

INSPECTION MANUAL CHAPTER 0307 APPENDIX A

REACTOR OVERSIGHT PROCESS SELF-ASSESSMENT METRICS

Effective Date: 08/25/2017

This Appendix contains a description of each of the objective performance metrics as described in Section 06.01(a) of **Inspection Manual Chapter (IMC) 0307**, “Reactor Oversight Process Self-Assessment Program.” The objectives, applicability, and requirements in IMC 0307 apply to this Appendix.

The objective performance metrics are organized by the Principles of Good Regulation as described in Section 05.02 of IMC 0307, which include independence, openness, efficiency, clarity, and reliability. Additional detail related to the specifics and basis of the metrics can be found in the reference documents noted in the Basis section of each metric.

In general, the metrics are defined and measured at the Agency-wide level, though many of the metrics also analyze the data by region **and/or office** for comparison purposes and to ensure reliable and consistent program implementation. The regional **and/or office** goals for a given metric are provided in the notes beneath the Agency-wide criteria, when applicable. To ensure consistency of collection and reporting of metric data, submittal forms will be used that will specify the data elements that will be needed to calculate the metrics, and periodic audits will be performed to verify data consistency.

0307A-01 INDEPENDENCE PERFORMANCE METRICS (I)

01.01 I-1 Completion of Baseline Inspection Program

Definition: The baseline inspection program is completed annually in accordance with program requirements.

Criteria:

Green	Yellow	Red
All regions and the Office of Nuclear Security and Incident Response (NSIR) met completion requirements	N/A	1 or more regions or NSIR did not meet completion requirements

*Note: No less than 100% compliance for any region or NSIR. Baseline inspection program completion is defined in section 04.07 of IMC 2515, "Light-Water Reactor Inspection Program - Operations Phase". Any region or office that does not complete the baseline inspection program per IMC 2515 is individually evaluated.

Basis: IMC 2515
Program Area: Inspection
Lead/Data Source: Regions, NSIR
Related Principles: Efficiency

01.02 I-2 Resident Inspector Objectivity through Rotation Policy

Definition: Senior resident inspectors (SRIs) and resident inspectors (RIs) are stationed for a 7-year maximum tour length, unless specifically granted an extension per IMC 2515.

Criteria:

Green	Yellow	Red
0 inspectors exceeded 7 years without an extension	N/A	1 or more inspectors exceeded 7 years without an extension

*Note: No less than 100% compliance for any region. Any region that has 1 or more inspectors exceed 7 years at a site without an extension is individually evaluated.

Basis: IMC 0102, "Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities," and IMC 2515
Program Area: Inspection
Lead/Data Source: Regions
Related Principles: Reliability

01.03 I-3 Resident Inspector Objectivity through Diverse Experience

Definition: Permanently-staffed SRIs and RIs spend a minimum of one week each year inspecting at another site.

Criteria:

Green	Yellow	Red
≤ 3 noncompliant	4-5 noncompliant	≥ 6 noncompliant

*Note: No more than two noncompliances in any region. Any region that has more than two noncompliances is individually evaluated.

Basis: IMC 0102
Program Area: Inspection
Lead/Data Source: Regions
Related Principles: Reliability

01.04 I-4 Inspector Objectivity Reviews

Definition: Line managers perform annual on-site employee performance and objectivity reviews of **fully qualified inspectors** assigned to an **inspection branch**.

<u>Criteria:</u>	Green	Yellow	Red
	≤ 3 noncompliant	4-5 noncompliant	≥ 6 noncompliant

*Note: No more than two noncompliances in any region **or NSIR**. Any region **or office** that has more than two noncompliances is individually evaluated.

Basis: IMC 0102
Program Area: Inspection
Lead/Data Source: Regions, NSIR
Related Principles: Reliability

01.05 I-5 Fully Qualified Inspectors and Operator Licensing Examiners

Definition: Inspectors and operator licensing examiners remain fully qualified in accordance with qualification requirements.

<u>Criteria:</u>	Green	Yellow	Red
	≤ 5 noncompliant	6-9 noncompliant	≥ 10 noncompliant

*Note: No more than three noncompliances in any region **or NSIR**. Any region **or office** that has more than three noncompliances is individually evaluated.

Basis: IMC 1245, "Qualification Program for **New and** Operating Reactor Programs," and Davis-Besse Reactor Vessel Head Degradation Lessons-Learned Task Force Report (ML022760172)
Program Area: Inspection
Lead/Data Source: Regions, NSIR
Related Principles: Reliability

01.06 I-6 Analysis of Permanent Site Staffing

Definition: Permanent inspector staffing levels at each of the reactor sites for both SRIs and RIs are maintained to provide continuity of regulatory oversight.

Criteria:

Green	Yellow	Red
≥ 95%	< 95% AND ≥ 90%	< 90%

*Note: No less than 90% compliance for any region. Any single site that falls below 90% is individually evaluated. Provide reasons for any meaningful increase or decrease in the inspector staffing level at reactors sites.

Inspectors assigned to the site permanently or through a rotation with a minimum duration of 6 weeks shall be counted. Inspectors on 6 week or longer rotational assignments will be identified as such. Inspectors assigned to the site for less than six weeks will not be counted, but should be indicated as such. Additionally, the regions shall indicate sites where permanently assigned resident or senior resident inspectors are away from the site for greater than 6 continuous weeks. Only inspectors who have attained at least a basic inspector certification status, as defined by Appendix A to Inspection Manual Chapter 1245, shall be counted.

Data will indicate number of days a qualified resident and senior resident inspector are permanently assigned to the site during the year divided by the number of days in the year. Number of days spent on training; meetings away from the site; participation in team inspections; leave; or other temporary duties (e.g. acting for branch chiefs in his/her absence) will not be counted against the metric unless the absence exceed 6 continuous weeks.

Basis: Davis-Besse Reactor Vessel Head Degradation Lessons-Learned Task Force Report (ML022760172) and IMC 2515

Program Area: Inspection

Lead/Data Source: Regions

Related Principles: Reliability

0307A-02 OPENNESS PERFORMANCE METRICS (O)

02.01 O-1 Issuance of Inspection Reports

Definition: **Reactor Oversight Process (ROP)** inspection reports are issued within applicable timeliness goals.

Criteria:

Green	Yellow	Red
≤ 25 late	> 25 AND ≤ 50 late	> 50 late

*Note: No more than 15 late inspection reports in any region **or 5 late inspection reports in NSIR**. Any region that has more than 15 late inspection reports **or office that has more than 5** is individually evaluated.

All inspection reports resulting from direct inspections of operating light water reactors and documented in accordance with IMC 0612, "Power Reactor Inspection Reports," are counted for this metric. For inspections not conducted by a resident inspector, inspection completion is normally defined as the day of the exit meeting. For integrated inspection reports, inspection completion is normally defined as the last day covered by the inspection report.

Basis: IMC 0612 and IMC 2515
Program Area: Inspection
Lead/Data Source: Regions, NSIR
Related Principles: Reliability, Efficiency

02.02 O-2 Issuance of Assessment Letters

Definition: Annual and follow-up assessment letters are issued within the applicable timeliness goals.

Criteria:

Green	Yellow	Red
≤ 2 late	3 late	≥ 4 late

*Note: No more than one late letter in any region. Any region that has more than one late letter is individually evaluated.

Basis: IMC 0305, "Operating Reactor Assessment Program"
Program Area: Assessment
Lead/Data Source: Regions
Related Principles: Reliability, Efficiency

02.03 O-3 Conduct of Annual Assessment Meetings or Other Engagement Activities

Definition: Public assessment meetings, or other engagement activities that discuss the results of the **U.S. Nuclear Regulatory Commission's (NRC's)** annual assessment of the licensee's performance, are conducted annually for all sites within the applicable timeliness goals.

Criteria:

Green	Yellow	Red
≤ 2 late	3 late	≥ 4 late

*Note: The level of public engagement and timeliness goals are determined by plant performance as described in IMC 0305. No more than one late meeting/activity in any region. Any region that has more than one late meeting/activity is individually evaluated.

Basis: IMC 0305
Program Area: Assessment
Lead/Data Source: Regions
Related Principles: Reliability, Efficiency

02.04 O-4 Reporting and Dissemination of Performance Indicator (PI) Data

Definition: PI data submittals by the licensees are posted to the **NRC's** external web site within the applicable timeliness requirements.

Criteria:

Green	Yellow	Red
0 late web posting	1- 3 late web postings	> 3 late web postings

*Note: Any licensee submittals that did not meet the timely reporting requirements will also be evaluated by NRC staff and discussed with industry to address corrective actions to prevent recurrence.

Basis: IMC 0306, "Information Technology Support for the Reactor Oversight Process," and NEI 99-02, "Performance Indicator Data Collection"
Program Area: Performance Indicators
Lead/Data Source: NRR/DIRS
Related Principles: Reliability, Efficiency

02.05 O-5 Issuance of ROP Public Meeting Notices and Summaries

Definition: ROP-related public meetings are noticed prior to the meeting and meeting summaries are posted after the meeting within the applicable timeliness requirements.

<u>Criteria:</u>	Green	Yellow	Red
	≥ 95%	< 95% AND ≥ 90%	< 90%

*Note: ROP-related public meetings include ROP working group meetings, annual assessment meetings, and other ROP-related meetings conducted by NRC staff. No more than two late notices or summaries for any region or office. Any region or office that has more than two late notices or summaries is individually evaluated.

Basis: M.D. 3.5, “Attendance at NRC Staff-Sponsored Meetings” and COM-202 “Meetings With Applicants, Licensees, Vendors or Other Members of the Public.”

Program Area: All
Lead/Data Source: NRR/DIRS, Regions, NSIR
Related Principles: Efficiency, Clarity

02.06 O-6 Responsiveness to ROP Contact Us Forms

Definition: ROP “Contact Us” (feedback) forms received through the public or internal website regarding the ROP are responded to within 45 days upon receipt.

<u>Criteria:</u>	Green	Yellow	Red
	≥ 95%	< 95% AND ≥ 90%	< 90%

Basis: IMC 0307
Program Area: All
Lead/Data Source: NRR/DIRS
Related Principles: Efficiency, Clarity

0307A-03 EFFICIENCY PERFORMANCE METRICS (E)

03.01 E-1 Completion of Supplemental Inspections

Definition: Exit meetings for supplemental inspections are completed within 180 days from licensee notification of readiness.

Criteria:

Green	Yellow	Red
≤ 1 late	2 late	≥ 3 late

*Note: No more than one late exit meeting in any region. Any region that has more than one late exit meeting is individually evaluated.

Basis: Management Direction
Program Area: Inspection, Assessment
Lead/Data Source: Regions, NRR/DIRS
Related Principles: Reliability, Clarity

03.02 E-2 Initiation of Reactive Inspections

Definition: Entrance meetings for reactive inspections are conducted within 30 days of a determination that an event or specific circumstances require a reactive inspection.

Criteria:

Green	Yellow	Red
≤ 2 late	3 late	≥ 4 late

*Note: No more than one late entrance meeting in any region. Any region that has more than one entrance meeting is individually evaluated.

Basis: MD 8.3, "NRC Incident Investigation Program"
Program Area: Inspection
Lead/Data Source: Regions, NRR/DIRS
Related Principles: Reliability, Clarity

03.03 E-3 Completion of Temporary Instructions

Definition: Temporary Instruction (TI) inspections associated with IMC 2201 and 2515 are completed within the required TI completion time.

Criteria:

Green	Yellow	Red
≥ 97.5% of documented completions are timely	< 97.5% AND ≥ 95%	< 95% of documented completions are timely

*Note: No less than 95% completion for any region. Any region that falls below 95% is individually evaluated. Documented completions are instances where TI results are documented in an inspection report.

Basis: Applicable Temporary Instruction
Program Area: Inspection
Lead/Data Source: Regions, NRR/DIRS
Related Principles: Reliability, Clarity

03.04 E-4 Completion of Performance Deficiency Determinations

Definition: The time from the identification date (i.e., the date the issue of concern was brought to the licensee’s attention by the NRC, the date the performance deficiency was self-revealed, or the date the licensee documented the condition resulting from the performance deficiency in the corrective action program) to the start date used for consideration of inspection findings in the assessment process (as defined by IMC 0305) is within 120 days.

Criteria:

Green	Yellow	Red
≥ 90% timely	< 90% AND ≥ 75%	< 75% timely

*Note: No more than two untimely occurrences for any region or NSIR. Any region or office that has more than two untimely occurrences is individually evaluated.

Basis: Business Process Improvement, “Process Improvement Review of the Significance Determination Process” (ML14318A512), and IMC 0305

*Note: This is a pilot metric that will be evaluated through focus and effectiveness reviews, and only applies to those findings finalized as Greater-than-Green.

Program Area: Significance Determination Process
Lead/Data Source: Regions, NSIR, NRR/DIRS
Related Principles: Reliability, Clarity

03.05 E-5 Completion of Final Significance Determinations

Definition: Inspection items are finalized as **Greater-than-Green** within 90 days since:
 (1) The date of initial licensee notification of the preliminary significance in an inspection report, or
 (2) The item was otherwise documented in an inspection report as an apparent violation or finding pending completion of a significance determination and not counted in the above category.

Criteria:

Green	Yellow	Red
≥ 95% timely	< 95% AND ≥ 90%	< 90% timely

*Note: No more than one late finalized significance determination for any region **or NSIR**. Any region **or office** that has more than one late finalized significance determination is individually evaluated.

Basis: IMC 0609, "Significance Determination Process."
Program Area: Significance Determination Process
Lead/Data Source: Regions, NSIR, NRR/DIRS
Related Principles: Clarity, Reliability

03.06 E-6 Responsiveness to ROP Feedback Forms

Definition: ROP Feedback Forms are completed within applicable timeliness goals.

Criteria:

Green	Yellow	Red
≥ 90% timely	< 90% AND ≥ 80%	< 80% timely

Basis: IMC 0801, "Reactor Oversight Process Feedback Program."
Program Area: All
Lead/Data Source: NRR/DIRS
Related Principles: Clarity, Openness

0307A-04 CLARITY PERFORMANCE METRICS (C)

04.01 C-1 Maintenance of ROP Web Pages

Definition: ROP pages on the public website are reviewed at least quarterly to ensure that the content on the page is up-to-date with accurate information.

Criteria:

Green	Yellow	Red
≥ 90% Web pages reviewed	< 90% AND ≥ 80%	< 80% Web pages reviewed

*Note: All ROP-related Web pages will be reviewed for general content on a quarterly basis. This review will also include a sampling of hyperlinks for accuracy.

Basis: Management Directive
Program Area: All
Lead/Data Source: NRR/DIRS
Related Principles: Openness

04.02 C-2 Corrections to ROP Web Pages

Definition: Broken hyperlinks or out-of-date content on the ROP internal or external Website are corrected within 30 days upon discovery.

Criteria:

Green	Yellow	Red
≥ 95% corrected within 30 days	< 95% AND ≥ 90%	< 90% corrected within 30 days

Basis: Management Directive
Program Area: All
Lead/Data Source: NRR/DIRS
Related Principles: Efficiency

04.03 C-3 Traceability of Greater-than-Green Inspection Findings

Definition: Inspection findings are updated in the Reactor Program System (RPS) and posted to the ROP web page to ensure traceability of a **Greater-than-Green** inspection finding from discovery to final resolution. When a report or letter follows up on an existing item (i.e., final significance determination letters and supplemental inspection reports), the RPS entry is updated to reflect the new information.

<u>Criteria:</u>	Green	Yellow	Red
	≥ 95% Greater-than-Green findings traceable	< 95% AND ≥ 90%	< 90% Greater-than-Green findings traceable

*Note: No more than one **Greater-than-Green** inspection finding found to be untraceable for any region **or NSIR**. Any region **or office** that has more than one untraceable issue is individually evaluated.

Basis: IMC 0306
Program Area: Significance Determination Process, Inspection
Lead/Data Source: Regions, NSIR, NRR/DIRS
Related Principles: Openness

04.04 C-4 Maintenance of ROP Governance Documents

Definition: Baseline Inspection Procedures (BIPs) and other ROP-related Inspection Procedures and Manual Chapters are **reviewed** at least once every 4 years.

<u>Criteria:</u>	Green	Yellow	Red
	≥ 95% reviewed within past 4 years	< 95% AND ≥ 90%	< 90% reviewed within past 4 years

Basis: IMC 0307 and Appendix B to IMC 0307
Program Area: Inspection
Lead/Data Source: NRR/DIRS
Related Principles: Reliability

0307A-05 RELIABILITY PERFORMANCE METRICS (R)

05.01 R-1 Performance of Lessons Learned Evaluations

Definition: Lessons learned evaluations are performed, reports are issued, and recommendations are considered and entered into the tracking system for significant NRC activities to ensure their completion in accordance with program expectations.

Criteria:

Green	Yellow	Red
All required evaluations completed and documented	N/A	1 or more evaluations not completed

*Note: All supplemental inspections conducted in accordance with inspection procedure (IP) 95003 “Supplemental Inspection For Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs Or One Red Input,” implementations of IMC 0350, “Oversight Of Reactor Facilities In A Shutdown Condition Due To Significant Performance and/or Operational Concerns,” Incident Investigation Team (IIT) responses, and Augmented Inspection Team (AIT) responses are individually evaluated for potential program improvements.

Timeliness expectations will be determined by senior management on a case-by-case basis.

Basis: IP 95003, IMC 0350, and MD 8.3
Program Area: All
Lead/Data Source: Regions, NRR/DIRS
Related Principles: Efficiency

05.02 R-2 Predictability and Repeatability of Significance Determination Results

Definition: Greater-than-**G**reen inspection findings and the associated degraded conditions contain adequate detail to enable an independent auditor to trace through the available documentation and conclude that the significance characterization is reasonably justifiable from both programmatic and technical positions. **This audit should be documented in a memo that is internally available to the NRC and referenced in the annual metric report.**

Criteria:

Green	Yellow	Red
0 deemed unpredictable	1 deemed unpredictable	≥ 2 deemed unpredictable

*Note: Any significance determination outcomes determined to be non-conservative will be evaluated and appropriate programmatic changes will be implemented.

Basis: IMC 0609, "Significance Determination Process"
Program Area: Significance Determination Process
Lead/Data Source: NRR/DIRS
Related Principles: Clarity

05.03 R-3 Predictability of Agency Actions and Response

Definition: Deviations from the Action Matrix are expected to be infrequent to ensure reliable and predictable programmatic and technical positions.

<u>Criteria:</u>	Green	Yellow	Red
	≤ 1 deviations	2 – 3 deviations	> 3 deviations

*Note: All deviations are individually evaluated for potential program improvements.

Basis: IMC 0305
Program Area: Assessment
Lead/Data Source: NRR/DIRS
Related Principles: Clarity

05.04 R-4 Consideration of Operating Experience Insights

Definition: A summary of recent operating experience insights is provided and discussed for the end-of-cycle assessments for each region to inform inspection planning.

<u>Criteria:</u>	Green	Yellow	Red
	Operating experience discussed during all regional assessment meetings	N/A	Operating experience not discussed during 1 or more regional assessment meetings

Basis: IMC 2523, "NRC Application of the Reactor Operating Experience Program in NRC Oversight Processes"
Program Area: Assessment, Inspection
Lead/Data Source: NRR/DIRS
Related Principles: Efficiency

0307A-06 REFERENCES

This list of references encompasses the entire ROP self-assessment process, including the Appendices to this Chapter.

IMC 0102, "Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities"

IMC 0305, "Operating Reactor Assessment Program"

IMC 0306, "Information Technology Support for the Reactor Oversight Process"

IMC 0308, "Reactor Oversight Process (ROP) Basis Document"

IMC 0350, "Oversight of Reactor Facilities in a Shutdown Condition Due To Significant Performance and/or Operational Concerns"

IMC 0608, "Performance Indicator Program"

IMC 0609, "Significance Determination Process"

IMC 0612, "Power Reactor Inspection Reports"

IMC 0801, "Reactor Oversight Process Feedback Program"

IMC 1245, "Qualification Program for Operating Reactor Programs"

IMC 2515, "Light-Water Reactor Inspection Program -- Operations Phase"

IMC 2523, "NRC Application of the Reactor Operating Experience Program in NRC Oversight Processes"

IP 95003, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs or One Red Input"

M.D. 3.5, "Attendance at NRC Staff-Sponsored Meetings"

MD 8.3, "NRC Incident Investigation Program"

NEI 99-02, "Regulatory Assessment Performance Indicator Guideline"

COM-202 "Meetings with Applicants, Licensees, Vendors or Other Members of the Public"
Staff report, "Process Improvement Review of the Significance Determination Process"
(ML14318A512)

Staff report, "Davis-Besse Reactor Vessel Head Degradation Lessons-Learned Task Force Report" (ML 022760172)

ATTACHMENT 1
Revision History for IMC 0307, Appendix A

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-Decisional, Non-Public)
N/A	ML023650446 12/12/02	Revised significantly to include a more detailed discussion of the role of inspectable and program area leads, the annual review of the baseline inspection program, and other aspects of the self-assessment program. The specific metrics for these roles were added to Appendix A.	None	N/A
N/A	ML033640661 12/12/03	Revised to provide greater detail for documenting the results of the annual inspection procedures reviews, and some metrics in Appendix A were modified to better align with the operating plan metrics and other program commitments.	None	N/A
N/A	ML040150392 01/14/04	Based on a decision at the DRP/DRS counterpart meeting held on December 17-18, 2003, metric IP-5 was revised to change the inspection report timeliness to 45 calendar days for all inspection reports, with exception of reactive inspection reports, which will stay at 30 days.	None	N/A
N/A	ML060110214 02/20/06	Revised to support the new safety performance measures of the NRC=s Strategic Plan, to better define the ROP goals and intended outcomes, and to consolidate and clarify several of the performance metrics. Completed 4 year historical CN search.	None	ML060110235

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-Decisional, Non-Public)
N/A	ML063050572 11/28/06	Revised to measure the effectiveness of the safety culture enhancements to the ROP, to clarify expectations regarding the resident demographics and staffing metrics, and to include a discussion of the consolidated response to external survey questions.	None	
N/A	01/10/08 CN 08-002	Revised to eliminate and consolidate several metrics, to separate Appendix A from the base IMC to serve as a stand-alone document, and to summarize and link to Appendix B on the ROP realignment process.	None	ML073510410
W200800299	ML090300596 03/23/09 CN 09-010	Revised to address the Commission SRM dated June 30, 2008, to reflect the recently issued Strategic Plan for FY 2008 – 2013, to reincorporate the security cornerstone in the ROP self-assessment process, and some metrics were revised for clarification purposes while others were removed to eliminate redundancy or unnecessary burden.	None	ML090300620
	ML12355A458 03/27/13 CN 13-010	Revised some of the metrics and/or their criteria to improve their usefulness in evaluating the effectiveness of the ROP, and to make the metrics more objective and measurable, as feasible.	None	ML12355A454; Closed FBFs: 0307A-1670 ML13086A012 0307A-1760 ML13086A023 0307-1703 ML13086A016

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-Decisional, Non-Public)
N/A	ML15218A532 11/23/15 CN 15-025	Significantly revised the self-assessment process using a three-part approach designed to assess the effectiveness of a mature program. As part of this effort, the metrics were significantly revised to make them more objective based on readily available information and to align with the Principles of Good Regulation.	None	ML15225A110 Closed FBFs: 0307A-1882 ML14098A162 0307A-2100 ML15308A012
N/A	ML17186A115 08/25/17 CN 17-016	Revised to clarify the I-4 metric, updated the documentation requirements for the R-2 metric, and make editorial changes.	None	ML17186A241 0307A-2207 ML17206A106