



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 4, 2022

MEMORANDUM TO: Gregory Bowman, Director
Vogtle Project Office
Office of Nuclear Reactor Regulation

FROM: Victor Hall, Chief */RA/*
Vogtle Project Office
Office of Nuclear Reactor Regulation

SUBJECT: CONSTRUCTION REACTOR OVERSIGHT PROCESS
PERFORMANCE METRIC REPORT FOR CALENDAR
YEAR 2021

The Construction Reactor Oversight Process (cROP) self-assessment program evaluates the effectiveness of the cROP through its success in meeting pre-established goals and intended outcomes. The staff performed the Calendar Year (CY) 2021 performance metric analysis in accordance with Inspection Manual Chapter (IMC) 2522, "Construction Reactor Oversight Process Self-Assessment Program," dated July 28, 2014, and IMC 2522 Appendix A, "Reactor Oversight Process Self-Assessment Metrics," dated October 4, 2017.

IMC 2522 and its appendix describe performance metrics associated with each of four cROP program areas: the inspection program (IP), significance determination process (SDP), assessment (AS) program, and inspections, tests, analyses, and acceptance criteria (ITAAC) program (ITA). The staff designates the program-specific metrics as the IP, SDP, AS, and ITA metrics, respectively. The staff also monitors and analyzes a metric of a more general nature, which is designated as the O metric, to assess the overall performance of the cROP.

Enclosure 1 provides a summary of the performance metric analysis results and Enclosure 2 provides the detailed report. The staff found that the cROP successfully met all but one applicable performance metrics by meeting the acceptance criteria defined in IMC 2522 Appendix A. The metric found not met involved rescinding previously accepted ITAAC closure notifications on the same ITAAC for both Vogtle Electric Generating Plant (Vogtle) Units 3 and 4. Three metrics were deemed not applicable for the CY 2021 self-assessment.

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These metrics were related to significant events and timeliness of supplemental inspections. There were no significant events in CY 2021, and there were no supplemental inspections.

Enclosures:

1. Self-Assessment Metric Overview
2. Self-Assessment Metric Report

SUBJECT: CONSTRUCTION REACTOR OVERSIGHT PROCESS PERFORMANCE
 METRIC REPORT FOR CALENDAR YEAR 2021
 DATED: JANUARY 4, 2022

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| NAME | NCovert | VHall | |
| DATE | 12/20/2021 | 1/4/2022 | |

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Calendar Year 2021

cROP Self-Assessment Metric Report

(Enclosures 1 and 2)

cROP SELF-ASSESSMENT METRIC OVERVIEW

INSPECTION PROGRAM (IP) METRICS

| | |
|---|--|
| IP1: Inspection Reports are issued within Timeliness Requirements | IP2: NRC's Response to Technical Assistance Requests (TAR) Is Timely |
| Met | Met |

SIGNIFICANCE DETERMINATION PROCESS (SDP) METRICS

| | |
|--|------------------------------|
| SDP1: SDP Results Are Predictable and Repeatable | SDP2: Appeals of SDP Results |
| Met | N/A |

ASSESSMENT (AS) PROGRAM METRICS

| | | | |
|---|--|---|---|
| AS1: Deviations from the Construction Action Matrix | AS2: Assessment Program Results Are Completed in a Timely Manner | AS3: Timeliness of Supplemental Inspections | AS4: Degradations in Quality of Construction are Gradual and Allow Adequate Agency Engagement of the Licensee |
| Met | Met | N/A | Met |

Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) METRIC

| |
|---|
| ITA1: Analysis of ITAAC Reopened After Closure Verification |
| Not Met |

OVERALL Construction Reactor Oversight Process (cROP) METRIC (O)

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|--|
| O: Analysis of NRC's Responses to Significant Events |
| N/A |

cROP SELF-ASSESSMENT METRIC REPORT

INSPECTION MANUAL CHAPTER 2522 APPENDIX A CONSTRUCTION REACTOR OVERSIGHT PROCESS SELF-ASSESSMENT METRICS

| | |
|-----------------------------|--|
| 2522A-01 | INSPECTION PROGRAM (IP) METRICS |
| IP-1 | <u>Inspection Reports are issued within Timeliness Requirements</u> |
| <u>Met:</u> | Yes |
| <u>Definition:</u> | Audit 100% of reactor construction inspection reports issued during the calendar year in relation to the inspection report timeliness requirements in Inspection Manual Chapter (IMC) 0613, "Power Reactor Construction Inspection Reports." |
| <u>Acceptance Criteria:</u> | At least 90% of reactor construction inspection reports issued during the calendar year meet the inspection report timeliness requirements in IMC 0613. |
| <u>Lead:</u> | Office of Nuclear Reactor Regulation (NRR)/Vogtle Project Office (VPO) |
| <u>Goals Supported:</u> | Objective, Risk-Informed, Predictable, Effective, Open |
| <u>Note:</u> | For inspections not conducted by a resident inspector, inspection completion is normally defined as the day of the final exit meeting. For resident inspector and integrated inspection reports, inspection completion is normally defined as the last day covered by the inspection report. For stand-alone team inspection reports, the report is issued no later than 45 calendar days after inspection exit. |
| <u>Analysis:</u> | All reactor construction inspection reports issued during Calendar Year (CY) 2021 met the timeliness requirements in IMC 0613. |

IP-2 NRC's Response to Technical Assistance Requests (TAR) Is Timely

Met: Yes

Definition: Audit 100% of TARs completed in the calendar year in relation to the TAR timeliness requirements in NRR-COM-106, Revision 6, "Technical Assistance Request (TAR) Process."

Acceptance Criteria: Construction TARs are expected to be completed in as timely a manner as possible in keeping with construction schedules and associated inspection and oversight. The nominal expectation for completion of construction TARs is 30 days.

Lead: NRR/VPO

Goals Supported: Objective, Risk-Informed, Understandable, Open, Effective

Analysis: All TARs closed in CY 2021 were closed in accordance with the timeliness requirements specified in NRR-COM-106.

2522A-02 SIGNIFICANCE DETERMINATION PROCESS (SDP) METRICS

SDP-1 SDP Results Are Predictable and Repeatable

Met: Yes

Definition: Audit 100% of construction inspection program inspection findings issued during the calendar year against the significance determination process in IMC 2519, "Construction Significance Determination Process," and its appendices.

Acceptance Criteria: If greater than 10 findings were issued during the calendar year, then at least 90% of them contain adequate detail to enable an independent auditor to trace through the significance determination process in IMC 2519 and its appendices and reach the same significance color characterization.

If 10 or fewer findings were issued during the calendar year, then no more than 1 of them did not contain adequate detail to enable an independent auditor to trace through the significance determination process in IMC 2519 and its appendices and reach the same significance color characterization.

Lead: NRR/VPO

Goals Supported: Risk-Informed, Predictable

Note: The number of inspection findings in a calendar year are those that are issued during that calendar year, independent of the inspection report number.

Analysis: There were 21 findings (19 GREEN and 2 WHITE) documented in 2021 and reviewed through independent audit. All findings contained the necessary detail to enable the independent auditor, using IMC 2519 "Construction Significance Determination Process," to obtain the same finding color characterization.

| | |
|-----------------------------|--|
| SDP-2 | <u>Appeals of SDP Results</u> |
| <u>Met:</u> | N/A |
| <u>Definition:</u> | Track the total number of appeals of final SDP results during the calendar year. |
| <u>Acceptance Criteria:</u> | Zero appeals of SDP significance that result in a final determination being overturned during the calendar year. |
| <u>Lead:</u> | Regions, NRR/VPO |
| <u>Goals Supported:</u> | Risk-Informed, Objective, Predictable, Understandable, Open |
| <u>Assessment:</u> | There were no appeals of final SDP results during CY 2021. |

2522A-03 ASSESSMENT (AS) PROGRAM METRICS

AS-1 Deviations from the Construction Action Matrix

Met: Yes

Definition: Audit all assessment-related letters during the calendar year and count the number of deviations from the Construction Action Matrix.

Acceptance Criteria: Zero deviations from the Construction Action Matrix during the calendar year.

Lead: NRR/VPO

Goals Supported: Objective, Risk-Informed, Open

Assessment: There were no deviations from the Construction Action Matrix during CY 2021.

AS-2 Assessment Program Results (Assessment Reviews, Assessment Letters and Public Meetings) Are Completed in a Timely Manner

Met Yes

Definition: Audit 100% of Assessment Reviews, Assessment Letters and Public Meetings issued/conducted during the calendar year in relation to the timeliness requirements in IMC 2505, "Periodic Assessment of Construction Inspection Program Results."

Acceptance Criteria: At least 90% of the timeliness goals for the assessment process are met during the calendar year.

Lead: Region, NRR/VPO

Goals Supported: Effective, Open, Predictable

Assessment: All Assessment Reviews, Assessment Letters and Public Meetings issued/conducted during CY 2021 met the timeliness requirements in IMC 2505, "Periodic Assessment of Construction Inspection Program Results."

AS-3 Timeliness of Supplemental Inspections

Met: N/A

Definition: Count the number of instances during the calendar year where a finding was held open for more than 6 months due to the need to complete the supplemental inspection.

Acceptance Criteria: No instances during the calendar year when a supplemental inspection has not been completed within 6 months for which the licensee had indicated they were prepared for the inspection.

Lead: Region, NRR/VPO

Goals Supported: Effective, Predictable

Assessment: There were no supplemental inspections required during CY 2021. A Special Inspection was conducted at Vogtle in June 2021 to assess electrical cable separation and related cable installation deficiencies. As a result of this inspection, two WHITE findings were identified and subsequently issued in November 2021. A Supplemental Inspection is planned in early CY 2022 to close out these inspection findings. The planned Supplemental Inspection is within the 6-month calendar window for this metric.

AS-4 Degradations in Quality of Construction are Gradual and Allow Adequate Agency Engagement of the Licensee

Met: Yes

Definition: Track the number of instances during the calendar year in which a construction site moves more than one column to the right in the Construction Action Matrix.

Acceptance Criteria: No instances during the calendar year in which performance issues cause a construction site to move more than one column to the right in the Construction Action Matrix.

Lead: NRR/VPO

Goals Supported: Risk-Informed, Predictable

Assessment: There were no instances during CY 2021 in which a construction site moved more than one column to the right in the Construction Action Matrix.

2522A-04 ITAAC METRICS

ITA-1 Analysis of ITAAC Reopened After Closure Verification

Met: No

Definition: Audit 100% of ITAAC that are reopened after closure verification during the calendar year.

Acceptance Criteria: No ITAAC have been verified as having been met that are reopened during the calendar year because of a deficiency in the process that was within the NRC's ability to identify before closure verification.

Lead: NRR/VPO

Goals Supported: Effective, Risk-Informed

Assessment: The ITAAC Closure Notifications (ICNs) for ITAAC Index No. 570 for Vogtle Units 3 and 4, submitted on May 20, 2020 (Agencywide Documents Access and Management (ADAMS) ML20141L588) and July 31, 2020 (ADAMS Accession No. ML20216A594) respectively, were reopened as a result of a deficiency found during CY 2021. The original ICNs mischaracterized an inspection of the as-built thermocouple sheaths. Following License Amendments 188 and 186 (ADAMS Accession No. ML21237A205) to make required changes to the ITAAC language, both have been subsequently resubmitted October 20, 2021 (ADAMS Accession No. ML212934A231) and October 27, 2021 (ADAMS Accession No. ML21300A358) and accepted for Units 3 and 4.

2522A-05 OVERALL cROP METRICS

O-1 Analysis of NRC's Responses to Significant Events

Met: N/A

Definition: Review 100% of incident investigation teams (IITs) and augmented inspection teams (AITs) reports that are issued during the calendar year to determine if major programmatic voids were identified during the cROP review portion of IITs and AITs.

Acceptance Criteria: No major programmatic voids are identified during the cROP review portion of IITs and AITs.

Lead: NRR/VPO

Goals Supported: Effective, Predictable

Assessment: There were no IITs or AITs performed or issued during CY 2021.