NRC INSPECTION MANUAL

NRR

INSPECTION MANUAL CHAPTER 2572

ASSESSMENT OF ADVANCED REACTOR CONSTRUCTION PROJECTS

Effective Date: TBD

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2572-01 PURPOSE

The Advanced Reactor Construction Oversight Program (ARCOP) integrates the U.S. Nuclear Regulatory Commission's (NRC's) inspection, assessment, and enforcement programs applicable to advanced power reactors. The ARCOP assessment process evaluates the quality of the fabrication, manufacturing, and construction of advanced reactor projects using a continuous assessment process. This continuous assessment process feeds into three areas of consideration, including (1) adjustments to the baseline inspection program, including changes to the design scoping matrices, (2) additional inspections beyond baseline, and (3) as inputs to the final assessment before transition to the operational phase of reactor oversight. In addition, results of the ARCOP assessment program are communicated to licensees, manufacturers, project vendors, the public, and other stakeholders.

This Inspection Manual Chapter (IMC) provides requirements and guidance applicable to all NRC offices involved in implementing the ARCOP assessment program.

2572-02 OBJECTIVES

02.01 To provide requirements and guidance for continuous assessment of the quality of the fabrication, manufacturing and construction of advanced reactors within each inspection and program area to determine reasonable assurance of inspection area quality.

02.02 To provide a predictable, repeatable, and scrutable response to safety-significant inspection findings pursuant to the ARCOP Finding Response Table (FRT).

02.03 To provide a method for communicating the NRC's response to safety-significant inspection findings to licensees, manufacturers, project vendors, the public, and other stakeholders.

02.04 To provide requirements and guidance for transitioning a unit from construction to operations.

2572-03 APPLICABILITY

This Inspection Manual Chapter (IMC) applies to AR construction projects for which an application has been accepted and docketed by the NRC for an AR Combined License (COL), Construction Permit (CP), Limited Work Authorization (LWA), or Manufacturing License (ML). This IMC no longer applies to an AR after an operational finding is made for that reactor under 10 CFR 50.57 or 10 CFR 52.103(g. After an operational finding is made for an AR, subsequent assessment of a licensee's performance for that reactor is conducted in accordance with applicable operational phase of reactor oversight IMCs. When multiple commercial ARs are being fabricated, manufactured, or constructed and are intended to be operated by the same licensee at a common location, both the ARCOP and operating reactor assessment processes can be in place at the same time, depending on whether one or more of these reactors have received an operational finding.

2572-04 DEFINITIONS

ARCOP definitions are found in Inspection Manual Chapter 2570, "Advanced Reactor Construction Oversight Program Basis Document." For readers' convenience, definitions relevant to the ARCOP assessment program are also listed below.

a. Advanced Reactor Construction Project. The fabrication, manufacturing and construction of one or more commercial advanced reactors intended to be operated by the same licensee at a common location. A reactor construction project includes fabrication activities performed at a non-licensed project vendor facility, reactor manufacturing activities at a manufacturing facility, and reactor construction at its final resting place, as applicable.

b. Assessment Letter. A letter from the NRC to a licensee or non-licensee that communicates assessment-related information.

c. Finding Response Table (FRT). A table consisting of four columns representing increasing levels of response based on the safety-significance of inspection findings. The FRT categorizes the safety-significance of findings; identifies the range of expected actions for the finding; identifies the expected response; and describes the appropriate level of communication.

d. Project Vendor. A non-licensed entity that fabricates nearly complete reactor plants or significant portions of safety-significant system modules under contract to an NRC licensee, NRC permit holder, or an applicant for an NRC license or permit. Project vendors are identified during inspection scoping and inspected under the ARCOP.

e. Reactor Manufacturer. An ML holder that produces complete reactor plants (e.g., microreactors), or nearly complete reactor plants (e.g., SMR power modules). A reactor manufacturer may produce reactors for multiple reactor construction projects.

2572-05 RESPONSIBILITIES AND AUTHORITIES

The final organizational structure for ARCOP implementation has not been determined. Current ARCOP IMC drafts are modeled after the organization implemented for the cROP. Changes will be made to roles and responsibilities if/when future NRC organizational changes are made.

05.01 Director, ARCOP Program Office (NRR/APO).

a. Provides overall program direction for the ARCOP assessment program.

b. Assesses the effectiveness, uniformity, and completeness of implementation of the ARCOP assessment program.

c. Ensures that non-licensees, licensees, the public, and other stakeholders are informed of the results of the ARCOP assessment program, as appropriate.

d. Recommends, develops, and implements improvements to the ARCOP assessment program.

05.02 Director, Division of Operating Reactor Safety (DORS), Region II

a. Implements the ARCOP assessment program (ACIP) for oversight elements led by NRC Region II for AR construction projects.

b. Ensures that project vendors, licensees, the public, and other stakeholders are informed of the results of the ARCOP assessment program, as appropriate.

c. Provides the APO the status of assigned ACIP inspections and their results.

05.03 Host Region DORS Branch Chiefs

a. Implements the ARCOP assessment program (ACIP) for oversight elements led by the NRC host region for AR construction projects.

b. Provides the APO the status of assigned ACIP inspections and their results.

05.04 Nuclear Security and Incident Response (NSIR) Responsible Branch Chiefs

a. Implements the ARCOP assessment program (ACIP) for oversight elements led by NSIR for AR construction projects.

b. Provides the APO the status of assigned ACIP inspections and their results, and performs assessments of NSIRs portion of the ACIP.

2572-06 REQUIREMENTS

06.01 The ARCOP assessment program shall provide for a continuous assessment of the quality of the fabrication, manufacturing and construction of advanced reactors within each inspection area to determine reasonable assurance of inspection area quality. This continuous assessment process shall feed into three areas of consideration, including (1) adjustments to the baseline inspection program, including changes to design-specific matrices, (2) additional inspections beyond baseline, and (3) as inputs to the final assessment before transition to the operational phase of reactor oversight.

06.02 Results of the ARCOP assessment program shall be communicated to licensees, manufacturers, project vendors, the public, and other stakeholders.

2572-07 GUIDANCE

07.01 Introduction

The NRC's ARCOP assessment program is implemented at AR construction projects for which the NRC has accepted an application for a COL, CP, LWA, or ML and there are enough quality-related activities ongoing in one or more of the ARCOP cornerstones of safety for an assessment to be meaningful. The ARCOP assessment program allows the NRC to integrate various information sources relevant to AR fabrication, manufacturing, and construction quality, make objective conclusions regarding the significance of findings, take actions based on these conclusions in a predictable manner, and effectively communicate these results to licensees, manufacturers, project vendors, the public, and other stakeholders.

07.02 Continuous Assessment

The staff conducts continuous assessments for each AR construction project through reviews of project vendor, manufacturer, and licensee quality performance after the completion of each reactor project fabrication, manufacturing, and/or construction inspection. The purpose of the continuous assessments are to assess the quality of the fabrication, manufacturing, and construction activities at the facility in specific inspection areas covered by the respective inspection. Outputs of the continuous assessment include: (1) adjusting the baseline inspection program as appropriate, and (2) determining any additional appropriate response to assessment results. In addition continuous assessment results are considered in the final assessment before transition to the operational phase of reactor oversight.

Upon completion of each inspection, the responsible branch chief, with input from the inspection area inspectors, will assess the inspection results and additional available relevant information.The responsible branch chief will also conduct an assessment after a final significance determination is completed for an AR construction project inspection finding that is determined to be greater-than-green.

a. Inputs to the Continuous Assessment.

1. ACIP Input.

The staff conducts ACIP inspections to monitor fabrication, manufacturing, and construction performance in the ARCOP strategic performance areas and cornerstones in accordance with the following IMCs:

- IMC 2573, “Inspection of the Advanced Power Reactor “Quality of Reactor Plant Construction” Strategic Performance Area,”
- IMC 2203, “Security Inspection Program for Advanced Power Reactor Construction,” and
- IMC 2574, “Inspection of the Advanced Power Reactor “Operational Readiness” Strategic Performance Area,”

Noncompliances will occur in a variety of AR construction project activities and will have varying levels of significance. Noncompliances will be dispositioned in accordance with IMC 2571, “Dispositioning Advanced Power Reactor Construction Noncompliances.”

Noncompliances of more than minor safety or environmental concern where the noncompliance is reasonably foreseeable and preventable are considered ARCOP inspection findings. Findings are divided into two categories: (1) those whose significance can be evaluated under the significance determination process (SDP) and (2) those that are outside the capability of the SDP that are evaluated under the NRC’s traditional enforcement (TE) program. ARCOP inspection findings are treated differently depending on the entity (licensee or non-licensee) that is responsible for the finding.

Most findings associated with licensees are dispositioned using the SDP and are assigned a color of green, white, or yellow based on increasing risk significance. Usually, the finding will have an associated violation that is either cited in a Notice of Violation (NOV) or treated as a noncited violation (NCV).

Most findings associated with non-licensees (typically findings identified at an offsite AR project vendor facility) are expected to be dispositioned as Notices of Nonconformance (NON) to the project vendor. NONs are administrative actions and do not have an associated violation. NONs do not have a color assigned to them to represent significance. However, under ARCOP, NRC staff will use the SDP to inform decision-making on the proposed NRC follow-up inspection to an NON. This process is only applicable to project vendors inspected under the ARCOP and is not used to screen traditional vendor findings, which will continue to be covered under the vendor inspection program (VIP).

Noncompliances that are outside the capability of the SDP are evaluated under the TE program and violations may be assigned a Severity Level of IV, III, II, or I, based on increasing significance, and characterized as a violation (VIO) or NCV as applicable. NRC response to noncompliances that involve TE violations may include follow-up inspections and/or review of NOV responses. TE NCVs typically do not warrant follow-up inspections.

2. Additional Input to the Continuous Assessment.

   Additional sources of input to the continuous assessment include the VIP, allegations, enforcement history, 10 CFR Part 21 and 10 CFR Part 50.55(e) reports, construction experience (ConE) reports, and other sources, as available, to develop objective conclusions about the overall quality of the AR construction project.

   Nonconformances identified during the VIP will be evaluated for significance using the screening process as described in IMCs 0617 and 2507. Traditional vendor nonconformances identified during VIP inspections will not be an input to the FRT, and NRC response to these issues will be in accordance with IMCs 0617 and 2507.

   Consistent with the Commission’s Final Safety Culture Policy Statement (76 FR 34773; June 14, 2011), the NRC expects that individuals and organizations associated with AR construction will establish and maintain a positive safety culture, commensurate with the safety and security significance of their activities and the nature and complexity of their organizations and functions. Safety culture insights, including insights into the Safety Conscious Work Environment (SCWE), are an input to the continuous assessment. Follow-up inspections may be used to evaluate significant safety culture concerns that are identified during the continuous assessment.

b. Adjustments to BIP

   The continuous assessment is used to adjust the BIP within the predetermined range of inspections to match the level of oversight needed to obtain reasonable assurance that the inspection area activities will continue to be conducted with adequate quality. This is referred to as the "reasonable assurance of inspection area quality

determination" for the inspection area. If the result of the continuous assessment is that reasonable assurance of quality has been demonstrated in an inspection area, then the baseline inspection plan is complete for that inspection area. APO shall be notified if a reasonable assurance of quality determination for an inspection area is made prior to completing the minimum number of inspection area samples specified in the project-specific inspection scoping matrix. APO should then evaluate if the design-specific inspection scoping matrix sample range should be revised for that inspection area.

If a reasonable assurance of inspection area quality determination has not been reached after the minimum number of samples are complete in an inspection area, then the cognizant branch chief may increase the inspection area baseline inspection samples beyond the minimum, not to exceed the maximum number of samples specified in the project-specific inspection scoping matrix. Inspection samples beyond the maximum are expected to be rare. However, if required to make a reasonable assurance of inspection area quality determination, then the applicable branch chief shall provide the justification for exceeding the maximum inspection sample size to the cognizant division director and the Director, APO, along with an inspection plan describing the specified number of additional inspection samples planned in the inspection area. The cognizant division director's approval, and Director, APO concurrence, is required before exceeding maximum sample sizes.

Acceptable justification for not coming to a reasonable assurance of inspection area quality determination after completing the maximum inspection area inspection sample size include:

- The receipt of additional assessment information (e.g., industry construction experience, a required report pursuant to Part 21 or 50.55(e), or allegations that warrant additional inspection;
- The existence of open NRC findings that warrant additional inspection;
- Changes to the quality assurance processes and/or organizations requiring additional inspection to verify a previous reasonable assurance determination; and
- The maximum inspection sample size provided insufficient inspection area performance information. This should be rare. If insufficient inspection area performance information was not obtained after the maximum inspection samples were conducted, then the cognizant NRC branch chief should consider holding a meeting with fabricator/manufacturer/licensee management to determine how to improve efficiency during NRC inspections. Additional meetings with NRC management should also be considered.

c. Additional Responses to Assessment Results

1. Additional Responses Based on ACIP Inputs

The NRC's continuous assessment of AR construction project performance will determine what additional actions, if any, the NRC will take if there are signs of declining performance. Under the ARCOP, the NRC's continuous assessment links regulatory actions to performance criteria using the ARCOP FRT. The FRT

provides predictable response from the NRC in a risk-informed, performance-based manner.

The FRT identifies the range of NRC and licensee or non-licensee actions and the appropriate level of communication for different inspection results. The NRC uses four levels of regulatory response with NRC regulatory response increasing as ARCOP construction project quality declines. The FRT describes a graded approach in addressing quality issues and was developed with the philosophy that, with all identified quality issues being of very low safety or security significance (i.e., Column 1), NRC engagement consists of the baseline inspection program as defined in IMC 2570. Agency action beyond the baseline inspection program will normally occur only if inspection finding input thresholds are exceeded. The NRC's continuous review of construction project quality will determine what additional actions, if any, the NRC will take if there are signs of declining quality.

Inspection findings identified during ARCOP project vendor, manufacturer and licensee inspections are the input to the FRT. The FRT lists expected NRC and licensee or non-licensee actions based on the inputs to the FRT. Actions are graded such that the agency becomes more engaged as the significance of issues increase.

For licensees, greater-than-green inspection findings will be considered in the FRT after the final significance determination letter has been issued. For project vendors, safety-significant NONs (i.e., those NONs evaluated as having elevated safety-significance using the ARCOP SDP) will be considered in the FRT after the NON is issued. The responsible branch chief will determine the appropriate column of the FRT to use for determining the required NRC response and communication. The responsible branch chief will communicate the assessment results to their respective regional division director for concurrence. Once respective regional division director concurrence is provided, the results will be provided to the Director, APO, for concurrence. The results of this assessment will be included in the final significance determination letter, an associated inspection report cover letter, or a separate assessment letter.

The process to appeal the staff’s final significance determination of an inspection finding documented in an NRC inspection report or final significance determination letter is described in IMC 2571. If the significance determination of a finding is appealed, that finding is evaluated in the FRT consistent with the original significance determination until the staff responds to the appeal in writing detailing a change in the final significance determination.

The finding will be closed upon successful completion of the associated supplemental inspection, and the closure will be documented in the supplemental inspection report. The finding’s closure date will be the date that the supplemental inspection was complete (i.e., the date of the supplemental inspection exit meeting).

Inspection findings will not be closed if the corresponding supplemental inspection reveals substantive inadequacies in the (1) evaluation of the root causes of the inspection finding, (2) determination of the extent of the performance problems, or (3) actions taken or planned to correct the issue. In

this case, additional agency action, including additional enforcement actions may be needed to independently acquire the necessary information to satisfy the inspection requirements.

In these situations, the original finding will be considered in the construction assessment process until the inadequacies identified in the supplemental inspection are adequately addressed and corrected, or a supplemental inspection has been completed successfully. If a finding is not closed during the supplemental inspection, then NRC shall include in the supplemental inspection report cover letter the specific weaknesses that need to be addressed to close the finding. The NRC decision to keep a finding open after completing the supplemental inspection must be authorized by the division director with responsibility for performance of the supplemental inspection after consulting with the director of the APO.

There may be instances in which the actions dictated by the FRT may not be appropriate. In these instances, the agency may deviate from the FRT to either increase or decrease agency action.

A deviation is defined as any regulatory action taken that is inconsistent with the range of actions discussed in the FRT. An FRT deviation may be considered for a situation such as a type of finding unanticipated by the IMC 2571 screening process that results in an inappropriate level of regulatory attention when entered in the FRT. [TBD] shall approve all deviations from the FRT. Management Directive (MD) 8.14 requires NRR to ensure that the causes for deviations are understood and to identify any necessary changes to the ARCOP guidance.

2. Additional Responses Based on Other Inputs

   Violations in the following circumstances are not adequately characterized by the ARCOP SDP alone:

   - Result in actual safety or security consequences,
   - Impact the ability of the NRC to perform its regulatory function,
   - Involve willfulness, or
   - Are not associated with ARCOP findings.

   Such violations are referred to as TE violations and are processed in accordance with the NRC's Enforcement Program. TE violations may have underlying findings that are assessed for significance using the screening process in IMC 2571, and NRC response to these findings will consider the guidance in the FRT.

   TE violations are independent of the findings evaluated in the FRT. An assessment of the overall TE history for the construction project is conducted during continuous assessments. A TE violation may receive follow up inspection using appropriate IPs in IMC 2515, Appendix C, "Special and Infrequently Performed Inspections."

When follow up of TE actions is planned, it should be coordinated with any supplemental inspections to avoid duplication of effort.

3. Unacceptable Performance

Licensee performance is unacceptable, and cessation of plant fabrication, manufacture, or construction activity will be considered when the NRC lacks reasonable assurance that the licensee can or will construct the facility in accordance with the design basis. The NRC should consider an order or other action to halt these activities when the NRC loses confidence in the licensee's ability to manufacture or construct the facility in accordance with the design basis (e.g., multiple examples where construction was determined to be outside of its design basis, either due to inappropriate modifications, the unavailability of design basis information, inadequate configuration management, or the demonstrated lack of an effective corrective action program).

If the NRC takes action to stop activities at a facility based on one of the criteria above (e.g., an order), then the licensee is also expected to perform a third-party assessment of their safety culture.

The NRC will assess the licensee's evaluation of their safety culture and independently perform an assessment of the licensee's safety culture.

The EDO/Deputy EDO (or designee) will then meet with senior licensee management in a regulatory performance meeting to discuss the licensee's degraded performance and the corrective actions. The Commission will approve the actions which are required before manufacturing or construction at the facility can be resumed.

07.03 Final Assessment Before Transition to the Operational Phase of Reactor Oversight.

a. Final Assessment Meeting Prior to an Operational Finding.

The issuance of an operating license under 10 CFR Part 50 is a licensing decision. However, 10 CFR50.57, "Issuance of operating license," requires the staff to, in part, find that "(a)(1) Construction of the facility has been substantially completed, in conformity with the construction permit and the application as amended…"; "(a)(2) the facility will operate in conformity with the application as amended…"; and (a)(3)(ii) there is reasonable assurance that the facility will be operated "in compliance with the regulations..." The final assessment meeting's purpose is to determine if implementation of the ARCOP supports these findings.

For facilities being built under a COL per 10 CFR Part 52, the staff is required to verify that the acceptance criteria of all ITAAC are met prior to allowing fuel to be loaded in the reactor. This finding is referred to the 10 CFR 52.103(g) finding. For COL holders, the final assessment meeting's purpose is to determine if implementation of the ARCOP supports this finding.

The director of the APO or designee will chair a final assessment meeting for an AR unit before the Commission or designee makes a positive operational finding under 10 CFR 50.57, 10 CFR 52.103(g), or pursuant to future operational requirements in 10 CFR Part 53, as applicable. The Director, NRR DRO, the Director, RII DORS, and

the Director, Host Region DORS, or designees, will participate in the final assessment meeting. Other participants should include applicable inspectors, project managers, APO staff, and other staff needed to support required NRC actions to recommend an AR unit to transition from construction to operations. Responsible NRC management will determine the meeting format and material. Provided that there are no outstanding quality issues, the output of the final assessment meeting is a recommendation for a positive operational finding for the AR unit.

After the Commission or designee makes a positive operational finding, regulatory oversight for the AR unit will transition to the ROP, and ROP cornerstones will be monitored. As such, the assessment requirements for ARs under the ROP will then apply to that unit. The host region will inform the licensee of the transition to the ROP and of the NRC's planned level of inspection, assessment, and enforcement. The timing and format of this notification is flexible and can either be a stand-alone letter or be incorporated into the correspondence notifying the licensee of the Operating License (OL) issuance or 10 CFR 52.103(g) finding.

After all units for an AR construction project are transitioned to the ROP, APO staff will conduct a review of the inspection program for that project, including fabrication, manufacturing, and on-site construction activities. This review will be the basis for changes or improvements to the design-specific inspection scoping matrix and project-specific inspection scoping matrices for future projects using that design.

b. Additional Considerations during the Transition to Operations for Part 52 Licensed AR Construction Projects

The 10 CFR 52.103(g) finding is the determination that all ITAAC inspections, tests, and analyses are complete and all acceptance criteria are met. Prior to the 10 CFR 52.103(g) finding, the NRC verifies that the licensee has corrected all ITAAC findings via review of the appropriate closure notifications (ITAAC Closure Notifications or ITAAC Post-Closure Notifications). ITAAC findings may remain open past the 10 CFR 52.103(g) finding, but the licensee must correct the deficiency that is material to ITAAC prior to the 10 CFR 52.103(g) finding. Findings that are not material to ITAAC may remain open past the 10 CFR 52.103(g) finding. Findings that are material to an ITAAC that is under ITAAC maintenance may remain open provided they do not cross one of the five ITAAC Post-Closure Notification thresholds, as described in section 8 of Nuclear Energy Institute (NEI) 08-01, Revision 5, "Industry Guidance for the ITAAC Closure Process Under 10 CFR Part 52."

Inspection findings identified before the 10 CFR 52.103(g) finding shall be dispositioned in accordance with IMC 2571. If a finding's significance determination and final enforcement action are not complete when the licensee indicates that all ITAAC are complete, then the NRC shall ensure that the findings are not, or are no longer, material to ITAAC before making the 10 CFR 52.103(g) finding.

Escalated enforcement findings that are open at the time of the 10 CFR 52.103(g) finding are used in the operational reactor oversight assessment process

07.04 Communications

a. AR Fabrication, Manufacturing, and Construction Annual Report

Annually, APO will issue an AR fabrication, manufacturing and construction report to summarize the previous year's assessment results for each AR manufacturing and construction project. The appropriate branch chiefs in NRR DRO, the host region DORS, and Region II DORS will provide input for the annual report as requested by APO.

At a minimum, the annual report will ensure NRC management awareness of:

1. AR projects to be discussed at the agency action review meeting (AARM),

2. AR projects with significant quality issues,

3. AR projects with FRT deviations,

4. AR projects with significant safety culture issues, and

5. Agency actions already taken in response to project quality issues.

An AARM is attended by appropriate senior NRC managers, is chaired by the Executive Director for Operations, or designee, and is conducted in accordance with the requirements in MD 8.14, "Agency Action Review Meeting." The Director of APO is responsible for preparing and presenting AR construction information at this meeting. The annual report will serve as the ARCOP input to, and will be the basis for, the ARCOP AARM discussion, as necessary.

b. Public Stakeholder Involvement

The results of the continuous assessment will usually be included in the applicable inspection report in accordance with IMC 0618 and should discuss the basis for the reasonable assurance of quality determination for each inspection area inspected. Alternatively, an assessment letter may be issued to document assessment results.

The staff will post a summary containing the results of the continuous assessment of AR construction project quality on the NRC's ARCOP public website. Public stakeholders will be afforded the opportunity to comment on or submit questions to the NRC via the public website. Public meetings are not required but may be considered if there is significant public interest. The involvement of the public in the results of the NRC's assessment of AR construction project quality is intended to provide an opportunity for the NRC to engage interested stakeholders on AR construction project quality and the role of the agency in ensuring the project is constructed in accordance with the design.

If an assessment meeting is held with a non-licensee/licensee, it will be a Category 1 public meeting in accordance with the Commission's policy on public meetings, with the exception that the meeting must be closed for such portions which may involve matters that should not be publicly disclosed under 10 CFR 2.390. Members of the public, the press, and government officials from other agencies are considered as observers during the conduct of the meeting. However, attendees should be given the opportunity to ask questions of the NRC representatives after the conclusion of the meeting.

Although the security cornerstone is included in the assessment process, the Commission policy is that specific information related to findings pertaining to the security programs cornerstone will not be publicly available. Therefore, security-related information other than what is publicly available in assessment letters, final significance

determination letters, and security inspection report cover letters will not be listed on public websites. If security-related information, which is a type of sensitive unclassified non-safeguards information (SUNSI), must be discussed in the assessment results, it shall be provided in separate, non-publicly available correspondence. NRC policy regarding SUNSI is provided in Management Directive 12.6, "NRC Sensitive Unclassified Information Security Program."

2572-08 REFERENCES

1. "10 CFR Part 52 Construction Lessons-Learned Report," dated January 16, 2024 (ML23325A202)
2. ADVANCE Act of 2024 (Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy Act of 2024), July 9, 2024
3. IMC 0618, "Advanced Power Reactor Construction Inspection Reports."
4. IMC 2203, "Security Inspection Program for Advanced Power Reactor Construction,"
5. IMC 2507, "Vendor Inspections"
6. IMC 2570, "Advanced Reactor Construction Oversight Program General Guidance and Basis Document"
7. IMC 2571, "Dispositioning Advanced Power Reactor Construction Noncompliances"
8. IMC 2573, "Inspection of The Advanced Power Reactor "Quality Of Reactor Plant Construction" Strategic Performance Area
9. IMC 2574, "Inspection of The Advanced Power Reactor "Operational Readiness" Strategic Performance Area"
10. Management Directive 8.8, "Management of Allegations"
11. NEI 08-01, Inspection Procedure 40600, "Licensee Program for Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Management"
12. NEIMA (Nuclear Energy Innovation and Modernization Act), January 14, 2019
13. Office Instruction NRO-REG-103, "Inspections, Tests, Analyses, and Acceptance Criteria Closure Verification Process"
14. Office Instruction NRO-REG-105, "NRC Staff Support of the Inspections, Tests, Analyses, and Acceptance Criteria Hearing Process"
15. Policy Statement on the Regulation of Advanced Reactors (73 FR 60612; October 14, 2008)
16. SECY-25-00XX, "Update on Development of the U.S. Nuclear Regulatory Commission's Advanced Reactor Construction Oversight Program," dated XXXX XX, 202X (MLXXXXXXXXX)

17. SECY-23-0048, “Vision for the Nuclear Regulatory Commission’s Advanced Reactor Construction Oversight Program,” dated June 6, 2023 (ML23061A086)

END

EXHIBITS:

Exhibit 1: Advanced Reactor Finding Response Table (FRT)

ATTACHMENTS:

Attachment 1: Acronyms
Attachment 2: Revision History for IMC 2572

Exhibit 1: Advanced Reactor Finding Response Table (FRT)

RESULTS		GREEN INSPECTION FINDING	WHITE INSPECTION FINDING	YELLOW INSPECTION FINDING
RESPONSE APPLIED TO EACH FINDING	Regulatory Engagement Meeting	None	Branch chief or division director	Regional Administrator or designee meets with senior management
	Enforcement Action Recipient Response	Corrective Action Program	Causal evaluation and corrective actions	Causal evaluation and corrective actions
	NRC Response	Baseline Inspection	Supplemental Inspection and evaluation for additional baseline inspection(s) in area(s) of concern	Supplemental Inspection and evaluation for additional baseline inspection(s) in area(s) of concern
COMMUNICATIONS	Inspection Report or Letter	Branch chief review/sign inspection report. Inspection report posted on public website.	Division director review/sign inspection report (with inspection plan). Inspection report posted on public website.	Regional Administrator review/sign inspection report (with inspection plan). Inspection report posted on public website.

Attachment 1: Abbreviations

AARM	Agency Action Review Meeting
ACIP	ARCOP Construction Inspection Program
APO	ARCOP Program Organization
AR	Advanced Reactor
ARCOP	Advanced Reactor Construction Oversight Program
CAL	Confirmatory Action Letter
CFR	Code of Federal Regulations
COL	Combined License
ConE	Construction Experience
CP	Construction Permit
DFI	Demand for Information
DORS	Division of Operating Reactor Safety
FR	Federal Register
FRT	ARCOP Finding Response Table
IMC	Inspection Manual Chapter
IP	Inspection Procedure
ITAAC	Inspections, Tests, Analyses, and Acceptance Criteria
LWA	Limited Work Authorization
LWR	Light Water Reactor
MD	Management Directive
ML	Manufacturing License
NCV	Non-cited Violation
NEI	Nuclear Energy Institute
NEIMA	Nuclear Energy Innovation and Modernization Act
NON	Notice of Nonconformance
NOV	Notice of Violation
NRC	Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
OL	Operating License
SC	Safety Culture
SCWE	Safety Conscious Work Environment
SDP	Significance Determination Process
SMR	Small Modular Reactor
SUNSI	Sensitive Unclassified Non-Safeguards Information
TE	Traditional Enforcement
URI	Unresolved Item
VIO	Violation
VIP	Vendor Inspection Program

Attachment 2: Revision History for IMC 2572

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 Information)
N/A	ML25210A571 XX/XX/202X CN XX-XXX	This is a draft version of this IMC. It is part of a set of IMCs that will implement the future Advanced Reactor Construction Oversight Program (ARCOP). This draft IMC will be the topic of discussion at a public workshop on August 26, 2025.	TBD	ML XXXXXXXX