MANUAL CHAPTER 2522

CONSTRUCTION REACTOR OVERSIGHT PROCESS SELF-ASSESSMENT PROGRAM

2522-01 PURPOSE

The construction reactor oversight process (cROP) self-assessment program evaluates the overall effectiveness of the cROP through its success in meeting pre-established goals and intended outcomes.

2522-02 OBJECTIVES

02.01 To establish the processes for collecting information and data to support the cROP self-assessment program.

02.02 To establish a process for objectively evaluating the effectiveness of the cROP in achieving the goals of being objective, risk-informed, understandable, predictable, open, and effective in accordance with NRCs Strategic Plan.

02.03 To provide timely, objective information to inform program planning and to develop recommended improvements to the cROP.

02.04 To inform the Commission, NRC senior management, and the public of the results of the cROP self-assessment program, including any conclusions and resultant improvement actions.

2522-03 RESPONSIBILITIES AND AUTHORITIES

03.01 Director, Office of New Reactors (NRO).

a. Oversees and manages the Construction Reactor Oversight Process.

b. Issues the annual cROP self-assessment SECY paper.

03.02 Director, Office of Nuclear Security and Incident Response (NSIR). Provides support and data as requested by the Director, NRO.

03.03 Regional Administrator(s). Provide data to support the cROP self-assessment program as requested by the Director, NRO.

03.04 Director, Division of Construction Inspection and Operational Programs (DCIP).

a. Oversees the implementation of the cROP self-assessment program.

b. Develops policies for the cROP self-assessment program.

03.05 Chief, Construction Inspection Program Branch (CIPB).

a. Develops program guidance and procedures for the cROP self-assessment program.

b. Ensures data from all sources are collected and consolidated to facilitate analysis.

c. Recommends and implements improvements to the cROP self-assessment program.

d. Monitors the effectiveness of corrective actions and improvements to the cROP that are developed in response to self-assessment findings.

e. Develops the annual cROP self-assessment SECY paper.

f. Ensures program and inspectable area leads are assigned, as applicable.

03.06 cROP Program Area Leads.

a. Collect self-assessment data each calendar year for assigned program area and summarize the information for the annual self-assessment report.

b. Develop the annual program evaluation for assigned program area.

03.07 cROP Inspectable Area Leads.

a. Collect data and user experience for assigned inspectable areas and summarize the information for the annual self-assessment report.

b. Review and evaluate the implementation of assigned inspection procedures for applicable programs and include lessons learned in the information provided for the annual self-assessment report.

NOTE: A complete listing of current cROP Program Area Leads and Inspectable Area Leads is available through the “points of contact” link from the NRO Construction Reactor Oversight Process internal webpage.

2522-04 DEFINITIONS

04.01 Definitions can be found in IMC 2506, “Construction Reactor Oversight Process General Guidance and Basis Document.”

2522-05 DISCUSSION

The cROP is the NRC's primary means of conducting oversight of licensee construction activities to provide reasonable assurance that facilities have been constructed and will operate in conformity with the license, the provisions of the Atomic Energy Act, and the Commission's rules and regulations. The cROP primarily consists of inspections, significance determination processes, assessment, and enforcement.

As noted in IMC 2506, “Construction Reactor Oversight Process General Guidance and Basis Document,” the basis of the cROP was derived in many instances from the Reactor Oversight Process (ROP). Similar to the ROP, the objectives of the staff in developing the various components of the cROP were to provide tools for inspecting and assessing licensee performance in a manner that was more risk-informed, objective, predictable, and understandable than the previous construction oversight processes. The goals of the cROP also include the organizational excellence objectives of openness and effectiveness from the NRC’s Strategic Plan. Each of these cROP goals support the NRC’s mission to ensure adequate protection of public health and safety and the environment, and to ensure adequate protection in the secure use and management of radioactive materials.

The six cROP goals are summarized below:

- Objective - decisions are based on factual information and uninfluenced by emotion, surmise, or personal prejudice.

- Risk-informed - risk insights are considered along with other factors (such as engineering judgment, safety limits, redundancy, and diversity) to better focus licensee and regulatory attention on issues commensurate with their importance to health and safety.

- Understandable - the process and its results are clear and written in plain English.

- Predictable - more than one individual can follow the same defined process and arrive at the same conclusion in a consistent manner (i.e., repeatable).

- Open - the NRC appropriately informs and involves stakeholders in the regulatory process.

- Effective - NRC actions are high quality, efficient, timely, and realistic, to enable the safe and beneficial use of radioactive materials.

The intended outcomes of the cROP, which help form its basis and are incorporated into the various cROP programs, include to successfully:

- Monitor and assess licensee performance
- Identify performance issues through NRC inspection
- Determine the significance of identified performance issues
- Adjust resources to focus on significant performance issues

- Evaluate the adequacy of corrective actions for performance issues
- Take necessary regulatory actions for significant performance issues
- Communicate inspection and assessment results to stakeholders
- Make program improvements based on stakeholder feedback and lessons learned

It is important that the cROP be periodically evaluated and improved to ensure continued achievement of its specified goals and intended outcomes. The staff conducts an annual cROP self-assessment to determine the success of the cROP in meeting the goals and intended outcomes and reports the results in an annual Commission paper. The staff gathers information through the following three methods in conducting the annual cROP self-assessment:

- Performance Metrics
- Program Evaluations by Inspectable Area and Program Area Leads
- Internal and External Surveys

05.01 Performance Metrics. Performance metrics were developed to assess performance with respect to the six goals of the cROP. A detailed description of these performance metrics is contained in Appendix A. Each metric in Appendix A includes its definition, the criteria to determine whether it is met, the organization responsible for gathering the data, and a cross-reference to the goals each metric is intended to support. The performance metrics will be reviewed as part of the annual cROP self-assessment process to evaluate their efficiency and effectiveness in providing a useful assessment of the cROP. Metrics may be added, deleted, or modified as necessary to provide a meaningful management tool. As part of the annual metric review, NRO/DCIP will evaluate the need to modify or add permanent automated systems to obtain needed metric information to minimize the burden on the staff.

05.02 Program Reviews. cROP program and inspectable area leads shall remain cognizant of the implementation of their assigned programs and procedures. Throughout the year, they shall review construction experience (ConE) issues for resolution and collect and review feedback forms written against their assigned areas to (1) assess the adequacy of the IMC or inspection procedure for possible improvements to its scope, focus, and guidance, (2) collect comments on the cROP from inspectors and licensees, and (3) include lessons learned in their assigned area.

The following program reviews will be conducted as a minimum during the annual cROP self-assessment:

- Review of inspection report adequacy using guidance in Exhibit 1 to this IMC
- Analysis of inspection hours and resource expenditures
- Analysis of Construction Inspection Qualification Status
- Construction Experience
- ITAAC Program Developments

In addition to these requirements, at the end of each year, the cROP program and inspectable area leads collect metric data and other insights into their areas and analyze the data for the previous year. The program and inspectable area leads shall summarize any insights gained, significant issues with, and major changes to their assigned areas. These analyses form the

basis for the program evaluations and are included in the annual cROP SECY paper. The summary input provided for each of the cROP areas is due to CIPB by the end of the 3rd week of January each year to support their specific program area evaluation for the annual self-assessment SECY paper.

05.03 Internal and External Feedback. The staff will solicit and analyze stakeholder feedback each year regarding cROP effectiveness. Possible methods to obtain feedback include internal and external surveys, internal and public meetings, and the IMC/IP change process.

05.04 Data Analysis and Recommendation Development.

NRO/DCIP has the overall responsibility for data collection. A variety of methods are used to collect data regarding the performance of the cROP. These methods include data from CIPIMS, internal and external stakeholder surveys, independent audits, responses to *Federal Register* notices, and information collected via program document reviews. To the extent possible, data collection is from agency databases and the need for ad hoc, manually developed data is minimized. Since the self-assessment program is relying heavily on the quality of the data contained in the CIPIMS database, it is imperative that Region II ensures the accuracy and timeliness of the CIPIMS data.

Data is typically collected quarterly. Data reporting is completed within 30 calendar days of the end of the quarter under review. Exhibit 2 to this IMC is a data collection and submittal form detailing the specific data elements for which Region II has the lead responsibility for data collection. Region II shall complete Exhibit 2 each quarter and forward the completed form to NRO_cROP Resource@nrc.gov.

NRO/DCIP has the overall responsibility for analyzing program data and developing recommended improvements to the cROP. Data analysis consists of comparing performance metric data with preestablished criteria and determining its meaning or programmatic impact. For example, criteria for acceptable cROP performance have been identified for each performance metric as detailed in Appendix A. A favorable comparison of data to these criteria would indicate that the cROP met the process goals and objectives, and no programmatic changes would likely be recommended. However, for an unfavorable comparison, more analysis may be required to determine causal factors and develop recommended process improvements.

The analysis of data also includes evaluating the results of audits conducted on various aspects of the cROP, comments collected from internal and external stakeholders, and any other insights gained by cROP program area leads.

Due to their direct experience with the inspection and oversight programs gained through implementation of the procedures, Region II staff should be consulted during the data analysis and recommendation development process to ensure that any regional insights are incorporated into the change process.

05.05 Annual Commission Paper. As directed by the Commission, the staff shall forward the results of the annual cROP self-assessment in a Commission paper. This Commission paper is issued to support the Agency Action Review Meeting (AARM) and the Commission briefing on

AARM results that follows. This paper typically addresses any lessons learned from the previous year, effectiveness evaluations of any major changes previously made to the cROP, the status of issues discussed in the Commission paper from the previous year, and any other significant issues affecting the cROP.

As a minimum, the annual Commission paper will include an evaluation of the construction inspection program, the construction Significance Determination Program (SDP), the ITAAC closure verification program, enforcement, and the construction assessment program. In addition, the staff typically includes discussions and assessments of cROP communication and inspector training activities, cROP self-assessment and independent evaluations, cROP resource expenditures and other topic areas as warranted. The paper will also include, as appropriate, an update on recent issues associated with ITAAC and an update on recent domestic and international ConE being incorporated into the NRC's programs.

The Commission paper will focus on the effectiveness of recent significant program changes, the strengths and weaknesses of the program, and additional planned actions to improve program effectiveness. The Commission paper will also present the staff's overall conclusions as to whether the cROP has been successful in meeting its goals and intended. The staff will highlight those areas of the cROP that warrant focus in the upcoming year based on the self-assessment results and lessons learned.

END

Attachment 1: Revision History for IMC 2522

Appendix A: cROP Self-Assessment Metrics

Non-publicly available exhibits available from the cROP SharePoint site links, click here:

Exhibit 1, Inspection Report Review Outline
Exhibit 2, Data Collection and Submittal Form

Attachment 1 - Revision History for IMC 2522

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training required and Completion Date	Comment and Feedback Resolution Accession Number
N/A	ML12289A044 11/30/2012 CN 12-027	This is the initial issuance of this Inspection Manual Chapter. Completed a four year search for commitments and found none.	N/A	ML12289A040
N/A	ML14189A211 07/28/2014 CN 14-017	This update is being issued as a minor change with no comment period.	N/A	N/A