

Construction Reactor Oversight Process Cornerstone Objectives, Attributes and Areas to Measure

Cornerstone	Design / Engineering
Objective	To independently assess the licensee's methods to (1) develop and implement detailed design and construction drawings and procedures; and (2) implement a design change process.
Attributes	Design Control; Procedure/Document Quality
Areas to Measure	ITAAC; Site-specific design; Design implementation; Design changes; Applicable Criteria from Appendix B
Inspectable Areas	Applicable IMC 2503 ITAAC procedures; Applicable IMC 2504 Construction Program Procedures; Design Acceptance Criteria.

Cornerstone	Procurement / Fabrication
Objective	To independently assess the licensee's methods to (1) procure material, equipment and services, and (2) control materials, parts, and components during fabrication.
Attributes	Process Control; Material Control; Procedure Quality
Areas to Measure	ITAAC; Commercial grade dedication; Receipt inspection; Licensee's Evaluation of Suppliers; Applicable Criteria from Appendix B; Maintenance and Storage of SSCs; and Reports Required by Regulations
Inspectable Areas	Applicable IMC 2503 ITAAC procedures; Applicable IMC 2504 Construction Program Procedures;

Cornerstone	Construction / Installation
Objective	To independently assess the licensee's programs and processes developed and implemented to ensure the construction and installation of facilities and structures, systems, and components in accordance with the design.
Attributes	Process Control; Material Control; Procedure Quality
Areas to Measure	ITAAC; Civil/Structural; Mechanical; Electrical; Welding; Maintenance and Storage of SSCs; Applicable Criteria from Appendix B; Reports Required by Regulations
Inspectable Areas	Applicable IMC 2503 ITAAC procedures; Applicable IMC 2504 Construction Program Procedures

Cornerstone	Inspection / Testing
Objective	To independently assess the licensee's programs and processes developed and implemented to inspect and test programs, facilities, and structures, systems, and components.
Attributes	Process Control; Material Control; Procedure Quality
Areas to Measure	ITAAC; ITAAC closure; ITAAC Maintenance; Non-ITAAC testing; Preoperational testing; Applicable Criteria from Appendix B
Inspectable Areas	Applicable IMC 2503 ITAAC procedures; Applicable IMC 2504 Construction Program Procedures

Cornerstone	Operational Programs
Objective	To independently assess the licensee's capability to safely operate the facility.
Attributes/Areas to Measure	<p>Program effectiveness</p> <p>Emergency preparedness; Radiation protection; Process and effluent monitoring; Fire protection; Preservice inspection; Preservice testing; Inservice inspection; Inservice testing; Environmental qualification; Reactor vessel material surveillance; Containment leak rate testing; Maintenance rule; Motor-operated valves; Quality assurance (operations); Operational Readiness.</p> <p>Training and Qualification</p> <p>Reactor operator training; Reactor operator requalification; Non-licensed plant staff training.</p>
Inspectable Areas	Applicable IMC 2504 Operational Program Procedures

Cornerstone	Security Programs for Construction and Operation
Objective	To provide assurance that (1) construction activities are not adversely impacted due to Fitness-for-Duty issues; and (2) the licensee's security programs use a defense-in-depth approach and can protect against the design basis threat of radiological sabotage from internal and external threats.
Attributes/Areas to Measure Note: Additional areas to measure will be added pending future construction security	<p><u>Access Authorization</u></p> <p>Operational Program: Personnel Screening; Behavior Observations; Fitness for Duty</p> <p>Construction Program: Fitness for Duty</p>

<p>rulemaking</p>	<p><u>Access Control</u></p> <p>Operational Program: Search; Identification</p> <p><u>Physical Protection</u></p> <p>Operational Program: Protected Areas and Vital Areas (Barriers, Alarms, Assessment)</p> <p><u>Contingency Response</u></p> <p>Operational Program: Protective Strategy Evaluation</p> <p><u>Material Control & Accounting</u></p> <p>Operational Program: Records, Reports; Procedures; Inventories</p> <p><u>Cyber Security</u></p> <p>Operational Program: Protection of Systems & Networks; Cyber Security Program; Plan & Procedures</p> <p><u>Protection of Safeguards Information</u></p> <p>Operational and Construction Programs: Access to SGI; Designation and Storage; Processing, Reproducing and Transmitting; Removal and Destruction</p>
<p>Inspectable Areas</p>	<p>Access control; Assessment and Detection; Contingency Plan and Compensatory Measures; Material Control and Accounting; Personnel Access, Fitness-for-Duty and Insider Mitigation; Physical Barriers; Programs and Procedures; Safeguards, Records and Reports; Security Management Oversight</p>