

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

<b>Cornerstone</b>	<b>Design / Engineering</b>
<b>Objective</b>	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.
<b>Attributes</b>	<b>Design Control; Procedure/Document Quality</b>
<b>Areas to Measure</b>	ITAAC; Site-specific design; Design implementation; Design changes; Applicable Criteria from Appendix B
<b>Inspectable Areas</b>	Applicable IMC 2503 ITAAC procedures; Applicable IMC 2504 Construction Program Procedures; Design Acceptance Criteria.

<b>Cornerstone</b>	<b>Procurement / Fabrication</b>
<b>Objective</b>	To independently assess the licensee's methods to (1) procure material, equipment and services, and (2) control materials, parts, and components during fabrication.
<b>Attributes</b>	<b>Process Control; Material Control; Procedure Quality</b>
<b>Areas to Measure</b>	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
<b>Inspectable Areas</b>	Applicable IMC 2503 ITAAC procedures; Applicable IMC 2504 Construction Program Procedures;

<b>Cornerstone</b>	<b>Construction / Installation</b>
<b>Objective</b>	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.
<b>Attributes</b>	<b>Process Control; Material Control; Procedure Quality</b>
<b>Areas to Measure</b>	ITAAC; Civil/Structural; Mechanical; Electrical; Welding; Maintenance and Storage of SSCs; Applicable Criteria from Appendix B; Reports Required by Regulations
<b>Inspectable Areas</b>	Applicable IMC 2503 ITAAC procedures; Applicable IMC 2504 Construction Program Procedures

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

<b>Cornerstone</b>	<b>Operational Programs</b>
<b>Objective</b>	<b>To independently assess the licensee's capability to safely operate the facility.</b>
<b>Attributes/Areas to Measure</b>	<p><b>Program effectiveness</b></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><b>Training and Qualification</b></p> <p>Reactor operator training; Reactor operator requalification; Non-licensed plant staff training.</p>
<b>Inspectable Areas</b>	<b>Applicable IMC 2504 Operational Program Procedures</b>

<b>Cornerstone</b>	<b>Security Programs for Construction and Operation</b>
<b>Objective</b>	<b>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.</b>
<b>Attributes/Areas to Measure</b>  <b>Note: Additional areas to measure will be added pending future construction security</b>	<p><b><u>Access Authorization</u></b></p> <p>Operational Program: Personnel Screening; Behavior Observations; Fitness for Duty</p> <p>Construction Program: Fitness for Duty</p>

<p><b>rulemaking</b></p>	<p><b><u>Access Control</u></b></p> <p>Operational Program: Search; Identification</p> <p><b><u>Physical Protection</u></b></p> <p>Operational Program: Protected Areas and Vital Areas (Barriers, Alarms, Assessment)</p> <p><b><u>Contingency Response</u></b></p> <p>Operational Program: Protective Strategy Evaluation</p> <p><b><u>Material Control &amp; Accounting</u></b></p> <p>Operational Program: Records, Reports; Procedures; Inventories</p> <p><b><u>Cyber Security</u></b></p> <p>Operational Program: Protection of Systems &amp; Networks; Cyber Security Program; Plan &amp; Procedures</p> <p><b><u>Protection of Safeguards Information</u></b></p> <p>Operational and Construction Programs: Access to SGI; Designation and Storage; Processing, Reproducing and Transmitting; Removal and Destruction</p>
<p><b>Inspectable Areas</b></p>	<p><b>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</b></p>