

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

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| 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. |

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| 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; |

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| 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 |

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| 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 |

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| 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 |

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| 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> |

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| <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> |