Vendor Inspection Program Plan, Revision 7

Yamir Diaz-Castillo
Mechanical Vendor Inspection Branch

Douglas Bollock
Electrical Vendor Inspection Branch

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Agenda

- Vendor Inspection Program Plan
  - Purpose of the VIP Plan
  - Objectives of the VIP
  - Selected Sections
- ITAAC Findings at Vendor Facilities
  - Expected Licensee Actions

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Vendor Inspection Program Plan

Purpose of the VIP Plan

Establish an overall approach, including goals, priorities, performance metrics, and resource management strategies for VIP activities.

Objectives of the Vendor Inspection Program

Verify that applicants and licensees are fulfilling their regulatory obligations with respect to providing effective oversight of the supply chain for operating reactors and reactor design and construction through a strategic sample of vendor inspections.

Vendor Inspection Program Plan

Selected Sections of the VIP Plan

- Appendix A: Strategy for Vendor Identification
- Appendix B: Strategy for Vendor Selection
- Appendix D: Strategy for Coordinating Vendor Inspections
- Appendix E: Vendor Inspection Program Performance Metrics
- Appendix F: Vendor Inspection Report Feedback Form

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Vendor Inspection Program Plan

Appendix A: Strategy for Vendor Identification

- Use current sources for vendor identification: 10 CFR Part 21 reports, interactions with NUPIC & ASME, communication with licensees and applicants, and allegations.
- Issue a regulatory issue summary to NRC applicants and licensees.
- Establish a page on the NRC public Web site that allows safety-related vendors to voluntarily provide information to the NRC.

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Vendor Inspection Program Plan

Appendix B: Strategy for Vendor Selection

- Vendor Prioritization Strategy is a tool to assess vendors using a set of predetermined attributes.
- Final score for each vendor is determined by adding up the individual score for each attribute - not all attributes are weighted equally.
- A higher score denotes that a particular vendor is more likely to be inspected (prioritized).

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Vendor Inspection Program Plan

Some of the attributes are:

- Prior NRC inspection experience
- NUPIC results
- Scope of supply
- Complexity of product or service
- Susceptibility to counterfeiting or cyber security issues
- Industry experience
- New or advanced technology
- Oversight by other entities
- Regulatory significance

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Vendor Inspection Program Plan

Appendix D: Strategy for Coordinating Vendor Inspection

- Vendor Inspection Center of Expertise (COE) is responsible for implementation of the vendor inspection program for new and operating reactors.
- Coordination between the COE and Region II Construction Inspection Staff for inspection support of targeted and non-targeted ITAAC-related activities.
- Inspection Manual Chapter 2507, “Vendor Inspections,” recently updated to reflect these changes.

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Vendor Inspection Program Plan

Appendix E: Vendor Inspection Program Performance Metrics

- 11 Performance metrics used to evaluate the success of the VIP
- Allows the NRC to:
  - Identify performance issues and determine their significance
  - Adjust resources to focus on significant performance issues
  - Take necessary regulatory actions for significant performance issues
  - Effectively communicate inspection results to stakeholders
  - Make program improvements based on stakeholder feedback and lessons learned
- VIP is assessed annually

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Vendor Inspection Program Plan

Appendix F: Vendor Inspection Report Feedback Form

- Used to help determine whether inspections reports are relevant, useful, and written in plain language.
- Questions revolved around the Notice of Violation and/or Notice of Nonconformance.
- Feedback form sent to the QA Manager after receipt of the inspection report.

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Construction Program Inspections (IMC 2506)

The vendor inspections are performed as part of the construction inspection program to inspect vendors supplying SR materials, equipment and services:

- Vendor Quality Assurance (QA) Programs (10CFR50, App B)
- Reporting of Defects (10 CFR 21, 10 CFR 50.55e)
- Commercial Grade Dedication (10 CFR 21)
- **Type testing for ITAAC related activities**
- Environmental Qualification Testing
- Counterfeit, Fraudulent, or Suspect Items

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Nonconformance Example

- NON 9990XXXX/201X-201-01
  - Lacking justification for the performance of partial valve strokes during valve flow testing

ITAAC	Design Commitment	Inspections, Tests, and Analyses	Acceptance Criteria
2.2.02.11a.i	The motor-operated and check valves identified in Table 2.2.2-1 perform an active safety-related function to change position as indicated in the table.	Tests or type tests of motor-operated valves will be performed to demonstrate the capability of each valve to operate under design conditions.	A test report exists and concludes that each motor-operated valve changes position as indicated in Table 2.2.2-1 under design conditions.

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Vendor Inspection Branch Actions

- Directly and clearly tie the finding to the applicable ITAAC in the inspection report and cover letter “material to the ITAAC acceptance criteria, specifically…”
- Enforcement actions to the vendor
- Letter to the affected Licensees
- NRC Vendor Inspection COE will re-inspect the vendor to ensure closure of the issue.

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Letter to Affected Licensees

- Describes the ITAAC finding at the vendor facility and how it directly affects the ITAAC acceptance criteria
- Provide a contact number if there are any questions
- Previous ITAAC Findings at vendor facilities were addressed in a single letter to Licensees (October 2013)
- NO ENFORCEMENT ACTIONS TO LICENSEES

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

ITAAC Closure Verification by Licensee

- Ensure ITAAC closure notification (ICN) on these ITAAC findings at the vendor facilities
- The ICN will address the ITAAC finding and corrective actions taken for final review and closure

Questions?

U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment