

Monitor and Control

- ITAAC Family Scorecard
- Overdue work items
- Look-ahead schedules and workforce planning
- Progress to 225-Day Letter
- Vendor Deliverable Schedule

ITAAC Closure Tools

- Auto assigned verification work
- Auto create ITAAC closure letters
- Auto create ITAAC closure packages

The Coreworx ITAAC Management solution provides best-in-class project management tools to fully satisfy the requirements for managing ITAAC Closure under 10 CFR Part 52.

The Coreworx ITAAC Solution provides project stakeholders with one common system for ITAAC planning, execution and closure. Key work processes including management of vendor deliverables, verification of deliverables, ITAAC maintenance, preparation of ITAAC closure packages, corrective actions, registry of all pre-operational maintenance and project change control are fully integrated. The Licensee can now easily monitor and control the scope, schedule and quality of ITAAC. Project dashboards provide real-time, transparent visibility to all project stakeholders. Measures are designed specifically to monitor progress and earned value, with full traceability to related ITAAC deliverables and activities.

The Coreworx ITAAC Management solution offers consortiums a toolset to significantly

mitigate risk, thereby increasing confidence of investors and insurance underwriters. While ITAAC is, at least for the time being, a nuclear-only term, other industries including fossil power generation, oil and gas, pharmaceutical, chemical, and mining are beginning to recognize the value in applying consistent best practice and self-regulation to construction of large-scale construction projects.

Technical Discipline	A As-built inspection	B Welding	C Construction Testing	D Operational Testing	E Qualification Criteria	F Design Fabrication Requirements
01 Foundations & Buildings	0.50				0.50	0.50
02 Structural Concrete			0.50			
03 Piping	1.77	1.90	1.90	1.75		1.82
04 Pipe Supports & Restraints						1.83
05 RPV & Intervals	1.00	1.00	1.00	1.00	1.00	1.00
06 Mechanical Components	2.00	1.80	1.67	1.96	2.00	1.97
07 Valves	1.63	2.00	1.83	1.92	1.75	1.85
08 Electrical Components & Systems	2.00		2.00	1.92	2.00	2.00
09 Electrical Cable	1.96		2.00			1.82
10 I&C Components & Systems	1.93		1.80	1.91	1.94	2.00
11 Containment Integrity & Penetrations	1.83			2.00	0.18	2.00
12 HVAC	2.00	2.00	2.00	2.00	2.00	2.00
13 Equipment Handling & Fuel Racks	0.99			1.71	1.25	1.50
14 Complex Systems w/ Multiple Components	1.92			1.71	1.25	1.50
15 Fire Protection	2.00		2.00	2.00		
16. Engineering	2.00				2.00	2.00
17 Security	2.00				2.00	
18 Radiation Protection	2.00				2.00	2.00

The Challenge

Managing ITAAC with effective project controls is essential to ensuring the successful closure of all ITAAC before a licensee may operate the constructed nuclear facility. Specific challenges include:

Schedule complexity: Every inspection, test and analysis document that is required for successful closure of an ITAAC criterion must be scoped during the planning phase of the project. The net result is managing thousands of ITAAC documents. In addition, it is estimated that the NRC will conduct 35,000 inspection hours on site for which most licensee's anticipate between 3-4x the preparation time.

Financial Impact of delays: Every day that the licensee is delayed represents a financial impact of a minimum \$1 million cost per day in lost revenue.

Originators Span the Supply Chain and the Globe: Documentation to satisfy closure of an ITAAC will come from various levels in the supply chain, from across the globe and potentially in various languages.

Management of Change and Corrective Action: Every plan is subject to change; every process can be improved. Lessons learned from ITAAC closure early in the project will be applied to improve quality and efficiency in subsequent ITAAC closures.

Solution Components

Coreworx offers one project system of record, satisfying the needs of all stakeholders for ITAAC closure including the Licensee, OEM, EPC, supply chain vendors, and the NRC.

- Work processes support the planning, execution and close out of ITAAC
- Standardized tools monitor and control progress
- Management of corrective actions relevant to each ITAAC criteria across the supply chain
- Document control, compliant with NQA-1 requirements, for the management of ITAAC criteria and closure package documentation.
 - Support for transmittals between external parties
 - Meta data management for ITAAC criteria and ITAAC

- closure packages in compliance with NEI 08-01
 - Standardized document numbering scheme
 - Responsibility matrix for verification tasks
 - View and markup tools for access to ITAAC deliverables regardless of the document's native application
 - Ability to perform regular audit for completeness
- Progress measurement of ITAAC criteria from the planning phase through to ITAAC closure.
 - Incremental milestones for deliverables
 - Schedule progress reporting for project managers, licensing managers and NRC project managers
 - Integration of ITAAC-related activities
 - Monitor and control real-time schedule performance, exceptions where ITAAC families are falling behind schedule, overdue work items, critical path work, vendor deliverable schedules, schedule slippage of ITAAC criteria and progress against the 225-day time window to fuel load
- Search capabilities supporting licensee verification of deliverables and NRC inspection of ITAAC closure packages and ITAAC closure tools including:
 - Management of interface agreements
 - Look-ahead schedule and work force planning
 - Assignment of ITAAC deliverables verification work
 - Verification of ITAAC deliverables and disposition of nonconforming items
 - ITAAC closure letters and ITAAC closure packages
- Integrated change control supporting change requests across the supply chain
 - Include scope of deliverables, schedule delays, change in the originator of required deliverables and quality of deliverables
 - Assess project change request across an integrated ITAAC team (e.g. OEM, EPC and Licensee team members)
 - Assign impact analysis work