



**U.S. NRC**

UNITED STATES NUCLEAR REGULATORY COMMISSION

*Protecting People and the Environment*

# **AP1000 DI&C ITAAC**

## **Inspection Approach**

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# DI&C ITAAC Focus

- **ITAAC 2.5.2.11 (Protection & Safety Monitoring System (PMS) Design & Development)**
- **ITAAC 2.5.2.12 (PMS Life Cycle Quality Processes); SMP, CMP, V&VP**
- **ITAAC 2.5.2.14 (PMS Component Interface Module (CIM) Design & Development)\***

**\* Design Acceptance Criteria**



# ITAAC 2.5.2.12 Issue

**Licensee / Consortium query:**

***“What constitutes satisfactory completion of inspection for this ITAAC?”***



## ITAAC 2.5.2.12

### ***Design Commitment***

The PMS software is designed, tested, installed, and maintained using a process which incorporates a graded approach according to the relative importance of the software to safety and specifies requirements for Software Management, Configuration Management, and Verification & Validation

### ***Inspections, Tests, Analyses***

Inspection will be performed of the process used to design, test, install, and maintain the PMS software.

### ***Acceptance Criteria***

A report exists and concludes . . . that requirements are provided for the following software development functions:

- Software management (SMP)
- Software configuration management (CMP)
- V&V (V&V Plan)



# Inspection Approach

- **Inspection uses sampled approach- for DI&C there is reliance on rigorous process and IV&V**
- **Seek to gain confidence in the implementation of the rigorous process and IV&V throughout the PMS development life cycle**
- **Inspection will verify implementation as part of each PMS inspection**
- **Expect inspections to continue through life cycle installation phase (pre-op), and verification of operations & maintenance processes (back end of life cycle)**



## **ITAAC Completion (projected sequence)**

**(1) ITAAC 2.5.2.14 (CIM)**

**(2) ITAAC 2.5.2.11 (PMS)**

**(3) ITAAC 2.5.2.12 (Process)**

**It is expected that 2.5.2.12 will be the last  
DI&C ITAAC to be completed and closed.**