

Department of Energy
Project Management Workshop
"Managing Uncertainty"

CNS EVMS Self Governance

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CNS EVMS Compliance

Consolidated Nuclear Security (CNS) / Y-12 and Pantex



CNS EVMS Compliance – Responsibilities & Authority

- Owner of "Rules, Tools, Process, Procedures"
- Provides Guidance
 - EVMS Compliance Review Board
 - Training and Mentoring
- Performs Governance
 - EVMS surveillances and oversight
- EVMS Compliance reports independently of the project management organization
 - Independence ensures the results are objective and that programmatic and systemic issues are identified



CNS EVMS Compliance – Data Driven Process

- Automates some of the manual reviews used in the past
- Assists in identifying systemic issues for Root Cause Analysis on Processes, System Description/Procedures, Training
- Provides drill down capabilities within the tools for identification and analysis of potential problem areas
- CNS has implemented a Data Driven process using automated tests as indicators which point to areas requiring further analysis



The Data Driven Process – Ribbon Charts

- The Ribbon Chart Test Indicators are run monthly
- Analyzed as an "indicator" of a potential problem

Description	Test T Thres	ypeł hold/Fre	quen	June	July				
Organization									
Guideline 01: Define the authorized work elements for program. A work breakdown									
structure (WBS), tailored for effective internal management control, is commonly used in									
this process.									
QE-LOI: 1.A.1: Is a single product-oriented WBS used for a given project extended to the control account le									
1.A.1-1.1 Verify that the numeric CA/WP/PP/SLPPs WBS codes align between the WBS Dictionary and EVMS Cost Tool.	С	5%	Μ	0%	0%				
1.A.1-1.2 Verify that the numeric CA/WP/PP/SLPPs WBS codes align between the IMS Flat File and the EVMS Cost Tool.	С	5%	Μ	0%	0%				
1.A.1-1.3 Verify that the WBS codes align between the Forecast IMS and Baseline IMS.	С	0	Μ	4	1				
1.A.1-2.1 Verify the product and/or deliverable from the PEP or other project scope definition document are reflected in the WBS Dictionary.	М	Yes	Q	Yes	Yes				



The Data Driven Process – Drill Down

	June Tes		Test: 1.A.1-1.3 WBS codes align between Forecast and Baseline IMS 4 Activities Tripped with a Zero Threshold						
А	В	С	D	E	F	G	Н	I.	
Guideline	e TestNo	TestMetricDescription	SubTestNo	X_VALUE	Y_VALUE	RESULT	THRESHOLD	TRIP	
		Verify that the numeric CA/WP/PP/SLPPs WBS codes align between the WBS							
	1 1.A.1-1.1	Dictionary and EVMS Cost Tool.	01_A_01-01_01_d	0	583	0	0.05	FALSE	
		Verify that the numeric CA/WP/PP/SLPPs WBS codes align between the IMS							
	1 1.A.1-1.2	Flat File and the EVMS Cost Tool.	01_A_01-01_02_d	0	583	0	0.05	FALSE	
	1 1.A.1-1.3	Verify that the WBS codes align between the Forecast IMS and Baseline IMS.	01_A_01-01_03_d	4	616	4	0	TRUE	
	1 1.A.2-1.1	Verifv the Dollar value. at the CA WBS levels. align between the IMS Flat File an	01 A 02-01 01 d	0	587	0	0.05	FALSE	

Drill down shows: WBS is in the Forecast Schedule but not in Baseline Schedule

Drill Down for June 2017

A	В	С	D	E	F
FC_WBS	FC_CC 🔹	BL_WBS	BL_CC 💌	COMPA 🖵	CNT 🔽
1.07.02.09.45.10.40.10.65.20	AREM2000			1	1
1.07.02.09.45.10.50.50	ANEX1300			1	1
1.07.02.09.45.25.30.05.32	AUCB1137			1	1
1.07.02.09.45.40.05.30.60	AECB2010			1	1



CNS EVMS Compliance and Self-Governance

- Monthly Reviews of data by EVMS Compliance and the Project
- Monthly analysis issued to management and the customer
- Analysis of results identifying potential non-compliance
 - Most trips are due to coding issues
- Identify corrective actions that must be implemented
- Maintain self-governance through continuous monitoring
- Implemented additional guidance:
 - EVMS Compliance Review Board for adjudication of EVMS related issues



Opportunities Associated With The Test Indicators

- Red is an emotional color and does not mean "failure"
- Tests run only on month-end data limits ability to prevent "red"
 - CNS is using quality checks prior to month-end close to improve data
- Materiality of the trips must be assessed for impacts to reporting
 - Is it a fatal flaw? Is it a systemic issue? Is it a "show stopper"?
- Relevancy of the tests run time has shown some tests need to be re-evaluated for applicability
- Of the 266 tests, 66% currently have zero thresholds
 - It is unlikely that test indicators will ever be 100% "Green"
 - What is good enough?
- Correction of "reds" can take 2-3 months due to the business cycle