

Engineering Practices Working Group
Cognizant System Engineer Subgroup
Meeting Minutes 10/29/09
Idaho Falls, Idaho

The meeting was held in the Center for Advanced Engineering Studies (CAES) building at Idaho Falls, Idaho. Special thanks to Jack Lance and Joan Garza for taking care of us during our stay.

The meeting proceeded roughly as noted on the attached agenda. Minor adjustments were made to account for availability of guest speakers and duration of topics.

Where presentations and other documents discussed herein have been posted to the LANL-hosted EPWOG ftp site, they are designated “(see FTP);” contact oruch@lanl.gov for access.

System Engineering Group Charter (Diane Cato)

Discussed the charter. (see Subgroup Status Etc ppt on FTP). Comments received included: In the scope, expand assessments of system health to include program health, include Mentoring within Training and Qualification, change wording of CGD to mirror language of tech basis doc “in conjunction with” EPWOG task team. Additionally, comment was to consider structuring like 420 Order. Diane and Fran will work on next version of the charter to incorporate the discussions.

Roles and Responsibilities of System Engineer (Fran Lemieux)

Discussed a whitepaper draft. (see Subgroup Status Etc ppt on FTP). Comments included: Consider adding a paragraph on independence. Additionally, define attributes for independence/technical conscious under various organizational structures. Question on the need to include SE Integration with other DOE Orders. Consideration of adding a figure to acknowledge the support and interactions with other orgs – Ops, Maint etc. There was a discussion of what if DOE Order 420 went away, and the only DOE guidance was what was stated in 830. Group very concerned.

Action: All – send Fran or Diane R2A2 if not already on EPWOG FTP site

Comments due First Friday in Dec 4

System Health Monitoring (Bill Heineken)

Discussed a best practice on System Health Monitoring. (see FTP). This was the third issuance, soliciting final comments prior to issuance as best practice. Comment to add “Present” results to system owner. Also discussion of distribution of results farther up the chain, to include DOE. Discussion on what systems should be included and how that is decided. Also, discussion regarding a focus on calibration data. Discussed that the System Health Report is not the mechanism for Operability determination. Jeff Brower presented an example of INL System Health Report. The summary report, stop light summary chart, governing procedure, training package and system health report example are now on the FTP site.

Action – All – send current examples of System Health, send words related to current practices on presentation, and comments on the draft Best Practice Reports to Bill Heineken at Heinekenwa@y12.doe.gov by Nov 20

Successful CSE Program (Jim O'Brien, Office of Nuclear Safety Policy and Assistance)

Roles well defined, in order to meet the order for reliably operable safety system. Design aspect weak link – handed to SE – system design needs to be well defined to ensure well maintained. Thanked EPWOG for participation at SSO Vegas Meeting, invited back, hope to make more beneficial. Looking at adding training to add value. Question – SSO Program as implemented requires the SSO to be jack of all trades, can't be. How relationship with SMEs? Looking at how SSOs are matrixing that support. Discussion of how accomplished at various sites – most have separate listing of SSO SMEs to support SEs. Pleased with the support we have given, glad that we are formed. SSO success relies on SE. Communication is key. Good practice to include the SSO on the walkdowns.

Tim Arcano also spoke: Paper looks good, key is how being implemented. Focus on the core functions to ensure they are being performed. Interfaces are weakest link and need attention. Joint walkdown critical, include Fac Rep.

Field System Walkdowns (Brad McClung)

Much discussion on purpose and scope for a formal walkdown. (see FTP for draft best practice procedure). Typically general material condition and configuration (no unauthorized mods). May be used for many purposes to include baseline document verification (CM), post mod CM verification, or other self designed scope. Comment to include typical invitees/participants. Also include a list of documents to be reviewed ahead of walkdown.

Action -- All – Provide additional criteria for inclusion in things to look at and provide feedback on definitions. Comments due to Brad at mcclunbd@nv.doe.gov by Dec 11.

NTS Reported that a CSE had been assigned to a project at pre-baseline in support of 1189 IPT, will report on success later.

CSE Management

Charlie facilitated a discussion of CSE management:

Direct vs Indirect Eng Orgs – impact on priority and ability to get “attention” of engineers deployed to field

Keys to success

R2A2

- Day to day
- Proj Suppt
- Misc Tasks
- Communication

Formalize communication – capture commitments in writing
Define internal interface
Relationships with Project VP – what we’ve done for you lately
Develop metrics – tool to use as “marketing” for Engineering
Engineering Leadership Team (Engineering Council) – Expectations, best Practices within the company, coming changes
MOUs/Interface agreement (Examples) – clear boundary definitions
Chief Engineer performance review input to Facility Engineering Mgr
Chief Engineer has veto rights on hiring/selection of Eng Mgrs
Design Authority rests with Company Chief Engineer and is delegated to the project chief engineers for further delegation to system engineers.
Visibility to Sr Mgmt – Marketing (Manpower needs, value added)
Proceduralize Tech Requirements (e.g. Drawing As-builts as readiness criteria– Not let Proj Manager cut funds/schedule for as-builts)

Action: Send Charlie Project, Startup Test procedures – interfaces – qual cards

Parking Lot items – Items for future consideration

Discussion of Management of list of VSS – How add/delete?
What PIs are used with success for measurement of Engineering Performance?
Definition of safety system boundaries – separate documents, SAR details, SDD, Safety Equipment List??
Should we develop Best Practices for Trending by System for systems that are common?

Attendance Roster

Contact information for those attending is appended to these minutes.

Thursday October 29, 2009

System Engineering Subgroup Meeting

CAES (Auditorium or Teton View next door)

Time	Topic	Lead	Objective
0715	Meet in Ameritel lobby, board two 15-passenger vans for CAES	Charlie/Tobin Oruch	
0730	Gather at CAES, copy speaker presentations and site procedures to single stick drive, coffee	Tobin	
0745	Roll Call, Introductions, Review Agenda	Fran/Diane	
0750	Review SEWG Charter	Fran/Diane	Information for attendees
0815	CSE R2A2	Fran	Review draft, edit draft, reach consensus on content for issue as a BP
0915	Break		
0930	NTS Field System Walkdown Framework/review examples	Fran/Brad McClung	Review examples, initiate discussion on content for issue as a BP, assign actions to develop BP
1100	Trending Data: Selection, measurement, Analysis, Corrective Actions	Fran/Diane	General philosophy discussions about how selected, what measured, ...
1200	Lunch		Eat and network
1300	Trending Data: Specific examples	All	Review HEPA/HVAC and Fire Protection/Suppression examples, decide if BP needed, if yes-assign actions to prepare BP
1400	What makes a successful CSE program? SSO feedback	Earl Hughes/Jim O'Brien	Feedback from SSOs as to their expectations
1500	CSE Management	Charlie Kronvall	Open discussion, tools for how to balance Ops/Eng priorities, technical expectations, CSE rigor—how/when to “tailor”
1600	Wrap up/Action Items	Fran/Diane	
1630	Adjourn		

EPWOG Fall CSE Meeting October 29 Idaho Falls

	Date	Name		Phone	e-mail	Company
	Th 10/29	Last	First			
1	X	Ailey	Dan	865-241-2313	dga@y12.doe.gov	B&W Y-12
2	X	Amaria	Navroze	303-887-9415	navroze.amaria@wqint.com	URS
3	X	Arcano	Tim	301-903-0139	joseph.arcano@hq.doe.gov	EM-65
4	X	Boodry	Kelly	208-533-7893	kelly.boodry@inl.gov	INL/BEA
5	X	Brower	Jeffrey	208-533-4457	jeffrey.brower@inl.gov	INL/BEA/BEA
6	X	Bryant	Jeffrey	208-533-3317	jeffrey.bryant@icp.doe.gov	ICP/CWI
7	X	Burnett	Mel	505-667-1562	melb@lanl.gov	LLNL
8	X	Cato	Diane	509-372-0103	diane_m_cato@rl.gov	WRPS
9	X	Cullum	Bob	575-234-8683	Bob.Cullum@wipp.ws	Wash TRU Solns
10	X	Fadeley	Randy	208-881-3069	randy.fadeley@icp.doe.gov	ICP/CWI
11	X	Fewell	Tom	208-533-2060	Thomas.fewell@icp.doe.gov	ICP/CWI
12	X	Heineken	Bill	865-576-3803	Heinekenwa@y12.doe.gov	B&W Y-12
13	X	Keith	Ken	865-576-9687	k7k@y12.doe.gov	B&W Y-12
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15	X	Knudson	Bob	702-295-0464	knudsorg@nv.doe.gov	NSTec
16	X	Kronvall	Charlie	509-376-9601	Charles_M_Kronvall@rl.gov	CHPRC
17	X	Lance	Jack	208-526-9048	jack.lance@inl.gov	INL/BEA
18	X	Landon	Wray	208-526-9076	wray.landon@inl.gov	INL/BEA
19	X	Lemieux	Fran	702-335-9567	lemieufh@nv.doe.gov	NSTec
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