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Radiation Safety System Configuration Control and Operational Readiness

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Responsibilities and Clarifications of Practices in Experiment Hall

■ Work Approval and Authorization

- Approval and Authorization are two distinct steps in work planning
 - *Approval: “Ready, Set”*
 - Can work be done, should work be done, are reviews complete etc...
 - For RSS components, depending on risk level this is recorded through our WRQ system or explicit memo depending on type of work. For changes to components (new installs and modifications), approval is re-verified prior to authorization.
 - *Authorization: “Go!”*
 - Is anything changed?, Are necessary controls in place?
 - For RSS components, this is recorded using the Configuration Control Work Permit.

Responsibilities and Clarifications of Practices in Experiment Hall (cont.)

- Roles and Differences in Responsibilities between old AOD and AES
 - Line Management is responsible for work authorization/approval and safety.
 - Depending on Risk Level, higher levels of management and oversight functions are involved.
 - *Line management: Group Leaders, ADDs*
 - *Oversight: CCSM, Floor Coordinators (maintain Config. Control)*
 - *Work Quality: Responsible Engineer, Radiation Safety System Engineer*
 - Responsible Engineer: Has responsibility for performing a particular task of a project.
 - RSSE: Effectively “owns” the component. Ensures that all work done on the component has proper documentation and is proper. For the experiment hall, the RSSE in general starts the CCWP process and starts its close out for planned work. FC and CCSP have the same signature authority as always.

Responsibilities and Clarifications of Practices in Experiment Hall

- Difference between AOD and AES
 - Most roles are the same.
 - One difference
 - *In AOD, each RSS didn't have an owner. Local Floor Coordinator who had many responsibilities including shift work was expected to "know" their beamlines. Floor Coordinator Group was an oversight group, not a technical group. Level of technical knowledge could be highly variable.*
 - *RSSE function would change depending on the job.*
 - *In AES, the RSSE effectively "owns" the components. Located within SI, function is in a technical group and are now full time technical employees.*
 - *Floor Coordinators and CCSM still fulfill their overall oversight function for all RSS work.*

Operational Readiness

■ Last Startup

- A number of beamlines were delayed in their startup due to a breakdown in a number of systems.
 - *The CCWP process was modified to add an electronic approval path within ICMS. (A purely paper path was and is still allowed)*
 - In a purely paper process, “exception handling” is easier to accomplish.
 - An electronic process forces a path that is difficult to “break out of”.
 - *Several key personnel were not available at startup.*
 - *Significant delay due to unfilled “paperwork” is unacceptable and shows failures on several fronts:*
 - Overloaded resources on Startup Day (i.e. Floor Coordinators)
 - *Floor Coordinators did exactly what they were supposed to do and did not bring up beamlines until authorizations were in place.*
 - Unclear path for “exception handling”
 - Attention of management

Operational Readiness

- What are we doing for next run.
 - CCWP Process
 - *Electronic CCWP process for non emergency work is highly desirable especially when one is opened. Easier to make sure work is approved, routing is easier, and process is auditable.*
 - *Process is currently being modified so that it is clear to all that paper closeouts are acceptable (in fact, paper “opens” are too)*
 - *Current implementation within our ICMS system has shortcomings. AES and ASD are currently working on a specification to merge our Work Request and CCWP processes. (longer term)*
 - Resource Allocation
 - *Better planning is required prior to startup to time average balance FC load.*
 - CCWPs need to be closed as they go, and closeout made easier to deal with.
 - Management now has access to better tools to follow the actual enabling of beamlines. Beamlines can and are enabled before startup day if ESAFs are in place.

Operational Readiness (cont.)

■ Resource Allocations (cont.)

- Working with HP now to simplify most survey requirements.
 - *While not in place yet, we are trying to get to the point where beamlines can start without minihutch and unistrut welding complete.*
 - *Reclassification of labyrinth and minihutch openings as not “RSS Work” to reduce unneeded bureaucracy.*

■ Exception Handling and Management Attention

- Closer management monitoring of each beamline’s status will be done starting one week before shutdown.
- AES Management signoff now in place to start up storage ring.
- Appropriate Group Leaders will need to provide status updates for why work is not complete if it is slipping and explain why CCWP process is not complete if work is done. CCWPs can not back up.
- AES –MIS ADD will be on the floor on startup days.
 - *If a problem does arise, it can be dealt with promptly.*