PSS/MPS Support for CEBAF/LERF

**Organization: Safety Systems Group**

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**This presentation does not include tasks required for support of or upgrades to CMTF, VTA, HDice, UITF, LCLS2, 12GeV-Hall C, ODH - Halls A, B, & C**

# Effort Year to Date

## Completed Support/Projects:

* PSS certification - CEBAF, LERF
* Door Control logic change - LERF
* PSS BCM power supply upgrade - BSY, E. Arc, INJ
* ODH Monitor change out - LERF

## Major Milestones Reached on Continuing Projects:

* Completed PSS installation on SHMS for 12GeV Hall C

# Near Term Tasks - Next month

**CEBAF Support**

Aug 2015

* ODH Sensor change out
* PSS Certification\*
  + - Changes include:

- Access door logic

- C100 interface timing

- Allowed modes for 0R08 dump movement

- BTM trip set points to EPICS

* W2 RF Separator FSD conversion
* Convert BLM/FSD from CAMAC to VME (partial) - W1, W2, W4

\*Possible change of date

# Mid Term Tasks (2–6 months)

**CEBAF Projects**

Sep-Oct 2015

* PLC upgrade - Hall C (complete system)
* PLC network upgrade - Counting House (partial)
* PA System upgrade (partial)

Nov 2015-Jan 2016

* Gun HVPS/Laser interface upgrade
* Hall C Dump - ion chambers/PCB

**LERF Support**

Nov 2015

* PSS Certification

# Long Term Projects

**CEBAF Projects**

2016

* PLC upgrade (complete system) - Hall A
* ODH System upgrade (partial 1/2) - N. Linac, S. Linac
* Install lights/horns in the N. Linac / S. Linac tunnels
* Examine Hall D transition issues with other halls
* Redesign Ion Chamber controls - Hall A
* Convert BLM/FSD from CAMAC to VME (partial) - Hall A, B, C
* Repair damaged BLM HVPS, FSD F. O. cables
* Explore individual Hall FSD shutdown
* Finish MPS HVPS upgrade to CAEN
* Replace Ion Chambers (partial)
* Install new Door Interlock Switches (partial)
* Remove door lock monitor switches from the PSS

# Long Term Projects

2017

* PLC upgrade (complete system) - Hall B
* ODH System upgrade (partial 1/2) - N. Linac, S. Linac
* PA System upgrade (partial)
* PSS HMI update
* Kicker redesign
* BLM head redesign
* BLM signal cable system redesign
* Redesign Ion Chamber controls - Hall C
* Replace Ion Chambers (partial)
* Install new Door Interlock Switches (partial)
* Upgrade Access Room status visual indicators

# Long Term Projects

2018 - 2019

* PLC upgrade (comprehensive) - N. Linac, S. Linac
* PLC upgrade (partial) - BSY, Injector
* PA System upgrade (partial)
* Replace PSS magenta beacons/strobes with LEDs

**LERF Projects**

2017

* ODH System upgrade (partial) - LERF
* PLC upgrade (partial) - LERF

2018

* ODH System upgrade (partial) - LERF

# Long Term Support

Systems supported after 2015:

* All systems and cards that provide the core PSS and MPS functions

Systems not supported after 2015:

* Legacy custom data acquisition systems or cards for outside customers
  + Replacement VME cards may be installed, but will not be supported by the Safety Systems Group
* No new custom data acquisition systems or cards will be developed or installed by the Safety system Group for outside customers

# Significant Problems Pending (technical issues, resource issues, scheduling)

* Staffing

**Current Staffing Outlook:**

* Ongoing training of new staff
* Replacement hires are frozen