Controls SW Group Meeting

September 12, 2024
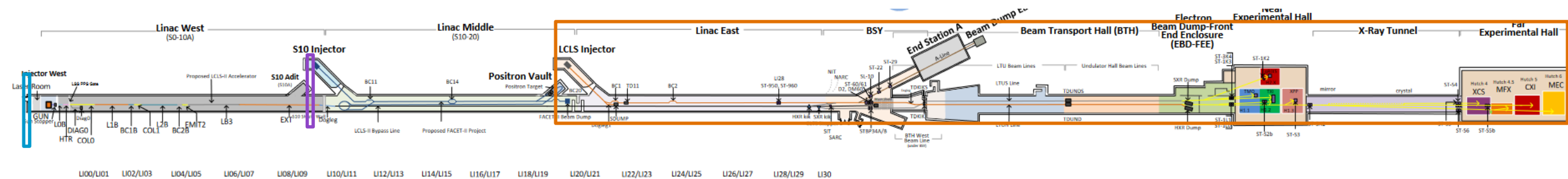
Agenda

1. Schedule Update
2. Power outage recovery
3. Controls housekeeping

T. Summers

SLAC NATIONAL ACCELERATOR LABORATORY

State of the Accelerators

- **LCLS-SC –** Downtime continuing until Oct. 1st when areas get locked up

    - KSUB04 maintenance, affecting S7-S10, re-energization removal of generators happened yesterday

- **FACET –** Downtime continuing until Oct. 1st, areas locked up Sept. 27th

- **LCLS-Cu/NC –** User program resumed

- SPEAR – PPS testing

- NLCTA is preparing to run, ASTA is running

Summer Downtime and LCLS-Cu Restart Update

- **The LINAC EAST downtime has ended and the machine is back in user delivery mode.**

- This week's 1-day PAMM was basically cancelled to focus on recovery after Monday's power outage.

- The next LINAC EAST + downstream PAMM is the week after next
  - Next PAMM is 3 days long
  - This alternating short/long pattern will continue the rest of the year

- Linac West and FACET downtime continues until Sept. 30
  - There are still 28 active SW jobs in this bucket – please start looking at closing them out.

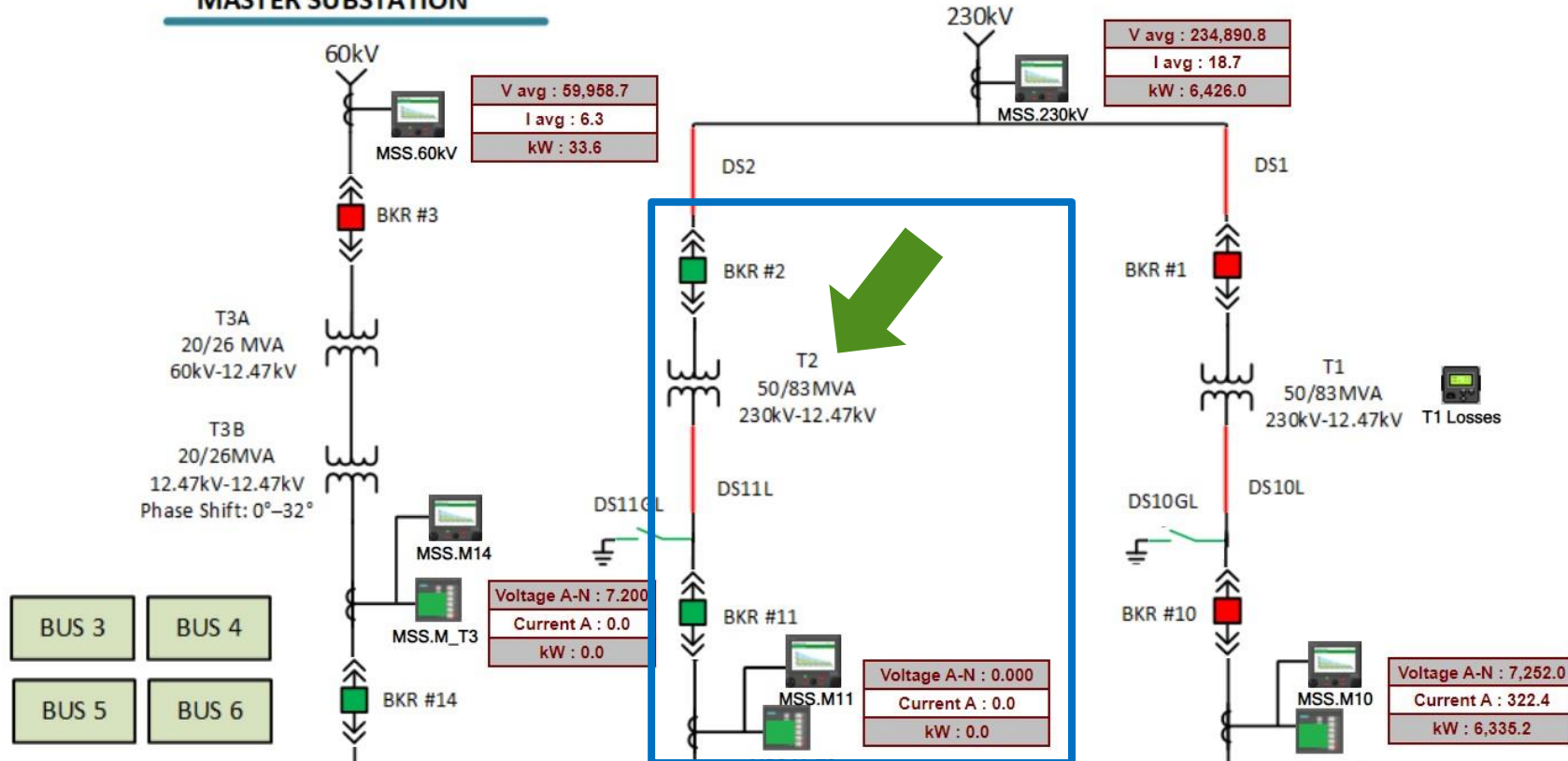| 837	12/21/2024	01/01/2025	All Accelerators	PAMM	Winter downtime
836	12/16/2024	12/21/2024	LCLS	PAMM	BTH open during PPS certification
835	12/11/2024	12/11/2024	SC_Linac_MD	POMM	Linac West POMM
834	12/03/2024	12/05/2024	AOSD LCLS	PAMM	Linac east + downstream 1 day PAMM, Linac west & facet 2.5 day PAMM
833	11/27/2024	11/27/2024	LCLS	POMM	Linac East & BSY POMM
832	11/18/2024	11/20/2024	All Accelerators	PAMM	Linac East+BSY 1.5 days, rest 2.5 day pamm
831	11/13/2024	11/13/2024	SC_Linac_MD	POMM	Linac West POMM
830	11/05/2024	11/07/2024	All Accelerators	PAMM	LCLS-NC+downstream 1 day, LCLS-SC & FACET 2.5 day PAMM
829	10/30/2024	10/30/2024	LCLS	POMM	Linac east + BSY POMM
828	10/21/2024	10/23/2024	All Accelerators	PAMM	LCLS-SC, FACET-II, LCLS-NC and downstream
827	10/08/2024	10/09/2024	All Accelerators	PAMM	LCLS-SC + FACET two day and LCLS-NC + downstream one day PAMM
826	10/02/2024	10/02/2024	LCLS	POMM	Linac east & BSY POMM
825	09/23/2024	09/25/2024	LCLS	PAMM	Linac east + downstream PAMM
808	07/05/2024	09/30/2024	All Accelerators	Downtime	FACET & Linac West Summer Downtime, bucket closes 6/14 17:00

Calendar View of Activities

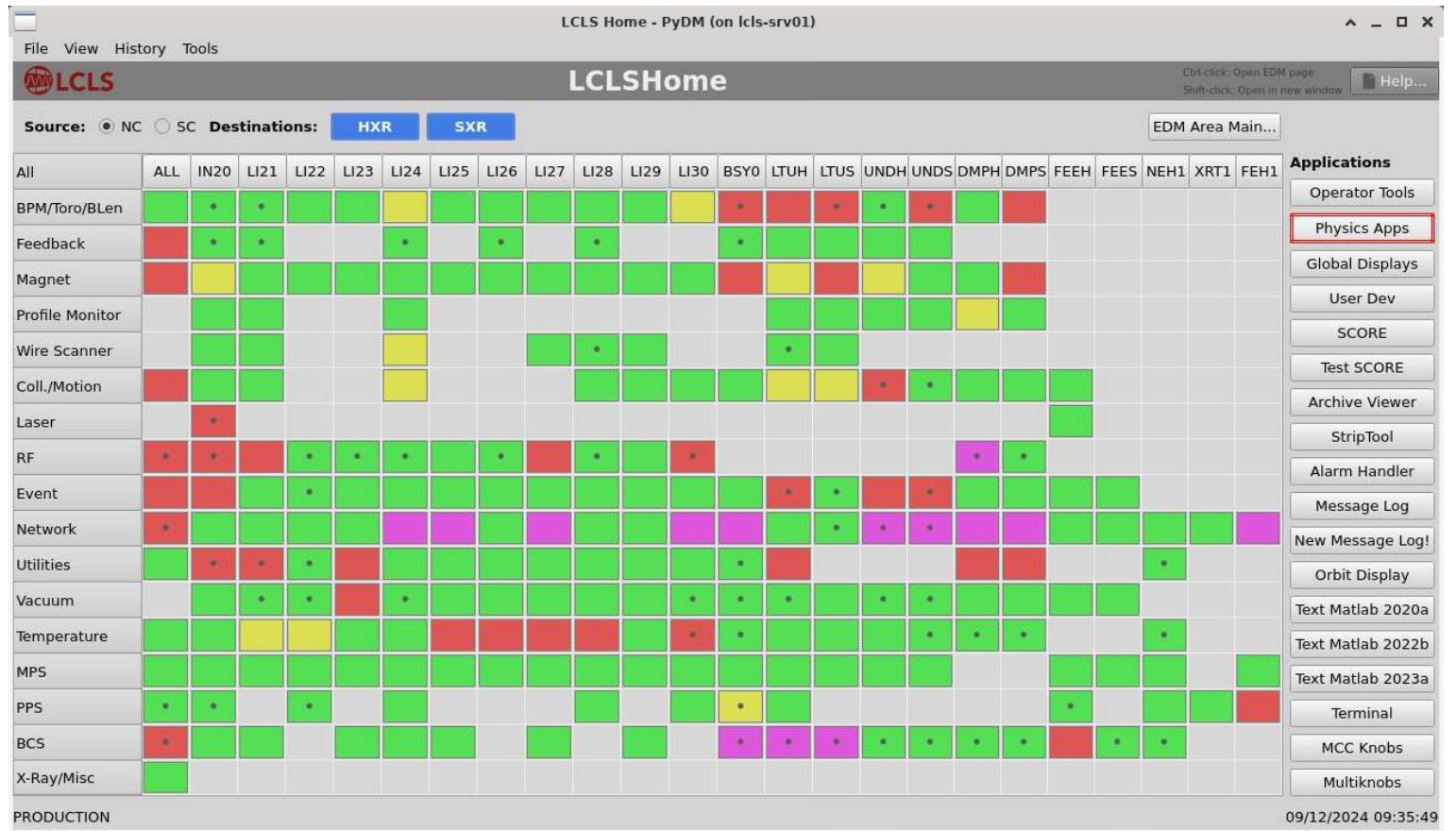| Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09/08/2024 • LCLS NC Users • LINAC West K-Sub 04 Outage– systems on generator power	09/09/2024 • LCLS NC Users • SSRL PPS Testing • LINAC West K-Sub 04 Outage– systems on generator power • **Power Outage – T2 Tripped** • LINAC Recovery • Cryoplant Recovery	09/10/2024 • LINAC Recovery • SSRL PPS Testing • LCLS NC Recovery activities • LINAC West K-Sub 04 Outage– systems on generator power	09/11/2024 • LCLS NC Recovery/Users • SSRL PPS Testing • LINAC West K-Sub 04 Re-energization	09/12/2024 • LCLS NC Users • SSRL PPS Testing/*SPEAR Controlled Access*	09/13/2024 • LCLS NC Users • SSRL PPS Testing/*SPEAR Controlled Access* • **North Gallery Road S25-S30 striping – traffic control**	09/14/2024 • LCLS NC Users
09/15/2024 • LCLS NC Users	09/16/2024 • LCLS NC Users • SSRL PPS Testing/*SPEAR No Access-Booster Controlled Access-LINAC No Access* • **South Gallery Road S26-S29 for gutter cleaning – traffic controlled**	09/17/2024 • LCLS NC Users • SSRL PPS Testing/*SPEAR No Access-Booster Controlled Access-LINAC No Access* • **South Gallery Road S26-S29 for grinding and paving – *No Access***	09/18/2024 • LCLS NC Users • SSRL PPS Testing/*SPEAR, Booster,LINAC ALL No Access* • **South Gallery Road S26-S29 for final paving – *No Access***	09/19/2024 • LCLS NC Users • SSRL PPS Testing	09/20/2024 • LCLS NC Users • SSRL PPS Testing	09/21/2024 • LCLS NC Users
09/22/2024 • LCLS NC Users	09/23/2024 • LCLS NC PAMM • SSRL PPS Testing	09/24/2024 • LCLS NC PAMM • SSRL PPS Testing	09/25/2024 • LCLS NC PAMM • SSRL PPS Closeout	09/26/2024 • LCLS NC PAMM Recovery • **SSRL/SPEAR Linac/Booster BAS**	09/27/2024 • LCLS NC Users • **LINAC Middle Searches** • **LINAC West Search – PPS Tests & LSS IAT** • **FACET II BAS** • SSRL/SPEAR Checkouts	09/28/2024 • LCLS NC Users

SLAC Power Outage Event – T2 tripped off

Documenting power outage recovery effort

- We have been asked to provide a detailed list of the controls effort needed to recovery from power outages
  - B005 – recover central control system services
  - Recover archivers, directory service
  - Recover/reboot IOCs…
  - Hours of effort by Ken, Jingchen, Charley, Arjun, Matt, Murali, Sonya, Namrata, Shawn, Garth, Carolina, Ryan, An, Jeremy…

- Many of these tasks are due to things not coming up in the right order, so we want to capture those dependencies as well as the simple failures

- I'll be sharing a spreadsheet with everyone to add these details – let's make a 1000 line list so people can see just how much effort is spent on recovery.

Focus on state of LCLSHOME

- To help the ACR operators more efficiently identify real issues in the accelerator we need to clear out all the disconnected statuses and alarms that don't actually impact the machine.

  - We are responsible for resolving the purple statuses
  - Area physicists have been tasked with fixing the red/yellow alarms that persist when the machine is running
  - We will be working with Ops and Physicists to start QA'ing the bypassed alarms

Focus on state of Open CATERs

- There are 486 open software and 261 open request caters assigned to SWE

- There are 41 open software jobs and 39 open request jobs assigned to SWE

- Go to CATER > Search > Adv Work Assignment Search and select your name to see all things assigned to you (caters, jobs, tasks).

- Suggestions for clearing the backlog? This is getting a lot of attention through the AD departments

Global Status Information

Type ↑≞	HOP	New	In Progress	Scheduled	Review to Close	Assigned To Me	Open	Closed
Hardware		310	487	454	31		1282	132939
Request		50	381	234	8	38	673	7859
Software		6	645	55		39	706	18558
Report Total:		**366**	**1513**	**743**	**39**	**77**	**2661**	**159356**

Temporary Utility Project

- Power was restored to our buildings yesterday around noon. We will be in this configuration until April.

- Be careful travelling over the new cable covers on the road in front of our building and on the walkway beside B024.

Welcome Mohammed Hasbuddin (Hasib)!

Mohammad Hasbuddin

- *I am software developer from India*
- *Done my Bachelor degree in electronics and communication from MDU in 2013*
- *Worked at different International organization like CERN, DESY, UoM*
- *Over 8 years of experience in Linux/Unix system administration and software development*
- *Worked with high-performance computing (HPC) environments at CERN and DESY, supporting critical infrastructure*
- *Like to play Table Tennis*
- *Looking forward to work with EED Group*