

Controls SW Group Meeting

August 8, 2024

Agenda

1. Downtime Update
2. ARW workshop recap
Tasha, James, Jeff, Joe

T. Summers

Summer Downtime Update

- **Downtime dashboard:** <https://slac.sharepoint.com/sites/AD/committees/iwp/Pages/IWP-Dashboard-2024-2025-Downtime.aspx>
- Find a link to Sharon's latest downtime slides near the top
- **We're currently on the 60kV power feed so power is limited.**
- **The LINAC EAST downtime is ending soon! Just under 2 weeks left...**

Please close out your caters asap!

- Linac West and FACET continue until Sept. 30
- Daily 8:15 meetings resume 8/19

CATER buckets for all the PAMMs and POMMs until the winter Downtime are now available :)

- Note there is a Linac east PAMM happening when our buildings will have no power Sept 4-11 (more on another slide)

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
824	09/10/2024	09/10/2024	LCLS	PAMM	Linac east + downstream
823	09/04/2024	09/04/2024	LCLS	POMM	Linac east & BSY POMM
808	07/05/2024	09/30/2024	All Accelerators	Downtime	FACET & Linac West Summer Downtime, bucket closes 6/14 17:00
809	07/05/2024	08/21/2024	LCLS	Downtime	Linac East Summer Downtime, bucket closes 6/14 17:00

Downtime LAF Timelines – Searches/PPS-BCS Testing/Outages

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08/04/2024 <ul style="list-style-type: none"> LINAC West K-Sub 04 Outage– systems on generator power 	08/05/2024 <ul style="list-style-type: none"> BSY Floor search S20 Inj Mod Test VVS PPS Testing Sweep of BTH, EBD-FEE at 3pm Hutch PPS LINAC West K-Sub 04 Outage– systems on generator power 	08/06/2024 <ul style="list-style-type: none"> Sweep of BTH, EBD-FEE at 3pm Hutch PPS LINAC West K-Sub 04 Outage– systems on generator power 	08/07/2024 <ul style="list-style-type: none"> ~6am 60kV Switchover 7am RA Substation Outage – Phase 1 (B910, B911, B912, B913) LINAC West K-Sub 04 Outage– systems on generator power 	08/08/2024 <ul style="list-style-type: none"> Site on 60kV line RA Substation Outage – Phase 1 (B910, B911, B912, B913) LINAC West K-Sub 04 Outage– systems on generator power 	08/09/2024 <ul style="list-style-type: none"> Site on 60kV line RA Substation Outage – Phase 1 (B910, B911, B912, B913) LINAC West K-Sub 04 Outage– systems on generator power 	08/10/2024 <ul style="list-style-type: none"> Site on 60kV line RA Substation Outage – Phase 1 (B910, B911, B912, B913) LINAC West K-Sub 04 Outage– systems on generator power
08/11/2024 <ul style="list-style-type: none"> Site on 60kV line RA Substation Outage – Phase 1 (B910, B911, B912, B913) LINAC West K-Sub 04 Outage– systems on generator power 	08/12/2024 <ul style="list-style-type: none"> Site on 60kV line RA Substation Outage – Phase 1 (B910, B911, B912, B913) LINAC West K-Sub 04 Outage– systems on generator power 	08/13/2024 <ul style="list-style-type: none"> Site on 60kV line RA Substation Outage – Phase 1 (B910, B911, B912, B913) LINAC West K-Sub 04 Outage– systems on generator power 	08/14/2024 <ul style="list-style-type: none"> Site on 60kV line Recovery of B910, B911, B912, B913 RA Substation Outage – Phase 2 LINAC West K-Sub 04 Outage– systems on generator power 	08/15/2024 <ul style="list-style-type: none"> Site on 60kV line Sweep of BTH, EBD-FEE at 3pm Hutch PPS BTM Refilling LINAC West K-Sub 04 Outage– systems on generator power 	08/16/2024 <ul style="list-style-type: none"> Site on 60kV line Sweep of BTH, EBD-FEE at 3pm BTM Refilling (contingency) LINAC West K-Sub 04 Outage– systems on generator power 	08/17/2024 <ul style="list-style-type: none"> Site on 60kV line LINAC West K-Sub 04 Outage– systems on generator power
08/18/2024 <ul style="list-style-type: none"> Site on 60kV line LINAC West K-Sub 04 Outage– systems on generator power 	08/19/2024 <ul style="list-style-type: none"> Site on 60kV line LINAC West K-Sub 04 Outage– systems on generator power BAS – LCLS NC 	08/20/2024 <ul style="list-style-type: none"> Site 230kV Switch Searches LINAC East/BSY LINAC West K-Sub 04 Outage– systems on generator power BAS – LCLS NC LCLS NC Startup 	08/21/2024 <ul style="list-style-type: none"> LCLS NC Startup LINAC West K-Sub 04 Outage– systems on generator power 	08/22/2024 <ul style="list-style-type: none"> LCLS NC Startup Searches BTH/EBD-FEE LINAC West K-Sub 04 Outage– systems on generator power 	08/23/2024 <ul style="list-style-type: none"> LCLS NC Startup LINAC West K-Sub 04 Outage– systems on generator power 	08/24/2024 <ul style="list-style-type: none"> LCLS NC Startup LINAC West K-Sub 04 Outage– systems on generator power

Downtime LAF Timelines – Program/Outages

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
08/25/2024 • LCLS NC Startup • LINAC West K-Sub 04 Outage– systems on generator power	08/26/2024 • LCLS NC Startup • LINAC West K-Sub 04 Outage– systems on generator power • TUP – B081 Power Outage • North Gallery Road blocked S25-S30 for road grinding – All Day	08/27/2024 • LCLS NC Startup • LINAC West K-Sub 04 Outage– systems on generator power • B050 UPS 3/4/5 PM • TUP – B081 Power Outage	08/28/2024 • LCLS NC Users • LINAC West K-Sub 04 Outage– systems on generator power • B050 UPS 3/4/5 PM • TUP – B033 Power Outage 3-4 hours	08/29/2024 • LCLS NC Users • Searches BTH/EBD-FEE • LINAC West K-Sub 04 Outage– systems on generator power • B050 UPS 3/4/5 PM	08/30/2024 • LCLS NC Users • Search LINAC Middle to reset clock for FACET II access period • LINAC West K-Sub 04 Outage– systems on generator power	08/31/2024 • LCLS NC Users • LINAC West K-Sub 04 Outage– systems on generator power
09/01/2024 • LCLS NC Users • LINAC West K-Sub 04 Outage– systems on generator power	09/02/2024 • LCLS NC Users • LINAC West K-Sub 04 Outage– systems on generator power	09/03/2024 • LCLS NC Users • LINAC West K-Sub 04 Outage– systems on generator power	09/04/2024 • LCLS NC POMM • LINAC West K-Sub 04 Outage– systems on generator power • TUP Power Outage ➤ B024 ➤ B025 ➤ B029 ➤ B034 ➤ B035 ➤ Chiller 25S Starting outage early ~4-5AM	09/05/2024 • LCLS NC Users • Searches BTH/EBD-FEE • LINAC West K-Sub 04 Outage– systems on generator power • TUP Power Outage ➤ B024 ➤ B025 ➤ B029 ➤ B034 ➤ B035 ➤ Chiller 25S	09/06/2024 • LCLS NC Users • LINAC West K-Sub 04 Outage– systems on generator power • North Gallery Road blocked S25-S30 for microsurfacing – All Day • TUP Power Outage ➤ B024 ➤ B034 ➤ B035 ➤ Chiller 25S B025 & B029 Re-energized in the afternoon	09/07/2024 • LCLS NC Users • LINAC West K-Sub 04 Outage– systems on generator power • North Gallery Road blocked S25-S30 for road hardening – All Day • TUP Power Outage ➤ B024 ➤ B034 ➤ B035 ➤ Chiller 25S

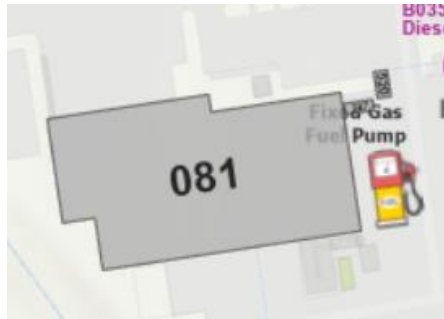
Downtime LAF Timelines - Program/Outages

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09/08/2024 • LCLS NC Users • LINAC West K-Sub 04 Outage- systems on generator power • TUP Power Outage ➤ B024 ➤ B034 ➤ B035 ➤ Chiller 25S	09/09/2024 • LCLS NC Startup • LINAC West K-Sub 04 Re-energization • TUP Power Outage ➤ B024 ➤ B034 ➤ B035 ➤ Chiller 25S	09/10/2024 • LCLS NC PAMM • TUP Power Outage ➤ B024 ➤ B034 ➤ B035 ➤ Chiller 25S	09/11/2024 • LCLS NC Users • TUP Power Restored ➤ B024 ➤ B034 ➤ B035 ➤ Chiller 25S	09/12/2024 • LCLS NC Users Power restored to B024, B034, B035	09/13/2024 • LCLS NC Users • North Gallery Road S25-S30 striping - traffic control	09/14/2024 • LCLS NC Users
09/15/2024 • LCLS NC Users New carpet in parts of B34!	09/16/2024 • LCLS NC Users • IR-2 PM - pending planning	09/17/2024 • LCLS NC Users • IR-2 PM - pending planning	09/18/2024 • LCLS NC Users • IR-2 PM - pending planning	09/19/2024 • LCLS NC Users • IR-2 PM - pending planning	09/20/2024 • LCLS NC Users • IR-2 PM - pending planning	09/21/2024 • LCLS NC Users
09/22/2024 • LCLS NC Users	09/23/2024 • LCLS NC PAMM	09/24/2024 • LCLS NC PAMM	09/25/2024 • LCLS NC PAMM	09/26/2024 • LCLS NC PAMM Recovery	09/27/2024 • LCLS NC Users • LINAC Middle Searches • FACET II BAS	09/28/2024 • LCLS NC Users
09/29/2024 • LCLS NC Users	09/30/2024 • LCLS NC Users • FACET II BAS	10/01/2024 • LCLS NC Users • FACET II Startup • LINAC West Searches • LCLS SC BAS	10/02/2024 • LCLS NC POMM • FACET II Startup • LCLS SC BAS	10/03/2024 • LCLS NC Users • FACET II Startup • LCLS SC BAS	10/04/2024 • LCLS NC Users • FACET II Startup • LCLS SC Startup	10/05/2024 • LCLS NC Users • FACET II Startup

Temporary Utility Power (TUP) Project

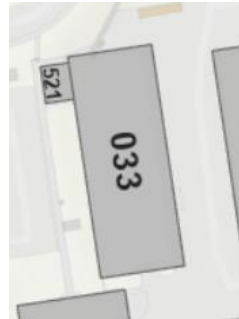
- Temporary Utility Power (TUP) Project supports the replacement of 25S switchgear and Switch#4.
- TUP would be providing power to the buildings/areas affected for the duration of the 25S switchgear replacement.
- TUP involves the utilization of portable substations, overhead conductors, and temporary switchgear.

Phase 1



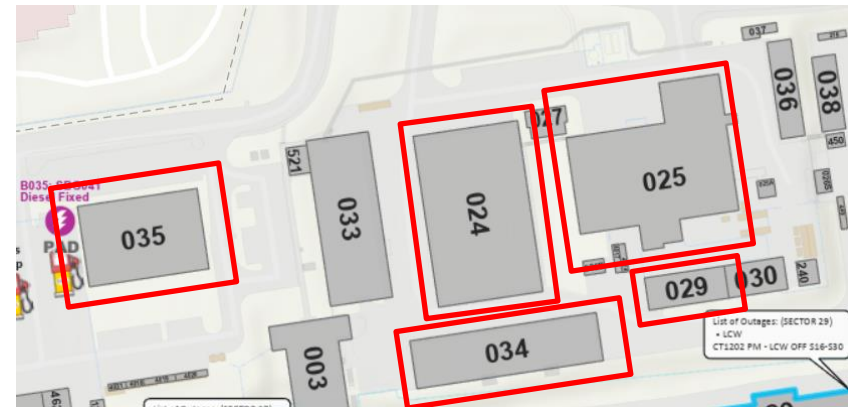
B081 Power Outage
Duration 2 Days
Aug 26 & Aug 27

Phase 2



B033 Power Outage
Duration 3-4 Hours
Aug 28

Phase 3 – Part I and Part II



Buildings 024, 025, 029, 034, 035, Chiller 25S
Power Outage Duration – 3 days each for Parts I & II split around a weekend (*outage for all 6 days plus the weekend*)
Sept 4 to Sept 11
(*Planning B025 & B029 to be done first and re-energized Friday ~09/06*)

Planning Meetings:

06/03/2024 @ 9:30am

07/02/2024 @ 1pm

07/23/2024 @ 1pm

08/01/2024 Meeting with Subcontractor TTI and EPD

08/05/2024 @ 2pm Controls Software Group Meeting – August 8, 2024

PM: Andi Schoppa 6

LCLS-II-HE K-Sub 04 Outage

Where

- Sectors 07 -10 in the Klystron Gallery & Linac Housing

When

- Monday 8/1/24 through Tuesday 9/6/24

Why

- K-Sub 04 will be down for 5 weeks to allow for electrical re-routing to avoid conflicts with new structural steel associated with the new cupola that will house a new cryo-distribution box

What will be affected

- All Power in sectors 07-08 will be down, and several racks will be impacted in sectors 09-10

Mitigations

Generators (plus N+1 back ups) will be provided to ensure power to:

- Sector 07-10 I&C Alcoves
- Distribution Panel in Sector 08 serving S08 racks
- Sector 07 Air handling unit
- Sec. 07 ODH
- Cryo Control racks
- **Each Generator will take about 1 hour to transfer loads, during which time, power will be completely off**

Extension Cords will be run to provide power to:

- Cryo Control racks 14&15 in sec. 07
Task lighting will be provided in the Linac Housing
- **No Linac Housing Access in sectors 00-10 6am-5pm on 8/1/24**

What will remain down:

- L2KG071-38
- Lighting and house powers in sectors 07-08
- SSAs in sectors 07-08

PM: Miles Bianchi

570-350-5688

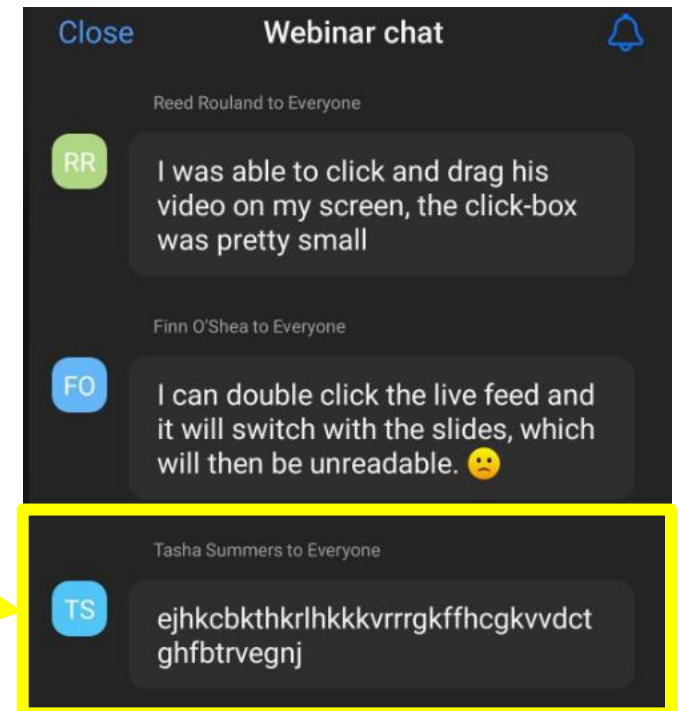
The HE Update Long Downtime (LTD) is coming...

See the memo sent on 7/30 from Greg Hays (LCLS-II-HE Project Director)

- The LTD is needed for LCLS HE upgrade installation (adding lots of cryomodules and more):
 - LTD begins Friday November 21, 2025 (Thanksgiving is the next week)
 - Return to Operations is March 1, 2027
- Important - the LCLS-Cu and FACET accelerators continue to run a user program during this time.
- There will still be a 2025 Summer Downtime for LCLS-Cu, LCLS-SC, and FACET, starting in July.

Other things SLAC wants you to know

- They're encouraging everyone to participate in the upcoming Culture Study by Gallup:
<https://intranet.slac.stanford.edu/event/2024/07/lunch-learn-slac%E2%80%99s-culture-study>
- Remember the new training requirement for course 219 – this is now yearly:
<https://intranet.slac.stanford.edu/news/2024/07/important-changes-required-training-and-badge-expirations>
- You are encouraged to share your feedback about the downtime:
<https://intranet.slac.stanford.edu/news/2024/07/feedback-summer-downtime-coordination>
- **Now is the time to pick up your YubiKey – USB multi-factor authentication token. Required for SLAC employees!**
 - This past Tuesday was the last organized event to pick yours up, but you can pick yours up at B050 and set it up yourself.
 - Beware that touching it will dump a random string of characters. Slack channels are full of them. So are Zoom chats. Don't be like me :)



Yesterday's Lab Director town hall chat



Special Presentation

Tasha Summers, James Bong, Jeff de Lamare, Joe DeLong

Recap of ARW 2024 workshop.