

Controls SW Group Meeting

July 13, 2023

Agenda

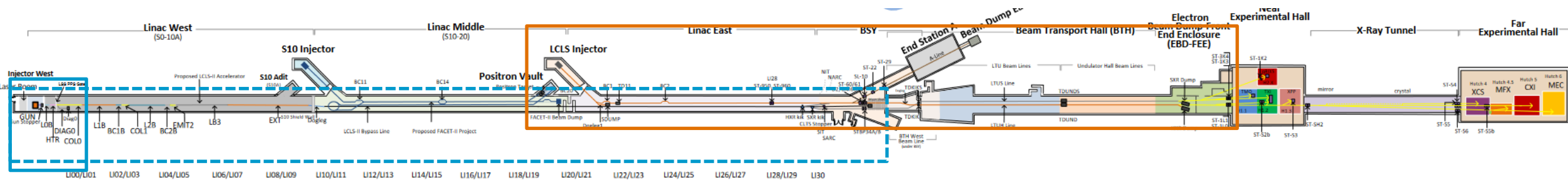
1. State of the machine
2. Upcoming schedules

T. Summers

State of the Accelerators

Both LCLS-SC and LCLS-Cu are running beam, FACET is getting ready

- **ALL electrical substation maintenance was completed.**
- **LCLS-SC:** Injector program with beam to DIAGO
 - Preparing to phase and tune beam at 3.5 GeV through linac to BSY-Dump this week
- **FACET:** Preparing for restart
 - BAS* was not ready yet, hopefully signed today
 - Tentative plan to turn on RF today/tomorrow, then restart linac this weekend
- **LCLS-Cu/NC:** Beam restored through linac and undulator lines
 - BBA for HXR and SXR completed, preparing for HXR Photon MD (experiment checkout and preparation for users)



Upcoming maintenance periods

PAMM Tuesday July 18 – Thursday July 20

(how is it the middle of July already?!?!)

- PAMM planning meeting right after this one
- Short POMM on July 27
- Next PAMM is August 1-3

Start Date ↓	End Date	Program	Machine Status	Description
11/01/2023	12/20/2023	All Accelerators	Downtime	2023 Nov-Dec downtime (LCLS SC, FACET, LCLS Cu)
09/19/2023	09/21/2023	All Accelerators	PAMM	9/19-9/21 PAMM
09/05/2023	09/07/2023	All Accelerators	PAMM	9/5-9/7 PAMM
08/15/2023	08/17/2023	All Accelerators	PAMM	8/15-8/17 PAMM
08/01/2023	08/03/2023	All Accelerators	PAMM	8/1-8/3 PAMM
07/26/2023	07/26/2023	All Accelerators	POMM	7/26 POMM
07/18/2023	07/20/2023	All Accelerators	PAMM	7/18-7/20 PAMM

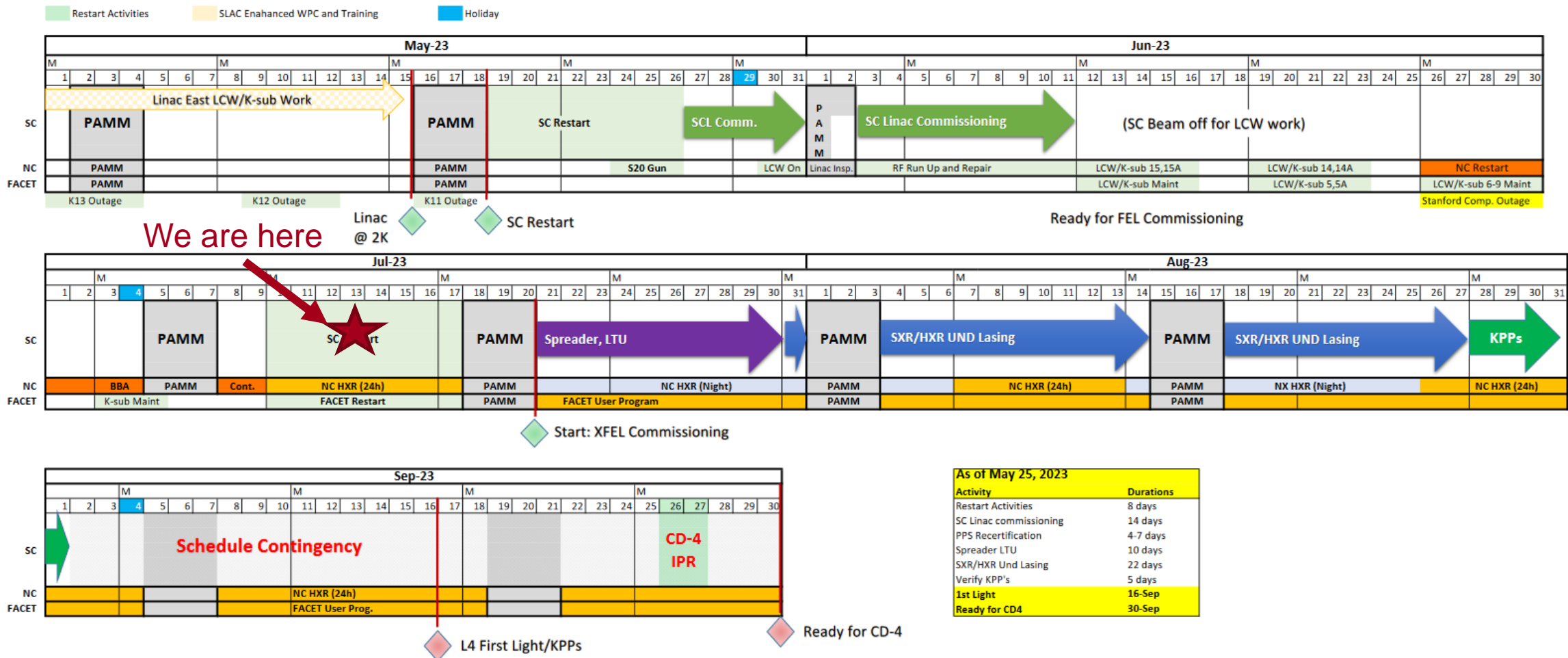
PPS Zone	RPFO Survey	Access State	Access Start	Search Time	No Access
Injector West	07/18 09:00	Controlled Access	07/18 10:00		07/20 15:00
LI01-LI07	07/18 09:00	Controlled Access	07/18 10:00		07/20 15:00
LI08-LI10A	07/18 09:00	Controlled Access	07/18 10:00		07/20 15:00

PPS Zone	RPFO Survey	Access State	Access Start	Search Time	No Access
S10 Injector		Controlled Access	07/18 06:00		07/20 12:00
LI10/LI11	07/18 08:00	Permitted Access	07/18 09:00	07/20 12:00	07/20 15:00
LI12/LI13	07/18 08:00	Permitted Access	07/18 09:00	07/20 12:00	07/20 15:00
LI14/LI15	07/18 08:00	Permitted Access	07/18 09:00	07/20 12:00	07/20 15:00
LI16/LI17	07/18 08:00	Permitted Access	07/18 09:00	07/20 12:00	07/20 15:00
LI18	07/18 08:00	Permitted Access	07/18 09:00	07/20 12:00	07/20 15:00
LI19/LI20	07/18 08:00	Permitted Access	07/18 09:00	07/20 12:00	07/20 15:00

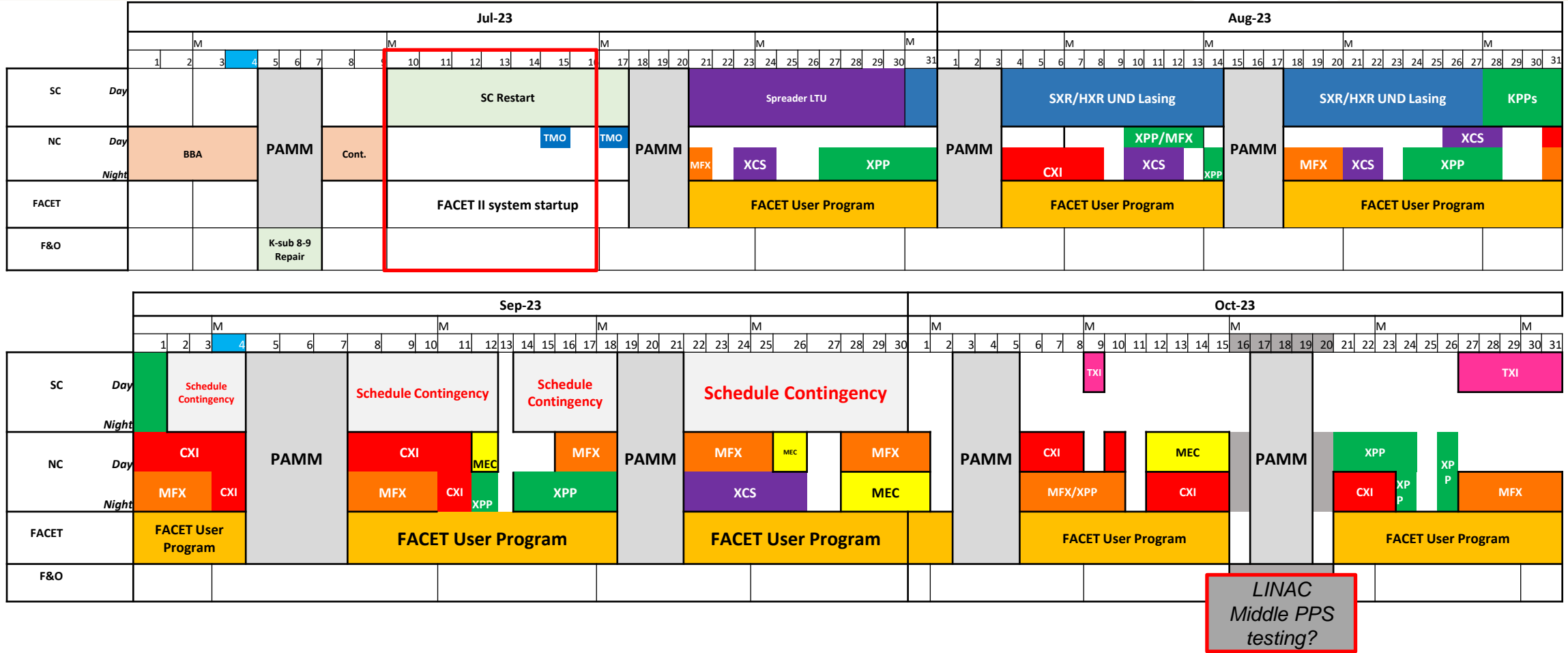
PPS Zone	RPFO Survey	Access State	Access Start	Search Time	No Access
LCLS-INJ		Controlled Access	07/18 06:00		07/19 16:00
LI21-LI23	07/18 07:00	Permitted Access	07/18 08:00	07/19 14:00	07/19 16:00
LI24/LI25	07/18 07:00	Permitted Access	07/18 08:00	07/19 14:00	07/19 16:00
LI26-LI29	07/18 07:00	Permitted Access	07/18 08:00	07/19 14:00	07/19 16:00
LI30	07/18 07:00	Permitted Access	07/18 08:00	07/19 14:00	07/19 16:00
BSY and BTHW	07/18 07:00	Permitted Access	07/18 08:30	07/19 18:00	07/20 10:00
HX-2		No Access			
BTH (LTU and U)		Permitted Access	07/18 06:00	07/19 16:30	07/19 18:30
EBD-FEE	07/18 08:00	Permitted Access	07/18 09:00	07/19 18:30	07/19 20:30

Looking ahead – big picture for following months

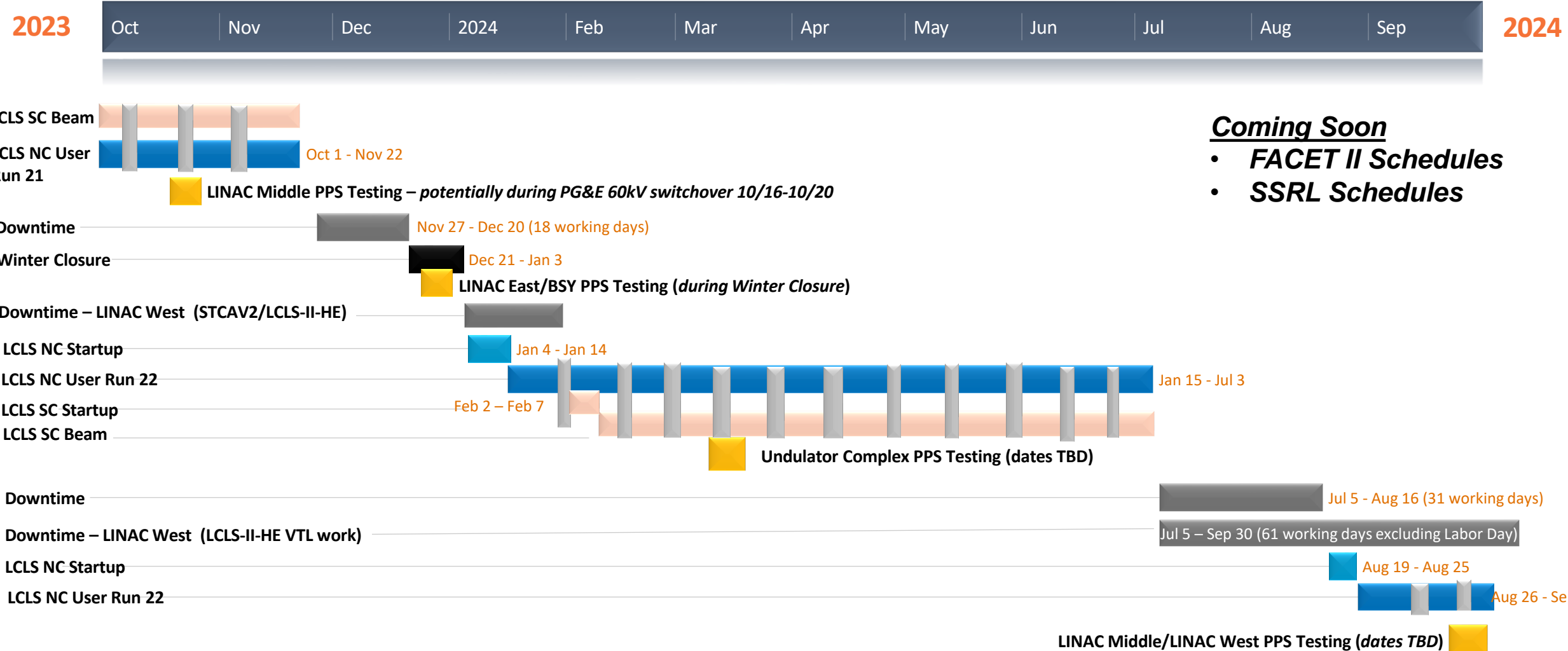
Projected First Light Schedule – May 25, 2023



LCLS User Schedules 2023



Oct 2023/Sept 2024 LCLS Schedules-Downtimes



- Coming Soon**
- ***FACET II Schedules***
 - ***SSRL Schedules***

Memo from Electrical Safety Officer – K. Jobe 07/05/23

SLAC ELECTRICAL SAFETY OFFICER



ESO Note

DATE: July 5, 2023
FROM: Keith Jobe, Interim Electrical Safety Officer
SUBJECT: 120/208 volt Amendment to the suspension of operation of equipment with obsolete Danger and Warning labels, v0.1

Scope

This amendment applies to operation of 120/208-volt equipment in panelboards, rack-mounted chassis, power switches integrated in utilization equipment, front-panel switches, disconnect switches, etc., when both the following are true:

1. The system voltage is 120 volts or 208 volts (single- or three-phase).
2. The power control device is in Normal Operating Condition: Doors and covers in place and secured. There is no evidence of impending failure (loosely installed, evidence of arcing).

– and **neither of the following are true** –

3. The equipment is posted as Operation Restricted (e.g.: DANGER UNDERRATED EQUIPMENT – DO NOT OPERATE ENERGIZED).
4. The panelboard MAIN incoming circuit breaker is the device being operated (for panelboards managed by the Facilities and Operations group). (Operation of any of the branch circuits is allowed.)

The above equipment may be operated **regardless of the date** on the Danger or Warning label. For 120/208-volt equipment, the arc-flash and electrical safety warning information applies to servicing or maintaining the equipment **while the worker is exposed to the hazard**. Updated warning labels and full applicable PPE is required while working on or near panelboards with their deadfront covers removed.

Note: Equipment such as mounted on DIN rails powered by a 120-volt power cord or a single phase molded-case circuit breaker rated 20 amperes or less are included within the scope of this document – even if there are no doors or covers

Controls Software Group Meeting – July 13, 2023



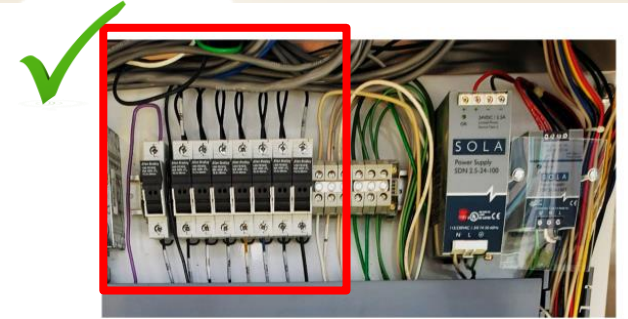
120V Disconnect Switch



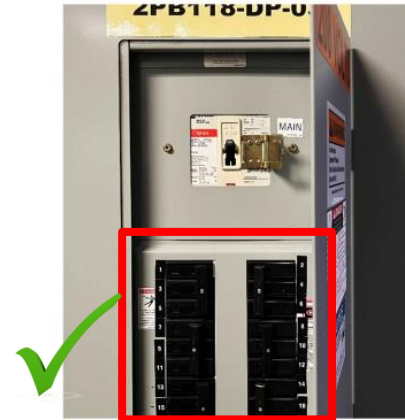
Rack mounted equipment, 208V with installed circuit breaker as on/off control



Rack mounted distribution panel



120V molded-case circuit breakers



120/208V panelboard with a MAIN circuit breaker

Question – how did recovery go?

We're running beams for the first time since mid-December!

- I'm interested in your experience with the program restart
 - Was it easy or challenging?
 - What was clear or confusing?
 - Do you feel you have enough time to check out things?
 - Are you getting lots of after hours calls or has it been quiet?