

ESH Status Update

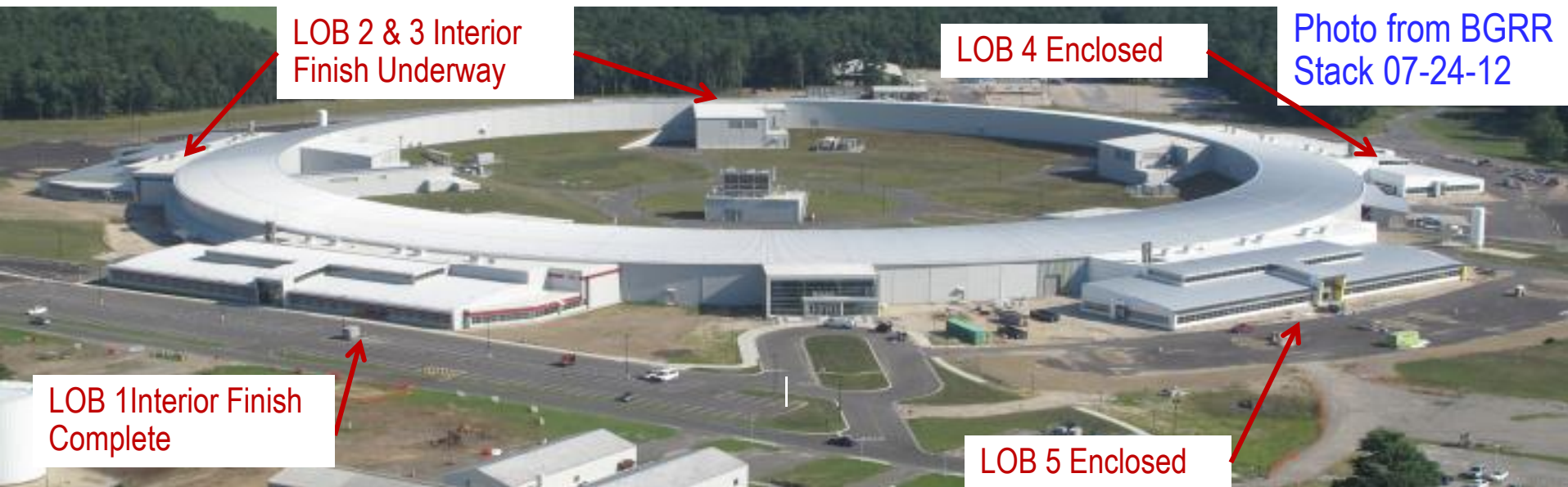


Steve Hoey, ESH Manager
Town Meeting
August 15, 2012

Outline

- BORE Status
- Sustainable Excellence
 - Linac mis-steer incident
 - PSD Injuries

Conventional Facilities BORE Status



- Ring Building complete and Occupied
- LOB 1, 2 & 3 BORE's held in June –pre occupancy items being completed
- LOB 1, 2 & 3 near complete
- LOB 4 & 5 ready by December 2012
- Staff to begin moving into LOB 1& 3 late Sept

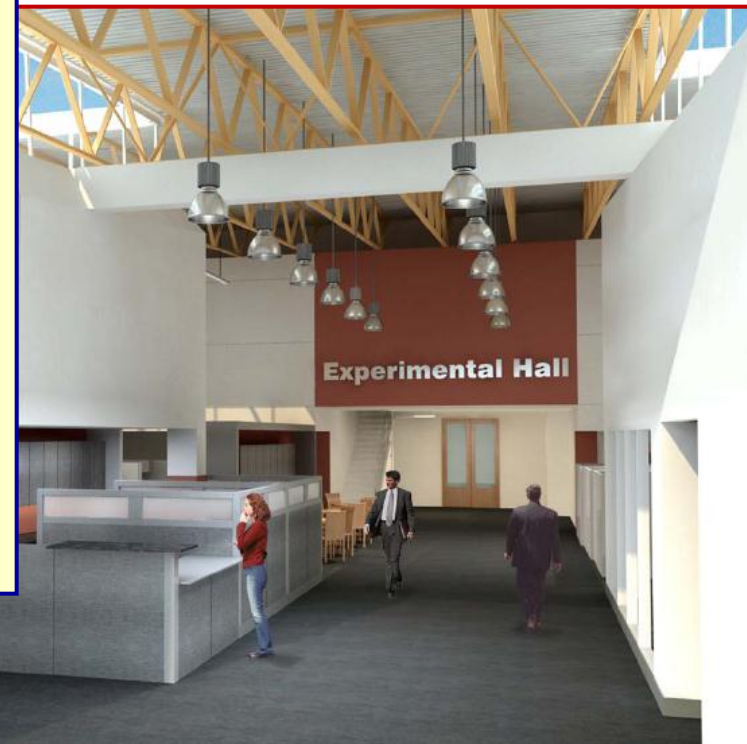


Laboratory Office Buildings (LOBs)



LOB design: 33,600 ft²

- 120 seats
- 10 laboratories
- machine shop
- conference rooms
- loading/storage area



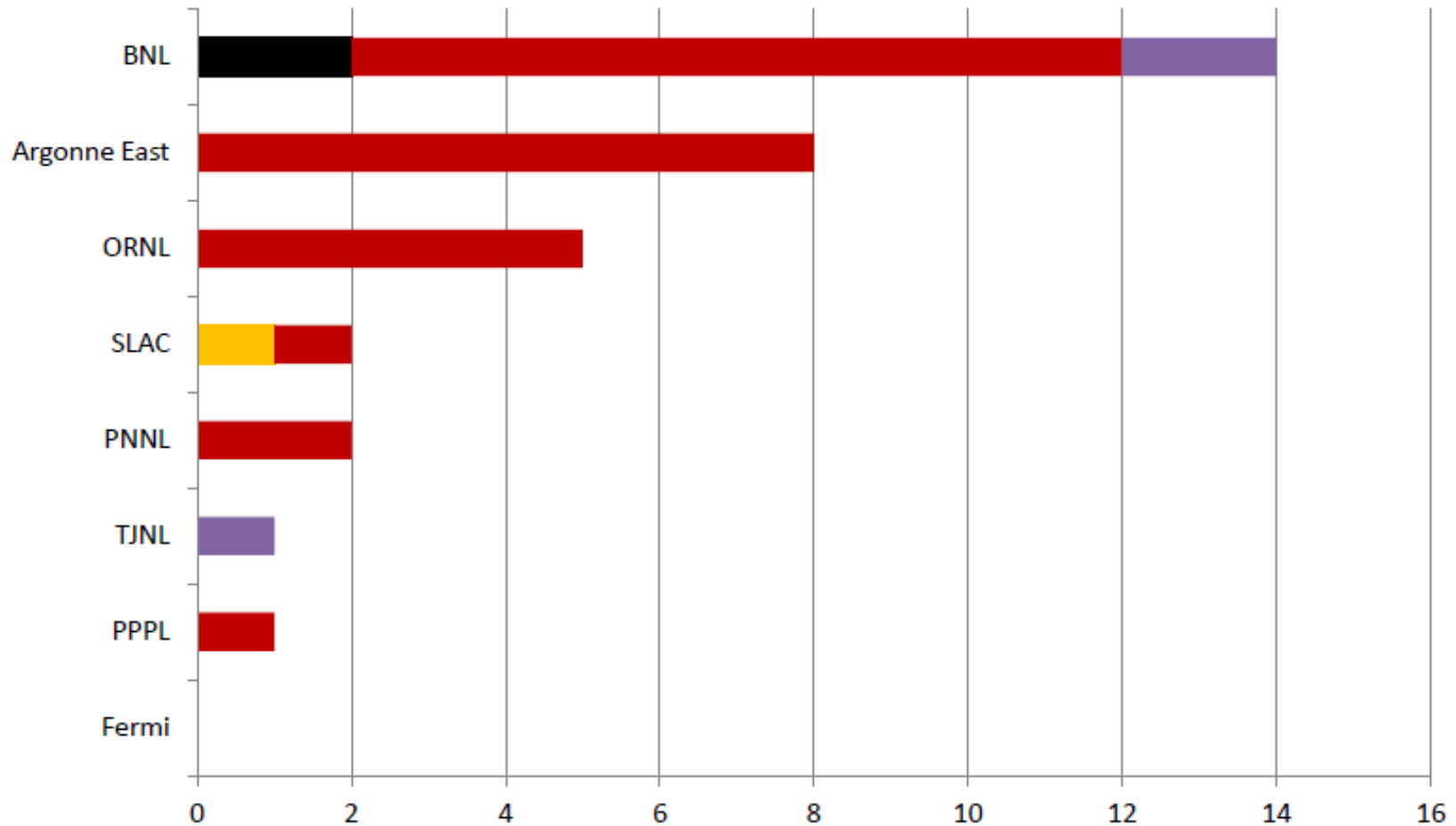
Project Beam line Hutch Installation



ENERGY

Sustainable Excellence

Major Events by Significance from CY 2011 to July 8, 2012



	Fermi	PPPL	TJNL	PNNL	SLAC	ORNL	Argonne East	BNL
■ OE (Operational Emergency)	0	0	0	0	0	0	0	2
■ SC 1 (Most Serious)	0	0	0	0	1	0	0	0
■ SC 2 (Very Serious)	0	1	0	2	1	5	8	10
■ R (Recurring)	0	0	1	0	0	0	0	2



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Very Serious Events 2009-6/15/12

Title	Sig Cat	Owning Dept/Division	Event Date
Brush Fire Near Bldg. 1002	OE	[EM] - Emergency Services Division	4/9/2012
Fire at SE area of BNL by Fawn Rd	OE	[EM] - Emergency Services Division	3/26/2012
Recurring Electrical Events Related to Work Planning	R	[DF] - Directorate - Facilities and Operations	2/28/2012
Recurring Contamination Events During Research w/Radiotracers	R	NTS [DJ] - Environmental and Life Sciences	2/14/2011
Bound Cylinder falls off truck, strikes employee, at Bldg 1008	2	NTS [PR] - Procurement & Property Management Division	4/26/2012
Elect. Worker Sustains Electric Shock	2	NTS [MP] - Modernization Project Office	12/15/2011
Subcontractor Falls From Scissor Lift	2	NTS [ER] - Environmental Restoration Projects	11/29/2011
Employee receives electrical shock while actuating wall switch	2	[FM] - Facility Operations Office	11/3/2011
Leaking Rad Source Area & Personnel Contamination	2	NTS [AD] - CAD/Radiological Control	9/29/2011
Oil spill in compressor room, Bldg. 902	2	[AM] - Magnet Division	9/14/2011
Heavy Equip. Mechanic Sustains Shock	2	NTS [SI] - Site Resources Division	6/15/2011
Employee Injures Arm During Tree Trimming Operation	2	NTS [SI] - Site Resources Division	3/5/2011
Electrical Contractor contacts unexpected live energy source	2	NTS [DF] - Directorate - Facilities and Operations	8/31/2010
Legacy Source Found during Cyclotron Dismantlement, Bldg. 901	2	NTS [MO] - Medical Department	7/19/2010
Loud Noise Startles Worker and Results in Injuries	2	NTS [SI] - Site Resources Division/CAD	10/9/2009
Technical Safety Requirement Violation at HFBR D&D Project	2	NTS [ER] - Environmental Restoration Proj	7/6/2009

Brush fires, not related to work planning

Self declared, based on trends

Sig Cat 2/R Events

Support Orgs: 9

Science/Joint: 5

Recent Events

Building 830, Fall From Fixed Ladder (DART) Site Resources, June 29, 2012

Description: On June 29, 2012, a sheet metal worker lost his grip while climbing a fixed ladder to walk down a future job and fell approximately 15 feet to the pavement. The worker was immediately transported to a local Hospital. The worker was diagnosed with two fractured vertebrae. He is recovering well and will begin therapy soon. The investigation is still ongoing.

Causes: A clear cause has not been identified. Some issues being reviewed are:

- Electrical conduit behind ladder may have caused interference or distraction.
- Spacing of the handrails on ladder platform may have caused the worker to overstretch and lose balance.

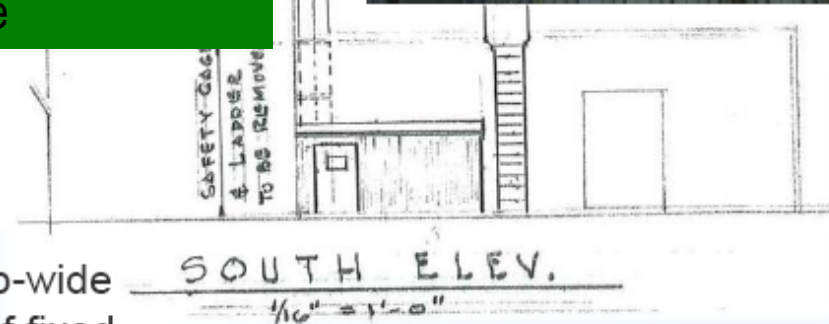
Immediate Corrective Actions:

- The Laboratory Director issued an immediate Lab-wide stand-down of work at height. Additional review of fixed ladders is being formulated.

RED = Out of Service

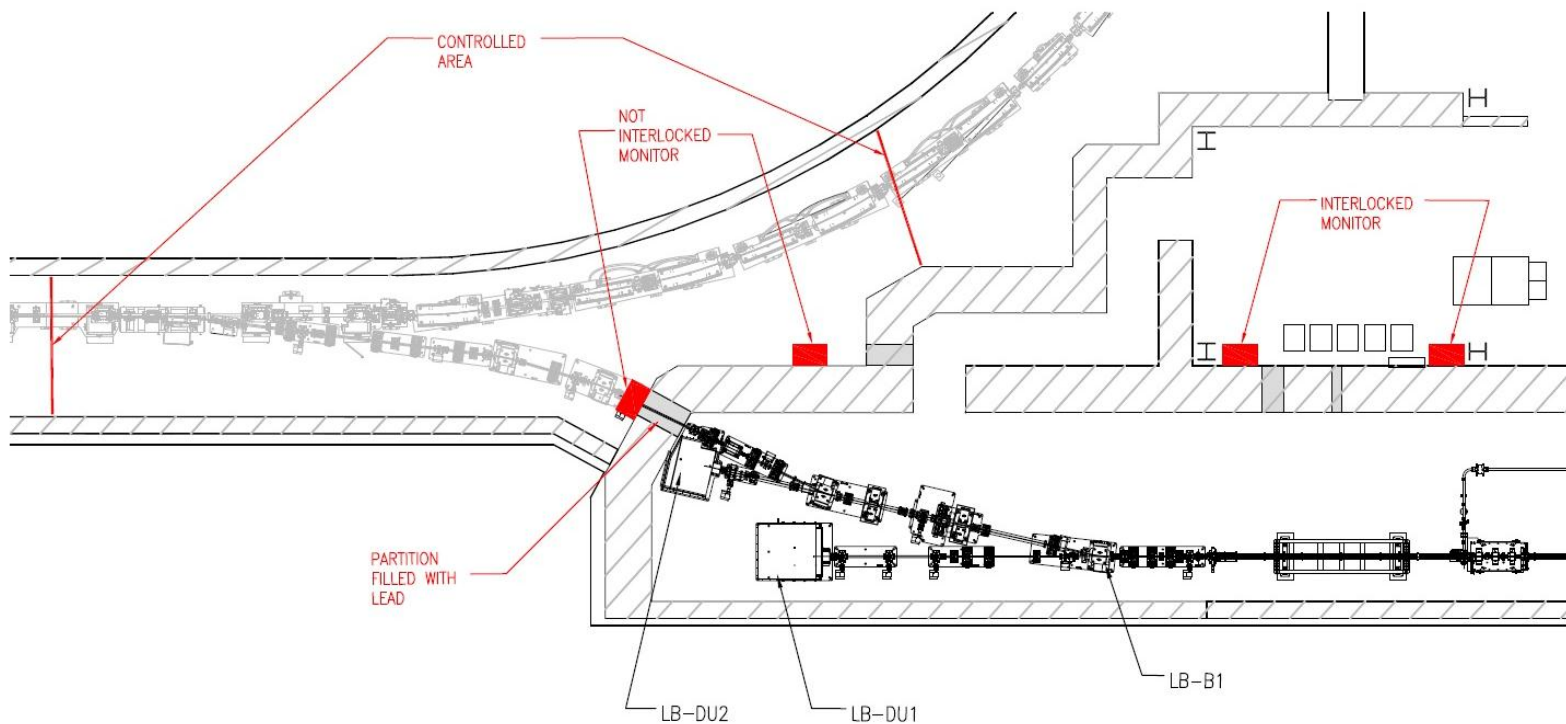
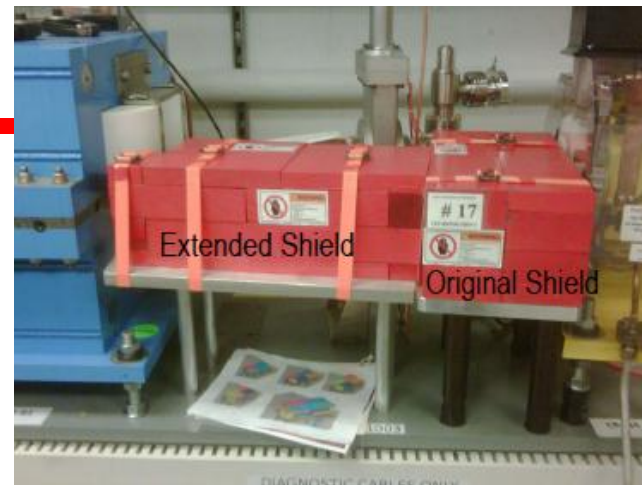
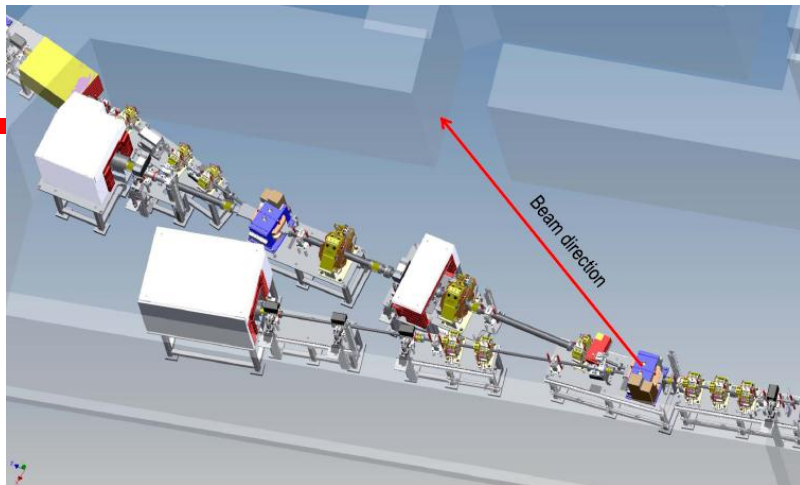
Yellow = Work planning required to use

Green = OK to use



Linac Mis-Steer Event

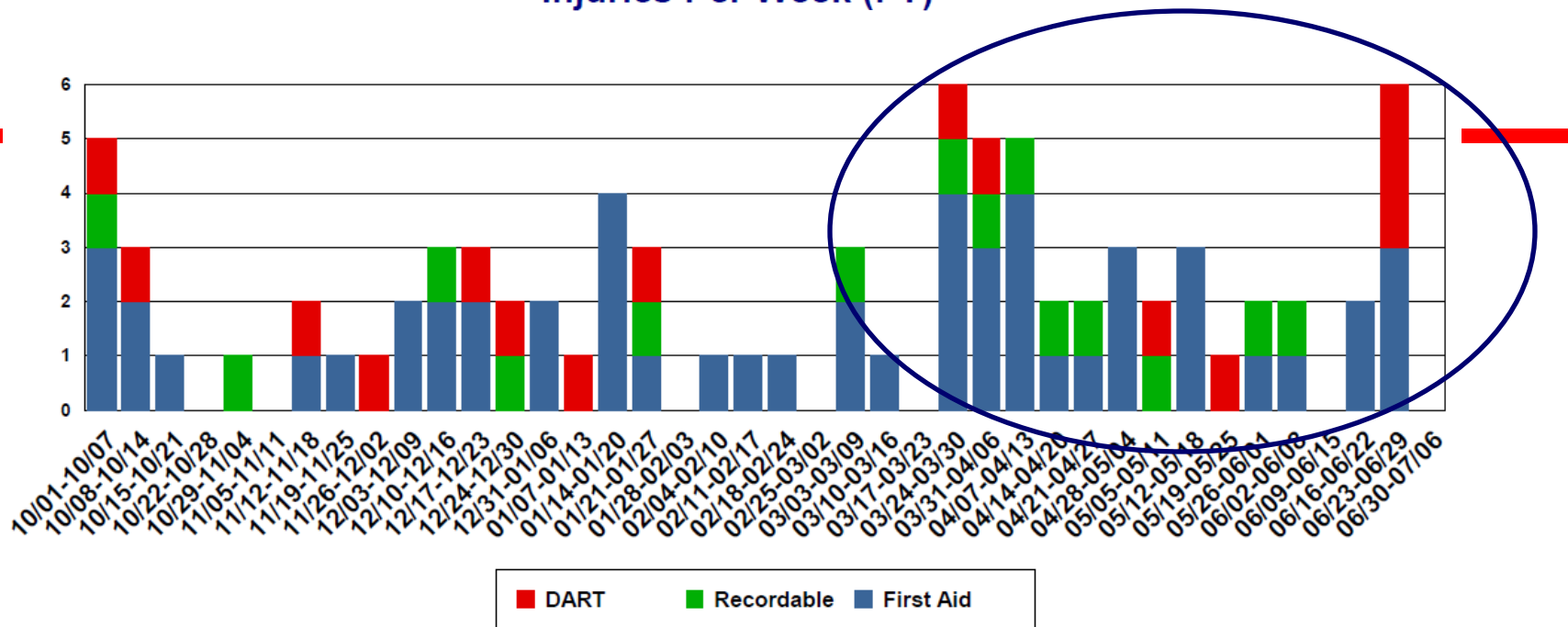
- On May 29, 2012, a beam mis-steering event took place at the Brookhaven National Laboratory (BNL) National Synchrotron Light Source II (NSLS-II) Linear Particle Accelerator (Linac) during high intensity commissioning activities
 - Operator tuning machine with 100 MeV beam energy at 15 nC/s current with dipole set at maximum current
 - This combination caused the beam to bend 4 times more than designed (this situation occurred on several occasions) and missed a down stream shadow shield and hit the wall between linac and booster
- This resulted in elevated radiation levels in a radiation monitored and Controlled Area within the nearby booster enclosure, which is a technical equipment installation area
- No one was injured and no instances of personnel radiation exposure have been identified
- Linac commissioning was suspended
- The possibility of this event was not adequately identified or addressed in the Linac Commissioning Safety Assessment Document (SAD)



Linac Mis-Steering Event Status

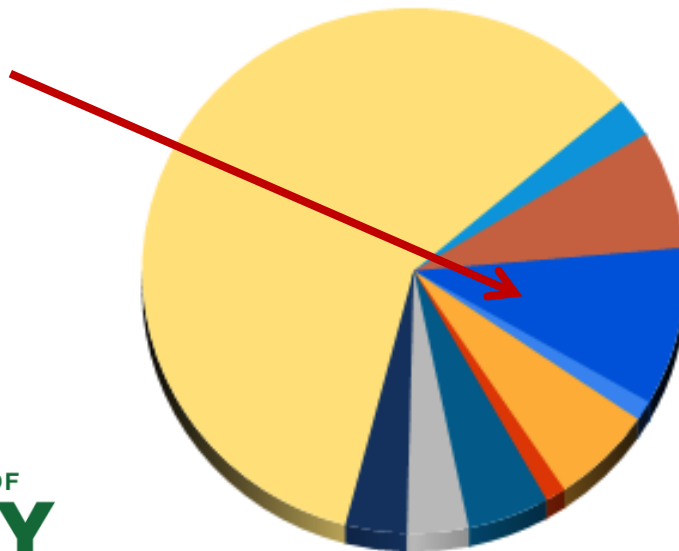
- Independent Investigation formed and delivered a Draft Report on 7/20
- Factual Accuracy Review initiated on 7/24
- Red Team independent review completed on 8/3
- Next draft due 8/17
- Final Report due on 8/31/12 to include direct causes, contributing causes, root cause and judgments of need
- Corrective actions under development
- LINAC commissioning schedule tbd

Injuries Per Week (FY)



FY2012 Injuries by Directorate

Photon Science



Directorate	#
BES	1
Bus. Op.	5
CEGPA	1
DO	4
ELS	3
ES&H	3
F&O	49
GARS	2
NPP	6
PS	8



U.S. DEPARTMENT OF
ENERGY

BROOKHAVEN
NATIONAL LABORATORY
BROOKHAVEN SCIENCE ASSOCIATES

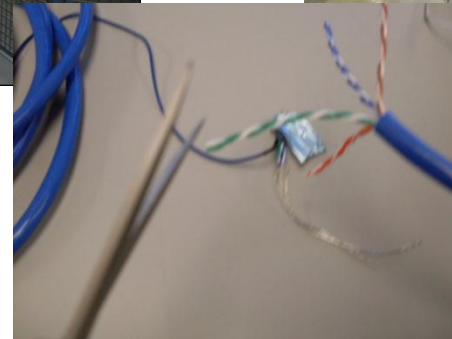
PSD Injuries (*Not Construction*)

FY 12

8 Total

• Bruised thumb	Contractor 740	First aid	10/2011
• Cut finger	Staff	First aid	12/2011
• Hurt knee	Contractor 740	TRC (DART)	01/2012
• Cut Chin	Staff	TRC	03/2012
• Punctured thumb	Job Shopper	First aid	04/2012
• Back pain	Staff	First aid	05/2012
• Cut finger	Staff	TRC	05/2012
• Bruised finger	Contractor	First aid	06/2012

No Users



Safety Improvement Plans

- Lab-wide there are initiatives underway to improve safety
- Director has requested improvement plans from each directorate
- Photon Sciences plan has been submitted and is being implemented
 - Each PS division director contributed to the Plan
 - A primary goal of the plan is to improve safety performance, awareness and accountability at the supervisor-worker level
- Division and group meetings held to go over lab wide ESH and operational issues
 - Staff engagement
 - Management visibility in worksites
 - Plan of day/week meeting focus on work planning
 - Increased frequency of PSSOC meetings to focus on ESH/Operations

Themes to Act Upon: Sustainable Excellence

- Sustained Safety & Operational Excellence
 - Must be a core value for all of us
 - Engagement, Accountability, and Role Modeling
- Supervisors are closest to the work and workers
 - LISTEN: Actively seek and provide feedback and listen to workers
 - ACT: Be relentless in taking actions to eliminate hazards
 - PERFORM: Set clear expectations and hold yourself and others accountable
 - LEAD: Spend time in the field and lead by example
- Be alert and engaged in concern for safety at all times (questioning)
 - Personal ownership and accountability for our own safety and those around us
 - Expect (demand) the same attitude about safety from all those around us – our bosses, our peers and those who work for us.