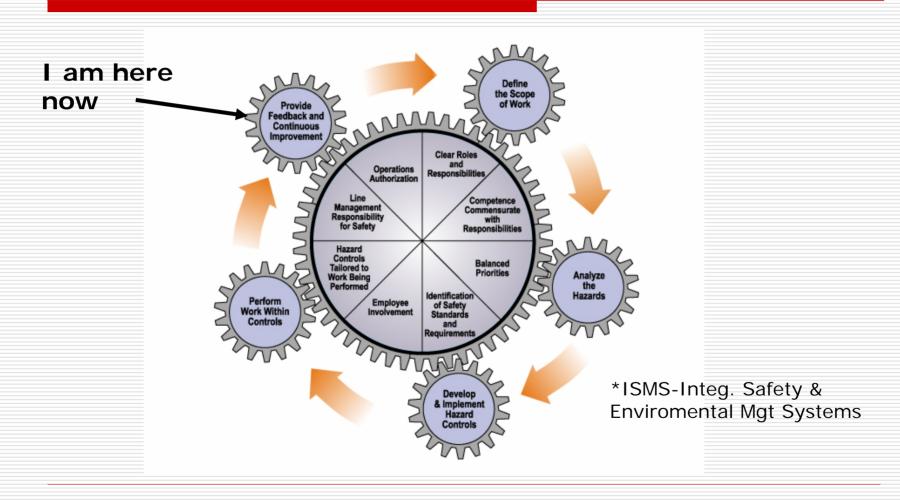
### LCLS Cable Plant

#### **ISEMS** in Practice:

## Where to go from here and the lessons learned from S20..

#### **ISEMS:** Cable Plant -Injection



# The Contractor has left the Auditorium...

- Any remaining long-haul cable installations in S20 are yours to pursue thru the Cable Shop Job Order system
  - Job Order submission detailing work
    - □ CAPTAR coding
    - Materials: Cable and Connectors
      - See Michael DiSalvo or myself first for availability
    - Follow-up with Cable Tech

#### Cable Plant: Moving On...

- □ To provide future <u>infrastructure</u>-
  - Work with PCD to design Rack and Tray systems.
    - Establishes cable run lengths and routing
  - Create coarse rack layout of involved systems.
    - Defines AC power requirements per bay
    - Modifiable by Systems Engineering
      - Rack/Elevation determines "Origin" of cable
  - Collect and disseminate Mechanical Group beamline information
    - Determines Z location of devices
      - Determines "Destination" of most cabling

#### .. Moving On (cont.)

basically CAPTAR input tells me what I							
have to supply to others!							
Rack Profiles							
How many rack bays							
AC power to CF (NOW!!)							
What kind and how many circuits							
Cable Plant							
Tray sizing and routes							
This <u>has</u> started up AGAIN!							

#### Lessons Learned:

#### Cable Information - Late

- Systems not yet designed (all new)
  - New Staff-Priority: Equipment ID and procure
  - New Equipment: New cable and connectors
- Cable Plant had to go to contract to make installation window.

#### Lessons Learned (cont.)

- Low Smoke Non-halogen made cable procurement painfully:
  - Slow
    - 10 week deliveries not uncommon
    - Contractor held-up
  - Expensive
    - □ 3x the cost
  - Limited selection <u>This hurts!</u>
    - Too large a gauge
    - Too many conductors
    - Not enough shielded pairs in a single cable...

We want your feedback right away!

#### **Queries to Follow**

- We now have more to model with but..
  - High level decisions still have to be made as to equipment concentrations.
  - We still need your input to <u>pending</u> <u>designs</u>... preferably in CAPTAR or CAPTAR like format

#### LCLS 2007 INSTALLATION CONTRACTS

_	CONTRACTS	SPECS TO PURCHASING FOR APPROVAL (2WKS)	OUT TO BIDS	JOB WALK	OPEN BIDS	AWARD/KICK- OFF MTG.	START	SLAC Contract Agent/ Buyer	Comments
	UTR = PM =			8/15/07		9/15/07 award	10/15/07 MOBILIZE	?	
	1 Core Drilling subcontract(s) -BTH, Und, BD, FEE, X-ray Estimate \$400k	7/1/07	7/15/07	2nd walk?	9/1/07	10/1/07 k/o mtg	11/08/07 start phase 1 start phase 2 N/A Complete - 3/15/08		
	UTR = PM =			9/3/07		10/1/07 award	11/1/07 MOBILIZE	?	
	2 Mechanical subcontracts- Install supports -BTH, Und, BD, FEE, X-ray Estimate \$650	7/15/07	8/1/07	2nd walk?	9/15/07	10/15/07 k/o mtg	11/15/07 start phase 1 start phase 2 N/A Complete - 4/1/2008		
	UTR = PM =			6/15/07		7/15/07 award	8/15/07 MOBILIZE	?	
	3 Electrical subcontracts- Install cable plant	5/1/07	5/15/07		7/1/07	8/1/07 k/o mtg	9/1/07 start phase 1		
550	-BTH West & Linac BC2 Estimate \$550k			2nd walk?			start phase 2- 11/1/07 Complete - 12/1/07		
	UTR = PM =			10/1/07		11/1/07 award	12/1/07 MOBILIZE	?	
2000	4 Electrical subcontracts- Install cable plant -BTH, Und, BD, FEE, X-ray Estimate \$2,000k	8/15/07	9/1/07	2nd walk?	10/15/07	11/15/07 k/o mtg	12/15/07 start phase 1 start phase 2- 5/9/08 Complete - 6/25/08		
	UTR = PM =			6/15/07		7/15/07 award	8/15/07 MOBILIZE	?	
50	5 Mechanical subcontracts- Install supports -Linac/ BC2 Estimate \$50k	5/1/07	5/15/07	2nd walk?	7/1/07	8/1/07 k/o mtg	9/1/07 start phase 1 start phase 2- N/A Complete - 12/1/07		
	{ }							-	
	\$3,650 k Total	1			1	1	1	<u> </u>	

1 of 1

#### BTH West –B105

