Daily Wrap-Up

2 February 2020

FS Installation/Integration Planning

Our “Guete Morge” started with pizza

and…

Good news:

Punxsutawney Phil did NOT see his shadow, which means spring will be early

Bad news:

Punxsutawney Phil is notoriously bad at predicting the end of winter

02 02 2020

A rare palindrome in any language

Follow-up (1) – Updates from CF

- Timing of Ross Brow: Currently in the schedule to be completed by the end of May 2024; however, this is our planning schedule. The successful EXC subcontractor can choose to order the activities as it fits for their construction schedule, i.e. the actual Ross Brow construction completion date may change.
- 2020 status of cyber/fiber installation activities:
  - Ross Campus cyber infrastructure (March 2020)
  - Ross Shaft fiber installation including fiber optic inspection and test (Oct 2020)
  - Ross Dry Basement/surface MCR (2024)
- EXC schedule will be known (notionally) for Directors Review (April 2020), but will not be incorporated into the official schedule due to the February deadline. We anticipate that the EXC schedule will be incorporated into the Project schedule for the DOE Review in July 2020.

Follow-up (2) – Helping us get work done

- Consistent processes for Review, Compliance, QA, Schedule
  - Suggested action: Need to develop distribution email lists for Compliance & Review Offices to ensure consistent communication
- Feedback required
  - PBS ID generator database to Marzio
  - QA Planning to Kevin
  - Requests for schedule reports to Mohammed
  - Specifications for transport cart (previous action item 81912)
- Progress on FS processes
  - Logistics planning
  - Worker health & safety

Follow-up (3) – Resolving Questions

- Question: What do we understand about particulate level in the air in the hall (and filtration of the ventilation system) and do we have or need a consistent approach to air filtering of our components (cryostat and cleanroom, DAQ room, detector mezzanine racks and racks on the cryostat roof (WIC, Photon crates)? Do we plan or need any measurements at the site and if so when/where could they be done?
- First answer: CF is designed to the detector requirements

FSCF-Engr-001	requirement	cryostat-005, cryostat-041	AHU's	FSCF shall provide AHU(s) underground as needed to meet air-quality requirements.

AIR HANDLING UNIT SCHEDULE

	SUPPLY FAN									NORMAL	EMERGENCY	PRE-FILTER		PANEL/BAG FILTER	
TYPE	DESIGN AIRFLOW (CFM)	ESP (IN WG)	FAN SPEED (RPM)	QTY (#)	MOTOR DATA (PER FAN) (HP)	(V)	(PH)	(HZ)	VFD	POWER	POWER	FACE VEL. (FPM)	FILTER MEDIA	FACE VEL. (FPM)	FILTER MEDIA
/E, PLENUM FAN WALL	31,500	2.75	2,227	4	15	460	3	60	Y	Y	N	417	MERV 8	417	MERV 13
/E, PLENUM FAN WALL	12,900	1.60	1,986	1	15	460	3	60	Y	Y	N	476	MERV 8	476	MERV 13
/E, PLENUM FAN WALL	10,600	1.30	1,773	1	15	460	3	60	Y	Y	N	492	MERV 8	492	MERV 13
/E, PLENUM FAN WALL	22,200	0.85	1,694	2	15	460	3	60	Y	Y	N	404	MERV 8	404	MERV 13
/E, PLENUM FAN WALL	31,500	2.75	2,227	4	15	460	3	60	Y	Y	N	417	MERV 8	417	MERV 13
/E, PLENUM FAN WALL	5,000	0.70	2,488	1	7.5	460	3	60	Y	Y	N	514	MERV 8	514	MERV 13

Actions Identified

22001	Update cryogenics integration cost to Installation group for the I&I cost review	Montanari	Feb. 10?
22002	clarify who is providing UPS: DAQ or Integration	Thea	
22003	Define Bandwidth req. between Fermi and SURF(reliability) & strategy to obtain	Thea, Weber	
22004	Clarify reliability of fibers (ensure data taking can continue + 1 week of storage + outage)	?	
22005	Depending on outcome of N2 VE, ensure LAr pipe installation can proceed without equipment interferences in the shaft	Montanari	
22006	Validate or update the 50kw requirement for cooling power on the surface (DAQ). Submit change request for related infrastructure changes if appropriate.	Lehmann, Fowler	
22007	Determine temporary services to be left by EXC subcontractor. Define sufficiently for Directors Review April 2020	Sienkiewicz, McCluskey, Fowler	29 Feb 2020
22008	Clarify the licenses for slow controls and process controls and which ones are accounted for in the budget	Lehmann, Montanari, Rameika	
22009	Develop consolidated strategy for parts databases (PBS ID, consortia, logistics)	?	
22010	Ensure adequate tools exist at the time of FD Installation for detailed scheduling	Elrafih, Nessi	
22011	Clarify the range of force impacts, particularly for APA moves through the shaft	Grenard, Jakubec	
22012	Improve template (action 81912) for rigging	Grenard, Jakubec, Beltramello, Andrews	
22013	Determine parameters of QA by Freight Forwarders	Jakubec	
22014	Ensure planning for maintenance & recertification includes provision for contractor work underground (consider staff & M&S resources required)	Jakubec	

See you at 830 tomorrow

3 Feb 2020	
08:30	Status of the Integration Drawings Release - Jack Fowler Jr (Duke University (US)) ()
08:50	Detector Integration, Control Drawings & Consortia Interfaces - Theresa Shaw (Fermi National Accelerator Lab. (Fermilab) Unknown-Unknown) Theresa Marie Shaw (Fermi National Accelerator Lab. (US)) Kyle David Zeug (University of Wisconsi Madison (US)) ()
09:30	DSS Integration & Scope - Dimitar Mladenov (CERN) ()
10:00	--- coffee break ---
10:25	Field cage & cathode layout details - Bo Yu (Brookhaven National Laboratory (US)) ()
10:55	APA Design Changes & Integration - Daniel Wenman (University of Wisconsin Madison (US)) Alberto Accelerator Lab. (US)) ()
11:25	Cable Routing (new details) & Detector Cable Information - Justin Freitag (Fermi National Accelerator Shaw (Fermi National Accelerator Lab. (US)) Theresa Shaw (Fermi National Accelerator Lab. (Fermil
11:40	What is still missing, next steps for Integration - Jack Fowler Jr (Duke University (US)) ()
11:55	--- Lunch ---
13:45	**Installation Planning - Session I** - William Miller (University of Minnesota (US)) James Allen Stewar National Laboratory (US)) (until 19:15) ()
13:45	Installation Schedule and Milestones - James Allen Stewart (Brookhaven National Laboratory (US))
14:15	Installation Plan Discussion - James Allen Stewart (Brookhaven National Laboratory (US)) () Installation_Plan-v3.pdf Installati
14:45	Cryostat Roof Infrastructure and Installation - Filippo Resnati (CERN) ()
15:15	DAQ Installation plan and Interface Milestones - Giovanna Lehmann Miotto (CERN) ()
15:45	--- coffee break ---
16:00	TPC Electronics work on cryostat roof & Interface Milestones - Marco Verzocchi (Fermi National Acce
16:30	Photon work on cryostat roof - David Warner ()
17:00	Discussion of Milestones - James Allen Stewart (Brookhaven National Laboratory (US)) () Milestones-installation.pdf Milestones-
17:45	Cryostat Internal Outfitting - Filippo Resnati (CERN) ()
18:15	Daily Wrap-Up - Jack Fowler Jr (Duke University (US)) ()