

LBNF@CERN

Report of Contributions

Contribution ID: 1

Type: **not specified**

Review of the current underground space at completion of CF

Wednesday, 22 August 2018 09:00 (20 minutes)

Doug Pelletier will give a brief overview the current underground campus that will be provided by FSCF at Acceptance for Use and Possession (AUP), (also known as Beneficial Occupancy).

Presenter: PELLETIER, Doug (FNAL)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 2

Type: **not specified**

Review phases of construction and installation

Wednesday, 22 August 2018 09:20 (20 minutes)

This will describe the 5 different phases of construction for cavern 1 and the CUC. Giving some high level details of overall duration (current times in the schedule), activities that will occur and material flow routes

Presenter: FOWLER JR, Jack (Duke University (US))

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 3

Type: **not specified**

Cryostat installation plans and requirements

Wednesday, 22 August 2018 09:40 (20 minutes)

Subsystems should have a reasonably detailed list of all of the operations that will occur during this activity, a list of tools required, the number of people that will be needed and any special requirements in the space (like lighting, cleanrooms, material handling, survey, electrical power, compressed air, ventilation, etc.). This session should cover the needs for the installation of the warm structure, insulation, inner membrane and mezzanine. If possible, we should also include as much information as we can about the closure of the TCO.

Presenters: MLADENOV, Dimitar (CERN); NESSI, Marzio (CERN)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 4

Type: **not specified**

Cryogenics installation plans and requirements

Wednesday, 22 August 2018 10:00 (20 minutes)

Subsystems should have a reasonably detailed list of all of the operations that will occur during this activity, a list of tools required, the number of people that will be needed and any special requirements in the space (like lighting, cleanrooms, material handling, electrical power, compressed air, ventilation, etc.). This session should cover the internal piping, proximity cryogenics, CUC cryogenics, pumps and protego valves.

Presenter: MONTANARI, David (Fermi National Accelerator Lab. (US))

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 5

Type: **not specified**

SP and DP detector installations

Wednesday, 22 August 2018 10:20 (30 minutes)

Subsystems should have a reasonably detailed list of all of the operations that will occur during this activity, a list of tools required, the number of people that will be needed and any special requirements in the space (like lighting, cleanrooms, material handling, survey, electrical power, compressed air, ventilation, etc.). This session should cover the installation needs for both SP and DP, configuration of the space at 4910, configuration of the space inside the cryostat, activities on top of the cryostat and the CUC DAQ room.

Presenters: STEWART, James Allen (Brookhaven National Laboratory (US)); MILLER JR, William Hopkins (University of Minnesota (US))

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 6

Type: **not specified**

Testing and results from Coimbra of the Module 0 LBNF cryostat components

Thursday, 23 August 2018 09:00 (30 minutes)

Module 0 parts were constructed for several of the critical structural members of the LBNF cryostat. We will review the testing and results of these pieces at Coimbra in Portugal.

Presenter: MLADENOV, Dimitar (CERN)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 7

Type: **not specified**

Comparing the calculations and measurements of the ProtoDUNE cryostat structure

Thursday, 23 August 2018 09:30 (30 minutes)

The deflections of the cryostat structure is being monitored during filling and was measured during the pressure tests. The results of these measurement will be compared to the calculated results.

Presenter: BELTRAMELLO, Olga (CERN)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 8

Type: **not specified**

Lessons learned from the cryogenics commissioning and filling

Thursday, 23 August 2018 10:00 (30 minutes)

Presenter: RESNATI, Filippo (CERN)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 9

Type: **not specified**

Overhead crane / monorail requirements update

Thursday, 23 August 2018 14:00 (30 minutes)

Review of current requirements and 30 % design. Design input for the bridge crane is needed.

Presenter: NESSI, Marzio (CERN)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 10

Type: **not specified**

Interface between mezzanine and mezzanine support points.

Wednesday, 22 August 2018 14:30 (30 minutes)

Review of current support point design and location of support points.

Presenters: MONTANARI, David (Fermi National Accelerator Lab. (US)); MLADENOV, Dimitar (CERN); FOWLER JR, Jack (Duke University (US))

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 11

Type: **not specified**

Review cryostat floor loading and design of support point provided

Wednesday, 22 August 2018 15:00 (30 minutes)

Review the current 30% design of load points in the slab at 4910 level

Presenter: MLADENOV, Dimitar (CERN)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 12

Type: **not specified**

N/S bridge interface

Wednesday, 22 August 2018 15:30 (30 minutes)

Review current design. Railings, bridge cranes underneath, stair connection and interface, work tower interface, addition of paths to cryostats, interface with cleanroom

Presenters: FEYZI, Farshid (University of Wisconsin-Madison (US)); STEWART, James Allen (Brookhaven National Laboratory (US)); GUARINO, Victor (High Energy Physics Division)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 13

Type: **not specified**

Egress routes from 4850 to 4910 level

Wednesday, 22 August 2018 16:00 (30 minutes)

Need to understand the requirements for egress from 4850 to 4910. This include number of people working at 4910, flow of material (large and small) to 4910, layout of 4910 area during various phases of construction.

Presenters: FEYZI, Farshid (University of Wisconsin-Madison (US)); FOWLER JR, Jack (Duke University (US)); STEWART, James Allen (Brookhaven National Laboratory (US)); ANDREWS, Michael (Fermilab); GUARINO, Victor (High Energy Physics Division)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 14

Type: **not specified**

Layout of the DUNE space in the CUC.

Thursday, 23 August 2018 11:00 (30 minutes)

Review the footprint of space provided for DUNE in the CUC and how it will be outfitted. This includes a DAQ room and another space intended for office, conf room, break/lunch room, etc. We need to review the following for the DAQ space: is the space adequate, height of the raised floor, routing of electrical and cooling water for the racks, cable trays and fire suppression system. For the additional space provided, do we need to partition it further, different uses of the space, outfitting required.

Presenters: STEWART, James Allen (Brookhaven National Laboratory (US)); SHAW, Theresa Marie (Fermi National Accelerator Lab. (US)); MILLER JR, William Hopkins (University of Minnesota (US))

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 15

Type: **not specified**

DUNE FD 30% design review: Detector Support System

Monday, 20 August 2018 09:00 (8 hours)

The agenda for the DSS review can be found at
<https://indico.fnal.gov/event/17719/>

Contribution ID: 16

Type: **not specified**

DUNE FD 30% design review: Detector Support System

Tuesday, 21 August 2018 09:00 (5 hours)

The agenda for the DSS review can be found at
<https://indico.fnal.gov/event/17719/>

Contribution ID: 17

Type: **not specified**

Review the high level milestones

Tuesday, 21 August 2018 14:00 (1 hour)

We will present a list of the high level milestones for LBNF/DUNE after the completion of FSCF. The goal will be make sure the logic and sequence is correct and get agreement from all of the stakeholders.

Presenters: MC CLUSKEY, Elaine Gregory (Fermi National Accelerator Lab. (US)); FOWLER JR, Jack (Duke University (US)); MACIER, Jolie (Fermi National Accelerator Lab. (US)); NESSI, Marzio (CERN); ELRAFIH, Mohammed (FNAL)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: **18**

Type: **not specified**

Common items for LBNF/DUNE installation and integration

Tuesday, 21 August 2018 15:00 (1 hour)

Presenters: JAMES, Eric (Fermi National Accelerator Lab. (US)); FOWLER JR, Jack (Duke University (US)); STEWART, James Allen (Brookhaven National Laboratory (US)); NESSI, Marzio (CERN)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: **19**

Type: **not specified**

EDMS

Tuesday, 21 August 2018 16:00 (1 hour)

The plans to implement the use of EDMS for LBNF/DUNE document storage, revision control and approvals. This will be for all technical documents, drawings and models.

Presenters: FOWLER JR, Jack (Duke University (US)); NESSI, Marzio (CERN)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 20

Type: **not specified**

Overview of the current 30% drawings for the Underground facility

Wednesday, 22 August 2018 13:30 (30 minutes)

Presenter: FOWLER JR, Jack (Duke University (US))

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 21

Type: **not specified**

Current status of cryostat design with GTT

Thursday, 23 August 2018 10:30 (20 minutes)

Presenter: NESSI, Marzio (CERN)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 23

Type: **not specified**

Review plans for rack cooling on top of the cryostat

Thursday, 23 August 2018 11:30 (30 minutes)

Presenters: FEYZI, Farshid (University of Wisconsin-Madison (US)); STEWART, James Allen (Brookhaven National Laboratory (US)); SHAW, Theresa Marie (Fermi National Accelerator Lab. (US))

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 25

Type: **not specified**

Review report on sealing of shotcrete surfaces

Wednesday, 22 August 2018 17:30 (30 minutes)

Presenters: PELLITIER, Doug (FNAL); FOWLER JR, Jack (Duke University (US)); WILLHITE, Josh (FNAL)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 26

Type: **not specified**

Review overall plans for ventilation and cooling with respect to power consumption

Thursday, 23 August 2018 14:30 (30 minutes)

Presenters: FOWLER JR, Jack (Duke University (US)); WILLHITE, Josh (FNAL)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 27

Type: **not specified**

Current grounding plans and issues with ARUP design

Wednesday, 22 August 2018 16:30 (30 minutes)

This session should review the current requirements for the FSCF final design for the DUNE grounding plans. Josh has identified issues for discussion & resolution.

Presenters: WILLHITE, Josh (FNAL); SHAW, Theresa Marie (Fermi National Accelerator Lab. (US))

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 28

Type: **not specified**

Lifting eyes provided by FSCF

Wednesday, 22 August 2018 17:00 (30 minutes)

There is currently a requirement for lifting eyes to be installed in the crown of the excavation over the mezzanines and septum area. Josh has identified issues for discussion and resolution.

Presenters: MONTANARI, David (Fermi National Accelerator Lab. (US)); WILLHITE, Josh (FNAL); ADAMOWSKI, Mark (Fermilab)

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: 29

Type: **not specified**

Review design of west entrance of cavern 1

Thursday, 23 August 2018 15:00 (30 minutes)

Presenters: MLADENOV, Dimitar (CERN); FOWLER JR, Jack (Duke University (US))

Session Classification: LBNF/DUNE Interface meetings

Contribution ID: **30**

Type: **not specified**

Discuss Cellular service underground

Thursday, 23 August 2018 15:30 (20 minutes)

Presenters: MCCLUSKEY, Elaine Gregory (Fermi National Accelerator Lab. (US)); FOWLER JR, Jack (Duke University (US))

Session Classification: LBNF/DUNE Interface meetings