

Host Lab Working Group Issues & Status

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LBNF/DUNE Interface Meeting
1 February 2018

Background

- Fermilab is host lab for DUNE
- Assumption: DUNE (Far Detector) operates as if it were on-site at Fermilab
- Host Lab Working Group chaired by Chris Mossey & FNAL COO Tim Meyer
 - Business & Liability
 - Fermilab – SURF Relationship
 - International Lab
 - User Interactions
 - LBNF/DUNE Project Support

Motivations

- **Host Lab Working Group**
 - Working group that will examine and as necessary develop or modify laboratory processes, capabilities, or policies to facilitate Fermilab's ability to host an international experiment at Fermilab campus in Batavia, IL and at Sanford Underground Research Facility in Lead, SD.
- **LBNF/DUNE Project Support – Charter**
 - As part of the Host Lab Working Group, the LBNF/DUNE Project Support subteam addresses issues specific to enabling the execution of the US-DOE Project scope, with further attention toward DUNE long-term operations. Deliverables for the LBNF/DUNE Project Support subteam are prioritized according to work phases: (1) execution of conventional facilities scope, (2) preparation for installation work for cryostat, cryogenic systems, and detector, and (3) DUNE Operations. The LBNF/DUNE Project Support subteam membership includes the project managers of LBNF and DUNE-US. Addressing issues and finalizing deliverables will require interactions with other Project, Fermilab, FRA and SDSTA resources. As work on deliverables progresses, these interactions will be noted.

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- Host Lab Working Group
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Issues for LBNF/DUNE Project Support

1. Temporary SURF storage, assembly and test areas
2. Expectations between DUNE and SDSTA
3. Host lab technical services
4. Emergency response services
5. Logistics services – tracking, receipt, delivery to work site
6. Temporary construction services, including electrical power
7. Documented agreement on acceptance criteria & ownership for in-kind contributions
8. Procurement services for non-DOE activities
9. Lodging or service to identify convenient/reasonably priced locations
10. Medical services
11. On site food services at SURF
12. Critical facilities at SURF – infrastructure responsibility during operations

Issues / Priorities / Timeline



- Conventional Facilities
 - Temporary SURF storage, assembly and test areas
 - Expectations between DUNE and SDSTA
 - Host lab technical services
 - Emergency response services
- Support for Installation
 - Logistics services – tracking, receipt, delivery to work site
 - Temporary construction services, including electrical power
 - Documented agreement on acceptance criteria & ownership for in-kind contributions
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Issues / Priorities / Timeline



- Conventional Facilities

- Temporary SURF storage, assembly and test areas
- Expectations between DUNE and SDSTA
- Host lab technical services
- Emergency response services

- Support for Installation

- Logistics services – trucking, delivery to work site
- Temporary construction, including electrical power
- Documentation on acceptance criteria & ownership for in-kind

- Support services for non-DOE activities

- Consulting or service to identify convenient/reasonably priced locations

- Medical services

- On site food services at SURF

- Operations

- Critical facilities at SURF – infrastructure responsibility during operations

Project activities drive prioritization of issues

Deliverables & Interactions for Top 4

1. Temporary SURF storage, assembly and test areas

1. Update LBNF/DUNE interface documents & requirements
2. Work with FNAL Real Property Team to add spaces as required

2. Expectations between DUNE and SDSTA

1. Cartoon drawing of DUNE Collaboration interaction with FRA/SDSTA/SURF
2. DUNE participants will work at SURF as Fermilab users, so must work through FRA processes for help, facilities, access, etc.
3. Draft transition to Ops plan draft and review with COO wrt host lab
4. Interact with DUNE & Neutrino Division to understand best way to communicate the working at SURF paradigm to DUNE collaborators

Deliverables & Interactions for Top 4

1. Temporary SURF storage, assembly areas

1. Update LBNF/DUNE interface documents
2. Work with FNAL Resource Management

2. Expectations for SDSTA

1. SDSTA interaction with FRA/SDSTA/SURF
SDSTA as Fermilab users, so must work with FRA wrt help, facilities, access, etc.
SDSTA groups plan draft and review with COO wrt host lab
SDSTA work with DUNE & Neutrino Division to understand best way to communicate the working at SURF paradigm to DUNE collaborators

Deliverables for each issue are ordered & interdependent with other sub-teams or FNAL experts

Deliverables & Interactions for Top 4

3. Host lab technical services

1. Develop comprehensive list of services required by the projects, starting with riggers, survey, computing & networking, welders, electricians
2. Understand whether Fermilab T&M office or project will develop T&M contracts for such services at SURF

4. Emergency response services

1. Revise LBNF/DUNE ESH Plan to clarify / codify
2. Communicate as part of training and preparation with LBNF and DUNE personnel and contractors coming to SURF
3. Include on user instructions on webpage

Deliverables & Interactions for Top 4

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For Discussion Today

Identify requirements; update requirements & interface documents

1. Temporary SURF storage, assembly and test areas
3. Host lab technical services
6. Temporary construction services, including electrical power

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Summary

- Host Lab Working Group is addressing a wide variety of issues
- Goal is to enable FNAL services to operate in a satellite location to support project needs
- LBNF/DUNE Project Support subteam addressing issues in a prioritized fashion

We will continue to seek Project team input as we address all of the host lab working group issues – stay tuned & thank you!