

EFIG Meeting 2 September 2015

EFIG Attendees: Joe Lykken (co-Chair), Chris Mossey (co-Chair), Eric James, Jim Strait, Mark Thomson, Chang Kee Jung, Jim Stewart, Steve Kettell, André Rubbia, Elaine McCluskey, Mike Lindgren (ex-officio), Jeff Dolph, Mike Headley, David Lissauer, Pepin Carolan (ex-officio)

EFIG members not attending: Marzio Nessi

Non-EFIG members attending: Bill Wisniewski, Tracy Lundin, Barry Norris, Josh Willhite, Jolie Macier, Mark Adamowski, Syd DeVries, David Vardiman, David Montanari

AGENDA

1. Welcome and Introductions
2. Approval of minutes of previous meeting
3. Report and discussion of 2nd meeting on far site design parameters
4. Towards CD-1R ESAAB: contingency issues
5. Report from Far Site risk workshop
6. Discussion of agenda items for future EFIG meetings

Decisions:

1. Going forward, change to bi-weekly EFIG meetings, with off-week meetings if necessary

Action Items:

1. Jim Stewart and Josh to arrange a meeting to inform working groups of the ARUP 100% PD to enable effective review and comments.
2. Mark and Andre - cavern/detector alignment tolerance requirements need review and refinement, if necessary
3. All – review dune- doc-139 regarding SURF Logistics Assumptions
4. Jeff – presentation at next EFIG of Interface Control Document and DUNE interfaces defined

MINUTES

- 1) Minutes of last meeting – comments need to be sent in.
- 2) Discussion of meeting today LBNF FSCF Final Design Reqmnts/Parameters Followup
 - a) Comments needed on 100% ARUP PD, asked to be distributed more often than at the end date for submittal to ARUP
 - b) Proposal for comment review meeting to go over the design and all comments
 - c) Proposal for attendance at CD-3a Director's Review
 - d) a) through c) above to be resolved by action item 1, above
 - e) grounding scheme has been rethought and will be a subject of DUNE Tech Board meeting on 9/3
 - f) interfaces of cavern wall given limited access after cryostat installation an issue for grounding scheme change
 - g) cryostat beam length issue still unresolved based on interfaces, should be limited to 10m, impact of 17m length is multiple

- h) hook height of monorail needed
 - i) control room requirements are still largely needed, Gina trying to setup October workshop
 - j) CFD needed for pump requirements regarding space at other end of cryostat, analyst desperately needed, Barry pressing Neutrino Division for possible 25% FY16
 - k) Cavern width: If space between cavern walls and cryostat was expanded beyond current ~0.3m, a trade study done by Russ Rucinski shows \$500k in labor savings vs. additional excavation cost of \$3M.
 - l) Logistics needs to be foremost in minds; document dune-doc-139 that documents SURF Logistics Assumptions must be reviewed by all. Another big meeting is not required.
 - m) Cavern size – has alignment group been tasked, they have been with CF, science must weigh in on detector angle tolerance, need two requirements: one existing requirement already states 4-cavern campus alignment; another defining cavern-to-cavern is required.
- 3) Contingency in the early years
- a) Briefed LBNF approach to responding to two CD-1-R recommendations with respect to early year and total project risk contingency given in preparation for follow on DOE meetings
 - b) Schedule of future meetings is September (PMRC) and October (ESAAB)
 - c) EVMS to start well after the CD-3a review
 - d) Best option to address contingency has least impact on both NS and FS
 - e) Discussion of sufficiency of contingency comment from CD-1-R
- 4) Discussion of outcomes of risk workshop of Mon-Tues this week
- 5) Timing of EFIG meetings, bi-weekly proposed for future; agreed
- 6) Interface Control Document discussion, presentation
- 7) Adjourn meeting at ~7:45pm CDT