

Minutes of ProtoDUNE-SP Integration, Test, and Installation weekly meeting January 12th, 2017

Attendees:

Roberto Acciarri
Christos Touramanis
Flavio Cavanna
Cheng-Ju Lin
Jack Fowler
Matthew Worcester
Bill Miller
Linda Bagby
Karol Hennessy
Andrea Zani
Anselmo Cervera Villanueva
Flor De Maria Blaszczyk
Francesco Pietropaolo
Paola Sala
Ettore Segreto
Zelimir Djurcic
Jolie Macier
Robert Flight
Thomas Kutter
Terri Shaw
Tim Loew
Anyone I forgot: sorry!

Meeting:

Started with slides from Roberto about the preliminary agenda of the Integration, Test and Installation parallel session of the Dune Collaboration Meeting at CERN. Only comments made to the agenda were to make sure the session would be held in the afternoon, to allow remote US people to join.

Second talk was from Tim about Beam Plug Installation.

On slide #6, Jack asked whether the AC power needed was designed according to EU standard, i.e., 220V. It is. Followed the consideration that, for how the grounding of the external Nitrogen Gas System is designed, the AC power must be clean power. In general, it was remarked both the power and the grounding must be handled correctly at installation time.

On slide #10, Bill Miller pointed out that when the N2 supply pipe will be connected to the Beam Plug in the cryostat, the operator will actually be about 1 foot further from the Beam Plug respect to the condition tested at Ash River, due to the presence of the Field Cages. Upon request from Tim, Bill ensured that they will test the connection procedure at Ash River with the right distances.

At the end of the presentation, Roberto asked whether precautions were considered to avoid the N2 stainless steel pipe line getting too close to the cathode. Answer was the pipe is stiff enough and of the right length so that once connected it can't move. There was initially the idea to provide

clamping point to secure the pipe along its way, but it has been abandoned because of the inherent risks of break.

Linda requested more details and drawings of the grounding and electrical scheme of the N2 Supply System. It has been agreed that such drawings will be sent to her by mail next week.

Third talk of the day from Bill on activities at Ash River and open questions/changes relative to the Clean Room design. A summary of last December Ash River workshop can be found instead in DocDB #2012.

Main point of discussion during the presentation concerned the motorized trolley for the Clean Room, slide #5. Jack pointed out a motorized trolley system is not foreseen in the current design and its addition would require time and extra-money. On the other side, the APAs/CPAs in the Clean Room stand 6" tall, hence too high to be pushed around by hand in a simple way. The agreement is that Jack will investigate the possibility and associated costs of installing a motorized trolley. At the same time, Bill and the Ash River group will look for ways to move the elements in the clean room without motorization.

Last talk of the day from Karol on DAQ status.

At slide #3, Roberto asked who the DAQ group is in contact with for the CRT. Answer is Ed Blutcher and Camillo Mariani for the electronics.

The question on slide #8 whether the Photon Detectors will be tested in the Cold Box with the same timeline as the APAs received positive confirmation. Christos asked whether the SSP test will require the DAQ. Yes, they will be read by the DAQ.