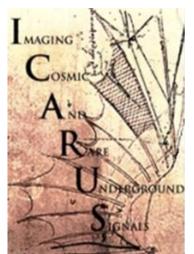


ICARUS Electrical Working Group

Linda F. Bagby September 20, 2018





Outline

- Introduction
- Scope of Activity
- Milestones & Timeline
- Status Report





Introduction

- The Electrical Working Group consist of an electrical/electronics representative from each Working Group.
- Our group members include
 - TPC (Time Projection Chamber): Matt Worchester
 - HV (Drift): Fernanda Garcia
 - PMT (Photomultipler Tube): GianLuca Raselli
 - AC Distribution and 'Isolated' Ground Monitoring: Linda Bagby
 - CRT (Cosmic Ray Tagger): Anne Schukraft
 - Cryo (Cryogenic instrumentation): Trevor Nichols





Scope of Activity

- Generate electronics rack build specifications and graphics.
 - Donatella and Angela have been instrumental in collecting information.
 - Summarized in SBN DocDB #1383
- Provide design documentation for all custom designed equipment.
 - Summarized in SBN DocDB #1466
- Generate AC and DC power distribution schematics for safety reviews.
- Assist with Operational Readiness Clearance documentation and participate in Reviews.





Milestones and Timeline

- Milestones
 - Defined as successfully completing an ORC for each sub-detector system.
- Timeline
 - Safety Engineering Design Reviews (SEDR), a component of a sub-system Operational Readiness Clearance Review (ORC), are requested and completed when documentation is complete and equipment is available at Fermilab.
 - To date, the TPC Power Supply has been reviewed.
 - and passed.
 - Sub-system ORC reviews will be completed once equipment is installed.
 - First is the 'Isolated' Detector power AC Distribution and Impedance Monitor.
- A more detailed schedule will be generated based on equipment delivery dates.





Status Report

- Our Kick-Off meeting occurred this morning.
- The group representatives have been providing the required documentation.
- We are now at a point of finalizing the design plans and updated documents as needed in preparation for the Safety Engineering Design Reviews for all custom electronic designs throughout the experiment.
- Rack layouts to finalize AC Distribution is in progress.
- A temporary installation of the Impedance Monitor will be finished within the next few weeks to familiarize the Collaboration with operational procedures and monitor the detector ground 'isolation'.

