





LBNF Primary Beam Project Update

Anne Norrick Friday 9am 9 Feb 2024

Primary Beam

Magnets

What is included

All conventional magnets needed for extracting the beam from the Main Injector/Recycler and moving the protons to the target. Includes stands to hold the magnets, and plans for installation.

Ongoing Work

- » Tests of kicker components are ongoing.
- » MI steel samples being sent to vendor.
- » Working on defining the magnet procurement plan.
- » Kicker prototype magnet has been disassembled and is waiting for parts before it can be reassembled.
- » Magnet stand Final Design Review scheduled for Feb 20th.

Magnet Power Supplies

What is included

Power supplies needed for any and all magnets used in the primary beam.

Ongoing Work

- » Optimizing power supply and bus layouts for LBNF5
- » Finalizing quad power supply load cable sizing and documentation
- » Updating the Technical Design Report
- » Working on cost definitions for updated planned schedule



Primary Beam

Primary Water System

What is included

All water cooling for all magnets and power supplies.

Ongoing Work

- » Continuing work on LCW piping and bus routing to the primary beam enclosure
- » Preliminary LCW branch piping to the new power supplies in MI-14 completed.
- » Continuing update of the TDR

Vacuum

What is included

Beam pipes and all of equipment needed to create and maintain vacuum in the beam pipes.

Ongoing Work

- » Final Design Review report received and is in review.
- » Drafting work on installation drawing is ongoing
- » Tests of the ceramic beam tube coatings are ongoing

