





LBNF Primary Beam Project Update

Anne Norrick Friday 9am 28 June 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

- » Dipole coil tooling refurbishment underway.
- » Kicker prototype assembly is completed, plans for testing underway.
- » Magnet and multiwire stands being finalized. Engineering note in review.
- » Quad installation procedure in process.



Magnet Power Supplies

What is included

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

Ongoing Work

- » Planning for kicker testing
- » Work to define a replacement dielectric fluid for Fluorinert is ongoing.
- » Q207 power supply specification document completed.
- » Working through cable routing and space issues for power supplies in/between MI-10 and MI-14.



Primary Beam

Primary Water System

What is included

All water cooling for all magnets and power supplies.

Ongoing Work

- » Ongoing work on the layout of the pump room and overall flow diagrams.
- » Developing interconnections for the magnet LCW and electrical connections.
- » Revising bus LCW flows for the new bus.

Vacuum

What is included

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

Ongoing Work

- » Vendor performing coating tests on longer beam tubes.
- » Continuing to release vacuum drawings.
- » Finalization of MI components expected mid-June.
- » Plans for transporting ceramic beam tubes under review by committee.

