



LBNF Primary Beam Project Update

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Friday 9am

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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

- » Kicker capacitor tests wrapping up
- » Work to write schedules for dipole and quadrupole procurement from vendors complete
- » Documents for both dipole and quadrupole magnets are under development
- » Final Design of magnet stands in progress and planned to finish this fall
- » Preparing for a Preliminary Design Review and early procurement for the Kicker Magnet
- » Magnet stand Final Design Review planned for November

Magnet Power Supplies

What is included

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

Ongoing Work

- » Power Supply design work ongoing
- » Modeling of power supplies along w/ their bus structures and water system continues to help optimize existing space constraints for both MI-14 and LBNF-5 service buildings

Primary Beam

Primary Water System

What is included

All water cooling for all magnets and power supplies.

Ongoing Work

- » Work on flow models and schematic diagrams for the LCW continue
- » The bus and pipe routing of the MVA is settled, working on the routing in the PBE
- » LCW at MI-14, need to figure out routing to the power supplies

Vacuum

What is included

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

Ongoing Work

- » Design and drafting work is ongoing
- » Kicker ceramic beam tubes coating samples have been received from the machine shop.
- » Final design of beam tube drawings nearly complete
- » Preparing for Final Design Review for the vacuum system this November