



Charge to the Review Committee for the Proposed LARP Project Scope and Plans

The US LHC Accelerator Research Program (LARP) has been a very successful R&D program to coordinate US involvement in the LHC accelerator and injector chain. Recently, the LARP organization has been charged by the DOE OHEP to develop a plan to provide significant US contributions to the LHC high luminosity upgrade constrained by a fixed budget. Based on the level of maturity of the R&D, a cost and schedule estimate developed by proponents, and CERN's preferences, a plan¹ which proposes contributions in three distinct areas of accelerator technology has been formulated. The schedule of milestones and deliverables is set by CERN's schedule of long shutdowns, the last of which is currently scheduled to take place during 2022 and 2023. While the DOE's formal project approval and funding process is scheduled to start in 2017, the need to develop a pre-project funding profile, using the base LARP budget and drawing on enhanced contributions from the General Accelerator R&D base program, makes it imperative that the plan be scrutinized by external experts as soon as possible.

The project review committee is charged to answer the following questions:

1. Can the proposed project scope fit within the schedule and budget guidance given?
2. Are the proposed cost, cost profiles and schedules reasonable?
3. Is the plan to integrate external contributions within the constraint of a fixed budget adequate?
4. Is the technical plan proposed by each sub-project optimally developed? Are there additional technical risks that should be considered?
5. Is the proposed management structure appropriate for the scope and scale of the project?
6. Are there additional comments the Committee feels are relevant, regarding either individual tasks or the project as a whole?

I would appreciate the Committee's answers to these questions submitted to me as a written report within three weeks following the review.

Thank You,

Eric Prebys
Program Director, LARP

¹ Proposed US Contributions to LHC High Luminosity Upgrade; *Eric Prebys, Oliver Brüning, John Fox, Marc Kaducak, Tom Markiewicz, Alex Ratti, Lucio Rossi, GianLuca Sabbi, Peter Wanderer*; 12/20/2012.