

LCLS INJECTOR PED MEETING

Wednesday, October 30, 10:00, Alexander Room (Bldg. 280-C)

This is the primary meeting where we will regularly meet to coordinate the LCLS injector PED (Project Engineering Design) effort. *This meeting will now be held every week.*

Agenda for this week:

1. **Review and revision of CD-2A goals**. What we have now is copied below. We need to create a more detailed set of goals and a realistic schedule.
2. **Compilation of long-lead items for the injector**. Homework for Akre (rf), Bolton (source laser), Dowell (electron beamline), Bellomo (power conversion), Ortega (controls): bring list of all items we will buy that are necessary to commission the LCLS injector that have expected delivery times of 3 months or more. Manufacturer and model can be listed, but generic names are also ok. Include an estimated (ball park) cost for each item.

CD-2A (Critical Decision 2A) is a DOE review of the LCLS project at which the LCLS must present its proposed long-lead procurement budget. The review will also look at our design progress. Our goal in the injector is to have at least 25% of the design complete. (The injector is to be designed in FY03 and 04, constructed in FY05, and commissioned in FY06--one year earlier than most of the rest of the LCLS. This schedule for the injector is the same as presented at the CD-1 Lehman Review last April.) The CD-2A review is presently scheduled for April 2003.

The PED Injector Milestones for first half of FY03 presented at the CD-1 Lehman Review were:

Dec 02: 1) Gun laser specifications and preliminary design. 2) Preliminary beam layout.

Mar 03: 2) RF gun specifications and preliminary design. 2) Laser oscillator bid package.

Recommendations from Lehman Review: Injector and Linac

1. Establish a resource-loaded schedule for the PED by September 2002
2. Establish a realistic spares list and include in Other Costs of other appropriate area by September 2002
3. Include support for the required injector scientist activity in the commissioning plan by September 2002
4. Move forward with laser prototyping as early as budget permits. Include planning by next review
5. Move forward with prototyping the gun as early as budget permits. Include in planning by next review
6. Perform prototyping and design validation tests on the GTF test stand, integrating as many of the injector components as possible before final integration on the injector linac. Include in the TPC. FY02-FY03.