

## **LCLS Response to the Technical Review of the X-Ray Endstation Systems**

May 10, 2003

### **Introduction**

On 2 December 2003, there was a Technical Review of the LCLS X-Ray Endstation Systems group (XES). The review committee consisted of Dr. Paul Fuoss (Argonne Nat. Lab.), Dr. D. Peter Siddons (Brookhaven Nat. Lab.) and Prof. Peter Kuhn (Scripps Research Inst.). A review report from the committee was submitted on 23 January 2004 [1].

### **Response to the review report**

The report affirmed the proposed concepts, plan, and budget for the XES. Several specific areas of risk were identified, and some general solutions proposed. In all of these areas, the LCLS team agrees with the findings of the report, and intends to adopt solutions along the lines that were proposed.

Specifically:

The report observes that communication between the XES group and the X-ray transport group (XTD) is very important for the success of LCLS, and recommended that this importance be recognized by LCLS management. LCLS is addressing this issue by giving a single person (J. Arthur) a role in the management of both XES and XTD, and by setting up a regular schedule of meetings between XES and XTD to discuss technical and interface issues.

The report points out the high technical risk associated with the proposed LCLS detector development plan, and advises a phased approach with frequent progress reviews. LCLS intends to follow such a phased approach, and has assigned a large contingency factor to the detector development.

The report recommends that more emphasis be placed on preparing a robust system of timing signals for LCLS experiments. This recommendation is being adopted.

The report proposes that the controls effort be given high priority within XES. This recommendation is being adopted, and is reflected in the XES staffing plan.

The report suggests that further review should be considered as the XES technical designs reach greater maturity. This recommendation is being adopted, and will be realized through the periodic reviews by the LCLS Facility Advisory Committee.

### **Reference**

[1] LCLS X-Ray Endstation System Review, P. Fuoss, D.P. Siddons, and P. Kuhn, Dec 2, 2003.