

STATEMENT OF WORK (SOW)	Doc. No. SP-391-001-80 R0	LUSI SUB-SYSTEM XCS LO Mono
<h2>XCS Large Angle offset Monochromator Statement of Work</h2>		
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Revision	Date	Description of Changes	Approved
R0	17APR09	Initial release	

## 1. Introduction

The X-ray Correlation Spectroscopy (XCS) instrument to be built at the Linac Coherent Light Source (LCLS) by the LCLS Ultrafast Science Instruments (LUSI) on the SLAC National Accelerator Laboratory site requires a detector positioning system to detect the x-ray signal scattered from an experimental sample.

This document describes the scope of work required to design fabricate and install the Large Offset Monochromator.

## 2. Scope

The work required is the design, fabrication, installation and testing of the Large Offset Monochromator. The Large Offset Monochromator specifications are described in SP-391-000-94, DCO Large Offset Monochromator.

The suggested and desired time durations between the award of the contract and the delivery of the completed mechanical system is less than one year.

## 3. Applicable Documents

SP-391-000-16	DCO Large Offset Monochromator Physics Requirements
SP-391-000-94	DCO Large Offset Monochromator Engineering Specification
SP-391-001-78	DCO Large Offset Monochromator Procurement Specification

All documents referenced within the above documents are applicable to the required work.

## 4. Requirements and Specifications

All requirements for the Large Offset Monochromator are found in SLAC documents No. SP-391-000-94 and SP-391-000-16.

### 4.1. Delivery Time and Commissioning

The suggested and desired time durations between the award of the contract and the delivery of the completed mechanical system is less than 12 months. Commissioning and final acceptance tests without beam under vacuum will be done within 3 months after the completion date of on-site installation. Commissioning with beam will be done within 3 months after the completion date of the final acceptance tests.

The Offeror must confirm to meet this time schedule or include a best alternative time schedule in the offer. The LCLS reserves the right to delay delivery, installation, final acceptance test by up to three months in the even of unavoidable delay to the LCLS operation and/or shutdown schedule.

## 5. Quality Assurance Requirements

The vendor will demonstrate the existence and functionality of a quality assurance program at the vendor's site.

## **6. Selection Criteria**

The potential vendors shall submit a Technical Proposal which shall contain no pricing data of any kind; cost and price information shall be included only in a separate volume. The following sections shall be present in the Technical Proposal and the proposals shall be judged and rank based on the content of each category

### **6.1. Technical Specifications**

The technical proposal will consist of responses to each of the specifications described in SLAC document No. SP-391-000-94. The proposal shall provide written documentation describing how individual specifications are to be met, including substantiating data or schematics where appropriate. An overall layout of the-system, and appropriate detail drawings, shall be included with the proposal.

### **6.2. Delivery and Milestone Schedule**

A delivery and milestone schedule shall be provided. It is preferred that every component of the system be delivered to SLAC at latest by January, 2011. A schedule for installation and acceptance testing of the system at SLAC after delivery, by vendor personnel (if necessary) in conjunction with SLAC personnel, should be provided as well.

### **6.3. Personnel, Experience and Facilities**

Bidder shall provide descriptions of the key technical and management personnel who will be involved in the design, production, testing, delivery, and acceptance testing of the system, and their relevant experience, A description of production facilities and testing equipment should be provided, a listing of similar systems sold and delivered, and to whom, including sale and delivery dates, should also be provided. If subcontractors are planned to be used, similar information on the subcontractors shall also be included.

### **6.4. Quality Assurance, Implementation and Performance Verification**

The bidder will provide a quality assurance plan, which includes provision for performance verification of major sub-components of the system. The plans for implementation, performance testing and acceptance testing should be clearly described. The quality-assurance plan should include the possibility of access to the vendor's facility, and that of any major sub-contractor during production, by SLAC representatives. Subcontractors should be identified and their quality assurance procedures should also be documented.

### **6.5. Financial Solvency**

The proposer shall provide evidence of financial stability in order to demonstrate the capability to carry the project to its completion.

## **7. Payment**

The winning bidder will be paid by SLAC in stepped increments at the completion of critical milestones: preliminary design complete, final design complete, successful testing at vendor site complete, successful acceptance testing at SLAC complete. The percentage of the total contract value paid at each major milestone is to be worked out between the vendor and SLAC Purchasing Department. Reward for early completion may be included in the contract.