



**ASME Standards Technology, LLC**

**Request for Proposals**

**RFP-ASMEST-10-03**

**B31 #6 – Validation of Carbon Steel Pipe for Hydrogen Service**

Date Posted: June 3, 2009

Proposal Due Date: June 30, 2009

**1. Summary**

ASME Standards Technology, LLC is soliciting proposals to test and validate material for Hydrogen pipeline service. Testing itself will be subcontracted to a laboratory and the report will be presented to B31.12 sub-committees for consideration as an appendix. The utility of the B31.12 standard would be greatly enhanced if it contained a list of materials recommended for use with Hydrogen.

This project resulted from ASME Pressure Technology Codes and Standards (PTCS) Standards Committee requests to identify, prioritize, and address technology gaps in PTCS Codes, Standards, and Guidelines. This project is one of several included for ASME FY2010 funding and is intended to establish and maintain the technical relevance of ASME codes and standards products. An overview of the annual ASME PTCS project selection process is provided at <http://files.asme.org/STLLC/10192.pdf>.

**2. Scope of Work**

a. Description

KIH (threshold stress intensity factor) measurements will be made on samples of pipe material according to the Option B method found in ASME B31.12 (Hydrogen Piping and Pipelines), PL-3.7.1(b)(2). Additional guidance can be found in ASME Section VIII Div.3, article KD-1040.

For each grade of pipe material, three heats of pipe in welded condition are to be tested. Each heat requires three specimens of BM, HAZ, and WM. This is 9 specimens per heat, or 27 for three heats. Test will be carried out on three grades of pipe to be provided by ASME. All tests will be done at 3000 psi hydrogen pressure. Consequently, a total of 81 tests are required for this project. The samples provided will be ring sections of pipe, to be cut and machined by the testing laboratory.

b. Deliverable

This report shall present test results such that they can be reviewed, voted upon, and incorporated as an appendix to B31.12 upon the next revision.

The final report shall be provided to ASME ST-LLC as a MS Word .doc file that is formatted in accordance with the ASME ST-LLC template, located here:

<http://files.asme.org/STLLC/18396.doc>.

c. Schedule

Investigators shall submit a schedule with their proposal that provides major milestones and a reporting schedule.

d. Reporting

A brief status report shall be provided monthly, via email, to the ASME ST-LLC project manager. Progress reports shall be presented at ASME B31.12 committee meetings.

**e. Travel Requirements**

Travel requirements are to present project results to ASME C&S committees during ASME BPVC Code Week meetings. Travel expenses shall be reimbursed, within the project budget, per the project Travel Policy.

**3. Applicant Eligibility Requirements**

ASME ST-LLC is seeking proposals from all qualified organizations including, but not limited to, engineering firms, consultants, academic institutions, and Federally Funded Research and Development Centers. In addition to relevant technical qualifications and experience, applicants must possess an understanding of relevant ASME codes and standards.

**4. Basis for Selection and Award**

ASME ST-LLC will select the winning proposal by evaluating and comparing the merits of each applicant's complete proposal. This process reflects ASME ST-LLC's desire to select an application based on its potential to achieve program objectives, rather than solely on evaluated technical merit or cost. Evaluation criteria include, but are not limited to, the following:

- Technical capabilities
- Experience
- Price
- Schedule
- Agreement with Terms and Conditions

ASME ST-LLC reserves the right to award, in whole or in part, any, all, or none of the applications submitted in response to this solicitation.

**5. Contract Terms and Conditions**

A fixed-price contract is preferred, but labor hour and expenses-type proposals will also be considered. Draft terms and conditions are located here <http://files.asme.org/STLLC/13937.pdf>. The final contractual terms and conditions will be negotiated between ASME ST-LLC and the winning applicant.

ASME ST-LLC will provide access to the required codes, standards, and other technical references.

**6. Submission Requirements**

a. Proposal Due Date

Proposals and amendments of proposals must be received by June 30, 2009. Applicants are encouraged to transmit their proposal well before this deadline.

## **b. Anticipated Selection and Award Date**

ASME ST-LLC plans to select the winning proposal within two weeks of the proposal deadline.

### **c. Application Preparation Costs**

This solicitation does not obligate ASME ST-LLC to pay any costs incurred in the preparation and submission of proposals, in making necessary studies or designs for the preparation thereof, or to acquire, or contract for any services.

### **d. Application Clarification**

ASME ST-LLC reserves the right to request clarification of proposals and/or supplemental information. The award may be made after few or no exchanges, discussions, or negotiations. Therefore, all applicants are advised to submit their most favorable application to ASME ST-LLC. ASME ST-LLC reserves the right, without qualification, to reject any or all proposals received in response to this solicitation and to select any proposal, in whole or in part, as a basis for negotiation and/or award. ASME ST-LLC reserves the right to modify or cancel this solicitation. All questions relating to the solicitation must be submitted to the contact below. Any amendments to the solicitation will be posted on the ASME ST-LLC web site ([http://stllc.asme.org/Requests\\_Proposals\\_RFPs.cfm](http://stllc.asme.org/Requests_Proposals_RFPs.cfm)).

### **e. Treatment of Proprietary Information**

A proposal may include technical and/or other data, including trade secrets and/or privileged, confidential commercial or financial information, which the applicant does not want disclosed to the public or used by ASME ST-LLC for any purpose other than proposal evaluation. To protect such data, the applicant should specifically identify the data to be protected.

### **f. Proposal Preparation and Submittal Instructions**

ASME ST-LLC may form a committee of subject matter experts to evaluate the technical qualifications of applicants. To help facilitate this evaluation, responses should include two separate documents, a Technical Proposal, and a Financial Proposal.

#### **(1) Technical Proposal**

- (a) Provide organization name and contact information.
- (b) Provide evidence of technical capabilities: credentials, qualifications, capabilities, and experience of individuals and the organization.
- (c) Describe approach to accomplish the Scope of Work.
- (d) Confirm agreement with the Scope of Work for the specified task(s)

#### **(2) Financial Proposal**

- (a) Provide a fixed price quotation or an hourly billing rate quotation and estimated project maximum.
- (b) Confirm agreement with the draft Terms and Conditions, or state any specific exceptions.

(3) Submit Technical and Financial Proposals via e-mail to the ASME ST-LLC contact below.

(4) Responses must be received on or before the deadline.

## **7. ASME Standards Technology, LLC Contact Information**

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