



Quarterly Technical Progress Report

Instrument Number DE-FC01-04FE68423

Sixth Quarter of 2005

September 21, 2005 - December 20, 2005

Major Partners in China: **Tsinghua University**

 The China Coal Research Institute

 China Petroleum and Chemical Industry Association

 China People's Institute of Foreign Affairs

Major Partners in the US: **Louisiana Steam Equipment Co.**

 H&J, Inc. USA

 National Research Center for Coal and Energy, West Virginia University

 Milestone

Submitted by: **S. T. Hsieh, Managing Director**

 U.S./ China Institute

 300 F Hebert Bldg.

 Tulane University

 6823 St. Charles Ave.

 New Orleans, LA 70118-5674

 (504) 862-3287 (voice), (504) 865-5526 (fax)

 Hsieh@eecs.tulane.edu

Table of Contents

Activity	Page
Project 1: Maintenance of the EETC	3
Task 1: Meeting all reporting requirements	3
Task 2: Management of EETC Program Meetings	3-4
Task 3: Compilation of Electronic EETC Newsletter	4
Project 2: Maintenance of the EETC Internet Presence	4
Task: Continuous Updating of the EETC Internet Site	4-5
Project 3: Support of the U.S./China Fossil Energy Protocol	5
Task : Provision of Services Related to the DOE/MOST Fossil Energy Protocol	5
Project 4: Facilitation of joint ventures to introduce small to medium size American businesses to the Chinese energy marketplace	5
Project 5: Workshops and Informational Tours	6
Project 6: Improvements of Stoker Boilers in Beijing	6
Project 7: Joint US-China Carbon Sequestration Studies	7
Project 8: Introduction of Advanced NOx Technologies	7
Attachments	

Payson Center 2/14/06 11:35 AM
Comment:

Progress for the Quarter on EETC Projects:

The objectives of the EETC include promoting the sales of U.S. energy and environmental technology in China and joint U.S./Chinese work to adapt elements of U.S. technology to provide environmental improvements in China. Jointly implemented by the U.S. Government (Department of Energy, DOE) and the Chinese Government (Ministry of Science and Technology, MOST), specific focal points of the EETC include:

1. Providing a forum of information exchanges on energy and environmental technologies;
2. Conducting U.S./China joint studies on environment and energy issues;
3. Conducting pilot projects to produce near and mid term emissions reductions in China through joint U.S./Chinese efforts; and,
4. Enable the identification of opportunities for U.S. businesses.

The progress of EETC in the US was severely affected by the following factors after Hurricane Katrina at which time S. T. Hsieh devoted his full time to the EETC projects in China. Tulane University closed for the semester, and re-opened on December 19, 2005, with only very limited available services.

Project 1: Maintenance of the EETC

Project Description

The project includes all activities that are required to maintain the physical presence of the EETC at both Tulane and Tsinghua Universities. Management of the EETC works continually seeking funding sources for the EETC located outside of the DOE.

Task 1: Meeting all reporting requirements.

Under this task, the reporting requirements of the Cooperative Agreement Attachment C, Federal Assistance Reporting Checklist, will be met. Additionally, the reporting and record keeping requirements of 10 CFR Sections 150 through 153 are met, and the records are to be maintained in a database by the EETC.

The reporting period summary of activities under this task has been held back due to the post-Katrina inaccessibility of Tulane University. The back log reports & forms are to be filed when they are available.

Task 2: Management of EETC Program Meetings

Under this task, the EETC will determine the dates and locations of Advisory Board meetings; issue formal invitations to meeting invitees; and, submit copies of meeting agenda to the COTR. The EETC will be responsible for keeping notes as the meeting progresses, and to facilitate the compilation of meeting minutes.

The quarterly summary of activities under this task was stopped due to the post-Katrina inaccessibility of Tulane University. This task is managed by S. T. Hsieh in China.

On December 15, 2005 a preliminary US-China EETC Board meeting was held at Tsinghua. S. T. Hsieh presented on the outlook of EETC (please see the attached PowerPoint presentation) with most ideas receiving strong support by the Chinese Party. The US EETC Board meeting was set for January 10, 2006 in Washington DC, and the US-China EETC Board meeting has been set for February 27, 2006 at

Tsinghua in Beijing. It has been proposed to organize an EETC Seminar on Energy Policy and Industry Practice on Feb. 27-28, 2006.

Task 3: Compilation of Electronic EETC Newsletter

A newsletter was not prepared during this period.

Project 2: Maintenance of the EETC Internet Presences

This project involves continuous updating of the EETC internet site to include relevant EETC information as it becomes available. Work will be undertaken under this project to ensure that up-to-date information on EETC activities is available to the public. Items to be continually updated include reports of activities as they are compiled and the list of EETC partners and industrial participants.

Task: Continuous Updating of the EETC Internet Site

Under this task, the EETC website will be modified quarterly to include new EETC reports and newsletters as they become available. After Katrina hit the region on August 29, 2005, EETC's website supported by Tulane University in the US, www.tulane.edu/~uschina/eetc3 was shut down. It will be revived after December 19, 2005 when Tulane University becomes accessible.

The website maintained by Tsinghua University in Beijing, www.us-china-eetc.org has been actively updated.

Summary of Activities under this Task for the Reporting Period:

Project 3: Support of the U.S./China Fossil Energy Protocol

This project includes provision by the EETC of assistance to FE/DOE in facilitating its energy protocol initiatives in China. This project involves maintenance of the capability to assist implementation of the Protocol as required. Under this task, the EETC will provide support services to DOE personnel in support of the Protocol, as directed by the COTR.

Summary of Activities under this Task for the Reporting Period:

1. EETC continuously facilitates the communications between FE/DOE and MOST. The workshop titled "US-China Clean Coal and Energy" was successfully implemented on October 28-29 at the China World Hotel in Beijing. EETC is in charge of the logistics and programs. The workshop proceedings have been posted on www.us-china-eetc.org, and will be posted on www.tulane.edu/~uschina/eetc3 as available.
2. EETC is continuously working on the finalization of the task "Extraction and Purification of Coal Mine Methane and Coal Bed Methane" under Annex III (Oil and Gas). EETC organized the US-China project team including the Shanxi Energy Industry Group, the Yongda Group (Wuxi), the Milestone Inc., and the Appalachian Power, and developed the work statement, budget and schedule. The project is being approved by DOE, and EETC is interfacing with the Chinese partners to get the project approved. It has been determined that the Shanxi Energy Industry Group may have other plans and we are actively searching for another partner.

3. EETC continuously facilitates the task “Environmental Impact of Direct Coal Liquefaction” under Annex II (Clean Fuel) with Shenhua Group and the National Center of Research for Coal and Energy, West Virginia University. The project is approved by DOE.

Project 4: Facilitation of joint ventures to introduce small to medium size American businesses to the Chinese energy marketplace.

EETC continuously seeks and facilitates joint ventures for American businesses, especially the small to medium sized business. Currently, EETC is tracking the following industry projects.

Louisiana Steam Equipment Co. (LSE) for steam management services and equipment sale. We started with Beijing area for district heating industry through a proposed partnership with Ether Company, Beijing. For the Chemical Industry sector, we are matching LSE with Chinese customers through China Petroleum and Chemical Industry Association (CPCIA). The Chinese have responded to LSE’s initial survey.

Supported and participated in the “Quadripartite Seminar on Clean Air for Asia” Beijing, November 2-4, 2005, sponsored by the Atlantic Council.

Organized and participated in the Zinc-Air Power Fuel Cell Seminar (on zero emission e-bus,) Shanghai, November 5, 2005 (Chaired by Mr. Shi Dinghuan, the National Clean Vehicle Coordination & Leading Group Office).

Worked with Zhejiang Energy Fuxing Fuel Co. and Zhejiang Provincial R&D Center for Clean Coal Technology (Ms. Shen Pei Hua, Chief Engineer et al.) on developing a partnership with EETC.

Project 5: Workshops and Informational Tours

Under this project, the EETC will host workshops and industrial site tours. The EETC will maintain the capability to conduct workshops, conferences, and informational tours involving EETC partners and industrial participants as required.

Explored the concept of a “US-China Coal Industry Summit” modeled after the “US-China Oil and Gas Industry Forum”. Partners could include West Virginia University, China Coal Research Institute, Tsinghua University etc.

Ongoing update of events that USCI/EETC will facilitate or participate in:

SEMINÁRIO: GERAÇÃO TERMELÉTRICA A CARVÃO MINERAL – UMA VISÃO MUNDIAL , Brazil, September 13, 2005. S. T. Hsieh planned to attend, but he had to cancel the trip due to Katrina.

“US-China Clean Coal Energy Conference” Beijing, October 28-29, 2005.

“Clean Coal and Power Conference” Washington, DC, November 21-22, 2005. S. T. Hsieh made a presentation on “The Recent Carbon Sequestration Activities in China.” The PowerPoint presentation material has been posted on www.us-china-eetc.org

Project 6: Improvements of Stoker-fired boilers in China

Stoker-fired boilers account for a majority of the coal consumed in China. These boilers are operated by industrial, institutional, and commercial coal customers, and are numerous in China. The amount precludes their wholesale replacement in the near-term. Options for improving their performance include fuel-switching to oil or gas, and implementing operational improvements to existing boilers. This project is focused upon the latter in applying low-cost operational improvements.

EETC has finalized with China Coal Research Institute (CCRI) the Subcontract for Improving the Performance and Reduce Emissions of Small & Medium Size Industrial (Stoker) Boilers in the Beijing Region. This approach allows the application of the results of this project as an alternative means of improving the air quality around Beijing in anticipation of the 2008 Olympics. US policy and management tools have been provided to CCRI. The first year report has been finalized, and submitted. The second year effort on demonstration at a pilot plant has been initiated.

Project 7: Joint U.S.-China Carbon Sequestration Studies

One of the joint U.S.-China Studies, focusing on CO₂ sources and sinks in China, is the first joint U.S.-China effort on Carbon Sequestration. It complements the Carbon Sequestration Leadership Forum (CSLF.) EETC has already initiated team formation, and is working to get the full endorsement by CSLF.

The negotiation of a sub-contract with Leonardo Technologies, Inc. has been completely interrupted in the wake of Hurricane Katrina after August 29, 2005. The project is to resume as soon as Tulane University resumes normal operation.

Project 8: Introduction of Advanced NO_x Control Technologies

The Chinese side has expressed special interest in the most advanced U.S. NO_x Control technologies such as the highly effective and expensive selective non-catalytic reduction (SNCR) technology/equipment. One project co-funded under the DOE-MOST Clean Fossil Energy Protocol (Annex IV) is focused upon the feasibility study of US technology for the green field project.

Funded by the US Trade & Development Agency (USTDA), the EETC and US EPA supported/facilitated the “Feasibility Study for the Environmental Emissions Control Project in China at Beilun Power Plant”. The project spotlighted retrofitting projects, and is to focus upon a specific Chinese power plant. A pre-feasibility study is to be completed to address technological options. In doing so, the project can assess potential markets for US technologies. Maintaining close contacts with US firms, such as H&J, the EETC has worked to support the US industry toward the realization of the market share in China. The EETC has participated at the bid evaluation, and will follow up with its development.

Attachments

[Eetc2005_12_15ideas.01.ppt EETC's bright future: Some Ideas for Considerations](#)