



Quarterly Technical Progress Report

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Fifth Quarter of 2005

July 21, 2005 - September 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

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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 exchange 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 reduction in China through joint U.S./Chinese efforts.
4. Through these activities enabling the identification of business opportunities for U.S. businesses.

The progress of EETC in the US was severely affected by the following factors:

1. On July 24, 2005, the 28 year old stepson of S. T. Hsieh, Mr. James C. Wang, suddenly passed away at his home in Chino Hill, CA. S. T. Hsieh had to cancel the scheduled meetings in China and return to the US for funeral arrangements.
2. On August 29, 2005, Hurricane Katrina devastated the Gulf Coast Region. The City of New Orleans was flooded and Tulane University was closed immediately.

After Hurricane Katrina, S. T. Hsieh was devoted to the EETC projects in China on a full time basis-.

Project 1: Maintenance of the EETC

Project Description

This project includes all activities that are required to maintain the physical presence of the EETC at both Tulane and Tsinghua Universities. EETC management continuously seeks funding sources for the EETC that are 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 will be maintained in a database by EETC.

The Summary of Activities under this Task for the Reporting Period was held back after Hurricane Katrina devastated the region and closed Tulane University.

Task 2: Management of EETC Program Meetings

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

The Summary of Activities under this Task for this quarter was completely stopped after Hurricane Katrina closed Tulane University on August 29, 2005.

Task 3: Compilation of Electronic EETC Newsletter

A newsletter was not prepared during this period.

Project 2: Maintenance of EETC Internet Presence

This project is the continuous updating of EETC's 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. EETC's Internet site will be continuously updated to include reports of all activities as they are compiled. In addition, an up-to-date list of EETC partners and industrial participants will be maintained on the website.

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 Hurricane Katrina hit the region on August 29, 2005, EETC's website which is supported by Tulane University, www.tulane.edu/~uschina/eetc3 was shut down.

However, the website maintained by Tsinghua University in Beijing, www.us-china-eetc.org was up and running after the hurricane and has been actively updated.

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

This project includes a provision of assistance by the EETC 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 facilitates communication between FE/DOE and MOST. A major workshop entitled "US-China Clean Coal and Energy" is being planned for October 28, 29 at the China World Hotel in Beijing. EETC will oversee logistics and programs.
2. EETC is finalizing the completion 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 (Shanxi Energy Industry Group, Yongda Group (Wuxi), Milestone Inc. and Appalachian Power) to develop the work statement, budget and schedule for this project. The project is being approved by DOE and EETC is interfacing with the Chinese partners to get the project approved.
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 the 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. Please see attached.

Project 5: Workshops and Informational Tours

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

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.

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

“Clean Coal and Power Conference” Washington, DC, November 21-22, 2005

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, precluding their wholesale replacement in the near-term. In addition to replacement, other options for improving their performance include fuel-switching to oil or gas, or implementing operational improvements to existing boilers. This project is focused on the latter, applying low-cost operations improvements.

EETC has finalized with China Coal Research Institute (CCRI) the Subcontract for Improving the Performance and Reduced Emissions of Small & Medium Size Industrial (Stoker) Boilers in the Beijing Region. This approach will allow the results of this project to be applied 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. First year report has been finalized and submitted. Second Year effort has been initiated.

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

One of the joint U.S.-China Studies which focuses 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. EETC is working with the team to get the full endorsement by CSLF.

The negotiation of a sub-contract with Leonardo Technologies, Inc. was completely interrupted by Hurricane Katrina after August 29, 2005. We will resume the project 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 on the feasibility study of US technology for the green field project.

Funded by the US Trade & Development Agency (USTDA), EETC and US EPA also supported/facilitated the “Feasibility Study for the Environmental Emissions Control Project in China at Beilun Power Plant”. The project focused on retrofitting projects. The approach will be focusing a specific Chinese power plant, and completing a pre-feasibility study that will address a range of technology options. This will allow a broad assessment of the potential market for all relevant U.S. technologies. EETC participated at the bid evaluation and will follow up with the development. S. T. Hsieh planned to attend the 2nd US-China NO_x and SO₂ Control Workshop, August 2-5 at Dalian, but due to the death of his step son on July 24, 2005, S. T. Hsieh had to return to the US and did not attend the Workshop. EETC maintained close contacts with US firms such as H&J supporting the US industry to realize the market share in China.