## MEMORANDUM OF UNDERSTANDING BETWEEN THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA AND THE NATIONAL DEVELOPMENT AND REFORM COMMISSION OF THE PEOPLE'S REPUBLIC OF CHINA CONCERNING INDUSTRIAL ENERGY EFFICIENCY COOPERATION

The Department of Energy of the United States of America (DOE) and the National Development and Reform Commission of the People's Republic of China (NDRC), jointly referred to herein as the "Participants";

RECOGNIZING that the development and use of energy are key elements of the economic growth of the United States and the People's Republic of China (PRC);

SHARING common serious energy challenges from increasing energy imports and worsening environmental impacts as energy use rises;

SHARING the sense of commitment to enhancing energy security through cooperation;

NOTING the prominence of the industrial sector as an energy consumer in the PRC, accounting for 70 percent of the country's total energy demand;

NOTING the PRC's energy efficiency goals in its 11th Five-Year Plan (2006-10) and its call for a 20 percent reduction of energy consumption per GDP unit by 2010 compared to that of 2005; and

NOTING that the cooperation on industrial energy efficiency assessments was discussed at the second United States-China Energy Policy Dialogue, which met in Hangzhou, PRC, on September 13-14, 2006, and extended during the second Strategic Economic Dialogue which met in Washington, DC on May 22-23, 2007;

HEREBY declare their intention to jointly promote industrial energy efficiency improvements and emissions reductions through the establishment of programs and activities designed to strengthen the PRC's national, regional and local energy efficiency ability to make improvements at energy-intensive factories and facilities.

The first phase of this effort is to conduct industrial energy efficiency assessments, according to the following parameters:

1. DOE and the NDRC intend to cooperate to carry out the industrial energy efficiency assessment. The Participants' leading representatives in this cooperation are: Department of Resource Conservation and Environment Protection of NDRC and Energy Efficiency and Renewable Energy Office of DOE.

- 2. NDRC is responsible for selecting approximately 8-12 enterprises from the "Top 1000" energy-intensive enterprises in the PRC that have a sufficient level of short-term funding and can be reasonably expected to implement feasible energy efficiency improvements recommended by the DOE and NDRC assessment teams.
- 3. A team of DOE-assembled industrial energy efficiency experts, along with a similar team assembled by NDRC, plan to conduct on-site plant audits of the production process and plant energy systems at selected PRC plants utilizing all available data that the host enterprise provides.
- 4. The DOE and NDRC assessment teams should report verbally and in writing to the PRC enterprises, and to the relevant PRC local, provincial and central government bodies on short-term, medium-term and long-term recommendations to save energy and money, and reduce greenhouse gas emissions in the host factories.
- 5. DOE intends to pay for travel, accommodations, consumables, equipment and professional fees associated with DOE energy experts conducting each enterprise assessment.
- 6. DOE intends to provide software decision tools needed to conduct plant energy audits and to train factory personnel on the use of the software and plant audit techniques. DOE and NDRC plan to discuss ways to translate and re-engineer software tools and training materials. DOE plans to pay the costs of conducting the activities identified in this paragraph.
- 7. As part of plant energy audits, DOE energy experts plan to identify improvements that save energy, and to provide information on equipment suppliers from the United States who can assist in implementing improvements.
- 8. DOE also plans to identify potential technology and demonstrations for highlyefficient boilers, fired heaters, combined heat and power units and other substitute energy technologies.
- 9. DOE proposes to lead the development of a comparison study of selected PRC Top 1000 enterprises and selected large U.S. manufacturing plants in the steel, non-ferrous, petrochemical, chemical, and cement industries, and to identify differences in best practices between counterpart plants/industries.
- 10. DOE and NDRC intend to prepare a policy study to compare U.S. and PRC energy efficiency strategies, energy efficiency laws, policies, standards and energy efficiency management.

- 11. DOE and the NDRC intend to collaborate on developing plant efficiency standards which could be used as the basis of a PRC national energy efficiency label and ISO standard.
- 12. DOE intends to provide energy experts for training sessions in the United States and the PRC and for field visits to familiarize PRC energy-saving management personnel, including government personnel, energy-saving supervisory and monitoring personnel, energy policy research personnel and the management of big energy consumption enterprises, with U.S. energy saving laws, policies, advanced energy saving procedures and technologies and best practices.
- 13. The Participants expect PRC enterprises that participate in the assessment to designate a counterpart team, whose members are experienced in and knowledgeable of the production process and are available to work closely with the DOE and NDRC assessment teams.
- 14. The Participants understand that U.S. in-kind contributions to the cooperative activities undertaken under this Memorandum of Understanding (Memorandum) are not to be subject to any form of import tax, duty or other charge assessed by the PRC.
- 15. DOE and NDRC understand that U.S. personnel who conduct the assessments under this Memorandum may be required to conclude written agreements with PRC enterprises, as appropriate, for the non-disclosure of the enterprises' businessconfidential information.
- 16. This Memorandum does not create any legally binding obligations between the Participants.

Signed at San Francisco, this 12th day of September, 2007, in duplicate in the English and Chinese languages.

FOR THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA:

FOR THE NATIONAL DEVELOPMENT AND REFORM COMMISSION OF THE PEOPLE'S REPUBLIC OF CHINA:

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