Transition Team Question # 7

Q: Does FE have international programs in coal, oil and gas, and SPR, and what is the funding?

- **Deliverable: Provide the amounts of funding for the international programs in Coal, Oil and Gas and for SPR.**

A: International Programs

Coal

FE does not have a separate international Coal Research RD&D program, but has a long history of productive cooperation with many foreign countries and organizations. This cooperation can be broadly divided into two areas:

1. outreach and information exchange through both formal (e.g., memoranda of understanding and cooperative agreements) and informal (site visits and conferences/workshops) activities, and
2. cooperative RD&D activities conducted through NETL's Office of Research and Development (ORD) and as part of projects supported by the coal R&D programs.

The latter activities are conducted primarily with U.S. companies, research organizations, other national laboratories, and academic institutions, including foreign partners, with unique skills and facilities as part of their work scope. Much of FE's outreach and information exchange occurs through various multilateral [Asia Pacific Economic Cooperation (APEC), Asia Pacific Partnership on Clean Development and Climate (APP), International Energy Agency (IEA), and Carbon Sequestration Leadership Forum (CSLF)] and bilateral (Brazil, Canada, China, Israel, Korea, Poland, and UK) agreements. NETL ORD has recently initiated cooperation with foreign R&D partners under most of the bilateral agreements. To date, this effort has been focused on sharing information on ongoing activities, identifying mutual areas of interest for cooperation, and developing work plans.

The Coal Program's most significant programmatic RD&D cooperation is implemented under the Sequestration Program, including projects with key stakeholders and partners in Algeria, Australia, Canada, China, Germany, and Norway.

<u>Current Coal Program Funding for International Activities</u>

- Support for Bilateral & Multilateral Agreements and general outreach activities: $200,000
- Support for APEC/EWG/EGCFE activities: $75,000
- Asia Pacific Partnership (APP): Congressional Appropriations: $7,500,000 in FY08 to be funded within specified program elements (Gasification, Sequestration, Advanced Research, and Program Direction Programs). Projects have been identified for collaboration on the basis of activities that the U.S. would

conduct anyway in the course of its R&D. The $7,500,000 is integral to the R&D program and is being counted as fulfilling the APP funding mandate by Congress.

- Sequestration Program support for international Carbon Capture and Storage projects: Total $3,058,000 ($1,000,000 in implementing agreement with NRCAn for Weburn; $138,000 cooperative agreement with University of California at San Diego for work at Sleipner; and remaining $1,920,000 to LBNL and LLNL to support work in Germany, Australia, Africa, and China). These activities provide high leveraging of funds for the U.S.

FE's international programs in coal are conducted by the Office of Clean Energy Collaboration. This office works in four major areas:

1. Coal Technology Exports. The office identifies and promotes opportunities for US industry and job creation through exports of clean coal technology to potential customers throughout the world, and particularly to fast-growing markets such as China and India. These US technologies address the expressed needs of many countries for cost-effective and secure energy and mitigation of local pollutants and carbon dioxide (CO_2) emissions. The office works both bilaterally with individual countries and multilaterally with organizations such as the International Energy Agency, the United Nations and the World Energy Council.
   FY 2009 Funding Request: $ 700,000

2. International Program Support. The United States is one of several IEA members that support the IEA Clean Coal Centre, which is the major activity in this line item. The Center is the pre-eminent international research institution on Clean Coal Technologies and is increasingly focused on technologies to mitigate climate change. It produces numerous reports each year on international coal technology developments that are highly-relied-upon by the U.S. government and by U.S. industry. Through the Centre, the United States learns about global technology markets in and disseminates information about US technology offerings.
   FY 2009 Funding Request: $ 706,000

3. US-China Energy Environmental Technology Center (EETC). The US-China EETC is a cooperative venture between the U.S. and China dedicated to helping solve China's critical energy problems through U.S. leadership in green energy technology, which will create jobs for American businesses that become involved in China's expanding energy and environmental sectors. It is operated jointly by Tulane University in New Orleans and Tsinghua University in Beijing. US-China EETC range from information exchanges and workshops to studies involving participation by Chinese and American firms. For example, American and Chinese firms working through US-China EETC assisted the city of Beijing to develop a plan to improve its air quality. American and Chinese experts also working together under its auspices recently completed an estimate of the capacity for geologic storage of CO_2 in China that showed substantial potential to reduce that country's CO_2 emissions.
   FY 2009 Funding Request: $ 0

4. Carbon Sequestration Leadership Forum (CSLF). The office serves as the Secretariat of the CSLF. The United States (DOE/FE) also chairs the CSLF Policy Group, the CSLF's governing body. The CSLF is a Ministerial-level multilateral climate change initiative for collaboration on Carbon Capture and Storage (CCS). Members include 21 countries and the European Commission. On a global basis, CSLF Members represent 58% of world population, 70% of energy production, 70% of energy consumption, 76% of CO_2 emissions and 76% of GDP. The CSLF provides an active mechanism through which Members and stakeholders from around the world exchange information and viewpoints on CCS and work together on projects to advance the CCS and make it globally available.

   FY 2009 Funding Request: $ 500,000 (From the CO_2 Sequestration Program)

SPR

- Annual Coordinating Meeting of Entity Stockholders (ACOMES). The U.S. Strategic Petroleum Reserve is a member of ACOMES together with 26 other national oil stockpiling agencies. ACOMES meets annually to exchange technical information, share experiences, and discuss changes in environmental regulations, legislation, and other issues affecting the maintenance and operations of oil reserves. There is no funding required.

- In addition, the U.S. SPR is directly involved in two ACOMES subgroups:

  - An International Crude Project Group (ICPG) to collaborate and study various technical issues associated with crude oil storage. This group sponsored the development of a computer-based sludge prediction program which has been installed and used by the SPR office.

  - An International Benchmarking Study Group (IBSG). The SPR joined with four other ACOMES members (Germany, France, the Netherlands and Switzerland) in 2004, to conduct a benchmarking study of their oil stockpiling programs. The objective of the study is to make comparisons of the oil stockpiling programs and to identify and adopt those best practices to improve performance. No funding.

- U.S. DOE/Estonia Cooperation Agreement on Oil Shale Technology**.** An MOU agreement between DOE and Estonia to advance the common interests of both countries with respect to oil shale research and development in the areas of mining, transporting, retorting, upgrading, and utilizing shale oil and related products is currently being finalized. (The establishment of an agreement has been agreed to informally by Secretary Bodman and Estonia's Prime Minister, Mr. Andrus Ansip). The MOU does not carry any obligation for DOE funding.

Oil & Gas

There is no specific dedicated funding for International Oil and Gas activities in the current budget.