Cooperative Agreement in support of
the “Smart Development Initiative”

MONTHLY REPORT – June 2006

Prepared for:
Energy Division—Energy Sector Governance Program
Office of Infrastructure & Engineering
Bureau for Economic Growth, Agriculture and Trade
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June 30, 2006
USAID Cooperative Agreement
Monthly Report
June 2006

The following are the activities conducted in the month of June. They fall under Task 1 (Continuation of Work in Ghana), Task 2 (Replication / Expansion of the Ghana model to the rest of West Africa) and Task 4 (Smart Development concepts).

- Dr. Foss and Dr. Gülen spent the week of June 12 in Ghana, working with Dr. Asante on RCEER deliverables and with the Advisory Board members on RCEER’s future structure and focus. The Board decided to register RCEER as a separate entity outside the university environment and to initiate a search for an Executive Director. The key results from the trip and further details can be found in the trip report provided as Attachment 1. (Task 1)

- RCEER continued to work on deliverables: 1- The Advisory Board is reviewing the natural gas book before publication; 2- printing of RCEER informational flyer is postponed until the end of September in order to incorporate information about the new regional focus; 3- RCEER started to implement the surveys with the help of EC and the Ministry. (Task 1)

- CEE continued to work on the first draft of a white paper on Smart Development and an institutional development kit. (Task 4)

- Mr. Essandoh-Yeddu and Dr. Gülen continued to work on a paper about the economics of the Tema LDC. (Task 1)

- Dr. Foss and Dr. Gülen collaborated with their colleagues from the Gas Research Group at UNIPORT to deliver a five-day course on energy value chains with a special emphasis on natural gas monetization options. The course was strongly supported by the NNPC and Petroleum Technology Development Fund. USAID/WA sponsored three delegates from the WAGP Authority and Mr. Alain Rosier from Nexant presented on WAGP developments. This is the second time CEE participated in such a workshop with GRC-UNIPORT. Alumni and network from these Nigerian programs can be instrumental in helping to expand RCEER activities in West Africa. (Tasks 1 and 2)

**Next steps**

- In July, RCEER will:
  - publish Guide to Natural Gas in Ghana (currently under final review by the Advisory Board before printing in mid-July)
  - hold a public outreach activity to launch the Guide (to coincide by the printing of the Guide)
  - tabulate results from the surveys on natural gas (currently surveys are under implementation)
ATTACHMENT 1

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Center for Energy Economics
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University of Texas at Austin

Trip Report

Activity: Trip 2 to Ghana
Dates: June 11 through June 16, 2006

Key Results

The Advisory Board decided to register RCEER as a separate entity, acquire new office space
and bank account in preparation for its expansion into a regional center of excellence.

The Board also decided to search for the Executive Director of the RCEER via
advertisements in the papers in Ghana and Nigeria.

One of the deliverables, RCEER informational flyer, has been postponed until the end of
September in order to include information about new RCEER set-up and regional focus.

The Steering Committee decided to publish the Natural Gas Primer and the Guide to Natural
Gas in Ghana together. Materials for both are ready and will be needed in outreach
programs and seminars to be offered. The first outreach activity will launch the Guide with
guest speakers from the Ministry, PURC and EC among others.

The EC started implementing the RCEER survey for industrial users in Tema together with
their own effort to collect fuel use data. The Ministry of Energy provided a cover letter for
implementation of the surveys for the bankers and journalists; RCEER started to distribute
these surveys during the week of June 19.

Summary Report

Sunday, June 11

Dr. Foss and Dr. Gülen met with Mr. Seth Adjei-Boye from PURC. Mr. Adjei-Boye was in
Houston in February for the two-week program on natural gas fundamentals (together with
Mr. Quaye-Foli from the Ministry and Mr. Essandoh-Yeddu of EC). The CEE team and Mr.
Adjei-Boye discussed the future of RCEER and in particular its expansion to play a regional
role in addition to developments associated with natural gas market frameworks in Ghana.

Dr. Asante visited with the CEE team. Dr. Asante provided a status update on RCEER
deliverables. The team decided to work on the surveys and final edits of the natural gas
guide together during the week of June 12.

Monday, June 12

Dr. Foss and Dr. Gülen visited the Tema Oil Refinery (TOR) and visited with several refinery
officials: Dr. K.K. Sarpong, Managing Director, Mr. E.K. Quartey, GM HSSE, Mr. Kingsley
Kofi Ditsa, Environmental Services Manager and Mr. Easmon Asamoah, RFCC Manager.
Refining is important for Ghana not only from a strategic perspective but also because
pricing and availability of petroleum products have implications for the natural gas market;
the decision to switch from oil products to natural gas will depend on these factors. TOR has plans to use natural gas for refining processes but also for generating power enough to serve the industrial estate in Tema. TOR’s intentions are dependent on the electricity market structure in Ghana: they would need to be able to access the transmission grid. If allowed, TOR would prefer to get gas directly from the WAGP via its own pipeline, complicating the prospects for an LDC business. TOR is one of the key industrial entities in Tema, which will participate in the natural gas survey. TOR is also a likely consumer of RCEER research and outreach activities in the future.

Dr. Foss and Dr. Gülen visited the Ghana Chamber of Mines. Mr. Sulemanu Koney, Director of Analysis in Research & Finance (who attended the New Era program in Houston) and Mr. Joshua Mortotli, Business Services Manager of AngloGold Ashanti provided the perspective of the mining sector on the secondary gas market development and related electricity market structure issues. Mines prefer to choose their electricity suppliers and they see natural gas as the fuel that will help quickly generate the power needs of the mines as well as the country. Ghana has significant mineral resources, extraction of which will require large amounts of relatively cheap and reliable electricity. Natural gas will be the fuel that will generate this electricity. Under the right circumstances, mining companies may be interested in the natural gas sector building pipelines to bring gas to their areas of operation. As such they will participate in RCEER’s natural gas survey. They are also a likely consumer of RCEER research and outreach activities in the future.

Dr. Gülen and Mr. Stephen Adu visited briefly to discuss the preparations for the Advisory Board meeting.

Tuesday, June 13

The CEE team met with Dr. Ofosu-Ahenkorah, Executive Secretary of EC, at the offices of the Commission to discuss the work done so far on secondary market framework. The EC is starting to collect fuel use data from potential natural gas customers in Tema. RCEER survey is asking for more detailed info on furnaces/boilers and also has questions on more general aspects of natural gas use. Dr. Ofosu-Ahenkorah offered to implement the RCEER survey for industrial users along with EC’s own data collection efforts.

Dr. Foss and Dr. Gülen also visited the National Petroleum Authority (NPA) and met with Mr. John Attafuah, Chief Executive and Mr. Isaac Tagoe, Technical Director. They learned about the role and responsibilities of this one-year old agency. Pricing of petroleum products have important implications for the refining sector as well as government’s energy and economic policies. It is also important for understanding the cost of fuels for industrial facilities and their interest in switching to natural gas. One of RCEER’s first activities was to evaluate socioeconomic impact of petroleum deregulation. With NPA’s new approach to product pricing, this study may be re-visited.

The CEE team and Dr. Asante visited the Ministry of Energy and met with Dr. Apiagyei Gyamfi, Director of the Petroleum Division and Mr. Boateng (who was in Houston for the New Era program and also attended the NARUC exchange visit in February). Dr. Gyamfi agreed to provide a cover letter for the surveys to be conducted with bankers and journalists.

Dr. Foss and Dr. Gülen visited with Mrs. Harriette Amissah-Arthur, Director, and Mr. Frank Atta Owusu, Project Officer, of KITE to discuss KITE’s interest in partnering with RCEER in different activities. KITE is an NGO that has been involved in various energy projects with ECOWAS among other international donors, especially in the area of access to energy, rural and peri-urban energy issues and environment-energy nexus. The experience of soft-money NGOs can be valuable for RCEER’s sustainability in the long-run. KITE is interested
in partnering with RCEER as long as it is a project of common interest and costs can be covered.

The CEE team had dinner with Mr. Adjei-Boye and Mr. William Gboney, previously with PURC. Mr. Gboney recently founded his own consultancy, International Institute of Infrastructural Economics and Management and offered technical courses on regulatory economics and could be a resource person for RCEER training activities.

**Wednesday, June 14**

Dr. Foss and Dr. Gülen met with Dr. Jatinder Cheema, USAID WA Mission Director, and Mr. Jeremy Strauss to provide background on RCEER and discuss its expansion into a regional center of excellence. The CEE team also visited with Mr. Kwabena Appenteng of the Ghana Mission to discuss current RCEER activities as well as general conditions in the energy sector in Ghana.

Dr. Gülen met with Dr. Smart-Yeboah, Regional Director at ECG. Dr. Smart-Yeboah wrote parts of the Guide to Electric Power in Ghana and presented at the launching of the Guide in July 2005. Dr. Gülen provided details on RCEER prospects as a regional center. They also discussed electricity market developments in Ghana as well as in WAPP area.

Dr. Asante, Dr. Foss and Dr. Gülen worked on the RCEER deliverables and prepared for the Advisory Board meeting. They decided to merge the Natural Gas Primer and Guide to Natural Gas in Ghana deliverables and publish them as one document at this time rather than waiting until late September to publish the Guide. They also decided to have the first public outreach activity as the launching of the merged Guide in about mid to late July. Mr. Kwaku Boateng from the Ministry, Mr. Adjei-Boye from PURC and perhaps others who traveled to the US as part of the NARUC and/or CEE programs or who attended CEE’s New Era program will present at this event.

The CEE team had dinner with Mr. Jeremy Strauss and Dr. Jeffrey Cochrane from the WA Mission and talked about the role of regional RCEER in meeting the energy sector challenges of the region.

**Thursday, June 15**

Dr. Foss and Dr. Gülen visited the offices of GNPC in Tema and met with Mr. Boateng, Managing Director, Mr. Thomas Manu, Director of Exploration & Production and Mr. Nii Adzei-Akpor, Exploration Manager. They discussed the training and capacity building needs of GNPC, potentially in partnership with BEG and CEE, combining technical fields of geosciences and petroleum engineering with business, regulatory and economic considerations. GNPC will develop a list of their training needs and send it to CEE; and CEE will collect information on similar arrangements BEG had with other national companies. If both sides agree on the partnership outline, funding sources will be pursued.

Dr. Gülen met with Mr. Kwaku Boateng at the Ministry and discussed July launching of the Guide and other opportunities. He also picked up the cover letter for the surveys signed by Dr. Gyamfi.

Dr. Foss went over the final draft of the Guide to Natural Gas in Ghana.

Ms. Jantuah-Banful from the RCEER Advisory Board joined Dr. Foss and Dr. Gülen for dinner. They discussed RCEER’s maturation into a regional center.
Friday, June 16

RCEER Advisory Board met for roughly three hours (see agenda below). In addition to the CEE team, Mr. Pianim, Mr. Adu, Dr. Ofosu-Ahenkorah, Ms. Jantuah-Banful, Dr. Asante, Mr. Strauss and Mr. Ahiaataku-Togobo from the Ministry were in attendance. After a quick review of past year’s activities, the Board considered the current activities, providing suggestions in implementation of surveys and outreach activities. RCEER Steering Committee will use these suggestions to structure the outreach activities and informational seminars. In addition, they will pursue spots on TV and radio programs to pass on the natural gas information to the public.

Mr. Francis Gbeddy of EC visited Dr. Foss and Dr. Gülen. Mr. Gbeddy was in Houston for the New Era program. They discussed regulatory developments associated with natural gas and electricity markets in Ghana.
Resource Center for Energy Economics and Regulation

Advisory Board Meeting

16th June 2006

Agenda

1. Welcome by the Chairman of the Board, Mr. Kwame Pianim, Chairman of PURC
2. Remarks by Dr. Michelle Michot Foss, Chief Energy Economist and Head of CEE
3. Evaluation of 2005 activities, Dr. Felix Asante, Coordinator of RCEER
4. Activities for 2006, Dr. Felix Asante, Coordinator of RCEER
5. Future Outlook of the Resource Center
6. Other Business