FEATURED ACCOMPLISHMENTS FOR THE QUARTER

AFGHANISTAN CAPACITY BUILDING PROGRAMS

USAID-SARI/Energy is implementing the Afghanistan Power Sector Capacity Building Program; the program is designed to improve the technical and managerial skills of Afghan utilities participants by sharing best practices within the Region by establishing sustainable linkages between Afghanistan and neighboring utilities.

This activity includes the following structure:

a. Executive development programs
b. Training of trainers programs
c. Technician training programs
d. Engineers training programs
e. Institutional twinning with utilities, regulatory bodies, and training institutes

SARI/Energy has undertaken the following activities this quarter:


This program was aimed at working executives and engineers in the Afghanistan distribution sector. Seven engineers were selected from the newly formed corporate entity, DABS. These seven candidates are currently enrolled in a 26 week course on O&M of T&D systems at National Power Training Institute (NPTI), Bangalore, India. This particular program prepares and trains the engineer to become competent in the operation and maintenance of power transmission and distribution systems.


This program was delivered to Afghanistan utility and ministry officials engaged in policy making and management of the power distribution sector. This course was designed for participants to develop an understanding of power distribution, issues, challenges, distribution reforms, regulation, commercialization and private sector participation in the power distribution sector including power distribution franchising.

This course was held in Kabul at the offices of the Ministry of Energy and Power. The course was successful in advancing the awareness of the various aspects, issues and challenges involved in regulation and commercialization of the power distribution sector.

Afghanistan Hydro Power Workshop-Katmandu, Nepal (8th – 12th September 2009)

The week-long program was conducted in Katmandu, Nepal. The Alternative Energy Promotion Centre (AEPC) was the knowledge partner for this program; and organized the event under the auspices of the Regional Centre for Micro-Hydropower. The workshop provided a unique opportunity for the Afghanistan participants to gain first-hand knowledge on various aspects of hydro-power development from small/micro-hydro power developers, implementers, manufacturers and policy makers in Nepal; all of whom have considerable experience in this field. This event was attended by ten participants from Afghanistan representing the Ministry of Energy & Water (MoEW) and the Ministry of Rehabilitation and Rural Development (MRRD).
SRI LANKA WIND POWER WORKSHOP: POLICIES, GRID INTEGRATION, PROJECT FINANCING, and TARIFFS

The Sri Lanka Sustainable Energy Authority (SLSEA) organized a wind power workshop in Colombo which was conducted August, 10-11, 2009. The workshop addressed such topics as wind energy policies, connection to grid networks, project development and finance, and the potential steps to promote wind power in Sri Lanka. SLSEA invited local speakers and participants, and the workshop was attended by a broad cross-section of stakeholders involved in wind development in Sri Lanka, including the banking community, developers, the Ceylon Electricity Board, and the public utility commission. Also in attendance were two delegates from Bhutan representing the Department of Energy, Royal Government of Bhutan and the Druk Green Power Corporation.

Sponsored by USAID SARI/Energy, implementing partner National Renewable Energy Laboratory (NREL) organized presentations for the workshop which covered such topics as wind integration and financial due diligence. Mr. David Corbus of NREL spoke on grid integration of wind energy, policy, and environmental issues. Mr. Kevin Smith of DNV-GEC spoke on financial due diligence and the risks associated with wind power projects.

Mr. Corbus discussed the challenges and strategies to integrate high levels of wind power into transmission grids, and gave examples of high-penetration wind scenarios on island grids of similar size to Sri Lanka. Mr. Smith discussed the various roles of the different parties (owner, financier, and independent engineer) involved in the wind power due diligence process and covered the key areas where risks are introduced in wind power projects and ways of mitigating those risks. After the workshop, meetings were held with the Ceylon Electricity Board to discuss next steps in pursuing increased wind development in Sri Lanka. Additional meetings were also held with the delegates from Bhutan to discuss the potential and challenges for increased wind power development in their country. Several key considerations were identified for wind development in Sri Lanka, and by interconnection with India’s power grid, which might increase the potential for higher wind penetration.

NREL REPORT ON WIND AND SOLAR DEVELOPMENT POTENTIAL IN BHUTAN

NREL has released a report on the potential for Wind and Solar power development in Bhutan. This assessment builds on the solar and wind resource data and maps recently developed by NREL under the SARI/Energy program. The report discusses the quality and distribution of resources across the country and the specific considerations and challenges Bhutan might face in developing those resources. Several scenarios were used to estimate the potential for solar and wind production under distributed and centralized configurations. This report will assist Bhutan to determine how solar and wind can best fit in with their renewable energy goals and establish a wind monitoring program to better characterize the wind power potential at promising sites. The report can be accessed from the following web address http://www.nrel.gov/docs/fy09osti/46547.pdf

US Agency for International Development
GLOBAL ENERGY MARKETS TRADE INDIA - BANGLADESH EXCHANGE

SARI/Energy organized and conducted an exchange program for Bangladesh Electricity Sector representatives to visit their counterparts in India to become familiar with the development and operation of the Indian electricity market. SARI/Energy had previously conducted an assessment of the India – Bangladesh interconnection project, and this program was designed to take the next step: transferability of the India Electricity Exchange (IEX) model to Bangladesh. SARI/Energy arranged for an eleven member delegation, led by the Power Secretary, to explore the transferability of the India Energy Exchange (IEX) business model to Bangladesh. The program was conducted in New Delhi, India from July 12-18, 2009. Delegates regarded the exchange program to be a focused, productive, and a beneficial platform for knowledge sharing and mutual cooperation.

RCCP COAL PREPARATION COURSE

The Regional Clean Coal Partnership (RCCP) Program was initiated at a regional workshop in Kolkata, India in September 2008. Following the success of that regional workshop, SARI/Energy organized a week-long course in July 2009 on coal preparation and beneficiation to support the network associations and other key stakeholders in SARI/Energy member countries. The program was able to acquaint and acclimatize the participants to the principles of clean coal preparation. The course also touched upon the issue of optimizing combustion efficiency of the coal. Through this program SARI/Energy enhanced the understanding of development of the coal sectors in SARI/Energy countries by promoting networking amongst stakeholders and through information dissemination. SARI/Energy partnered with the Coal Research and Development Central Institute of Mining and Fuel Research, (CIMFR) Dhanbad, Jharkhand, India.

SMALL GRANTS UPDATE

From the first round of Request for Applications (RFA), USAID SARI/Energy Small Grants Program (SGP) successfully selected, awarded and launched twenty five projects, worth about USD $ 721,000 this quarter. Encouraged by the strong response, SGP launched a second round, seeking additional solicitations to undertake activities within the scope of the program’s mandate. This announcement was made on August 20, 2009 and was open to eligible organizations from all eight member nations - Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. Details regarding the RFA announcement were posted on the website, and promotion included mailing and other outreach efforts. The last date for submission of applications was September 25, 2009.

The SGP also successfully closed its first project awarded under the SGP program: the four-month project in Nepal was awarded to the National Association of Community Electricity Users - Nepal (NACEUN) wherein the grantee undertook a training programme on electricity house wiring for fifteen women from rural Nepal. The total project cost was estimated at USD $ 15,525, of which USD $ 7,762 was USAID’s contribution. Upon finishing the in-class and practical session curriculum, the grantee organized a certificate distribution ceremony for the graduates from the program.
Cross-Border Trade

In continuation to the initiative taken under the Regional Clean Coal Partnership Program (RCCP), SARI/Energy is organizing a four-day Program on Advanced Coal Management. This program is scheduled to be conducted from December 1-4, 2009 at Kolkata, India. The knowledge partners of the training program are the Central Institute of Mining and Fuel Research (CIMFR) and Indian School of Mines (ISM). This program aims to create awareness of the challenges that the coal industry will face in the future, to enhance the participants understanding of their roles in the emerging business scenario within the region, and to better equip the participants to handle interpersonal components of their respective organizations and their country. In Nepal, SARI/Energy developed and conducted a two-day workshop on transmission service agreements in July 2009 for NEA. The workshop was designed to familiarize NEA with the fundamental provisions of transmission service agreements (TSAs). The workshop was conducted in anticipation of the completion of the India - Nepal Transmission Interconnection Project. SARI/Energy provided this workshop to build capacity and understanding of the essential components of a TSA, to define the possible legal and transactional ramifications of specific provisions in a TSA, including risks and liabilities to NEA, and to provide an interactive workshop module that reviewed a typical TSA.

In the Maldives, PA mobilized the SNC-Lavalin team to begin work on the Island / Atoll Interconnection Pre-Feasibility Study; additional field trips will be scheduled during the fourth quarter 2009. For Pakistan, PA continued with providing advisory services to the CASA 1000 working group. PA also completed the draft final report on System Reliability for CEB Sri Lanka; the report is being reviewed and a review meeting will be held in early November 2009.

Energy Markets

Marcados International and Infraline will be organizing a three-day certificate course on power markets in Mumbai, India from October 29-31, 2009. SARI/Energy will sponsor eleven participants from Bangladesh, Nepal, Pakistan and Sri Lanka to attend this course. The course is designed to familiarize participants with the evolution of power markets in India, including: how electricity markets in India have transitioned from monopolistic to competitive structures, the evolution of the conduct of market participants and regulatory structures, the future prospects in terms of strategy, behaviour, regulatory framework, concerns about energy security and environment, and how market participants can profit from this emerging opportunity while managing risks.

Clean Energy Access

USAID-SARI/Energy is in the process of promoting a Regional Centre for Excellence in Micro Hydropower (RCEMH) in Nepal, in collaboration with the Alternative Energy Promotion Centre (AEPC). The objective of the centre will be to share SARI country experience in developing micro hydropower with other SARI countries, and to promote best practices in the South Asia region. This centre will showcase the know-how gained by AEPC, and other countries, in the field of micro hydropower. USAID-SARI/Energy is also working on promoting a Regional Centre for Excellence in Rural Electrification (RCERE) in Bangladesh, in partnership with the Rural Electrification Board of Bangladesh (REB). This centre will promote best practices in rural electrification in the South Asia region by showcasing the know-how gained by REB and disseminating information from the ‘Pal Bidyut Samiti (PBS) model’ for rural electrification. The centre’s objective will be to promote rural electrification as a means of creating income producing opportunities and enhancing socio-economic development in rural areas.

USEA is also organizing an Executive Exchange on the Use and Integration of Renewable Energy in the Power Sector, October 19–23, 2009 in Madrid Spain whereby executives from Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka will focus on the integration of grid-connected renewable energy in the power sector. During the activity, South Asian delegates will visit Spanish government agencies, market operators, utilities, and manufacturers to discuss government policies, market strategies and commercially proven renewable energy technologies to expand renewable energy deployment. Participants will discuss the technical, market, regulatory, and policy barriers of renewable grid connection and develop strategies to accelerate development. The exchange
will further help the utility executives and policymakers with the knowledge of modern technologies, financing strategies, policies, and successful project development methodologies, to foster renewable energy uptake in their countries and create a more attractive investment climate for the renewable energy sector. Site visits will allow the participants to observe the methodologies and technologies discussed during the exchange.

SARI/Energy undertook a definitional mission to Kerala and conducted a series of in-depth discussions with the Energy Management Centre (EMC), and other relevant stakeholders, on the establishment of a Women-in-Energy Centre of Excellence at EMC. The framework of the centre and respective responsibilities of stakeholders were agreed upon, and the Minister of Power, State Government of Kerala, expressed his willingness for EMC to enter into an agreement with USAID SARI/Energy. The National Renewable Energy Laboratory (NREL) participated in the discussions and committed to support the centre with technical assistance. PA is preparing a report reflecting the findings, follow-up actions, timelines, and financial commitments of all partners for this initiative. SARI/Energy received a request from Sri Lanka's Ceylon Electricity Board (CEB) to provide an exchange visit to India to study establishing wind energy interconnection requirements to the Sri-Lanka national grid. SARI/Energy is planning to host a workshop for Sri Lanka participants, including CEB, who would visit India and observe India’s wind energy generation and interconnection facilities. The participants will also receive detailed information on interconnection agreements, PPAs, and other requirements currently prevailing in India. This exchange program is scheduled for the last week of October, 2009 and will host between six and eight senior level participants.

S3IDF completed the report Concept Note on Establishing a Revolving Fund as a part of its ongoing efforts to investigate the transferability of the S3IDF Merchant bank Model to Nepal. Interest has been shown by multi-lateral development banks to fund and conduct a pilot project in Nepal based on this model.

**Afghanistan Capacity Building Program**

Building on the successful launch this program for training and building capacity within the Afghanistan power sector, SARI/Energy will be following up the initial series of programs under the Afghanistan Capacity Building Program with the following planned activities:

- **Short Program on Operation and Maintenance of Substation Equipment** (October 5-10, 2009) at NPTI, Faridabad, for thirty engineers
- **Training of Trainers (TOT) Program for Training Engineers in Substation Operation and Maintenance** (November 9 till December 5, 2009) at NPTI, Faridabad, for fifteen engineers
- **Short-term Training Program for Technicians in Metering and Revenue Protection** (December 20-24, 2009) at Kabul, Afghanistan, for thirty professionals
- **TOT program for Training Technicians in Distribution System Operation and Management** (first week of January, 2010) at NPTI, Faridabad, for fifteen engineers

**ABOUT SARI/ENERGY**

USAID’s SARI/Energy program promotes energy security in South Asia through three activity areas:

- Cross-border energy trade
- Energy markets
- Regional clean energy access

Through these activities SARI/Energy facilitates more efficient regional energy resource utilization; works towards transparent and profitable energy practices, mitigates the environmental impacts of energy production, and increases regional access to energy.

SARI/Energy countries include Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. SARI/Energy implementing partners include PA Consulting Group, the United States Energy Association (USEA), and National Renewable Energy Laboratory. SARI/Energy provides support to partners and stakeholders on pre-feasibility studies, technical assistance, advisory services, training, peer exchanges, mapping and project development in each of the above three core areas.
SARI/Energy Daily News Roundup

USEA distributes a daily bulletin of energy-related news from the SARI/Energy countries, along with notices of SARI/Energy activities and special events. The bulletin is distributed via email and includes web links to related articles. To receive the South Asia Energy Daily Online News Roundup contact: sarienews@usea.org

SARI/Energy Web page

For current information on our activities, please visit the SARI/Energy web page: www.sari-energy.org

CONTACT INFORMATION

Program Director:
Mr. S. Padmanaban - spadmanaban@usaid.gov

Project Coordinator:
Ms. Mercy Thomas - methomas@usaid.gov

Country Coordinators:
Afghanistan - Mr. Abdul Rasool Wardak -RWardak@usaid.gov
Bangladesh - Mr. A.K.D. Sher Mohammad Khan -sherkhan@usaid.gov
Maldives - Ms. Peiris Salma- speiris@usaid.gov
Nepal - Mr. Shankar Khagi - skhagi@usaid.gov
Pakistan - Mr. Syed Farrukh Hussain - sfhussain@dsl.net.pk
Sri Lanka - Ms. Peiris Salma- speiris@usaid.gov

Implementing Partners:
PA Consulting Group - Mr. Michael Hajny - Chief of Party Michael.hajny@paconsulting.com
U.S. Energy Association - Mr. John Hammond - Program Manager JHammond@usea.org
National Renewable Energy Laboratory Ms. Shannon Cowlin - Project Manager Shannon_Cowlin@nrel.gov

15 March 2010