





United States Energy Association South Asia Regional Initiative for Energy Integration (SARI/EI) Request for Proposal – Capacity-Building Training Program October 2017

# REQUEST FOR PROPOSAL – Training on the Design, Management and Operation of a Power Trading Entity

Closing date of RFP: November 6, 2017

Implementing Agency: United States Energy Association

Funding Agency: United States Agency for International Development

Through funding through the U.S. Energy Association's (USEA) cooperative agreement with the U.S. Agency for International Development (USAID), USEA is organizing a five-day training program on electricity trading tailored to Pakistan, with possible participation to be included from Afghanistan. The training is intended to provide the participants with institutional and human capacity building in the design, management and operation of a power trading entity.

The training will be conducted as part of USAID's South Asia Regional Initiative for Energy Integration (SARI/EI) program.

Proposals are due by 17:00 hours EST of the closing date. Please forward your proposal in soft copy with a read receipt to Ms. Sara Burback, Program Coordinator, at <a href="mailto:sburback@usea.org">sburback@usea.org</a>.

As this is a USAID-funded program, the RFP follows USAID Procurement Regulations and Laws. All bidder details will be kept confidential.

### I. INTRODUCTION

The U.S. Energy Association is the U.S. Member Committee of the World Energy Council (WEC). USEA, headquartered in Washington, DC, is an association of public and private energy-related organizations, corporations, and government agencies.

Through a cooperative agreement with the United States Agency for International Development (USAID) Bureau for Economic Growth, Education and Environment (E3), the United States Energy Association implements an Energy Utility Partnership Program (EUPP) available to all USAID assisted countries and USAID Missions. EUPP assists developing countries to increase environmentally sustainable energy production and use and improve the operational efficiency and increased financial viability of their utilities and related institutions. The goal of the EUPP is to increase access in USAID-assisted countries to environmentally sound energy services.

Under the Energy Utilities Partnership Program (EUPP) mechanism, USEA implements activities for the USAID South Asia Regional Initiative for Energy Integration (SARI/EI) program. USAID first launched the South Asia Regional Initiative for Energy (SARI/E) program with USEA in 2000. The first three phases of the program focused on cross-

border energy trade (CBET), energy market formation and regional clean energy development. The current phase, entitled the South Asia Regional Initiative for Energy Integration (SARI/EI), covers the eight countries of Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka, and aims to further the earlier objectives of advancing regional energy integration and increasing CBET.

# II. SUMMARY

This "Power Trading Training for Pakistan" will provide participants with a five-day training program to provide the participants with institutional and human capacity-building in the design, management, and operation of a power trading entity within Pakistan. The training will lay major stress on the development of skills and knowledge in the functional operations of power trading.

The purpose of this RFP is to solicit proposals from various candidate organizations, conduct a fair and extensive evaluation, and select the organization or individuals deemed most suitable to conduct the week-long training.

Read more: www.usea.org and www.sari-energy.org.

#### III. SOUTH ASIA BACKGROUND

Over the last two decades, South Asia has been one of the fastest growing regions in the world, with an average annual growth rate of 6% as measured by GDP per capita. Yet despite this impressive macroeconomic growth, the energy sector in the region has not been able to keep pace, and continues to experience chronic problems of supply shortage and poor quality of service. South Asia's energy security dilemma is one of the single energy development challenges of the 21st century critical to the economic future of almost 1.5 billion people. Given this dilemma, the only long-term solution is the sustained increase in regional energy cooperation among the South Asian countries. USAID's South Asia Regional Initiative for Energy Integration (SARI/IE) program has been advocating energy cooperation in South Asia since 2000. Now the program has transitioned to the next phase of advancing regional energy integration and cross-border energy trade (CBET) in the eight South Asian countries. The program addresses policy, legal, and regulatory issues related to energy in the region; promotes transmission interconnections; and works towards establishing a regional market exchange for electricity.

Over the past several decades South Asia has witnessed the steady growth of CBET between India and Bhutan and, more recently, between India and its other eastern neighbors, such as Nepal and Bangladesh. However, despite the tremendous benefits of regional energy trade and co-operation, CBET has thus far been limited in scope and influence upon energy trade in South Asia. There is a clear recognition that South Asia's energy sector has not been able to keep pace with the needs of the region, including a growing customer base, and it continues to experience chronic problems of shortage of supply and poor quality of service. The majority of South Asian countries struggle to connect their remote and rural customer base to the electricity grid, and CBET could expand the reach of electricity into these unlit regions. Hydropower and renewable energy both hold strong potential in aiding the expansion of CBET among South Asian countries.

Currently in South Asia, India, Bangladesh, Bhutan and Nepal have established transmission links through which electricity is being traded. Opportunities for cross border electricity trade (CBET) in the region have amplified particularly now that energy security has become a political priority for all the country governments. The recent developments favoring CBET in the region include signing of the Power Trade Agreement by Governments of India and Nepal as well as the signing of the SAARC Framework Agreement for Energy Cooperation (Electricity) in December 2014. These developments have already mobilized stakeholders for regional and sub-regional projects in the areas of power generation, transmission and power trade. The gravitas for CBET in South Asia was further established when the second meeting of SAARC energy regulators held in February 2016 deliberated to constitute the "SAARC Council of Experts and Energy Regulators (Electricity)" and a "Forum of Regulators".

The Indian market is characterized by significant growth in high demand for electricity, coupled with an electricity market dominated by coal. Coal, however, is not in constant supply, and this energy shortage has led to advances in clean energy development. India's CBET in hydropower with Bhutan, which began in 1961, has facilitated the reduction of carbon dioxide emissions and helped minimize electricity shortages in India. Concurrently, India and Nepal are in the process of expanding their cross-border transmission lines to further establish the two country's energy trade, which has been beneficial for both countries in developing transmission interconnections and grid connectivity.

USEA's SARI/EI program has conducted three modules focused on capacity-building through designing, managing, and operating a power trading entity. These modules were led by PTC India Ltd, a public-private partnership that has helped establish India's power market. The first of the three modules provided an overview of the structure of the Indian Power Sector; India's Regulatory Commissions and their roles and powers; and the roles and functions of India's government and private utilities, transmission system operators, and load dispatch centers. The second module deepened participant's understanding of power trading entities by addressing establishing a power trading entity, including short, medium, and long-term power purchase and sales; drafting power purchase sales agreements; and the legal framework for operating a power trading entity. The third module focused on the impact of PTC India's work in the country's power market. This was done through role playing scenarios covering a variety of relevant topics, including contract execution, bilateral contracts, and bid submission. Delegates also visited PTC India's control room and regional load dispatch center for a hands-on overview in operations and maintenance. USAID/USEA conducted a total of four rounds of this training; however, due to visa limitations, only two executives from Pakistan were able to attend.

# IV. PAKISTAN BACKGROUND

Pakistan could strongly benefit from an expansion of intra-country and regional CBET, as the country's high use of fossil fuels is unable to fully supply the population during peak energy hours. Participation in cross-border hydropower could boost the country's use of renewable energy while helping to accommodate for peak energy hours and lower the high cost of producing fossil fuel energy in Pakistan's outdated thermal plants. In this vein, the Government of Pakistan has created agencies with the mission of creating a role for Pakistan in the South Asian energy market, as well as administer intra-country trading. Pakistan's Central Power Purchasing Authority (CPPA-G) was created as a nonprofit tasked with creating and administering a competitive power purchasing market in Pakistan, including importing power from surrounding countries. Pakistan's National Electric Power Regulatory Authority (NEPRA) serves as the national regulator, which has also addressed creating a competitive energy market by restructuring the country's government-run energy sector to a privatized one. Privatization would create investment opportunities for both the Pakistan private sector and foreign energy companies. Both NEPRA and CPPA are working towards placing Pakistan within the emerging South Asian integrated energy market.

USEA's proposed power trading training will work towards addressing critical issues in Pakistan's emerging energy market with anticipated participation by the Central Power Purchasing Authority Guarantee Limited (CPPA-G), the National Transmission and Despatch Company (NTDC), the Ministry of Energy (Power Division) (MOE-PD) and the National Electric Power Regulatory Authority (NEPRA). NTDC operates and maintains multiple kV grid systems and transmission lines throughout Pakistan. It is licensed by NEPRA. MOE-PD is the federal ministry that oversees NTDC, the Private Power and Infrastructure Board, and the Alternative Energy Development Board. MOE-PD enforces federal policy and government incentive programs within the country's energy policy. CPPA-G, NTDC and MOE-PD will both serve as the driving forces behind developing and implementing a power trading entity in Pakistan. Representatives of Pakistan's electricity distribution companies, such as the Islamabad Electric Supply Company and K-Electric may also attend.

# V. STATEMENT OF WORK

The training will be specifically tailored to Pakistan. It will provide the participants with the background for developing the institutional and human capacity to design, manage, and operate a power trading entity for Pakistan.

#### VI. SCOPE OF WORK

The vendor will conduct a five-day training activity for 15-20 executives from Pakistan to provide the institutional and human capacity to design, manage, and operate a power trading entity. The participants will be nominated by the USAID Pakistan mission. Classroom lectures delivered by highly experienced instructors will be supplemented by hands-on exercises that emphasize development of skills and knowledge in the functional operations of power trading. The Vendor will review the reverse auctions training agenda prepared by USEA and design a workshop with a clear link to the November 13 – 17, 2017 reverse auctions workshop. It is anticipated that the entities that will participate in the trading workshop are expected will be the same as the ones in the November 2017 workshop, as will the majority of the participants. The vendor will provide the participants with various documents relevant to the institutional, staffing and management issues critical to the formation of a power trading organization, including but not exclusive to, organizational charts, job descriptions/summaries, staff training and evaluation plans, etc. Emphasis should be on providing hands-on activities including role play, class exercise, review of PPAs, PSAs, etc.

Topics to include, but not limited to:

- The evolution of power trading as a separate entity in the power sector, the various roles played by power traders, basic guidelines for power trading, propriety trading vs. portfolio optimization, arbitrage
- Market participants & their role: brokers, traders, dealers, market makers, liquidity providers, marketers, wholesale merchants, investment banks, and traders
- Setting up a power trading entity:
  - Legal framework for operation of a power trading entity
  - o Procedures and terms and conditions for granting of trading license
  - Statutory compliance for traders
  - o Human resources and infrastructure requirements for setting up of a power trading entity
  - o Net worth and working capital considerations and requirements
- Short term, long/medium term power purchase and sales
- Power purchase/sales agreements: major contractual, financial and commercial provisions and their significance
- Overview of scheduling, billing, energy accounting, settlement, and bidding on power exchanges
- Tariff models for competitive bidding processes, review of the existing tariff models in Pakistan
- Identifying and mitigating risks
- Review/gap analysis of existing and required policies in Pakistan
- Case studies within the region
- Guarantees (such as sovereign guarantee from GOP) or no guarantees

Finally, the vendor will provide pre and post-training assessments of the participants to evaluate their understanding of the lessons.

USEA will be responsible for all logistical arrangements for the participants and training venue. The vendor will be responsible for the following:

- Course design
- Providing professional, experienced speakers to present 5 days of lectures
- Providing advance reading material for the participants
- Providing soft and written copies of all presentation and hand-out materials
- Pre and Post-training assessments
- Speaker(s) roundtrip airline ticketing, lodging and meals (with the exception of lunch for each of the 5 training days and 1 welcome dinner to be provided by USEA) for a training conducted in Bangkok, Thailand

#### VII. IMPLEMENTATION AND APPROACH

The vendor conducting the training should propose a one-week training program tailored to Pakistan's current energy market with a focus on the specific goals for operating a power trading entity for the country. The vendor must have the detailed knowledge of the design and development of energy markets and the political, economic and technical issues associated with Pakistan in particular and the South Asian regional energy trade. The vendor is expected to have prior experience of working on infrastructure issues in within Pakistan, and a current understanding of the Pakistan power sector and its market capabilities.

#### VIII. SCHEDULE

The training is tentatively scheduled to take place in March or April 2018.

# IX. PROPOSAL CONTENT

The proposal must contain the following:

- a) A cover letter to the proposal
- b) A technical proposal, including:
  - Demonstration of an understanding of the issues to be addressed under the proposed scope of work specified above by providing a summarized technical approach for each of the tasks listed (Maximum 2 pages).
  - Proposed project schedule to perform the tasks under this project highlighting any deviations to the proposed scope of work specified above.
- c) A financial proposal, including:
  - Detailed justification (i.e. line item budget)
  - Labor, other direct costs, indirect costs, and level of effort for each employee proposed for this
    project
- d) Short CVs/bio sketches of proposed trainers
- e) Completed USAID Contractor Employee Biographical Data Sheet forms for each employee proposed for this project (https://www.usaid.gov/forms/aid-1420-17)
- f) Summary of the work to be performed by each employee proposed for this project

# X. EVALUATION CRITERIA

Selection of an offer for contract award will be based on an evaluation of proposals against technical merit and budget justification. Proposals shall first be evaluated from a technical standpoint based on the training proposal (i.e. without regard to proposed budget justification). Once a proposal is determined to be technically acceptable, the budget justification will be evaluated.

# XI. PROPOSAL TIMEFRAME

E-mail Notification of Intent to Bid

The required e-mail notification of intent to bid of should be e-mailed to <a href="maileosospace">sburback@usea.org</a> with a read receipt. Please include "SARI/EI RFP — Power Trading Training for Pakistan" in the subject line and provide your name or name of organization and contact email address as well as a short note describing your intent to respond to this solicitation in the body of the e-mail.

All questions related to this RFP should be submitted via email to Sara Burback at <a href="mailto:sburback@usea.org">sburback@usea.org</a> no later than October 23, 2017. All questions and answers will be provided to all prospective bidders.

Interested parties are requested to submit final proposals no later than November 6 2017. Proposals should be sent via email with a read receipt to Sara Burback at <a href="mailto:sburback@usea.org">sburback@usea.org</a>.

**END OF RFP**