



**United States Energy Association
South Asia Regional Initiative for Energy Integration (SARI/EI)
Request for Proposal – Training on the Creation and Operations of a Power Exchange
January 2021**

REQUEST FOR PROPOSAL – Training on the Creation and Operations of a Power Exchange

Closing date of RFP:	February 24, 2021
Implementing Agency:	United States Energy Association
Funding Agency:	United States Agency for International Development
Maximum Award Amount:	\$25,000 USD
Training recipients:	Training tailored to Bangladesh, Bhutan Nepal, and Sri Lanka
Location of training:	Remote (via web conferencing)

The United States Energy Association (USEA) is inviting prospective organizations, including consultants, traders, power exchanges, and training institutes, or individuals through this Request for Proposal (RFP) to submit proposals for developing and delivering a comprehensive training on the creation and operations of a power exchange for South Asian energy officials. 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 submit all proposals with a read receipt to Ms. Sarah Blanford, Deputy Program Director, Energy Utility Partnership Program, at sblanford@usea.org. Proposals must be in digital format (PDF).

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 United States Energy Association (USEA) is an association of public and private energy-related organizations, corporations, and government agencies. USEA represents the broad interests of the U.S. energy sector by increasing the understanding of energy issues, both domestically and internationally.

Through a cooperative agreement with the USAID Bureau for Economic Growth, Education and Environment (E3), USEA implements the Energy Utility Partnership Program (EUPP), available to all USAID-assisted countries and USAID Missions. EUPP supports the efforts in USAID-assisted developing countries to increase environmentally sustainable energy production and to improve the operational efficiency and increased financial viability of their utilities and related institutions, with the goal of increasing the access of these countries to safe, reliable, affordable and environmentally sound energy services.

Under the 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 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. BACKGROUND

South Asia is the fastest growing region in the world, with an average annual growth rate of 7% 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 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, 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.

In a region like South Asia, where some areas have a power surplus and others a deficit, a power exchange can a vital role in energy security. A power exchange (PX) is a trading center where utilities, power marketers, and other electricity suppliers submit price and quantity bids to sell energy or services, and potential customers submit offers to purchase energy or services. Key points of a power exchange include a facility for trading of electricity, the ability to foster the development of competition, transparency, and liquidity.

The Government of India has recently revised guidelines on CBET paving the way for tri-lateral power trade and has also made Indian power exchanges more accessible to the regional participants. Electricity trading through power exchanges (PX) is in place in India through two existing entities – the Indian Energy Exchange (IEX) and the Power Exchange of India Ltd. (PXIL). Both receive guidance from the Central Electricity Regulatory Commission (CERC). Soon Indian power exchanges will host buyers and sellers from neighboring countries as India looks to operationalize cross-border sale and purchase of electricity, with Central Electricity Regulatory Commission (CERC) having approved regulations for cross-border power trading in the short-term market. As per the plan, the country's largest power exchange, IEX, will begin hosting buyers and sellers from neighboring countries (starting with Nepal) to participate in power trading with both buy and sell calls initially. These developments have mobilized stakeholders for regional and sub-regional projects in the areas of power generation, transmission, and power trade.

III. SCOPE OF WORK

Purpose: The purpose of this program is to provide the participants with the background knowledge and skills necessary for developing the institutional and human capacity to design, develop, and operate a power exchange.

Objectives: The objectives of the program shall include:

- 1) Providing participants with proficient knowledge of fundamentals of power markets and various products
- 2) Providing participants with proficient knowledge in designing, developing and operating a power exchange

- 3) Providing participants with an improved understanding of how the open market has evolved into a successful multi buyer/multi seller organization
- 4) Providing participants with a comprehensive understanding of the Indian market and power exchange, the interaction between exchange and grid operator, and ways to maximize the benefits of selling and buying energy in that market
- 5) Providing participants with a comprehensive understanding of the legislative, policy and regulatory measures, as well as grid management measures, such as scheduling and dispatch, implemented in India that have led to the establishment of competitive and liquid markets, including real time, day ahead, and intra-day markets

Program Requirements:

The program shall be tailored to South Asia, drawing heavily on India's experience with power markets, specifically the power exchanges.

The program is envisaged to comprise of ten days of training, separated into two modules, each five days in duration. However, bidders can propose different formats including number of days they consider sufficient to cover all the requested topics and practical exercises. Classroom lectures will be delivered by highly experienced instructors, supplemented by hands-on exercises that emphasize development of skills and knowledge in the functional operations of a power exchange. The training shall include mock exercises on bidding and scheduling, and demonstrations of simulated or bidding platforms.

The anticipated SARI/EI delegation will comprise of 20 participants, including 6 participants each from Bangladesh, Nepal and Bhutan, and 2 participants from Sri Lanka. The same set of participants will participate in both modules of training. USEA will initiate selection and coordination with the participants. The trainer will be responsible for ongoing communication with the participants to coordinate video conferencing logistics, provide updates on the training, and be responsive to inquiries and discussions.

Training sessions shall include pre-training and post-training surveys administered to all participants. A pre-training survey shall be conducted prior to the first training module. It will be designed to assess participants' baseline knowledge and competencies and to identify knowledge gaps and weak areas. The planned training courses shall be modified to address the identified gaps. A post-training/skill assessment survey will take place after the second module and will be designed to measure participating trainees' knowledge improvements in the subject areas. The assessments should inform quantitative and qualitative results.

The contractor must have extensive knowledge of the design and development of energy markets and the political, economic, and technical issues associated with South Asian regional energy trade. The contractor is expected to have prior relevant working experience in the region and a solid understanding of the South Asian power sectors and market capabilities (particularly Bangladesh, Bhutan, India, Nepal, and Sri Lanka).

Tasks: The tasks to be performed by the Contractor under this Scope of Work shall include the following:

Task 0: Sign Subcontract Agreement: Once the subcontract agreement has been signed by both parties, the contractor will be allowed to invoice 10% of the total cost of the subcontract agreement.

Task 1: Conducting the 1st module of the training. The contractor will develop and conduct Module 1 – a five-day classroom-style training program for the SARI/EI delegation via web conferencing. Module 1 will focus on the overall background, rules, and regulations that govern a power exchange and will provide the participants with the background knowledge to prepare them for Module 2. The module will include the following topics:

- Fundamentals of power markets
- Power exchange operation
- Trading process flow
- Modes of power trading

- Products and services offered
- Power exchange participants and governing bodies
- Technical requirements

Task 2: Conducting the 2nd module of the training. The contractor will develop and conduct Module 2 – a five-day classroom-style training program for the SARI/EI delegation via web conferencing. Module 2 will focus on India’s power markets and power exchanges and include the following topics:

- Overview of India power market
- Open access
- Development of a competitive platform for trading (policy & regulations, and establishment of power exchanges)
- Products and services offered on IEX and PXIL and trading platforms
- Price discovery in power exchange products and exchange operation
- Interaction between power exchange and grid operator
- Case studies of Indian experience of operating a multi power exchange model
- New developments in power exchange space in India
- Other international case studies

Module 2 will also include – on the final day of the training – a brainstorming session. During the brainstorming session, participants, led by the contractor, will develop action plans outlining steps that need to be taken towards establishing their country’s own power exchange entity and/or expanding or starting participation in India’s.

Deliverables: Based on the Scope of Work, the following deliverables and products shall be submitted:

Task 1: **Deliverable 1.** Advance materials to be distributed to the participants. These shall be pre-activity reading materials for participants to provide them with as much background knowledge on the subject that is suitable and reasonable; documents should not be overly lengthy. It is also recommended to distribute example documents that can be reviewed prior to the training and then discussed during the training.

Deliverable 2. Draft and final copies of the following documents shall be provided to USEA for review and approval:

- Annotated outline of full training curriculum for the 5 days of training for Module 1 (including annotated outlines of role-playing or other hands-on working sessions)
- Pre-training assessment that measures participants’ knowledge of key topics
- Manuals, presentations and all other training materials developed for and distributed to the participants
- Handouts of documents relevant to the institutional, staffing and management issues critical to the formation of a power exchange, including but not exclusive to, organizational charts, job descriptions/summaries, staff training and evaluation plans, etc.

Task 2: **Deliverable 3.** Draft and final copies of the following documents shall be provided to USEA for review and approval:

- Annotated outline of full training curriculum for the 5 days of training for Module 2 (including annotated outlines of role-playing or other hands-on working sessions)
- Post-training assessment that measures participants’ knowledge of key topics
- Manuals, presentations and all other training materials developed for and distributed to the participants
- Handouts of various documents relevant to the training

Deliverable 4. Draft and final copies of the Training Report, including:

- Summary of the training provided. A short one-page summary should be given, along with a lengthier and more detailed summary of 4-6 pages in length.
- A list of topics that the participants felt were of particular interest and use to them, noting which countries and organizations the topics were applicable to.
- Summary of lessons-learned and subject areas requiring more training.
- From the perspective of the contractor – an outline of detailed steps the countries need to take to design, develop, and operate a power exchange entity, as well as to increase or initiate participation in India’s market. Must include regulations and policies needed, as well as operational changes at the utility level. The contractor can include information taken from the Module 2 participant brainstorming session, as well as outside resources/expertise.
- Information on additional trainings, webinars, online-courses that participants could utilize to increase their knowledge of the subject matter.
- Copies of assessments and a summary of the assessments. Assessments will measure pre and post knowledge levels on all training topics, open feedback on what topics were most and least useful, and open feedback on what topics require further training/were not adequately covered by contractor.
- Qualitative and quantitative summary of the participants’ training assessment.
- Written summaries of the action plans conducted during Module 2.
- Electronic copies of all final presentation and hand-out materials.
- Copies of all participants’ action plans.

Reporting: The contractor will report to USEA.

Schedule: The project is expected to begin in April 2021 and take approximately 4 months to complete.

Task	Activities	Deliverables	Target Completion Date
Subcontract	Sign subcontract agreement	Subcontract agreement signed by both parties	April 30, 2021
Training Module 1	Conduct 5-day training	Advance materials Curriculum Pre- and post-training surveys Training materials	May 31, 2021
Training Module 2	Conduct 5-day training	Curriculum Pre- and post-training surveys Training materials	June 30, 2021
	Reporting	Final Report	July 31, 2021

IV. IMPLEMENTATION AND APPROACH

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

Award Ceiling

USEA is constrained by a \$25,000 budget for this project.

Subcontract Agreement Management and Oversight

A subcontract agreement between USEA and the winning bidder shall be subject to all USAID Special Terms and Conditions, including all mandatory FAR Flow-Down clauses, where applicable, and the provisions included in 2CFR200 and 2CFR700. All bidders are strongly encouraged to review these provisions prior to submitting a proposal.

- Standard Provisions for U.S. Nongovernmental Organizations:
<https://www.usaid.gov/sites/default/files/documents/1868/303maa.pdf>
- 2CFR200: <https://www.gpo.gov/fdsys/pkg/CFR-2014-title2-vol1/pdf/CFR-2014-title2-vol1-part200.pdf>
- 2CFR700: <https://www.gpo.gov/fdsys/pkg/CFR-2015-title2-vol1/pdf/CFR-2015-title2-vol1-part700.pdf>

Subcontract agreement management, oversight, and payment will be carried out by USEA.

V. PROPOSAL CONTENT

The proposal must contain the following components. Exclusion of any of the required items will impact the proposal's scoring.

- a) A cover letter to the proposal, including a bidder's current Data Universal Numbering System (D-U-N-S) number and proof of a current registration in the System of Award Management (SAM).
*Note regarding SAM registration: USEA will accept a proposal if it includes proof that the company is in the process of obtaining a SAM registration. A PDF copy of an email from "notification@sam.gov" to the bidder stating that the bidder "successfully submitted the entity registration for NAME OF COMPANY in the U.S. Government's System for Award Management (SAM)" is the only form of acceptable proof. Please note that SAM registration is a 10-step process. Please refer to this [guide](#) for more information. **Proposals without a DUNS number or proof of SAM registration will not be considered.***
- b) A technical proposal, including:
 - Demonstration of the knowledge of the design and development of energy markets and the political, economic, and technical issues associated with South Asian regional energy trade, particularly Bangladesh, Bhutan, India, Nepal, and Sri Lanka and their readiness to develop in a power exchange. (Maximum 1 page).
 - 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. This section should include the bidder's general approach to implementing different tasks and activities described in the SoW above and must include an adequate description of training methodology. (Maximum 2 pages).
 - Proposed project schedule to perform the tasks under this project highlighting any deviations to the proposed scope of work specified above.
 - Proposed summary of quantitative and qualitative results that can be provided by the contractor at the conclusion of the training.
 - Proposed reports and other deliverables that will be provided that can be used by the South Asian participants to assist them in their planning for creation of a power exchange entity.
 - Bio sketches of personnel, including at least 1 – 2 subject matter experts, one of which will be a team leader that will be dedicated to the project. The bio sketches must highlight each individual's direct experience with the subject matter. (Maximum 2 paragraphs per person).
 - Summary of relevant experience of each proposed team member for (not beyond) the past 10 years. Relevant experience should be listed chronologically (starting with the most recent). Not to exceed 3 pages for each proposed team member.
 - Summary of the work to be performed by each employee proposed for this project.
- c) A financial proposal, including:
 - Detailed justification (i.e., line-item budget), including direct and indirect costs (printing, administrative supplies, etc.).
 - Anticipated labor costs, broken down by the number of man-hours and fully loaded daily rate for each employee proposed for this project. All salary information will be kept confidential.
 - Bids must be made in USD.
- d) Completed USAID Contractor Employee Biographical Data Sheet forms for each employee proposed for this project (<https://www.usaid.gov/forms/aid-1420-17>).
- e) A summary of the company's background and experience may be included but must be limited to 2 pages.

VI. EVALUATION CRITERIA

Selection of an offer for a subcontract award will be based on an evaluation of proposals against qualifications, subject matter expertise, technical approach, and budget justification. Proposals shall first be evaluated from a technical standpoint (qualifications, subject matter expertise and technical approach) without regard to proposed budget justification. For those proposals determined to be technically acceptable, budget justification will be evaluated.

Evaluation Criteria: 25%: Experience with similar projects (for each contractor & the organization in general)
 25%: Subject matter expertise (education and professional experience)
 20%: Technical approach
 30%: Cost

VII. QUESTIONS AND CLARIFICATIONS

All questions related to this RFP should be submitted via email with a read-receipt to Sarah Blanford at sblanford@usea.org no later than 5:00 pm EST on **February 5, 2021**. All questions and answers will be posted on USEA's website.

Interested parties are requested to submit final proposals no later than **February 24, 2021** by 05:00 pm EST. Proposals should be sent via email with a read receipt to Sarah Blanford at sblanford@usea.org.

END OF RFP