



## Request for Proposal (RFP)

Commodity/Service Required:	Energy Portfolio Management System (EPMS) for Discoms
Type of Procurement:	Subcontract
Type of Contract:	Firm Fixed Price
Term of Contract:	22 months from the date of award
Contract Funding:	United States Agency for International Development (USAID)
This Procurement supports:	South Asia Regional Energy Partnership (SAREP)
Submit Proposal to:	SAREP-Procurement@rti.org
Date of Issue of RFP:	May 18, 2023
<b>Date Questions from Supplier Due:</b>	May 30, 2023
<b>Date Proposal Due:</b>	June 12, 2023
Approximate Date Subcontract Issued to Successful Bidder:	July 12, 2023
<b>Method of Submittal: Electronic (no hard copies required to be submitted)</b>	
Respond via e-mail with attached documents in MS Word / pdf format. The Bidder/Seller agrees to hold the prices in its offer firm for <b>90 days</b> from the date specified for the receipt of offers, unless another time is specified in the addendum of the RFP.	
<b>Solicitation Number:</b>	<b>SAREP RFP-2023-019</b>

### Eligibility Criteria:

1. Since this is a USAID funded project, therefore as per USAID ADS 310, only firms that belong to Geographic Code 937 country can receive a USAID funded subcontract from RTI. Geographic code 937 is defined as - the United States, the cooperating country/recipient country (India in this case), and developing countries other than advanced developing countries, and excluding prohibited sources. For more information on this, please refer to <https://www.usaid.gov/sites/default/files/2022-12/310.pdf>. The list of developing nations is provided at <https://www.usaid.gov/sites/default/files/2022-05/310maa.pdf>. Please note that the Geographic Code 937 restriction flows down to lower tier subcontractors as well.
2. Government entities/undertakings/PSUs and quasi-Government/para-statal entities are not eligible to participate in the bidding and receive a USAID funded sub-contract or a lower tier subcontract

### **Attachments to RFP:**

1. Attachment "A" – Statement of Work
2. Attachment "B" – Instructions to Bidders/Sellers

**RTI International is a trade name of Research Triangle Institute. RTI and the RTI logo are U.S. registered trademarks of Research Triangle Institute.**

4. Attachment “C” - Subcontract Terms and Conditions. These are also listed on our website at: [https://www.rti.org/sites/default/files/standard\\_subaward\\_terms\\_and\\_conditions\\_v1\\_11.pdf](https://www.rti.org/sites/default/files/standard_subaward_terms_and_conditions_v1_11.pdf)  
Supplier’s delivery of products, performance of services, or issuance of invoices in connection with this Subcontract establishes Supplier’s agreement to the Terms.
5. Attachment “D” - Quick start guide to obtaining a SAM UEI number

**All bidders/sellers are responsible to carefully review each attachment and follow any instructions that may be relevant to this procurement.**

***IMPORTANT: Bidders are required to submit their unconditional acceptance of the Subcontract Terms and Conditions listed in Attachment ‘C’ along with their bid. Failure to do so will result in the exclusion of their bid from being considered for the resulting subcontract. Also, bidders must sign off on Attachments ‘A’ and ‘B’ in the signature blocks provided at the end of each attachment and submit these with their bid proposal.***

## Attachment “A” Statement of Work

### Description of Activity/Service:

#### Introduction

RTI International is an independent, nonprofit research institute dedicated to improving the human condition. Clients rely on us to answer questions that demand an objective and multidisciplinary approach—one that integrates expertise across the social and laboratory sciences, engineering, and international development. We believe in the promise of science, and we are inspired every day to deliver on that promise for the good of people, communities, and businesses around the world.

RTI International has been working in Asia for more than 35 years, providing technical assistance, institutional strengthening, and program support on behalf of governments, foundations, and private-sector clients. Together with our local partners, we deliver science-based solutions and advisory and technical services to help countries across South and Southeast Asia achieve national, regional, and local goals—in health, education, economic growth, governance and public policy, and environmental management. RTI is implementing 19 projects in the Asia region with its offices located in India, Indonesia, Thailand, Cambodia, Philippines, Laos, Nepal, and Papua New Guinea.

RTI International is the implementing contractor for a five (5) year USAID project called the USAID South Asia Regional Energy Partnership (SAREP). SAREP will serve as a linchpin of the Asia Enhancing Development and Growth through Energy (EDGE) initiative. To achieve USAID’s goal of improving access to affordable, secure, reliable and sustainable energy, SAREP will address two distinct, yet mutually dependent objectives: a. Enabling six countries – Bangladesh, Bhutan, India, Maldives, Nepal and Sri Lanka—to build systems and processes in line with their respective economic and energy security priorities, and b. Facilitating collaboration among these six countries in a regional energy market that will accelerate economic development, self-reliance, livelihoods, health, and productivity throughout the region.

SAREP’s objectives are as follows:

- Workstream 1: Regional Energy Hub
- Workstream 2: Technical Services
  - Objective 1: Enhanced regional energy markets and integration
  - Objective 2: Increased development of advanced energy
  - Objective 3: High-performing modern utilities.
  - Objective 4: Transparent, best-value procurement.

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## Statement of Work: Energy Portfolio Management System (EPMS) for Discoms

### A. BACKGROUND

The South Asia Regional Energy Partnership (SAREP) is the flagship regional energy program of the United States Agency for International Development (USAID) mission to India (USAID/India). This five-year initiative (2021-26) will improve access to affordable, secure, reliable, and sustainable energy in six countries—Bangladesh, Bhutan, India, Maldives, Nepal, and Sri Lanka—in line with these countries' climate and clean energy priorities. The program is a key activity under the U.S. Government's Asia Enhancing Development and Growth through Energy (EDGE) initiative and aligns with USAID's climate change priorities to advance equitable and ambitious actions to confront the climate crisis. The program helps the United States Government's Indo-Pacific Vision and facilitates collaboration among the six countries in South Asia to accelerate the transition to clean energy, mitigate climate change, and promote energy security.

SAREP's activities and outcomes also support and contribute to the Strategic Clean Energy Partnership (SCEP) and the Climate Action and Finance Mobilization Dialogue (CAFMD) under the recently established U.S.-India Climate and Clean Energy Agenda 2030 Partnership.

Through this collaboration, India, and the U.S. aim to demonstrate swift climate action that is inclusive, resilient, and based on national and regional priorities. In India, aligning with priorities of Ministry of Power and Ministry of New and Renewable Energy, SAREP aims to facilitate targeted action and drive systems change by engaging with state stakeholders including state government policy makers, utilities, and regulators to achieve one of its objectives i.e., making utilities modern and high performing.

With changing paradigm, factors like higher share of intermittent renewables into the energy mix, changing consumption patterns, weather conditions, distribution energy resources etc. have increased the complexity of day-to-day operations. Further, introduction of new market products such as Real-time Market (RTM), Green Day-ahead Market (GDAM), High-Price Day-ahead Market (HPDAM) pose decision making challenges of optimally utilizing the power markets. Therefore, there is need for a comprehensive and dynamic decision-support tool for discoms to assist them in managing their short-term energy portfolio management activities.

Towards this, SAREP intends to work with Energy Efficiency Services Limited (hereinafter "central stakeholder" or "EESL") to support discoms in optimizing their power procurement costs, increase renewable power consumption, and efficiently plan their day-to-day energy portfolio management operations. The expected outcome is modern, financially viable utilities while enabling the clean energy transition and promoting adaptability to new technical advancements.

To achieve the desired outcome, SAREP would like to engage a technology service provider (TSP) to: i) develop an Energy Portfolio Management System (EPMS) for optimizing the discom's power portfolio management activities with a focus on short-term Energy Portfolio Management; ii) provide support services to two Discoms/Discoms' holding company for a period a one year on the EPMS; iii) provide operational and maintenance support for running the EPMS.

*Note: Two Discoms or the Discoms' holding company(ies) (hereinafter "identified discoms"), as the case maybe, for the deployment of EPMS and support services will be finalized in consultation with the central stakeholder.*

*After sub-contract Performance Period as mentioned in Section. F, the agreement shall get completely transferred (complete legal entitlement of the work product developed pursuant to this RFP) to Central Stake holder for subsequent use and operations. This agreement will then be governed by the General Contract Conditions (GCC) (Attachment D), in addition to the terms of this RFP and or contract entered pursuant to this RFP, of the Central Stakeholder. SAREP shall formally exit after payment of all pending dues as per the terms and conditions to TSP. Subsequently, all the obligations of TSP with regard to providing support services shall get transferred to Central Stake holder who will have exclusive rights to enter business with DISCOMS and other third parties. Contract value will be decided through supplementary agreements for each such party or DISCOMS.*

*In event of more than Two DISCOMS getting finalized during the sub-contract performance period as mentioned at Section F, the payments to TSP for support services for the 3<sup>rd</sup> DISCOM shall be made by the Central Stakeholder by Signing a supplementary (separate) agreement with Central Stakeholder at the discovered rates from this RFP for 3<sup>rd</sup> DISCOM onwards.*

In this context SAREP intends to appoint a technical service provider (TSP) for EPMS as detailed in the Scope of Work section.

## **B. OBJECTIVE**

Approximately 70-80% of Indian discoms' expenses are attributed to power-purchase costs. The financial health of the discoms can be improved if the energy portfolio activities are done efficiently. Even a small reduction of 3-5% in the power purchase costs will amount to substantial savings.

With the changing paradigm, the energy portfolio management operations are becoming more complex. Factors such as higher share of intermittent renewables into the energy mix, changing consumption patterns, weather conditions, distribution energy resources etc. have increased the complexity of day-to-day operations. Further, the introduction of new market products such as Real-time Market (RTM), Green Day-ahead Market (GDAM), High-Price Day-ahead Market (HPDAM) pose decision making challenges of optimally utilizing the power markets.

While deploying or procuring services for energy portfolio management discoms face challenges such as: i) lack of in-house expertise to run/develop such solutions; ii) high costs of developing/procuring stand-alone solutions; iii) data security issues; iv) continuity of such solutions/services from one vendor to another and v) conflict of interest from trader entities offering such solutions.

The proposed EPMS will provide discoms' with much-needed support for making analytics-based decisions in the areas of i) forecasting, ii) optimization and iii) market participation. Thus, helping the Indian discom's to optimize their power procurement cost, increase renewable power consumption, efficiently plan their day-to-day energy portfolio management operations, and demand response programs.