

REQUEST FOR PROPOSALS

UNITED STATES ENERGY ASSOCIATION

United States Energy Association
Energy Technology and Governance Program (ETAG)

Cooperative Agreement #AID-OAA-12-00036

REQUEST FOR PROPOSALS (RFP)

AID-OAA-12-00036-2019-709-01

Electric Distribution Network Simulation Modeling Software and Training

Questions Due: October 28, 2019

Proposals Due: November 4, 2019

The United States Energy Association (USEA), in cooperation with the United States Agency for International Development (USAID), is seeking proposals from qualified software vendors to provide electric distribution network simulation modelling software for the members of the USAID/USEA Southeast Europe Distribution System Operator Security of Supply Working Group. The software will serve as a common platform for the participating DSOs to model and perform analyses of their distribution networks to assist them in the development of their long-term network development plans.

The software vendor will also be required to provide a series of training workshops on the use of the software for the member DSOs to build sustainable institutional capacity to develop their network models and to utilize them for network analyses.

BACKGROUND

The electric distribution system operators in Southeast Europe are being required to submit annual five-year distribution network development plans to their energy regulatory authorities to comply with EU and Energy Community of Southeast Europe directives. These plans provide investment projections based upon a series of detailed technical analyses of their distribution networks including projected load growth scenarios, overall network efficiency and system reliability.

Many of the DSOs in Southeast Europe do not possess the appropriate tools nor technical capacity to undertake these types of technical analyses and are required to outsource the work to consultants. As a result, the utilities are unable to properly evaluate and verify the work of the consultants and consequently, unable to properly defend the plans with the regulatory authorities.

USEA is seeking to provide each member DSO with distribution network planning software together with a series of training workshops on its use. The goal is to ultimately enable the utilities to produce these network development plans in-house or to have the technical skills and tools to evaluate and verify the work of outside consultants.

The following eleven (11) electric distribution system operators are members of the Working Group:

1. Albania: OSHEE (Operatori i Shpërndarjes së Energjisë Elektrike sh.a.)
2. Bosnia & Herzegovina: EPBiH (JP Elektroprivreda BiH)
3. Bosnia & Herzegovina: EPHZHB (JP Elektroprivreda Hrvatske Zajednice Herceg-Bosne)
4. Bosnia & Herzegovina: ERS (JP Elektroprivreda Republike Srpske)
5. Bosnia & Herzegovina: EDB (JP Komunalno Brcko)
6. Croatia: HEP (Operator Distribucijskog Sustava d.o.o.)
7. Georgia: EnergoPro Georgia

8. Kosovo: KEDS (Kosovo Electricity Distribution and Supply)
9. North Macedonia: EVN Macedonia (EVNM)
10. Montenegro: CEDIS (Crnogorski elektrodistributivni system)
11. Serbia: EPS (Elektroprivreda Srbije)

SCOPE OF WORK

Electric Distribution Network Simulation Modelling Software

The Vendor will provide electric distribution network simulation modelling software and maintenance & support (M&S) packages to each of the eleven (11) DSO Working Group members. The software must include the following functionality:

- Graphical User Interface
- libraries (database of typical equipment)
- Geographical Data and Maps (interface to import GIS dataform, existing databases)
- Ability to integrate with existing GIS, SCADA, DMS, EMS and other smart grid applications
- Import compatibility with ENTSO-E and UCTE databases, PSS/E data
- Reliability Analysis
- Investment Analysis (Present Value)
- Short Circuit Analysis
- Load Flow / Contingency Analysis
- Optimal Separation Points for optimum topology to minimize network losses

Proposals should include pricing information on the cost of additional M&S packages for one year. Due to the large volume of software packages offerors are requested to document an option for two (2) years M&S at discounted prices.

Training

The Vendor will also be required to provide a series of three (3) joint three-day training workshops at locations in the region to be determined through December 2020 to build institutional capacity of the Working Group members to utilize the software to develop their network development models and to perform network analyses.

The proposal should clearly outline the Vendor's training methodology including proposed curriculum, the use of training materials, in-class exercises, case studies, and homework assignments.

DELIVERABLES AND SCHEDULE

The Vendor will adhere to the following project schedule:

Task	Action	Date
1	Provide electric distribution network planning software licenses and M&S packages to each of the eleven (11) WG members	Due within two weeks upon receipt of payment from USEA
2	Prepare a Draft Training Agenda	Due two weeks prior to each workshop
3	Prepare training materials including Power Point Presentations, case studies and training exercises	Due two weeks prior to each workshop
4	Prepare Meeting Reports summarizing lessons learned and highlighting next steps	Due one week after each workshop

PROPOSAL PREPARATION

Interested parties are requested to submit a cost proposal and a brief technical proposal of no more than 5 pages, including the following:

- Technical description of the software and included modules including detail on the specific capabilities of the software to address the network planning requirements outlined in the Scope of Work.
- Proposed training curricula including detail on the use of training materials, in-class exercises, case studies, and homework assignments
- A resume for each trainer proposed to conduct the training workshops (appendix, not counted toward the technical proposal page limit)
- List of reference utilities using the software
- The cost proposal should NOT include any travel related costs, as USEA will fund these directly. The sub-agreement between USEA and the winning offer will be structured as a fixed sub-agreement for software licenses, maintenance and support, and any associated labor, fringe benefits and overhead. USEA will fund other direct costs, including travel (transportation, lodging and a U.S. Government approved daily meals and incidental allowance) directly.

EVALUATION CRITERIA

Proposals will be evaluated based on the following weighted scoring criteria:

- 40% -- Software Functionality
- 30% -- Proposed Training Plan
- 30% -- Price

TIMEFRAME:

Please put "Distribution Software RFP" in the subject line for all emails related to this RFP.

Interested parties are requested to register their interest via email to the following mailbox: proposals@usea.org. Registering interest will ensure you receive all questions submitted by interested parties and the corresponding responses from USEA.

Questions on the terms of this request for proposals must be submitted prior to October 28, 2019 by email to the following mailbox: proposals@usea.org. All questions received and their corresponding responses and all other RFP related announcements will be posted on the USEA website and distributed to parties registering interest in this RFP. Final proposals must be submitted by email by 5:00 pm on November 4, 2019 to the following mailbox: proposals@usea.org.