FOR DISTRIBUTION

Request for Proposals (RFP)

For

Consulting Services

To develop the Operating Strategy for the CASA-1000 HVDC Power Transmission System Comprising HVDC Converter Station Terminals in Tajikistan and Pakistan, along with an HVDC Line from Sangtuda, TJ to Nowshera, PK via Afghanistan

RFP Reference No.: RFP 2018-06-CASA-1000/DCO

July 10, 2018

Contracting Entity: ECODIT LLC 1300 Wilson Blvd, Suite 920 Arlington, VA 22209-2321 USA

REQUEST FOR PROPOSALS (RFP) REFERENCE NO.: RFP 2018-06-CASA-1000/DCO

Section I. Instructions to Prospective Offerors

A. Introduction

The U.S. Agency for International Development (USAID) signed a contract in 2014 with ECODIT LLC for the Central Asian Republics (CAR) Energy Links Project (Contract No. AID-176-C-14-00004). Through Energy Links, USAID/Central Asia (CA) is uniquely positioned to address various power sector and water management challenges, as described below, and seize existing opportunities to achieve increased national energy security for countries in Central Asia via four supporting outcomes, namely:

- Increased transparent intra- and inter-regional energy trade;
- Improved legal and regulatory framework and investment climate for the countries' energy sectors;
- Improved corporate governance, operations, and commercialization of the energy companies;
 and
- Improved energy efficiency (EE) and demand-side management (DSM).

USAID Energy Links Project, implemented by ECODIT LLC, employs and provides resources for the Inter-Governmental Council (IGC) Secretariat of the Central Asia-South Asia (CASA-1000) Transmission Project. The CASA-1000 power transmission project aims to facilitate electricity trade between the countries of Central Asia and South Asia by putting in place the commercial and institutional arrangements, as well as the transmission infrastructure, required for this trade. The four countries participating in the project are Afghanistan, the Kyrgyz Republic, Pakistan and Tajikistan. The Kyrgyz Republic and Tajikistan are two countries in Central Asia endowed with some of the world's most abundant clean hydropower resources with water cascading from the mountain ranges and filling the rivers every summer. Both of these countries have a surplus of electricity during the summer.

The CASA-1000 project is designed to connect all four countries and will help making the most efficient use of clean hydropower resources in the Central Asian countries by enabling them to transfer and sell their electricity surplus during the spring-summer period to the countries in South Asia. The US\$1.2 billion project is funded by the World Bank, European Investment Bank, European Bank for Reconstruction and Development, Islamic Development Bank, and other donors. The CASA-1000 project will extend over 1,300 km with transmission capacity of 1,300 MW. It will use modern HVDC and HVAC technologies.

The CASA-1000 Secretariat (provided by ECODIT LLC as part of the Energy Links Project) is currently funded by USAID and acts on behalf of the CASA-1000 project countries providing overall CASA project coordination as well as managing specific aspects of the project, including development of the DC Operator strategy. Additional information may be obtained at www.casa-1000.org.

The purpose of this Request for Proposals ("RFP") is to engage professional consultancy services to undertake the first two of five phases to evaluate options, develop and ultimately implement the strategy to put in place the appropriate organization, agreements, operating parameters, procedures, documentation, rules and, if necessary, regulations for the operation of the CASA-1000 High Voltage, Direct Current ("HVDC") system, as defined below.

B. Terms of Reference

Terms of Reference (ToR) with a detailed scope of services, budget estimates, schedules and deliverables are provided in Attachment 1.

C. Proposal Submission Date

The deadline for written questions is: 5:00 pm, U.S. EDT (Eastern Daylight Time), Friday, July 20, 2018.

The deadline for receiving proposals is: 5:00 pm U.S. EDT (Eastern Daylight Time), Friday, August 10, 2018.

Written questions and proposals must be submitted in English.

Offerors shall submit their questions and proposals electronically by email to:

Ara Khachatryan
Senior Contracts and Pricing
Manager ECODIT LLC
akhachatryan@ecodit.com

with copy to:

Gregory Osadetz, Interim Executive Director, CASA-1000 Secretariat Energy Links Project, ECODIT LLC greg.osadetz@casa-1000.org

Martina Schwartz
Deputy Director, Energy Practice
Sr. Energy Project Manager, Energy Links
ECODIT LLC
mschwartz@ecodit.com

Andriy Mitskan
Chief of Party, Energy Links Project
ECODIT LLC
Andriy.mitskan@energylinks.org

Offerors are responsible for ensuring that their offers are received in accordance with the instructions stated herein. Late offers may be considered at the discretion of ECODIT LLC. ECODIT LLC cannot guarantee that late offers will be considered.

D. Proposal Documents and Format

ECODIT LLC anticipates issuing one or several subcontracts to a selected service provider(s) that has the ability to perform the required tasks, provide timely high-quality deliverables, and generally manage these activities in an effective and responsible manner. While ECODIT LLC will provide the subcontractor with a letter of invitation, it will be the responsibility of the subcontractor to obtain all related technical and budgetary documentation.

Proposal submission will include three sections:

- A one-page Cover Letter, which can be either in an MS Word or Adobe PDF format.
- A Technical Proposal which will not exceed 10 pages, excluding resumes and other supporting documentation such as corporate or individual consultant capability statements.
 The technical offer should address the general approach and a prospective offeror's qualifications to implement the requirements as specified by the ToR (see Attachment 1 below). It can be either in an MS Word or Adobe PDF format.
- A Financial Proposal as a straightforward budget illustrating best technical and commercial value to the Contracting Entity, funded by the U.S. Government, in a format to be proposed by the prospective offerors. Supporting information should be provided in sufficient detail to allow for a complete analysis of each proposed cost element or line item. ECODIT LLC reserves the right to request additional cost information if the technical evaluation committee has concerns of the reasonableness, realism, or completeness of an offeror's proposed costs.

E. Deadlines and Validity of Quote

The following calendar summarizes important dates in the solicitation process. Offerors must follow these deadlines.

Deadline for written questions. **5:00 pm, U.S. EDT (Eastern Daylight Time)**, **Friday, July 20, 2018**

Proposal due date...... 5:00 pm U.S. EDT (Eastern Daylight Time), Friday, August 10, 2018

Subcontract award (estimated) August 31, 2018

The dates above may be modified at the sole discretion of ECODIT LLC. Any changes will be published in an amendment to this RFP. Offeror's proposals must remain valid for 120 days after the proposal due date.

F. Evaluation Criteria

ECODIT LLC will evaluate Offerors' Technical and Cost Proposals based on a Combined Quality and Cost – Based Selection (QCBS). In the case of QCBS, the total score is calculated by weighting the technical and financial scores and adding them per the formula and instructions in the chart included in Section H.

The weighting of technical and financial scores will be as follows:

Technical Proposal: up to 70 points

Financial Proposal: up to 30 points

Total: 100 points

Evaluation Process – Combined Quality and Cost - Based Selection (QCBS)

The Consultant achieving the highest combined technical and financial score will be invited for negotiations.

A. Technical Proposals

The technical proposals will be evaluated based on their responsiveness to the Terms of Reference, applying the evaluation criteria described in the following table.

EVALUATION CRITERIA		Max. Weight	
I. Specific Experience of consultants relevant to the assignments		3	
a.	Experience in similar projects	2	
b.	Experience in similar geographic areas	1	
II. Adequacy of the proposed methodology and work plan to the TOR		17	
a.	Understanding of Objectives and Quality of Methodology	10	
b.	Work Program	4	
C.	Staffing and staff-input arrangements	3	
III. Key professional staff qualifications and competence for the assignment The number of points to be assigned to each of the above positions or disciplines shall be determined considering the following three subcriteria and relevant percentage weights: 1) General qualifications 30% 2) Adequacy for assignment 50% 3) Experience in Central and/or South Asian region 20%			
,	TOTAL	70	
Minimum number of points of Technical Evaluation to qualify for consideration of contract award is 50 Points .			

B. Financial Proposals

The lowest evaluated Financial Proposal (Fm) is given the maximum financial score (Sf) of 30.

The formula for determining the financial scores (Sf) of all other Proposals is calculated as follows:

 $Sf = 30 \times Fm/F$, in which "Sf" is the financial score, "Fm" is the lowest price, and "F" the price of the proposal under consideration.

Proposals are ranked according to their combined technical (St) and financial (Sf) scores as follows: S = St + Sf.

G. Submission Requirements

TECHNICAL PROPOSAL

The sections of the offeror's Technical Proposal must respond to the information requested in the sections below.

1. General Approach:

The offeror should describe its general approach to develop the DC Operator Strategy for the CASA-1000 project as required in the ToR (see Attachment 1 below). This section should include the offeror's approach to implementation of tasks and activities described in the ToR. It will include the schedule of activities and technical tasks, and implementation plan for the activities described in the ToR.

2. Technical Capabilities and Skills

This section must include a description of the offeror's capabilities and skills (both human and institutional) to implement the proposed tasks and activities. Proposed technical staff of the offeror must be skilled and experienced in DC technologies, engineering and/or operation of DC converter stations. Please provide Position Title, Proposed Staff and a Brief Technical Background of the Proposed Staff in the tabular format as below. Offerors may also submit resumes and other supporting capability statements which will not be counted against technical proposal page limits.

Position Title	Proposed Staff	Brief Technical Background

The offeror must have sufficient technical personnel and management capabilities to responsibly implement the required tasks and manage activities to meet the needs and specifications detailed by ECODIT LLC.

3. Relevant Experience and Past Performance

Prospective offerors must include detailed references demonstrating their experience and technical ability to implement requested services, per ToR in Attachment 1, worldwide and in Central Asia and/or South Asia regions. Experience in Central Asia and/or South Asia regions is highly preferred. Offerors must include at least 3 past performance references of similar work (under contracts or subcontracts) previously implemented as well as contact information for the companies for which such work was completed. Contact information must include at a minimum:

- Name of point of contact who can speak to the offeror's performance,
- Name and address of the company for which the work was performed, and
- Email and phone number of the point of contact.

ECODIT LLC reserves the right to check additional references not provided by an offeror.

4. Office Location / Geographic Codes

Prospective offerors should specify their locations. The authorized USAID geographic codes are 937 and/or 110. A prospective offeror's location outside the authorized geographic code does not preclude submission, however, if the offeror is from a location outside of the authorized geographic codes, a USAID waiver would be needed, requiring a compelling justification for the best technical and commercial value to the U.S. Government.

5. Best Value

Prospective offerors should illustrate their ability and commitment to providing best value to ECODIT LLC and USAID in terms of high-quality results that meet the objectives of the RFP in a cost-effective manner.

FINANCIAL PROPOSAL

Prospective offerors should prepare and submit detailed Technical and Financial Proposals. The Technical Proposal should meet all requirements of the ToR in Attachment 1 below. Financial Proposals should provide the following breakdown of cost information:

- Labor Costs;
- Travel and Transportation Costs;
- Other Direct Costs (to specify);
- Any Applicable Taxes and Profit/Fee.

Estimate for Labor Cost / Level of Efforts (LOE)

While no restrictions are placed on the Bidders' proposal, estimated LOE and travel costs for this RFP are estimated as follows for Phase 1 and Phase 2:

	LOE	Travel
	(person-days)	(trips)*
Phase I	80	2
Phase II	300	8

^{*(}person-trips expected to be within the host country area). It is expected that each person-trip will be 7-10 days in duration, including travel days.

When preparing travel budgets, the prospective offerors should be guided by the US Government regulations, including for international air travel and for travel per diem allowances.

Exchange Rate

Proposals may be made in any combination of up to three freely convertible currencies.

The single currency for the conversion of all prices expressed in various currencies into a single one will be the US Dollar.

The official source of the selling (exchange) rate is: https://www.oanda.com/

The date of the exchange rate is: 14 days before the proposal due date.

H. Other Conditions

- 1. The Total Contract Value will be based on a fixed price, the payment of which will be tied to completion of specific deliverables by the successful offeror.
- The offeror awarded this Contract will be eligible to participate in bids related to the future phases of the CASA-1000 DC Operator Strategy Development mandate as summarized in the attached Terms of Reference, but will be precluded from participating in bids through which CASA engages the party or parties that will provide the DC Operator services.

Attachment 1

TERMS OF REFERENCE

REGARDING:

Consulting Services to develop the Operating Strategy for the CASA-1000 HVDC Power Transmission System Comprising HVDC Converter Station Terminals in Tajikistan and Pakistan, along with an HVDC Line from Sangtuda, TJ to Nowshera, PK via Afghanistan

RFP Reference No.: RFP 2018-06-CASA-1000/DCO

The contents of this document are the sole responsibility of ECODIT LLC and do not reflect the views of the United States Government.

TERMS OF REFERENCE (ToR) RFP 2018-06-CASA-1000/DCO

Consulting Services to develop the Operating Strategy for the CASA-1000 HVDC Power Transmission System Comprising HVDC Converter Station Terminals in Tajikistan and Pakistan, along with an HVDC Line from Sangtuda, TJ to Nowshera, PK via Afghanistan

I. Overview

The purpose of this ToR document is to lay out the work plan for developing, evaluating and ultimately executing the strategy to put in place the appropriate organization, agreements, operating parameters, procedures, documentation, rules and, if necessary, regulations for the operation of the CASA-1000 HVDC system. A key aspect of this plan is the development of the mandate for, and contracting of, a third party to operate the system as the DC system operator, as defined below.

The CASA-1000 HVDC system will include:

- 1. Two 1300 MW VSC converter stations located near Sangtuda, Tajikistan and Nowshera, Pakistan, and;
- 2. Approximately 800 km of 500kV+/- HVDC transmission line running south from Sangtuda, through Afghanistan into Pakistan,

together the "DC Facilities".

The initial power transmitted will come from seasonal surpluses (May – September) generated by hydroelectric facilities located in the Kyrgyz Republic and Tajikistan. Power Purchase Agreements (PPAs) and the necessary ancillary commercial agreements are in place.

II. Scope

The Consultant is requested to develop the DC Operator Strategy for the CASA-1000 Project, as per requirements of a Master Agreement signed by representatives of four countries – the Kyrgyz Republic, Tajikistan, Afghanistan, and Pakistan.

The CASA-1000 Master Agreement regulates the relationship amongst the National Transmission Companies involved regarding the CASA project (the "Parties"). It states that there will be an "...operation and maintenance agreement among the National Transmission Companies and the DC Operator for the provision of operation and maintenance services in relation to the DC Facilities".

In the Master Agreement: ""DC Operator" means the legal person appointed by the National Transmission Companies to carry on the operation and maintenance of the DC Facilities or its successors and permitted assigns in accordance with the terms of the O&M Agreement."

"The DC Operator, once appointed, will carry out the role, functions and responsibilities of operator of the DC Facilities in accordance with the terms and conditions as set forth in the O&M Agreement, and the Parties to this (Master) Agreement wish to regulate certain matters as between themselves in relation to their dealings with the DC Operator under the O&M Agreement."

The Master Agreement also anticipates that a Technical Code will be developed and agreed to by the companies that will "... provide for the operating procedures and principles governing the relationship between the DC Operator, each National Transmission Company and all other Third-Party Users..."

Open Access Rules are the procedures that will be followed for utilization of the CASA system outside of each May – September seasonal Supply Period (the "Non-Supply Period"). It is anticipated that Third Party Users will have access to CASA capacity through both the Supply Period and Non-Supply Period of each year, and that the DC Operator will have responsibility for managing such open access usage.

The DC Operator will also be expected to develop, operate and maintain an Electronic Bulletin Board accessible by the National Transmission Companies that will include archived information related to key documents, historical utilization and performance information regarding planned works, as well as segregated, confidential party-specific financial and operational data.

This comprehensive approach for DC Operator Strategy development includes five phases:

Phase I: Initial Analysis and Identification of Alternative Options for Operating Strategies;

Phase II: Detailed Analysis and Recommendation Based on Comprehensive Investigation;

Phase III: Commercial Preparation Phase;

Phase IV: Commercial Execution Phase, and;

Phase V: Implementation.

In the current RFP, the Consultant is requested to complete the first two phases of the DC Operator Strategy development, as follows:

- Phase I: Initial Analysis and Identification of Alternative Operating Strategies
- Phase II: Detailed Analysis and Recommendation Based on Comprehensive Investigation

III. Activities for DC Operator Strategy Development and Implementation Schedule

The development and implementation of the DC Operator strategy will be undertaken in a phased approach:

Phase I: Initial Analysis and Identification of Alternative Options for Operating Strategies

Implementation timeline: Four (4) months, September 1, 2018 – December 31, 2018

For Phase 1, the Consultant shall conduct desk analysis for identification of alternative options for operation strategies. This phase will result in the identification and description of the two or three operating strategies that best take into account the technical, business, legal, regulatory and geo-political conditions of the project.

The Consultant shall prepare the Report of Phase I with following considerations and deliverables:

- 1. List of key information, parameters and evaluation criteria to be taken into account in order to make an informed decision on the structure of the DC Operator mandate.
- 2. Consolidation of preliminary operational considerations/limits/restrictions identified by the host National Transmission Companies.
- 3. Summary description and comparison of viable operating structure options against the identified evaluation criteria.
- 4. Identification, to the extent possible, of the specific conditions under which each option would be the preferred option.
- 5. Additional information required to be investigated in order to provide a final recommendation.
- 6. Draft outline of Technical Code and identification of key parameters that may bear on operating strategy. Preliminary spare equipment inventory strategy.
- 7. Initial work plan and budget to Target Commercial Operation Date.

The Consultant will use its technical expertise and knowledge of HVDC and interconnected transmission system operations, and knowledge of the electric transmission systems of Central Asia and South Asia regions. The results of Phase I will be presented at the CASA-1000 Joint Working Group (JWG) meeting for countries' comments and suggestions.

Phase II: Detailed Analysis and Recommendation Based on Comprehensive Investigation

Implementation timeline: Six (6) months, January 1, 2019 – June 30, 2019

Based on CASA-1000 JWG concurrence with the overall approach to operating options, for Phase 2 the Consultant shall collect reliable data, conduct detailed comparative analysis of the options, and recommend one operating strategy with relevant justifications for countries' approval.

The Consultant shall prepare the Report of Phase II with following considerations and deliverables:

- 1. Assumptions and collected data of required information from:
 - a. National Transmission Companies.
 - b. Study of CASA agreements and host country regulations.
 - c. Existing and potential third-party operators.
 - d. CASA representatives and related parties (e.g. World Bank).
 - e. Selected EPC contractor regarding technical design considerations of system to be constructed that will impact operating strategy (e.g. ramp rate limitations).
- 2. Definitive description of viable operating structure alternatives, including resources required and timeline to implement.
- 3. Comparative analysis of alternatives against all evaluation criteria.
- 4. Review and approval by all CASA countries of the preferred operating strategy and definitive work plan by all CASA countries.

The results of Phase II will be presented at the CASA-1000 Joint Working Group (JWG) meeting for countries' comments and concurrence.

July 10, 2018