



Secretariat of the Inter-Governmental Council of the CASA-1000 Power Transmission Project
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June 23, 2018

**Solicitation of Expressions of Interest:
CASA-1000 POWER TRANSMISSION PROJECT
DC OPERATOR CONTRACTING STRATEGY**

Name of Assignment : 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

Client : CASA-1000 IGC Secretariat

Response Date: : June 30, 2018

I. The governments of **Pakistan, Afghanistan, Tajikistan and Kyrgyzstan** have received financing from the World Bank and other IFI's towards the cost of the **Central Asia-South Asia Electricity Transmission and Trade Project ("CASA")**. 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.

The purpose of this RFP will be to engage a consultant to undertake the first two of five phases ("Package A") 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.

The Secretariat now invites Expressions of Interest from qualified organizations which wish to be invited to submit proposals to provide the following consulting services (hereinafter called "Services"):

Consulting Services to develop the Operating Strategy for an 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.

II. CASA-1000 Project Overview

The CASA-1000 HVDC system will include:

1. Two 1300 MW HVDC converter stations located near Sangtuda, Tajikistan and Nowshera, Pakistan, and;

2. Approximately 750 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 Kyrgyzstan and Tajikistan. Power Purchase Agreements (PPAs) and the necessary ancillary commercial agreements are in place.

A Master Agreement regulates the relationship amongst the four 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 to 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.

III. Implementation

The CASA-1000 Secretariat has been tasked to develop, then implement, the strategy that will lead to the contracting of an appropriate third party DC Operator. The Executive Director of the CASA Inter-Governmental Council (IGC) Secretariat will be responsible for implementing the requirements and instructions of the CASA countries as specified in the Master Agreement in relation to the DC Operator under the direction of the Joint Working Group, until such time as the CASA-1000 Operating Committee (as anticipated in the Master Agreement) is constituted.

IV. Timeline

Based on current tender processes and time lines, the Commercial Operations Date for CASA-1000 is estimated to be defined as 36 to 42 months after the start of construction activities on the Converter Station contracts which are expected to start this year. The Master Agreement specifies that the Parties will adopt both the Technical Code and Open Access Rules *at least* 18 months before the Target Commercial Operations Date.

Finalization of all other aspects of the DC Operator's mandate, selection and contracting are likely to be required to be in place within a similar time frame.

V. DC Operator Strategy Development and Implementation Schedule

The development and implementation of the DC Operator strategy will be undertaken in a total of five phases as described below. The objective of this request for Expressions of Interest is to seek proposals from qualified Consultants to execute the first two of these phases, identified below as Package A. This and subsequent stages are expected to require the services of a third party technical contractor with expert knowledge of HVDC and interconnected transmission system operations, and preferably with familiarity with the electric transmission systems of Central Asia.

PACKAGE A (comprising Phases I and II):

Phase I: Initial Analysis: Possible Operating Strategies (Target Delivery Date: October, 2018)¹

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 geopolitical conditions of the project.

¹ All dates are preliminary.

The following deliverables will be prepared:

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.

**Phase II: Detailed Proposal: Preferred Operating Strategy
(October, 2018 – March, 2019)**

1. Collection 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 time line 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.

PACKAGE B (comprising Phases III, IV and V):

Phase III: Tender Preparation (March, 2019 – August, 2019)

1. Drafting of all necessary agreements.
2. Development of necessary national operating parameters, rules and regulations, including the Technical Code.
3. Preparation of necessary bid documents.

Phase IV: Contract Tender and Award (September, 2019 – February, 2020)

1. Tendering of necessary contracts.
2. Bid evaluation.
3. Bid award.

Phase V: Implementation (March, 2020 - September, 2021)

1. Execution of implementation contracts and plans.
2. Staff hiring.
3. Training.
4. Preparation of manuals regarding: Operations, maintenance, technical conditions, e.g. dispatch protocols. Coordination with EPC Contractor (consider making delivery of manuals a payment milestone)
5. Simulations, other interfaces with HVDC Converter Station EPC Contractor, e.g. during Factory Acceptance testing.

VI. Request for Expressions of Interest

This note seeks expressions of interest from qualified contractors to undertake the first two phases that comprise Package A of this mandate and we ask you to respond no later than June 30, 2018. The target date for issuance of the RFP is July 1, 2018.

Additional information may be obtained at www.casa-1000.org, or by request to secretariat@casa-1000.org, reference RFP 2018-06-CASA-1000/DCO.

Interested parties should send their response, along with any relevant background information, by e-mail, courier or registered mail to arrive no later than June 30, 2018 to:

CASA-1000 Secretariat
c/o Energy Links
20A Kazybek Bi Str., 4th floor
Almaty, Kazakhstan 050010
Phone: +7 727 293 0120
Attention: RFP 2018-06-CASA-1000/DCO

or:

secretariat@casa-1000.org

**Sincerely,
CASA-1000 Secretariat**