NEPAL ELECTRICITY AUTHORITY

(A Government of Nepal Undertaking)
Request for Expressions of Interest (EOI)

For

Consulting Services (International) on Power System Protection and Utility scale solar in Nepal with relevant capacity development trainings under the Additional Financing on SASEC Power System Expansion Project

(Date of First Publication: 11th December 2020)

- 1. Government of Nepal has received grant assistance from Asian Development Bank (ADB) for the Additional Financing on the South Asia Sub-regional Economic Cooperation (SASEC) Power System Expansion Project. Part of the facility is provided to Nepal Electricity Authority (NEA) to fund eligible payment under consultant's services. With the facility, NEA intends to undertake the Supervision and Miscellaneous support of the Utility scale Grid-tied PV Solar, High Voltage Transmission and Distribution system projects through an International Consultant in a lump sum mode.
- 2. In particular, the principal activities of the International Consulting Firm shall include inter alia the following:
 - a) Develop protection coordination for the INPS

 The objective of the service is to develop protection coordination for the INPS to minimize the customer service interruptions and system outage from power system disturbance thereby increasing the reliability and security of the INPS. The Consultant shall study and analyse the electrical system with given data and verify that coordination exists among generator and transmission line protections and generator control, inclusive of generator bus bar protection; develop minimum design guidelines and design philosophy for the protection system of the INPS; and develop and propose modified settings as required to achieve coordinated operation of the protection schemes and generator control so that reliability, system stability and system security of the INPS is significantly enhanced.
 - b) Provide Training Substation Design
 The objective of this service is to provide training to the NEA employees in various aspects
 of planning and design of the High Voltage Substations with an aim to help NEA to
 develop its capability to plan, design and build robust power system in Nepal.
 - c) Provide Training Civil Structures and foundation design The objective of this service is to provide training to the NEA employees in various aspects of civil structure and foundation design of the High Voltage Transmission lines and substations with an aim to help NEA to develop its capability to plan, design and build robust power system in Nepal.
 - d) Provide Training Transmission Line Design
 The objective of this service is to provide training to the NEA employees in various aspects
 of planning and design of the High Voltage Transmission lines with an aim to help NEA to
 develop its capability to plan, design and build robust power system in Nepal.
 - e) Provide Training Tower Design
 The objective of this service is to provide training to the NEA employees in various aspects
 of planning and design of the High Voltage Transmission towers with an aim to help NEA
 to develop its capability to plan, design and build robust power system in Nepal.
 - f) Provide Training Grid Tied Solar

The objective of this service is to review, update and provide training in the "Guidelines for developing utility scale solar PV projects in Nepal" issued by Ministry of Energy, Water Resources and Irrigation of the Government of Nepal.

- g) Conduct a pre-feasibility and a Detailed feasibility study for Solar Park

 The objective of this service is to conduct all the activities mentioned for a pre-feasibility
 and a Detailed feasibility study for Solar Park of areas of the Mustang district near the
 under construction 220 KV Dana Substation as per guidelines for developing utility scale
 solar PV projects in Nepal and recommend an appropriate business model including
 additional infrastructure requirements like grid extension, road, water supply, etc. with
 implementation matrix, procurement plan and complete bid documents using reverse
 auction process that facilitates time efficient and cost effective solar park in Nepal.
- 3. NEA ("the Employer") now invites eligible Consultant (a consulting firm or consortium of consulting firms or consulting arm of electric utility) to indicate their interest in providing the services. Expression of interest (EOI) will be assessed based on Management Competence (10%), Technical Competence (80%) and Geographical Competence (10%). Based on the evaluation of EOI, shortlisted consultants will be invited to submit a full technical proposal and financial proposal through the Request for Proposal (RFP).
- 4. The details of the package are accessible from ADB's consulting services recruitment notice (http://csrn.adb.org), and interested consultants are encouraged to submit their EOI through ADB's consultant management system (registration and access through http://csrn.adb.org or http://cms.adb.org). The same information (detailed request for EOI and Terms of Reference) can be found in the office of NEA or downloaded from the web site: www.nea.org.np. The interested Consultants must provide information that shows experience and qualification in the related field with substantiation, description of completed similar assignments, work experience in the related areas, etc. to show their managerial, technical and geographical competence to perform the services. Also, additional information in the form of brochures, description of completed similar assignments, work experience in the specified areas, availability of appropriate skills among staff, etc. to show their technical, managerial and financial competence to perform the services should be provided. Such information must also include a brief description of the firm together with the organization structure and staffing. In particular, the information must include, among others, the following:
 - a) General and specific experience of the firm;
 - b) Experience of the firm in the principal activities listed in 2 above. The Consultant must provide information on jobs undertaken in the past fifteen (15) years giving a brief description of each job undertaken, the funding source(s), and amount of contract and information on the client/employer;
 - c) Corporate profile of the firm with Quality Assurance Plan, ISO 9000, Complaint handling mechanism & Assurance of continuity of professional services and Social protection practices of experts
 - d) Information on organizational strength (organizational structure, number of permanent professional staffs and number of total staffs) and;
 - e) Duly filled up Attachment 1 (given in the website).
- 5. The application must be responsive to the requirements mentioned above and information sought in Attachment-1. The application should be in sufficient details to be verifiable. Consultants may associate with others to enhance their qualifications.

- 6. The services to be provided by the firm(s) are estimated at 33 person-months of international key experts and 16 person-months of national non key experts. The term of the consulting services shall be 10 months.
- 7. The bidding consultant must have more than Fifteen (15) years of consulting experience in the power sector. Here, bidding consultant shall mean the consultant who has submitted the EOI and not its parent company.
- 8. The consultant must have completed at least one (1) assignment each of providing (a) training in Substation Design, Civil Structures and foundation design, Transmission Line Design, Tower Design of 400 kV or above and design of Grid-Tied Solar of at least 200 MW (b) developed protection coordination for the national electricity grid/s of at least 3000 km of aggregated route length of 132 kV or above voltage class Transmission line and (c) conducted a detailed feasibility study for Solar Park of 200 MW or above during last 15 years. In order to substantiate the aforementioned consulting contracts, the consultant shall submit the End User Certificate from Client depicting main scope of the contract. Incomplete or On-going Consulting Contracts will not be taken in to account and hence will not be evaluated.
- 9. The Consultant(s) will be selected and engaged in accordance with the Guidelines on the Use of Consultants by Asian Development Bank and its Borrowers (March 2013) under the Quality and Cost Based (QCBS at 90:10 ratio) selection method.
- 10. Tentative commencement date of the consultant will be 1st October 2021.
- 11. The Expressions of Interest, EOI (one original and one duplicate) shall either be delivered to the address below by 13:45 hours Nepal Standard Time on 11th January 2021 or through CMS (online) is 11th January 2021 by 16:00 (Manila time). The EOI should be clearly marked with "Expression of Interest for Selection of Consultant for Consulting Services (International) on Power System Protection and Utility scale solar in Nepal with relevant capacity development trainings under the Additional Financing on SASEC Power System Expansion Project.

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- 12. The interested Consultant(s) may obtain further information at the above address during office hours.
- 13. NEA reserves the right to reject any or all of the EOIs at any stage without assigning any reason whatsoever and without incurring any liability to the affected applicant(s). NEA will not be responsible for any cost of expenses incurred by the consultants in connection with the preparation or delivery of the EOI.