



ODISHA RENEWABLE ENERGY DEVELOPMENT AGENCY

S-3/59, MANCHESHWAR INDUSTRIAL ESTATE

Bhubaneswar-751010, ODISHA

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EOI No. 3211 dated 19.08.2020

Expression of Interest (EOI) for designing, engineering, installing, testing, commissioning along with operating and maintaining E-Rickshaw Charging Infrastructure in Konark NAC, Odisha

Notice Inviting EOI

Expressions of Interest (EOI) are invited from reputed manufacturers/ integrators (“Participants”) of e-rickshaw charging infrastructure for sharing their experiences and technical know-how about various aspects of e-rickshaw charging infrastructure such as design, capacity, technical specification, maintenance requirements, etc. and as per the scope of work requirements in connection with “Solarization of Konark” a project being implemented in Konark, Odisha under the high Visibility Solar Applications programme of Ministry of New and Renewable Energy, Government of India.

All interested Participants are requested to submit their response to this EOI through email as per the requirements in this EOI by 29.08.2020.

The select Participants will be required to make online presentations about their products and services as per schedule to be intimated subsequently.

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Chief Executive

Background

“Solarization of Konark” is a project proposed under the High Visibility Solar Applications Scheme and Off-grid Solar Power Scheme of the Ministry of New and Renewable Energy (MNRE), Government of India. The project prima facie envisages the Solarization of Notified Area Council (NAC) in Konark. The broad objective of the project is minimizing the overall carbon footprint of the NAC through the replacement of conventional grid power by solar energy. The project primarily entails the installation of a grid-connected solar power plant of suitable capacity to make Konark a Z-NET (zero net energy) NAC. It further explores the relevance and scope of introducing various on-grid and off-grid applications of solar power in the context of the NAC. The various applications include street lighting, provision of clean drinking water, e-public transport system, assured power supply to places of public gathering/ sensitive areas, etc.

Under this initiative, a total of twenty (20) no. of e-rickshaw is proposed to travel on the road of Konark NAC for about 15 km distance. For charging of these e-rickshaws, two (2) no. of charging stations are proposed having both AC and DC charging options (“Project”).

Objectives

- To develop an understanding of the technical, operational, and maintenance aspects of E-Rickshaw charging infrastructure through a consultative process.
- To float a Request for Proposal (RFP) subsequently for selection of a Participant for designing, engineering, installing, testing, and commissioning along with operating and maintaining E-Rickshaw Charging Infrastructure in Konark NAC, Odisha for a period of five years.

Requirements :

The 2 no. of charging station proposed to be placed within Konark NAC. There will be both AC slow charging and DC fast charging options in the charging stations. In both these charging stations, battery-swapping infrastructure can also be developed, which should be able to support concurrent charging of at least 5 batteries at each charging station.

The E-rickshaws for which these charging stations will be developed shall have:

- Four-Seater E-Rickshaw with a maximum loading capacity of 380 kg (four passengers, Driver, and 40 kg luggage),
- A maximum speed of 20 to 25 kmph,
- The minimum range of 80 km in one charge, considering the depth of discharge for 85%,
- Minimum speed of 5 kmph at a gradient of 3 degrees and with starting and moving capability at 7 degree gradient, driven by a brushless AC or DC motor of output power 850 W or above but not more than 2,000 W,
- Driven from an EV grade battery of 100 Ah or As Approved by International Centre for Automotive Technology (ICAT) or Automotive Research Association of India (ARAI), confirming to the Ministry of Road Transport and Highway GSR No. 709 (E) dated 8 October 2014 and Notification No. S.O. 2590 (E) dated 8 October 2014 and any subsequent amendment issued from time to time.

Who can participate in the EOI

The following are the eligibility criteria for participating in the EOI.

1. The Participant should be a single business entity registered as a company or proprietorship firm under the applicable laws in India.
2. The Participant shall have experience of at least one (1) year from the last date of submission of the response to the EOI in design, engineering, supply, installation, testing, commissioning, operation, and maintenance of at least two (2) charging stations for E-Vehicles in India.
3. The Participant shall not be blacklisted by any Government Agency/ Authority.

Submission of EOI

The responses submitted by the participants should cover the following points:

1. Brief description of the business, year of incorporation, management, and experience of the firm.
2. Recommended capacity of both AC and DC for the E-rickshaws charging station to support charging of 20 E-rickshaw with specifications mentioned above.
3. Detailed technical specification of AC and DC charging stations.
4. Land requirement for E-rickshaw charging stations.
5. Need for battery swapping and detailed specification for the battery-swapping station.
6. Engineering design and drawing for both civil and electrical infrastructure of E-rickshaw Charging Infrastructure and battery swapping stations.
7. Consumables and spare parts requirement.
8. Business plan for running, operation, and maintenance of the proposed charging infrastructure and battery swapping stations.
9. Manpower requirement for operation and maintenance of E-rickshaw charging stations.
10. Case study of past installation of EV/E-rickshaw charging stations.
11. Major risks in operations of E-rickshaw charging stations.
12. Filled Application Format as enclosed at Annexure-A.

Selection Parameters

The responses submitted by Participants for the Project will be evaluated based on the following parameters for the preparation of RFP:

1. A detailed description of the specifications for both the AC slow charging and DC fast charging option in the station.
2. Engineering design and drawing for both civil and electrical infrastructure.
3. Detailed business plan for running, operation, and maintenance of the proposed charging cum battery swapping stations.

4. Detailed business plan for operation and maintenance of the proposed AC and DC charging stations.
5. Novelties proposed in the Project in question.

Selection Procedure

1. OREDA will form a Technical Committee for evaluation of the responses submitted by the Participants.
2. The committee may request the participants to make online presentations on their products.
3. The Technical Committee will shortlist the responses based on the selection parameters as decided by the committee, from the various selection parameters stated above to prepare the RFP.
4. Final recommendations from the Technical Committee will be placed before CE OREDA, for approval.
5. Following approval, the RFP document will be finalized and published.

Procedure for submitting the response under this EOI

All the responses will be submitted through Email to ceoreda@oredaorissa.com on or before the scheduled date.

List of Documents to be submitted

1. A proposal in response to the EOI covering the scope highlighted above.
2. Legal registration certificate of the Participant.
3. Letter of awards/ Work Orders/ contract agreement along with the Joint Commissioning Certificates as evidence of the participant experience of achieving commissioning of EV/E-Rickshaw Charging Infrastructure for at least one project in the last 2 years.

Timeline

Sl. No.	Activity	Timeline
1.	Issue of EOI for development of the Project	19.08.2020
2.	Last date and time of submission of the response to EOI	29.08.2020
3.	Online presentation of the response made by the participants	To be intimated later
4.	Finalization of RFP	To be intimated later

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Chief Executive

Annexure-A

Application

Name of the company/firm	
Detail Postal address of the registered office	
Date of incorporation/registration (attach a photo copy of the certificate of incorporation/registration)	
Name of the head of the organization	
Name of the contact person	
Contact details	
Phone	
Fax	
Email	
Experience in manufacturing/assembling AC and DC charging stations	
No. of AC and DC charging stations commissioned during the last three years. (please provide site-wise details such as the name of the site, capacity, numbers, purpose for which the AC and DC charging stations were installed, name and contact details of the client, etc.	
Description of other important activities being carried out mainly in solar PV space.	
Name of the other national/International organization with which the firm has collaborated particularly (Copies of MOUs/work orders may be furnished)	
Major works in hand	
Size and spread of the organization (Give the list of the staff and names of the districts/blocks/villages where the organization has worked).	
Details of finances handled by the organization for managing the proposed assignment (give a detailed analysis in a separate sheet.)	

End of EOI