

# KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Companies Act, 1956)
Reg.Office: Vydyuthi Bhavanam, Pattom,
Thiruvananthapuram - 695 004
CIN:U40100KL2011SGC027424

Website: www.kseb.in Phone: +91 471 2447404 E-mail: cerees@kseb.in

### **ABSTRACT**

Establishment of EV charging stations in locations owned by KSEBL & Government., under Government of Kerala (GoK) and Government of India (GoI), Department of Heavy Industry (DHI), Scheme – Selection of EPC contractor through Request for proposals (RfP) from the empanelled bic ders and Business Model for Government premises - Sanction accorded – Orders issued.

Corporate Office (Renewable Energy and Energy Savings)

BO (FTD) No.574/2020 (KSEB/CE(REES)/INNV-EMob/20-21), Tvm, dated 14.09.2020

- Read: 1. Office Order (Director (T,SO,CP,Safety&REES)) No.805/2020/CE(REES)/INNV/T4/DCC/2020-21 dated TVM 29.5.2020
  - 2. Note no. Chief Engineer (REES)/INNV-Emob/19-20/355 dated 2.7.2020 of the Chief Engineer (REES) submitted to Full Time DirectorsFTD ((Agenda No. 44/6/20)
  - 3. Note No. KSEBL/TRAC/G/EV Stations/2020-21 dated 24.07.2020 of the Dy Chief Engineer (C&P) with full powers of CE
  - 4. Note No CE(REES)/INNV-Emob/20-21/525 dated 20.08.2020 submitted to the Full Time Directors (Agenda No. 64/8/20)

#### **ORDER**

As per order read as 1<sup>st</sup> above, eight firms were empanelled for a period of three years to participate in forthcoming RfPs for selecting the implementing agencies for establishment of EV charging stations in the State at various locations under different categories of schemes like State Government funded schemes, Central (FAME II of DHI) and Deposit works etc under Government, Public Sector Undertaking, Cooperative sector, aided/ autonomous institutions, Private agencies, Individuals etc.

Accordingly, establishment of charging stations at KSEBL and other Government premises is by Engineering, Procurement Construction (EPC) contractor selected through RfP.

### RfP I- State Government Scheme (Government of Kerala):

The work involves Supply, installation, testing and commissioning of 32 charging stations of the following configuration including 5 years warranty.

i) Bharath AC 001 (10 kW)

3 Guns of 3.3kW each

-1Number

ii) Bharath DC 001 (15kW)

1Gun

- 1Number

iii) CCS+CCS 50kW / CCS+CHAdeMO 25kW 2Guns

Suns -1Number

As per GO (Rt) No.473/2019/TRANS dated, Tvm, 15.10.2019, Administrative Sanction was accorded to the Chairman and Managing Director, KSEBL to expend Rs. 8.20 crore from the E-Mobility promotion fund towards establishment of 32 stations. KSEBL has already received Rs. 5.0 crore and the work of 6 stations is already tendered and progressing. The present RfP is for the balance 26 stations.

# RfP II- DHI, Central scheme (Government of India):

The work involves Supply, installation, testing and commissioning of 30 charging stations of the following configuration including 5 years warranty.

- 1) 25Numbers EV Fast Charging Stations with the following configuration:
  - i) Bharath DC 001 (15kW)

1Gun

- 3Numbers

- ii) CCS II + CHAdeMO & Type 2 AC 122kW ~1Number
- 2) 5Nos EV Slow Charging Stations with the following configuration:

i) Bharath AC 001 10 kW

3Guns of 3.3kW each

-2Numbers

ii) Bharath DC 001 15kW

1Gun

- 5Numbers

iii) Type II AC 7 kW

-1Number

The fund for the above scheme is

- (a) Grant of 50% of an average investment is expected to be received from DHI (GoI).
- (b) Grant of 100% is expected to be received from the State for State schemes (GoK)

The project has to be implemented as per timelines stipulated by the Central and State Government, in order to avail financial assistance offered. Anticipating the probable delay in processing the tenders as well as the execution of the projects in the prevailing pandemic situation, the two RfPs with price bid were floated for selection of EPC contractors towards establishment of 56Nos EV charging stations (26 in GoK scheme and 30 in DHI, GoI scheme) as shown below:

- i) No. KSEBL/REES/26EVCS/15/20-21 dated 09.07.2020 Installation of 26 electric vehicle charging infrastructure at various KSEBL/ premises in Kerala including two years warranty and further three years extended warranty- under GoK scheme.
- ii) No. KSEBL/REES/30EVCS/16/20-21dated 10.07.2020 -Installation of 30 electric vehicle charging infrastructure at various KSEBL/ Government premises in Kerala including two years warranty and further three years extended warranty- under DHI, GoI scheme.

The Chief Engineer (REES), as per note read as (4) above has also reported that the Government land for establishing Charging Station has to be taken over on right to use basis for which 'Royalty', has to be paid. In the committee meeting held on 06.06.2020, it was decided to offer promotional measures such as free charging facility for the EVs owned by the Government organization and its staff for the first one year. For the next two years, the offer shall be limited to the vehicles owned by the organization @ 50% of the tariff to be enforced on public (Tariff to be decided later). From the fourth year onwards, the charges shall be 70% of the rate enforced on public.

The Deputy Chief Engineer (Commercial and Planning) with full powers of Chief Engineer as per note read as (3) above has offered remarks on the tariff calculated on establishment of EV charging stations. Energy charge applicable to EVC is taken as Rs.5/kWh throughout the entire life. With the levelized rate of Rs.13.03 per unit of charging and discounting rate of 10% IRR comes to 17.32 % and NPV Rs. 3.70 lakh.

In case cost of charger inclusive of AMC as discovered through bid process is considered by DHI for grant of subsidy, then the percentage will improve to 67.29%. In this case, the levelized tariff comes to Rs. 12.06/unit.

The rate for charging is charging cost of battery, which is inclusive of cost of charging equipment. If utilization improves over the years, the charging cost will come down significantly than that estimated above.

The Chief Engineer (REES) has placed the matter before Full Time Directors as per note read as (4) above. Having considered the above, the Full Time Directors, in its meeting held on 26.08.2020

- 1. Resolved to ratify the action of the Chief Engineer (REES) in having floated two RfPs with price bid for selection of EPC contractors towards establishment of 56Nos EV charging stations (26 in Government of Kerala scheme and 30 in DHI, Government of India scheme) to avoid the time delay for the execution of the project due to Covid-19 pandemic condition and receive time line claim of the State and Central Grant.
- 2. Further resolved to initiate negotiation with Government agencies invocating the weighted average rate as Rs. 13.03 arrived, with promotional offers as given below, for speedy takeover of the land on right to use with subsequent hand over to the successful contractor to avoid the delay in execution of the above project
  - a) Free charging facility for the EVs owned by the organization and its staff for the first one year
  - b) 50% of the tariff collected from public, for the coming two years, for the vehicles owned by the organization only and
  - c) 70% of the tariff collected from public, from the fourth year onwards.

Orders are issued accordingly.

By Order of the Full Time Directors

Sd/-G. Lekha Company Secretary

Copy to:

TA to Chairman & Managing Director/ PA to Director (Finance)/ TA to Director (Transmission, System Operation & REES)/ TA to Director (Corporate Planning & Safety)/ TA to Director (Generation Civil)/ TA to Director (Generation-Electrical & SCM)/ TA to Director (Distribution, IT & HRM)/ Secretary (Admn.)/ Senior CA to Secretary/ Fair copy Section.

Forwarded by Order

Assistant Executive Engineer