# NEW AND RENEWABLE ENERGY DEVELOPMENT CORPORATION OF ANDHRA PRADESH LIMITED (NREDCAP)

(A State Government Company)

Regd.Office:# 12-464/5/1, River Oaks Apartment, CSR KalyanaMandapam Road, Tadepalli, Guntur District, Pin: 522 501.Email: <a href="mailto:info@nredcap.in">info@nredcap.in</a>, <a href="mailto:pds:modeleap.in">pdse@nredcap.in</a>, <a href="mailto:pds:modeleap.in">pdse@nredcap.in</a>,

Ref: NREDCAP/SE/EOI/SSL/RC Rates/16/2022 Date: 23.03.2022

### **EXPRESSION OF INTEREST**

Expression of Interest (EOI) from empanelled suppliers of NREDCAP for the year 2021-22 is invited for finalization of rate contract prices for supply & installation of the following LED based Solar Street Lighting Systems along with a board displaying name of the sponsoring organization and to fix to the pole of solar street light. The systems shall be supplied and installed on Turnkey basis with five years warranty anywhere in Andhra Pradesh State as per the specifications furnished in the Annexure.

- a) 20W LED based Solar Street Lighting System
- b) 40W LED (2 Nos X 20W) based Solar Street Lighting System

The components involved in the above Solar Gadgets such as SPV Module, W-LED Luminaires, Lithium Ferro Phosphate (LiFePO4) Battery Banks shall have IEC/BIS test certification from MNRE / MNRE authorized test centers. The other technical parameters shall be as per MNRE specifications. The suppliers shall have 3 years' experience in installation of solar off-grid systems (Copies of the work completion reports to be enclosed) and minimum cumulative turnover of Rs. 1.00 Crore during the last 3 financial years in Off-Grid Solar Gadgets (Enclose copy of the certificate issued by Charted Accountant). The suppliers have not been black listed at any time by NREDCAP as well as any of the Govt. Nodal Agencies in the country. The suppliers shall demonstrate the solar gadgets for which they are submitting their financial offer at NREDCAP Head Office, Tadepalli, Guntur District on 06.04.2022.

The empanelled suppliers fulfilling the eligibility criteria shall submit their sealed financial quotations in the formats enclosed on or before 06.04.2022, 05:00 PM along with an Earnest Money Deposit of Rs. 50,000/-(Rupees Fifty thousand only) in the form of DD/BG/RTGS from any Nationalized Bank drawn in favour of NREDCAP, which is refundable after finalization of the rate contract system.

#### **TERMS AND CONDITIONS**

- 1. The Specifications of the LED based Solar Street Lighting Systems along with Display Board are mentioned in the enclosed **Annexures -'A to B'.**
- 2. The rates quoted in the financial offer (Annexures A1 to B1) shall inclusive of transportation & installation charges and all taxes as per GST Act.
- 3. The filled in document together with all enclosures shall be submitted in a sealed cover super scribing "FINANCIAL OFFER TO FIX THE RATE CONTRACT PRICE FOR LED BASED SOLAR STREET LIGHTING SYSTEMS ALONG WITH DISPLAY BOARD".
- 4. Good quality components should be supplied. In case if it is found that materials are not as per MNRE Specifications, such components are to be replaced at free of cost.
- 5. All the Systems including Battery should be under guaranteed for a period of **Five years** from the date of installation against all defects.
- 6. The empanelled suppliers shall generate demand and submit the specific indents along with payments to Head Office through our District Manager so as to award the works.
- 7. The price quoted in the financial offer is exclusive of NREDCAP Service charges.
- 8. The Rate Contract Price will be valid up to 31.03.2023 and it may extend further on specific approval of the competent authority.
- 9. The VC & Managing Director may relax any of the conditions for valid reasons and the decision of VC & Managing Director is final and binding.

Sd/-VC & Managing Director

# TECHNICAL SPECIFICAIONS OF 20W CAPACITY LED BASED SOLAR STREET LIGHTING SYSTEM ALONG WITH DISPLAY BOARD

| S.No | Name of the<br>Component | Technical Specifications   |  |  |
|------|--------------------------|--|--|--|
| 1    | SPV Module               | 12V, 100Wp capacity poly crystalline module with IEC/BIS test certification from MNRE / MNRE authorized test centers along with suitable Solar PV module support Structure.  |  |  |
| 2    | Battery Bank             | <b>12.8V, 30Ah</b> capacity Lithium Ferro Phosphate (LiFePO4) Battery with IEC/BIS test certification from MNRE / MNRE authorized test centers.  |  |  |
| 3    | LED Luminaire            | 20W capacity LED based Solar luminary with inbuilt MPPT charge controller to operate dusk to dawn.  The Luminaire must use high efficacy W-LED with minimum 135 lumens per watt and UV free.   |  |  |
| 4    | Light output             | Multiple light levels  The lamp should have two levels of light to take care of different lighting needs during the night.   |  |  |
| 5    | Mounting of light        | Pole mounted, minimum 5.0 meters above the ground level  |  |  |
| 6    | GI Pole                  | 3 inch dia, 6 meters length and 3 mm thick GI Pole   |  |  |
| 7    | Accessories              | As per requirement   |  |  |
| 8    | Civil Foundation         | The foundation size is 0.45 m X 0.45 m X 0.90 m. The Foundation shall be RCC pile foundation in CC(1:2:4).   |  |  |
| 9    | Duty Cycle               | Dusk to Dawn: 4 hours full light, rest of the time at lower level, with motion sensor. i) In case any movement is there, it senses it and glows to full level. ii) Then it comes back to lower level after sometime, automatically.  |  |  |
| 10   | Autonomy                 | 3 days or 36 operating hours per permissible discharge.  |  |  |
| 11   | Electronics              | Overall total efficiency of the Electronics should be minimum 85%  |  |  |
| 12   | Display Board            | Display board size of 450 MM (18 inch) x 600 MM (24 inch) along with SS Nuts& Bolts, Clamp set to fix for round pole of 75 mm (3 inch) Dia at a height of 8 ft from ground level. Frame and Support arms made with 25 mm (1 inch) HDG square tube with 3 mm thick.  Fixing Plate made with 5 mm thick Flat 50 mm wide and 50 mm height, with 12 mm Dia Hole as per the design attached |  |  |
| 13   | Warranty                 | i) The Street Lighting System (including the battery) will be warranted for a period of five years from the date of installation. ii) The PV Module(s) will be warranted for a minimum period of 25 years from the date of installation.   |  |  |

## **FINANCIAL OFFER**

# FINANCIAL OFFER FOR SUPPLY & INSTALLATION OF 20W LED BASED SOLAR STREET LIGHTING SYSTEM ALONG WITH DISPLAY BOARD ON TURNKEY BASIS

| S.No. | N. 641 T   | Unit Rate (Rs) |        |
|-------|--|----------------|--------|
|       | Name of the Item   | Non-Remote     | Remote |
| 01    | Design, Supply, Installation, Testing and Commissioning of 20W LED based Solar Street Lighting System along with display board with the following components as per specifications mentioned in Annexure-A including installation and transportation charges on Turnkey basis i) 100Wp SPV Module ii) 20W LED based luminaire iii) 12.8V, 30 Ah Lithium Ferro Phosphate (LiFePO4) Battery Bank iv) 6mtrs length GI Pole v) Civil foundation vi) Other Electrical & Electronic items vii) Display Board size of 450 MM (18 inch) x 600 MM (24 inch) along with SS Nuts & Bolts, Clamp set  Warranty: i) The Street Lighting System (including the battery) will be warranted for a period of five years from the date of installation. ii) The PV Module(s) will be warranted for a minimum period of 25 years from the date of installation. |                |        |
| 02    | GST @12% on 70% of item no: 01   |                |        |
| 03    | GST @18% on 30% of item no: 01   |                |        |
| 04    | Total – (01+02+03)<br>(In words)   |                |        |

Date: Signature of the Supplier / Manufacturer with seal

# TECHNICAL SPECIFICAIONS OF 40W (2 Nos X 20W)CAPACITY LED BASED SOLAR STREET LIGHTING SYSTEM ALONG WITH DISPLAY BOARD

| S.No | Name of the<br>Component | <b>Technical Specifications</b>   |  |
|------|--------------------------|---|--|
| 1    | SPV Module               | <b>2 Nos X 12V, 100Wp</b> capacity poly crystalline module with IEC/BIS test certification from MNRE / MNRE authorized test centers along with suitable Solar PV module support Structure.  |  |
| 2    | Battery Bank             | 2 Nos X 12.8V, 30Ah capacity Lithium Ferro Phosphate (LiFePO4) Battery with IEC/BIS test certification from MNRE / MNRE authorized test centers.  |  |
| 3    | LED Luminaire            | 2 Nos X 20W capacity LED based Solar luminary with inbuilt MPPT charge controller to operate dusk to dawn.  |  |
|      |                          | The Luminaire must use high efficacy W-LED with minimum 135 lumens per watt and UV free.  |  |
| 4    | Light output             | Multiple light levels  The lamp should have two levels of light to take care of different lighting needs during the night.  |  |
| 5    | Mounting of light        | Pole mounted, minimum 5.0 meters above the ground level   |  |
| 6    | GI Pole                  | 3 inch dia, 6 meters length and 3 mm thick GI Pole  |  |
| 7    | Accessories              | As per requirement  |  |
| 8    | Civil Foundation         | The foundation size is 0.45 m X 0.45 m X 0.90 m. The Foundation shall be RCC pile foundation in CC(1:2:4).  |  |
| 9    | Duty Cycle               | Dusk to Dawn: 4 hours full light, rest of the time at lower level, with motion sensor. i) In case any movement is there, it senses it and glows to full level. ii) Then it comes back to lower level after sometime, automatically.   |  |
| 10   | Autonomy                 | 3 days or 36 operating hours per permissible discharge.   |  |
| 11   | Electronics              | Overall total efficiency of the Electronics should be minimum 85%   |  |
| 12   | Display Board            | Display board size of 450 MM (18 inch) x 600 MM (24 inch) along with SS Nuts & Bolts, Clamp set to fix for round pole of 75 mm (3 inch) Dia at a height of 8 ft from ground level. Frame and Support arms made with 25 mm (1 inch) HDG square tube with 3 mm thick.  Fixing Plate made with 5 mm thick Flat 50 mm wide and 50 mm height, with 12 mm Dia Hole as per the design attached |  |
| 13   | Warranty                 | i) The Street Lighting System (including the battery) will be warranted for a period of five years from the date of installation. ii) The PV Module(s) will be warranted for a minimum period of 25 years from the date of installation.  |  |

Date:

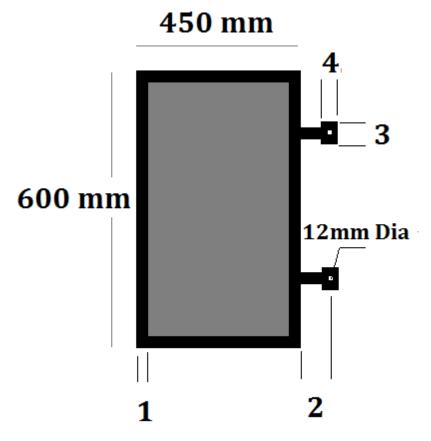
## **FINANCIAL OFFER**

FINANCIAL OFFER FOR SUPPLY& INSTALLATION OF 40W (2 Nos x 20W) LED BASED SOLAR STREET LIGHTING SYSTEMALONG WITH DISPLAY BOARD ON TURNKEY BASIS

| S.No. | N. C. C. L. T.  | Unit Rate (Rs) |        |
|-------|---|----------------|--------|
|       | Name of the Item  | Non-Remote     | Remote |
| 01    | Design, Supply, Installation, Testing and Commissioning of 40W (2 Nos x 20W) LED based Solar Street Lighting System along with display board with the following components as per specifications mentioned in Annexure-B including installation and transportation charges on Turnkey basis i) 2Nos X 100Wp SPV Module ii) 2 Nos X 20W LED based luminaire iii) 2 Nos X 20W LED based luminaire iii) 2 Nos X 12.8V, 30 Ah Lithium Ferro Phosphate (LiFePO4) Battery Bank iv) 6mtrs length GI Pole v) Civil foundation vi) Other Electrical & Electronic items vii) Display Board size of 450 MM (18 inch) x 600 MM (24 inch) along with SS Nuts & Bolts, Clamp set Warranty:  i) The Street Lighting System (including the battery) will be warranted for a period of five years from the date of installation.  ii) The PV Module(s) will be warranted for a minimum period of 25 years from the date of installation. |                |        |
| 02    | GST @12% on 70% of item no: 01  |                |        |
| 03    | GST @18% on 30% of item no: 01  |                |        |
| 04    | Total – (01+02+03)<br>(In words)  |                |        |

Date:

### **DISPLAY BOARD SPECIFICATIONS:**



- 1. 25 mm 2. 100 mm
- 3.50 mm 4.50 mm



## Model Solar Street Lighting System with Display Board

