II) SOLAR HIGH MAST LIGHT – 10 Nos. (Approx.)

Competitive bids are invited for the supply, installation, testing and commissioning of 10 numbers (Approx) of Solar high mast light with induction bulb from the firms/companies having experience in the establishment of high mast light with induction bulb and possessing ISO certificate.

A. Technical Specifications

- 1. Rubber coated GI structure of 12 meter height for mounting highmast light:- RCC foundation with 2×2×1.5 meter. Foundation bolt 6 nos and suitable to coastal area installations. 12 meter GI coating and MRF anti-corrosion paint/rubber compound coating. Single phase wiring with DC motor, 24V, 500 RPM, 10KG torque. Top fixing 4 arms with 90 degree.
- **2. Induction light:-** Four numbers of induction lamp with 100 watts output, Aluminium cast metal body, Front glass and input voltage 100V AC to 270V AC.
- **3.** Lightning arrestor and Earthing:- Copper strip earthing with 1.3x0.3 mm size.
- **4. Signal light for aircraft:-** ip 65 with LED type.
- **5. Solar panels:**-Manufactured by an MNRE certified company with SPA rating 1A or 2A. Solar Polycrystalline panels with Four numbers of 250wp and 24 dc, efficiency above 15%. Structure should made of 1.5 inch anglers and should be coated with MRF anti-corrosion paint or rubber compound.
- **6. Batteries:** Four numbers of c10, 12V 150AH batteries with structures coated with MRF anti-corrosion paint or rubber compound coating to enclose the battery.
- 7. Solar power conditioning unit:- MNRE approved 2KW connected load. VDC 24V and sine wave output. With isolation transformer and MPPT rectifier.
- **8.** Installation of meter box: Single phase meter with box of ISO 9001-2008 certified.
- **9. Installation of control board:-** Singe phase wiring and timer settings (branded).
- **10. Wiring of high mast light:-** ISO 9001-2008 certified cable of 200 meters with 2.5 Sqr mm.
- 11. MCB with box:- single phase with 6A.

Note: - All the components of the solar high mast light system should resist marine environment conditions.

B. Tender Conditions

- 1. 1% of the cost of articles quoted shall be furnished as EMD by means of demand drafts of a Nationalized Banks drawn in favour of Managing Director, KSCADC at payable at Trivandrum.
- 2. A preliminary Agreement in the prescribed format (as per the tender document) on stamped paper worth Rs. 100/-) shall be executed and furnished along with the tender document.
- 3. 5% of agreed value shall be furnished as security deposit in the form of bank guarantee of a Nationalized Banks for a period of five years from the date of issue of satisfactory completion report.
- 4. The solar highmast light shall be commissioned at the site as specified by KSCADC in the fishing villages of Kerala State.
- 5. There shall be 20 years replacement warranty for solar panels and five years replacement warranty for all other components of solar high mast light.
- 6. The solar highmast light shall be commissioned within two months on receipt of the supply order.
- 7. The rates quoted must be inclusive of all taxes, duties, freight, labour charges etc.
- 8. The price of solar panel and accessories shall be after 30% MNRE subsidy.
- 9. The year wise terms of Annual Maintenance Contract (AMC) shall be submitted along with the tender for a period of 5 years.
- 10. Firm/company/ authorized suppliers declared by Kerala Govt., including KSCADC to be ineligible to participate for corrupt, fraudulent or any other unethical business practices shall not be eligible during the period for which such ineligibility is declared.
- 11. KSCADC do not bind themselves to accept the lowest or any bid and reserves the right to reject any or all bids with/without any reason and accept/prefer any bid or Bidder without assigning any reason and also reduce or extend the period of contract without assigning any reason.
- 12. KSCADC reserves the right to contact and verify Bidder's information, references and data submitted in the Bid proposal without further reference to the Bidder.
- 13. The absence of specifications details regarding any equipment to be supplied under this project implies that best general practices will prevail and that first quality material and workmanship will be applied as per the discretion of KSCADC. Certification standards, when available, for the to-be-installed equipments and materials, will prevail.
- 14. The KSCADC reserves the right to vary the quantities and fix a delivery schedule. KSCADC also reserves the right to order additional quantities at a price not more than the price accepted after this tender for a period of six months from the date of order placement.
- 15. KSCADC reserves the right to effect changes in the Technical Specifications. Any such change will be notified in writing to all those who have purchased this Document. In case, any of the bidder have submitted the bids before receiving the notification of changes, will be allowed to submit a revised tender accordingly.

Note:- The tender shall be put in a single sealed cover super scribing the wordings "Bid for Solar high mast light".