



**HUBBALLI DHARWAD SMART CITY LIMITED
HUBBALLI**

TENDERS FOR

**DESIGN SUPPLY INSTALLATION TRANSPORTATION
TESTING AND COMMISSIONING OF OFF-GRID
BUTTERFLY SOLAR OF 6.25KVA (5KWP THREE PHASE,
OFF GRID) AND 3YEARS OF OPERATION AND
MAINTANANCE ON DBOT (DESIGN BUILT OPERATE
AND TRANSFER) AT TOLANKERE FOR HUBBALLI
DHARWAD SMART CITY**

Volume I – Tender Document

Indent No: HDSCL/Butterfly Solar/2021-22

TENDER Notification No HDSCL/SCP Tender/2021-22 dated 05.01.2022

Address for communication:

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Disclaimer

The information contained in this Request for Proposal (“RFP”) document provided to the Bidder(s) whether verbally or in documentary form by or behalf of Hubballi Dharwad Smart City Limited (HDSCL) or any of their employees or advisors, is provided to the Bidder subject to the terms, and conditions set out in this RFP document and all other terms and conditions.

This RFP document is not an agreement and is not an offer or invitation by HDSCL to any parties other than the Bidders. The purpose of the RFP document is to provide the Bidder (s) with information to assist the formulation of their proposals. This RFP document does not purport to contain all the information each Bidder may require. This RFP document may not be appropriate for all persons, and it is not possible for HDSCL, their employees or advisors to consider the investment objectives, financial situation and particular needs of each Bidder who reads or uses this RFP document. Each bidder should conduct his own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP document and where necessary obtain independent advice from appropriate sources. HDSCL, their employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulation as to the accuracy, reliability or completeness of the RFP document.

The HDSCL may in their absolute discretion, but without being under any obligation, update, amend or supplement the information in this RFP document

NOTICE INVITING TENDER

Only e-tenders are to be submitted through the e-procurement portal http://www.eproc.karnataka.gov.in or CPPE website. Any correspondence extension to above tenders shall be held in above website only. Sd/- CGM & Head, OSCOM	Sd/- Executive Engineer PWD Division Chikkodi.								
DPROSCMRO/4-1170M/2021-22									
The Times of India 05/01/2022									
									
Special Purpose Vehicle for implementation of Smart City Project (Registered Company No. CIN - U74999KA2017 PLC 101266)									
No: HDSC/SCP Tender/MD/2021-22 Date : 04.01.2022									
E-Tender Notification on Hubballi-Dharwad Smart City Project Advt. No. 12/2021-22 Date : 04-01-2022									
(1) The Managing Director, Hubballi-Dharwad Smart City Ltd (HDSC) invites the bid from eligible bidders through E-procurement under Karnataka Public Procurement & Transparency Act 1999-2000. (2) The bidders have to participate through online procurement only. The website for "ONLINE BIDDING" is http://www.eproc.karnataka.gov.in . (3) All the bid documents can be seen and obtained from website http://www.eproc.karnataka.gov.in . (4) All the payments to be made through E-Procurement only. (5) Tender documents will be available for bidding on above website. (6) Other details can be seen in the bid documents. (7) Any information on Addendum / Corrigendum / Cancellation of tender can be seen in the said website. (8) For further details please contact General Manager (Tech.), Hubballi-Dharwad Smart City Limited, Hubballi during the Office hours on Telephone No: 0836-2355331 and 2355322, information can also be obtained from website: http://www.eproc.karnataka.gov.in and smart.net.									
Sl. No.	Incident No.	Name of Work	Amount put to tender (Rs.)	EMD Amount (Rs.)	Tender Documents Available from	Pre-bid meeting will be held on	Last date for submission of Tender Documents	Technical Proposal will be opened on	Period of Completion
1	1480	Procurement and Installation of Ethylene Propylene Diene Monomer (EPDM) Rubber Flooring for Open Gym and play equipment's area in Tolanakere Lake.	44,00,000/-	1,00,000/-	07.01.2022	14.01.2022 at 11:00 hrs at Office of HDSC, 1 st Floor, Samskrutik bhavan, New Cotton market Road, Hubballi	24.01.2022 at 16:00 hrs	27.01.2022 at 11:00 hrs	03 months implementation including monsoon period
2	HDSC/ BUTTERFLY-SOLAR /2021-22	Design, supply, installation, testing and commissioning of off grid Butterfly Solar Power Plant (8.25 KVA) at Tolanakere on OSOT Under Hubballi Dharwad Smart City.	4,25,000/-	20,000/-	07.01.2022	14.01.2022 at 11:30 hrs at Office of HDSC, 1 st Floor, Samskrutik bhavan, New Cotton market Road, Hubballi	24.01.2022 at 16:00 hrs	27.01.2022 at 11:05 hrs	03 months implementation including monsoon period
Sd/- General Manager (Tech.) Hubballi-Dharwad Smart City Limited., Hubballi					Sd/- Managing Director Hubballi-Dharwad Smart City Limited., Hubballi				
A-807 GOVERNMENT OF ODISHA DEPARTMENT OF WATER RESOURCES OFFICE OF THE CHIEF ENGINEER & BASIN MANAGER.						GREATER CHENNAI STORM WATER DRAIN			

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SCHEDULE OF BIDDING PROCESS

Time Schedule of various Tender related Events

Event Description	Date
Tender notification	04.01.2022
Availability of Document on e-Procurement web-site (www.eproc.karnataka.gov.in)	07.01.2022
Pre-bid meeting at Hubballi Dharwad Smart City Limited., Hubballi	14.01.2022 at 11:30 hrs
Last date & time for receiving and closing bids	24.01.2022 at 16:00 hrs.
Pre-qualification bid opening date & time	27.01.2022 at 11:00 hrs

1. INTRODUCTION

1.1 Background

- 1.1.1 The Hubballi Dharwad Smart City Limited (HDSCL) invites Proposals from reputed firms having past experience in **Design Supply Installation Transportation Testing AND COMMISSIONING OF OFF-GRID BUTTERFLY SOLAR OF 6.25KVA (5KWP Three phase, Off Grid) and 3YEARS OF OPERATION AND MAINTANANCE ON DBOT (DESIGN BUILT OPERATE AND TRANSFER) AT TOLANKERE FOR HUBBALLI DHARWAD SMART CITY**, Hubballi with eco-friendly, sustainable designs with low impact on energy and water consumption on turnkey at TOLANKERE, Hubballi (hereinafter referred to as "Project") location defined Appendix A (b).
- 1.1.2 The Proposals would be evaluated on the basis of the Qualification Parameters and Evaluation Criteria set out in this RFP Document in order to evaluate the successful bidder for the Project ("Successful Bidder"). The Successful Bidder would then have to enter into agreement with HDSCL, and perform its obligations as stipulated therein.
- 1.1.3 Amount reserved for the project is Rs.5 lakhs (all-inclusive including civil, electrical cost and O & M for 3years). RFP cost shall be with in this amount.

1.2 Brief Description of Bidding Process

- 1.2.1 HDSCL intends to adopt a single stage process for selection of the Successful Bidder. This would, however, be in two parts – the first part in which Bidder would need to fulfil the qualification parameters specified and furnish the proposal, also the bidders will be invited for technical round for presentation of the proposal before the Technical Committee. The financial bids of those whose proposals are found to be substantially responsive & accepted will only be opened.
- 1.2.2 The Bidders would have the liberty to inspect the project site at their own cost.

2. INSTRUCTIONS TO BIDDERS

A. General

2.1 Scope of Proposal

- 2.1.1 HDSCL wishes to receive Proposals from reputed agencies and firms for the project in order to evaluate the Successful Bidder.
- 2.1.2 The lump sum offer shall include provision for the following:

Conceptualization, design, engineering, manufacturing, supply, installation, transportation, preparation of content/artistic production, commissioning, system integration and technical realization, operate & maintenance for three years, documentation, training, handing over of complete system in working condition

2.1.2 (A) TECHNICAL SPECIFICATIONS

Quality certification and standards for off Grid Butterfly Solar PV systems are essential for the successful implementation of this technology. Hence, all components of the solar PV system must conform to the relevant standards and certifications given below:

1. SOLAR PHOTOVOLTAIC MODULES:

- A. The PV modules used should be made in India¹.
- B. The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-1 - requirements for construction & Part 2 - requirements for testing, for safety qualification or equivalent IS.
- C. As the PV modules will be installed in a highly corrosive atmosphere throughout their lifetime, they must conform to IEC 61701.
- D. The total solar PV array capacity should not be less than allocated capacity (kWp) and should comprise of solar crystalline modules of minimum 300 watts.
- E. Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- F. PV modules must be tested and approved by one of the IEC authorized test centers.
- G. The module frame shall be made of corrosion resistant materials, preferably having anodized aluminium.
- H. The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid. HDSCL/owners shall allow only minor changes at the time of execution.
- I. The rated output power of any supplied module shall have tolerance within +/- 3%.

- J. The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) per cent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
- K. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode.

The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.

- L. I-V curves at STC should be provided by bidder.

M. Warranties:

Material Warranty:

- i. Material Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (05) years from the date of installation to the original customer ("Customer")
- ii. Defects and/or failures due to manufacturing
- iii. Defects and/or failures due to quality of materials
- iv. Non conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owners sole option

Performance Warranty:

The PV modules must be warranted for their output peak watt capacity, which should not be less than 90% at the end of ten (10) years and 80% at the end of twenty-five (25) years².

2. ARRAY STRUCTURE

- A. Hot dip galvanized MS mounting structures may be used for mounting the modules/ panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum output. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements.
- B. The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed. It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard and submit wind loading calculation sheet to HDSCL. Suitable fastening arrangement such as grouting

and calming should be provided to secure the installation against the specific wind speed.

- C. The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.
- D. Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, and nuts and bolts. Aluminium structures also can be used which can withstand the wind speed of respective wind zone. Protection towards rusting need to be provided either by coating or anodization.
- E. The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels
- F. Regarding civil structures the bidder need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof.
- G. The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m².
- H. The minimum clearance of the structure from the roof level should be 300 mm.

3. JUNCTION BOXES (JBs)

- A. The junction boxes are to be provided in the PV array for termination of connecting cables. The Junction Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminium /cast aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.
- B. Copper bus bars/terminal blocks housed in the junction box with suitable termination threads conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single / double compression cable glands. Provision of earthings. It should be placed at 5 feet height or above for ease of accessibility.
- C. Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs) / SPDs, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups.
- D. Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification.
- E. All fuses shall have DIN rail mountable fuse holders and shall be housed in thermoplastic IP 65 enclosures with transparent covers.

4. DC DISTRIBUTION BOARD:

- A. DC Distribution panel to receive the DC output from the array field.
- B. DC DPBs shall have sheet from enclosure of dust & vermin proof conform to IP 65 protection. The bus bars are made of copper of desired size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.

5. AC DISTRIBUTION PANEL BOARD:

- A. AC Distribution Panel Board (DPB) shall control the AC power from PCU/ inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- B. All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.
- C. The changeover switches, cabling work should be undertaken by the bidder as part of the project.
- D. All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air - insulated, cubical type suitable for operation on three phase / single phase, 415 or 230 volts, 50 Hz
- E. The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- F. All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- G. Should conform to Indian Electricity Act and rules (till last amendment).
- H. All the 415 AC or 230 volts devices / equipment like bus support insulators, circuit breakers, SPDs, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions

Variation in supply voltage	+/- 10 %
Variation in supply frequency	+/- 5 Hz

6. PCU/ARRAY SIZE RATIO:

- A. The combined wattage of all inverters should not be less than rated capacity of power plant under STC.

- B. Maximum power point tracker shall be integrated in the PCU/inverter to maximize energy drawn from the array.

7. PCU/ Inverter:

As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the “Power Conditioning Unit (PCU)”. In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit/inverter should also be DG set interactive. If necessary. Inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:

Switching devices	IGBT/MOSFET
Control	Microprocessor /DSP
Nominal AC output voltage and frequency	415V, 3 Phase, 50 Hz (In case single phase inverters are offered, suitable arrangement for balancing the phases must be made.)
Output frequency	50 Hz
Grid Frequency Synchronization range	+/- 5 Hz
Ambient temperature considered	-20° C to 50° C
Humidity	95 % Non-condensing
Protection of Enclosure	IP-20(Minimum) for indoor. IP-65(Minimum) for outdoor.
Grid Frequency Tolerance range	+/- 5 Hz
Grid Voltage tolerance	-0.20.15
No-load losses	Less than 1% of rated power
Inverter efficiency(minimum)	>93% (In case of 10 kW or above with in-built galvanic isolation) >97% (In case of 10 KW or above without in-built galvanic isolation)
Inverter efficiency (minimum)	> 90% (In case of less than 10 kW)
THD	< 3%
PF	> 0.9

- A. PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- B. The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power; inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.

- C. Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- D. Anti-islanding (Protection against Islanding of grid): The PCU shall have anti islanding protection in conformity to IEEE 1547/UL 1741/ IEC 62116 or equivalent BIS standard.
- E. Successful Bidders shall be responsible for galvanic isolation of Butterfly Solar LT panel.
- F. In PCU/Inverter, there shall be a direct current isolation provided at the output by means of a suitable isolating transformer. If Isolation Transformer is not incorporated with PCU/Inverter, there shall be a separate Isolation Transformer of suitable rating provided at the output side of PCU/PCU units.
- G. The PCU/ inverter generated harmonics, flicker, DC injection limits, Voltage Range, Frequency Range and Anti-Islanding measures at the point of connection to the utility services should follow the latest CEA (Technical Standards for Connectivity Distribution Generation Resources) Guidelines.
- H. The power conditioning units / inverters should comply with applicable IEC/ equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068-2 (1,2,14,30)/ Equivalent BIS Std.
- I. The MPPT units environmental testing should qualify IEC 60068-2 (1, 2, 14, 30)/ Equivalent BIS standard. The junction boxes/ enclosures should be IP 65 (for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.
- J. The PCU/ inverters should be tested from the MNRE approved test centre/ NABL/ BIS/ IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

PROTECTIONS

The system should be provided with all necessary protections like earthing, Lightning, and grid islanding as follows:

A. LIGHTNING PROTECTION

The SPV power plants shall be provided with lightning & overvoltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV

array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per NFC 17-102:2011 standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and suitable earthing such that induced transients find an alternate route to earth.

B. SURGE PROTECTION

Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and –ve terminals to earth (via Y arrangement).

C. EARTHING PROTECTION

Each array structure of the PV yard should be grounded/ earthed properly as per IS: 3043-1987. In addition the lightning arrester/masts should also be earthed inside the array field. Earth Resistance shall be tested in presence of the representative of Department/HDSCL as and when required after earthing by calibrated earth tester. PCU, ACDB and DCDB should also be earthed properly. Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential.

D. GRID ISLANDING:

In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as “Islands.” Powered Islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.

A manual disconnect 4-pole isolation switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel.

8. CABLES

Cables of appropriate size to be used in the system shall have the following characteristics:

- A. Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards
- B. Temp. Range: –100C to +800C
- C. Voltage rating 660/1000V
- D. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- E. Flexible
- F. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum (2%)

- G. For the DC cabling, XLPE or, XLPO insulated and sheathed, UV-stabilized single core multi-stranded flexible copper cables shall be used; Multi-core cables shall not be used.
- H. For the AC cabling, PVC or, XLPE insulated and PVC sheathed single or, multi-core multi-stranded flexible copper cables shall be used; Outdoor AC cables shall have a UV-stabilized outer sheath.
- I. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use. Outer sheath of cables shall be electron beam cross-linked XLPO type and black in color.
- J. The DC cables from the SPV module array shall run through a UV-stabilized PVC conduit pipe of adequate diameter with a minimum wall thickness of 1.5mm.
- K. Cables and wires used for the interconnection of solar PV modules shall be provided with solar PV connectors (MC4) and couplers
- L. All cables and conduit pipes shall be clamped to the rooftop, walls and ceilings with thermo-plastic clamps at intervals not exceeding 50 cm; the minimum DC cable size shall be 4.0mm² copper; the minimum AC cable size shall be 4.0 mm² copper. In three phase systems, the size of the neutral wire size shall be equal to the size of the phase wires.
- M. Cable Routing/ Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified. In addition, cable drum no. / Batch no. to be embossed/ printed at every one meter.
- N. Cable Jacket should also be electron beam cross-linked XLPO, flame retardant, UV resistant and black in color.
- O. All cables and connectors for use for installation of solar field must be of solar grade which can withstand harsh environment conditions including High temperatures, UV radiation, rain, humidity, dirt, salt, burial and attack by moss and microbes for 25 years and voltages as per latest IEC standards. DC cables used from solar modules to array junction box shall be solar grade copper (Cu) with XLPO insulation and rated for 1.1kV as per relevant standards only.
- P. The ratings given are approximate. Bidder to indicate size and length as per system design requirement. All the cables required for the plant shall be provided by the bidder. Any change in cabling sizes if desired by the bidder shall be approved after citing appropriate reasons. All cable schedules/ layout drawings shall be approved prior to installation.
- Q. Multi Strand, Annealed high conductivity copper conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armored cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BoS item / component Standard Description Standard Number
Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V, UV resistant for outdoor installation IS /IEC 69947.
- R. The total voltage drop on the cable segments from the solar PV modules to the solar grid inverter shall not exceed 2.0%.
- S. The total voltage drop on the cable segments from the solar grid inverter to the building distribution board shall not exceed 2.0%.

9. TOOLS & TACKLES AND SPARES:

- A. After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the bidder for maintenance purpose. List of tools and tackles to be supplied by the bidder for approval of specifications and make from HDSCL/ owner.
- B. A list of requisite spares in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes. Fuses, MOVs / arrestors, MCCBs etc. along with spare set of PV modules be indicated, which shall be supplied along with the equipment. A minimum set of spares shall be maintained in the plant itself for the entire period of warranty and Operation & Maintenance which upon its use shall be replenished.

10. DANGER BOARDS AND SIGNAGES:

Danger boards should be provided as and where necessary as per IE Act. /IE rules as amended up to date. Three signages shall be provided one each at battery –cum- control room, solar array area and main entry from administrative block. Text of the signage may be finalized in consultation with HDSCL/ owner.

11. DRAWINGS & MANUALS:

- A. Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. Bidders shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the power plant and power evacuation, synchronization along with protection equipment.
- B. Approved ISI and reputed makes for equipment be used.
- C. For complete electro-mechanical works, bidders shall supply complete design, details and drawings for approval to HDSCL/owners before progressing with the installation work

12. PLANNING AND DESIGNING:

The bidder should carry out Shadow Analysis at the site and accordingly design strings & arrays layout considering optimal usage of space, material and labor. The bidder should submit the array layout drawings along with Shadow Analysis Report to HDSCL/Owner for approval.

HDSCL reserves the right to modify the landscaping design, Layout and specification of sub-systems and components at any stage as per local site conditions/requirements. The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidder shall submit three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

13. DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT

- A. The Contractor shall furnish the following drawings Award/Intent and obtain approval
- B. General arrangement and dimensioned layout
- C. Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
- D. Structural drawing along with foundation details for the structure.
- E. Itemized bill of material for complete SV plant covering all the components and associated accessories.
- F. Layout of solar Power Array
- G. Shadow analysis of the roof

14. SAFETY MEASURES:

The bidder shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA guidelines etc.

2.1.3 Any agency / firm / Tenderers, shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Government of Karnataka and such bidders are not eligible for participating in the tender process.

2.1.4

- i) Contractor shall carry out all the activities required for the completion of the work in all respects and shall include all such items in the Un-priced Bill of Quantities to be furnished.
- ii) The unpriced Bill of Quantities will be considered only for the general assessment of the Tenderer and it shall not be deemed to contain all the items necessary for the successful completion of the work.
- iii) During execution, items other than indicated in the Unpriced Bill of Quantities, found required for completion of the work on turnkey basis shall be executed.
- iv) No extra payment on any account will be admissible for all essential components that are to be necessarily executed to complete the work in all respects.
- v) Provisional program for completion of various components of work shall be furnished.
- vi) Required drawings for any civil work and total electrical demand load to be indicated by the bidder.

2.1.5 Penalty for Delay

- a. After acceptance of the tender, *the competent authority HDSCL* shall issue a Letter of Acceptance (LoA) to the successful bidder. Within 21 days of issue of LoA successful bidder shall fulfill all the requirements as per LoA and enter into the Agreement with HDSCL. A Notice to Proceed will be issued by the HDSCL to the successful Tenderer to commence the work. The Contractor shall enter upon or commence any portion of work only with the written authority and instructions of the competent authority. Without such instructions the Contractor shall have no claim to demand for measurements of payment for work done by him.
- b. The time allowed for carrying out the work as entered in the tender shall be strictly observed by the Contractor. It shall be reckoned from the date of issue of Notice to Proceed to the Contractor. The work shall throughout the stipulated period of the Contract be proceeded with, with all due diligence (time being deemed to be the essence of the Contract on the part of the Contractor). To ensure good progress during the execution of the work, the Contractor shall be bound (in all cases in which the time allowed for any work exceeds one month) to comply with the time schedule according to the programme of execution of the work as agreed upon and enclosed to the Contract. The Contractor shall make Work Scheduling and furnish planned monthly stipulated financial and physical progress for assessment of Shortfall.
- c. The progress of works shall be reviewed by the competent authority with the Contractor.
- d. To the extent the shortfall is assessed, as due to the delay on the part of the Contractor a notice shall be issued to Contractor by the competent authority or his authorized representative to make up the shortfall in the succeeding month. If the shortfall is not made up before the next review of progress of the work, the Contractor shall be liable to pay penalty as indicated below.
- e. In respect of the shortfall in progress, assessed as due to the delay on the part of Contractor the Contractor shall be liable to pay as penalty for an amount equal to

0.1% (zero point one percent) of the quoted capital cost of the balance work assessed according to the programme, for every day that the due quantity of work remains incomplete provided always that the total amount of penalty to be paid under the provisions of this clause shall not exceed 10% (ten percent) of the value of the Capital cost during implementation phase. (or progress achieved with in the stipulated or extended time completion). The penalty so recovered may be refunded if the short fall in progress is made good by the contractor with in stipulated or extended time of completion.

The LD will be levied only if delay is attributable to Contractor. If there is delay in progress due to the reasons attributable to Employer, no LD shall be levied on Contractor.

The payment or deduction of such damages will not relieve The Contractor from his obligation to complete the work or any of his obligation and liabilities under the contract.

f. In the event of any of the above courses being adopted by the Engineer, the Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased, or procure any materials, or entered into any engagements, or made any advances on account of, or with a view to the execution of the work and the performance of the Contract. And in case the Contract shall be rescinded under the provision aforesaid, the Contractor shall be entitled to recover or be paid any sum for any work there of actually performed by him under this Contract, if the Competent authority has certified in writing the performance of such work and the amount payable in respect thereof.

2.1.6 Liquidated Damages for Delay in Completion:

If the work is not completed within the Scheduled time period, then liquidated damages for the whole of the works @ 1 % (one Percent) per week of the capital cost of the balance work.

The LD will be levied only if delay is attributable to Contractor. If there is delay in progress due to the reasons attributable to Employer, no LD shall be levied on Contractor.

The payment or deduction of such damages will not relieve The Contractor from his obligation to complete the work or any of his obligation and liabilities under the contract.

2.1.7 Penalty and liquidated damages applicable concurrently

However, in the situation where both the above clauses becomes applicable together, the total of liquidated damages and penalty for delay shall be limited to 10% of the total value of the contract (Reduced from a total percentage of 20% i.e. a maximum of 10% penalty for delay and 10% for liquidated damages)

2.1.8 Priced Bill of Quantities

The successful Tenderer on award of LoA shall submit a break up for priced Bill of Quantities, to form the basis for a mutually agreed interim payment schedule between the successful Tenderer and HDSCL.

2.1.8 Force Majeure

If either party is prevented from the performance of its obligations in whole or in part for reasons of Force Majeure, viz., acts of God, acts of Government, acts of public enemy, war, hostility, civil commotion, sabotages, fire floods, explosions, epidemics, then provided notice of happening of any such eventuality is given by the affected party to the other party within 45 days from the date of occurrence and cessation of the Force Majeure, the period of Force Majeure shall be excluded accordingly. If force majeure event(s) continue beyond the period of six months the parties shall hold consultation to decide on further course of action. Neither party can claim any compensation from the other party on account of force majeure.

2.1.9 General and local conditions of Site

The Tenderer is advised to visit the site of work in order to acquaint himself with all the connected information for the proper execution of the work. The work covered under this tender has been detailed under the 'Scope of Works'.

- a. The Tenderer shall satisfy himself as to the nature and location of the work, the general and local conditions, particularly those having bearing on transportation, disposal, handling and storage of materials, availability of labour, water, electricity, roads, and the configuration and conditions of the grounds and details of storm water drains and flow characteristics, the character, quality and quantity and of surface and sub-surface materials to be encountered, including the hard rock levels, sub soil water levels, utility crossings, the character of equipment and facilities needed preliminary to and during the progress of the work and all other matters, which can, in any way, affect the work or the cost existing traffic condition and the requirements for traffic diversion during construction stage.

Tenderers must satisfy themselves by personal examination of the site of the proposed work by examination of plans and specifications and by other means as they prefer as to the accuracy of all conditions affecting the work and shall not at any time, after the submission of their tender, dispute or complain, nor assert that there was any misunderstanding in regard to the nature or amount of the work to be done nor in consequence apply for extension of time for completion beyond the agreement date for successful performance of the work as per the HDSCL's requirement. It is to be clearly understood that the amount quoted by the Tenderer shall cover all such contingencies and nothing extra on any account whatever shall be paid.

- b. No. accommodation is available at the site of work for office, residence, labour, store etc., and the Contractor has to make his own arrangement and no claim whatsoever shall be paid.
- c. The Contractor shall make his own arrangement for the disposal of the excavated earth and debris from the works to such place where the same shall not cause nuisance and should be acceptable to the authorities concerned.
- d. The execution of any items of work where any incidental work is actually required but not specifically stated in the tender, it is to be understood that the amount quoted by the Contractor shall cover such charges also and nothing extra on account of such incidental charges, if any, shall be paid.
- e. The Contractor shall make his own arrangement at his own cost for the provision of telephone facilities at the site of works.
- f. The Contractor shall make his own arrangement for electricity supply and water during execution. However, the HDSCL will assist the Contractor to get temporary electric connections from HESCOM and the cost of connection and electric charges shall be borne by the Contractor. The HDSCL shall in no way be responsible for any delay in getting the electric connection and no claim on this account whatever, shall be entertained. It should be clearly understood that the Contractor has to make his own arrangement for generators for use before the electric connection is secured by him and also to be used as a stand by arrangement in case of power failure etc. or in the case of disconnections of electric supply by HESCOM for any reason.

2.1.10 Contractor's general responsibilities

- a. The Contractor shall with due care and diligence execute and complete the

works and remedy any defects there in accordance with the provisions of the contract. The Contractor shall provide all superintendence, labour, materials, plant, Contractor's equipment and all other things, whether of a temporary or permanent nature, required in and for such design, execution, completion and remedying of any defects, so far as the necessary for providing the same is specified in or is reasonably to be inferred from the Contract.

b. All operations of the Contractor shall be confined to areas authorized by the Engineer-in-charge and the storage of materials shall be over sites specifically indicated by the Engineer-in-charge. The Contractor shall be obliged to keep the premises in hygienic conditions by proper drainage of the area, provide with suitable approaches, throughout the period of contract. Contractor shall rectify all damages caused to Government property within area thus allotted. Contractor shall be responsible to clear away all rank vegetation at site at his own cost.

c. It shall be the Contractor's responsibility to transport all equipment and materials to the job site at his own expense. The Contractor shall use only established roadways or construct and use such temporary roadways as may be necessary and approved by the Engineer Member. When it is necessary to protect kerbs or sidewalks, the Contractor shall provide protection against damage. Any damage caused to roads, kerbs, sidewalks etc., shall be repaired by the Contractor at his own cost.

2.1.11 Contractor's superintendence

a. The Contractor shall provide all necessary superintendence during the execution of the works and as long thereafter as the Engineer may consider necessary from the proper fulfilling of the Contractor's obligations under the Contract. In the event of approval for employment of sub-Contractor, or a competent and authorised representative is withdrawn by the Engineer, the Contractor shall give his whole time to the superintendence of the works. Such authorised representative shall receive, on behalf of the Contractor, instructions from the Engineer.

b. If approval of the representative is withdrawn by the Engineer, the Contractor shall, as soon as practicable, having regard to the requirement of replacing him as herein after mentioned, after receiving notice of such withdrawal, remove the representative from the works and shall not thereafter employ him again on the works in any capacity and shall replace him by another representative approved by the Engineer.

2.1.12 Care of works

The Contractors shall take full responsibility for the care of the works and materials and plant for incorporation therein from the commencement date until the expiry of Operation and Maintenance for the whole of the works, when the responsibility for the said care shall pass to the Employer. Provided that:

a. If the Engineer issues a taking over certificate for any section or part of the permanent works, the Contractor shall cease to be liable for the care of that section or part from the date of expiry of Operation and Maintenance Period, when the responsibility for the care of that section or part shall pass to the Employer, and

b. The Contractor shall take full responsibility for the care of any outstanding works and materials and plants for incorporation there in which he undertakes and finish during the Operation and Maintenance period until such outstanding works have been completed.

2.1.13 Responsibility to rectify loss or damage

If any loss or damage happens to the works or any part thereof, or materials or plant for incorporation therein, during the period for which the Contractor is responsible for the care thereof, from any cause whatsoever, the Contractor shall, at his own cost, rectify such loss or damage so that the permanent works conform

in every respect with the provisions of the Contract to the satisfaction of the Engineer. The Contractor shall also be liable for any loss or damage to the works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations.

2.1.14 Avoidance of damage to roads

The Contractor shall use every reasonable means to prevent any of the roads, bridges communicating with or on the routes to the site from being damaged, injured by any traffic of the Contractor or any of his sub-Contractors and in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of materials, plant, Contractor's equipment or temporary works from and to the site shall be limited, as far as reasonably possible, and so that no unnecessary damage or injury may be occasioned to such roads and bridges.

2.1.15 Transport of Contractor's equipment or temporary works

a. The Contractor shall be responsible for and shall pay the cost of strengthening any bridges or altering or improving any road communicating with or on the routes to the site to facilitate the movement of Contractor's equipment or temporary works and the Contractor shall indemnify and keep indemnified the Employer against all claims for damage to any such road or bridge caused by such movement, including such claims as may be made directly against the Employer, and shall negotiate and pay such claims arising solely out of such damage.

b. If it is found necessary for the Contractor to move one or more loads of heavy constructional plant and equipment, materials or pre-constructed units or parts of units of work over roads, highways, bridges on which such oversized and overweight items are not normally allowed to be moved, the Contractor shall obtain prior permission from the concerned authorities. Payments for complying with the requirements, if any, for protection of or strengthening of the roads, highways or bridges shall be made by the contractor and such expenses shall be deemed to be included in his tender rates, and/ or Contract Price.

2.1.16 Transportation of materials or plant

Any damage occurs to any bridge or roads communicating with or on the routes to the site arising from the transport of materials or plant, the Contractor shall notify the Engineer with a copy to the Employer, as soon as he becomes aware of such damages or as soon as he receives any claims from the authority entitled to make such claim. Where under any law or regulation the hauler of such materials or plant is required to indemnify the road authority against damage, the Employer shall not be liable for any cost or charges or expenses in respect thereof or in relation thereto. In other cases, the Employer shall negotiate the settlement of and pay all sums due in respect thereof and in respect of all claims, proceedings, damages, costs, charges and expenses in relation thereto. Provided that if and so far as any such claim or part thereof is, in the opinion of the Engineer, after due consultation with the Employer and the Contractor, to be due to such failure shall be recoverable from the Contractor by the Employer and may be deducted by the Employer from any monies due or to become due to the contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer. Provided also the Employer shall notify the Contractor whenever a settlement is to be negotiated and, where any amount may be due from the Contractor, the Employer shall consult with the Contractor before such settlement is agreed.

2.1.17 Engagement of staff and labour

a. The Contractor shall make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

b. The Contractor shall, at all times during the continuance of the Contract, comply fully with all existing acts, regulations and by laws including all statutory amendments and re-enactment of State or Central Government and other local

authorities and any other enactments, notifications and acts that may be passed in future either by the State or the Central Government or local authority, including Indian Workmen's Compensation Act, Contract Labour (Regulation and Abolition) Act 1970 and Equal Remuneration Act 1976, Factories Act, Minimum Wages Act, Provident Fund Regulations, Employees Provident Fund Act, schemes made under the same act, Employees' State Insurance and also Labour Regulations, Health and Sanitary Arrangement for Workmen, Insurance and other benefits and shall keep Employer indemnified in case any action is commenced by competent authorities for contravention by the Contractor. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated hereforth on the part of the Contractor, the Engineer shall have the right to deduct from any monies due to the Contractor, his amount of security deposit or recover from the Contractor personally any sum required or estimated to be required for making good the loss or damages suffered by the Employer.

2.1.18 Inspection of Works

The Officer/ Officers of the HDSCL (or) any other agency authorised by the HDSCL for project management shall have the power to inspect the work and issue directions to Contractor to have proper control over the works in the interest of the HDSCL.

2.1.19 Deviations

- a. The HDSCL may order any alterations, additions to or omissions from the work as described in the tender documents (including change in the lines, levels, positions and dimensions of any part of the work) that may in its opinion be necessary and for that purpose it shall have power to order the Contractor and the Contractor shall carry out the same. No alteration, addition or omission shall vitiate this contract.
- b. The Engineer Member will have the right to get any item of work whether included in the tender or not executed through other agencies.
- c. The payments for deviation shall be paid at the rates quoted in the BOQ if the deviation is similar to that of any item of BOQ are the Competent authority shall fix the rate as per market rates on the actual basis.

2.1.20 Royalties

Except where otherwise stated, the Contractor shall pay all tonnage and other royalties, taxes, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the works and shall be deemed to be included in the quoted price.

2.1.21 Materials

a. General

- i. The contractor shall, at his own expense, provide all materials required for the works.
- ii. All materials to be provided by the Contractor shall be conformity with the specifications laid down in the contract and the Contractor shall, if required by the "**Engineer-in-charge or Engineer's Representative**", furnish proof about suitability to the satisfaction of the HDSCL/Engineer's Representative.
- iii. The HDSCL, its officials and the "**Engineer-in-charge or Engineer's Representative**" concerned with the contract shall be entitled at any time to inspect and examine any materials intended to be used in or on the works, either on the site or at factory or workshop or other place (s) where such materials are assembled, fabricated or manufactured or at any place (s) where these are lying or from which these are being obtained and the

contractor shall give such facilities as may be required for such inspection and examination.

iv. No material brought to the site shall be removed off the site without the prior approval or the Engineer's Representative.

a. Storage

Materials required for the works whether brought by the Contractor or supplied by the HDSCL shall be stored by the Contractor only at places approved by the HDSCL. Storage and safe custody of materials shall be the responsibility of the Contractors.

b. Defective Materials

i. Any materials used on work without prior inspection and where testing is necessary and without approval of the Engineer's Representative" is liable to be considered unauthorized and defective.

ii. The "Engineer's Representative" shall have full powers for getting removed any or all of the materials brought to site by the Contractor that are not in accordance with the contract specifications or do not conform in character or quality to the samples approved by him.

iii. The "Engineer's Representative" shall have full powers to require other proper materials to be substituted for rejected materials and in the event of the Contractor refusing to comply, he may cause the same to be supplied by other means at the cost of the Contractor.

2.1.22 Defects liability Period including routine maintenance

During the Defect liability period (DLP) of 1 year, contractor shall maintain the project area at his own cost. Payment will not be made from HDSCL towards the maintenance.

During the Operation & Maintenance period for next 4 years after completion of DLP, contractor shall maintain the project area with rates quoted/rationalized.

2.1.23 Completion of outstanding work and remedying defects

To the intent that the works shall, at or as soon as practicable after the expiration of the Operation and Maintenance Period, be delivered to the Employer in the conditions required by the Contract, fair wear and tear expected, to the satisfaction of the Engineer, the Contractor shall:

a. Complete or cause to complete the work, if any, outstanding on the date stated in the Taking-Over Certificate as soon as practicable after such date and

b. Execute all such work of amendment, reconstruction, and remedying defects, shrinkages or other faults as the Engineer may, during the Operation and Maintenance Period or within 14 days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to its expiration, instruct the Contractor to execute.

2.1.24 Cost of remedying defects during defect liability period and during Operation and Maintenance.

All work shall be executed by the Contractor at his own cost if the necessary there of is, in the opinion of the Engineer due to:

a. The use of materials, plant or workmanship not in accordance with the Contract, or

b. Where the Contractor is responsible for the design of part of the permanent

- works, any fault in such design, or
- c. The neglect of failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor's part under the contract.

2.1.25 Defects Liability Certificate

The Contract shall not be considered as completed until a Defects Liability Certificate shall have been signed by the Engineer and delivered to the Employer, with a copy to the Contractor, stating the date on which the Contractor shall have completed his obligations to execute and complete the works and remedy any defects therein to the Engineer's satisfaction. The Defects Liability Certificate shall be given by the Engineer within 28 days after the expiration of the Defects Liability Period, or if different defects liability periods shall become applicable to different sections or parts of the permanent works, the expiration of the rest of such period, or as soon as there after as any works instructed, have been completed to the satisfaction of the Engineer.

2.1.26 Settlement of Disputes – Time Limit

All disputes arising out of or in connection with this contract, not settled by amicable settlement, shall be finally referred to the Deputy Commissioner (DC) of the district. Upon such reference the DC shall attempt to amicably resolve the dispute within (60) days. If the dispute is not settled in the first appeal, it shall be referred with the Managing Director, KUIDFC, Govt. of Karnataka (GoK) who shall be the sole arbitrator, who will conduct the proceedings in accordance with procedures prescribed under Arbitration and Conciliation Act 1996, of India and or its latest amendments if any. The decision of Managing Director, KUIDFC, shall be binding on either party. If the dispute is not amicably settled within 60 (Sixty) days from the date of reference to Deputy Commissioner (DC) or 120 (One Hundred and Twenty) days from the date of reference to Managing Director, KUIDFC, either party may refer the dispute to the Court of Law. The Courts at Hubballi Dharwad shall have jurisdiction over such disputes.

2.1.27 Legal Action Conditions of Contract with the Contractor are fully applicable to the Contractors/Sub-Contractors. In case of default or non-compliance thereof, the Employer may take independent appropriate legal action as per the Contract Agreement with the Contractor/ Sub- Contractor. The Contractor however shall be directly liable to HDSCL for any failure/ non-compliance of contract stipulations by the Contractor/ Sub Contractor, and liable to all legal actions, damages, compensation to HDSCL as per Conditions of Contract, irrespective of the results of their legal actions taken on the Contractors/ Sub Contractors.

2.1.28 Damage to persons and property

The Contractor shall indemnify the Employer against all losses and claims in respect of:

- a. Death of or injury to any person, or
- b. Loss of or damage to any property including the works, which may arise out of or in consequence of execution and completion of the works and remedying of any defects therein, and against all claims, proceedings,

damages, costs, charges and expenses what so ever in respect thereof or in relation thereto.

2.1.29 Safety, Security and Protection of the environment

The Contractor shall, through out the execution and completion of the works and the remedying of any defects therein:

- a. Have full regard for the safety of all persons entitled to be upon the site and keep

the site (so far as the same is under his control) and the works(so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons,and

- b. Take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.
- c. Barricading and safety requirements are very important aspects. The above provisions shall be followed strictly and at no time the construction/excavation area are to be left unbarricaded or without red lamps during the hours or darkness. Failure to comply with the requirements mentioned in the preceding paragraphs shall be deemed to be breach of the contract on the part of the Contractor for which the Contractor shall be liable for action under relevant clauses/conditions of the agreement. In addition to other actions being taken for such breach of contract, the Contractor shall be liable to pay a compensation @ Rs. 1000/- per Sq. meter of area left unbarricaded.

2.1.30 Safety of workers

In respect of all labour directly or indirectly employed in the work. for the performance of the Contractor's part of this agreement, the Contractor shall at his expense arrange for the safety provisions as per: Indian Standard Safety codes shown below and shall at his own expense provide for all facilities in connection there with. In case the Contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay penalty prescribed under relevant clauses of these tender documents for each default and in addition the Engineer Member shall be at liberty to make arrangement and provide facilities as aforesaid and recover the cost incurred on that behalf from the

- Contractor, and no claims what so ever shall be entertained.
- a. BIS: 3696 (Part-I) -1966 Safety Code for scaffolds and ladders.
 - b. BIS: 3696 (Part-II)- 1966 Safety code for scaffolds and ladders Part II
 - c. BIS: 3764 – 1966 Safety code for excavation work.
 - d. BIS: 4081 – 1967 Safety code for blasting and drilling operations.
 - e. BIS: 4138 – 1977 Safety code for working in compressed air.
 - f. BIS: 5121 Safety code for piling and other deep foundations
 - g. BIS: 5916 – 1970 Safety codes for construction involving use of hot bituminous materials.
 - h. BIS: 7293 – 1974 Safety code for working with construction machinery
 - i. BIS: 7969 – 1975 Safety code for storage and handling of building materials.
 - j. Indian Electricity Rules 1956.
 - k. Any other code and/ or as per directions of Engineer Member.

The site personnel shall take proper safety precautions by wearing helmets, safety boots, gloves, safety shoes, etc. and also display warning boards, warning lights, etc. at site. At the time of constructions, Contractor shall embed all electrical / other fixtures like base plates, brackets, and conduits etc. for street lighting etc. as per the directions of the Engineer-in-charge. Nothing extra what so ever will be payable on this account.

2.2 Number of Proposals

Each Bidder shall submit only one (1) Proposal. Any Bidder, who submits or participates in more than one Proposal, shall be disqualified.

2.3 Proposal Preparation Cost

The Bidder shall be responsible and shall pay for all of the costs associated with the preparation of his proposal and his participation in the bidding process. HDSCL will not be responsible or liable in any way for such costs, regardless of the conduct or outcome of the bidding process.

2.4 Project Inspection and visit to the Project Property

2.4.1 It is desirable that each Bidder submits his proposal after visiting the Project site and ascertaining for himself at his own cost the location, surroundings, or any other matter considered relevant by him for the successful completion and commissioning of the project including infrastructural works of civil, electrical required for the successful completion of the project.

Prior to submitting his tender for the work, the tenderer shall visit and examine the site of works and its surroundings at his own expense and obtain and ascertain for himself on his own responsibility, all information that may be necessary for preparing his tender and entering into a contract including the actual nature and conditions of site, availability of material, labour, probable for labour camps, stores etc, and the extent of lead and lift required for execution of work after taking into consideration obstructions in work, if any, and allow for all such extras likely to be incurred in the quoted contract for the work. The Tenderer is advised to obtain all necessary information as to risks, contingencies and all other circumstances which may influence or affect his tender before the submission of his tender.

The Tenderer shall be deemed to have full knowledge of the site, irrespective of whether he inspects it or not, and no extra charges consequent on any misunderstanding or otherwise shall be allowed.

2.4.2 It would be deemed that by submitting the Proposal, that he has:

- a. Made a complete and careful examination of the RFP Document, and

- b. Received all relevant information requested from HDSCL and
- c. Made a complete and careful examination of the various aspects of the Project including but not limited to:
 - (i) The property (Project Site);
 - (ii) Existing facilities and structures if any;
 - (iii) The conditions of the access roads and utilities in the vicinity of the Project Site;
 - (iv) Conditions affecting transportation, access, disposal, handling and storage of materials;
 - (v) Clearances to be obtained for the Project; and
 - (vi) All other matters that might affect the part of the Bidder's performance under the terms of this RFP document.

2.4.3 HDSCL shall not be liable for any mistake or error or omission on the part of the Bidder in respect of the above.

2.5 Right to Accept or Reject any of the Proposals

Notwithstanding anything contained in this RFP, HDSCL reserves the right to accept or reject all proposals or to annul the bidding process or reject all proposals, at any time without any liability or any obligation for such rejection or annulment, without assigning any reasons.

HDSCL reserves the right to reject any Proposal if:

- (a) At any time, a material misrepresentation is made or discovered, or
- (b) The Bidder does not respond promptly and diligently to requests for supplemental information required for the evaluation of the Proposal

Rejection of the Proposal by HDSCL as aforesaid would lead to the disqualification of the Bidder. If such disqualification / rejection occurs after the Proposals have been opened and the Successful Bidder gets disqualified / rejected, then HDSCL reserves the right to:

- a. Either invite the next best Bidder to match the proposals submitted by the Successful Bidder;

OR

- b. Take any such measure as may be deemed fit in the sole discretion of HDSCL, including annulment of the bidding process.

B. Documents

2.6 Contents of RFP

The contents of RFP may additionally include Addenda issued in accordance with class 2.7

2.7 Amendment of RFP

2.7.1 At any time prior to the Proposal Due Date, HDSCL may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the RFP Document by the issuance of Addenda.

2.7.2 Any Addendum thus issued will be posted on the web site for the information of all who have purchased the RFP Document.

2.7.3 In order to provide the Bidders reasonable time to examine the Addenda, or for any other reason, HDSCL may, at its own discretion, extend the Proposal Due Date. Such extension would be notified on the web site for the information of those who have purchased the RFP Document.

2.8 Clarifications

Prospective Bidder requiring any clarification on the RFP document may notify HDSCL in writing. The Bidders should send in their queries three days in advance to pre-bid meeting.

Preparation and Submission of Proposal

- i) Contractor to carry out all the items required for Design Supply Installation Transportation Testing AND COMMISSIONING OF OFF-GRID BUTTERFLY SOLAR OF 6.25KVA (5KWP Three phase, Off Grid) and 3YEARS OF OPERATION AND MAINTANANCE ON DBOT (DESIGN BUILT OPERATE AND TRANSFER) AT TOLANKERE FOR HUBBALLI DHARWAD SMART CITY, shall include all such items in the unpriced Bill of Quantities.
- ii) No extra payment on any account will be admissible for all essential components that are to be necessarily executed to complete the work in all respects.

2.9 Language and Currency

2.9.1. The Proposal and all related correspondence and document should be written in the English language. Supporting documents and printed literature furnished by Bidder with the Proposal may be in any other language provided they are accompanied by appropriate translations of the pertinent passages into the English language. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Proposal, the English language translation shall prevail.

2.9.2 The currency for the purpose of the Proposal shall be the Indian Rupee (INR).

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2.10 Bid Security (Earnest Money Deposit)

2.10.1 The supplier/contractor can pay the Earnest Money Deposit (EMD) in the e-Procurement portal using any of the following payment modes:

- 1 Credit Card
- 2 Direct Debit
- 3 National Electronic Fund Transfer (NEFT)
- 4 Over the Counter (OTC)

OTC payment procedure

If a contractor/supplier chooses to make payment of EMD/tender processing fees Over The Counter (OTC) in any of the designated Bank branches listed in the e-Procurement web-site (www.eproc.karnataka.gov.in), the contractor/supplier will need to log into e-Procurement system, access the tender for which bid is being created and then select the OTC option under the payment section and print the Challan shown in that section. The printed challan will have the unique bid reference number and the amount to be remitted. Along with the challan, contractor can choose to make the payment either in the form of cash or in the form of Demand Draft. Cheque payments will not be accepted. The contractor is requested to specifically inform the bank officer to input the unique bid reference number printed in the challan in the banking software. Upon successful receipt of the payment, the bank will provide a 16-digit reference number acknowledging the receipt of payment. This 16-digit reference number has to be inputted by contractor in the payment section of its bid as payment confirmation before the bid is submitted (i.e.) as a pre-requisite for bid submission.

NEFT payment procedure

If a contractor/supplier chooses to make payment of EMD/tender processing fees using Reserve Bank of India's (RBI) National Electronic Fund Transfer (NEFT) system, the contractor/supplier will need to log into e-Procurement system, access the tender for which bid is being created and then select the NEFT option under the payment section and print the Challan shown in that section. The printed challan will have the unique bid reference number, account details of Government of Karnataka and the

amount to be remitted. The contractor has to submit the printed challan to its bank-branch (NEFT-enabled) and request for an account-to-account transfer, wherein the money will get transferred from the contractor's bank account to GoK's bank account. The contractor should ensure that NEFT transfer instructions are executed and the funds are wired to the Government of Karnataka's principal account before the last date for bid submission and preferably 24 hours before the last date for bid submission. If the contractor's bank transfers/wires the money after the last date for bid submission, the contractor's bid will be liable for rejection. Upon executing the transfer, the contractor's bank will provide a reference number generated by NEFT software as confirmation of transfer, which has to be inputted by contractor in the payment section of its bid as payment confirmation before the bid is submitted (i.e.) as a pre-requisite for bid submission. Also, the account number from which the funds were transferred have to be inputted in the e-Procurement system as part of its bid.

The supplier/contractor's bid will be evaluated only on confirmation of receipt of the payment (EMD) in the Government of Karnataka central pooling a/c.

EMD amount will have to be submitted by the supplier/contractor taking into account the following conditions:

The supplier/contractor's bid will be evaluated only on confirmation of receipt of the payment (EMD) in the Government of Karnataka central pooling a/c, amount will have to be submitted by the supplier/contractor taking into account the following conditions:

- a. EMD will be accepted only in the form of electronic cash (and not through Demand Draft or Bank Guarantee) and will be maintained in the Govt.'s central pooling account until the contract is closed.

The entire EMD amount for a particular tender has to be paid in a single transaction. For details on e-Payment services refer to e-procurement portal for more details on the process.

Refund of EMD

Based on the instructions of Tender Accepting Authority (TAA) the EMD amount of the unsuccessful bidders will be refunded to the respective Bank a/c's of the supplier/contractor registered in the e-Procurement system.

2.10.2 Deleted

- 21.3 Any tender not accompanied by an acceptable earnest money deposit and not secured as indicated in Sub-Clauses 2.10.1 and 2.10.2 above shall be rejected by the Employer as non-responsive.
- 21.4 The earnest money deposit of unsuccessful Tenderers will be returned within 30 days of the end of the tender validity period specified in Sub-Clause 2.11
- 21.5 The earnest money deposit of the successful Tenderer will be discharged when the Tenderer has signed the Agreement and furnished the required Performance Security.
- 21.6 The earnest money deposit may be forfeited:

- (a) if the Tenderer withdraws the Tender after tender opening during the period of tender validity;
- (b) if the Tenderer does not accept the correction of the Tender Price, pursuant to RFP Clause; or
- (c) in the case of a successful Tenderer, if the Tenderer fails within the specified time limit to
 - (i) sign the Agreement; or
 - (ii) furnish the required Security deposit
 if the documents submitted by the Tenderer found to be misleading/forged or fake

2.11 Validity of Proposal

Proposal shall remain valid for a period not less than One Hundred Eighty (180) days from the Proposal Due Date (Proposal Validity Period). HDSCL reserves the right to reject any Proposal, which does not meet this requirement.

2.12 Extension of Validity of Proposal

In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the Tenderers may extend the period of validity for a specified additional period. The request and the Tenderers' responses shall be made in writing or by cable. A Tenderer may refuse the request without forfeiting his earnest money deposit. A Tenderer agreeing to the request will not be required or permitted to modify his tender.

2.13 Format and Signing of Proposal

2.13.1 The Bidder would provide all the information as per this RFP. HDSCL would evaluate only those Proposals that are received in the required format and are deemed complete in all respects.

2.13.2 The Proposal shall be submitted in two parts as follows:

- I. Part 1 containing
 - a) Letter of Proposal together with Bid Response Sheets Nos. 1, 2 (As per format set out in Appendix C)
 - b) Power of attorney (as per format set out in appendix B)
 - c) Eligibility criteria
 - d) Technical proposal including details of Projects Production and all specification / Drawings required for operationalizing this project including Un-priced Bill of Quantities.
 - e) Programme for completion of the work
 - f) Terms of payment
- II. Part 2 containing
 - a) The Price Schedule (as per format enclosed in Appendix D).
 - b) The Price Schedule shall not exceed Rs.500 lakhs.

2.13.3 Each of Part I and Part II proposal shall be submitted as per requirement of e-procurement proposal.

2.14 Submission of RFP

2.14.1 The bids shall be submitted through Government of Karnataka e-Procurement Platform www.eproc.karnataka.gov.in only

2.15 Proposal Due Date

2.15.1 Proposal shall be submitted before 16:00 hours IST on the Proposal due Date mentioned in the Schedule of Bidding Process, in the manner and form as detailed in this RFP. Proposals submitted by either facsimile transmission or telex will not be acceptable.

2.15.2 HDSCL may, in exceptional circumstances and at its sole discretion, extend the Proposal Due date by issuing an addendum in accordance with Clause 2.7 uniformly for all Bidders.

2.16 Late Proposals

In online e-procurement system, you shall not be able to submit the bid after the bid submission time and date as the icon or the task in the e-procurement portal will not be available.

2.17 Modifications/ Substitution/ Withdrawal of Proposals

2.17.1 Tender has all the time to modify and correct or upload any relevant document in the portal till Bid submission date and time, as published in the e-procurement portal.

D. Evaluation of Proposal

2.18 Technical Evaluation

2.18.1 The Employer will open online Technical Bid (First Cover) of all the Tenders received through e-procurement portal, in the presence of the Tenderers or their representatives who choose to attend at the date, time and the venue specified in the e-procurement portal. In the event of the specified date of Tender opening being declared a holiday for the Employer, the Tenders will be opened at the appointed time and location on the next working day.

2.18.2 The Tenderers names, the presence or absence of earnest money deposit (amount, format), the submission of qualification information and such other information as the Employer may consider appropriate will be announced by the Employer at the opening.

2.18.3 The Employer shall prepare minutes of the Tender opening, including the information disclosed to those present in accordance with Sub-Clause 2.18.2

2.18.4 HDSCL would subsequently examine and evaluate Proposals in accordance with the criteria as per the procedure set out in Clause 2.22.

2.18.3 HDSCL reserves the right to reject any Proposal, if:

(a) At any time, a material misrepresentation is made or discovered;

Or

(b) The Bidder does not respond promptly and diligently to requests for supplemental information required for the evaluation of the Proposal

2.19 Confidentiality

Information relating to the examination, clarification, evaluation and recommendation for the Bidders shall not be disclosed to any person not officially concerned with the process. HDSCL will treat all information submitted as part of Proposal in confidence and would require all those who have access to such material to treat the same in confidence. HDSCL will not divulge any such information unless it is ordered to do so by any authority pursuant to applicable law or order of a competent court or tribunal, which requires its disclosure.

2.20 Tests of Responsiveness

2.20.1 Prior to evaluation of Proposals, HDSCL will determine whether each Proposal is responsive to the requirements of the RFP. A Proposal shall be considered responsive if the Proposal:

- a. Not Applicable
- b. Is accompanied by the Power of Attorney as specified in Appendix B
- c. Is accompanied by Bid security as per clause 2.10
- d. Contains information in formats same as those specified in this document.
- e. Mentions the validity period as set out in Clause 2.11.

2.20.2 HDSCL reserves the right to reject any Proposal which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by HDSCL in respect of such Proposals.

2.21 Clarifications

To facilitate evaluation of Proposals, HDSCL may, at its sole discretion, seek clarifications in writing from any Bidder regarding his Proposal.

- The HDSCL would have the right to review the Proposals and seek clarifications where necessary. The response from the Bidder(s) shall only be in writing but no change in the substance of the Proposal would be permitted. It is clarified that Bidders are free to make suggestions but are not allowed to submit any conditional bid as specified earlier.

- The Proposal (Financial and Technical) should be unconditional and any conditionality attached with the proposal may result in the rejection of the Proposal
- 2.22.1 In Part 1 of the Proposal Evaluation, the Proposals shall be checked for responsiveness with the requirements of the RFP as per Clause 2.20.1. Only the Proposals which are considered responsive, shall be evaluated on the basis of Qualification Parameters set out in document. Only such bids shall be considered for further evaluation.
 - 2.22.2 Proposals meeting requirement under 2.22.1 would be evaluated based on the technical presentation made by the bidders.
 - 2.22.3 In part 2, only the Proposals of the bidders who successfully qualify in technical presentation in Part 1 would be opened and evaluated. The HDSCL thereafter shall select the preferred bidder.
 - 2.22.4 HDSCL may either choose to accept the Proposal of the Preferred Bidder or invite him for negotiations.
 - 2.22.5 Upon acceptance of the Proposal of the Preferred Bidder with or without negotiations, HDSCL shall declare the Preferred Bidder as the Successful Bidder.

2.22 Notifications

HDSCL will notify the Successful Bidder by facsimile and / or by a letter [Letter of Acceptance (LoA)] that his Proposal has been accepted.

2.23 Acceptance of Letter of Acceptance (LoA) and Execution of EPC Agreement

Within 20 days from the date of issue of the LoA, the Successful Bidder shall accept the LoA and return the same to HDSCL and shall also sign the Agreement after submitting required Performance Guarantee.

2.25. Securities

The Successful Bidder shall submit the following Performance Bank Guarantees at his own expense and submit unconditional and irrevocable Performance Bank Guarantee (PBG) to the Authority.

1. Implementation Performance Bank Guarantee (IPBG) shall be submitted within Twenty One (21) working days from the date of issuance of LOA, for an amount equivalent to 5% of the total Capital cost, towards the implementation Phase, valid for a period of 6 months or Until Commissioning date whichever is later.
2. Operational Performance Bank Guarantee (OPBG) shall be submitted to the authority prior to expiry of the IPBG at least 3 months in advance, towards the Operation Phase for an amount equivalent to 5% of the total contract amount, valid for a period of 5 years plus 60 days.

3. Additional Security shall be collected for all Tenders whose Tender Premium is negative beyond 10%, and no Additional Security shall be collected for all tenders whose Tender Premium is up to Minus 10%. Additional Security shall be collected only to the extent of negative premium beyond minus 10%). - ** Modified clause inserted vide circular no : ನಅಇ 410 ಸಮಸ 2017 Dated: 20.02.2018. The amount of Additional Performance Security shall be equal to difference in amount between amount put to tender and quoted amount by the successful bidder.
4. The performance security shall be in the form of the Bank Guarantee issued by Nationalized/Scheduled Bank in India as per form included in Section 6 (Employer's Requirements, Bank Guarantees and Certificates).
- 5 Release of Security

On satisfactory performance and completion of the order in all respects and duly certified to this effect by the Authority, Project Completion Certificate shall be issued and the IPBG would be returned to the Bidder after the receipt of OPGB an after deducting penalties, if any upon Commissioning of the plant.

OPBG would be returned to the bidder upon completion of O&M of the project in all respect at the end of 5 years plus 60 days after deducting penalties, if any.

3. CRITERIA FOR QUALIFICATION AND EVALUTION OF PROPOSALS

A. PART 1 – QUALIFICATION

3.1 Qualification Parameters

- 3.1.1 The Bidders competence, capability and eligibility are proposed to be established by the experience as a contractor
- 3.1.2 For this the Bidder would be required to meet the Qualification parameters as details in this Section 3.

3.2 Eligible Experience

B. PART 1: EVALUATION OF TECHNICAL BID

1. Engineering Procurement and Construction (EPC)
2. player or Channel partner of EPC player should executed and commissioned minimum 300MW of Solar rooftop in India with minimum 5 years of experience.
3. Channel partner of EPC player can participate the tender with authorization letter of EPC player.
4. Warranty and guarantee should provide by EPC player to customer.
5. EPC player should have manufacturing facility of Cell and Module manufacturing facility in Bangalore with minimum capacity of 1 MW.
6. EPC player/Channel partner of EPC player should have sales and service office in Hubli.

3.3 Qualification Criterion for Experience

- 3.3.1 Any Bidder, meet the parameters as mentioned in Clause 3.2 would be deemed to meet the qualification parameters
- 3.3.2 The Bidder shall furnish details of eligible experience as on the date of submission of the document as per bid Response Sheet No.2
- 3.3.3 The Bidder shall furnish adequate evidence to support its claim as per Appendix C Bid Response Sheet No .2

B. PART 2: EVALUATION OF PRICE SCHEDULE

3.4 Evaluation parameters

The Bidders should indicate their Price Schedule for the Project as per Appendix D. The evaluation will be done by the committee constituted by HDSCL as per Section 2.22 mentioned above..

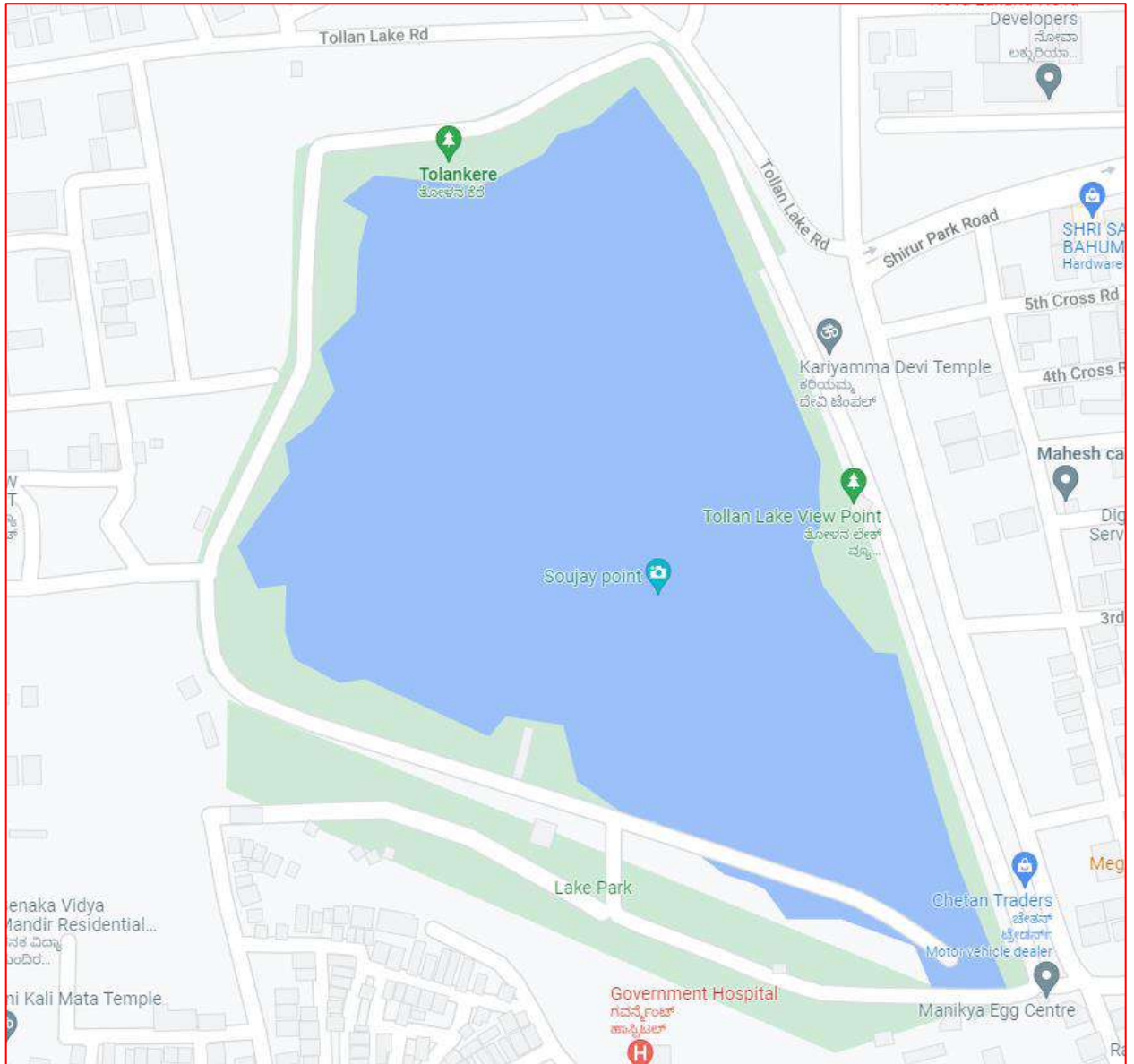
APPENDIX A

a) Terms of Payment

S. No	Milestone	Payment	Required Documentation for release of Payment
1	Signing of Contract between Operator and HDSCL	10% of the payment	Submission of Bank Guarantee
2	Approval of Design		Approved Design Drawings and Reports from competent authorities
3	Procurement of materials	20 % of payment	Physical verification of material procured as per approval by competent authorities
4	Installation and commissioning	20 % of payment	Construction clearance certificate and Physical verification of material installation as per approved drawings by competent authorities
5	Go-Live	30 % of payment	Work Completion certificate by HDSCL team after physical inspection and trial run in front of competent authorities

b) Location

TOLANKERE, Hubballi.



APPENDIX B

FORMAT FOR POWER OF ATTORNEY FOR SIGNING OF PROPOSAL

POWER OF ATTORNEY

Know all men by these presents. We (name and address of the registered office) do hereby constitute, appoint and authorize Mr/M/s(name and residential address who is presently employed with us and holding the position ofas our attorney to do in our name and on our behalf all the acts, deeds and things necessary in connection with or incidental to our bid for the project **“Design Supply Installation Transportation Testing AND COMMISSIONING OF OFF-GRID BUTTERFLY SOLAR OF 6.25KVA (5KWP Three phase, Off Grid) and 3YEARS OF OPERATION AND MAINTANANCE ON DBOT (DESIGN BUILT OPERATE AND TRANSFER) AT TOLANKERE FOR HUBBALLI DHARWAD SMART CITY”**, turnkey basis at tolankere,Hubballi with defect liability period of one year and maintenance of the system for three years including signing and submission of all documents and providing information/ responses to HDSCL representing us in all matters before HDSCL,and generally dealing with HDSCL in all matters in connection with our bid for the d\said project (s). We here by agree to ratify all acts; deeds and things lawfully done by our said attorney pursuant to this power of attorney shall and shall always be deemed to have been done by us.

For

 (Signature)

Accepted **(Name of the Title and Address)**

..... (Signature)
(Name title and address of the attorney)

Note.

- The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants (s) and when it is so required the same should be under common seal. Affixed in accordance with the required procedure. The power of attorney should be on a stamp paper of appropriate value.
- Also, whenever required, the bidder should submit for verification the extract of the charter document and documents such as a resolution / power of.

Attorney in favor of the person executing this power of attorney for the delegation of power hereunder on behalf of the Bidder.

APPENDIX C

LETTER OF PROPOSAL

On the letter head of the Bidder

Date:

To

Hubballi Dharwad Smart City Limited,
CSS No. 122/124, HDMC Samskrutika
Bhavan, 1st Floor, New Cotton Market
Road, Hubballi – 580029
Ph: 0836 – 2355331
Email : smartcityhubballidharwad@gmail.com

Ref: Design Supply Installation Transportation Testing AND COMMISSIONING OF
OFF-GRID BUTTERFLY SOLAR OF 6.25KVA (5KWP Three phase, Off Grid)
and 3YEARS OF OPERATION AND MAINTANANCE ON DBOT (DESIGN
BUILT OPERATE AND TRANSFER) AT TOLANKERE FOR HUBBALLI
DHARWAD SMART CITY,.

Madam/Sir,

Being duly authorized to represent and act on behalf of.....
(Herein after referred to as “the Bidder”), and having reviewed and fully understood all
of the qualification requirements and information provided, the undersigned hereby
apply for qualification for the project referred above.

We are enclosing both parts of our Proposal in one original plus two (2) copies, with the
details as per the requirements of the RFP, for your evaluation.

We confirm that our Proposal is valid for a period of ninety (90) days from
..... (Proposal due date)

Yours faithfully,

Bid Response Sheet No. 1

DETAILS OF BIDDER

1. (a) Name
- (b) Address of the office(s)
- (c) Date of incorporation and/or commencement of business.

2. Brief description of the Company including details of its main lines of business.

3. Details of individual (s) who will serve as the point of contact / communication for HDSCL within the Company:
 - (a) Name :
 - (b) Designation :
 - (c) Company :
 - (d) Address :
 - (e) Telephone Number :
 - (f) E-Mail Address :
 - (g) Fax Number :
 - (h) Mobile Number :

4. Name, Designation, Address and Phone Numbers of Authorised Signatory of the Bidder:
 - Name :
 - Designation :
 - Address :
 - Phone No. :
 - Fax No. :
 - Mobile :

5. Details of firms, infrastructure, details of employees with the following:
Designation:
Qualification:
Length of total experience:
Service with the bidder

Bid Response Sheet No. 2

EXPERIENCE OF THE BIDDER / OR

PRINCIPALS

I. Design Supply Installation Transportation Testing AND COMMISSIONING OF OFF-GRID BUTTERFLY SOLAR OF 6.25KVA (5KWP Three phase, Off Grid) and 3YEARS OF OPERATION AND MAINTANANCE ON DBOT (DESIGN BUILT OPERATE AND TRANSFER) AT TOLANKERE FOR HUBBALLI DHARWAD SMART CITY,;

S. No	Year	Name of the Client	Brief Description of Work	Cost of Project (Rs in Lakhs)
1				
2				
3				

- a) The applicant shall provide details of only those projects undertaken by it under its own name (Copies of work orders to be furnished)
- b) Certificate from the client/employer indicating the date of commencement & date completion and commissioning, cost of the project
- c) Financial turnover certificate from applicant's statutory auditors

II Following document to be submitted

- 1. Copy of PAN No
- 2. GST Registration Certificate
- 3. Structure of firm Name of Director/ Partners and Technical Staff
- 4. Five years audited balance sheet
- 5. Liquid assets and / or availability of credit facilities of not less than **Rs.2.3 lakh** (Letter of credit /Certificates from banks for meeting the fund requirement as per the format in Appendix E)
- 6. All the above documents / certificates shall be submitted duly attested from the gazette officer or their CA / Notary Public

APPENDIX D

PRICE SCHEDULE

Bidder to quote his price proposal through e-portal only, for the following item.

Description	INR
Design Supply Installation Transportation Testing AND COMMISSIONING OF OFF-GRID BUTTERFLY SOLAR OF 6.25KVA (5KWP Three phase, Off Grid ON DBOT (DESIGN BUILT OPERATE AND TRANSFER) AT TOLANKERE FOR HUBBALLI DHARWAD SMART CITY,(CAPEX)	Bidder to quote his price proposal only in e-portal only.
1 st YEAR OF OPERATION AND MAINTANANCE ON DBOT (DESIGN BUILT OPERATE AND TRANSFER) AT TOLANKERE FOR HUBBALLI DHARWAD SMART CITY (1 st year O&M)	Bidder to quote his price proposal only in e-portal only.
2 nd YEAR OF OPERATION AND MAINTANANCE ON DBOT (DESIGN BUILT OPERATE AND TRANSFER) AT TOLANKERE FOR HUBBALLI DHARWAD SMART CITY (2 nd year O&M)	Bidder to quote his price proposal only in e-portal only.
3 rd YEAR OF OPERATION AND MAINTANANCE ON DBOT (DESIGN BUILT OPERATE AND TRANSFER) AT TOLANKERE FOR HUBBALLI DHARWAD SMART CITY (3 rd year O&M)	Bidder to quote his price proposal only in e-portal only.
NOTE: Bidder to quote unit rates. Applicable taxes will be paid separately	

APPENDIX F

To:

WHEREAS _____ *[name and address of Contractor]*
(hereinafter called "the Contractor") has undertaken, in pursuance of Contract No.
_____ dated _____ to execute _____ *[name*
of Contract and brief description of Works] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of Rs. _____
[amount of guarantee] _____ Rupees _____
_____ *[in words]*, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____
_____ *[amount of guarantee]* as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until 30 days from the date of expiry of the Defects Liability Period.

Signature and seal of the guarantor _____
Name of Bank _____
Address _____
Date _____