

No:

Date:

NIB No. : 09/2017-18

Notice inviting on line bids for “Design, Supply, Erection, Testing, Commissioning and Operation and Maintenance upto 5 years of Rooftop Solar Photovoltaic Powered water pumping Project at various Bawaries (Open well)” in KOTA City.

Kota Smart City Limited, KSCL Kota invites online unconditional bids through e-procurement portal <http://eproc.rajasthan.gov.in> from eligible bidders in accordance with the RTPP Act 2012 and RTPP Rules 2013 amended upto date and under National Competitive Bidding (NCB) with Single Stage -two envelope Bidding procedure for following works :

	Name of Work	Estimated Cost (Rs. In Lakhs)	Earnest Money (Rs. In Lakhs)	Tender Fee & Processing Fee pay to M.D. RISL, Jaipur	Period of completion
1	Design, Supply, Erection, Testing, Commissioning and Operation and Maintenance upto 5 years of Rooftop Solar Photovoltaic Powered water pumping Project at various Bawaries (Open well) in KOTA City	80.00	01.60	Rs. 10,000/- Tender Fee & Rs. 1,000/- Processing Fee	Construction Period 06 Months, DLP 12month & thereafter O&M Period 05 year.

- Detailed NIT & Bid Documents can be seen at the websites <http://sppp.raj.nic.in> & <http://eproc.rajasthan.gov.in> and may be download/Upload free of cost from <http://eproc.rajasthan.gov.in>
- Any subsequent addendum/corrigendum shall be published only at the websites <http://sppp.raj.nic.in> & <http://eproc.rajasthan.gov.in>

**Additional Chief Engineer,
Kota Smart City Ltd.**

Copy to following for information:

- PS to Principal Secretary, LSGD, GoR, Jaipur & Chairman, KSCL, Kota
- Mayor, NNK & Vice Chairman, KSCL, Kota
- Chairman, UIT & Vice Chairman, KSCL, Kota
- PA to CEO, KSCL, Kota
- PA to ACEOKSCL, Kota
- Director, NIUA, Delhi for publication on Smartnet
- Financial Advisor, KSCL, Kota
- Superintending Engineer, Kota Smart City Limited, Kota.
- Concerning ExEn/AEn Kota Smart City Limited, Kota, Kota
- Library In-charge, NNK, Kota for vide publicity in state and National level paper
- Notice Board Kota.

**Additional Chief Engineer,
Kota Smart City Ltd.**



KOTA SMART CITY LIMITED

Notice inviting Bids (NIB) of bidders for Implementation of “Solar PV powered water pumping System on Identified Bawaries in Kota Smart city area” under the Smart Cities Mission

KOTA SMART CITY LIMITED
(An initiative of GoI, GoR & ULB)



CIN: U75232RJ2016SGC056440
Tel: 0744-2502293
Fax: 0744-2501282
E-mail:ksclkota@gmail.com
nnkota@gmail.com

Chief Executive Officer

Kota Smart City Limited,
Rajeev Gandhi Bhawan, Block-A,
Dusshera Maidan, Kota, Rajasthan, 324007
Tel: 0744-2502293 | Fax: 0744-2501282,
E-mail:ksclkota@gmail.com

No:

Date:

DETAILED NIB
NIB No. :09/2017-18

Notice inviting on line bids for Design, Supply, Erection, Testing, Commissioning and Operation and Maintenance upto 5 years of Rooftop Solar Photovoltaic Powered water pumping Project at various Bawaries (Open well) in KOTA City.

KSCL, Kota invites online unconditional bids through e-procurement portal <http://eproc.rajasthan.gov.in> from eligible bidders.

Bidding will be conducted through procedures in accordance with the RTPP Act 2012 and RTPP Rules 2013, amended upto date and under National Competitive Bidding with Single Stage -two envelopes bidding procedure with pre-qualification filter and are open to all national Bidders.

Name & Address of the Procuring Entity	Chief Executive Officer Kota Smart City Limited, Rajeev Gandhi Bhawan, Block-A, Dusshera Maidan, Kota, Rajasthan, 324007
Subject Matter of Procurement	Design, Supply, Erection, Testing, Commissioning and Operation and Maintenance upto 5 years of Rooftop Project Site Solar Photovoltaic Powered water pumping Project at various Bawaries (Open well) in KOTA City
Period of completion	Construction Period - 06 Months DLP 12 months & thereafter O&M Period - 05 year
Bid Procedure	Single-stage: Two Part (envelope) open competitive eBid procedure at http://eproc.rajasthan.gov.in
Bid Evaluation Criteria (Selection Method)	Least Cost based selection
Eligibility Criteria	As detailed in bid documents
Websites for downloading Bidding Document	http://sppp.raj.nic.in http://eproc.rajasthan.gov.in
Fees	Earnest Money & Cost of tender documents Fees shall be deposited through RTGS/NEFT/Demand Draft in the account of Smart City Kota having account no. 039394600001113 with YES Bank, Jai Height Gumanpura Main Road, Gumanpura Kota 324007, Kota Branch (IFSC code YESB0000393). The Unique Transaction Reference (UTR) of RTGS/NEFT shall be uploaded by the tenderer along with scanned copies of eligibility documents with “Eligibility Bid”. Bidding document fee (Non-Refundable): Rs. 10000/- (Rupees Ten Thousand only) in RTGS/NEFT/Demand Draft drawn on any Scheduled/ Commercial



KOTA SMART CITY LIMITED

Notice inviting Bids (NIB) of bidders for Implementation of “Solar PV powered water pumping System on Identified Bawaries in Kota Smart city area” under the Smart Cities Mission

	Bank in favour of “CEO, Kota Smart City Limited” payable at “Kota”. Tender Processing Fee (Non-Refundable): Rs.1000/- (Rupees One Thousand only) in Demand Draft drawn on any Scheduled/Commercial Bank in favour of “Managing Director, RISL” payable at “Jaipur”.
Estimated Procurement Cost	Rs. 80.00 Lakhs (Eighty Lakhs) only.
Earnest Money Deposit(EMD) and Mode of Payment	EMD (Refundable) : Rs 01.60 Lakhs (One Lakh and Sixty Thousand) only. Mode of Payment: Banker’s Cheque/Demand Draft drawn on any Scheduled Commercial Bank or Bank Guarantee, RTGS/NEFT in the account of Smart City Kota having account no. 039394600001113 with YES Bank , Jai Height Gumanpura Main Road, Gumanpura Kota 324007, Kota Branch (IFSC code YESB0000393) . The Unique Transaction Reference (UTR) of RTGS/NEFT shall be uploaded by the tenderer along with scanned copies of eligibility documents with “Eligibility Bid” as per Bid document.
Period of on-line availability of Bidding Documents (Start / End Date)	Start Date: From: 12.10.2017 11:00 AM End Date: Till 12.11.2017 06:00 PM
Pre-bid Meeting	Date/ Time: 18.10.2017 at 03:00 PM Place: Conference Hall 2 nd Floor, Kota Smart City Limited, Rajeev Gandhi Bhawan, Block-A, Dusshera Maidan, Kota, Rajasthan, 324007
Start Date for submission of Bids	Start Date: 27.10.2017 From 11:00 AM
Manner, End Date for submission of Bids	Manner: Online at e-Proc website (http://eproc.rajasthan.gov.in) End Date: 12.11.2017 up to 10:00 AM
Submission of original Banker’s Cheque/ Demand Draft for Bid Document cost, Earnest Money, Bid Processing Fee & other documents listed herein after	Up to 13.11.2017 Till 03:00 PM
Date & Time of Technical Bid Opening	Date: - 13.11.2017 at 04:00 PM
Date/ Time/ Place of Financial Bid Opening	Will be intimated later to the Technically qualified bidders
Bid Validity	90 days from the bid submission deadline

Note:

1. Bidders (authorised signatory) shall submit their offer on-line in Electronic formats both for technical and financial proposal. However, RTGS/NEFT/ DD / Banker’s Cheques / BG (if applicable) for Bid Document Fees, RISL Processing Fees and Earnest Money should be submitted physically in original at the office of Kota Smart City Limited Kota by time and date mentioned above as prescribed in bid document and scanned copy of same should also be uploaded along with the technical Bid/ cover.
2. In addition to above, the following original documents should also be submitted physically in the Kota Smart City Limited, Kota office by time and date mentioned above and scanned copies of same should also be uploaded along with the technical Bid/ cover:
 - a. Letter of Technical Bid
 - b. Power of Attorney for appointing authorized representative
3. Any subsequent addendum/corrigendum shall be published only at the websites sppp.raj.nic.in & <http://eproc.rajasthan.gov.in> and will not be published in newspapers. In case there is a holiday on the day of opening of bids, activities assigned on that date shall be carried out on the next working day.
4. Before electronically submitting the bids, it should be ensured that all the bid documents including conditions of contract are digitally signed by the bidder.
5. Department will not be responsible for delay in online submission due to any reason. For this, bidders are requested to upload the complete bid well advance in time so as to avoid 11th hour issues like slow speed; choking of web site due to heavy load or any other unforeseen problems
6. All the prospective bidders are encouraged to participate in the pre-bid meeting and it is advised that the work sites are visited and bid documents are studied thoroughly.
7. The procuring entity reserves the sole right to cancel the bid process and reject any or all of the Bids without assigning any reason.
8. Procurement entity disclaims any factual or other errors in the bidding document (the onus is purely on the individual bidders to verify such information) and the information provided therein are intended only to help the bidders to prepare a logical bid-proposal.
9. No conditional bids shall be accepted and such bids shall be summarily rejected forthwith.
10. The provisions of RTPP Act 2012 and Rules 2013 thereto shall be applicable for this procurement. Furthermore, in case of any inconsistency in any of the provisions of this bidding document with the RTPP Act 2012 and Rules thereto, the latter shall prevail.

**Additional Chief Engineer,
Kota Smart City Ltd.**

Notice Inviting on-line Bids (NIB)

for
Design, Supply, Erection, Testing, Commissioning,
Operation and Maintenance upto 5 years
of
Rooftop Solar Photovoltaic Powered water pumping Project
at
Various Bawaries (Open well)
in
Kota, Rajasthan, India

KOTA SMART CITY LIMITED

Rajeev Gandhi Bhawan, Block-A, Dussehra Maidan, KOTA - 324007, (Raj), India

Tel: 0744-2502293 ; Fax: 0744-2501282

E-mail: ksclkota@gmail.com

ISSUANCE

This Notice Inviting Bids (NIB), by KOTA Smart City Limited (KSCL) is for selection of eligible Bidder(s) for the design, supply, erection, testing and commissioning (EPC) including operation and maintenance (O&M) post commissioning of Solar (RTS) Photovoltaic Power Projects in KOTA City.

Note:

1. Though adequate care has been taken while preparing this (NIB), the Bidder(s) shall satisfy itself that this (NIB) is complete in all respects.
2. Intimation of any discrepancy shall be given immediately to the correspondence office address given below. If no intimation is received from any Bidder(s) up to the date of Pre Bid Meeting, it shall be considered that this (NIB) is complete in all respects.
3. KSCL may modify, amend or supplement this (NIB) including allocation of the Project.
4. While this (NIB) has been prepared in good faith, neither Kota Smart City Limited nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFP, even if any loss or damage is caused by any act or omission on their part.
5. The Selection of Bidder shall be carried out through E-Procurement Process Only. Submission of Bids in Electronic Format shall be on Website www.eprocure.rajasthan.gov.in
6. Bidders are suggested to regularly visit our website www.eproc.rajasthan.gov.in for latest updates after the issue of this (NIB). All modification(s)/ amendment(s)/ clarification(s) /information(s) etc. will be made available on the e-procurement website www.eproc.rajasthan.gov.in only.
7. KSCL at its discretion may extend the time for submission of Bid.
8. RTTP Act 2012 and Rules 2013 will prevail on this bid.
9. Address for Correspondence:
Chief Executive Officer
KOTA SMART CITY LIMITED (KSCL)
Rajeev Gandhi Bhawan, Block-A, 2nd Floor, Dusshera Maidan, KOTA - 324007, (Raj), India
Tel: 0744-2502293 ; Fax: 0744-2501282
E-mail: ksclkota@gmail.com

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SECTION 1 :DEFINITIONS AND ABBREVIATIONS

In this (NIB), the following words and expressions shall have the meaning as herein defined where the context so admits:

1. **“Affiliate”** shall mean a company that either directly or indirectly
 - a. controls, or
 - b. is controlled by, or
 - c. is under common control with
2. a **“Bidder”** and **“control”** means ownership of one company by at least 26% (Twenty Six percent) of the voting rights of the other company;
3. **“Allocated Capacity”** shall mean the capacity of work allocated to the Successful Bidder(s) consisting of multiple sites for implementation of Projects in KOTA through this (NIB) process;
4. **“B.I.S.”** shall mean specifications of Bureau of Indian Standards (BIS);
5. **“Bid”** shall mean the Technical and Price Bid (both Envelope 1 and Envelope 2) submitted by the Bidder along with all supporting documents/ formats/ attachments/ annexure etc., in response to this (NIB) in accordance with the terms and conditions hereof;
6. **“Bid deadline”** shall mean the last date and time for submission of the Bid in response to this (NIB), as specified in Bid Information Sheet;
7. **“Bidding Process”** shall mean the process adopted by KSCL in carrying out the allocation of specified capacity in this (NIB) to the selected Bidder in pursuant to this (NIB);-
8. **“Chartered Accountant” or CA** shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949;
9. **“Competent Authority”** shall mean the Chief Executive Officer of KOTA Smart City Limited himself and/or a person or group of persons nominated by the CEO for the mentioned purpose herein;
10. **“Earnest Money Deposit” or EMD** shall mean security of Bid Selection by way of Cheque/ DD/BG to be submitted along with the Bid by the Bidder as per the provisions of this (NIB) and within the timelines specified in Bid Information Sheet;
11. **“Eligibility Criteria”** shall mean the Criteria as set forth in this (NIB);
12. **“EPC”** shall mean turnkey “Engineering, Procurement & construction” service providing contractor or Contracting Company/ies;
13. **“IEC”** shall mean International Electro-Technical Commission;
14. **“KSCL”** shall mean KOTA Smart City Limited and their officers authorised for implementation of this project;
15. **“kWh”** shall mean Kilo Watt Hour;
16. **“kWp”** shall mean Kilo Watt Peak;
17. **“Letter of Allocation” or LoA** shall mean the letter issued by KSCL to the Successful Bidder pursuant to this (NIB) for implementation of Project ;
18. **“Notice inviting Bids” or (NIB)** shall mean this document and all related Annexure/Formats, etc.;
19. **“O&M”** shall mean Operation and Maintenance of Projects for specified period in (NIB) from the date of its commissioning;
20. **“Owner”** shall mean person Authorized Or head of office /Department of the State Government/State Government Undertaking and allows the “EPC” to install Project on its premises in pursuant to this (NIB);
21. **“Price Bid”** shall mean online Bid as per Price-Bid format prescribed in this (NIB);
22. **“Project Company”** shall mean Company incorporated by the Bidder as per Indian Laws in accordance with eligibility criteria of this (NIB);
23. **“Project Sanction Documents”** shall mean the documents to be submitted by the Successful Bidder(s) to KSCL, which includes **Service Level Agreement**;

24. **“Project Timeline”** shall mean the time allowed for commissioning of Project according to LoA under Contract/Agreement from KSCL.
25. **“Qualified Bidder(s)”** shall mean the Bidder(s) who, after evaluation of its Technical Bid as per evaluation criteria, stands qualified for opening and evaluation of the Price Bid;
26. **“Project Site Solar Photovoltaic” or (RTS)** shall mean Solar Photovoltaic array/system installed on the flat /inclined roof of the building/elevated platform on metallic or concrete structure at minimum 10 (Ten) feet above ground level/Ground mounted system (in places where sufficient shadow free Project Site area is not available).
27. **“Service Level Agreement” or SLA** shall mean agreement entered by the KSCL / with the “EPC” through this (NIB) process i.e. the arrangement wherein the KSCL and the “EPC” mutually agree on terms and conditions and enter into Service Level Agreement for construction of project with O&M;
28. **“Statutory Auditor”** shall mean the auditor of a Company appointed under the provisions of the Companies Act, 1956/2013 or under the provisions of any other applicable governing law;
29. **“Successful Bidder(s)”** shall mean the Bidder(s) selected by KSCL pursuant to this (NIB) for implementation of RTS as per the terms of this (NIB), and to whom LoA has been issued.
30. **“Wp”** shall mean Watt peak;

INTERPRETATIONS

1. Words comprising the singular shall include the plural and vice versa.
2. An applicable law shall be construed as reference to such applicable law including its amendments or re-enactments from time to time.
3. A Time of Day shall save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time (IST).
4. Different parts of this (NIB) are to be taken as mutually explanatory and supplementary to each other and if there is any differentiation between or among the parts of this (NIB), they shall be interpreted in a harmonious manner so as to give effect to each part.
5. The table of contents and any headings or sub headings in this (NIB) has been inserted for case of reference only and shall not affect the interpretation of this (NIB).

SECTION 2 :INTRODUCTION & SCOPE OF WORK

1. BACKGROUND

- 1.1. KOTA Smart City Limited (KSCL), a SPV formulated to develop and implement smart city initiatives in the city of Kota.
- 1.2. KSCL is planning to use Solar Power for water pumping and circulation of water in various Bawaries (Open well) in Kota city.
- 1.3. On behalf of such bawaries, KSCL now invites EPC service providers to implement this work.
- 1.4. The Solar PV energy will be used to power the pumps for water circulation and recharging it by mixing oxygen.
- 1.5. KSCL reserves the right to select the final list of bawaries without assigning any reason to anyone.
- 1.6. KSCL will select the EPC service provider to get these project installed and maintained on his behalf.

2. (NIB) SCOPE

- 2.1. Total proposed capacity shall be **7 nos. 2HP** submersible Pump with 2 kWp Solar & **5 nos. 3HP** submersible Pump with 3kWp Solar on multiple bawaries in KOTA.
- 2.2. Prospective list of such bawaries and their brief details are enclosed in the Annexure at the end of this NIB.
- 2.3. The successful bidder will design and implement the projects as per this (NIB).
- 2.4. Due-Diligence of identified project sites and preparation of implementation plan, submitting to KSCL and taking approvals. The EPC will submit its feasibility survey report with design and selected products Datasheets on each project to KSCL before implementation.
- 2.5. Design, supply, erection, testing and commissioning of Projects including O&M on various identified bawaries in KOTA.

SN	Particulars	Details
1	NIT No.	<u>09/2017-18</u>
2	Details of Work	Design, Supply, Erection, Testing, Commissioning and Operation and Maintenance upto 5 years of Rooftop Solar Photovoltaic Powered water pumping Project at various Bawaries (Open well) in KOTA City City.
3	Work Area	Identified bawaris at Kota city area.
4	Total no of Projects Proposed	Total 12 sites 7 nos. 2HP submersible Pump with 2 kWp Solar & 5 nos. 3HP submersible Pump with 3kWp Solar

3. BID COST & DEPOSITS

	Deposits	Amount / Form
1	Refundable Earnest Money Deposit (EMD)	Rs. 1.6 Lakhs (Rupees One Lakh sixty thousand Only) by way of DD/ Bankers Cheque/ Bank Guarantee in favour of Chief Executive Officer, KSCL payable at Kota
2	Non-refundable Cost of Bid for each Bidder	Rs.10,000/- (Rupees Ten Thousand Only) by way of DD/Bankers Cheque in favour of Chief Executive Officer, KSCL payable at Kota.

KOTA SMART CITY LIMITED

Notice inviting Bids (NIB) of bidders for Implementation of “Solar PV powered water pumping System on Identified Bawaries in Kota Smart city area” under the Smart Cities Mission

3	Non-refundable e-proc Charges for each Bidder	Rs. 1,000/- (Rupees One Thousand Only) by way of DD/Banker’s Cheque in favour of MD, RISL payable at Jaipur but deposited with CEO, Kota Smart City Limited (KSCL) at Kota.
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4. BID EVENTS TIME-LINE

	Bid Events	Date & Time
1	RFP Publish date and time	From: 12.10.2017 11:00 AM
2	Start date and time of downloading RFP From website: www.eproc.rajasthan.gov.in	From: 12.10.2017 11:00 AM
3	Date and time of PRE-BID Meeting	18.10.2017 at 03:00 PM
4	Start date & time of uploading on-line bids	27.10.2017 11:00 AM
5	Last date & time of submission of Tender Cost, Processing Fees and EMD along-with all relevant information at Office of Kota Smart City Limited, 2nd Floor, A-Block, Rajeev Gandhi Bhawan, CAD Circle, Kota	Up to 13.11.2017 Till 03:00 PM
6	Last date & time of submission of on-line bids through e-procurement portal	12.11.2017 up to 10:00 AM
7	Date & time of opening of technical Bids	13.11.2017 at 04:00 PM
8	Date and time of opening of Financial Bid (on-line)	Shall be intimated after evaluation of Technical bid.

5. TENDER TIME-LINE

	Bid Events	Date & Time
1	Validity period of Bids	6 (Six) months form Last Date of Submission of Bid.
2	Period of EPC completion	06 months / As per Section-8 of tender document
3	Period of O&M	Up to 25 years/ As per Section-8 of tender document

SECTION 3 :ELIGIBILITY CRITERIA OF BIDDER

1. ESTABLISHMENT

- 1.1. The Bidder should be either a **individual / body / firm** or a **consortium** of two bodies / firms, while each of them is either a body or a firm incorporated in India under the Companies Act, 1956 or Companies Act, 2013 / the Limited Liability Partnership Act, 2008, a Subset of companies Act, 2003 / the partnership Act in India / registered as sole proprietor under Shop Act, including any amendment(s) thereto
- 1.2. Such entity (ies) should be engaged in the business of manufacturing or project contracting in the filed of Electrical / mechanical / civil engineering or Solar Power/Renewable Energy (RE)/ Water pumping or similar nature of work.
- 1.3. A copy of registration certificate(s) should be furnished along with the bid in support of above. In case of consortium, registration certificate(s) and copy of consortium agreement as per GCC of this NIB shall be enclosed.
- 1.4. Bidder(s) shall furnish valid GST registration certificate on or before date of submission of bid.

2. TECHNICAL EXPERIENCE

- 2.1. The Bidder(s) should be either **Electrical contractor** registered under category of Class E-1 or manufacture firm and shall have minimum one year experience in electrical contracting / solar related works.
- 2.2. The details of the Project(s) executed during period mentioned above shall be listed & submitted in the prescribed format as per ANNEXURE.
- 2.3. Certificate issued by the any Government/Semi-government Organization / PSU or reputed organisation towards the satisfactory installation and functioning of the Project(s) shall be furnished compulsorily by the Bidder(s).

3. FINANCIAL COMPETENCE

- 3.1. The Bidder(s) shall have a minimum Annual average Turnover of Rs. **15** lakhs (Rupees fifteen lakhs Only) in any of the last 03 (Three) Financial years. In case of consortium, lead bidder should meet this requirement on his individual capacity.
- 3.2. In case Audited Accounts are not available for last FY, the Bidder(s) shall submit Provisional Annual Accounts for the last FY duly authorized by Board of Directors of the Bidder(s), subject to submission of Audited Annual Accounts for last FY as and when available.

4. NOTE

- 4.1. The tenderer must fill up above information clearly in enclosed sheet and attach all required documents in support as at a glance in Techno - Commercial bid.
- 4.2. If supporting documents are not attached for each eligible criterion above, the bid shall be rejected without further reference.

SECTION 4 :GENERAL TERMS AND CONDITIONS

1. GENERAL TERMS & CONDITIONS

- 1.1. All costs towards site visit and submission of document(s) etc. shall be borne by the Bidder(s) themselves.
- 1.2. The Bidders are informed that KSCL is neither under any obligation to select any Bidder, nor to give any reason for either qualifying or disqualifying any Bidder. KSCL is also not under any obligation to proceed with the Program or any part thereof.
- 1.3. At any time prior to opening of the Price Bid, KSCL either at its own initiative or in response to clarifications requested by a prospective Bidder may modify the (NIB) by issuing an amendment. Such amendment shall be up loaded on the e-procurement website.
- 1.4. After opening of the Bid(s) and till final selection of Successful Bidder(s), no correspondence of any type shall be entertained, unless called for by KSCL. Any type of uncalled clarifications on prices and/or rebates shall not be accepted and addressed by KSCL.
- 1.5. This is a zero deviation bidding process. Bidder(s) shall ensure compliance with all the provisions of this (NIB) and submit their Bid(s) accordingly. Bid(s) with any deviation to the (NIB) shall be liable for rejection.
- 1.6. If a Bidder imposes conditions, which are in addition to/or in contravention with the conditions mentioned herein, its Bid is liable to be summarily rejected. In any case, none of such conditions will be deemed to have been accepted unless specifically mentioned in the LoA issued by KSCL.
- 1.7. KSCL will review the Bid(s) to determine whether the Bid(s) is substantially responsive to the requirement of this (NIB). Bid(s) considered non-responsive shall be liable for rejection.
- 1.8. KSCL shall take up detailed evaluation of the responsive Bid(s) only.
- 1.9. Bidder(s) must quote the Price strictly in the manner as indicated in the price schedule, as per prescribed format, (ONLINE ONLY) failing which their Bid(s) is liable for rejection.
- 1.10. Bidder(s) shall sign the Bid on each page as token of acceptance of all the terms and conditions and upload with the Bid along with the declaration as per ANNEXURE- 2.
- 1.11. The Bidder(s) are required to study carefully the conditions of this (NIB), the enclosed specifications and the relevant provisions of the relevant BIS/IEC/MNRE specifications, wherever necessary before submitting the Bid.
- 1.12. All documents, drawings, instructions, design data, calculations, operation, maintenance and safety manuals, reports, labels and any other data shall be in English Language. All agreement(s) and correspondence(s) between the KSCL and the Bidder(s) shall be in English language.
- 1.13. Any printed literature furnished by the Bidder(s) may be in another language, provided that this literature is accompanied by an English translation, in which case, for the purpose of interpretation of the document, the English version shall prevail.

2. BID VALIDITY

Bid(s) shall be valid for a period of 06 (Six) months from the last date of submission of the Bid, as specified in Bid Information Sheet. Bid(s) with validity of less than 06 (Six) months from last date of submission of bid shall not be considered. The validity can be further extended with mutual consent of the Bidder(s) and KSCL.

2. EARNEST MONEY DEPOSIT

2.1. The Bidder(s) shall furnish EMD of prescribed amount by way of DD/ Bankers Cheque in favour of “Chief Executive Officer, KSCL, Kota” payable at KOTA.

OR

Bank Guarantee of prescribed amount of Nationalized or Scheduled Bank (valid for six months from last date of submission of bid) in favour of “Chief Executive Officer, KSCL, KOTA”.

2.2. Bid(s) without EMD or any change in applicable amount of EMD shall be rejected and treated as non-responsive by KSCL. No interest will be paid on the amount of EMD.

2.3. EMD may be forfeited if-

2.3.1. A Bidder withdraws its Bid before Bid validity,

2.3.2. A Bidder submits false information,

2.3.3. A Successful Bidder fails to sign the LoA within the stipulated time,

2.3.4. A Successful Bidder fails to furnish the applicable PBG/Security Deposit within stipulated time.

2.4. EMD shall be refunded to the unsuccessful Bidder(s) after finalization of the Bid(s) and signing of LoA with Successful Bidder(s).

3. SECURITY DEPOSIT (SD) / PERFORMANCE BANK GUARRANTEE (PBG)

3.1. The “Selected bidder” has to submit Performance Bank Guarrantee @10% of LOA value within 02 months of LoA date in the form of DD/Banker Cheque or Bank Guarantee. The initial validity of BG shall be 24 months from the date of LoA and extended till the O&M period.

3.2. In case of SSI Units of Rajasthan, PBG /Security Deposit value shall be relaxed as per applicable provisions. Government Undertakings PSUs are exempted from furnishing of Security Deposit.

3.3. The Earnest Money (in case of successful bidders) may be utilized as part of PBG if desired by the bidder.

3.4. The Earnest Money of successful tendered will be adjusted (if deposited as DD/Bankers Cheque) towards PBG against order value at the time of LoA.

3.5. The tenderer may deposit balance amount of PBG in the form of DD (if willing to adjust EMD in SD)

OR

In way of Bank guarantee valid for 24 months from date of agreement for full amount of PBG, (If “EPC” is willing to submit the total amount in form of BG, BG of EMD deposited will be refunded than).

3.6. On receipt of written request from “EPC”, KSCL shall release the EMD against submission of PBG for O&M period.

3.7. PBG / Security Deposit shall be denominated in Indian Rupees and shall be in the form of Bank Guarantee, as per ANNEXURE 8.

4. BIDDER’S CONSORTIUM

Consortium Bid(s) shall be acceptable from Bidder(s) as under:

- 4.1. The lead member of the Consortium shall submit “Consortium Agreement” and undertake the responsibility for all obligations and liabilities relating to the Project and in accordance with the terms of this (NIB).
- 4.2. The work will be awarded to the lead member and KSCL will acknowledge other Consortium member in LoA and other communication(s).
- 4.3. Each Consortium must nominate a lead member of the Consortium and must submit the Power of Attorney by all the members of the Consortium in favor of the lead member.
- 4.4. Bid(s) shall contain the information required for each member of the Consortium.
- 4.5. Only 1 (One) agreement with only 1 (One) party will be accepted under the Consortium Agreement.
- 4.6. Any company applying as a sole Bidder cannot at the same time be member of any Consortium(s) applying for this (NIB). Further, a member of a particular Consortium cannot be a member of any other Consortium applying for this (NIB).
- 4.7. The member(s) of the Consortium shall be jointly liable for the execution of the Project(s) in accordance with the terms of the LoA, however, KSCL will interact only with the lead member who shall own all liability and responsibility on behalf of the Consortium.
- 4.8. A Consortium as a whole must be a sound entity both technically and financially. Financial consortium is not allowed. Lead member should meet the financial eligibility criteria on its own. All the financial obligations required to be met for the execution of this (NIB) should be the sole responsibility of lead member only.

5. RIGHT TO WITHDRAW THE (NIB) AND TO REJECT ANY BID

- 5.1. This (NIB) may be withdrawn or cancelled by KSCL at any time without assigning any reasons thereof. KSCL further reserves the right, at its complete discretion, to reject any or all of the Bids without assigning any reasons whatsoever and without incurring any liability on any account.
- 5.2. KSCL reserves the right to interpret the Bid(s) submitted by the Bidder(s) in accordance with the provisions of this (NIB) and make its own judgment regarding the interpretation of the same. In this regard, KSCL shall have no liability towards any Bidder and no Bidder shall have any recourse to KSCL with respect to the selection process.
- 5.3. KSCL shall evaluate the Bid(s) using the evaluation process specified in BID EVALUATION AND IDENTIFICATION AND ALLOCATION OF WORK TO “EPC”, at its sole discretion. KSCL’s decision in this regard shall be final and binding on all the Bidders.
- 5.4. KSCL reserves its right to vary, modify, revise, amend or change any of the terms and conditions of this (NIB) before Bid Deadline. The decision regarding acceptance of the Bid(s) by KSCL shall be full and final.
- 5.5. KSCL reserves its right to cancel any or all of the contracts/LOA from Bidder(s) at any time without assigning any reasons thereof and without incurring any liability on any account.

SECTION 5 :SPECIAL CONDITIONS OF CONTRACT

1. ACCEPTANCE OF LOA

- 1.1. Selected “EPC” offering **lowest cost** will be awarded the work as per NIB conditions and that will be biniging for acceptance on selected bidder.

2. FORFEITURE OF PBG

- 2.1. The bidder who executes the work more than 50% but below 80% of the total allocated capacity within the timeline or extended period (if any), PBG for the unexecuted allocated capacity shall be forfeited.
- 2.2. The bidder could not execute upto 50% of the allocated work within the timeline or extended period (if any) due to reason attributable to him, it will be treated as breach of contract and it will be the cause for forfeit of PBG and KSCL may take action of cancellation of contract with debarring and blacklisting of firm.

3. PROJECT EXECUTION PAYMENT TO EPC

- 3.1. The selected bidder (EPC) shall submit monthly RA bills to KSCL as per the progress.
- 3.2. The bills will be verified and passed for payment or returned back for necessary rework / compliances by the officer in charge for the project execution.
- 3.3. The bills which are found in order shall be paid preferably within next 30 days.
- 3.4. 90% of the payments shall be released against the RA bills.
- 3.5. Balance 10% payment will be released after final commissioning of all the project works provided the performance bank Guarrantee of 10% contract value valid for the O&M period is submitted.

4. PROJECT O&M PAYMENT TO EPC

- 4.1. The (EPC) shall submit quarterly bills to KSCL as per the progress. First year base rate shall be as per the price bid and the escalation for next years shall be @5% per Annum.
- 4.2. The bills will be verified and passed for payment or returned back for necessary rework / compliances by the officer in charge for the project O&M.
- 4.3. The bills which are found in order shall be paid preferably within next 30 days.
- 4.4. 100% of the payments shall be released against the bills provided the performance bank Guarrantee of 10% contract value valid for the O&M period is submitted.

5. DELAY IN DELIVERY CHARGES

- 5.1. On successful installation of the Projects, Installation / commissioning Certificate shall be issued to “EPC”.
- 5.2. In case of delay in commissioning beyond Project Timelines, considering extension if any, “EPC”(s) shall be liable to pay Delay in Delivery Charges.
- 5.3. The authorization for installing the Project can be repudiated at any time by KSCL, if the systems are not installed to its satisfaction. The reasons for repudiation shall be recorded by KSCL. In case

of non-performance in any form and shape of the terms and conditions of the Agreement, the CEO, KSCL KOTA has the power to cancel the LOA.

- 5.4. The time specified for completion of work is the essence and the successful “EPC” shall arrange to complete work within the period.
- 5.5. If “EPC” does not comply with his proposed schedule for the completion of the project, CEO, KSCL may at its discretion to allow an extension in time of completion, subject to recovery from the “EPC” an agreed Delay in Delivery Charges @0.5% per week to maximum 10% on the undelivered portion of the work.
- 5.6. If the “EPC” requires an extension of time in completion of contractual period on account of occurrence of any hindrance, they shall apply in writing to the authority for the same immediately on occurrence of the hindrance but not after the stipulated date of completion of work.
- 5.7. Delivery period may be extended with or without Delay in Delivery Charges on the merits of the case.
- 5.8. In case of extension approved with Delay in Delivery Charges, the amount as per above clauses, shall be deducted from the due payments to EPC.

6. PROJECT COMMISSIONING BY “EPC”(S)

6.1. Application for Commissioning Certificate:

When “EPC”(s) fulfill all of its obligations, it shall be eligible to apply for Commissioning Certificate. The Engineer-in-Charge of KSCL shall issue to “EPC” the Commissioning Certificate within 7 (Seven) days after receiving an application from “EPC” and verifying the Commissioning documents and satisfying itself that the work has been completed in accordance with and as set out in this (NIB). If any short comings are observed, KSCL will ask “EPC” to improve upon them and resubmit the application after improvements.

6.2. Project Completion Report (PCR)

“EPC” shall submit the Project Completion Report (PCR) in soft copy and as well as in Hard copy after Commissioning of the Project as per the scope of this (NIB) to KSCL, in the prescribed format.

7. TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP

- 7.1. The design, supply, erection, testing, commissioning, and performance of the equipment shall be in accordance with relevant appropriate IEC/ Indian Standards as detailed in this (NIB)’s Technical specifications. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by any appropriate Govt Authority shall be used.
- 7.2. Any equipment which has not been specifically mentioned in this (NIB) but which are necessary for the design, supply, erection, testing, commissioning and performance or completeness of the Project shall be provided by the “EPC” without any extra cost and within the time schedule for efficient and smooth O&M of the Project.

8. PROJECT OPERATION

- 8.1. KSCL is funding the project and maintaining it. “EPC” shall be doing O&M for 5 years post commissioning and during this period he will facilitate KSCL to have the optimum plant uptime above 95%. After the first 5 year term of O&M, the contract shall be extended on similar terms by KSCL or bawari owner as the case may be.

8.2. “EPC” shall ensure efficient O&M for 5 (Five) years from the date of commissioning of the Project. Post 5 years, KSCL or owner can extend the O&M work to “EPC” or any other suitable service provider on mutually agreed terms and expense reimbursement.

9. O&M GUIDELINES TO BE FOLLOWED BY “EPC”

9.1. The “EPC” shall be responsible for all the required activities for successful O&M of the Project from the date of commissioning of the Project.

9.2. “EPC” shall depute qualified and experienced engineer/technicians till the O&M period at the Project site, if required.

9.3. “EPC” shall perform periodic cleaning of solar modules, or as and when required.

9.4. “EPC” shall undertake performance monitoring, controlling, troubleshooting, maintaining of logs and records.

9.5. A maintenance record register / Report shall be maintained by “EPC” with effect from commissioning to record the daily generation, regular maintenance work carried out as well as any preventive and breakdown maintenance along with the date of maintenance, reasons for the breakdown, duration of the breakdown, steps taken to attend the breakdown, etc.

9.6. For any issues related to O&M, the KSCL shall intimate “EPC” to resolve the issue within 7 (Seven) days.

9.7. In the event of breach of any of the conditions of the Agreement any time on the part of the “EPC”, the Agreement may be terminated summarily by CEO; KSCL without compensation to the “EPC” and PBG/SD Deposited by the “EPC” will be forfeited.

10. INSURANCE

10.1. “EPC” shall also take insurance for Third Party Liability covering loss of human life, engineers and workmen and also covering the risks of damage to the third party/material/equipment/properties during execution of work and for entire lifecycle of the project.

10.2. The “EPC” shall ensure that all its employees and representatives are covered by suitable insurance against any damage, loss, injury or death arising out of the execution of the work or in carrying out the SLA. Liquidation, death, bankruptcy etc., shall be the responsibility of the “EPC”.

10.3. “EPC” shall be responsible for safe usage of Project Site available and any of the work of “EPC” shall not degrade the Project Site, for example, puncture to an extent of affecting the strength of the Project Site. “EPC” shall be liable for penalty in case of any misuse of the available Project Site.

11. TAX EXEMPTIONS

11.1. Price Bids are invited inclusive of Taxes and duties. However, Tax exemptions including certificates of any sort, if available may be dealt with the concerned department of Government of India or Government of Rajasthan, as applicable, by the Bidder. KSCL / Owner in no case will be responsible for providing any tax exemptions to the Bidder.

11.2. Any required documentation for the tax exemption will be supported by KSCL / owner as per the request of “EPC”, provided there is no payment to be made by KSCL/ owner.

12. CORRUPT OR FRAUDULENT PRACTICES

- 12.1. The KSCL requires that “EPC” shall follow the highest standards of ethics during the execution of scope of work, as defined in this (NIB). In pursuance of his (NIB), KSCL Defines, for the purposes of this provision, the terms set forth as follows:
- 12.1.1. Corrupt Practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the Bid process or in contract execution; and
- 12.1.2. “fraudulent practice” means a misrepresentation of facts in order to influence the Bid process or the execution of an Agreement to the detriment of the KSCL/Government scheme, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non- competitive levels and to deprive the KSCL of the benefits of free and open competition;
- 12.2. Will declare a firm ineligible/debarred, either indefinitely or for a specific period of time, a Government contract if at any time it is found that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government schemes.
- 13. DEBARRED FROM PARTICIPATING IN KSCL’S BID**
- 13.1. KSCL reserves the right to carry out the performance review of each of the “EPC” from the time of submission of Bid.
- 13.2. In case it is observed that a “EPC” has not fulfilled its obligations in meeting the various timelines envisaged, in addition to the other provisions of the (NIB), such “EPC” may be debarred from participating in KSCL’s any future Bid for a period as decided by the CEO, KSCL.
- 14. APPLICABLE LAW**
- 14.1. This (NIB) shall be interpreted in accordance with the laws of the Union of India.
- 15. SETTLEMENT OF DISPUTE**
- 15.1. Legal proceedings, if any, arising out of this (NIB) shall have to be lodged in courts situated in KOTA, Rajasthan only.
- 15.2. If any question is raised or issue arises between the Project Site Owner(s) and “EPC”, and matter is taken to any court of law, KSCL shall not be responsible in any manner and shall not be made a party in it.
- 15.3. If any dispute of any kind whatsoever arises between KSCL and “EPC” in connection with or arising out of this (NIB) including without prejudice to the generality of the foregoing, any question regarding the existence, validity or termination, the parties shall seek to resolve any such dispute or difference by mutual consent.
- 15.4. If the parties fail to resolve, such a dispute or difference by mutual consent, within 45 (Forty Five) days of its arising, then the dispute shall be referred by either party by giving notice to the other party in writing of its intention to refer to arbitration as hereafter provided regarding matter under dispute. No arbitration proceedings will commence unless such notice is given.
- 15.5. In all other cases, any dispute submitted by any party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below:
- 15.5.1. Project Owner and “EPC” shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within 30 (Thirty) days after the later of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be

appointed by the Appointing Authority for third arbitrator which shall be the President, Institution of Engineers.

- 15.5.2. If one party fails to appoint its arbitrator within 30 (Thirty) days after the other party has named its arbitrator, the party which has named an arbitrator may request the Appointing Authority to appoint the second arbitrator.
- 15.5.3. If for any reason an arbitrator is unable to perform its function, the mandate of the arbitrator shall terminate in accordance with the provisions of applicable laws as mentioned in previous clause and a substitute shall be appointed in the same manner as the original arbitrator.
- 15.5.4. Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue or arbitration shall be KOTA, Rajasthan.
- 15.5.5. The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration panel, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or claims of immunity from such enforcement.
- 15.5.6. The arbitrator(s) shall give reasoned award.
- 15.6. Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the agreement unless they otherwise agree.
- 15.7. The Cost of arbitration shall be equally shared between the “EPC” and Project Site Owner

16. FORCE MAJEURE

- 16.1. For purpose of this clause, "Force Majeure" means an event beyond the control of the “EPC” and not involving the “EPC”'s fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restrictions and fright embargoes, etc. Whether a “Force majeure” situation exists or not, it shall be decided by KSCL and its decision shall be final and binding on the “EPC” and all other concerned parties.
- 16.2. If a force majeure situation arises, the “EPC” shall notify KSCL in writing promptly, not later than 14 (Fourteen) days from the date such situation arises. “EPC” shall notify KSCL not later than 3 (Three) days of cessation of force majeure conditions. After examining the cases, KSCL shall decide and grant suitable additional time for the completion of the work, if required.

17. GRIEVANCE REDRESSAL MECHANISM

- 17.1. In case any Bidder is aggrieved against decision or action of any agency involved in the Bidding process, can take appropriate actions as defined in ANNEXURE-19.

18. MISCELLANEOUS CONDITIONS

- 18.1. The Bawari Owner (Project Site owner) shall allow easy access to the Authorized Representative and/or to the person(s) authorized by the Authorized Representative of “EPC” for:
 - 18.1.1. Site inspection for shadow free Project Site area available
 - 18.1.2. Site Inspection for assessing the structural requirements for installation of the Project
 - 18.1.3. Designing of layout for installation of the Project
 - 18.1.4. Carrying component and equipment to the Project Site of the Building
 - 18.1.5. Installation of the Project including civil works
 - 18.1.6. Erection and Testing of components,
 - 18.1.7. Commissioning of the Project,
 - 18.1.8. Inter-connection of the Project with pumping system,
 - 18.1.9. O&M of the Project,
 - 18.1.10. Regular Monitoring,

18.1.11. Resolution of complaints

18.1.12. Any other work as may be necessary for efficient O&M of the Project

18.2. “EPC” shall not transfer, assign, or sublet the work under this (NIB) or any substantial part thereof to any other party without the prior consent of KSCL in writing.

18.3. “EPC” or its subcontractors shall not make any other use of any of the documents or information of this (NIB), except for the purposes of performing as per this (NIB).

18.4. KSCL will not be bound by any Power of Attorney granted/issued by the “EPC” or its subcontractors or by any change in the composition of the firm made during or subsequent to the execution of the contract. However, recognition to such Power of Attorney and change (if any) may be given by KSCL after obtaining proper legal advice, the cost of which will be chargeable to the concerned “EPC”.

19. SUCCESSORS AND ASSIGNEES

19.1. In case KSCL or “EPC” (s) undergoes any merger or amalgamation or a scheme of arrangement or similar re-organization and this (NIB) is assigned to any entity(ies) partly or wholly, the Agreement shall be binding mutatis mutandis upon the successor entities and shall continue to remain valid with respect to obligation of the successor entities.

20. SEVERABILITY

20.1. It is stated that each paragraph, clause, sub-clause, schedule or annexure of this (NIB) shall be deemed severable and in the event of the unenforceability of any paragraph, clause sub-clause, schedule or the remaining part of the paragraph, clause, sub-clause, schedule annexure and rest of the Agreement shall continue to be in full force and effect.

21. RIGHTS AND REMEDIES ONLY FOR THE PARTIES

21.1. This (NIB) is not intended and shall not be construed to confer on any person other than the KSCL and “EPC” hereto, any rights and/or remedies herein.

22. OTHER DEFAULTS

22.1. In case of occurrence of any of the below mentioned situations, In addition to the recourse available in the bidding documents or the contract, bidder will be punished with fine which may extend to fifty Lakh rupees or ten percent of assessed value of total procurement, whichever is less:

22.1.1. Any bidder after qualifying for opening of financial bid withdraws without valid grounds, from the procurement process; KSCL will forfeit the deposited amount as EMD of the bidder with KSCL and take action for debarring and blacklisting of firm.

22.1.2. Any bidder after opening of financial bids and deciding eligible for award, withdraws without valid grounds, from the procurement process, KSCL will forfeit the deposited amount as EMD of the bidder with KSCL and take action for debarring and blacklisting of firm.

22.1.3. Any bidder after deciding and matching L-1 withdraws without valid grounds, from the procurement process, KSCL will forfeit the deposited amount as EMD of the bidder with KSCL and take action for debarring and blacklisting of the firm.

22.1.4. Any bidder after award of work fails to provide procurement contract, any other document or PBG/security deposit required in terms of the bidding documents, KSCL will forfeit the deposited amount as EMD of the bidder with KSCL and take action for debarring and blacklisting of the firm.

22.2. When a tenderer is unable to complete upto 50% of allocated capacity within the specified or extended period (if any), it will be treated as breach of contract and it will be the cause of forfeit PBG/security deposit against total awarded quantity under contract and KSCL may take action with cancellation of contract with debarring and blacklisting of firm. CEO, KSCL shall be entitled to award the work to other tenderer/ agency without notice to the tenderer but on his (i.e. tenderer's) account and risk, the work or any part thereof which the tenderer has failed to complete or if not available, the best and nearest available substitute thereof.

23. CORRESPONDENCE

23.1. The Bidder(s) requiring any Technical clarification of the Bid documents may contact in writing or by Fax /E-mail. Verbal clarifications and information given by the KSCL or its employees or its Representatives shall not be in any way entertained.

SECTION 6 :BID SUBMISSION AND BID OPENING

GENERAL INSTRUCTIONS FOR TENDER RESPONSE (BID) SUBMISSION

1. The provisions of RTPP Act 2012 and Rules 2013 thereto shall be applicable for this procurement.
2. Furthermore, in case of any inconsistency in any of the provisions of this bidding document with the RTPP Act 2012 and Rules thereto, the latter shall prevail.
3. Websites for downloading Bidding Document sppp.rajasthan.gov.in & eproc.rajasthan.gov.in
4. The pre-bid meeting will be held at conference hall, KSCL, KOTA.
5. The e-bid upload shall be started 10 days after pre-bid meeting (refer bid events).
6. The bidders are requested to submit their bids prior to last date of submission to avoid non submission of their bids within prescribed date & time due to non-availability / hanging of website, at either ends at last moment, or any other reason whatsoever. The last date of submission of bids will not be extended on such account.
7. **ONLINE SUBMISSION OF BID:**
 - 7.1. List of required Formats/documents to be submitted online duly signed digitally by Authorized Signatory:
 - 7.2. **Cover-1 of Technical Bid:** Upload the scanned copy of DDs/Pay Orders towards Cost of tender Document, processing fee of KSCL and scanned copy of DDs/Pay Orders/BG of EMD (in pdf format) with copy of relevant Certificate for Exemption of EMD (If applicable).
 - 7.3. **Cover-2 of Technical Bid:** All Non-financial information in the Formats as per tender with Complete Bid Document (dully signed on each and every page as proof of acceptance of all terms and condition of Bid).
 - 7.4. **Cover-3 of Price bid:** Online submission as per prescribed Format only.
8. **TECHNICAL BID SUBMISSION (COVER -1):**
 - 8.1. Following documents are required to be submitted in cover 1 (Both in on-line and Hard Copy Submission):

- 8.1.1. **COST OF TENDER:** The DD/Bankers Cheque of prescribed value in favour of “Chief Executive Officer, KSCL, Kota” payable at Kota.
- 8.1.2. **E-PROC PROCESSING FEE:** The DD/Bankers Cheque of prescribed value in favour of “MD, RISL, Jaipur” payable at Jaipur but deposited at Chief Executive Officer, KSCL, Kota.
- 8.1.3. **EMD:** The DD/Bankers Cheque of prescribed value in favour of “Chief Executive Officer, KSCL, Kota” payable at Kota
OR
Bank Guarantee of prescribed value of Nationalized or scheduled bank (valid for six months from last date of submission of bid) in favour of Chief Executive Officer, KSCL, Kota.
- 8.2. Earnest Money & Cost of tender documents Fees shall be deposited through RTGS/NEFT/Demand Draft in the account of Smart City Kota having account no .039394600001113 with YES Bank, Jai Height Gumanpura Main Road, Gumanpura Kota 324007, Kota Branch, IFSC code YESB0000393.
- 8.3. (The Unique Transaction Reference) UTR of RTGS/NEFT shall be uploaded by the tenderer along with scanned copies of eligibility documents with “Eligibility Bid”.
- 8.4. Bidding document fee **Non-Refundable** :(Rs .10000) -/Rupees Ten Thousand only (in RTGS/NEFT/Demand Draft drawn on any Scheduled /Commercial Bank in favour of “CEO, Kota Smart City Limited ”payable at “Kota”.
- 8.5. Tender Processing Fee)Non-Refundable :(Rs.1000) -/Rupees One Thousand only (in Demand Draft drawn on any Scheduled/Commercial Bank in favour of “Managing Director, RISL ”payable at “Jaipur”.
- 8.6. Hard copies of documents related to eligibility bid, e-tender processing fees and EMD/ cost of tender documents shall be submitted to KSCL, KOTA before the last date and time of submission. This is essential otherwise the bid in electronic form (Cover 1, Cover 2 and Cover 3) will not be opened of that bidder.
- 9. TECHNICAL BID SUBMISSION (COVER -2):**
- 9.1. All the required information shall be furnished strictly in the prescribed formats only. Any information indicated other than the prescribed formats shall not be entertained. The Bid(s) shall be evaluated on the basis of information furnished in the prescribed formats only.
- 9.2. This (NIB) shall essentially be signed digitally and submitted/uploaded on www.eprocure.rajasthan.gov.in as part of Cover 2 (It is also instructed to all the bidders that all the documents uploaded should be clearly legible/readable) prior to the Bid Deadline as specified in Bid Information.
- 9.3. The Bidder(s) shall provide complete information at the time of submission of Bid(s). If the Bidder(s) is asked to furnish some more clarification(s) /confirmation(s) /document(s), it shall be required to furnish the same within specified time, failing which the case shall be finalized/decided on the basis of available information/document(s).
- 9.4. The responsibility of ignorance of its Bid(s) on account of delay in furnishing of desired information/document(s) shall be of the Bidder(s). However, if there are any shortcomings in the submission of the information which do not materially affect the qualification criterion, then the

Bid Evaluation Committee shall have the power to consider the facts on the merit of the case and decide the Bid evaluation accordingly.

10. FINANCIAL BID SUBMISSION (COVER -3):

- 10.1. The financial bid is to be submitted online only as per format Annexure-5. This format is to be downloaded from www.eprocure.rajasthan.gov.in filled & uploaded back to www.eprocure.rajasthan.gov.in
- 10.2. Financial Bids submitted/uploaded on www.eprocure.rajasthan.gov.in in any other format may be rejected. Submission of price in cover-2 will be finally rejected and such bids will be considered as disqualified in technical evaluation and cover-3 (on-line) of such bids will not be opened.
- 10.3. Cutting / overwriting, if any, in the figures of the tendered documents is required to be clarified / indicated in words, duly signed, failing which the tender may be rejected.
- 10.4. The Bidder(s) shall not quote any deviations/ amendments/modifications/alterations in the Price Bid(s). Price Bid(s) with any such deviations shall be rejected.
- 10.5. The financial bid of tenderers qualifying eligibility criteria shall thereafter be opened on specific time, date of venue which will be intimated to them separately.

11. BID SUBMISSION

12. Submission of Envelope (in Physical Form) should be reached at the office of CEO, KSCL KOTA.

S.No.	Details required	Details of Attachment
1.	Cost of Bid:	DD/Banker’s Cheque No.:Date:..... Amount:..... In favor of Chief Executive Officer, KSCL payable at KOTA.
2.	e-proc Charges:	DD/Banker’s Cheque No.: Date:..... Amount:..... In favor of MD, RISL payable at Jaipur.
3.	EMD	DD/Banker’s Cheque/Bank Guarantee: Date:..... Amount:..... In favor of Chief Executive Officer, KSCL payable at KOTA.

13. BID SUBMISSION NOTE:

- 13.1. Submission of price in cover-2 will be considered disqualification and such bids will be finally rejected in technical evaluation and cover-3 of such bids will not be opened.
- 13.2. The information in the Formats/ tables shall be filled properly.
- 13.3. If any document(s) submitted in support of above parameters found false, the Bid(s) shall be disqualified and EMD shall be forfeited and the Bidder(s) shall be blacklisted.
- 13.4. Cutting in Bid(s) shall be verified by the signature with seal on every attempt and overwriting is not allowed.

- 13.5. The Bidder(s) must fill up all the information clearly as per this (NIB) and attach all required documents in support.
- 13.6. The Bidder(s) shall submit all the required information along with the Bid prior to the Bid Deadline, failing which Bid will be treated as non-responsive.
- 13.7. If supporting documents (Self attested) are not attached for each Minimum Technical Eligibility Criteria (Technical, Financial and other) specified in SECTION-4, the Bid shall be rejected without further reference.
14. Bidder(s), who wish to participate in this (NIB), shall be required to register on www.eprocure.rajasthan.gov.in if not registered earlier. To participate in e- tendering, Bidder(s) shall have Digital Signature Certificate (DSC) - Class II (e-tender supportive) or Class III as per requirement under Information Technology Act-2000 using which they can sign their electronic Bid(s) (i.e. Envelope-2). Bidder(s) can procure the same from any Controller of Certifying Authorities (CCA) approved.
15. Certifying agency or they may contact e-Procurement Cell, Department of IT & C, Government of Rajasthan on the following address:
E-Procurement Cell,
RISL, Yojna Bhawan, Tilak Marg, C- Scheme, Jaipur (Rajasthan)
E-mail: eproc@rajasthan.gov.in
16. Bidders are also advised to refer “Bidder’s Manual” available under “Downloads” section on www.eprocure.rajasthan.gov.in for further details about the e-tendering process.
17. Address for Correspondence for enquiries and clarifications:
Chief Executive Officer
KOTA SMART CITY LIMITED (KSCL)
Rajeev Gandhi Bhawan, Block-A, Dussehra Maidan, KOTA - 324007, (Raj), India
Tel: 0744-2502293 ; Fax: 0744-2501282
E-mail: ksclkota@gmail.com
18. Contact details of Staff of KSCL in reference to this (NIB)
Name: Mr. Sanjay Baheti / Mr. K M Sharma
Designation: Executive Engineer
Cell no: 9413348421
Address: KOTA SMART CITY LIMITED (KSCL)
Rajeev Gandhi Bhawan, 2nd Floor, Block-A, Dussehra Maidan, KOTA - 324007, (Raj), India
Tel: 0744-2502293; Fax: 0744-2501282
E-mail: ksclkota@gmail.com
19. Note: All correspondence in reference to this (NIB) by mail shall essentially be sent only to e-mail id: ksclkota@gmail.com
20. **BID OPENING STEPS:**
- 20.1. **Step-1: Opening of Cover-I**
- 20.1.1. First the COVER-1 containing scanned copies of DD’s/Banker’s cheque of (a) Tender Cost, (b) RISL e-proc charges and (c) EMD (may be in form of BG)/ Exemption Certificate (if applicable) shall be opened.

20.1.2. It will be checked for conforming eligibility for opening of online Bid and checked for conforming to the eligibility for opening cover–2 i.e. Technical Bid.

20.2. Step-2: Opening of Cover-2

20.2.1. COVER-2 (i.e. Technical bid) shall be opened of that bidder who confirms eligibility referred in above para. Please refer Check-list for Evaluation of Technical Bid for Bidder(s) in COVER -2. Online Bid will be opened for that bidder(s) who’s Cover –I is received at the office of the CEO, KSCL upto the given time schedule and found eligible.

20.2.2. Cover-2 (i.e. Technical Bid) shall be opened and evaluated for the Bidder(s) eligibility for opening cover–3 i.e. Financial Bid.

20.3. Step-3: Opening of Cover-3

20.3.1. Step-3: Cover-3 (i.e. Price Bid) submitted through e-tendering only of those Bidder(s) will be opened who are found technically eligible and qualified under Step 2 above.

21. The basis of evaluation shall be the value quoted in the Price Bid as per the format attached in ANNEXURE-5. The Bidder(s) are required to quote on firm basis and no price variation on any account shall be considered.

SECTION 7 :BID EVALUATION AND IDENTIFICATION AND ALLOCATION OF WORK TO “EPC”

1. BID EXAMINATION

1.1. Bidder(s) shall carefully examine the Technical Specification, terms and conditions, and other details relating to this (NIB).

1.2. The Bidder(s) shall be deemed to have examined this (NIB) including the Annexures/ Formats etc., and to have obtained information on all matters whatsoever that might affect it to execute the Project and to have satisfied itself as to the adequacy of its Bid. The Bidder(s) shall be deemed to have known the scope of work, nature and magnitude of the requirements of material and labour involved, etc. and as to all supplies it has to complete in accordance with this (NIB).

1.3. The Bidder(s) is expected to have completed all possible Technical, Commercial, Policy, Regulatory and Statutory due-diligence prior to submitting its bid in pursuant to this (NIB).

1.4. The Bidder(s) is advised to submit Bid on the basis of conditions stipulated in this (NIB). The Bidder’s standard terms and conditions, if any, shall not be considered. The cancellation/alteration/amendment/modification in this (NIB) shall not be accepted by KSCL.

1.5. Bid(s) not submitted as per the instructions to the Bidder(s) are liable to be rejected. Bid(s) shall confirm in all respects with requirements and conditions referred in this (NIB).

1.6. KSCL at its own discretion has the right to reject any or all the Bids without assigning any reason whatsoever.

2. CORRECTION OF ARITHMETICAL ERRORS

2.1. Provided that a Price Bid is substantially responsive, the Procuring Entity will correct arithmetical errors during evaluation of Financial Bids on the following basis:

- 2.2. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- 2.3. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- 2.4. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.
- 2.5. If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its EMD shall be forfeited or its Bid Securing Declaration shall be executed.

3. CRITERIA FOR SELECTION OF BIDDER(S)

- 3.1. The Bid shall be allocated to the Successful Bidder(s) based on the **lowest EPC cost (including O&M as per (NIB))** as quoted in Price Bid.
- 3.2. The Price Bid shall take into consideration all the costs related to the scope of work mentioned under Section-3.
- 3.3. The Bidder(s) shall quote for the entire scope of work on a “single responsibility” basis such that the total Price Bid shall cover the obligations mentioned in this (NIB) in respect of design, supply, erection, testing and commissioning including O&M as per (NIB).
- 3.4. The Bidder(s) shall furnish Price Bid including all taxes and duties, insurance, etc.
- 3.5. No price escalation on account of any statutory increase in or fresh imposition of customs duty, excise duty, sales tax, electricity duty or duty levied in respect of the systems authorized to be installed, shall be applicable.
- 3.6. The Price quoted will be firm till the contract period including all taxes and duties, insurance, etc., irrespective of its actual cost of execution of the Project(s).
- 3.7. No escalation over and above the quoted price will be granted to the Bidder(s), on any reason whatsoever during the Contract period.

4. PROCESS OF SELECTION OF BIDDER

- 4.1. Price Bid shall be opened and evaluated for the technically qualified bidder(s), as per below mentioned criteria of this (NIB).
- 4.2. Based on the Price Bid(s) quoted by the Bidder(s), KSCL shall arrange the Price Bids in the ascending order i.e. L1, L2, L3...Ln etc.
- 4.3. The bidder with the lowest quote value shall be declared as L1.
- 4.4. KSCL will prefer to select only ONE vendor for total capacity of (NIB).

4.5. If More than One bidder found same highest quote as L1, bidder with Sound Financial Net-worth and higher technical experience will be given preference for allocation of capacity.

5. NOTIFICATION OF “EPC”

5.1. The name of the “EPC” shall be notified, and the offered price on KSCL website: www.eprocure.rajasthan.gov.in and shall also be notified individually by issuing LoA.

6. ISSUANCE OF LOA

6.1. KSCL shall notify the Successful Bidder(s) as per criteria mentioned in selection process clauses. Successful Bidder shall acknowledge the receipt of LoA and return duplicate copy with signature of the Authorized Signatory of the Successful Bidder to the KSCL within 10 (Ten) days of issuance of LoA. Successful Bidder(s) shall be referred as “EPC” after signing of LoA.

6.2. If the Successful Bidder, to whom LoA has been issued, does not fulfill any of the conditions specified in this (NIB), KSCL reserves the right to annul/cancel the award of the LoA of such Successful Bidder.

SECTION 8 :COMPLETION PERIOD

1. CONSTRUCTION PERIOD

“EPC” shall install the Projects for the capacity mentioned in LoA as per the technical specifications of this (NIB) within completion period of 06 (Six) months from the date of issue of LOA.

2. DEFECT LIABILITY PERIOD (DLP)

After competition of each Project i.e. successful Commissioning, 12 (Twelve) months Defect Liability period shall be observed to stabilize the plant performance and overcoming all construction anomalies to the satisfaction of KSCL engineer.

3. HANDING OVER

Successful “Handing over” of the plant shall be deemed after absorption of DLP period for all contractual purpose.

4. PRODUCT GUARANTEE/ WARRANTEE PERIOD

4.1. Unless specified otherwise in tender, all product used shall be warranted for free replacement or repair for any manufacturing defects and this warrantee period shall be minimum 5 years from the date of “handing over” for all major & critical equipment’s.

4.2. Similarly, the EPC work shall also be warranted for free remedy of any shortcoming or any issue observed towards all services rendered under this (NIB) such as design & engineering, workmanship & execution etc. shall be minimum 5 years from the date of handing over for each Project.

4.3. The EPC at its own cost will ensure to rectify all problems observed or issues raised within 5 years after handing over of the plant ensuring successful running of the plant.

5. OPERATION & MAINTENANCE (O&M) PERIOD

5.1. After handing over, the EPC will enter into O&M contract with KSCL/Plant owner for a period upto 25 years. The initial term of the agreement shall be 5 years and shall be kept renewing by the respective project owner as per the agreed rate on mutual agreement.

- 5.2. EPC shall quote the 1st year base price and each proceeding year 5% escalation shall be allowed on the previous year’s price.
- 5.3. Parties will enter into O&M contract initially for 5 year term and keep revising it for next term as per the mutual agreement.

SECTION 9 :STEPS TO TAKE UP THE WORK

Although the procedure of taking up work to complete as per requirement has already described in the (NIB), in order to provide guidelines at a glance further, the steps to take up work under this program are summarized as under:

Step -1	Successful Bidder (EPC) shall be issued LoA by KSCL. The Successful Bidder(s) will be given list of prospective sites details to engage with them and arrange site surveys of prospective sites sufficient enough to have detailed engineering design for installation of system.
Step -2	“EPC” will submit his site survey report with basic design of all such sites and KSCL will then approve them for the way projects to be implemented.
Step -3	KSCL advise any revision or approve them for the way projects to be implemented.
Step -4	“EPC” shall initiate the process of detail engineering & designing of the Project and other subsequent activities of supply of material, erection, etc. All the items to be procured shall be approved by KSCL for its specifications and make.
Step -5	“EPC” shall approach project site for and initiate site construction works for the Project.
Step -6	“EPC” shall complete the civil work, erection, testing and Commissioning of the Project and report to concerned Project officer/Project Manager and get a Commissioning / Completion Certificate from KSCL.
Step -7	“EPC” shall facilitate testing requirement for each Project as may be required to start the projects.
Step -8	“EPC” shall commission the Project and initiate water pumping / circulation from it.
Step -9	“EPC” shall undertake O&M activities of the projects.
Step -10	“EPC” shall submit O&M Performance Report to KSCL.
Step -11	“EPC” shall ensure timely service of the Project

The steps described above are only for indicative purpose and some of them can be running in parallel for various sites. Many other action(s) may be required which are not listed above for the successful implementation of the work. Project planning has to ensure that all sites are completed within the period defined in the (NIB).

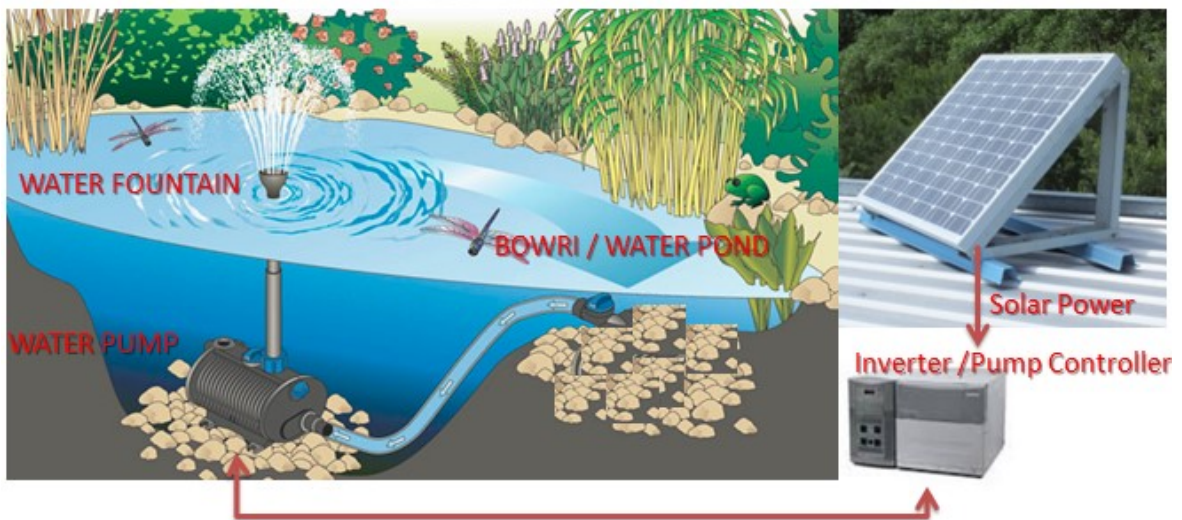
SECTION 10 :SOLAR POWERED WATER PUMPING SYSTEM

1. OBJECTIVE OF SOLAR POWERED WATER FOUNTAINS IN KOTA (RAJ)

This project is for oxidation of water in water bodies using the Solar Power, proposed for implementation in Kota Smart City Area on various water bawadies (open wells).



Solar Powered Water Fountain



2. SYSTEM INTRODUCTION, CONCEPT & DESIGN

- 2.1. Solar powered water Pumping System is an application using **Solar Photovoltaic Modules** and Pump controller driving any AC 3-phase **Mono-block** or **Submersible pumps**.

- 2.2. There is list of water bodies / Bawari in Kota city whose water can be charged by creating a water fountain powered by Solar (Refer Annexure 3 – List of Bawari).
- 2.3. It is presumed that all are shallow waters (suction is within 3-10 M) and the head of water discharge is to be designed for fountain so maximum 5 M rise.
- 2.4. It is thus proposed to use a 2/3HP submersible pumping system with controller powered by 2/3 kWp Solar panels.
- 2.5. The Solar system is standalone off-grid system which is islanded and preferably installed at southern corner of the Bawari.
- 2.6. A kiosk based small pump & control box should be designed close to the water and piped inside the pond.
- 2.7. A fountain spray nozzle system will be connected at the perimeter of the pond for discharge of pumped water at pressure which is dropping inside the bawari.
- 2.8. This system will work during sunny hours sufficient enough to charge the water with oxygen. Provision for any lighting is not added at present from Solar panels because that design will be off-grid (and without battery). Thus the system is designed only to run in day time in sunny hours only.
- 2.9. Operation and maintenance requirement shall be of cleaning the panels over 7-10 days interval and regular security to ensure safety and control theft of assets. **Safety to restrict unauthorized access to pump box and system.**

3. SYSTEM AT A GLANCE:

TECHNICAL DATA SHEET FOR 230 VAC & 415 Submersible and Monoblock pump									
Sr. No.	1	2	3	4	5	6	7	8	9
Make									
Model	V4/OIL FILLED/SS	V4/OIL FILLED/SS	V4/OIL FILLED/SS	V4/OIL FILLED/SS	V-6/V-9 M.S BODY	V6/SS/WATER FILLED	V-6/V-9 M.S BODY	V6/SS/WATER FILLED	V6/SS/WATER FILLED
HP/KW	1 HP (submersible)	2 HP (submersible)	3 HP (submersible)	3 HP (submersible)	3 HP (open well)	5 HP (submersible)	5 HP (open well)	7.5 HP (submersible)	10 HP (submersible)
Stage	10	15	12	15	1	5	1	11	14
Voltage	230 V (THREE PHASE)	160 V (THREE PHASE)	230 V (THREE PHASE)	230 V (THREE PHASE)	230 V (THREE PHASE)	380 V (THREE PHASE)	380 V (THREE PHASE)	415 V (THREE PHASE)	415 V (THREE PHASE)
Discharge outlet (in Inch)	1.25 "	1.25 "	1.5 "	1.5 "	3 "	2 "	3 "	2 "	2 "
Head (in meters)	30 meter	45 meter	45 meter	60 meter	10 meter	60 meter	15 meter	130 meter	165 meter
Discharge in LPM	70 LPM	80 LPM	120 LPM	100 LPM	750 LPM	190 LPM	900 LPM	170 LPM	170 LPM
Shut Off Head	45 meter	70 meter	65 meter	85 meter	20 meter	75 meter	25 meter	170 meter	230 meter
Overall efficiency	45.90 %	45.90 %	45.90 %	45.90 %	47.50 %	54.90 %	47.50 %	54.90 %	54.90 %
Maximum AMP	2.7 A	7.5 A	8.5 A	8.5 A	8.5 A	8.5 A	8.5 A	13.5 A	17 A
Size of cable	1 * 3 * 1.5 sq.mm	1 * 3 * 2.5 sq.mm	1 * 3 * 2.5 sq.mm	1 * 3 * 1.5 sq.mm	1 * 3 * 2.5 sq.mm	1 * 3 * 2.5 sq.mm	1 * 3 * 2.5 sq.mm	1 * 3 * 4.0 sq.mm	2 * 3 * 4.0 sq.mm
RPM	2800	2800	2800	2800	2800	2800	2800	2800	2800

SECTION 11 :TECHNICAL SPECIFICATIONS OF SPV SYSTEM

The proposed Projects shall be commissioned as per the technical specifications given below.

1. PROJECT SITE AND INSTALLATION REQUIREMENTS

1.1. The shadow-free area required for installation of a PV system is about 10-12 m² per kW (kilowatt). This number includes provision for clearances between solar PV array rows. The solar panels may be installed on the roof of the building with a south facing tilt angle that varies from 11 - 30 degrees depending on the latitude of the location. Sufficient area shall be available for servicing the system. In between the rows of solar panels sufficient gap needs to be provided to avoid the shading of a row by an adjacent row. The pump controller shall be placed indoor in a safe and easily accessible place. Outdoor duty inverters can be mounted outdoor preferably under a canopy.

1.2. Quality and Workmanship

1.2.1. System designed to last 25 years or more. It is therefore essential that all system components and parts, including the mounting structures, cables, junction boxes, distribution boxes and other parts also have a life cycle of at least 25 years.

1.2.2. Therefore, all works shall be undertaken with the highest levels of quality and workmanship. During inspection special attention will be given to neatness of work execution and conformity with quality and safety norms. Non-compliant works will have to be redone at the cost of the Installer.

1.3. Solar PV System (SPV) System Components

A typical off-grid solar PV system consists of the following main components:

- 1.3.1. Solar PV (photo-voltaic) array
- 1.3.2. Solar PV array support structure
- 1.3.3. Solar Off-Grid inverter or Pump Controller
- 1.3.4. Protection devices
- 1.3.5. Cables
- 1.3.6. Make, Data sheet and technical specification of all these items should be approved by KSCL.

2. SOLAR PHOTOVOLTAIC MODULES:

2.1. SOLAR PV ARRAY:

2.1.1. SPV modules used in SOLAR WATER PUMPING SYSTEM are specifically designed such that to withstand extreme Indian weather conditions from Hot, Humid, Rainy, Stormy to Dusty, keeping module operationally intact in all forms.

2.1.2. It consists of an array of solar panels connected in series and parallel combination to achieve the desired voltage and current necessary to drive the AC pump. The power rating of solar array is to be decided as per the power requirement of the existing pump set.

2.2. Warranties:

2.2.1. 10 years manufacturing warranty and 25 years Performance Warranty such that the predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 25 year period and not more than 10% after ten years period of the full rated original output.

2.3. Data-Sheet / Specification of Solar PV Modules

2.3.1. Solar PV modules shall be of the crystalline silicon type, manufactured in India. Detailed specifications are given below.

Type	Crystalline Silicon
Origin	Cell & Module should be Manufactured in India
Efficiency	$\geq 15\%$
Fill factor	$\geq 70\%$
Degradation warranty	Panel output (Wp) capacity to be $\geq 90\%$ of design nominal power till 10 th years and $\geq 80\%$ of design nominal power till 25 th year
Module frame	Non-corrosive and electrolytically compatible with the mounting structure material
Termination box	Thermo-plastic, IP 65, UV resistant. Junction box with either provision of external screw terminal connection or sealed type with 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.
Blocking diodes	Schottky type
Module minimum rated power	The nominal power of a single PV module shall not be less than 250Wp. The rated output power of any supplied module shall have tolerance of +5/-0%.
Power output rating	To be given for standard test conditions (STC). I-V curve of the sample module shall be submitted.
RF Identification tag for each solar module	Shall be provided inside the module and must be able to withstand environmental conditions and last the lifetime of the solar module.
RF Identification tag data	<ul style="list-style-type: none"> a) Name of the manufacturer of PV Module b) Name of the Manufacturer of Solar cells c) Month and year of manufacture (separately for solar cells and module) d) Country of origin (separately for solar cells and module) e) I-V curve for the module f) Wm, Im, Vm and FF for the module g) Unique Serial No and Model No of the module h) Date and year of obtaining IEC PV module qualification certificate i) Name of the test lab issuing IEC certificate j) Other relevant information on traceability of solar cells and module as per ISO 9000 standard
Compliance with standards and codes	IEC 61215 IIS 14286 IEC 61730 Part 1 and 2. Any other test applicable in addition to above, if introduced by MNRE or any statutory authority shall also be complied to.
Salt Mist Corrosion Testing	As per IEC 61701

3. SOLAR PV MODULE MOUNTING STRUCTURE

MS Galvanized mounting structure (Fixed Type) required for holding approx. 4 nos Solar Modules (1 mt x 2mt) per kW, to ensure the long life and hassle free operation of entire system. Manual tracking option is not required. Detailed specifications for the mounting structure are given below:



Specification of Mounting Structure

Wind velocity withstanding capacity	150 km/hour
Structure material	Corrosion resistant and electrolytically compatible with fastners, Hot dip galvanised steel As per latest IS 2062: 1992 with a minimum galvanisation thickness of 120 microns in compliance of latest IS 4759 or aluminium alloy with anti-rusting coating or anodization
Bolts, nuts, fasteners, panel mounting clamps	Stainless steel SS 316
Mounting arrangement for metal sheet roofs	Mounting directly on the sheet metal, ensuring stability and wind withstanding capacity, or penetrating the sheet metal and fixing to the sub-structure, ensuring that the roof remains water proof and ensuring stability and wind withstanding capacity.
Mounting arrangement for elevated structures	The elevated structure has to be securely anchored to the supporting surface. Concrete foundations of appropriate weight and depth for elevated structures mounted directly on the ground; Bolted with anchor bolts of appropriate strength for elevated structures mounted on RCC surfaces.
Mounting arrangement for ground installations	With removable concrete ballast made of pre-fabricated PCC M25; assuring enough ground clearance to prevent damage of the module through water, animals and other environmental factors.
Installation	The structures shall be designed for simple mechanical on-site installation. There shall be no requirement of welding or complex machinery at the installation site.
Minimum distance between roof edge and mounting structure	0.3 m (Applicable for flat RCC roofs) / minimum clearance of the structure from the roof level should be 300 mm.
Access for panel cleaning and maintenance	All solar panels must be accessible from the top for cleaning and from the bottom for access to the module- junction box.
Panel tilt angle	North - south orientation with a fixed tilt angle from 11-30 degrees (depending on location), south facing.
Max load bearing capacity of the roof	The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m ² .

4. SOLAR INVERTER /VFD/PCU CUM PUMP CONTROLLER: (PART OF PUMP CONTROLLER BOX):

- 4.1. 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.
- 4.2. The **Solar Inverter cum Pump Controller** is housed in powder coated, rugged MS enclosure.
- 4.3. 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.
- 4.4. The PCU/ inverters should be tested from the MNRE approved test centers / NABL /BIS /IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these



should be approved by international test houses confirming to IEC standards.

- 4.5. Pumps operate automatically depending on rise and fall of sun.
- 4.6. The pump controller can take solar power input and give three phase a.c. output to the a.c. pump such that when full solar power is available the motor will run at full rated speed and when it is cloudy or in the morning/evening (i.e. when solar power is limited) it will run at lower speed proportional to the availability of solar energy.
- 4.7. High efficiency (>95%), better quality, low cost, compact design for better reliability.
- 4.8. Very low harmonic current thus better power quality and life of system.
- 4.9. Inverse exponential speed variation during lack of solar radiation.
- 4.10. A high frequency transformer less inverter system, output Three Phase 415V AC and V/F control to manage starting condition of selected pump (2&3HP) eliminates the requirement of large Battery Banks. The equipment is DSP based and operated with software for digital control of inverter parameters, fault finding diagnostic and digital IO signaling.
- 4.11. **MPPT CHARGE CONTROLLER (INBUILT WITH SOLAR INVERTER UNIT) :** With this function (Maximum Power Point Tracking), it regulates the output frequency according to irradiation in real time to achieve the maximum power. It is designed with MPPT technology to maximize water delivery at various solar energy levels. MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS std.
- 4.12. Adopting the proposed dynamic VI maximum power point tracking (MPPT) control method, fast response and stable operation can be achieved.
- 4.13. The detailed specifications of the solar inverter are given below.

Specifications for Solar powered pump Controller PCU unit	
Total output power (AC)	To match solar PV plant capacity while achieving optimum system efficiency
Switching devices	IGBT/MOSFET
Control	Microprocessor /DSP
Input DC voltage range	As required for the solar grid inverter DC input.
Maximum power point (MPPT) tracking	Shall be incorporated
Number of independent MPPT inputs	1 or more
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.)
Total harmonic distortion	< 5% (preferred Less than 3%)
Built-in Protection	AC high / low voltage; AC high / low frequency
Operating ambient temperature range	-10 °C to +55 °C
Humidity	0 – 95% Rh / 95 % Non-condensing
No-load losses	Less than 1% of rated power
Inverter efficiency (minimum)	> 90%
Protection degree / Protection of Enclosure	IP 65 for outdoor mounting, IP 54 for indoor mounting
Communication interface	RS 485 / RS 232 / RJ45/ Wi-fi
Safety compliance	IEC 62109-1, IEC 62109-2
Environmental Testing	IEC 60068-2 (1,2,14,30)
Efficiency Measurement Procedure	IS /IEC 61683
Cooling	Convection
Display type	LCD for data display. LCD / LED for status display
Display parameters to include	Output power (W), cumulative energy (Wh), DC voltage (V), DC current (A), AC voltage (V), AC frequency (Hz), AC current

(A), cumulative hours of operation (h).

5. DC DISTRIBUTION BOARD & COMBINER BOX (PART OF PUMP CONTROLLER BOX):

A DC distribution box shall be mounted close to the solar grid inverter. The DC distribution box shall be of the thermo-plastic IP65 DIN-rail mounting type and shall comprise the following components and cable terminations:

- 5.1. Incoming positive and negative DC cables from the DC Combiner Box;
- 5.2. DC circuit breaker, 2 pole (the cables from the DC Combiner Box will be connected to this circuit breaker on the incoming side);
- 5.3. DC surge protection device (SPD), class 2 as per IEC 60364-5-53;
- 5.4. Outgoing positive and negative DC cables to the solar grid inverter.
- 5.5. As an alternative to the DC circuit breaker a DC isolator may be used inside the DC Distribution Box or in a separate external thermoplastic IP 65 enclosure adjacent to the DC Distribution Box. If a DC isolator is used instead of a DC circuit breaker, a DC fuse shall be installed inside the DC Distribution Box to protect the DC cable that runs from the DC Distribution Box to the Solar Grid Inverter.
- 5.6. 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.

5.7. Solar Array Fuse:

- 5.7.1. The cables from the array strings to the solar grid inverters shall be provided with DC fuse protection. Fuses shall have a voltage rating and current rating as required. The fuse shall have DIN rail mountable fuse holders and shall be housed in thermoplastic IP 65 enclosures with transparent covers.

6. AC DISTRIBUTION PANEL BOARD (PART OF PUMP CONTROLLER BOX):

- 6.1. An AC distribution box shall be mounted close to the solar inverter. The AC distribution box shall be of the thermos-plastic IP65 DIN rail mounting type and shall comprise the following components and cable terminations:
 - 6.1.1. Incoming 3-core / 5-core (single-phase/three-phase) cable from the solar inverter
 - 6.1.2. AC circuit breaker, 2-pole / 4-pole
 - 6.1.3. AC surge protection device (SPD), class 2 as per IEC 60364-5-53
 - 6.1.4. Outgoing cable to the pump.
- 6.2. AC Distribution Panel Board (DPB) shall control the AC power from PCU/ inverter/Controller/VFD, and should have necessary surge arrestors. All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.
- 6.3. 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
- 6.4. The panels shall be designed for minimum expected ambient temperature of 45 degrees Celsius, 80 percent humidity and dusty weather.
- 6.5. All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- 6.6. Should conform to Indian Electricity Act and rules (till last amendment).
- 6.7. 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	+/- 3 Hz

7. JUNCTION BOXES (JBs, if required)

- 7.1. If required, for termination of connecting cables, GRP/FRP/Powder Coated Aluminium /cast aluminium alloy Junction Boxes (JBs) with full dust, water & vermin proof arrangement shall be used. All wires/cables must be terminated through cable lugs. The JBs shall be such that input & output termination can be made through suitable cable glands.
- 7.2. 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.
- 7.3. 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 for monitoring and disconnection for each of the groups.
- 7.4. 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
- 7.5. Junction boxes and solar panel terminal boxes shall be of the thermo plastic type with IP 65 protection for outdoor use and IP 54 protection for indoor use.
- 7.6. Cable terminations shall be taken through thermo-plastic cable glands. Cable ferrules shall be fitted at the cable termination points for identification.

8. PROTECTIONS

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

8.1. LIGHTNING PROTECTION

- 8.1.1. 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.
- 8.1.2. Lightning protection should be provided as per IEC 62305 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.

8.2. SURGE PROTECTION

- 8.2.1. Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and -ve terminals to earth (via Y arrangement)
- 8.2.2. Surge protection shall be provided on the DC side and the AC side of the solar system.
- 8.2.3. The DC surge protection devices (SPDs) shall be installed in the DC distribution box adjacent to the solar grid inverter.
- 8.2.4. The AC SPDs shall be installed in the AC distribution box adjacent to the solar grid inverter.
- 8.2.5. The SPDs earthing terminal shall be connected to earth through the above mentioned dedicated earthing system. The SPDs shall be of type 2 as per IEC 60364-5-53

8.3. EARTHING PROTECTION

- 8.3.1. 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/Kota Smart City Limited as and when required after earthing by calibrated earth tester. PCU, ACDB and DCDB should also be earthed properly.
- 8.3.2. 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.
- 8.3.3. The PV module structure components shall be electrically interconnected and shall be grounded.

Earthing shall be done in accordance with IS 3043-1986, provided that earthing conductors shall have a minimum size of 6.0 mm² copper, 10 mm² aluminium or 70 mm² hot dip galvanised steel. Unprotected aluminium or copper-clad aluminium conductors shall not be used for final underground connections to earth electrodes.

- 8.3.4. A minimum of two separate dedicated and interconnected earth electrodes must be used for the earthing of the solar PV system support structure with a total earth resistance not exceeding 5 Ohm.
9. The earth electrodes shall have a precast concrete enclosure with a removable lid for inspection and maintenance. The entire earthing system shall comprise non-corrosive components.
- 9.1.1. Personnel to carry out any maintenance, this switch shall be locked by the utility personnel

10. CABLES

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

- 10.1. Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards
- 10.2. Temp. Range: –10°C to +80°C.
- 10.3. Voltage rating 660/1000V
- 10.4. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation, Flexible
- 10.5. 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. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.
- 10.6. Cable Routing/ Marking: All cable/wires are to be routed suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- 10.7. The ratings given are approximate. Bidder to indicate size and length as per system design requirement. All the cables required for the plant provided by the bidder. Any change in cabling sizes if desired by the bidder/approved after citing appropriate reasons.
- 10.8. All cable schedules/layout drawings approved prior to installation.
- 10.9. Multi Strand, Annealed high conductivity copper conductor PVC type ‘A’ pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armoured cable for underground laying. All cable trays including covers to be provided.
- 10.10. The DC cables from the SPV module array shall run through a UV- stabilised PVC conduit pipe of adequate diameter with a minimum wall thickness of 1.5mm.
- 10.11. Cables and wires used for the interconnection of solar PV modules shall be provided with solar PV connectors (MC4) and couplers.
- 10.12. All cables and conduit pipes shall be clamped to the Project Site, walls and ceilings with thermo-plastic clamps at intervals not exceeding 50 cm.
- 10.13. The minimum AC cable size shall be 4.0 mm² copper.
- 10.14. In three phase systems, the size of the neutral wire size shall be equal to the size of the phase wires.
- 10.15. Cables and conduits that have to pass through walls or ceilings shall be taken through a PVC pipe sleeve.
- 10.16. Cable conductors shall be terminated with tinned copper end-ferrules to prevent fraying and breaking of individual wire strands. The termination of the DC and AC cables at the Solar Grid Inverter shall be done as per instructions of the manufacturer, which in most cases will include the use of special connectors.
- 10.17. The following colour coding shall be used for cable wires:
- 10.18. DC positive: red (the outer PVC sheath can be black with a red line marking)
- 10.19. DC negative: black
- 10.20. AC single phase: Phase: red; neutral: black
- 10.21. AC three phase: Phases: red, yellow, blue; neutral: black

10.22. Earth wires: green

11. TOOLS & TACKLES AND SPARES:

- 11.1. 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.
- 11.2. 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.
- 11.3. The Installer shall keep ready stock of tools, tackles and essential spares that will be needed for the day-to-day maintenance of the solar PV system. This shall include but not be limited to, the following:
 - 11.3.1. Screw driver suitable for the junction boxes and combiner boxes;
 - 11.3.2. Screw driver and I or Allen key suitable for the connectors, power distribution blocks, circuit breaker terminals and surge arrestor terminals;
 - 11.3.3. Spanners I box spanners suitable for the removal of solar PV modules from the solar PV module support structure;
 - 11.3.4. Solar panel mounting clamps;
 - 11.3.5. Cleaning tools for the cleaning of the solar PV modules;
 - 11.3.6. Spare fuses.

12. DANGER BOARDS AND SIGNAGES:

- 12.1. Danger boards should be provided as and where necessary as per IE Act. / IE rules as amended up to date.
- 12.2. This signage shall be provided one each at Controler, Solar array area and pumping point. Text of the signage may be finalized in consultation with Kota Smart City Limited / owner.

13. CAUTION SIGNS

- 13.1. In addition to the standard caution and danger boards or labels as per Indian Electricity Rules, the AC distribution box near the solar inverter, the pump to which the AC output of the solar PV system is connected and the Solar Generation Meter shall be provided with a non-corrosive caution label with the following text: “WARNING –POWER SOURCE, SOLAR”
- 13.2. The size of the caution label shall be 105mm (width) x 20mm (height) with white letters on a red background.

~~14. FIRE EXTINGUISHERS:~~

- ~~14.1. The firefighting system for the proposed power plant for fire protection shall be consisting of:~~
- ~~14.2. Portable fire extinguishers in the control room for fire caused by electrical short circuits~~
- ~~14.3. Sand buckets in the control room~~
- ~~14.4. The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCUs as well as on the Roof or site where the PV arrays have been installed.~~

15. DRAWINGS & MANUALS:

- 15.1. 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.
- 15.2. Approved ISI and reputed makes for equipment be used.
- 15.3. For complete electro-mechanical works, bidders shall supply complete design, details and

drawings for approval to Kota Smart City Limited /owners before progressing with the installation work

15.4. **Documentation:** The Installer shall supply the following documentation:

- 15.4.1. System description with working principles.
- 15.4.2. System single line diagram.
- 15.4.3. Solar PV array lay-out.
- 15.4.4. Routing diagram of cables and wires.
- 15.4.5. Data sheets and user manuals of the solar PV panels and the solar grid inverter.
- 15.4.6. A system operation and maintenance manual.
- 15.4.7. Name, address, mobile number and email address of the service centre to be contacted in case of failure or complaint.
- 15.4.8. Warranty cards.
- 15.4.9. Maintenance registers.

15.5. **Test Certificates and Reports to be furnished**

- 15.5.1. Test Certificates / Reports from IECQ / NABL accredited laboratory for relevant IEC / equivalent BIS standard for quoted components shall be furnished. Type Test Certificates shall be provided for the solar modules and the solar grid inverters to provide evidence of compliance with standards as specified in Technical Specification. Customer reserves the right to ask for additional test certificates or (random) tests to establish compliance with the specified standards.

16. **PLANNING AND DESIGNING:**

- 16.1. 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 Kota Smart City Limited /Owner for approval.
- 16.2. Kota Smart City Limited 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.
- 16.3. The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidder submits three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

17. **DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT**

- 17.1. The Contractor shall furnish the following drawings Award/Intent and obtain approval
- 17.2. General arrangement and dimensioned layout
- 17.3. Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
- 17.4. Structural drawing along with foundation details for the structure.
- 17.5. Itemized bill of material for complete SV plant covering all the components and associated accessories.
- 17.6. Layout of solar Power Array
- 17.7. Shadow analysis of the Solar PV design

18. **SAFETY MEASURES:**

- 18.1. 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.

19. **MISC. CONDITIONS**

- 19.1. Module can be directly mounted on the sloping roof sheet in such a way that the clearance for air flow between them should be approximately 200mm.
- 19.2. All cables are to be routed in the conduit/raceways/concealed in the structure till the control box, mounted at the Site.
- 19.3. The Control box shall be able to house properly DCDB, ACDB, Inverter, LDB/PDB as may be required. It should be designed for outdoor duty of IP 65 with proper louvers for air ventilation. It should be lockable to avoid any un-authorized access.
- 19.4. The separate earthing for the equipment and the structure should be provided properly.
- 19.5. These are the broad guidelines and the design of the solar system should be approved by the tendering authority before execution.
- 19.6. The BOM enclosed in NIB is the minimum requirements and if any other components are desired to make the system operational shall be supplied by EPC without any cost implication to KSCL.
- 19.7. The price should be quoted on lump-sum basis for electrical system and plumbing system in the price bid format including all cost to EPC and no other payments shall be made over and above this price.
- 19.8. If the item sr no 5, 8, 9 & 10 of BOM of this NIB, are consumed more than 110% of the proposed estimate, EPC can request KSCL to pay extra items at the prevailing RUDIP rates. However, acceptance of the extra claim shall be to the discretion of KSCL officer in charge.
- 19.9. All the SOR equipment makes such as pumps, power cables, GI pipes shall be as per the RUIDP ISOR – 2017 make list
- 19.10. All Non-SOR equipment shall comply with the latest technical standards.
- 19.11. **Preferred Makes** of various items is as listed below: -
 - 19.11.1. Solar Cells/Modules – Indian Manufacturing companies such as CEL, BHEL, Moserbear, WebSolar, Indosolar, Tata Solar power, Adani, or equivalent.
 - 19.11.2. Solar Inverter cum Pump Controller – Amrut Energy, ABB, Schnieder, Jain irrigation or equivalent.

SECTION 12 : LIST OF SITES

(TENTATIVE & MAY VARY IF KSCL DESIRES)

Listed below the project sites identified for the Solar powered water pumping system installation :

Bawaries details in Kota City					
Sr. No.	Bawari Location	Bawari Perimeter	Total Depth	Water level	Remarks
1	Danabadi - Jain Temple	52 Mtrs	10 Mtrs	8 Mtrs.	
2	Rangbadi Temple location 1	34 Mtrs	6 Mtrs	4 Mtrs.	
3	Rangbadi Temple location 2	72 Mtrs	5 Mtrs	3 Mtrs.	
4	Khade Gadesh Ji Temple	28 Mtrs	11 Mtrs	10 Mtrs.	
5	Bhuteshwar Mahadev Location 1	12 Mtrs	8 Mtrs	4 Mtrs.	
6	CV Garden sweeming pool	48 Mtrs	25 Mtrs	20 Mtrs.	
7	PHED office Bawari	50 Mtrs	22 Mtrs	18 Mtrs.	
8	Shiv Mandir, kanswa	16 Mtrs	5 Mtrs	3 Mtrs.	Area suggested at corner of Kund
9	Mangleshwar vyayam shala	24 Mtrs	4 Mtrs	3 Mtrs.	
10	Well Near Ranpur Talab	16 Mtrs	20 Mtrs	16 Mtrs.	
11	Jagpura bawari inside bag	16 Mtrs	20 Mtrs	16 Mtrs.	
12	Jharneshwar Mahadev mandir	75 Mtrs	4 Mtrs	3 Mtrs.	

SECTION 13 :BILL OF MATERIAL OF PROPOSED SYSTEM

The Proposed system shall have following equipment's in compliance to with specifications of the (NIB):
(TENTATIVE & MAY VARY AS PER SITE CONDITION)

BAWARY No.-1, DANABADI JAIN TEMPLE

SN	BILL OF MATERIAL	QTY	Unit
A.	Electrical System		
1	Solar PV Module	3	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 3HP submersible pump)	1	set
4	Submersible Pump (3ph, min 20mt head, min 250LPM discharge)	3	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B.	Plumbing System		
8	GI Pipe (2.5. " dia) from pump to surface	12	Mt
9	GI Perimeter pipe (2.5" dia) ring	30	Mt

10	GI Perimeter pipe (1.5” dia) ring	25	Mt
11	Brass Spray nozzles of 6mm dia. at each 1 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	55	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-2, RANGBADI TEMPLE LOCATION-1

SN	BILL OF MATERIAL	QTY	Unit
A.	Electrical System		
1	Solar PV Module	2	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 2HP submersible pump)	1	set
4	Submersible Pump (3ph, min 15mt head, min 150LPM discharge)	2	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B.	Plumbing System		
8	GI Pipe (1.25 ” dia) from pump to surface	8	Mt
9	GI Perimeter pipe (1.25” dia) ring	20	Mt
10	GI Perimeter pipe (1.00” dia) ring	15	Mt
11	Brass Spray nozzles of 6mm dia. at each 1 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	35	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-3, RANGBADI TEMPLE LOCATION-2

SN	BILL OF MATERIAL	QTY	Unit
A.	Electrical System		
1	Solar PV Module	3	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 3HP submersible pump)	1	set
4	Submersible Pump (3ph, min 15mt head, min 350LPM discharge)	3	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B.	Plumbing System		
8	GI Pipe (2.5 ” dia) from pump to surface	6	Mt
9	GI Perimeter pipe (2.5” dia) ring	40	Mt
10	GI Perimeter pipe (1.5” dia) ring	32	Mt
11	Brass Spray nozzles of 6mm dia. at each 1 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	72	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-4, KHADE GANESH JI TEMPLE

SN	BILL OF MATERIAL	QTY	Unit
A.	Electrical System		
1	Solar PV Module	2	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 2HP submersible pump)	1	set
4	Submersible Pump (3ph, min 15mt head, min 125LPM discharge)	2	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B.	Plumbing System		
8	GI Pipe (1.25 ” dia) from pump to surface	12	Mt
9	GI Perimeter pipe (1.25” dia) ring	20	Mt
10	GI Perimeter pipe (1.00” dia) ring	8	Mt
11	Brass Spray nozzles of 6mm dia. at each 1 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	28	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-5, BHUTESHWAR MAHADEV

SN	BILL OF MATERIAL	QTY	Unit
A.	Electrical System		
1	Solar PV Module	2	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 2HP submersible pump)	1	set
4	Submersible Pump (3ph, min 12mt head, min 80LPM discharge)	2	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B.	Plumbing System		
8	GI Pipe (1.25 ” dia) from pump to surface	10	Mt
9	GI Perimeter pipe (1.25” dia) ring	10	Mt
10	GI Perimeter pipe (1.00” dia) ring	4	Mt
11	Brass Spray nozzles of 6mm dia. at each 1 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	14	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-6, CV GARDEN SWIMMING POOL

SN	BILL OF MATERIAL	QTY	Unit
A.	Electrical System		
1	Solar PV Module	3	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set

3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 3HP submersible pump)	1	set
4	Submersible Pump (3ph, min 30mt head, min 240LPM discharge)	3	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B. Plumbing System			
8	GI Pipe (2.5 ” dia) from pump to surface	28	Mt
9	GI Perimeter pipe (2.5” dia) ring	25	Mt
10	GI Perimeter pipe (1.5” dia) ring	25	Mt
11	Brass Spray nozzles of 6mm dia. at each 1 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	50	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-7, PHED OFFICE

SN	BILL OF MATERIAL	QTY	Unit
A. Electrical System			
1	Solar PV Module	3	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 3HP submersible pump)	1	set
4	Submersible Pump (3ph, min 30mt head, min 260LPM discharge)	3	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B. Plumbing System			
8	GI Pipe (2.5 ” dia) from pump to surface	25	Mt
9	GI Perimeter pipe (2.5” dia) ring	32	Mt
10	GI Perimeter pipe (1.5” dia) ring	20	Mt
11	Brass Spray nozzles of 6mm dia. at each 1 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	52	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-8, SHIV MANDIR KANSUA

SN	BILL OF MATERIAL	QTY	Unit
A. Electrical System			
1	Solar PV Module	2	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 2HP submersible pump)	1	set
4	Submersible Pump (3ph, min 30mt head, min 260LPM discharge)	2	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set

7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B. Plumbing System			
8	GI Pipe (1.25 " dia) from pump to surface	30	Mt
9	GI Perimeter pipe (1.25" dia) ring	10	Mt
10	GI Perimeter pipe (1.00" dia) ring	6	Mt
11	Brass Spray nozzles of 6mm dia. at each 1 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	16	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-9, MANGLESHWAR VYAYAM SHALA

SN	BILL OF MATERIAL	QTY	Unit
A. Electrical System			
1	Solar PV Module	2	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 2HP submersible pump)	1	set
4	Submersible Pump (3ph, min 8mt head, min 160LPM discharge)	2	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B. Plumbing System			
8	GI Pipe (1.25 " dia) from pump to surface	6	Mt
9	GI Perimeter pipe (1.25" dia) ring	14	Mt
10	GI Perimeter pipe (1.00" dia) ring	10	Mt
11	Brass Spray nozzles of 6mm dia. at each 2 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	24	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-10, WELL NEAR RANPUR TALAB

SN	BILL OF MATERIAL	QTY	Unit
A. Electrical System			
1	Solar PV Module	2	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 2HP submersible pump)	1	set
4	Submersible Pump (3ph, min 23mt head, min 100LPM discharge)	2	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B. Plumbing System			
8	GI Pipe (1.25 " dia) from pump to surface	22	Mt
9	GI Perimeter pipe (1.25" dia) ring	10	Mt

10	GI Perimeter pipe (1.00” dia) ring	6	Mt
11	Brass Spray nozzles of 6mm dia. at each 2 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	16	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-11, JAGPURA BAWARY

SN	BILL OF MATERIAL	QTY	Unit
A.	Electrical System		
1	Solar PV Module	2	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 2HP submersible pump)	1	set
4	Submersible Pump (3ph, min 24mt head, min 100LPM discharge)	2	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B.	Plumbing System		
8	GI Pipe (1.25 ” dia) from pump to surface	20	Mt
9	GI Perimeter pipe (1.25” dia) ring	10	Mt
10	GI Perimeter pipe (1.00” dia) ring	6	Mt
11	Brass Spray nozzles of 6mm dia. at each 2 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	16	Nos
12	Plumbing connections, valves, controls & accessories	1	set

BAWARY No.-12, JHARNESHWAR MAHADEV

SN	BILL OF MATERIAL	QTY	Unit
A.	Electrical System		
1	Solar PV Module	3	kWp
2	Module Mounting Structurer (GI / Aluminum)	1	set
3	Pump controller come Inverter with MPPT Charge controller, housed inside Enclosure (Sine wave, 3ph suitable for 3HP submersible pump)	1	set
4	Submersible Pump (3ph, min 14mt head, min 370LPM discharge)	3	HP
5	Solar Cable & Submersible cable (1 x 3 x 2.5Sq mm /or /as may be adequate for connection from Solar Panels to inverter and from inverter to pump)	40	Mt.
6	Electrical system Protection devices & Junction Boxes etc.	1	set
7	Kiosk for keeping the controller etc. with safety arrangement	1	set
B.	Plumbing System		
8	GI Pipe (2.5 ” dia) from pump to surface	3	Mt
9	GI Perimeter pipe (2.5” dia) ring	45	Mt
10	GI Perimeter pipe (1.5” dia) ring	30	Mt
11	Brass Spray nozzles of 6mm dia. at each 1 mt interval on perimeter pipe for water discharging back into bawaries in the shape of fountain	75	Nos
12	Plumbing connections, valves, controls & accessories	1	set



KOTA SMART CITY LIMITED

Notice inviting Bids (NIB) of bidders for Implementation of “Solar PV powered water pumping System on Identified Bawaries in Kota Smart city area” under the Smart Cities Mission

ANNEXURE-1 :PRICE BID

Tender Inviting Authority: Chief Executive Officer, Kota Smart City Limited, Kota, Rajasthan						
Name of Work : Design, Supply, Erection, Testing, Commissioning and Operation and Maintenance upto 5 years of Rooftop Solar Photovoltaic Powered water pumping Project at various Bawaries (Open well) in KOTA City City						
Contract No:	09/2017-18					
Bidder Name :	<< SAMPLE FORMAT ONLY, TO BE FILLED ONLINE >>					
PRICE SCHEDULE						
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	3	4	5	6	7
1	Design, Supply, Erection, Testing, Commissioning, of standalone Solar Photovoltaic Powered water pumping Electrical system (2kW Solar PV module, Inverter come pump controller, Module Mounting structurer, 2HP Submersible Pump etc.) on selected sites at KOTA	7	No.			
2	Design, Supply, Erection, Testing, Commissioning, of standalone Solar Photovoltaic Powered water pumping Electrical system (3kW Solar PV module, Inverter come pump controller, Module Mounting structurer, 3HP Submersible Pump etc.) on selected sites at KOTA	5	No.			
3	Supply & installation of water dispensing system (GI Pipe 25mm dia & plumbing fitting etc.)	150	mts			
4	Supply & installation of water dispensing system (GI Pipe 32mm dia & plumbing fitting etc.)	180	mts			
5	Supply & installation of water dispensing system (GI Pipe 40mm dia & plumbing fitting etc.)	130	mts			
6	Supply & installation of water dispensing system (GI Pipe 65mm dia & plumbing fitting etc.)	240	mts			
7	Supply & Fixing of 6mm brass nozzles.	453	No.			
8	Base year price for Operation and Maintenance of Solar Photovoltaic Powered water pumping Projects installed on selected bawaries at KOTA	12	No.			
	Total in Figures					
	Quoted Rate in Words	INR		Only		

Note: This information should be filled on-line only on e-procurement site as per procedure.

ANNEXURE 2: BID APPLICATION FORM (IN COVER -2)

KOTA SMART CITY LIMITED
KOTA (Rajasthan)

1. Subject: (NIB) for
2. Name and full postal address, contact Number and Email of the Bidder submitting the Bid:...
3. To be addressed to:
4. Chief Executive Officer, KOTA Smart City Limited, KOTA (Rajasthan)
5. Reference ((NIB) No):....
6. The fee as per (NIB) has been submitted/ deposited as under:

S.No.	Details	Amount	CR No./ DD No.
1	Cost of Bid: in favour of CEO, KSCL payable at KOTA	Rs. 10,000/-	
2	e-proc Charges: in favour of MD, RISL, payable at Jaipur	Rs.1,000/-	
3	EMD in favour of CEO, KSCL, KOTA	Rs.1.60 Lakhs	

7. We agree to abide by all the conditions as mentioned in (NIB) No..... Dated and subsequent revisions thereof issued by the Chief Executive Officer, KSCL, KOTA and (all the pages of which have been signed by us in token of acceptance of the terms mentioned therein).
8. The Costs/Rates for the installation, commissioning, operations and maintenance thereof are given in the schedule of prices attached herewith.
9. Material will be delivered within delivery period / schedule.
10. The rates quoted are valid upto 6 (Six) months from the date of opening of the Price Bid. The period can be extended with mutual consent.

SIGNATURE and SEAL OF BIDDER

ANNEXURE 3 : CHECK-LIST FOR EVALUATION OF TECHNICAL BID FOR BIDDER (IN COVER -2)

S. No.	Details Required (Self- attested document to be attached)	Details of Attachment	Page No.
1	Complete Bid Document (Duly signed on each and every page in confirmation of acceptance of Terms and Condition of Bid) along with the declaration as per ANNEXURE 4.		
2	As per Section 3 (1) (A copy of certificate/registration document should be furnished along with the Bid in support of above.)		
3	As per Section 3 (2) The Bidder(s) shall have cumulative experience as per (NIB) The details of the Project(s) executed shall be listed in ANNEXURE 5. A certificate issued towards the satisfactory installation and functioning of the Project(s) should be furnished by the Bidder(s).		
4	As per Section 3 (3) The Bidder(s) shall have financial capability to take up the proposed work to be supported by Audited Annual Accounts for last 03 (Three) Financial Years (FY) as per (NIB). Accounts for the last FY duly authorized by Board of Directors of the Bidder(s), subject to submission of Audited Annual Accounts for last FY as and when available. In case Audited Accounts are not available for last FY, the Bidder(s) shall submit Provisional Annual Report.		
5	As per Section 3 (1.3) Bidder(s) shall furnish valid GST registration certificate.		
6	Authorization Certificate/Consortium Agreement. (If the Bid is submitted by the any authorized person/firm/agent/Consortium Firm on behalf of original Bidder)		
7	Others - Certificates in support of clarification of technical requirements (if any).		

ANNEXURE 4 :BRIEF DETAILS & DECELERATION OF THE BIDDER

The brief details of the Bidder(s) shall be filled in as under:

S. No	Particulars	Detail
1	Name of the Bidder	
2	Registration Number	
3	Date of Registration	
4	Registered Address with Tel. Number	
5	Details of Product(s) being manufactured at their own	
6	Name of Directors of the Company	(1)
	(at least Two directors with email IDs and contact Numbers):	(2)
7	GST/Sales Tax/Vat Registration Number	
8	Year from which firm is in business in Solar Power/Renewable Energy	
9	Major Area (Name of States) of working remained till date	
10	Technical Officers/Engineers and other officers/officials working in the company	(1) Technical Person (Nos.)
		(2) Other officers/ officials (Nos.)
11	Branch offices/Dealers network is available in KOTA (if yes, provide details)	
12	The person(s) authorized by the Bidder for work of Project Site Projects in KOTA.	

In relation to Bid submitted, we hereby declare under Section 7 of Rajasthan Transparency in Public Procurement Act, 2012, that:

1. We possess the necessary professional, technical, financial and managerial resources and competence required by the (NIB) issued by the Procuring Entity;
2. We have fulfilled our obligation to pay such of the taxes payable to the Union and the State Government or any local authority as specified in the (NIB);
3. We are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended and not the subject of legal proceedings for any of the foregoing reasons;

4. We do not have, and our directors and officers not have, been convicted of any criminal offence related to my/our professional conduct or the making of false statements or misrepresentations as to my/our qualifications to enter into a procurement contract within a period of 3 (Three) years preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;

5. We do not have a conflict of interest as specified in the Act, Rules and the Bidding Document, which materially affects fair competition;

SIGNATURE and SEAL OF BIDDER

Date:
Name :
Designation:
Address:

ANNEXURE 5 :SCHEDULE OF EXPERIENCE

(Please attach certificates in support for work executed)

S.No.	Details of Project installed till Bid Deadline	Year	Department/Agency/ Beneficiary for which work carried out	Total kW size of work	Cost of works (Amt. in Lakhs.)	Attachment at Page No. of Bid
1						
2						
3						
4						
.....N						
TOTAL						

SIGNATURE and SEAL OF BIDDER



KOTA SMART CITY LIMITED

Notice inviting Bids (NIB) of bidders for Implementation of “Solar PV powered water pumping System on Identified Bawaries in Kota Smart city area” under the Smart Cities Mission

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly KSCL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder or to enforce any security held by KSCL or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

Notwithstanding anything contained herein above, our liability under this Guarantee is restricted to Rs. (Rupees only) and it shall remain in force until [six months from the date of Bid Deadline] with an additional claim period of 30 (Thirty) days thereafter. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if KSCL serves upon us a written claim or demand.

Signature

Name

Power of Attorney No.

For [Insert Name of the Bank]

Banker's Stamp and Full Address.

ANNEXURE 7 :FORMAT FOR PERFORMANCE BANK GUARRANTEE (PBG)

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

In consideration of the[Insert name of the Bidder] (hereinafter referred to as “EPC”) submitting the response to the (NIB) No.dated..... issued by KOTA Smart City Limited (hereinafter referred to as KSCL) and KSCL considering such response to the (NIB) of[insert the name of the selected Bidder] (which expression shall unless repugnant to the context or meaning thereof include its executers, administrators, successors and assignees) and issuing Letter of Allocation No.....to[Insert Name of “EPC”] as per terms of (NIB) and the same having been accepted by the “EPC”,].

As per the terms of the (NIB), the.....[insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to KSCL at forthwith on demand in writing from KSCL or any Officer authorized by it in this behalf, any amount up to and not exceeding Rupees[Total Value] only, on behalf of[Insert name of the “EPC”].

This guarantee shall be valid and binding on this Bank up to.....and includingand shall not be terminable by notice or any change in the constitution of the Bank or the term of contract/agreement or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective contract/agreement.

Our liability under this Guarantee is restricted to Rs[insert total value]

Our Guarantee shall remain in force until..... [24 months from the date of signing of Letter of Allocation] KSCL shall be entitled to invoke this Guarantee till [insert last date of Security Deposit validity].

The Guarantor Bank hereby agrees and acknowledges that KSCL shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by KSCL, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to KSCL.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by[Insert name of “EPC”]. The Guarantor Bank shall not require KSCL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against KSCL in respect of any payment made hereunder.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at KOTA shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.



KOTA SMART CITY LIMITED

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This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly KSCL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the “EPC”, to make any claim against or any demand on the “EPC” or to give any notice to the “EPC” or to enforce any security held by KSCL or to exercise, levy or enforce any distress, diligence or other process against the “EPC”.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs.(Rupeesonly) and it shall remain in force until We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if KSCL serves upon us a written claim or demand.

For [Insert Name of the Bank]
Signature
Name
Power of Attorney No.

Banker's Stamp and Full Address.

Dated this day of....., 20..

Witness:

1. Signature
Name and Address

2. Signature
Name and Address

Notes:

1. The Stamp Paper should be in the name of the Executing Bank and of appropriate value.
2. The PBG shall be executed by any scheduled Bank

ANNEXURE 8 :FORMAT OF INSTALLATION / COMISSIONING CERTIFICATE

1. Project Identification

Project No		Installation Date	
Name of Site Owner		Name of EPC	
Address of Installation		Address of EPC	
Phone No		EPC Phone No	
E-mail / Fax No		E-mail / Fax No	
Mobile No		EPC's GST No	Note: GST no. Should be printed or stamped properly

2. Technology Description and System Design/Specification

The details of material installed are as under:

S.No.	Item	Make and Capacity of each	Quantity	Serial Numbers
1	Module			
	Capacity/Power of each PV module (Wp)			
	Cumulative capacity of Module (kWp)			
	Solar Cell Technology			
	Module efficiency (in percentage)			
2	Pump Controller / Inverters			
	Type of Inverter			
	Make of Inverter			
	Capacity/Power of each PCU/inverters (VA)			
	Capacity/Power of PCU/Inverters (KVA)			
	Invert efficiency (full load)- in percentage			
3	Pump			
	Details & rating of Pump			
	Type of Pump			
	Make of Pump			
4	Other Electrical equipments			
	Cable			



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	MCB/Protection			
	Surge Protection device			
	Other items.....			
5	Water dispensing Mechanism			
	Pumping Arrangement and piping details			
	No. Nozzle's spray			
6	Monitoring Mechanism			
	Details of display / Meters / indicators for regular verification			

3. Verification

Above equipment's are installed & tested properly and found working satisfactorily.

Owners authorized Person with seal.		“EPC” representative installed the system	
Signature		Signature	
Name		Name	
Designation		Designation	
Department		Department	
Seal / Stamp		Seal / Stamp	
Date		Date	
Verification by KSCL Representative (Name & Signature of verifying agency representative with Stamp).			

4. COMMISSIONING CERTIFICATE

1. The work has been completed on datewith in stipulated period / with a delay of days.
2. Instruction Manual, Guarantee Card and Invoice of system have been submitted to KSCL.
3. The project execution has been vetted by KSCL and found that it has been installed and commissioned in good condition as per technical specification of this (NIB).

SIGNATURE of PROJECT OFFICER, KSCL with SEAL

Date

Note : Part 1, 2 shall be filled & signed by the EPC and get it verified by KSCL representative in part 3 and then submit it with all enclosures (as referred in part 4.2 of this format) to KSCL officer in charge for the project. The officer will review and issue the commissioning certificate by filling & signing part 4 of this format.

ANNEXURE 9: COMPLIANCE WITH THE CODE OF INTEGRITY AND NO CONFLICT OF INTEREST

Any person participating in a procurement process shall –

- (a) Not offer any bribe, reward or gift or any material benefit either directly or indirectly in exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
- (b) Not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- (c) Not indulge in any collusion, Bid rigging or anti-competitive behavior to impair the transparency, fairness and progress of the procurement process;
- (d) Not misuse any information shared between the procuring Entity and the Bidders with an intent to gain unfair advantage in the procurement process;
- (e) Not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (f) Not obstruct any investigation or audit of a procurement process;
- (g) Disclose conflict of interest, if any; and
- (h) Disclose any previous transgressions with any Entity in India or any other country during the last three years or any debarment by any other procuring entity.

Conflict of Interest: -

Bidder participating in a bidding process must not have a Conflict of Interest. A Conflict of Interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations i.e. A Bidder may be considered to be in Conflict of Interest with one or more parties in a bidding process if, including but not limited to:

- a. Have controlling partners/ shareholders in common; or
- b. Receive or have received any direct or indirect subsidy from any of them; or
- c. Have the same legal representative for purposes of the Bid; or
- d. Have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Entity regarding the bidding process; or
- e. The Bidder participates in more than 1(One) Bidding a bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same subcontractor, not otherwise participating as a Bidder in more than one Bid; or
- f. The Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Goods, Works or Services that are the subject of the Bid; or
- g. Bidder or any of its affiliates has been hired (or is proposed to be hired) by the procuring entity as engineer-in-charge consultant for the contract.

SIGNATURE and SEAL OF BIDDER

ANNEXURE 10 :GRIEVANCE REDRESSAL PROCESS

The designation and address of the First Appellate Authority is **Chief Executive Officer**, Kota Smart City Limited, 2nd Floor, Rajeev Gandhi Bhawan, Block-A, Dussehra maidan, Kota.

The designation and address of the Second Appellate Authority is Secretary/Principal Secretary, LSG Govt. of Rajasthan.

1) Filing an appeal

If any Bidder or prospective Bidder is aggrieved that any decision, action or omission of the Procuring Entity is in contravention to the provisions of the Act or the Rules or the Guidelines issued there under, he may file an appeal to First Appellate Authority, as specified in the (NIB) within a period of 10 (Ten) days from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved:

Provided that after the declaration of a Bidder as successful the appeal may be filed only by a Bidder who has participated in procurement proceedings:

Provided further that in case a Procuring Entity evaluates the Technical Bid(s) before the opening of the Financial Bid(s), an appeal related to the matter of Financial Bid(s) may be filed only by a Bidder whose Technical Bid is found to be acceptable.

2) The officer to whom an appeal is filed under para (1) shall deal with the appeal as expeditiously as possible and shall endeavor to dispose it of within 30 (Thirty) days from the date of the appeal.

3) If the officer designated under para (1) fails to dispose of the appeal filed within the period specified in para (2), or if the Bidder or prospective Bidder or the Procuring Entity is aggrieved by the order passed by the First Appellate Authority, the Bidder or prospective Bidder or the Procuring Entity, as the case may be, may file a second appeal to Second Appellate Authority specified in the (NIB) in this behalf within 15 (Fifteen) days from the expiry of the period specified in para (2) or of the date of receipt of the order passed by the First Appellate Authority, as the case may be.

4) Appeal not to lie in certain cases

No appeal shall lie against any decision of the Procuring Entity relating to the following matters, namely: -

- (a) Determination of need of procurement;
- (b) Provisions limiting participation of Bidders in the Bid process;
- (c) The decision of whether or not to enter into negotiations;
- (d) Cancellation of a procurement process;
- (e) Applicability of the provisions of confidentiality.

5) Form of Appeal

a. An appeal under para (1) or (3) above shall be in the annexed form along with as many copies as there are respondents in the appeal.

b. Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee.

c. Every appeal may be presented to First Appellate Authority or Second Appellate Authority, as the case may be, in person or through registered post or authorised representative.

- 6) Fee for filing appeal
- a. Fee for first appeal shall be Rs. 2,500 (Rupees Two Thousand Five Hundred) and for second appeal shall be Rs. 10,000 (Rupees Ten Thousand), which shall be non- refundable
 - b. The fee shall be paid addressed to Appellate Authority concerned in the form of bank demand draft or banker's cheque of a Scheduled Bank in India payable in the name of “Kota Smart City limited” payable at Kota.
- 7) Procedure for disposal of appeal
- a. The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.
 - b. On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall, -
 - i. hear all the parties to appeal present before him; and
 - ii. Peruse or inspect documents, relevant records or copies thereof relating to the matter .
 - c. After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.
 - d. The order passed under sub-clause (c) above shall also be placed on the State Public Procurement Portal.

SIGNATURE and SEAL OF BIDDER