



रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

## Request for Proposal for Selection of Bidders for

### Design, Supply, Erection, Testing, Commissioning and Operation and Maintenance for 25 years of

### Grid Connected Rooftop and Small Ground Mounted Solar Photovoltaic Power Projects on State/Central Government buildings & Government under taking buildings

In

Rajasthan

Under

**RESCO Mode**

**NIT No.: REIL/BID/PROJECT/2024-25/001**

**Dated: 01.07.2024**



### **RAJASTHAN ELECTRONICS & INSTRUMENTS LTD.**

(An ISO 9001:2015 & 14001:2015 'Mini-Ratna' Central Public Sector Enterprise)

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10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 1 of 142	बोली दाता के हस्ताक्षर
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## DISCLAIMER

1. Though adequate care has been taken while preparing the NIT document, the Bidders shall satisfy themselves that the document is complete in all respect. Intimation regarding any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within ten (10) days from the date of notification of NIT, it shall be considered that the document is complete in all respect and has been received / acknowledged by the Bidder(s). Bidders submitting their bids shall be deemed to have taken into consideration, all the circumstances affecting the execution of the contract. REIL shall not be responsible for the same.
2. Rajasthan Electronics & Instruments Ltd. (REIL) reserves the right to modify, amend or supplement this document.
3. While this tender document has been prepared in good faith, neither REIL 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 document, even if any loss or damage is caused by any act or omission on their part.

Place: Jaipur

Date:

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 3 of 142	बोली दाता के हस्ताक्षर
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# PART (भाग) – I

## INVITATION FOR BIDS

बोलियों के लिए आमंत्रण

(IFB)

(निविदा सं.: –REIL/BID/PROJECT/2024-25/001)

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## INVITATION FOR BIDS (IFB)

For

**Implementation of 10 MWp Grid Connected Roof Top and Small Ground Mounted Solar Photovoltaic Power Plants on State/Central Government buildings & Government under taking buildings in Rajasthan, India under RESCO Model.**

### (SINGLE STAGE TWO ENVELOPE BIDDING)

Date of Issuance of NIT : **01/07/2024**

1. Government of India desires to implement grid connected rooftop solar PV projects on the roofs of Govt./PSU Buildings/Offices as well as small ground mounted Solar PV systems as a part of its Renewable Energy Initiatives.
2. Accordingly, several Government organizations, Ministries and other institutions have taken necessary steps to install Grid-Connected Rooftop Solar PV Projects at their premises/buildings, to increase electricity consumption through renewable energy.
3. REIL is a Central Public Sector Enterprises, incorporated under the Companies Act, 1956, having its Registered Office at 2, Kanakpura Industrial Area, Sirsi Road Jaipur – 302034 (hereinafter referred to as REIL/ Employer).
4. REIL, therefore, invites sealed bids from eligible bidders to participate in Notice Inviting Tender (NIT) for Site Survey, Design, Manufacture, Supply, Erection, Testing and Commissioning along with associated power evacuation & transmission system including Warranty, 25 years Operation and Maintenance of Roof Top Solar PV Power System for Central/State Government Buildings in Rajasthan under RESCO Model.
5. For the implementation of above mentioned work, Bidders should submit their bid proposal online complete in all aspect on or before Last date of Bid Submission as mentioned on the Bid Information Sheet of NIT document.
6. Bidder shall submit bid proposal along with non-refundable bid processing fee complete in all respect as per the Bid Information Sheet. Techno-Commercial bids will be opened as per the Bid Information Sheet in online presence of authorized representatives of bidders who wish to be present. Bid proposals received without the prescribed bid processing fees will be rejected. In the event of any date indicated above is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.
7. Bid documents which include Eligibility Criteria, Technical Specifications, various Conditions of Contract and Formats etc. can be downloaded from REIL website [www.reiljp.com](http://www.reiljp.com) or from Central Public Procurement Portal ([www.eprocure.gov.in](http://www.eprocure.gov.in)) It is mandatory to download official copy of NIT Document from REIL website [www.reiljp.com](http://www.reiljp.com) or from Central Public Procurement Portal in order to participate in the Tender. Any amendment(s)/corrigendum/clarification(s) with respect to this Bid shall be uploaded on Central Public Procurement Portal only. The Bidder should regularly check for any Amendment(s)/Corrigendum/Clarification(s) on the above portal only.
8. The bidding process under this NIT is for 10 MWp comprising of RESCO Model.
9. This NIT may be withdrawn or cancelled by REIL at any time without assigning any reasons thereof. REIL 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.
10. The bidding process under this NIT is only for government buildings in Rajasthan.
11. The detailed scope of work includes:

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12. The tentative potential for the Rajasthan state has been enclosed herewith in this NIT documents as Annexure - II. Successful bidder is requested to visit the respective sites and check the feasibility of space including installation capacity in consultation with respective site in charge / owner. Successful bidder need to submit project sanction documents (PPA agreement between successful bidder and the rooftop owner(s) at the quoted tariff as per NIT and project report for the approval of REIL for issuance of project specific sanction letter(s). The PPA shall be executed in the prescribed format attached herewith this NIT document which have been provided by Ministry of New and Renewable Energy. However, REIL shall facilitate the process.
13. The Scope of the Work would essentially cover, but not limited to Site Survey of Identified Roof Tops and surplus lands, Identification of New Roof Tops and surplus land , Site Visit, Solar Potential Assessment, Finalization of plant capacity for Identified Locations, execution of PPA (in the prescribed format attached herewith this NIT document), Design, Engineering, Manufacture, Supply, Storage, Civil work, Erection, Testing & Commissioning , Inter-connections with the grid for net metering & obtaining all statutory approvals, quality control of the grid connected rooftop Solar PV Project including Operation and Maintenance (O & M) of the project for a period of 25 years after commissioning of project. Any additional modification work of the roof tops solar power plant in order to implement the system/project shall be in the scope of successful bidder.
14. Bid Security / EMD shall be furnished as capacity listed out in the NIT along with the response to NIT as per Clause of Bid Information Sheet. Bid Security / EMD shall be enclosed in a sealed envelope and shall be submitted in the office of REIL.
15. PBG amount shall be furnished by the successful bidder after issuance of LOA / NOA by REIL.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 6 of 142	बोली दाता के हस्ताक्षर
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## INTERPRETATIONS

1. Words comprising the singular shall include the plural & 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.
4. Different parts of this contract 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 contract, 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 the contract has been inserted for case of reference only & shall not affect the interpretation of this agreement.

## BID INFORMATION SHEET

Document Description	Implementation of 10 MWp Grid Connected Roof Top and Small Ground Mounted Solar Power Plants for Central/State Government Buildings in Rajasthan under RESCO Model.
NIT No.& Date	REIL/BID/PROJECT/2024-25/001
Location	Various Locations in entire Rajasthan.
Downloading of NIT document	
Period of work	<b>PPA Signing</b> - Within 6 Months from the date of issuance of NOA/LOA. <b>Work Completion</b> –With in 9 Month from the date of Signing of PPA with beneficiary.
Pre-bid Conference / Clarification Meeting	11/07/2024 at 11:00 HRS to be held online (Interested bidders may sent mail at <a href="mailto:himanshu.sharma@reil.co.in">himanshu.sharma@reil.co.in</a> for getting link of online meeting before 03-07-2024 )
Last date & Time for Online Submission of bids	22-07-2024
Last date & Time for physical submission of offline document at REIL office, JAIPUR	22-07-2024 up to 18:00 HRS
Online Bid Opening (Techno-Commercial)	23-07-2024
Financial Bid Opening	To be intimated subsequent to short listing of techno-Commercial bids.
Estimated Cost	Rs. 18.00 Lakh / MWp
Capacity to be Quoted by bidder	Minimum Quoted Capacity :- 2 MW
Non- Refundable Bid Processing Fee for each bidder	Rs. 5,000/- (Rupees Five Thousand) (to be submitted in the form of DD / Banker's Cheque/RTGS, along with the bid in favor of "Rajasthan Electronics & Instruments Ltd., payable at Jaipur.
Bid Security / EMD	Bid Security / EMD INR 8.00 Lakh per MWp (Indian Rupees Eight Lakh only) (To be submitted in the form of DD/Bank Guarantee along with the bid).The minimum validity period of BG should be up to 06 Months from the Bid Deadline, may be extended as per request / instruction of REIL.

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Construction –Performance Bank Guarantee (C-PBG)/ Performance Security	Successful Bidder shall be required to furnish a Construction-Performance Bank Guarantee (C-PBG) as per the provisions of Clause 3.13
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Name, Designation, Address and other details (For Submission of Response to RfP)	Addl. General Manager(RE) Rajasthan Electronics & Instruments Ltd. 2, Kanakpura Ind. Area, Sirsi Road Jaipur- India-302034 Email- <a href="mailto:deepak.gupta@reil.co.in">deepak.gupta@reil.co.in</a>
Details of persons to be contacted in case of any assistance required	1. Mr. Deepak Gupta AGM (RE), <a href="mailto:deepak.gupta@reil.co.in">deepak.gupta@reil.co.in</a>  2. Mr. Himanshu Sharma Sr. Engineer (RE) <a href="mailto:himanshu.sharma@reil.co.in">himanshu.sharma@reil.co.in</a>

**Important Note:** Prospective Bidders are requested to remain updated for any notices / amendments / clarifications etc. to the tender document through the websites [www.reiljp.com](http://www.reiljp.com) and [www.eprocure.gov.in](http://www.eprocure.gov.in). No separate notifications will be issued for such notices/amendments/clarifications etc. in the print media or individually. Intimation regarding notification/amendments/clarifications etc. shall be updated on [www.reiljp.com](http://www.reiljp.com) and the details will only be available from [www.eprocure.gov.in](http://www.eprocure.gov.in) .

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 8 of 142	बोली दाता के हस्ताक्षर
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## PART (भाग) - II

# INSTRUCTIONS TO THE BIDDERS

बोलीदाताओं के लिए निर्देश

(ITB)

(निविदा सं.: REIL/BID/PROJECT/2024-25/001)

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 9 of 142	बोली दाता के हस्ताक्षर
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## 1. INTRODUCTION

- 1.1 REIL is as implementing agency for implementation of grid connected roof top and small solar power plants under RESCO mode at various Govt. buildings in Rajasthan. The generated solar power may be utilized for captive application and the surplus power may be fed to the grid. The aims for this project to reduce the fossil fuel based electricity and make buildings self-sustainable from the point of electricity, to the extent possible. This NIT is with aggregate capacity of 10 MWp in state of Rajasthan, India envisages installation of grid-connected roof top solar PV projects on the roofs of Government /Semi Govt./Autonomous bodies buildings broadly in following categories:

**Table- 1.1**

**List of categories of Government Buildings:**

(i)	Government Buildings	Buildings of Central & State Government, Local Government covering all Government Offices at various locations in Rajasthan.
(ii)	Government Institutions	Government Institutions, Public Sector Undertakings all buildings owned by Government directly or by any Government owned societies, companies, corporations, Institutions or Organizations, Government educational/ health institutions etc.

- 1.2 There is no incentive / subsidy in this project. Therefore bidder should quote the levelized tariff accordingly.
- 1.3 The Project Cost of the project is as given below.

**Table -1.3**

S.No.	Capacity	Project Cost for Rajasthan State
1	Above 10 KWp and up to 25 KWp	Rs. 40,000/- per KWp
2	Above 25 KWp and up to 1000 KWp	Rs. 45,000/- per KWp

- 1.4 REIL, which expression shall also include its successors and permitted assigns, hereby invites interested companies to participate in the bidding process for the selection of successful bidder(s)/developer(s) for implementation of grid-connected Roof Top and Small Ground mounted Solar Power Plants in Rajasthan as per NIT Annexure-II.
- 1.5 The Bidder is advised to read carefully all instructions and conditions appearing in this document and understand them fully. All information and documents required as per the bid document must be furnished. Failure to provide the information and / or documents as required may render the bid technically unacceptable.
- 1.6 The bidder shall be deemed to have examined the bid document, to have obtained his own information in all matters whatsoever that might affect carrying out the works in line with the scope of work specified elsewhere in the document at the offered rates and to have satisfied himself to the sufficiency of his bid. The bidder shall be deemed to know the scope, nature and magnitude of the works and requirement of materials, equipment, tools and labor involved, wage structures and as to what all works he has to complete in accordance with the bid documents irrespective of any defects, omissions or errors that may be found in the bid documents.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 10 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

## 2. BID DETAILS

2.1 The bidding process under this NIT is for 10 MWp capacity under RESCO Model in Rajasthan. Bidder should quote levelized tariff (Rs. per KWh) for 25 years. Bidder has to quote as per the eligibility criteria.

2.1.1 Bid is invited from the prospective bidders for the Tendered Capacity as indicated in Annexure-II against Rajasthan. The bidding is in levelized tariff excluding taxes & duties (ie.GST). GST on levelized tariff will be paid extra as per applicable norms. Bidders will be required to furnish a levelized fix tariff for 25 years starting from the date of commissioning of the Project. Capacity will be allocated based on the lowest levelized tariff for 25 years quoted by the bidder for Rajasthan state subject to as per NIT.

2.1.2 **The maximum tariff to be quoted for Projects is Rs.6.50/kWh (above 10kWp and upto 25kWp capacity single project) and Rs. 4.05/kWh (for above 25kWp and upto 1000kWp capacity). Financial bids containing tariffs quoted beyond the above limit will be summarily rejected.**

## 2.2 SIZE OF THE PROJECTS:

2.2.1 The size of each project shall be above 10 KWp.

2.2.2 The final capacity to be installed will be determined at the time of signing of PPA between the Developer and Beneficiary.

## 2.3 BID CAPACITY:

2.3.1 The Bidder may apply for Rajasthan State as per eligibility criteria i.e. Financial & Technical eligibility criteria.

2.3.2 REIL reserves the right to allocate part capacity to the bidder.

2.3.3 The minimum capacity to be quoted by the bidder is 2 MWp.

## 3. INSTRUCTION TO THE BIDDERS

### 3.1 FOR E-TENDERING

3.1.1 Submission of Online Bids is mandatory for this Tender. Bidder must be uploaded all the documents related to tender.

3.1.2 Now, the Government of India has made e-tendering mandatory.

3.1.3 Specifically for Supplier (Bidding) organizations, the following KEY INSTRUCTIONS for BIDDERS must be assiduously adhered to:

(i) Obtain individual Digital Signing Certificate (DSC or DC) of either Class 2 or class 3 well in advance of your tender submission deadline on CPP Portal.

(ii) Register your organization on CPP Portal well in advance of the important deadlines for your first tender viz 'Date and Time of Closure of Procurement of Tender Documents' and 'Last Date and Time of Receipt of Bids'. Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation of users, assigning roles to them, etc.

(iii) Get your organization's concerned executives trained on CPP Portal well in advance for tender submission.

(iv) Submit your bids well in advance of tender submission deadline on CPP Portal (There could be last minute problems due to internet timeout, breakdown, etc.). If bidders fail to upload the bid on CPP Portal, REIL will not be responsible for the same.

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- (v) The Bidder must upload all the documents with self-attested by Authorized Person, related to NIT during Online Bid-Submission.
- (vi) The envelope shall bear { Capacity}, the NIT No., the words 'DO NOT OPEN BEFORE' (due date & time) and mailing address of bidder with contact number and mail ID.

3.1.4 Other Requirements:

(i) Minimum Requirements at Bidder's End

- a. A Computer System with at least 1 GB RAM and Internet connectivity.
- b. Internet connectivity with at least 2 Mbps speed.
- c. Internet Explorer 7.0 or Mozilla Firefox or above.
- d. Java Run Time Engine (JRE- 1.7.0) or higher
- e. Digital Certificate(s)

(ii) Any Further support and assistance:

<b>REIL Helpdesk</b>	
<b>Telephone/ Mobile</b>	Mobile Numbers: +91- 7727011714 +91- 7340064963
<b>Email-ID</b>	<a href="mailto:deepak.gupta@reil.co.in">deepak.gupta@reil.co.in</a> <a href="mailto:himanshu.sharma@reil.co.in">himanshu.sharma@reil.co.in</a>

**3.2 INCORPORATION OF A PROJECT COMPANY**

- 3.2.1 In case the Bidder wishes to incorporate a Project Company, in such a case Bidder if selected as a Successful Bidder can incorporate a Project Company. Bidder shall be responsible to get all clearance required/ obtained in the name of the Bidding Company transferred in the name of the Project Company.
- 3.2.2 The aggregate equity share holding of the Successful Bidder in the issued and paid up equity share capital of the Project Company shall not be less than fifty-one percent (51%) up to a period of 1 (one) years from the date of commissioning of the entire NOA Capacity of the Project Developer.
- 3.2.3 Company formed by members of the consortium who is a Successful Bidder shall have at least aggregate equity share holding of 51% held by the member of the Consortium in a newly formed Company up to a period of one (1) Operational Year. Further, any member of the Successful consortium shall maintain individual equity in newly formed Company of at least, 51% (0.51) of its share in the bidding consortium, up to a period of one (1) Operational Year.
- 3.2.4 In case of Successful Bidder being a Partnership Firm or an LLP, the equity ownership of the partners in the Successful Bidder or the Project Company shall remain in same proportion as mentioned in the partnership deed submitted along with the Bid, up to a period of one (1) Operational Year. Nodal Agency shall be notified, within a month, in case of any change in equity proportion for ownership of such Successful Bidder.
- 3.2.5 Any change in ownership and liabilities after one (1) Operational Year shall be permissible, however Power Producer should inform Nodal Agency in writing within 30 Days of change in ownership.

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### 3.3 BID SUBMISSION BY THE BIDDER

Language: The Bid and all related correspondence and documents in relation to the Bidding Process shall be in English language. Supporting documents and printed literature furnished by the Bidder with the Bid may be in any other language provided that they are accompanied by translations of all the pertinent passages in the English language, duly authenticated and certified by the Bidder. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Bid, the English language translation shall prevail.

- 3.3.1 The information and/or documents shall be submitted by the Bidder as per the formats specified in this NIT document.
- 3.3.2 Strict adherence to the formats wherever specified, is required. Wherever, information has been sought in specified formats, the Bidder shall refrain from referring to brochures / pamphlets. Non-adherence to formats and / or submission of incomplete information may be a ground for declaring the Bid as non-responsive. Each format has to be duly signed and stamped by the authorized signatory of the Bidder then scanned and uploaded in the Techno- Commercial Bid Part.
- 3.3.3 The Bidder shall furnish documentary evidence in support of meeting Eligibility Criteria as indicated in Clause no. 4 of ITB to the satisfaction of REIL., Bidder shall also furnish consolidated audited annual accounts in support of meeting financial requirement, which shall consist of unabridged balance sheet, profit and loss account, profit appropriation account, auditor's report, etc., as the case may be of Bidding Company or Financially Evaluated Entity for any of the last three (3) financial years immediately preceding the Bid Deadline which are used by the bidder for the purpose of calculation of Annual Turnover or of last Financial Year in case of Net Worth.
- 3.3.4 In case the annual accounts for the latest financial year are not audited and therefore the bidder cannot make it available, the applicant shall give certificate to this effect from the Statutory Auditor and Authorized signatory along with provisional Annual Account signed by directors of the company and certificate by Chartered Accountant. In such a case, the Applicant shall provide the Audited Annual Reports for 3 (Three) years preceding the year; or from the date of incorporation if less than 3 years.

### 3.4 BID SUBMITTED BY BIDDING COMPANY

The Bidding Company should designate one person to represent the Bidding Company in its dealings with REIL. The person should be authorized to perform all tasks including, but not limited to providing information, responding to enquires, signing of Bid etc. The Bidding Company should submit, along with Bid, a Power of Attorney in original (as per Format - 6), authorizing the signatory of the Bid.

### 3.5 CLARIFICATIONS AND PRE-BID MEETING

- REIL will not enter into any correspondence with the Bidders, except to furnish clarifications on NIT Documents, if necessary. The Bidders may seek clarifications or suggest amendments to NIT online, also soft copy by e-mail to reach REIL before of the pre bid meeting at the address, date and time mentioned in Bid information sheet.
- The Bidder(s) or their authorized representative(s) is /are invited to attend pre-bid meeting(s), which will take place on date(s) as specified in Bid information sheet, or any such other date as notified by REIL.
- The purpose of the pre-bid meeting will be to clarify any issues regarding the NIT including in particular, issues raised in writing and submitted by the Bidders.
- REIL is not under any obligation to entertain / respond to suggestions made or to incorporate modifications sought for.

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### 3.6 AMENDMENTS TO NIT BY REIL

- i. At any time prior to the deadline for submission of Bids, REIL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the NIT document by issuing clarification(s) and /or amendment(s).
- ii. The clarification(s) / amendment(s) (if any) shall be notified on REIL website [www.reiljp.com](http://www.reiljp.com) / Portal of CPP (<https://www.eprocure.gov.in>) at least Two (2) days before the proposed date of submission of the Bid. If any amendment is required to be notified within Two (2) days of the proposed date of submission of the Bid, the Bid Deadline may be extended for a suitable period of time.
- iii. REIL will not bear any responsibility or liability arising out of non-receipt of the information regarding Amendments in time or otherwise. Bidders must check the website for any such amendment before submitting their Bid.
- iv. In case any amendment is notified after submission of the Bid (prior to the opening of Techno-Commercial Bid due date /time for opening of techno-commercial bid shall be extended and it will be for the Bidders to submit fresh Bids/supplementary bids as the date notified by the REIL for the purpose.
- v. All the notices related to this Bid which are required to be publicized shall be uploaded on REIL website [www.reiljp.com](http://www.reiljp.com) /CPP Portal (<https://www.eprocure.gov.in>)

### 3.7 BIDDING PROCESS

#### 3.7.1 BID FORMATS

The Bid in response to this NIT shall be submitted by the Bidders in the manner provided in Clause 3.4 of ITB, Part - II. The Bid shall comprise of the following:

- (A) **ENVELOPE- I (COVERING LETTER, BID PROCESSING FEE AND BID SECURITY etc.) (TO BE SUBMITTED OFF-LINE AND ON-LINE BOTH)**
  - i. Covering Letter as per prescribed Format -1.
  - ii. Bid processing fee Rs 5,000/- ( Rupees Five Thousand ) inclusive of GST shall be submitted in the form of DD / Banker's Cheque / RTGS , in favour of "Rajasthan Electronics & Instruments Ltd., payable at Jaipur:
  - iii. Bid Security / EMD as per the prescribed Format - 3 shall be submitted for the tendered capacity in a separate envelope as per Clause 3.12.
  - iv. Checklist for Bank Guarantee submission requirements as prescribed in Format -5.
  - iii. Original power of attorney issued by the Bidding Company in favour of the authorized person signing the Bid, in the form attached hereto as Format - 6 or standard power of attorney in favour of authorized person signing the Bid. (Power of Attorney must be supplemented by Board Resolution to above effect for the company incorporated under Company Act 1956 or Company Act 2013). However, Employer may accept general Power of Attorney executed in favour of Authorised signatory of the Bidder, if it shall conclusively establish that the signatory has been authorized by the Board of Directors to execute all documents on behalf of the Bidding Company.

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iv. Original copy of the JV Agreement, If any

The Bidder should also upload the scanned copies of all the above mentioned original documents during Online Bid-Submission.

**(B) ENVELOPE- II TECHNO-COMMERCIAL DOCUMENTS (TO BE SUBMITTED ONLINE ONLY)**

- i. Certificate of Incorporation of Bidding Company.
- ii. General particulars of bidders as per Format -2.
- iii. Bidder's composition and ownership structure as per prescribed Format-A as Shareholding certificate certified by Director/practicing Chartered Accountant / Company Secretary and Authorized signatory of the company.
- iv. Document in support of meeting General Eligibility Criteria as per Clause no. 4.1.
- v. Document in support of meeting technical Eligibility Criteria as per Clause no. 4.2
- vi. Document in support of meeting Financial Eligibility Criteria as per Clause no. 4.3.
- vii. Undertakings from the Financially Evaluated Entity or its Parent Company / Ultimate Parent Company as per Format - 9, if applicable.
- viii. Format - 8, if applicable, supported by Board Resolution of the Parent Company / Ultimate Parent Company of the Bidding Company duly certified by the Company Secretary or Authorized signatory to provide the Performance Bank Guarantee (PBG) in the event of failure of the Bidding Company to do so.
- ix. Signed and stamped Copy of NIT Documents including amendments & clarifications (on each page) by Authorized signatory.

**(C) PRICE BID(S) (TO BE SUBMITTED ONLINE ONLY )**

- i) The Bidder shall submit the Price Bid digitally signed by an authorized signatory ON LINE in format only. The price bid shall be restricted to two places of decimal.
- ii) Only "On line Price bids" shall be considered for evaluation.

**Note:-**Bidder must submit all the above documents on line .If the Bidder submits the Document offline as specified in Clause 3.7.1 A, but fails to submit online Bid then the Bid shall be considered non-responsive, However the Bid Security shall be returned subject to request letter received from the Bidder's side, but the Processing fee is non-returnable.

**3.8 BID DUE DATE**

The Bidder should submit the Bids ON LINE and delivered the offline documents of the bid to the address indicated below on or before date & time specified in the Bid Information Sheet.

Addl. General Manager (RE)

RAJASTHAN ELECTRONICS & INSTRUMENTS LTD.  
2, Kanakpura Industrial Area, Jaipur-302034

**3.9 VALIDITY OF BID**

3.9.1The bid and the Price Schedule included shall remain valid for a period of 180 days from the date of techno-commercial bid opening, with bidder having no right to withdraw, revoke or cancel his offer or unilaterally vary the offer submitted or any terms thereof. In case of the bidder revoking or canceling his offer or varying any term & conditions in regard thereof or not accepting letter of

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allocation, REIL shall forfeit the Bid Bond furnished by him. Confirmation regarding the Bid offer validity shall be clearly mentioned in the covering letter.

3.9.2 In exceptional circumstances when letter of allocation is not issued, REIL may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The Bid Bond shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid Bond. A Bidder granting the request will neither be required nor permitted to modify its Bid in any manner.

### 3.10 METHOD OF BID SUBMISSION

3.10.1. Bids are required to be submitted online on CPP Portal ([www.eprocure.gov.in](http://www.eprocure.gov.in)). Off line documents are to be submitted before due date in a single sealed cover envelope as referred under clause 3.7.1 (A) above. It should be duly sealed and signed.

3.10.1. Envelope shall clearly super scribe the followings:

“Off line Documents for Implementation of 10 MWp Grid Connected Roof Top and Small Ground Mounted Solar Power Plants for Government Buildings in Rajasthan under RESCO Model” and shall clearly indicate the name and address with mobile number and email of the Bidder. In addition, the Bid Due Date should be indicated on the right hand corner of each of the envelopes. Each of the envelopes shall be addressed to:

Addl. General Manager (RE),  
RAJASTHAN ELECTRONICS & INSTRUMENTS LTD.  
2, Kanakpura Industrial Area, Jaipur-302034  
Telephone No. - 0141-2470062, 2470363  
e-mail: deepak.gupta@reil.co.in

3.10.2 The Bidders have the option of sending their Documents either by Registered Post or Speed Post or Courier or by Hand Delivery, so as to reach REIL Office by the Bid Deadline. Documents submitted by telex/telegram/fax/e-mail shall not be considered under any circumstances. REIL shall not be responsible for any delay in receipt of the Bid. Any Bid received after the Bid Deadline shall be returned unopened. It should be noted that Document envelope shall not contain any information/document relating to Price Bid. REIL shall not be responsible for premature opening of the Price Bids in case of non-compliance of above.

3.10.3 All pages of the documents, except for the Bid Bond, and any other document executed on non-judicial stamp paper, forming part of the Bid and corrections in the Bid, if any, must be signed by the authorized signatory on behalf of the Bidder. It is clarified that the same authorized signatory shall digitally sign all pages of the Bid. However, any published document submitted with the Bid shall be signed by the authorized signatory at least on the first and last page of such document Bidders shall submit the Bid in original, duly signed by the authorized signatory of the Bidder. No change or supplemental information to a Bid will be accepted after the Bid Deadline, unless the same is requested for by REIL or results from any amendment to NIT issued by REIL under clause 3.6 of this document.

3.10.4 If the envelope is not super scribed as per the specified requirement, REIL will have no responsibility for the Bid's misplacement or premature opening.

3.10.5 The envelope shall be sealed properly & shall indicate the Name & address of the Bidder. The Bid must be complete in all technical and commercial respect and should contain requisite certificates, drawings, informative literature etc. as required in the Bid document. Each page of the Bid document should be signed & stamped. Bids with any type of change or modification in

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any of the terms/ conditions of this document shall be rejected. If necessary, additional papers Z may be attached by the Bidder to furnish/ submit the required information. Any term / condition proposed by the Bidder in his bid which is not in accordance with the terms and conditions of the NIT document or any financial conditions, payment terms, rebates etc. mentioned in Price Bid shall be considered as a conditional Bid and will make the Bid invalid.

### 3.11 COST OF BIDDING

The bidder shall bear all the costs associated with the preparation and submission of his offer, and the company will in no case be responsible or liable for those costs, under any conditions. The Bidder shall not be entitled to claim any costs, charges and expenses of and incidental to or incurred by him through or in connection with submission of bid even though REIL may elect to modify / withdraw the invitation of Bid.

### 3.12 BID SECURITY/ EMD

The Bidder shall furnish interest free Bid Security / EMD in the form of Bank Guarantee (BG) / Demand Draft drawn in favour of “Rajasthan Electronics & Instruments Ltd.”, payable at Jaipur. The validity of Bid Security / EMD shall be for a period of 180 days from the Bid Deadline. The Bid Security /EMD of unsuccessful bidders shall be returned within 30 days from the date of issuance of Letter of Allocation(s) on bidder’s request. Bid Security / EMD of Successful bidder shall be released after the receipt of PBG in the format prescribed by REIL and after the receipt of confirmation of their PBG’s from their respective banker.

The formula applicable to calculate the Bid Bond amount under will be:

**Bid Bond amount = (INR 8.00 Lakhs) X Bid Capacity in MWp**

The bidder may alternatively submit bid security amount through demand draft on which no interest shall be payable by REIL.

3.12.1 The Bid Security /EMD shall be denominated in Indian Rupees and shall:

- i. At the Bidder’s option, be in the form of either a Demand Draft or a Bank Guarantee from the List of Banks as indicated in Annexure –B.
- ii. Be confirmed for payment by the branch of the bank giving the Bank Guarantee at Jaipur.
- iii. be submitted in its original form; copies will not be accepted and remain valid for a minimum period of 180 days from the date of original Techno Commercial bid opening, or beyond any period of extension subsequently requested under Clause 3.9.2. In case of extension in bid opening date, bidder has to either submit the amended BG valid for 06 months from actual date of bid opening or amended BG if requested by REIL after actual bid opening for requisite period.

3.12.2 The Successful Bidder shall sign and stamp the Letter of Allocation (LOA) and return the signed & stamped duplicate copy of the same to REIL within 14 days from the date of its issuance.

3.12.3 The Bid Security / EMD shall be forfeited without prejudice to the Bidder being liable for any further consequential loss or damage incurred to REIL under following circumstances:

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 17 of 142	बोली दाता के हस्ताक्षर
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- a. Hundred Percent (100%) of Bid Bond amount of the proposed capacity, if a Bidder withdraws/revokes or cancels or unilaterally varies his bid in any manner during the period of Bid Validity specified in the NIT document and in accordance with the Clause 3.9.2 of Part -II.
- b. Hundred Percent (100%) of Bid Bond amount of the proposed capacity, if the Successful Bidder fails to unconditionally accept the Letter of Allocation within 30 days from the date of its issuance.
- c. Hundred Percent (100%) of Bid Bond amount of the proposed capacity, if the Successful Bidder fails to furnish the “Performance Security” after 60 days.

### 3.13 PERFORMANCE SECURITY / PERFORMANCE BANK GUARANTEE (PBG)

3.13.1 Within 30 days from the date of issuance of Allocation letter (LOA) and before signing of PPA, Successful Bidder shall furnish the Performance Security of allocated capacity.

The formula applicable to calculate the PBG amount will be:

- a) For General Category State:

$$\text{PBG amount} = (\text{Rs. 1.80 Lakh}) \times \text{Capacity in MWp.}$$

3.13.2 REIL at its sole discretion may cancel the allocated capacity and forfeit 100% of Bid bond, in case Performance security is not submitted within 60 days from issuance of Allocation Letter as per Clause 3.12.3(c). However, total project completion period shall remain same. Part PBG shall not be accepted.

3.13.3 The Performance Security shall be denominated in Indian Rupees and shall be in one of the following forms:

- a. Demand Draft or a Bank Guarantee from the List of Banks as indicated in Annexure -B
- b. BG confirmed for payment by the branch of the Bank giving the Bank Guarantee at Jaipur.

3.13.4 The PBG shall be forfeited as follows without prejudice to the Bidder being liable for any further consequential loss or damage incurred to REIL.

- a. If the Successful Bidder is not able to identify the projects and submit Project Sanction Documents to the satisfaction of REIL, PBG amount, pro-rata to the capacity for which the Successful Bidder is not able to identify the Projects and submit Project Sanction Documents.
- b. If the Successful Bidder is not able to commission the projects to the satisfaction of REIL, PBG amount, pro-rata to the capacity not commissioned by the Successful Bidder. However, Hundred Percent (100%) PBG amount furnished for the Sanctioned Capacity, if the Successful Bidder fails to Commission the Projects(s) to the satisfaction of REIL, for the already identified locations, which are notified by REIL in the NIT or otherwise and for which Allocation Letter/ Sanction Letter has been issued.
- c. In all the above cases corresponding unidentified/non-commissioned capacity shall stand cancelled.
- d. Contractor shall be responsible for any water leakage or seepage due to construction work on the roof during the installation of rooftop solar (RTS) plants and also during the O&M period of 5 years. In case of leakage during the above mentioned period, necessary repair by specialized

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agency must be carried out by the Contractor immediately without any cost implications to REIL, failing which PBG amount will be forfeited on pro rata basis for the respective building.

3.13.5 The Performance Security shall be valid for a minimum period of 5 years from the date of issuance of Allocation Letter(s). Initially successful bidder have to submit 50% PBG for a period of 5 years and balance 50 % to be submitted with in 30 days after signing of PPA by the beneficiary i.e. prior to execution of the project.. If the successful bidder does not extend the PBG, the same shall be forfeited by REIL. The Performance security shall be released after 1 year from the date of commissioning with the compliance of entire obligations in the contract.

### 3.14 OPENING OF BIDS

3.14.1 Bid shall be opened at date & time specified in Bid Information Sheet or amendments issued by REIL at the venue indicated herein above, in the presence of one representative from each of the Bidders who wish to be present.

3.14.2 Name of the Bidder, and State bid for, shall be read out to all the Bidders at the time of bid opening.

### 3.15 RIGHT TO WITHDRAW THE NIT AND TO REJECT ANY BID

3.15.1 This NIT may be withdrawn or cancelled by REIL at any time without assigning any reasons thereof. REIL 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.

3.15.2 REIL reserves the right to interpret the Bid submitted by the Bidder in accordance with the provisions of the NIT and make its own judgment regarding the interpretation of the same. In this regard the REIL shall have no liability towards any Bidder and no Bidder shall have any recourse to REIL with respect to the selection process. REIL shall evaluate the Bids using the evaluation process specified in NIT, at its sole discretion. REIL decision in this regard shall be final and binding on the Bidders.

3.15.3 REIL reserves its right to vary, modify, revise, amend or change any of the terms and conditions of the Bid before submission. The decision regarding acceptance of bid by REIL will be full and final.

### 3.16 ZERO DEVIATION

3.16.1 This is a ZERO Deviation Bidding Process. Bidder is to ensure compliance of all provisions of the Bid Document and submit their Bid accordingly. Tenders with any deviation to the bid conditions shall be liable for rejection.

### 3.17 EXAMINATION OF BID DOCUMENT

3.17.1 The Bidder is required to carefully examine the Technical Specification, terms and Conditions of Contract, and other details relating to supplies as given in the Bid Document.

3.17.2 The Bidder shall be deemed to have examined the bid document including the agreement/ contract, to have obtained information on all matters whatsoever that might affect to execute the project activity and to have satisfied himself as to the adequacy of his bid. The bidder shall be deemed to have known the scope, nature and magnitude of the supplies and the requirements of material and labour involved etc. and as to all supplies he has to complete in accordance with the Bid document.

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- 3.17.3 Bidder is advised to submit the bid on the basis of conditions stipulated in the Bid Document. The cancellation / alteration / amendment / modification in Bid documents shall not be accepted by REIL.
- 3.17.4 Bid not submitted as per the instructions to bidders is liable to be rejected. Bid shall confirm in all respects with requirements and conditions referred in this bid document.

### 3.18 Selection of Successful Bidders

- 3.18.1 The bidders shall be arranged in the ascending order with lowest quoted tariff. i.e L-1 ,L-2 and so on for each state . The L-1 will be selected as successful bidder and allocation of the capacity will be as per clause no.- 1.5.6 of part – III ( Evaluation Criteria) of the NIT.
- 3.18.2 A letter of Intent (LOI) will be issued to the successful bidder for depositing 10 % of PMC Charges as advance.
- 3.18.3 At the end of selection process, a letter of Allocation (LOA) will be issued to the successful bidder on lowest quoted tariff.
- 3.18.4 In all cases, REIL's decision regarding selection of bidder or other- wise based on quotation or annulment of tender process shall be final and binding on all participating bidders.

## 4. ELIGIBILITY CRITERIA

### 4.1 GENERAL CONDITIONS

- 4.1.1 The Bidder should be a body corporate incorporated in India under the Companies Act,1956 or 2013 including any amendment thereto or a Partnership Firm having executed partnership deed and registered as per sections 58 & 59 of the Partnership Act, 1932, as amended or a Limited Liability Partnership Firm (LLP) registered under section Limited Liability Partnership Act, 2008, as amended or registered Sole Proprietor. A copy of certificate of incorporation, partnership deed or LLP/ Sole Proprietor or registration, as applicable and relevant, shall be enclosed with Format 2.
- 4.1.2 Consortium of maximum of three companies is allowed under NIT. Consortium may comprise of Companies or Sole Proprietor or Limited Liability Partnership Firms or Partnership Firms or any combination thereof. In case of consortium, Lead Member must independently meet the Financial Eligibility Criteria.
- 4.1.3 Further, Bidder must note that for evaluation of qualification against Financial Eligibility Criteria, following conditions shall be applicable:
- 4.1.3.1 Bidder shall establish net-worth as required by this NIT.
- 4.1.3.2 In-case Bidder/ Lead Member of Consortium has referred its Affiliate to meet the Financial Eligibility criteria, then relationship with the Affiliate by the Bidder shall continue i.e., equity holding should be more than 26% for period of the First Operational Year. Further, Affiliate of Bidder and member of Consortium shall furnish information as sought in FORMAT 8 & FORMAT 9.
- 4.1.4 A Bidder shall not have a conflict of interest for the bid. Bidder(s) shall be disqualified where it has conflict of interest. The Bidder may be considered to have conflict of interest with one or more parties in this bidding process, if:
- 4.1.5 A Bidder submits more than one Bid in the bidding process, either individually including bid submitted as authorized representative on behalf of one or more Bidder(s)] or as Member of consortium.
- 4.1.6 They have a relationship with each other, directly or through common third parties, that puts them in position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of Nodal Agency regarding this bidding process.

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- 4.1.7 The Bidders shall have to submit their Technical Bid and Financial Bid and other required relevant documents/ certificates, if any, online only (duly encrypted bids) as per time schedule (Key dates) as mentioned in Clause.
- 4.1.8 If the bidder's submitted information is found to be false declaration or misrepresentation, the bidder(s) shall be out rightly rejected and may even debarred or blacklisted from REIL's future tenders.

**4.2 TECHNICAL ELIGIBILITY CRITERIA:**

- 4.2.1 The bidder should have designed, supplied, installed & commissioned at least one (1) number of Grid Connected SPV power plant with a minimum capacity of 250 KWp and cumulative capacity of Grid Connected SPV power plant of not less than 50% of quoted capacity commissioned in the last Seven (7) years, prior to bid submission date.

Note:-

- i. The bidders must submit documentary proof for technical eligibility certified by concerned SNAs/ Central/State Government Organization / Project Owner for work executed.
- ii. Bidder can use the technical strength of its Affiliate to fulfill the Technical Eligibility Criteria mentioned in NIT.
- iii. In case of consortium, Technical Criteria shall be fulfilled either by Lead Member or by other consortium partners individually.

**4.3 FINANCIAL ELIGIBILITY CRITERIA:**

- (a) The Minimum Average Annual Turnover (MAAT) of the bidder in the last three financial years should be INR 108.00 lakh per MWp (Indian Rupees Ninety Lakh per MWp) on standalone basis. This must be the Company's turnover / Parent Company or Affiliate's turnover. A summarized sheet of average turnover certified by registered CA should be compulsorily enclosed along with corresponding annual accounts.

And

Net worth equal to or greater than the value calculated at rate of Rs. 1.0 Crore per MWp of capacity offered by the Bidder in its Bid. "Net Worth" of the Bidder shall be calculated as per Company Act 2013. The Computation of Net worth shall be based on latest available unconsolidated audited annual accounts but not older than two (2) years. Share premium can be included in the Net worth calculation only in case of listed companies in India. The formula of calculation of net-worth shall be as follows:

$$Net-worth = (Paid\ up\ share\ capital) + (Free\ reserves) + (Share\ premium\ of\ listed\ companies) - (Revaluation\ of\ reserves) - (Intangible\ assets) - (Miscellaneous\ expenditure\ to\ the\ extent\ not\ written\ off\ and\ carry\ forward\ losses)$$

- (b) Bidders shall furnish documentary evidence as per the Format - 7, duly certified by Authorized Signatory and the Statutory Auditor / Practicing Chattered Accountant of the Bidding Company in support of their financial capability.

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- (c) The Bidder will provide a copy each of audited annual report of previous three financial years for ascertaining their turnover and Net Worth for the purpose of verification.

NOTE: Other income shall not be considered for arriving at annual turnover.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 22 of 142	बोली दाता के हस्ताक्षर
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## PART (भाग) – III

# EVALUATION CRITERIA

## मूल्यांकन के मानदंड

(निविदा सं.: - REIL/BID/PROJECT/2024-25/001)

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## 1. BID EVALUATION

The evaluation process comprises the following four steps:

Step I: Responsiveness check of Techno Commercial Bid

Step II: Evaluation of Bidder's fulfillment of Eligibility Criteria

Step III: Evaluation of Price Bid

Step IV: Successful Bidders(s) selection

### 1.1. RESPONSIVENES CHECK OF TECHNOCOMMERCIAL BID

The Techno Commercial Bid submitted by Bidders shall be scrutinized to establish responsiveness to the requirements laid down in the NIT subject to Clause 3.3.1, Clause 3.3.2, and Clause 3.3.3 of Part - II. Any of the following may cause the Bid to be considered "Non-responsive", at the sole discretion of REIL:

- a. Bids that are incomplete, i.e. not accompanied by any of the applicable formats inter alia covering letter, power of attorney supported by a board resolution etc.;
- b. Bid not signed by authorized signatory and /or stamped in the manner indicated in this NIT;
- c. Material inconsistencies in the information /documents submitted by the Bidder, affecting the Eligibility Criteria;
- d. Information not submitted in the formats specified in this NIT;
- e. Bid being conditional in nature;
- f. Bid not received by the Bid Deadline;
- g. Bid having Conflict of Interest;
- h. More than one Member of a Bidding Company using the credentials of the same Parent Company / Affiliate;
- i. Bidder delaying in submission of additional information or clarifications sought by REIL as applicable;
- j. Bidder makes any misrepresentation.

Each Bid shall be checked for compliance with the submission requirements set forth in this NIT before the evaluation of Bidder's fulfillment of Eligibility Criteria is taken up. Clause 3.2 of Part - II shall be used to check whether each Bidder meets the stipulated requirement.

### 1.2 PRELIMINARY EXAMINATION

1.2.1 REIL will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed and stamped and whether the Bids are otherwise in order.

1.2.2 If there is a discrepancy between words and figures, the amount written in words will prevail.

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### 1.3 EVALUATION OF BIDDER'S FULFILMENT OF ELIGIBILITY CRITERIA

Evaluation of Bidder's Eligibility will be carried out based on the information furnished by the Bidder as per the prescribed Formats and related documentary evidence in support of meeting the Eligibility Criteria as specified in Clause 4. Non-availability of information and related documentary evidence for the satisfaction of Eligibility Criteria may cause the Bid non-responsive.

### 1.4 EVALUATION OF PRICE BID

Price Bid of the Qualified Bidders shall be opened online through CPP Portal in presence of the representatives of such Qualified Bidders, who wish to be present, on a date as may be intimated by REIL to the Bidders through REIL website or Email. The evaluation of Price Bid shall be carried out based on the information furnished in Financial Bid (Price Bid). The Price Bid submitted by the Bidders shall be scrutinized to ensure conformity with the NIT. Any Bid not meeting any of the requirements of this NIT may cause the Bid to be considered "Non-responsive" at the sole decision of the REIL.

1.4.1 Eligible Bidders shall quote the Fixed Tariff for 25 Years (Quoted Tariff) in the Financial Bid. The Levelized tariff shall be two decimal places only.

### 1.5 SUCCESSFUL BIDDER(S) SELECTION

1.5.1 Bids qualifying in Clause 1.4 shall only be evaluated in this stage. Bid qualifying as per Eligibility Criteria shall only be evaluated in this stage.

1.5.2 Technical qualification sheet (Check List) is must filing for a Bidder to avoid the further rejection.

1.5.3 The Bids shall be evaluated to identify Total No. of Qualified Bidders for allocation of 10 MW capacity.

1.5.4 Eligible Bidders shall be ranked from the lowest to highest quote based on the Financial Bids submitted by the Bidders.

1.5.5 Eligible Bidder with lowest Quoted Tariff for given scope of work shall become the Qualified Bidder.

#### 1.5.6 ALLOCATION OF CAPACITY

- For Selection of other Bidders for allocation of 10 MW Capacity, Bidders with the higher quote L2,L3,L4,L5,L6,.....and so on shall match the Price Bid of declared L1 first. In such cases, when any bidder in the ascending order refuses to match the price bid of declared L1, next bidder in the Ascending Order will be offered to match the Price Bid of declared L1 and this process will be continued till selection of required nos. of successful bidders for allocation of 10 MW Capacity.
- REIL may negotiate with L1 bidder for further negotiation.
- L1 bidder will be allocated a capacity quoted by them.
- Next bidders in ascending order after matching the tariff quoted by L1 bidder will be allocated capacities equal to their respective quoted capacity till allocation of entire 10 MW Capacity.
- In case where two or more Eligible Bidders bid the same Quoted Tariff, Eligible Bidder with highest Net Worth shall be placed above the bidder having lower Net- Worth in Ascending Order.
- In case of non-availability of required no. of proposals, the balance allocation will be on the discretion of MD, REIL.
- The LoA shall be issued by the REIL to the Successful Bidders.
- If Successful Bidder fails to acknowledge the same, submit the C-PBG, the Nodal Agency reserves the right to cancel the LoA to Successful Bidder and may

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 25 of 142	बोली दाता के हस्ताक्षर
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debarred for submission of tender in REIL for next 2 years.

9. REIL at its own discretion has the right to reject any or all the Bid without assigning any reason whatsoever.

**Note: Matching of the L1 Tariff does not guarantee the allotment of the capacity quoted by the Bidder. The capacity allocation will be done based on the price quoted by the Bidders in their financial bid i.e. first L-2 capacity, and then L-3 capacity and so on till the total capacity to be allocated is exhausted.**

10. At this stage, only L1 matching requests will be entertained.
11. The Letter(s) of Intent shall be issued to all successful bidders for depositing 10% of PMC Charges (Considering project cost as per Table 1.3 part –II (ITB) as advance with in 14 days of issue of LOI.
12. The Letter(s) of Allocation (LOA) shall be issued all successful bidders who deposited 10% of the PMC Charges.
13. Each Successful Bidder shall acknowledge the LOA and return duplicate copy with signature of the authorized signatory of the Successful Bidder to REIL within Fourteen (14) days of issue of LOA.
14. If the Successful Bidder, to whom the LOA has been issued, does not fulfil any of the conditions specified in Bid document, then REIL reserves the right to annul / cancel the award of the Letter of Allocation of such Successful Bidder.
15. REIL has right to debarred/blacklist to L1 bidder in case of non execution of any project.
16. REIL at its own discretion, has the right to reject any or all the Bids without assigning any reason whatsoever, at its sole discretion

## 1.6 INCREASE/ DECREASE OF BIDDER ALLOCATED CAPACITY

- 1.6.1 REIL reserves the right to increase / decrease the Bidder(s) Allocated Capacity at the sole discretion of REIL on the request of the successful bidder.
- 1.6.2 In case capacity is enhanced by REIL as per Clause 1.5.6 above, Successful bidder shall submit the equivalent amount of PBG to REIL within 30 days from the date of issuance of Sanction letter, failing which sanctioned capacity shall stands cancelled.

## 2. NOTIFICATION TO SUCCESSFUL BIDDERS

The name of Successful Bidders shall be notified indicating the allocated capacity and the offered price on REIL website [www.reiljp.com](http://www.reiljp.com) or CPP Portal and also shall be notified individually through Letter of Allocation (LOA).

## 3. PROJECT ALLOCATION AND SANCTION

- 3.1 The identification of the projects (roof tops) at the time of bidding is not mandatory. The Bidders, however, in their own interest are advised to make a preliminary survey of availability of roof tops for which they intend to Bid and as prescribed in the NIT, as well as issue of Grid connectivity as non-availability of roof tops and non-completion of other formalities after allocation of project will result in forfeiture of Bid Security/EMD amount submitted by them.
- 3.2 The Successful Bidders selected as described in Clause 1.5 above shall be issued Letter of Allocation (LOA) indicating the allocated capacity, the allocated sites etc.

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- 3.3 The successful bidder shall, within **Sixty (60) days of the issuance of LOA** shall do a detailed survey of the allotted sites and submit any deviance in capacity to REIL in writing along with the documentary evidence. If there are no discrepancies notified in the capacity within Sixty (60) days of issuance of LOA, the capacity listed under Annexure-II shall be deemed final and any deviation from such capacity at the time of Commercial Operation Date shall result in forfeiture of PBG. Bidder shall furnish amended PBG for increase or decrease of capacity.
- 3.4 Bidder shall enter into a PPA at the L-1 Tariff arrived through bidding process.
- 3.5 **The bidders who have been notified as Successful Bidders shall be given 15 months from the date of issuance of NOA/LOA. Out of above 06 month shall be given for signing of PPA and 09 months for execution of the project. The time for submission of project sanction documents by the Developer to REIL will be maximum 1 (one) months from the date of signing of PPA.** If bidder fails to sign PPA within 6 months the allocation may be canceled.
- 3.6 If the Bidder fails to commission the sanctioned project within specified time i.e. 09 months from the date of signing of PPA, further 3 (Three) months shall be allowed to Developer for completion of entire unexecuted capacity with penalty/ LD. Penalty/ LD on per day basis would be levied for 3(Three) months period. After total 12 (Twelve) months, from the date of signing of PPA, the project will get cancelled and the total PBG would be forfeited.
- 3.7 Successful bidders shall share the time and date stamping photographs of the roofs and location details (Address) with REIL before entering into any legal agreement with the Owner. This has to ensure that the location identified by the Successful Bidder / Developer is strictly complying the list provided along with the NIT document.
- 3.8 Onus of locating the buildings/rooftops and completing the other documentation like finalizing the Project report, checking strength of the building and entering into agreements with the buildings/rooftops owners lies with the Successful Bidder / Developer within the above-mentioned time frame even for the buildings/rooftops identified by REIL for preferential installation.
- 3.9 After submission of Project Sanction Documents by the Successful Bidder/ Project Developer and accepted by REIL, REIL will issue the Sanction Letter(s) for the Project (s).

#### 4. OTHER CONDITIONS

- 4.1 Bidder or owner of the building has to obtain all the necessary approvals/Consents/Clearances required for Erection, Testing, Commissioning and O&M of the project including Grid connectivity. REIL shall not have any responsibility in this regard.
- 4.2 Bid Security/ EMD and Processing Fee Submission:

Bid Security/ EMD shall be submitted for the offered capacity in a separate envelop (along with processing fee) super scribed with name of the state & other details.

- 4.3 Tax Exemptions:

The Levelized Tariff is excluding of Taxes and duties ( I.e. GST). GST on levized tariff will be paid extra as per applicable norms. However, Tax exemptions including certificates of any sort, if available may be dealt with the concerned Department of Govt. of India by the bidder. REIL in no case will be responsible for providing any tax exemptions to the bidder.

- 4.4 Eligibility of Standalone System : Standalone system is not allowed under this NIT. The system should be grid-interactive
- 4.5 Requirement of Approvals on Makes of the Components:

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The modules should be manufactured in India only. Rest of the components can be procured from any source. However, these items should meet the Technical specification and standards mentioned in NIT.

**4.6 Operation of the System during Weekends & Holidays and Calculation of CUF:**

During grid failure, the SPV system stops generating. Any instances of grid failure need to be mentioned in the monthly report and those instances need to be authorized by local DISCOM. Then the period will be excluded in calculation of CUF.

**4.7 Commercial Operation Date:**

4.7.1 Commercial Operation Date shall be defined from the point the system starts generating electric energy (at full rated KWp) for 5 continuous hours.

4.7.2 The period of construction given in Time Schedule includes the time required for mobilization as well as testing, rectifications if any, retesting and completion in all respects to the entire satisfaction of the Engineer-in-Charge.

**5. UPDATING THE PROJECT PROGRESS ON BI-WEEKLY BASIS**

Successful bidder should update the project progress on bi-weekly basis. Non updating of the progress shall be considered as no progress and shall attract punitive actions as per the relevant provision of the Contract. However, the decision of Engineer-in-charge shall be final in this regard.

**6 INSPECTION AND AUDIT BY THE GOVERNMENT**

The Successful bidder shall permit the owner, REIL and their representatives to inspect the Successful bidder's site, accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the owner or REIL, if so required by the owner anytime.

**7 COMMISSIONING/ COMPLETION CERTIFICATE :**

**7.1 Application for completion/ commissioning certificate:**

The plant will be deemed as commissioned on successful connectivity with the grid for net metering fulfilling the local DISCOM requirement. However on bidder's request plant can be deemed as commissioned on submission of application to concern DISCOM for NOC and net metering. When the Successful bidder fulfils his obligation under the Contract, he shall be eligible to apply for Completion/ Commissioning Certificate. The Engineer-in-Charge shall normally issue to the Successful bidder the Completion Certificate within one month after receiving any application therefore from the Successful bidder after verifying from the completion documents and satisfying himself that the Work has been completed in accordance with and as set out in Contract documents.

**7.2 Document Submission for Issuance of Commissioning / Completion Certificate:**

For the purpose of above the following documents will be deemed to form the completion documents:

- a) Checklist for inspection of Roof Top SPV power plants as per REIL format provided at the time of inspection.
- b) Project completion report from successful bidder as per REIL format.
- c) Project completion / satisfaction certificate from roof top owners.

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## PART (भाग) – IV

# GENERAL CONDITIONS OF CONTRACT

## आम अनुबंध की शर्तें (GCC)

(निविदा सं. : REIL/BID/PROJECT/2024-25/001)

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## 1 SCOPE OF WORK

The Scope of the Work would essentially cover, but not limited to Site Survey of Identified Roof Tops and surplus lands, Identification of New Roof Tops and surplus land, Site Visit, Solar Potential Assessment, Finalization of plant capacity for Identified Locations, execution of PPA (in the prescribed format attached herewith this NIT document). Obtaining No Objection Certificate (NOC)” from Distribution Company (DISCOM) for grid connectivity, complete design, engineering, manufacture, supply, storage, civil work, erection, testing & commissioning , Inter-connections with the grid for net metering & obtaining all statutory approvals, quality control of the grid connected rooftop Solar PV Project including Operation and Maintenance (O & M) of the project for a period of 25 years after commissioning of the projects as per REIL’s acceptance. The bidder shall be responsible in ascertaining and certifying the strength of civil structure on which roof top solar plant shall be set up.

The bidder shall also submit:-

- The mode in which the system will operate is in accordance with the provisions of Rajasthan Electricity Regulatory Commission Grid Interactive Distributed RE Generative System Regulations 2021 and amended time to time.
  - Detailed planning of time bound smooth execution of Project;
  - Performance testing of the Completion and Successful Commissioning of the Project;
  - Comprehensive O &M of the Project for twenty five (25) Operational Year to assure faultless operation, and inventory maintenance;
  - Supply of Power from Commissioning to Termination or for twenty five (25) Operational Years.
  - Coverage of risk liability of all personnel associated with implementation and realization of the Project;
- The bidder is responsible for the waterproofing of the roof disturbed/ pierced for installation of Project for the Comprehensive O&M period of first 3 Operational Years. The bidder should immediately take necessary action to repair any damage to the water proofing. However, in such situations, bidder shall bear any loss or damage to Project and rectify the same within reasonable timeframe but any generation loss in such eventualities shall not be passed on to Procurer. If bidder fails to do required water proofing within 7 days from the day of identification of issue, Customer may get the same done at prevailing market rate and bidder shall reimburse the same to Customer. If the bidder fails to reimburse the expenses to the Customer then such expenses shall be adjusted by the Customer from the energy bills of the next six (6) months.

In case the bidder desires to do ground mount for part/full capacity for any site then bidder should consider the associated civil costs for such sites while bidding.

## 2 LEVELLIZED TARIFF

The Levelled Tariff of 25 years shall include all the costs related to above Scope of Work. Bidder shall quote for the entire facilities on a “single responsibility” basis such that the total Bid Price covers all the obligations mentioned in the Bidding Documents in respect of Design, Supply, Erection, Testing and Commissioning including Warranty, apart from Operation & Maintenance for a period of 25 years, goods and services including spares required if any during O&M period. The Bidder has to take all permits, approvals and licenses, Insurance etc., provide training and such other items and services required to complete the scope of work mentioned above.

- The Levelled tariff quoted is on lump sum turnkey basis and the bidder is responsible for the total Scope of work described at Clause 1 above.
- The Levelled tariff shall remain firm and fixed and shall be binding on the Successful Bidder till completion of work irrespective of his actual cost of execution of the project. No escalation will be granted on any reason whatsoever. The bidder shall not be entitled to claim any additional charges, even though it may be necessary to extend the completion period for any reasons whatsoever.

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- 2.3 The Levellized tariff shall be excluding of taxes & duties (i.e. GST). GST on levized tariff will be paid extra as per applicable norms. The prices quoted by the firm shall be complete in all respect and no price variation /adjustment shall be payable by REIL.
- 2.4 The Operation & Maintenance of Solar Photovoltaic Power Plant would include wear, tear, overhauling, machine breakdown, insurance, and replacement of defective modules, invertors / Power Conditioning Unit (PCU), spares, consumables & other parts for a period of 25 years.
- 2.5 The Levellized tariff shall be specified in sanction letter based on Successful Bidder's quote for each project. The Levellized tariff shall be in accordance with all terms, conditions, specifications and other conditions of the Contract as accepted by the REIL and incorporated into the sanction letter.
- 2.6 The Bidder shall complete the Price Bid furnished in the NIT Documents.

### 3 INSURANCE

- 3.1 The Bidder shall be responsible and take an Insurance Policy for transit-cum-storage-cum-erection for all the materials to cover all risks and liabilities for supply of materials on site basis, storage of materials at site, erection, testing and commissioning. The bidder shall also take appropriate insurance during O&M period, if required.
  - 3.1.1 The Bidder 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 the Contract. Before commencement of the work, the Bidder will 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 Contract. Liquidation, Death, Bankruptcy etc., shall be the responsibility of bidder.

### 4 WARRANTIES AND GUARANTEES

The Bidder shall warrant that the goods supplied under this contract are new, unused, of the most recent or latest technology and incorporate all recent improvements in design and materials. The bidder shall provide warrantee covering the rectification of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of 25 years for projects. The successful bidder has to transfer all the Guarantees/ Warrantees of the different components to the Owner of the project. The responsibility of operation of Warrantee and Guarantee clauses and Claims/ Settlement of issues arising out of said clauses shall be joint responsibility of the Successful bidder and the owner of the project and REIL will not be responsible in any way for any claims whatsoever on account of the above.

### 5 TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP

- 5.1 The design, engineering, manufacture, supply, installation, testing and performance of the equipment shall be in accordance with latest appropriate IEC/ Indian Standards as detailed in the Part - VII (Technical specifications) of the bid document. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE shall be used.
- 5.2 The specifications of the components should meet the technical specifications mentioned in Part -VII.
- 5.3 Any supplies which have not been specifically mentioned in this Contract but which are necessary for the design, engineering, manufacture, supply & performance or completeness of the project shall be provided

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 31 of 142	बोली दाता के हस्ताक्षर
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by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV plant.

5.4 The bidder shall maintain sufficient inventory of the spare parts to ensure that the Project is functional during the term of PPA.

## 6 OPERATION & MAINTENANCE (O&M) GUIDELINES TO BE MANDATORILY FOLLOWED BY BIDDERS

6.1 The bidder shall be responsible for all the required activities for successful operation and maintenance of the Rooftop Solar PV system for a period of 25 years from the date of commissioning of the plant.

6.2 For the total capacity, below mentioned guidelines, shall be followed. In addition, O & M practices shall be strictly followed as per Annexure-C.

6.2.1 O&M of Solar Power Plant shall be compliant with grid requirements to achieve committed energy generation.

6.2.2 Contractor will depute qualified and experienced engineer/ technicians periodically / need base till the O&M period at project site.

6.2.3 Periodic cleaning of solar modules. The modules shall be cleaned with a periodic interval of 15 days or as and when required as per actual site conditions. It's the responsibility of the bidder to get the modules cleaned during O & M Period. Roof Top Owner is responsible for such obligation of bidder so as to achieve guaranteed CUF.

6.2.4 Periodic checks of the Modules, Inverters and BOS shall be carried out as a part of routine preventive and breakdown maintenance.

6.2.5 Immediate replacement of defective Modules, Invertors and other equipment as and when required.

6.2.5.1 Supply of all spares, consumables and fixtures as required. Such stock shall be maintained for all associated equipment's and materials as per manufacturer's / supplier's recommendations.

6.2.5.2 All the testing instruments required for Testing, Commissioning and O&M for the healthy operation of the Plant shall be maintained by the Bidder. The testing equipment's must be calibrated once in a year from NABL accredited labs and the certificate of calibration must be kept for reference as required.

6.2.5.3 If negligence/ mal-operation on part of the Bidder's operator results in failure of equipment, such equipment should be repaired/ replaced by the Bidder free of cost.

6.2.5.4 Co-ordination with Owner / DISCOM / CEIG as per the requirement for Joint Metering Report (JMR). The person in charge present at site from bidder's side shall take a joint meter reading in the presence of rooftop owner on a daily basis. Furnishing generation data (JMR) each month to REIL positively by 1st week of every month for the previous month.

6.2.5.5 Online Performance Monitoring, controlling, troubleshooting, maintaining of logs & records. A maintenance record register is to be maintained by the operator 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

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 32 of 142	बोली दाता के हस्ताक्षर
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maintenance, reasons for the breakdown, duration of the breakdown, steps taken to attend the breakdown, etc.

6.2.5.6 For any issues related to operation & maintenance, a toll-free number shall be made available to the rooftop owner/ plant owner to attend the issue within 72 hours and rectify the same within 7 days. If not attended within such stipulated time, a complaint may be raised to REIL, pursuant to which, a penalty of Rs. 10,000 / 5,000 for full month or more shall be imposed for a system capacity above 100 KWp / below or equal to 100 KWp. Further, If the outage of the plant is more than 30 days continuously, then the 50% PBG amount shall be encased by REIL and If the outage is exceeding more than 60 days than complete PBG amount shall be encased by REIL. This will be applicable till 5 years of O&M as per the Scope of the NIT.

6.2.5.7 If any jobs covered in O&M Scope as per NIT are not carried out by the contractor/ Bidders during the O&M period, the Engineer-In-Charge shall take appropriate action as deemed fit. REIL reserves the right to make surprise checks/ inspection visits at its own or through authorized representative to verify the O&M activities being carried out by the Bidder. Failure to adhere to above guidelines will result in penal action including debarring from participation in next tender.

## 7 METERING AND GRID CONNECTIVITY

Metering and grid connectivity of the roof top solar PV system under this NIT would be the responsibility of the Bidder in accordance with the prevailing guidelines of the concerned DISCOM and / or CEA (if available by the time of implementation).

The Successful bidder will bear the cost of net metering including interconnection cost. The Rooftop owner will have to bear the cost-of-service line up-gradation, change in CT/PT for metering, if required, However, the successful bidder owner will have to inform to building owner all the expected cost which the building Owner have to incur at the time of signing of PPA.

The bidder shall install the Generation Meter separately near the output of Inverter and Net-Meter shall be located in place of present DISCOM's metering system.

## 8 PLANT PERFORMANCE EVALUATION

The successful bidder shall be required to meet minimum guaranteed generation with Performance Ratio (PR) at the time of commissioning and related Capacity Utilization Factor (CUF) as per the GHI levels of the location during the O&M period. PR should be shown minimum of 75% at the time of inspection for initial commissioning acceptance. Minimum CUF of 15% for Rajasthan should be maintained for the five year for fulfilling one of the conditions for release of PBG. The bidder should send the periodic plant output details to REIL for ensuring the CUF. The PR & CUF will be measured at Solar Meter not at inverter level.

### 8.1 PROGRESS REPORT

The bidder shall submit the progress report monthly to REIL in Prescribed Performa. REIL will have the right to depute its representatives to ascertain the progress of contract at the premises of works of the bidder.

#### 8.1.1 Submission of Project Completion Report (PCR)

The bidder shall submit the Project Completion Report (both in editable soft copy and signed hard copy) after commissioning of the project as per the Scope of NIT to REIL as per the Format

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 33 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

given in Annexure L. Non-submission of the report shall be considered as “Breach of Contract” and shall attract punitive actions as per the relevant provisions of the Contract. However, the decision of Engineer - in - charge shall be final in this regard.

#### 8.1.2 Submission of O&M Report (OMR)

The bidder shall submit the Monthly O&M Report mandatorily to REIL as per the Format enclosed at Annexure-G. Non-submission of the report shall be considered as “Breach of Contract” and shall attract punitive actions as per the relevant provisions of the Contract. However, the decision of Engineer - in - charge shall be final in this regard.

### 9 PROJECT INSPECTION

All Project’s progress will be monitored by REIL and the projects will be inspected for quality at any time during commissioning or after the completion of the project either by officer(s) from REIL or any agency/ experts designated / authorized by REIL from time to time. REIL shall depute a technical person(s) from its list of empanelled experts/ agencies updated from time to time for inspection, Third party verification, monitoring of system installed to oversee, the implementation as per required standards and also to visit the manufacturer’s facilities to check the quality of products as well as to visit the system integrators to assess their technical capabilities as and when required. The cost of Inspection to be carried out by REIL shall be borne by REIL. The cost of re-inspection, if any shall be borne by contractor. The projects shall be inspected at any time during commissioning or after the completion of the project(s) as follows:

Inspection shall be carried out by Inspecting officer(s) nominated by REIL, REIL officials, or any other agencies if required, to be notified by REIL from time to time

### 10 Deleted

### 11 APPLICABLE LAW

The Contract shall be interpreted in accordance with the laws of India.

### 12 SETTLEMENT OF DISPUTE

12.1 **For Indian Bidders** : Any dispute shall attempt to resolve through good faith consultation, disputes arising in connection with this contract, and such consultation shall begin promptly after a Party has delivered to the other Party a written request for such consultation. Each of the parties shall be free to choose each of the below mentioned procedures.

Any dispute, which could not be settled by the Parties through amicable settlement, shall be finally referred to arbitration of two arbitrators, one to be appointed by each party to the dispute, and in case of difference of opinion between them to an umpire appointed by the said two arbitrators before entering on the reference, and the decision of such arbitrators or umpire, as the case may be, shall be final and binding on both parties. Arbitrator shall be appointed by the parties on mutual consent or, in the absence of any such consent among the parties as per the provisions of Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the Rules made thereunder as applicable in India.

Any dispute arising from this contract or relating thereto or additional contract thereto, including disputes arising from or relating to the interpretation, invalidity, breach or termination shall be settled amicably. If the parties do not reach resolution of the matter within two months, the dispute shall be referred to the relevant court of Jurisdiction. The venue of Arbitration proceedings shall be at Jaipur.

12.2 IN CASE THE CONTRACTOR IS A PUBLIC-SECTOR ENTERPRISE OR A GOVERNMENT DEPARTMENT.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 34 of 142	बोली दाता के हस्ताक्षर
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In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contracts(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22-05-2018". .

12.3. Cost of arbitration shall be borne by Successful bidder.

### 13 FORCE MAJEURE

13.1 "Force Majeure" shall mean any event beyond the reasonable control of the Employer or of the Contractor, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected, and shall include, without limitation, the following:

- (a) war, hostilities or warlike operations (whether war be declared or not), invasion, act of foreign enemy and civil war,
- (b) rebellion, revolution, insurrection, mutiny, usurpation of government, conspiracy, riot and civil commotion,
- (c) earthquake, landslide, volcanic activity, flood or cyclone, or other inclement weather condition, nuclear and pressure waves or other natural or physical disaster,

13.2 Notwithstanding the provisions of clauses contained in this NIT document, the contractor shall not be liable to forfeit (a) PBG for delay and (b) termination of contract, if he is unable to fulfill his obligation under this contract due to force majeure conditions.

13.3 For purpose of this clause, "Force Majeure" means an event like Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restrictions and fright embargoes etc. Whether a "Force majeure" situation exists or not, shall be decided by REIL and its decision shall be final and binding on the contractor and all other concerned.

13.4 In the event that the contractor is not able to perform his obligations under this contract on account of force majeure, he will be relieved of his obligations during the force majeure period. In the event that such force majeure extends beyond six months, has the right to terminate the contract in which case, the PBG shall be refunded to him.

13.5 If a force majeure situation arises, the contractor shall notify REIL in writing promptly, not later than 14 days from the date such situation arises. The contractor shall notify REIL not later than 3 days of cessation of force majeure conditions. After examining the cases, REIL shall decide and grant suitable additional time for the completion of the work, if required.

### 14 LANGUAGE

14.1 All documents, drawings, instructions, design data, calculations, operation, maintenance and safety manuals, reports, labels and any other date shall be in English Language. The contract agreement and all correspondence between the REIL and the bidder shall be in English language.

### 15 OTHER CONDITIONS

15.1 The Successful bidder shall not transfer, assign or sublet the work under this contract or any substantial part thereof to any other party without the prior consent of REIL in writing.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 35 of 142	बोली दाता के हस्ताक्षर
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15.2 The Successful bidder or its subcontractors shall not display the photographs of the work and not take advantage through publicity of the work without written permission of REIL and owner of the Rooftop.

15.3 The Successful bidder or its subcontractors shall not make any other use of any of the documents or information of this contract, except for the purposes of performing the contract.

15.4 REIL will not be bound by any Power of Attorney granted/ issued by the Successful bidder 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 REIL after obtaining proper legal advice, the cost of which will be chargeable to the Successful bidder concerned.

**15.5 SUCCESSORS AND ASSIGNEES:**

In case REIL or Successful bidder may undergo any merger or amalgamation or a scheme of arrangement or similar re-organization & this contract is assigned to any entity (ies) partly or wholly, the contract shall be binding mutatis mutandis upon the successor entities shall continue to remain valid with respect to obligation of the successor entities.

**15.6 SEVERABILITY:**

It is stated that each paragraph, clause, sub-clause, schedule or annexure of this contract shall be deemed severable & 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 & rest of the contract shall continue to be in full force & effect.

**15.7 COUNTERPARTS:**

This contract may be executed in one or more counterparts, each of which shall be deemed an original & all of which collectively shall be deemed one of the same instrument.

**15.8 RIGHTS & REMEDIES UNDER THE CONTRACT ONLY FOR THE PARTIES:**

This contract is not intended & shall not be construed to confer on any person other than the REIL & Successful bidder hereto, any rights and / or remedies herein.

**16 CORRESPONDENCES**

Bidder requiring any Techno-Commercial clarification of the bid documents may contact in writing or by Fax /E Mail.

Name	Contact Number	Email ID
Sh. Deepak Gupta	0141-2470062,2470363	deepak.gupta@reil.co.in

Verbal clarifications and information given by the REIL or its employees or its Representatives shall not be in any way entertained.

**17 CORRUPT OR FRAUDULENT PRACTICES**

REIL requires that Successful Bidders / Developers should follow the highest standard of ethics during the execution of contract. In pursuance of this policy, REIL defines for the purposes of this provision, the terms set forth as follows:

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 36 of 142	बोली दाता के हस्ताक्षर
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- 17.1 “corrupt practice” means 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
- 17.2 “fraudulent practice” means a misrepresentation of facts in order to influence a bid process or the execution of a contract to the detriment of the REIL / Govt. 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 REIL of the benefits of free and open competition.
- 17.3 REIL will declare a firm ineligible/debarred, either indefinitely or for a specific period of time, a GOVT. 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 / REIL projects.

## 18 DEBARRED FROM PARTICIPATING IN REIL’S ROOF TOP TENDER

- 18.1 REIL reserves the right to carry out the performance review of each Bidder from the time of submission of Bid onwards. In case it is observed that a bidder has not fulfilled its obligations in meeting the various timelines envisaged, in addition to the other provisions of the NIT, such Bidders may be debarred from participating in REIL’s any future tender for a period as decided by the competent authority of REIL.
- 18.2 The Successful bidder must ensure that installation of Solar power plants are applicable for newly commissioned projects i.e. for the projects whose construction/dispatch of equipment’s have been started only after the issue of sanction letter/allocation letter .Any roofs on which projects has been installed or commissioned before the issue of allocation letter/sanction letter shall be construed as fraudulent activity in which case Successful bidder(s) may be debarred from participating in REIL’s future tender for a period as decided by the Competent authority. However, such locations may be used for installation of additional capacity with the prior approval of competent authority.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 37 of 142	बोली दाता के हस्ताक्षर
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## PART (भाग) – V

# SPECIAL CONDITIONS OF CONTRACT

## अनुबंध की विशेष शर्तें (SCC)

(निविदा नं.: REIL/BID/PROJECT/2024-25/001)

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 38 of 142	बोली दाता के हस्ताक्षर
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## 1 DEFINITIONS & ABBREVIATIONS

In this “Bid / NIT Document” the following words and expression will have the meaning as herein defined where the context so admits:

- 1.1. “Affiliate” shall mean a company that either directly or indirectly
- controls or
  - is controlled by or
  - is under common control with

A Bidding Company and “control” means ownership by one company of at least twenty six percent (26%) of the voting rights of the other company.

- 1.2. “Project Cost” shall mean per KWp cost for solar power plants without battery. For the purpose of this NIT, the Project cost will be considered as per **Table -1.3** .
- 1.3. "B.I.S." shall mean specifications of Bureau of Indian Standards (BIS).
- 1.4. “Bid/ Tender” shall mean the Techno Commercial and Price Bid submitted by the Bidder along with all documents/ credentials/ attachments/ annexure etc., in response to this NIT, in accordance with the terms and conditions hereof.
- 1.5. “Bidder/ Bidding Company” shall mean Bidding Company submitting the Bid. Any reference to the Bidder includes Bidding Company/ including its successors, executors and permitted assigns as the context may require”
- 1.6. “Bid Bond” shall mean the unconditional and irrevocable bank guarantee to be submitted along with the Bid by the Bidder under Clause 3.12, Part - II of this NIT, in the prescribed Format-3
- 1.7. “Bid Deadline” shall mean the last date and time for submission of Bid in response to this NIT as specified in Bid Information Sheet.
- 1.8. “Bid Capacity” shall mean capacity offered by the bidder in his Bid under invitation.
- 1.9. “CEA” shall mean Central Electricity Authority.
- 1.10. “Chartered Accountant” 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.
- 1.11. “Competent Authority” shall mean Managing Director (MD) of Rajasthan Electronics & Instruments Ltd. himself and /or a person or group of persons nominated by MD for the mentioned purpose herein.
- 1.12. “Commissioning” means Successful operation of the Project / Works by the Contractor, for the purpose of carrying out Performance Test(s) as defined in NIT.
- 1.13. “Company” shall mean a body incorporated in India under the Companies Act, 1956 or Companies Act, 2013 including any amendment thereto.
- 1.14. “**Capacity Utilization Factor**” (CUF) means the ratio of the actual output from a solar plant over the year (kWh) to the maximum possible output from it for a year (kWh) under ideal conditions.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 39 of 142	बोली दाता के हस्ताक्षर
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CUF = Actual Plant Output in kWh over the year / (Installed Plant Capacity in KWp x 365 x 24).

Monthly CUF: Monthly Plant output in kWh / (installed plant capacity in KWp x number of days in a month x 24).

- 1.15. "Eligibility Criteria" shall mean the Eligibility Criteria as set forth in Clause 4 of this NIT.
- 1.16. "Financially Evaluated Entity" shall mean the company which has been evaluated for the satisfaction of the Financial Eligibility Criteria set forth in Clause 4.3 hereof.
- 1.17. "IEC" shall mean specifications of International Electro-Technical Commission.
- 1.18. "KWp" shall mean Kilo-Watt Peak.
- 1.19. "kWh" shall mean Kilo-Watt-hour.
- 1.20. "MNRE" shall mean Ministry of New and Renewable Energy, Government of India.
- 1.21. "Maximum Bid / Tender Capacity" shall mean 10 MWp which is the maximum aggregate capacity for which the Bidder can submit its Bid.
- 1.22. "Model" shall mean RESCO model which includes energy sale which shall not exceed beyond the levelized ceiling tariff as referred in NIT.
- 1.23. "Net-worth" shall have same meaning as defined in Company Act 2013 and Amendment, if any.
- 1.24. "O&M" shall mean Operation & Maintenance of 25 years for RESCO model of Rooftop Solar PV system.
- 1.26. "Owner of project" shall mean anyone who has ownership of the roof (including in the form of lease) and is the legal owner of all equipment of the project OR the Successful bidder who has taken the roof on mutually agreed terms and conditions from the roof top owner(s) and enters into a PPA with the consumer(s) for supply of solar power for at least 25 years from the date of Commissioning of project.
- 1.27. "Levellized Tariff" shall mean the tariff offered by the Bidder for 25 years for the Scope of work as per NIT document subject to the maximum levelized tariff of 25 years of as per NIT.
- 1.28. "Project capacity" means " In case projects, wherein installed inverter capacity is less than the PV Module array capacity, the inverter capacity shall be considered for declaring commissioned plant capacity. Similarly, for projects wherein inverter capacity is more than the PV Module array capacity, the PV Module array capacity shall be considered for declaring commissioned plant capacity"
- 1.29. "Performance Ratio" (PR) means

"Performance Ratio" (PR) means the ratio of plant output versus installed plant capacity at any instance with respect to the radiation measured.

$$PR = \frac{\text{Measured output in KWp}}{\text{Installed Plant capacity KWp}} \times \frac{1000 \text{ W/m}^2}{\text{Measured Radiation intensity in W/m}^2}$$

- 1.30. "Parent Company" shall mean a company that holds at **least Fifty percent (50%)** of the paid-up equity capital directly or indirectly in the Bidding Company as the case maybe;

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 40 of 142	बोली दाता के हस्ताक्षर
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- 1.31. "Project Company" shall mean Company incorporated by the bidder as per Indian Laws in accordance with Clause no 3.2.4 of Part –II.
- 1.32. "Project Sanction Documents" shall mean the documents as specified in Annexure-A.
- 1.33. "Price Bid" shall mean Envelope II of the Bid, containing the Bidder's quoted Price as per the Annexure of this NIT;
- 1.34. "Qualified Bidder" shall mean the Bidder(s) who, after evaluation of their Techno Commercial Bid as per Clause 4 of Part-II stand qualified for opening and evaluation of their Price Bid;
- 1.35. "NIT" shall mean Request for Selection (NIT)/ Bid document / Tender document.
- 1.36 "RESCO" shall mean Renewable Energy Service Companies.
- 1.37. "RESCO model" shall mean where the bidders intend to take a rooftop owned by some other entity on mutually agreed terms and conditions including lease agreement from the roof top owner(s) and enters into the PPA with rooftop owner / DISCOM / others for supply of Solar power for 25 years at a tariff as per NIT from the date of Commissioning of project.
- 1.38. "PPA" shall mean Power Purchase Agreement to be executed between successful bidder / project developer and the rooftop owner. The prescribed format for execution of PPA is attached as Annexure-III to this NIT.
- 1.39. "Rooftop Solar PV" shall mean solar PV array/system installed on the flat / inclined roof/curved roof of the building / elevated platform on metallic or concrete structure minimum 10 feet above ground level / Ground mounted system (in the places where sufficient shadow free rooftop area is not available.) .
- 1.40. "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.
- 1.41. "Successful Bidder(s) / Contractor(s)/ Project Developers(s)" shall mean the Bidder(s) selected by REIL pursuant to this NIT for Rajasthan regarding Implementation of Grid Connected Roof Top Solar PV System as per the terms of the NIT Documents, and to whom Letter of Allocation has been issued;
- 1.42. "SNA" shall mean State Nodal Agency.
- 1.43. "Tendered Capacity" shall mean the total aggregate capacity in Rajasthan State of India 10 MWp proposed to be allocated by REIL to the Successful Bidder through this bidding process as per terms and conditions specified therein.
- 1.44. "Ultimate Parent Company" shall mean a company which directly or indirectly owns at least twenty-six percent (26%) paid up equity capital in the Bidding Company) and/or in the Financially Evaluated Entity and such Bidding Company and /or the Financially Evaluated Entity shall be under the direct control or indirectly under the common control of such company.
- 1.45. "Wp" shall mean Watt Peak.

## 02 Project Capacity

Project capacity shall be considered as total of module capacity in KWp at STC (DC capacity ). Contractor is allowed to increase the DC Capacity maximum 20 % of the Inverter capacity.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 41 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

**03. REIL's PMC Charges:**

- 3.1 PMC charges of REIL shall be 4.50% of the project capacity cost as per table-1.3 of NIT.
- 3.2 The above PMC charges are exclusive of GST which shall be paid extra as applicable..
- 3.3 PMC Charges of REIL shall be collected from the successful bidder,
  - a) 10 % of eligible capacity as per LOI within 14 days before issue of LOA (Non returnable) and
  - b) Remaining 90 % within 30 days after signing of PPA by the beneficiary i.e. prior to execution of the project.
- 3.4 If successful bidder unable to sign the PPA up to 15 % of allocated capacity then 10 % advance amount will be forfeited.

**04. Exemption for MSEs:**

- 4.1 Bid security / Bid Bond are exempted for MSEs Vendors / Developers registered under NSIC / Udhyog Aadhaar Category only.
- 4.2 In this tender Price preference is not applicable to MSEs.
- 4.3 If MSEs vendor is awarded the capacity and it does not submit the performance bank guarantee as per clause 3.13 of Part – II ITB, it shall be blacklisted from all tenders of REIL.

**05. Seepage in Roof:**

Contractor shall be responsible for any water leakage or seepage due to project construction work on the roof during the installation of rooftop solar (RTS) plants and also during the O&M period of 3 years. In case of leakage during the above mentioned period, necessary repair by specialized agency approved by REIL must be carried out by the Contractor immediately without any cost implications to REIL, failing which PBG amount will be forfeited on pro rata basis for the respective building.

**06. Liquidated Damages:**

- 6.1 The Successful Bidder shall complete the entire scope of work within designated time as provided in section - Evaluation Criteria.
- 6.2 Liquidated Damages on per day basis calculated for the Performance Security on a 06 (Six) Months period would be levied. After six (6) Months the Project will get cancelled and the total PBG amount would be forfeited.
- 6.3 For example,
  - 6.3.1 If a project of 1 MWp is delayed by thirty-six (30) days then the Liquidated Damages will be levied as given below:

$$\text{Liquidated Damages} = [(\text{Performance Security})/180 \text{ Days}] * \text{delayed days} = (1,80,000/180) * 30 = \text{INR } 30,000/-$$

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 42 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

## PART (भाग) – VI

# SAMPLE FORMS & FORMATS

नमूना प्रपत्र और प्रारूप

(निविदा सं.: REIL/BID/PROJECT/2024-25/001)

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 43 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format-1

**FORMAT FOR SUBMITTING NIT**

**Covering Letter**

(The covering letter should be on the Letter Head of the Bidding Company)

Ref.No. \_\_\_\_\_ Date: \_\_\_\_\_

From: \_\_\_\_\_ (Insert name and address of Bidding Company)

\_\_\_\_\_  
\_\_\_\_\_

Tel.#:

Fax#:

E-mail address#

To

RAJASTHAN ELECTRONICS & INSTRUMENTS LTD.  
2, Kanakpura Ind. Area  
Sirsi Road  
JAIPUR-302034

**Subject:** NIT for “Implementation of 10 MWp Grid Connected Roof Top and Small Ground Mounted Solar Photovoltaic Power Projects on State / Central Government Buildings & Government under taking buildings in Rajasthan under RESCO Model.”

Dear Sir,

1. We, the undersigned....[insert name of the ‘Bidder’] having read, examined and understood in detail the NIT Document for Implementation of Grid connected Solar PV System hereby submit our Bid comprising of Price Bid and Techno Commercial Bid. We confirm that neither we nor any of our Parent Company / Affiliate/Ultimate Parent Company has submitted Bid other than this Bid directly or indirectly in response to the aforesaid NIT.

2. We give our unconditional acceptance to the NIT, dated.....and NIT Documents attached thereto, issued by REIL, as amended. As a token of our acceptance to the NIT Documents, the same have been initialed by us and enclosed to the Bid. We shall ensure that we execute such NIT Documents as per the provisions of the NIT and provisions of such NIT Documents shall be binding on us.

3. Bid Capacity

We have bid for the State \_\_\_\_\_ for the capacity of \_\_\_\_\_ MWp. (mention in the separate table, capacity and state name as per NIT terms and conditions)

4. Bid Security

We have enclosed a Bid Security of Rs.....(Insert Amount), in the form of bank guarantee no.....(Insert number of the bank guarantee) dated.....[Insert date of bank guarantee] as per

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 44 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format .....from .....(Insert name of bank providing Bid Security) and valid up to .....in terms of Clause .....of this NIT. The offered quantum of power by us is KWp. (Insert total capacity offered / demand draft/banker cheque for Rs.-----In favour of REIL payable at Jaipur).

5. We have submitted our Price Bid strictly as per this NIT, without any deviations, conditions and without mentioning any assumptions or notes for the Price Bid in the said format(s).
6. In case we are a Successful Bidder, we shall furnish a declaration at the time of commissioning of the Project to the affect that neither we have availed nor we shall avail in future any Incentive for implementation of this project.
7. Acceptance

We hereby unconditionally and irrevocably agree and accept that the decision made by Rajasthan Electronics & Instruments Ltd. in respect of any matter regarding or arising out of the NIT shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process.

We confirm that there are no litigations or disputes against us, which materially affect our ability to fulfill our obligations with regard to execution of projects of capacity offered by us.

8. Familiarity with Relevant Laws & Regulations of India

We confirm that we have studied the provisions of the relevant an laws and regulations of India as required to enable us to submit this Bid and execute the NIT Documents, in the event of our selection as Successful Bidder. We further undertake and agree that all such factors as mentioned in NIT have been fully examined and considered while submitting the Bid.

9. Contact Person

Details of the contact person are furnished as under:

Name : .....

Designation : .....

Company : .....

Address : .....

Phone Nos. : .....

Fax Nos. : .....

E-mail address : .....

10. We are enclosing herewith the Envelope-I (Covering letter, Processing fee and Bid Security etc) in hard copy as per clause 3.7.1.A of the NIT.

It is confirmed that our Bid is consistent with all the requirements of submission as stated in the NIT and subsequent communications from RAJASTHAN ELECTRONICS & INSTRUMENTS LTD. The information submitted in our Bid is complete, strictly as per the requirements stipulated in the NIT and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid. We confirm that all the terms and conditions of our Bid are valid for acceptance for

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 45 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

a period of 6 month from the Bid deadline. We confirm that we have not taken any deviation so as to be deemed non-responsive.

Dated the \_\_\_\_\_ day of \_\_\_\_\_, 20

Thanking you,

We remain,

Yours faithfully,

Name, Designation and Signature of Authorized Person in whose name Power of Attorney/Board Resolution / Declaration (Annexure-F).

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 46 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format-2

**GENERAL PARTICULARS OF THE BIDDER**

1.	Name of the Company	
2.	Registered / Corporate Office Address	
3.	E-mail	
4.	Web site	
5.	Authorized Contact Person(s) with name, designation Address and Mobile Phone No., E-mail address/ Fax No. to whom all references shall be made.	
6.	Year of Incorporation	
7.	Have the bidder/Company ever been debarred By any Govt. Dept. / Undertaking for undertaking any work.	
8.	Reference of any document information attached by the Bidder other than specified in the NIT	
9.	Whether the Bidder wishes to form a Project Company for execution of work	Yes/No
10.	Bidding company is listed in India	Yes/No
11.	Details of the Ownership structure	
12.	Whether company is MSEs as on the bidding date	Yes/No

(Signature of Authorized Signatory)  
With Stamp

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 47 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format-A

### Shareholding certificate

Name of the Equity holder	Type and Number of shares owned	% of equity holding	Extent of Voting rights

(Signature of Authorized Signatory)

With Stamp

(Signature of Company Secretary/Director/Chartered Accountant)

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 48 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format- 3

**FORMAT FOR BID SECURITY/EMD**

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

Ref. \_\_\_\_\_ Bank Guarantee No. \_\_\_\_\_

Date: \_\_\_\_\_

In consideration of the ----- [Insert name of the Bidder] (hereinafter referred to as 'Bidder' submitting the response to NIT inter alia for selection of the Project of the capacity of MWp in the State as indicated in NIT) in response to the NIT No. dated issued by Rajasthan Electronics & Instruments Ltd. (hereinafter referred to as REIL) and REIL considering such response to the NIT of .....[insert the name of the Bidder] as per the terms of the NIT, the ----- [insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to REIL at [Insert Name of the Place from the address of REIL] forthwith without any protest and demur on demand in writing from REIL or any Officer authorized by it in this behalf, any amount upto and not exceeding Indian Rupees -----[Insert amount not less than that derived on the basis of INR ---- Lakhs per MWP of cumulative capacity proposed in a State only, on behalf of M/s. [Insert name of the Bidder].

This guarantee shall be valid and binding on this bank up to and including----- [insert date of validity in accordance with Clause 3.12.1.iii of this NIT] and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract 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 agreement.

Our liability under this Guarantee is restricted to INR (Indian Rupees \_ only). Our Guarantee shall remain in force until\_\_\_\_\_ [insert date of validity in accordance with Clause 3.13.1.iii of this NIT]. REIL shall be entitled to invoke this Guarantee till\_\_\_ [Insert date which is 30 days after the date in the preceding sentence].

The Guarantor Bank hereby agrees and acknowledges that the REIL 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 REIL, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to REIL.

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

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

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 49 of 142	बोली दाता के हस्ताक्षर
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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.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly REIL 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 REIL 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. \_\_\_\_\_ (Rs. \_\_\_\_\_ only) and it shall remain in force until [Date to be inserted on the basis of Clause 3.12.1.iii of this NIT] with an additional claim period of thirty (30) days thereafter. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if REIL 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.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 50 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format-4

**FORMAT FOR PERFORMANCE BANK GUARANTEE (PBG)**

{To be submitted for the Allocated capacity in Rajasthan }

(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 selected Solar Power Developer') submitting the response to NIT inter alia for selection of the Project of the capacity of KWp/MWp, at.....[Insert name of the State] under this NIT in response to the NIT no..... dated..... issued by Rajasthan Electronics & Instruments Ltd. (herein after referred to as REIL) and REIL considering such response to the NIT of .....[insert the name of the selected Solar Power Developer] (which expression shall unless repugnant to the context or meaning thereof include its executors, administrators, successors and assignees) and selecting the Solar Power Project of the Solar Power Developer and issuing Letter of allocation No ----- to (Insert Name of selected Solar Power Developer) as per terms of NIT and the same having been accepted by the selected SPD or a Project Company, M/s ----- {a Special Purpose Vehicle (SPV) formed for this purpose}, if applicable]. As per the terms of the NIT, the [insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to REIL at [Insert Name of the Place from the address of the REIL] forthwith without any protest or demur on demand in writing from REIL or any Officer authorized by it in this behalf, any amount upto and not Exceeding Rupees----- [Total Value] only, on behalf of M/s [Insert name of the selected Solar Power Developer / Project Company]

This guarantee shall be valid and binding on this Bank up to and including..... and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract 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 agreement.

Our liability under this guarantee is restricted to Rs. \_\_\_\_\_ GUARANTEE in part or in full, as it may deem fit.

Our Guarantee shall remain in force until..... REIL shall be entitled to invoke this Guarantee till .....

The Guarantor Bank hereby agrees and acknowledges that REIL 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 REIL, made in any format raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to REIL.

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

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

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 51 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

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.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly REIL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the selected Solar Power Developer / Project Company , to make any claim against or any demand on the Successful bidder or to give any notice to the selected Solar Power Developer / Project Company or to enforce any security held by REIL or to exercise, levy or enforce any distress, diligence or other process against the selected Solar Power Developer / Project Company .

Not with standing anything contained hereinabove, our liability under this Guarantee is restricted to INR (Indian Rupees \_ only) 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 REIL 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. 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 Performance Bank Guarantee (PBG) shall be executed by any of the Bank from the List of Banks enclosed as per Annexure-B

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 52 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format -5

### CHECK LIST FOR BANK GUARANTEES

Sl.No	Details of checks	YES/NO.
1	Is the BG on non-judicial Stamp paper of appropriate value, as per applicable Stamp Act of the place of execution	
2	Whether date, purpose of purchase of stamp paper and name of the REIL are indicated on the back of Stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be not later than the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the party on whose behalf the BG has been issued. Also the Stamp Paper should not be older than six months from the date of execution of BG).	
3	Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG?	
4	Is each page of BG duly signed/ initialed by executants and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed Performa?	
5	Does the Bank Guarantees compare verbatim with the Performa prescribed in the Bid Documents?	
6	Are the factual details such as Bid Document No. / Specification	
7	Amount of BG and Validity of BG correctly mentioned in the BG	
8	Whether overwriting/cutting if any on the BG have been properly authenticated under signature & seal of executants?	
9	Contact details of issuing bank Including email ID, Mobile number etc.	

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 53 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format-6

**POWER OF ATTORNEY**

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

(a) Power of Attorney to be provided by the Bidding Company in favour of its representative as evidence of authorized signatory's authority.

Know all men by these presents, We ..... (name and address of the registered office of the Bidding Company as applicable) do hereby constitute, appoint and authorize Mr./Ms. .... (name & residential address) who is presently employed with us and holding the position of

..... as our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for implementation of grid connected solar Power Plants in the State \_ in response to the NIT No ..... dated ..... issued by M/s. Rajasthan Electronics & Instruments Ltd. (REIL), Jaipur including signing and submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which the REIL may require us to submit. The aforesaid Attorney is further authorized for making representations to the REIL, Jaipur and providing information / responses to REIL, Jaipur representing us in all matters before REIL, Jaipur and generally dealing with REIL, Jaipur in all matters in connection with Bid till the completion of the bidding process as per the terms of the above mentioned NIT.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the NIT.

Signed by the within named

.....(Insert the name of the executant company) through the hand of

Mr.....

Duly authorized by the Board to issue such Power of Attorney

Dated this.....day of..... Accepted

Signature of Attorney

(Name, designation and address of the Attorney)

Attested

..... (Signature of the executant)

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 54 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

(Name, designation and address of the executant)

.....

Signature and stamp of Notary of the place of execution

Common seal of.....has been affixed in my/our presence pursuant to Board of Director's Resolution dated.....

WITNESS

1. .... (Signature)

Name.....

Designation.....

2. .... (Signature)

Name.....

Designation.....

Notes:

The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and the same should be under common seal of the executant affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the power of attorney shall be duly authorized by the executant(s) in this regard.

The person authorized under this Power of Attorney, in the case of the Bidding Company / Lead Member being a public company, or a private company which is a subsidiary of a public company, in terms of the Companies Act, 1956, with a paid up share capital of more than Rupees Five crores, should be the Managing Director / whole time director/manager appointed under section 269 of the Companies Act, 1956. In all other cases the person authorized should be a director duly authorized by a board resolution duly passed by the Company.

Also, wherever required, the executant(s) should submit for verification the extract of the chartered documents and documents such as a Board resolution / power of attorney, in favour of the person executing this power of attorney for delegation of power hereunder on behalf of the executant(s).

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 55 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format -7

**FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT (AS PER CLAUSE 4.3, PART-II)**

(To be submitted on the letter head of Bidding Company)

To,

RAJASTHAN ELECTRONICS & INSTRUMENTS LTD.  
2, Kanakpura Ind. Area  
Sirsi Raod  
JAIPUR-302034

Dear Sir,

**Subject:** Bid for Implementation of 10 MWp Grid Connected Roof Top and Small Ground Mounted Solar Photovoltaic Power Projects on State / Central Government Buildings & Government under taking buildings in Rajasthan under RESCO Model.

We submit our Bid/Bids for the total capacity of ----- MWp for which details of our Financial Eligibility Criteria Requirements are as follows.

Further, we certify that the Financially Evaluated Entity (ies) had an Annual Turnover  
Or

Net worth (strike out whichever is not applicable) of Rs.....Crore computed as per instructions provided in Clause 4.3 of this NIT based on unconsolidated audited annual accounts (refer Note-1 below) any of the last 3 Years immediately preceding the Bid Deadline.

Name of Financially Evaluated Entity*	Relationship with Bidding Company**	Financial year	Year of Incorporation	Annual Turnover (Rs. Crore)	Net worth as per Clause 4.3 (in Rs. Crore)

\* The Financially Evaluated Entity may be the Bidding Company itself.

\*\* The column for “Relationship with Bidding Company” is to be filled in only in case financial capability of Parent Company and/or Affiliate has been used for meeting Qualification Requirements.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 56 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Yours faithfully

Signature and stamp (on each page) of Authorized Signatory of Bidding Company.

Name: .....

Date: .....

Place: .....

Signature and stamp (on each page) of Chartered Accountant/Statutory Auditors of Bidding Company.

Name: .....

Date: .....

Place: .....

Notes:

Audited consolidated annual accounts of the Bidder may also be used for the purpose of financial criteria provided the Bidder has **at least 26% equity in** each company whose accounts are merged in the audited consolidated accounts and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered again for the purpose of evaluation of the Bid.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 57 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format-8

**FORMAT FOR CERTIFICATE OF RELATIONSHIP OF PARENT COMPANY OR AFFILIATE WITH THE BIDDING COMPANY**

To,

.....

Dear Sir,

**Subject:** Bid for Implementation of 10 MWp Grid Connected Roof Top and Small Ground Mounted Solar Photovoltaic Power Projects on State / Central Government Buildings & Government under taking buildings in Rajasthan under RESCO Model.

We hereby certify that M/s.....,M/s.....,M/s.....are the Affiliate(s) /Parent Company of the Bidding Company as per the definition of Affiliate/Parent Company as provided in this NIT and based on details of equity holding as on seven (7) days prior to the Bid Deadline.

The details of equity holding of the Affiliate/Parent Company/Bidding Company or vice versa as on seven (7) days prior to the Bid Deadline are given as below:

<b>Name of Bidding Company</b>	<b>Name of the Affiliate of the Bidding Company/ Name of the Parent Company of the Bidding Company</b>	<b>Name of the Company having common control on the Affiliate and the Bidding Company</b>	<b>Percentage of Equity Holding of Parent Company in the Bidding Company</b>

\*Strike out whichever is not applicable.

.....

(Insert Name and Signature of Statutory Auditor or practicing Company Secretary of the Bidder)

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 58 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Format-9

**UNDERTAKING FROM THE FINANCIALLY EVALUATED ENTITY OR ITS PARENTCOMPANY / ULTIMATE PARENT COMPANY**

(On the Letter Head of the Financially Evaluated Entity or its Parent Company/Ultimate Parent Company)

Name:  
Full Address:  
Telephone No.:  
E-mail address:  
Fax/No.:  
To,

.....

Dear Sir,

We refer to the NIT No.....dated.....for “Implementation of 10 MWp Grid Connected Roof Top and Small Ground Mounted Solar Photovoltaic Power Projects on State / Central Government Buildings & Government under taking buildings in Rajasthan under RESCO Model”.

“We have carefully read and examined in detail the NIT, including in particular, Clause ....of the NIT, regarding submission of an undertaking, as per the prescribed Format at Annexure.....of the NIT.

We confirm that M/s.....(Insert name of Bidding Company/) has been authorized by us to use our financial capability for meeting the Financial Eligibility as specified in Clause...of the NIT referred to above.

We have also noted the amount of the Performance Guarantee required to be submitted as per Clause...of the NIT the .....(Insert the name of the Bidding Company) in the event of it being selected as the Successful Bidder”.

In view of the above, we hereby undertake to you and confirm that in the event of failure of .....(Insert name of the Bidding Company) to submit the Performance Guarantee in full or in part at any stage, as specified in the NIT, we shall submit the Performance Guarantee not submitted by .....(Insert name of the Bidding Company)”.

We have attached hereto certified true copy of the Board Resolution Whereby the Board of Directors of our Company has approved issue of this Undertaking by the Company.

All the terms used herein but not defined, shall have the meaning as ascribed to the said terms under the NIT.

Signature of Authorised Signatory

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 59 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Common seal of .....has been affixed in my/our presence pursuant to Board of Director’s Resolution dated.....

WITNESS

.....

(Signature)

Name.....

Designation.....

.....

(Signature)

Name.....

Designation.....

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 60 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Annexure-A

### DOCUMENTS REQUIRED FOR PROJECT SANCTION

Following documents will be required to be submitted for project sanction:

1. Power Purchase Agreement between the Developer and the owner of the Project.
2. Power Purchase Agreement shall have reference to the REIL's NIT No. and Letter of Allocation and provisions as per terms and conditions, technical specification and performance parameter in line with the REIL's NIT Document against which Letter of Allocation has been issued. In addition, it shall indicate the tariff payable by the project Owner to the developer, payment terms, and completion period along with other conditions of contract like insurance, warranty, force majeure, arbitration, jurisdiction, governing law, and site access for the developer and, site access for REIL officials for the entire plant life, obligation of the Project owner.
3. No Objection Certificate from the concerned DISCOM for grid connectivity or CEIG approval.
4. Summary Project Report (2-3 pages only) as per Format at Annexure H.
5. Proof of REIL PMC Charges: Zerox copy of DD/Bankers cheque /RTGS for an amount as per clause no.3 of Part-V (SCC), drawn in favour of RAJASTHAN ELECTRONICS & INSTRUMENTS LTD., Jaipur, payable at Jaipur against payment of REIL PMC Charges.
6. Certificate from a chartered engineer certifying that the roof and the civil structure on which solar plant would be set up has the requisite strength to last for 25 years.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 61 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Annexure-B

**List of Banks**

<b>1. SCHEDULED COMMERCIAL BANKS</b>	<b>2. OTHER PUBLIC SECTOR BANKS</b>
<b>SBI AND ASSOCIATES</b>	1. IDBI Bank Ltd.
State Bank of India	<b>3. FOREIGN BANKS</b>
	1. Bank of America NA
	2. Bank of Tokyo Mitsubishi UFJ Ltd.
State Bank of Indore	3. BNP Paribas
	4. Calyon Bank
	5. Citi Bank N.A.
	6. Deutsche Bank A.G
<b>NATIONALISED BANKS</b>	7. The HongKong and Shanghai Banking Corpn. Ltd.
1. Allahabad Bank	8. Standard Chartered Bank
2. Andhra Bank	9. Societe Generale
3. Bank of India	10. Barclays Bank
4. Bank of Maharashtra	11. Royal Bank of Scotland
5. Canara Bank	12. Bank of Nova Scotia
6. Central Bank of India	13. Development Bank of Singapore (DBS, Bank Ltd.)
7. Corporation Bank	

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 62 of 142	बोली दाता के हस्ताक्षर
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8. Dena Bank	<b>4. SCHEDULED PRIVATE BANKS</b>
9. Indian Bank	1. Federal Bank Ltd.
10. Indian Overseas Bank	2. Kotak Mahindra Bank Ltd.
11. Oriental Bank of Commerce	3. Axis Bank Ltd.
12. Punjab National Bank	4. ICICI Bank Ltd.
13. Punjab & Sind Bank	5. HDFC Bank Ltd.
14. Syndicate Bank	6. Yes Bank Ltd.
15. Union Bank of India	7. IDFC Bank Ltd.
16. United Bank of India	8. IndusInd Bank
17. UCO Bank	9. KarurVysya Bank
18. Vijaya Bank	10. South Indian Bank
19. Bank of Baroda	



## **OPERATION AND MAINTENANCE GUIDELINES OF GRID CONNECTED PV PLANTS**

For the optimal operation of a PV plant, maintenance must be carried out on a regular basis.

All the components should be kept clean. It should be ensured that all the components are fastened well at their due place.

Maintenance guidelines for various components viz. solar panels, inverter, wiring etc. are discussed below:

### **1. SOLAR PANELS**

Although the cleaning frequency for the panels will vary from site to site depending on soiling, it is recommended that

- The panels are cleaned at least once every fifteen days.
- Any bird droppings or spots should be cleaned immediately. Use soft water and a soft sponge or cloth for cleaning.
- Do not use detergent or any abrasive material for panel cleaning. Isopropyl alcohol may be used to remove oil or grease stains.
- Do not spray water on the panel if the panel glass is cracked or the back side is perforated.
- Wipe water from module as soon as possible.
- Use proper safety belts while cleaning modules at inclined roofs etc.
- The modules should not be cleaned when they are excessively hot. Early morning is particularly good time for module cleaning?
- Check if there are any shade problems due to vegetation or new building. If there are, make arrangements for removing the vegetation or moving the panels to a shade-free place.
- Ensure that the module terminal connections are not exposed while cleaning; this poses a risk of electric shock.
- Never use panels for any unintended use, e. g. drying clothes, chips etc. Ensure that monkeys or other animals do not damage the panels.

### **2. CABLES AND CONNECTION BOXES**

- Check the connections for corrosion and tightness.
- Check the connection box to make sure that the wires are tight, and the water seals are not damaged.
- There should be no vermin inside the box.
- Check the cable insulating sheath for cracks, breaks or burns. If the insulation is damaged, replace the wire.
- If the wire is outside the building, use wire with weather-resistant insulation.
- Make sure that the wire is clamped properly and that it should not rub against any sharp edges or corners.
- If some wire needs to be changed, make sure it is of proper rating and type.

### **3. INVERTER**

- The inverter should be installed in a clean, dry, and ventilated area which is separated from, and not directly above, the battery bank.
- Remove any excess dust in heat sinks and ventilations. This should only be done with a dry cloth or brush.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 64 of 142	बोली दाता के हस्ताक्षर
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- Check that vermin have not infested the inverter. Typical signs of this include spider webs on ventilation grills or wasps' nests in heat sinks.
- Check functionality, e.g. automatic disconnection upon loss of grid power supply, at least once a month.
- Verify the state of DC/AC surge arrestors, cable connections, and circuit breakers.

#### 4. SHUTTING DOWN THE SYSTEM

- Disconnect system from all power sources in accordance with instructions for all other components used in the system.
- Completely cover system modules with an opaque material to prevent electricity from being generated while disconnecting conductors.
- To the extent possible, system shutdown will not be done during day time or peak generation.

#### 5. INSPECTION AND MAINTENANCE SCHEDULE

Component	Activity	Description	Interval	By
PV Module	Cleaning	Clean any bird droppings / dark Spots on module	Immediately	User/Technician
	Cleaning	Clean PV Modules with plain water or mild dish wash detergent. Do not used brushes, any types of solvent, abrasives, harsh detergent	Fortnightly or as per site conditions	User/Technician
	Inspection for plants	Use infrared camera to inspect for hot spots, by pass diode failure.	Annual	User/Technician
PV Array	Inspection	Check the PV Modules and racks for any damage, note down location & Serial No. Of damaged modules	Annual	User/Technician
	Inspection	Determine if any new objects such as vegetation growth are causing shading of the array and remove them if possible	Annual	User/Technician
	Vermin Removal	Remove bird nest or vermin from array or rack area	Annual	User/Technician
Junction Boxes	Inspection	Inspect electrical boxes for corrosion or intrusion of water / insects	Annual	Electrician
		Seal boxes if required	Annual	Electrician
		Check position of switches and breakers	Annual	Electrician
		Checks operation of all protection devices	Annual	Electrician
Wiring	Inspection	Inspect cabling for signs of cracks, defects, loose connections, overheating, short or open circuit and ground faults	Annual	Electrician
Inverter	Inspection	Observed instantaneous operational indicators on the face plate of the inverter to ensure that the amount of power being generated is typical of conditions	Monthly	Electrician
		Inspect inverter housing or shelter for physical maintenance	Monthly	Electrician



रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

		if requires.		
	Service	Clean or replace any air filters	As needed	Electrician
Instruments	Validation	Spot check monitoring instruments (Pyranometer etc.) with standard instruments to ensure that they are operational and within specifications	Annual	PV Specialist
Transformer	Inspection	Inspect transformer oil level, temperature gauges, breaker, silica gel , meter , connections	Annual	Electrician
Tracker (if present)	Inspection	Inspect gears, gears boxes, bearing as required	Annual	Technician
	Service	Lubricate tracker mounting bearings, gear box as requires	Annual	Technician
Plant	Monitoring	Daily operation & performance monitoring	Daily	Site In-charge
Spare Parts	Management	Manage inventory of spare parts	As needed	Site In-charge
Log Book	Documentation	Document all O&M activities in the log book available to all service personnel.	Continuous	Site In-charge



## QUALITY CERTIFICATION, STANDARDS AND TESTING FOR GRID-CONNECTED ROOFTOP SOLAR PV SYSTEMS/POWER PLANTS

Quality certification and standards for grid-connected rooftop solar PV systems are essential for the successful mass-scale implementation of this technology. It is also imperative to put in place an efficient and rigorous monitoring mechanism, adherence to these standards. Hence, all components of grid-connected rooftop solar PV system/ plant must conform to the relevant standards and certifications given below:

### Solar PV Modules/Panels

IEC 61215 and IS 14286:2010	Design Qualification and Type Approval for Crystalline Silicon Terrestrial Photovoltaic (PV) Modules
IEC 61701	Salt Mist Corrosion Testing of Photovoltaic (PV) Modules
IEC 61853- Part 1/ IS 16170: Part 1	Photovoltaic (PV) module performance testing and energy rating –: Irradiance and temperature performance measurements, and power rating
IEC 62716	Photovoltaic (PV) Modules – Ammonia (NH <sub>3</sub> ) Corrosion Testing  (As per the site condition like dairies, toilets)
IEC 61730-1,2	Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction, Part 2: Requirements for Testing

### Solar PV Inverter:

IEC 62109-1, IEC62109-2 and IS 16221	Safety of power converters for use in photovoltaic power systems –  Part 1: General requirements, and Safety of power converters for use in photovoltaic power systems  Part 2: Particular requirements for inverters. Safety compliance (Protection degree IP 65 for outdoor mounting, IP 20 for indoor mounting)
IEC/IS 61683 (as applicable)	Photovoltaic Systems – Power conditioners: Procedure for Measuring Efficiency (10%, 25%, 50%, 75% & 90-100% Loading Conditions)
IEC 62116/ UL 1741/ IEEE 1547 and IS 16169:2014	Utility-interconnected Photovoltaic Inverters - Test Procedure of Islanding Prevention Measures



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(as applicable)	
IEC 60255-27	Measuring relays and protection equipment – Part 27: Product safety requirements
IEC 60068-2 / IEC 62093	Environmental Testing of PV System – Power Conditioners and Inverters
(as applicable)	

### Fuses

IS/IEC 60947 (Part 1, 2 & 3), EN 50521	General safety requirements for connectors, switches, circuit breakers (AC/DC): a) Low-voltage Switchgear and Control-gear, Part 1: General rules b) Low-Voltage Switchgear and Control-gear, Part 2: Circuit Breakers c) Low-voltage switchgear and Control-gear, Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units d) EN 50521: Connectors for photovoltaic systems – Safety requirements and tests
IEC 60269-6	Low-voltage fuses - Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems

### Surge Arrestors

BFC 17-102:2011	Lightening Protection Standard
IEC 60364-5-53/IS 15086-5 (SPD)	Electrical installations of buildings - Part 5-53: Selection and erection of electrical equipment - Isolation, switching and control
IEC 61643- 11:2011	Low-voltage surge protective devices - Part 11: Surge protective devices connected to low-voltage power systems - Requirements and test methods

### Cables

IEC 60227/IS 694, IEC 60502/IS 1554 (Part 1 & 2) / IEC69947 (as applicable)	General test and measuring method for PVC (Polyvinyl chloride) insulated cables (for working voltages up to and including 1100 V, and UV resistant for outdoor installation)
BS EN 50618	Electric cables for photovoltaic systems (BT(DE/NOT)258), mainly for DC Cables





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### Earthing /Lightning

IEC 62561 Series (Chemical earthing)  (as applicable)	IEC 62561-1 Lightning protection system components (LPSC) - Part 1: Requirements for connection components IEC 62561-2  Lightning protection system components (LPSC) - Part 2: Requirements for conductors and earth electrodes IEC 62561-7 Lightning protection system components (LPSC) - Part 7: Requirements for earthing enhancing compounds
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### Junction Boxes

IEC 60529	Junction boxes and solar panel terminal boxes shall be of the thermo-plastic type with IP 65 protection for outdoor use, and IP 21 protection for indoor use
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### Energy Meter

IS 16444	A.C. Static direct connected watt-hour Smart Meter Class 1 and 2 — Specification (with Import & Export/Net energy measurements)
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### Solar PV Roof Mounting Structure

IS 2062/IS 4759	Material for the structure mounting
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**Note-** Equivalent standards may be used for different system components of the plants. In case of clarification following person/agencies may be contacted.

Ministry of New and Renewable Energy (Govt. of India)  
National Institute of Solar Energy  
The Energy & Resources Institute  
TUV Rheinland  
And  
UL



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Annexure-E

### PROJECT REPORT FORMAT

#### Format for Summary Project Report for Grid Connected Rooftop SPV Power Plants

1. Name of Bidder
2. NIT no.
3. Project details (Site location & Address)
4. Brief about the Rooftop Solar Power Generation System
5. Details of the beneficiary
6. Specifications of the Components and Bill of Material/ Quantities

S.No.	Component	Specifications	Quantity	Make
A	Solar PV module			
A.1	Aggregate Solar PV capacity (KWp)			
B	Grid Tie inverter (Type and Capacity)			
B.1	Aggregate Inverter capacity (KVA)			
C	Module mounting structure (Certified by a Structural Engineer)			
D	Array Junction Box			
E	AC & DC Distribution Board and Solar meter with MIP Box			
F	Cable (All type)			
G	Earthing Kit (maintenance free)			
H	Import/ Export Meters			
I	Online monitoring system			
J	Any other component			
K	Transformer if required			

7. Unit cost of solar power generation
8. Cost benefit analysis, payback period
9. Expected output/annum
10. Respective drawings for layout, electrical wiring connections, earthing, components etc.
11. Connectivity details with grid and metering arrangement (with sketch diagram)
12. Copy of electricity bill of the beneficiary and consumer number
13. Any other information
14. Documentary proof regarding beneficiary type as per clause 1.2 of the NIT

(The above information should be limited up to 2-3 pages only)

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 70 of 142	बोली दाता के हस्ताक्षर
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Annexure-F

**DECLARATION of AUTHORIZATION**

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

I/We ..... (name and address of the registered office of the Bidding Company as applicable) do hereby constitute, appoint and authorize Mr./Ms. .... (Name & residential address) who is presently employed with us and holding the position of .....to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for Implementation of 10 MWp Grid Connected Roof Top and Small Ground Mounted Solar Photovoltaic Power Projects on State / Central Government Buildings & Government under taking buildings in Rajasthan under RESCO Model in response to the NIT No ..... dated

..... issued by M/s. Rajasthan Electronics & Instruments Ltd.(REIL),Jaipur including signing and Submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which the REIL may require us to submit.

The aforesaid undertaking is further authorized for making representations to the Rajasthan Electronics & Instruments Ltd, Jaipur and providing information / responses to REIL, Jaipur representing us in all matters before REIL, Jaipur and generally dealing with REIL, Jaipur in all matters in connection with Bid till the completion of the bidding process as per the terms of the above mentioned NIT.

We hereby agree to ratify all acts, deeds and things done by our said undertaking pursuant to this undertaking and that all acts, deeds and things done by our aforesaid undertaking shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the NIT.

Signed by the within named

.....(Insert the name of the executant company) Name:

Company:

Phone: E-mail:

Address:

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 71 of 142	बोली दाता के हस्ताक्षर
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Annexure-G

**Monthly O & M Report**

Month and year:

Name of the bidder:

NIT ref no.:

Project Capacity:

Address of the site:

**Part A**

Component	Activity	Description	Date	Name / Signature	Remarks
PV Module	Cleaning	Immediately clean any bird droppings/ dark Spots on module			
	Cleaning	Clean PV Modules with plain water or mild dish washing detergent			
	Inspection for plants	Infrared Camera inspection for hot spot, by pass diode failure			
PV Array	Inspection	Check the PV modules and rack for any damage			
	Inspection	If any new objects such as vegetation growth etc. are causing shading of array. Remove if any			
	Vermin Removal	Remove bird nest or vermin from array and rack area			
Junction Boxes	Inspection	Inspect electrical boxes for corrosion intrusion of water or vermin.			
		Check position of switches and breakers			
		Check status of all protection devices			
Wiring	Inspection	Inspect cabling for signs of cracks, defects; lose connections, corrosion, overheating, arcing, short or open circuits and ground faults.			
		Observe instantaneous operational indicators on the faceplate			
Inverter	Inspection	Inspect Inverter housing or shelter for any physical Maintenance. Check for connection tightness.			
	Services	Clean & Replace any Air filters			
Instruments	Validation	Verify monitoring instruments (pyranometer etc.) with standard Instruments to verify their operation within tolerance limits			
Transformer	Inspection	Inspect the Transformer oil level, Temperature gauges, breaker, silica gel, meter, connections etc			

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 72 of 142	बोली दाता के हस्ताक्षर
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Plant	Monitoring	Daily Operation and performance monitoring			
Spare Parts	Management	Manage Inventory of Spare parts			
Log Book	Documentation	Maintain Daily Log Records			
Tracker (If any)	Inspection	Inspect Gears, gear boxes, bearing motors			
	Service	Lubricate bearings, gear as required			

\*Provide details of any replacement of systems/components, damages, plant/inverter shut down (planned/forced), breakdown, etc under remarks.

\*Daily register is to be maintained by the bidder at each location. The same may be inspected by REIL or its authorised representative at any time during the 25 years of O&M period. The Register will have the information about the daily generation, Inverter downtime if any, Grid outages.

### Part A

Date	Generation kWh	Grid outage (hh:mm)	Inverter down period (hh:mm)	Remarks
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

Total generation for the month in kWh:

Cumulative generation since commissioning in kWh:

CUF for month in %:

Cumulative CUF since commissioning in %: Date:

Date :

Signature of the Authorized signatory of the Bidder

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 73 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Annexure-H

**Project Completion Report for Grid-Connected Rooftop SPV Power Plant**

Financial year * :			
Approval No. * :			
Proposal Title :			
Installed by agency :			
Project initiated by :			
<b>Title of the Project* :</b>			
Category of the organization / beneficiary* :		Capacity (KWp)*:	
Address of contact person* :		Name of the contact person* :	
State* :		District/City* :	
Mobile* :		Email* :	
Telephone No. :	STD code-	Website :	
<b>Other information</b>			
Electricity Distribution Company Name			
Electricity consumer account no. as per electricity bill :		as on Date :	
<b>Bank Details of Beneficiary</b>			
Name of A/c holder :			
Name of Bank :			
Name of Branch and Address :			
Bank IFSC Code :			
9 Digit Micr Code :			
Type of Account :			
Account No. :			
Adhar Card Number :			

**Technology Description & System Design /Specification  
(Compliance to BIS/IEC Standards is mandatory)**

<b>1. Module</b>			
Capacity/Power of each PV Module(Wp)* :	1.Capacity/Power 2.Capacity/Power		1.Nos: 2.Nos:
Cumulative Capacity of Modules(KWp):			
Solar cell technology :			
Module efficiency (in Percentage) :			
<b>2. Inverters</b>			
Type of inverter :			
Make of inverter :			
Capacity/Power of each PCU/inverters (VA)* :	Capacity/Power Nos.		
Capacity/Power of PCU/inverters (KVA) :			
Inverter efficiency (Full load) : (in percentage)			



रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

<b>3.Metering Arrangement</b>			
Details of Metering			
Type of Meter* :			
Make of Meter :			
<b>4.Other information's</b>			
Units of electricity generated by the solar plant as per meter (in KWh):			
Monitoring Mechanism:			
No. of personnel to be trained in O&M :			
Task & Expected Schedule(in Months) :			
<b>Grid connectivity level</b>			
Grid connectivity level phase* :		Grid connectivity level Voltage* :	
<b>Costing of Project</b>			
Module Cost	Rs.	Total Cost of Installation :	Rs.
Inverter Cost	Rs.		
Others	Rs.		
Total			





रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Annexure-I

**INTIMATION TO DISCOM FOR IMPLEMENTATION OF GRID CONNECTED ROOF TOP SOLAR PV PLANT UNDER RESCO MODEL**

To,

Date:-----

(Designated Officer, DISCOM)

1.	Name of SPD/Implementing	
2	Name of the Consumer*	
Site Details*		
3	Address of the Rooftop Project Site:*	H No:
		Street Name:
		Village Name:
		District Name:
		State:
		Pin Code:
4	Phone / Mobile no. *	
5	Email Id:	
6	Electricity Consumer No. *	
7	Category ) * (Please	Residential Commercial Educational Industrial Government
8	Installed Plant Capacity (KWp)*	
9	Connected load (kVA)*	
10	Voltage level at interconnection*	415 V 11kV above 11 kV
11	Nearest Transformer Details	Location: Capacity:
12	Details of Inverter with Anti-Islanding Protection* Phase (Φ): (Please ) Galvanic Isolation (Please )	Make: Capacity:
		Single phase 3-Phase
		Inside Inverter Outside Inverter
14	Both AC and DC components of the SPV power plants Earthed*:	
15	CEIG Inspection required*	Yes No
16	If, Yes, Inspection date * (Attach copy of CEIG	
18	Bank Account details	Account No. Bank Branch
19	Date of Grid Synchronization*	
20.	Net metering and grid connectivity (Attach acknowledgment from DISCOM,	Applied on:
		Fees Deposited On:

\*to be provided mandatorily

It is certified that the information furnished above is true to the best of my knowledge.

Consumer /

Copy To:

Authorized Signatory of Implementing Agency on behalf of consumer Engineer In-charge, REIL, Jaipur

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 76 of 142	बोली दाता के हस्ताक्षर
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Appendix-N

**Undertaking from the Bidding Company on their Letter Head**

Name:

Full Address:

Telephone No.:

E-mail address:

Fax/No.:

To,

Rajasthan Electronics & Instruments Ltd.

2-Kanakpura Industrial Area,

Jaipur-302034

Dear Sir,

We refer to the NIT No.....dated.....for “Implementation of 10 MWp Grid Connected Roof Top and Small Ground Mounted Solar Photovoltaic Power Projects on State / Central Government Buildings & Government under taking buildings in Rajasthan under RESCO Model.”.

We have carefully read and examined in detail the NIT, including its amendments and clarifications as available on CPP Portal.

We confirm that M/s..... (Insert name of Bidding Company/) has fulfilled all the Requirements of MSME Act and as per the acknowledgement/certificate of MSEs provided by .....(Insert name of Authority who has provided the MSEs Certificate), we are eligible for execution of the Solar PV project for which the bid has been submitted by us in pursuance to the REIL’s NIT No.....dated.....

Further, we are complying and will continue to comply all terms and conditions of acknowledgement / certificate of MSEs until any further orders from the MSEs authority. Any change in the acknowledgement / certificate of MSEs submitted to REIL, shall be immediately apprised to REIL for their any further decision in this regard.

Further, we are also eligible for the benefits provided under MSEs Act, 2006 and any further order issued by Govt. of India in this regard prior to last date of bid submission for the aforementioned NIT.

In case any information provided/documents submitted or anything material or otherwise is found w.r.t above undertaking, REIL shall have the right to cancel the capacity allocated/sanctioned to us and forfeit the Performance Bank Guarantee submitted by us. In addition to above, we (including our affiliate/parent/assigns) may also be debarred by REIL to participate in any future tender.

All the terms used herein but not defined, shall have the meaning as ascribed to the said terms under the NIT.

Signature of Managing Director/Authorised signatory (with company Stamp)

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 77 of 142	बोली दाता के हस्ताक्षर
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Annexure-K

**REIL DETAIL FOR BANK GUARANTEE (BG)**

SNO.	DESCRIPTION	REIL DETAIL
01.	<b>Name and Address of the Bank</b>	Punjab National Bank, Mid Corporate Branch, M.I. Road, Jaipur, Rajasthan
02.	<b>Branch Code</b>	0221
03.	<b>Account No.</b>	0221008700000152
04.	<b>MICR Code</b>	302024003
05.	<b>IFSC Code</b>	PUNB0022100
06.	<b>GSTIN of REIL</b>	08AABCR1528G1ZL
07.	<b>PAN No. of REIL</b>	AABCR1528G

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 78 of 142	बोली दाता के हस्ताक्षर
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Appendix-P

**Tentative Vendor List**

S. No.	ITEM	SUPPLIER	PLACE
01.	SPV module ( Made in India)	MNRE Approved Vendors (Solar module manufacturers must register under the Approved list of modules and manufacturers (ALMM) of MNRE).	India
02.	Power Conditioning Unit (PCU)/ Inverter	Schneider	Bangalore
		ABB	Bangalore
		Bongfiglioli	Germany
		Fecon	Germany
		AEG	Bangalore
		Hitachi-Hirel	Gandhinagar
		Hitachi-Hirel	Sananad
		Vacon	Bangalore
		Kaco	Germany
		Fronuis	Austria
		TMEIC	India/ Japan
		L&T	India
		SMA	Germany
		EEL	Italy
		Wynner Tech	
		Delta	India
		Sungrow	India
Solis	China		
Huawei			
Goodwe			
Sofar	China		
Sineng	China		
	Any equivalent make		
03.	DC Cable Connector	Any make-model which is Type Tested as per EN 50521 or having marking of VDE/ CE/UL/ CSA/ "BIS	
04.	Floor mounted Draw out type indoor LT Switchgear Panel (MCC etc.)	L&T	Mumbai/Coimbatore/Ahmednagar
		Schneider	Nasik
		Unilec	Gurgaon
		ABB	Nasik
		Siemens	Kalwa
	Any equivalent make		
05.	Wall mounted fixed type indoor/outdoor LT Switchgear non compartmentalized Panel( Lighting panels / AC/ DC Fuse boards etc.)	Control Devices	Kolkata
		Conquerent Control Systems	Manesar
		Jasper	Noida
		Havells	Faridabad
		Novateur Electrical & distribution systems	Murthal
		AvoidTechnovator	Manesar
		Any equivalent make	
		Additionally all vendors identified for Floor mounted Draw out type indoor LT Switchgear Panel	
Additionally all vendors identified for Floor mounted fixed type indoor LT Switchgear Panel			
06.	AC Cable	Universal Cable Ltd	Satna
		NICCO	Shamnagar, Kolkata
		Torrent Cable Ltd	Nadaid
		Incab	Pune



रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

		Polycab Wires Pvt. Ltd	Daman
		KEI Industries	Bhiwadi
		Havells India Ltd.	Alwar
		Apar Industries	Valsad
		Finolex	Pune
		KEC International	Vadodara
		Paramount Communications	Khuskhera
		Any equivalent make	
07.	DC Cable(Interconnecting SPV Modules, SPV Module to PCU)	Siechem	Pondicherry
		Advance India	India
		LAPP	India
		TOP	Spain
		Prsymian	
		Leoni	Germany
		Poly Cab	India
		Apar	Khatalwada
		Any equivalent make	
08.	Earthing & Lightning Protection Material like GI Strip/GI Wire etc	Main contractor Approved Sources box subject to galvanization	
09.	Lighting fixtures with accessories (LED type)	M/ s Wipro	Pune
		M/s GE	India
		M/s Philips	Pune
		M/s Surya	India
		M/s. Syska	
		M.s. CGL	India
		HEVEL	Pune
		M/s Surya Roshni	Noida
		M/s Bajaj	Mumbai
		Any equivalent make	
10	MCB Boxes/Junction boxes / Link Boxes/ Adopter box, Switch Boxes, Pull Boxes(Hot Dip Galvanized)	ISI Mark OR Equivalent OR any approved make	
11..	PVC conduit/hume pipe/lighting wire/GI pipes/HDPE pipe/Structural Steel/ GI steel rigid conduit/ epoxy conduit	BIS licensee with valid CML number / ISI marked with valid	
12.	Lightning Arrestor	Main Contractor approved sources: subject to manufacturer / supplier having valid Type Test Report as per IS /IEC in NIT	
13.	Cable Lug	M/s Dowell	Mumbai
		M/s Billets ElektroWerke Ltd.	Umbergaon
		M/s Chetna	Nasik
		Additional Vendors with Make-Model having mark of CE/VDE/ UL /CSA / BIS .	
14.	Cable Tray Flexible Tray Support System	Vatco	Mumbai
		Inar profiles	Enkapalli
		Industrial perforations	Kolkata
		Premier power products	Howrah
		Steeliteengg.	Mumbai
		Indiana gratings	Pune
		Amtech	Pune
		Ratan Projects	Howrah
		MKSD Industries	Taloja
		Any equivalent make	
15.	PT	Mehru	Bhiwadi
		ABB	Vadodara

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 80 of 142	बोली दाता के हस्ताक्षर
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		Alstom	Hosur
		CGL	Nasik
		Any equivalent make	
16.	CT	Mehru	Bhiwadi
		Alstom	Hosur
		ABB	Vadodara
		CGL	Nasik
		BHEL	Jhansi/Bhopal
		Vishal Transformer	Meerut
		Heptacare	Meerut
		Any equivalent make	
17.	AB Tariff energy meter	Secure Meter	Udaipur
		Schneider Electric	
		Elster	Mumbai
		L&T	Mysore
		Any equivalent make	
18.	Bus Insulator	Aditya Birla	Halol
		IEC	Bhopal
		WSI	Chennai
		MODERN Insulator	Abu Road
		SARAVANA Global Energy	Cuddalore
		Any equivalent make	
19.	Clamps & connectors	KLEMMEN ENGG	CHENNAI
		MILIND	MUMBAI
		EMI	MUMBAI
		NOOTAN ENGG	MUMBAI
		TAG CORPORATION	CHENNAI
		ITPL	MUMBAI
		RASHTRAUDYOG	KOLKATA
		PEE VEE ENGG	BANGALORE
		MEGHA Engg	CHENNAI
		EXALT	Mumbai
		Any equivalent make	
20.	Insulator hardware, conductor accessories & earth wire accessories	RASHTRA UDYOG	KOLKATA
		IAC	KOLKATA
		ITPL	MUMBAI
		EMI	MUMBAI
		EMTT	Kolkata
		Any equivalent make	
21.	Piping	Main Contractor approved sources; with valid BIS license	
22.	Fire Extinguisher	BIS approved sources with valid BIS License	

NOTE: The above is indicative/suggested vendor list. The place specified for manufacturer may change in India.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 81 of 142	बोली दाता के हस्ताक्षर
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## PART (भाग) – VII

# SCOPE OF WORK & TECHNICAL SPECIFICATIONS

स्कोप ऑफ वर्क & तकनीकी निर्देश

(निविदा सं.: REIL/BID/PROJECT/2024-25/001)

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 82 of 142	बोली दाता के हस्ताक्षर
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The proposed project shall be commissioned as per the technical specifications given below. It is contractor's responsibility to design the system as per site's weather conditions. Domestic Modules ( made in India ) & solar module manufacturers must register under the Approved list of modules and manufacturers (ALMM) of MNRE are to be used, failing which it will be assumed that system is not matching the requirement of the NIT and bidder's PBG shall be forfeited. Competent Authority's decision will be final and binding on the bidder.

## 1. DEFINITION

A Grid Tied Solar Rooftop Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables, Junction boxes, Distribution boxes and switches. PV Array is mounted on a suitable structure. Grid tied SPV system is without battery and should be designed with necessary features to supplement the grid power during day time. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable. Solar PV system shall consist of following equipments/components.

- Solar PV modules consisting of required number of Crystalline PV Cells.
- Grid interactive Power Conditioning Unit with Remote Monitoring System.
- Mounting structures.
- Junction Boxes.
- Earthing and lightening protections.
- IR/UV protected PVC Cables, pipes and accessories

### 1.1 SOLAR PHOTO VOLTAIC MODULES:

1.1.1 The PV modules used should be made in India.

1.1.2 The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-1 - requirements for construction & Part 2 - requirements for testing, for safety qualification or equivalent IS.

- a) For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701.
- b) The total solar PV array capacity should not be less than allocated capacity (KWp) and should comprise of solar crystalline modules of minimum 250 Wp and above wattage. Module capacity less than minimum 250 watts shall not be accepted.
- c) Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes (Forward Voltage,  $V_f \leq 0.55$  Volt) shall be provided.
- d) PV modules must be tested and approved by one of the IEC authorized test centres.
- e) The module frame shall be made of corrosion resistant materials, preferably having anodized aluminium.
- f) The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid. REIL shall allow only minor changes at the time of execution.
- g) Other general requirement for the PV modules and subsystems shall be the Following:

I. The rated output power of any supplied module shall have only positive tolerance.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 83 of 142	बोली दाता के हस्ताक्षर
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- II. The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 % from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
- III. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
- IV. The efficiency of all photovoltaic modules measured at STC shall be minimum 15.20%.
- V. Temperature coefficient of power shall be from (-) 0.30 %/°C to (-)0.43 %/
- VI. I-V curves at STC should be provided by bidder.
- VII. The glass used to make the crystalline silicon modules shall be toughened low iron glass with minimum thickness of 3.2 mm for both 72 and 60 cell module. The glass used shall have transmittance of above 90%.
- VIII. The back sheet used in the crystalline silicon based modules shall be of 3 layered structures. Outer layer of fluoro polymer, middle layer of Polyester (PET) based and Inner layer of encapsulant primer. The thickness of back sheet should be of minimum 300 microns with water vapour transmission rate less than 2 g/m<sup>2</sup>/day. The Back sheet shall have voltage tolerance of more than 1000 V.
- IX. The EVA used for the modules should be of UV resistant in nature. No yellowing of the back sheet with prolonged exposure shall occur. EVA used for fabrication of modules shall be fresh & used within the specified shelf life.
- X. The sealant used for edge sealing of PV modules shall have excellent moisture ingress protection with good electrical insulation (Break down voltage >15 kV/mm) and with good adhesion strength.
- XI. Modules should have rugged design to withstand tough environmental conditions and high wind speeds suitable for site condition.
- XII. Modules shall perform satisfactorily in relative humidity up to 85 % and temperature between -10<sup>0</sup>C and 85<sup>0</sup>C (module temperature).
- XIII. PV modules must be warranted for their output peak watt capacity, which should not be less than 90% of the initial value at the end of 10 years and 80% of the initial value at the end of 25 years.
- XIV. The modules shall be warranted for minimum of 5 years against all material/ manufacturing defects and workmanship, starting from date of Operational Acceptance subject to the fulfilment of performance criteria laid down in point No. - XIII above. If the manufacturer provides it from the date of manufacturing this shall be Contractor's responsibility to get the extended warranty from the manufacturer at its own cost and effort.

h) Solar PV modules

Plants installed in high dust geographies must have the solar modules tested with relevant dust standards (Applicable standard would be IEC 60068-2-68). Modules shall be designed for rugged

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design to withstand tough environmental conditions & maximum wind load 2400 Pa and snow load of 5400Pa as per Safety standard IEC 61730.

1.1.3 Modules deployed must use a RF identification tag. The following information must be mentioned in the RFID used on each module. This should be inside the laminate only.

- a) Name of the manufacturer of the PV module
- b) Name of the manufacturer of Solar cells.
- c) Month & year of the manufacture (separate for solar cells and modules)
- d) Country of origin (separately for solar cells and module)
- e) I-V curve for the module Wattage,  $I_m$ ,  $V_m$  and FF for the module
- f) Unique Serial No and Model No of the module
- g) Date and year of obtaining IEC PV module qualification certificate.
- h) Name of the test lab issuing IEC certificate.
- i) Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001

1.1.4 Warranties:

a) Material Warranty:

i. Material Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (05) years from the date of sale to the original customer ("Customer")

ii. Defects and/or failures due to manufacturing

iii. Defects and/or failures due to quality of materials

iv. Non-conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owners sole option

b) Performance Warranty:

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.

## 1.2 ARRAYSTRUCTURE

a) Hot dip galvanized MS mounting structures may be used for mounting the modules/ panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum insolation. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements.

b) The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed (like Jaipur-wind speed of 150 km/ hour). It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard and

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submit wind loading calculation sheet to REIL. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.

- c) The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS4759.
- d) Structural material shall be corrosion resistant and electrolytic ally compatible with the materials used in the module frame, its fasteners, nuts and bolts. Aluminum structures also can be used which can withstand the wind speed of respective wind zone. Protection towards rusting need to be provided either by coating or anodization.
- e) The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels
- f) Regarding civil structures the bidder need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof.
- g) The total load of the structure (when installed with PV modules) on the terrace should be less than 60kg/m<sup>2</sup>.
- h) The minimum clearance of the structure from the roof level should be 300mm.

### 1.3 JUNCTION BOXES (JBs)

- a) The junction boxes are to be provided in the PV array for termination of connecting cables. The J. Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminum /cast aluminum alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs or MC4 compatible connectors. The JB's shall be such that input & output termination can be made through suitable cable glands.
- b) Copper bus bars/terminal blocks housed in the junction box with suitable termination threads Conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single / double compression cable glands. Provision of earthings. It should be placed at 5 feet height or above for ease of accessibility.
- c) Each Junction Box shall have High quality Suitable capacity SPDs, Reverse Blocking Diodes, fuses and MCBs. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups. In order to provide protection to all cables and modules, string fuses shall be provided in both positive and negative legs of the string cabling. String fuses shall be of PV category and dedicated to solar applications and conform to IEC 60269-6 or UL-2579 standards.
- d) The junction box used in the modules shall have protective bypass diodes to prevent hot spots in case of cell mismatch or shading. The material used for junction box shall be made with UV resistant material to avoid degradation during module life and the Junction sealing shall comply IP65 degree of protection.
- e) 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.
- f) All fuses shall have DIN rail mountable fuse holders and shall be housed in thermoplastic IP 65 enclosures with transparent covers.

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g) All internal wiring shall be carried out with 1100V grade stranded copper wires.

**1.4 DC DISTRIBUTION BOARD (As per Applicability and requirement):**

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

**1.5 AC DISTRIBUTION PANEL BOARD:**

- a) AC Distribution Panel Board (DPB) shall control the AC power from PCU/ inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- b) All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.
- c) The changeover switches, cabling work should be undertaken by the bidder as part of the project.
- d) All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air - insulated, cubical type suitable for operation on three phase / single phase, 415 or 230 volts, 50Hz
- e) The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- f) All indoor panels will have protection of IP21 or better. All outdoor panels will have protection of IP65 or better.
- g) Should conform to Indian Electricity Act and rules (till last amendment).
- h) All the 415 AC or 230 volts devices / equipment like bus support insulators, circuit breakers, SPDs, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions

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

**1.6 PCU/ ARRAY SIZE RATIO:**

- a) The combined wattage of all inverters should not be less than rated capacity of power plant under STC.
- b) Maximum power point tracker shall be integrated in the PCU/inverter to maximize energy drawn from the array.

**1.7 PCU/ Inverter:**

As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the "Power Conditioning Unit (PCU)". In addition, the PCU shall also house

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MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit/inverter could be DG set interactive. Inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows.

Switching devices	IGBT/ MOSFET
Control	Microprocessor /DSP
Nominal AC output voltage and frequency	400 V, 3 Phase, 50 Hz (In case single phase inverter are offered suitable arrangement for balancing the phases must be made)
Output frequency	50 Hz
Grid Frequency Synchronization range	+/- 5 Hz
Ambient temperature considered	-20° C to 50° C
Humidity	95 % Non-condensing
Protection of Enclosure	IP-65(Minimum) for outdoor. IP-21(Minimum) for indoor.
Grid Frequency Tolerance range	+/- 5 Hz
Grid Voltage tolerance	-20 % & +15 %
No-load losses	Less than 1% of rated power
Inverter efficiency(minimum)	>93% (In case of 10 KWp or above with in-built galvanic isolation) >97% (In case of 10 KWp or above without in-built galvanic isolation)
Inverter efficiency (minimum)	> 90% (In case of less than 10 KWp)
THD	< 3%
PF	> 0.9

- Three phase PCU/ inverter shall be used with each power plant system (10KWp and/or above) but in case of less than 10KWp single phase inverter can be used.
- PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
- Solar meter and external data logger to monitor plant performance through external computer shall be provided.
- Anti-islanding (Protection against Islanding of grid): The PCU shall have anti islanding protection in conformity to IEEE 1547/UL 1741/ IEC 62116 or equivalent BIS standard.
- Inverter / PCU shall be provided galvanic isolation for protection of solar roof top power plant with electrical grid or LT panel.
- The PCU/ inverter generated harmonics, flicker, DC injection limits, Voltage Range, Frequency Range and Anti-Islanding measures at the point of connection to the utility services should follow the latest CEA (Technical Standards for Connectivity Distribution Generation Resources) Guidelines.
- 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.

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- j) The enclosures should be IP 65 (for outdoor)/ IP21 (indoor) and as per IEC 529 specifications.
- k) The PCU/ inverters should be tested from the MNRE approved test centres/ NABL/ BIS/ IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

## 1.8 CIVIL WORK :

All associated civil works, including Design, Procurement & Supply and Erection of the rooftop solar power plant, in all respect for:

- 1.8.1 Construction of module mounting structure foundations, transformer if required and other power equipment foundations, cable trenches for cable routing and earthing pits.
- 1.8.2 Arrangement of permanent water supply infrastructure for module washing and daily usage.
- 1.8.3 Provision of water drainage at the roof top level.

## 2 INTEGRATION OF PV POWER WITH GRID:

- 2.1 The output power from SPV would be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV system shall be out of synchronization and shall be disconnected from the grid. Once the DG set comes into service, PV system shall again be synchronized with DG supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid/ DG power connection need to be provided.
- 2.2 All necessary equipment which is required for evacuation of Solar Plant at Client Panel shall be provided by contractor. AC Isolator / MCCB must be provided by the contractor for disconnection of complete solar power plant from Client evacuation Panel.

## 3 DATA ACQUISITION SYSTEM / PLANT MONITORING:

- i. Data Acquisition System (Data Logger) shall be provided for each of the solar PV plant.
- ii. Data Logging Provision for plant control and monitoring, time and date stamped system data logs for analysis with PC at respective work centre (PPA Signing Authority). Metering and Instrumentation for display of systems parameters and status indication to be provided.
- iii. Solar Irradiance: An integrating Pyranometer / Solar cell based irradiation sensor (along with calibration certificate) provided, with the sensor mounted in the plane of the array. Readout integrated with data logging system.
- iv. Temperature: Temperature probes for recording the Solar panel temperature and/or ambient temperature to be provided complete with readouts integrated with the data logging system
- v. The following parameters are accessible via the operating interface display in real time separately for solar power plant:
  - a.AC Voltage.
  - b.AC Output current.
  - c.Output Power

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- d. Power factor.
  - e. DC Input Voltage.
  - f. DC Input Current.
  - g. Time Active.
  - h. Time disabled.
  - i. Time Idle.
  - j. Power produced
  - k. Protective function limits (Viz-AC Over voltage, AC Under voltage, over frequency, under frequency ground fault, PV starting voltage, PV stopping voltage).
- vi. All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values, previous values for up to a month and the average values) should be made available for energy auditing through the internal microprocessor and should be read on the digital front panel.
  - vii. PV array energy production: Digital Energy Meters to log the actual value of AC voltage, Current & Energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.5 accuracy class.
  - viii. Computerized DC string/Array monitoring and AC output monitoring shall be provided as part of the inverter and/or string/array combiner box or separately.
  - ix. String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.
  - x. Computerized AC energy monitoring shall be in addition to the digital AC energy meter.
  - xi. The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular and graphical form.
  - xii. All instantaneous data shall be shown on the computer screen.
  - xiii. Software shall be provided for USB download and analysis of DC and AC parametric data for individual plant.
  - xiv. Provision for instantaneous Internet monitoring and download of historical data shall be also incorporated.
  - xv. Remote Server and Software for centralized Internet monitoring system shall be also provided for download and analysis of cumulative data of all the plants and the data of the solar radiation and temperature monitoring system.
  - xvi. Ambient / Solar PV module back surface temperature shall be also monitored on continuous basis.
  - xvii. Simultaneous monitoring of DC and AC electrical voltage, current, power, energy and other data of the plant for correlation with solar and environment data shall be provided.

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xviii. Remote Monitoring and data acquisition through Remote Monitoring System software at the owner / REIL location with latest software/hardware configuration and service connectivity for online/ real time data monitoring / control complete to be supplied and operation and maintenance / control to be ensured by the bidder. Provision for interfacing these data on the Owner’s server and portal in future shall be kept. The selected bidder shall provide real time unit generated data to REIL using any technology.

**4 TRANSFORMER “IF REQUIRED” & METERING:**

- a) Dry/oil type relevant KVA, 11kV/415V, 50 Hz Step up along with all protections, switchgears, Vacuum circuit breakers, cables etc. along with required civil work.
- b) DISCOM’s approved bidirectional electronic energy meter (ABT Meter) (0.5 S class) shall be installed for the measurement of import/Export of energy as State/ DISCOM policies.
- c) The bidder must take approval/NOC from the Concerned DISCOM for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network and submit the same to REIL before commissioning of SPV plant.
- d) Reverse power relay shall be provided by bidder (if necessary), as per the local DISCOM requirement.

**5 POWER CONSUMPTION:**

Regarding the generated power consumption, priority need to give for internal consumption first and thereafter any excess power can be exported to grid. Decisions of appropriate authority like DISCOM, state regulator may be followed.

**6 PROTECTIONS**

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

**6.1 LIGHTNING PROTECTION**

The SPV power plants shall be provided with lightning & overvoltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC 62305 standards. 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.

**6.2 SURGE PROTECTION**

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

**6.3 EARTHING PROTECTION**

- a) 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/REIL as and when required after earthing by calibrated earth tester. PCU, ACDB and DCDB should also be earthed properly.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 91 of 142	बोली दाता के हस्ताक्षर
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- b) 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.

#### 6.4 GRID ISLANDING:

- a) In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC- to- AC inverters from continuing to feed power into small sections of the grid, known as “Islands.” Powered Islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.
- b) A manual disconnect 4-pole isolation switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel.

### 7 CABLES

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

- i. Shall meet IEC 60227/IS 694, IEC 60502/IS1554standards
- ii. Temp. Range:  $-10^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$
- iii. Voltage rating 660/ 1000V
- iv. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- v. Flexible
- vi. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop of entire DC side of solar plant to be the minimum (2%).
- vii. For the DC cabling, XLPE or, XLPO insulated and sheathed, UV-stabilized single core multi-stranded flexible copper cables shall be used; Multi-core cables shall not be used.
- viii. For the AC cabling, PVC or XLPE insulated and PVC sheathed single or, multi-core multi-stranded flexible / Armoured copper cables shall be used. Bidder may use PVC/ XLPE insulated and PVC sheathed single/multicore, multistranded armoured Aluminum cable from ACDB to LT/HT Panel (Owner).Outdoor AC cables shall have a UV- stabilized outer sheath.
- ix. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use. Outer sheath of cables shall be electron beam cross-linked XLPO type and black in color.
- x. The DC cables from the SPV module array shall run through a UV-stabilized PVC conduit pipe of adequate diameter with a minimum wall thickness of 1.5mm.
- xi. Cables and wires used for the interconnection of solar PV modules shall be provided with solar PV connectors (MC4 Compatible) and couplers.
- xii. All cables and conduit pipes shall be clamped to the rooftop, walls and ceilings with thermo-plastic clamps at intervals not exceeding 50 cm; the minimum DC cable size shall be 4.0 mm<sup>2</sup> copper; the minimum AC cable size shall be 4.0 mm<sup>2</sup> copper. In three phase systems, the size of the neutral wire size shall be equal to the size of the phase wires.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 92 of 142	बोली दाता के हस्ताक्षर
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- xiii. Cable Routing/ Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified. In addition, cable drum no. / Batch no. to be embossed/ printed at every one meter.
- xiv. Cable Jacket should also be electron beam cross-linked XLPO, flame retardant, UV resistant and black in color.
- xv. All cables and connectors for use for installation of solar field must be of solar grade which can withstand harsh environment conditions including High temperatures, UV radiation, rain, humidity, dirt, salt, burial and attack by moss and microbes for 25 years and voltages as per latest IEC standards. DC cables used from solar modules to array junction box shall be solar grade copper (Cu) with XLPO insulation and rated for 1.1kV as per relevant standards only.
- xvi. The ratings given are approximate. Bidder to indicate size and length as per system design requirement. All the cables required for the plant shall be provided by the bidder. Any change in cabling sizes if desired by the bidder shall be approved after citing appropriate reasons. All cable schedules/ layout drawings shall be approved prior to installation.
- xvii. 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. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BoS item / component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V, UV resistant for outdoor installation IS /IEC69947.
- xviii. The total voltage drop on the AC cable segments from the solar grid inverter to the building distribution board shall not exceed 2.0%.

## 8 CONNECTIVITY

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the Distribution Code/Supply Code of the State and amended from time to time. Following criteria have been suggested for selection of voltage level in the distribution system for ready reference of the solar suppliers.

Plant Capacity	Connecting voltage
Above 20 KWp and up to 100 KWp	415V – three phase
Above 100 KWp	At HT/EHT level (11kV/33kV/66kV) as per DISCOM rules

- a) The maximum permissible capacity for rooftop shall be 1 MWP for a single net metering point or as per DISCOM policy.
- b) Utilities may have voltage levels other than above; DISCOMS may be consulted before finalization of the voltage level and specification be made accordingly.
- c) For large PV system (Above 100 KWp) for commercial installation having large load, the solar power can be generated at low voltage levels and stepped up to 11 kV level through the step up transformer. The transformers and associated switchgear would require to be provided by the SPV bidders.

## 9 TOOLS & TACKLES AND SPARES:

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 93 of 142	बोली दाता के हस्ताक्षर
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- a) After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the bidder for maintenance purpose. List of tools and tackles to be supplied by the bidder for approval of specifications and make from REIL/ owner.
- b) A list of requisite spares in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes. Fuses, MOVs / arrestors, MCCBs etc along with spare set of PV modules be indicated, which shall be supplied along with the equipment. A minimum set of spares shall be maintained in the plant itself for the entire period of warranty and Operation & Maintenance which upon its use shall be replenished.

## 10 DANGER BOARDS AND SIGNAGES:

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

## 11 FIRE EXTINGUISHERS:

The fire fighting system for the proposed power plant for fire protection shall be consisting of:

- a) Portable fire extinguishers in the control room for fire caused by electrical short circuits
- b) Sand buckets in the control room
- c) 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.

## 12 DRAWINGS & MANUALS:

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

## 13 PLANNING AND DESIGNING:

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

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 94 of 142	बोली दाता के हस्ताक्षर
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**14 DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT:**

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

**15 SOLAR PV SYSTEM ON THE ROOF TOP FOR MEETING THE ANNUAL ENERGY REQUIREMENT**

The Solar PV system on the rooftop of the selected buildings will be installed as per the net-metering policy, depending upon the area of rooftop available and the remaining energy requirement of the office buildings will be met by drawing power from grid at commercial tariff of DISCOMs.

**16 SAFETY MEASURES:**

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

**17 DISPLAY BOARD**

The bidder has to display a board at the project site mentioning the following:

- a. Plant Name, Capacity, Location, Date of commissioning, estimated Power generation.
- b. Financial Assistance details from REIL/MNRE/Any other financial institution apart from loan. This information shall not be limited to project site but also be displayed at site offices/head quarter offices of the successful bidder
- c. The size and type of board and display shall be approved by Engineer-in-charge before site inspection.

**18. SCOPE OF WORK FOR SMALL GROUND MOUNTED SOLAR POWER PLANTS (Applicable for > 100 KWp):**

In continuation to the scope of work in the NIT the general scope of work for the ground mounted solar PV power plant involves Engineering, Procurement, Supply and Construction (EPC), commissioning and evacuation of power into the control room as per clause 8 ( Connectivity ) above is given below .

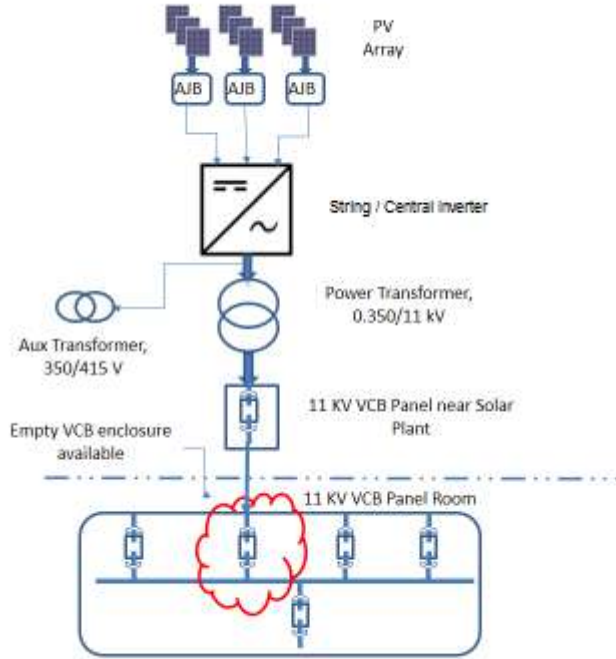
**18.1 Evacuation of Power & Metering Point:**

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 95 of 142	बोली दाता के हस्ताक्षर
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The evacuation voltage shall be as per clause 8 ( Connectivity ) above wherein evacuating point cum metering point shall be installed at 11/33/66 kV interconnection point within the boundary of solar plant. From point of interconnection onwards upto 11/33/66 kV control room, the contractor shall carry out all necessary arrangement to evacuate power supply. ABT meter to measure net power evacuation shall be installed at 11/33/66 kV interconnection point near solar PV plant boundary.



**Sample Schematic Diagram of > 100 kW Solar Project evacuated at 11 kV .**

### 18.2 Tracking Structures:

REIL encourages Bidders to employ proven and reliable seasonal tracking system to increase the performance of the plant. If bidder shall provided the solar tracking system then Bidder shall submit the details specifications / designs / guarantees and warranties / and any other claims on performance / output of the solar tracking solutions.

### 18.3 Electrical Work:

Consisting of installation of solar PV modules junction boxes (IP-65 min.), grid-tied inverters / PCU, power transformers (IS 2026 ) and instrument transformers if required ( IS 2705 for CT, IS 3156 for PT) meters, control panel, 11/33/66 kV switchgear, underground cables for evacuation (IS 7098-II), interconnection through wires, cables, bus bars, etc.; plant lighting system, weather monitoring system, SCADA and remote web-based communication & monitoring hardware, software etc compatible with rooftop solar plants monitoring system in the premises. plant and human safety and protection equipment including danger signs etc; Auxiliary Supply for lighting and SCADA System as per standards.

### 18.4 Civil and Other Non-Electrical Work:

18.4.1 **Module Mounting Structures (MMS):** The Contractor shall design, fabricate, supply and install HDGI (hot dip galvanised iron) module mounting structures with all required accessories like clamps, fasteners (SS304), cable ties etc., The structures can be of fixed/ seasonal tracker are accepted.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 96 of 142	बोली दाता के हस्ताक्षर
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- 18.4.2 **Foundations:** The Contractor shall design and construct appropriate civil foundations for MMS, prefabricated structures/RCC, transformers etc. as per relevant standard and shall be submitted for approval from REIL. For backfilling of foundation excavated soil is not allowed.
- 18.4.3 **Storm Water Drainage System:** The Contractor shall provide storm water drainage system for entire plant and connect it with existing storm water drainage system.
- 18.4.4 **Solar PV Module Cleaning System:** The Contractor shall plan for one wash of all solar PV modules on bi-weekly basis. For this, the Contractor shall construct and operate suitable litre capacity RCC/ Sintex water tank.
- 18.4.5 **Approach / Internal Roads and Pathways:** The Contractor shall provide internal roads of asphalt type for the plant site as per latest MORTH specification.
- 18.4.6 **Cable Trenches:** Construction of RCC cable trenches with cable trays and covers in inverter and control rooms, earthen excavated cable trench with alternate layers of sand and brick as per relevant IS from PV arrays to inverter room to 11/33/66 KV central control room shall be provided by the Contractor.
- 18.4.7 **Site levelling:** The Contractor shall level the site, as required, so as to compact the plant in minimum possible area and also minimize shading losses because of solar PV module structures. Site is almost very flat and suitable for the solar plant.
- 18.4.8 **Soil Test:** The bidder shall provide soil test report, which is meant to indicate kind of soil condition. Contractor is solely responsible to carry out detailed Geotechnical investigation to ascertain soil parameters of the proposed site for the planning / designing / construction / providing guarantee / warranty of all civil work including but not limited to foundations / piling for module mounting structures, HT lines, 11/33/66 kV switchgear equipment etc. The Contractor shall carry out soil investigation through Government approved / NABL certified soil consultant. These reports shall be furnished to the REIL prior to commencing work. All RCC works shall be provided of required grade of concrete as per relevant IS specifications as well as based on soil data considering appropriate earthquake seismic zone, wind velocity, whether effect, soil characteristics etc.

**Note:**

01. Please refer Annexure-D for IEC standards to be mandatorily adhered.
02. The indicative/suggested vendor list is attached in Appendix- L for implementation of the project.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 97 of 142	बोली दाता के हस्ताक्षर
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Annexure-III

## **MODEL POWER PURCHASE AGREEMENT (PPA)**

**BETWEEN**

**CONTRACTOR AND GOVT.ORGANIZATION, PSU  
AND OFFICES**

**FOR**

**DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING  
AND COMMISSIONING INCLUDING WARRANTY,  
OPERATION & MAINTENANCE OF GRID CONNECTED  
ROOF-TOP SOLAR PHOTOVOLTAIC AND SMALL SOLAR  
POWER PLANTS**

**IN**

**RESCO MODEL**

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 98 of 142	बोली दाता के हस्ताक्षर
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This Power Purchase Agreement (PPA) is executed is executed (date), (month), (year) at <location>\_between < Authorized representative of Purchaser i.e. Government Organization, PSU and Offices > (detail address), (hereinafter referred to as “purchaser”) AND M/s (Name of Power Producer) (CIN No. ). A company incorporated under the companies act, 1956/2013 having its registered office at (detail address) (hereinafter referred to as "Power Producer" which expression shall, unless repugnant to the meaning or context hereof, be deemed to include its successors and assigns). The Purchaser and Power Producer are each individually referred to as a "Party" and collectively as the "Parties".

**WHEREAS:**

- A. The Power Producer has been notified as successful bidder by <Name of Expert PSU> for "Design, Manufacture, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance of ----- KWp Rooftop Solar PV System at (building name)" (Project) and as per competitive bidding under NIT No -----dated-----.
- B. The Power Producer is engaged in the business of design, supply, erection, testing, commissioning, operating and maintenance power plants, including grid connected rooftop power projects.
- C. The Power Producer has agreed to install and operate a solar photovoltaic power plant of capacity as per Schedule -I at the Premises after due inspection of the Premises as defined hereinafter and supply the entire Solar Power of the Project to Purchaser on the terms and conditions contained in this Agreement.
- D. The Purchaser has agreed to purchase the entire Solar Power of the Project on the terms and conditions contained in this Agreement.

NOW THEREFORE in consideration of the mutual promises, conditions and covenants set forth herein, the Parties hereby agree as below:

**1. Definitions and Interpretation**

**1.1 Definitions**

In addition to other capitalized terms specifically defined elsewhere in the Agreement or unless the context otherwise requires the following words and phrases shall be defined as follows:

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 99 of 142	बोली दाता के हस्ताक्षर
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- (a) "Actual Monthly Production" means the amount of energy recorded by the Main Metering System during each calendar month of the Term, pursuant to Section 5.2;
- (b) "Affiliate" means with respect to any specified Person, any other Person, directly or indirectly controlling, controlled by or under common control with such specified Person)
- (c) "Agreement" means this Power Purchase Agreement executed hereof, including the schedules, amendments, modifications and supplements made in writing by the Parties from time to time.
- (d) "Applicable Law" means, with respect to any Person, any constitutional provision, law, statute, rule, regulation, ordinance, treaty, order, decree, judgment, decision, certificate, holding, injunction, registration, license, franchise, permit, authorization, guideline, Governmental Approval, consent or requirement or any Governmental Authority in India having jurisdiction over such Person or its property, enforceable by law or in equity, including the interpretation and administration thereof by such Governmental Authority.
- (f) "Assignment" has the meaning set forth in Section 14.1 .
- (g) "Business Day" means any day other than Sunday or any other day on which banks in < name of the State> are required or authorized by Applicable Law to be closed for business:
- (h) "Commercial Operation Date" has the meaning set forth in Section 4. 3(b)
- (i) "Consents, Clearances and Permits" shall mean all authorization, licenses, approvals, registrations, permits, waivers, privileges, acknowledgements, agreements or concessions required to be obtained from or provided by any concerned authority for the purpose of setting up of the generation facilities and / or supply of power:
- (j) "Deemed Generation" has the meaning set forth in Section 5.3 (c)
- (k) "Delivery Point" shall be the single point, at a location mutually agreed by the Parties, in line with applicable regulation/ rules where Solar Power is delivered by the Power Producer from the System to the Purchaser.
- (l) "Dispute" has the meaning set forth in Section 17.7 (b).
- (m) "Disruption Period" has the meaning set forth in Section 5.3 (c).
- (n) "Distribution Utility or DISCOM " means the local electric distribution owner and operator providing electric distribution and interconnection services to Purchaser at the Premises;

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 100 of 142	बोली दाता के हस्ताक्षर
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- (o) "Due Date" has the meaning set forth in Section 7.4 .
- (p) "Effective Date" has the meaning set forth in Section 2 .
- (q) "Estimated Remaining Payments" means as of any date, the estimated remaining Solar Power Payments to be made through the end of the applicable Term, as reasonably determined by the Power Producer in accordance with Section 7.1 .
- (r) "Expiration Date" means the date on which the Agreement terminates by reason of expiration of the term.
- (s) "Force Majeure Event" has the meaning set forth in Section 11.1 .
- (t) "Governmental Approval" means any approval, consent, franchise, permit, certificate, resolution, concession, license or authorization issued by or on behalf of any applicable Governmental Authority for the purpose of setting up of the Project and / or for sale and purchase of Solar Power of the Project pursuant to the Agreement.
- (u) "Governmental Authority" means any central, state, regional, district, town, city or municipal government, whether domestic or foreign, or any department, agency, bureau, or other administrative, regulatory or judicial body of any such government.
- (v) "Indemnified Persons" means the Purchaser Indemnified Parties or the Power Producer-indemnified Parties, as the context requires.
- (w) "Insolvency Event" means with respect to a Party, that either
  - i. Such party has (A) applied for or consented to the appointment of or the taking of possession by a receiver, custodian, trustee, administrator, liquidator on the likes of itself or of all or a

[Type text]

Substantial part of its assets or business; (B) been unable to pay its debts as such-debts become due; (C) made a general assignment for the benefit of its creditors, (D) commenced a voluntary proceeding under any insolvency or bankruptcy law;

(E) filed a petition seeking to take advantage of any other law relating to the bankruptcy, insolvency, reorganization, winding up or composition or readjustment of debts; or (F) taken any corporate or other action for the purpose of effecting any of the foregoing; or

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 101 of 142	बोली दाता के हस्ताक्षर
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- ii. It is clarified that a dissolution or liquidation will not be an Insolvency Event if such dissolution or liquidation is for the purpose of a merger, consolidation or reorganization, and the resulting company retains credit worthiness similar to the dissolved or liquidated entity and expressly assumes all obligations of the dissolved and liquidated entity under this Agreement and is in a position to the perform them.
- (x) "Installation Work" means the construction and installation of the System and the Start-up, testing and acceptance (but not the operation and maintenance) thereof; all performed by or for the Power Producer at the Premises.
- (y) "Invoice Date has the meaning set forth in Section 7.2.
- (z) "Losses" means all losses, liabilities, claims, demands, suits, causes of action, judgments, awards, damages, cleanup and remedial obligations, interest, fines, fees, penalties, costs and expenses (including all attorneys' fees and other costs and expenses incurred in defending any such claims or other matters or in asserting or enforcing and indemnity' obligation)
- (aa) "Main Metering System" means all meter(s) and metering devices owned by the Power Producer and installed at the Delivery point for measuring and recorded the delivery and receipt of energy.
- (bb) "Metering Date" means the first Business day of each calendar month subsequent to the month in which the Solar Power is generated by the Power Producer. The billable units shall be equal to the difference between the meter reading on the Metering Date and the meter reading on the previous month's Metering Date.
- (cc) "Party" or Parties" has the meaning set forth in the preamble to this Agreement.
- (dd) "Performance Ratio" (PR) means the ratio of plant output versus installed plant capacity at any instance with respect to the radiation measured.  
 $PR = (\text{Measured output in KWp} / \text{Installed plant capacity in KWp} * 1000 \text{ W/m}^2 / \text{Measured radiation intensity in W/m}^2)$
- (ee) "Person" means an individual, partnership, corporation, Limited Liability Company, business trust, Joint Stock Company, trust, unincorporated association, joint venture, firm, or other entity, or a Governmental Authority.
- (ff) "Power Producer Default" has the meaning set forth in Section 12.1 (a).
- (gg) "Power Producer Indemnified" has the meaning set forth in Section 16.2.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 102 of 142	बोली दाता के हस्ताक्षर
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- (hh) "Premises" means the premises described in Schedule 1 to this Agreement. For the avoidance of doubt, the Premises include, the entirety of any and underlying real property located at the address described in Schedule 1 to this Agreement.
- (ii) "Purchase Date" means the date on which title to the System transfers to the Purchaser pursuant to the Purchaser exercising its purchase option under Section 3.2.
- (jj) "Purchase Price" means the fee payable by Power Purchaser to the Power Producer under the circumstances described in Section 3.2
- (kk) "Purchaser Default" has the meaning set forth in Section 12.2 (a).
- (ll) "Purchaser Indemnified Parties" has the meaning set forth in Section 16.1
- (mm) "Representative" has the meaning forth in Section 15.1.
- (nn) "Scheduled Complete Date" has the meaning set forth in Section 4.1(g)
- (oo) "Selectee" means, a new company (i) proposed by the Lenders read with Schedule III hereof and approved .by the Purchaser (ii) or proposed by the Purchaser in accordance. with Schedule III hereof and approved by-the Lenders, for substituting the Power Producer for the residual period of the Agreement by amendment of the Agreement or by execution of a fresh power purchase agreement in-accordance with the terms and conditions contained in the said Schedule.
- (pp) "Solar Power" means the supply of electrical energy output from the System.
- (qq) "Solar Power Payment" has the meaning set forth in Section 7.1.
- (rr) "System" includes the integrated assembly of photovoltaic panels, mounting, assemblies, inverters, converters, metering, lighting fixtures, transformers, ballasts, disconnects, combiners, switches, wiring devices and wiring, and all other material comprising the Installation Work.
- (ss) "System Operations" means the Power Producer's operation; maintenance and repair of the System performed in accordance the requirement herein.
- (tt) "Tariff" means the price per kWh set forth in Schedule II hereto.
- (uu) "Term" has the meaning set forth in Section 3.1:

## 1.2 Interpretation

- (a) Unless otherwise stated, all references made, in this Agreement to "Sections", "Clauses" and "Schedules" shall refer respectively to Sections, clauses and Schedules of this Agreement. The Schedules to this Agreement form an

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integral part of this Agreement and shall have effect as though they were expressly set out in the body of this Agreement.

- (b) In the Agreement, unless the context otherwise requires (i) words imparting singular connotation shall include plural and vice versa: (ii) the words "include", "includes", and "including" mean include, includes and including "without limitation" and (iii) the words "hereof", "hereto", "herein" and "hereunder" and words of similar import refer to the Agreement as a whole and not to any particular provision of the Agreement.

## 2. Effective Date

This Agreement shall be effective on the day that falls one Business Day after the date of signing of this Agreement.

## 3. Terms and Termination

### 3.1 Term

The term of the Agreement shall commence on the Effective Date and shall continue for twenty five (25) years from the start of Financial Year starting immediately after Commercial Operations Date (the "Term"), unless and until terminated earlier pursuant to the provisions of the Agreement. After the Term, the ownership of the System shall be transferred to the Purchaser free of cost.

### 3.2 Purchase Option/ Purchase Obligation

So long as a Purchaser default shall not have occurred and be continuing, Purchaser has - the option to purchase the System by paying the Power Producer the Purchase price as per Schedule III to this Agreement. To exercise its purchase option, the Purchaser shall not less than Ninety (90) days prior to the proposed Purchase Date, provide written notice to the Power, Producer of Purchaser's intent to exercise .its option to purchase the System on such purchase date: In the event Purchaser confirms its intention to exercise the purchase option in writing to the Power Producer, (i) Purchaser shall pay the applicable purchase price to the Power Producer on the Purchase Date, and such payment shall be made in accordance with any written instructions delivered to Purchaser by the Power Producer for payments under the Agreement, and (ii) the Parties shall promptly execute all documents necessary to (A) cause title to the System to pass to Purchaser on the Purchase Date, free and clear of all liens and (B) assign all vendor warranties for the

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System to Purchaser. Upon execution of the documents and payment of the applicable purchase price in each case as described in the preceding sentence, the agreement shall terminate automatically and the Purchaser shall become the owner of the System. Upon such termination, the Power Producer shall offer' its operations and maintenance ("O&M") services to the Purchaser and the Parties may enter into an O&M agreement in this regard. The terms and conditions of the O&M agreement will be negotiated in good faith between the Parties.

### 3.3 Conditions of the Agreement prior to installation

In the event that any of the following events or circumstances occur prior to the Commercial Operation Date, the Power Producer may terminate the Agreement, in which case neither Party shall have any liability to the other except for any such liabilities that may have accrued prior to such termination.

- (a) There has been a, material adverse change in the rights of Purchaser to occupy the Premises or the Power Producer to install the System at the Premises.
- (b) The Power Producer has determined that there are easements, Capacity Cost Recovery (CCRs) or other liens or encumbrances that would materially impair or prevent the installation, operation, maintenance or removal of the System. If any dispute arises before commercial operation date, the same shall be resolved under clause, 17.7 (c)

## 4 Construction, Installation, Testing and Commissioning of the System.

### 4.1 Installation Work

- a) The Power Producer will cause the Project to be designed, manufactured, supplied, engineered, erected, tested and commissioned, operated & maintained and constructed substantially in accordance with NIT No \_\_\_\_\_ dated: \_\_\_\_\_ and the sanction letter issued by <NAME OF EXPERT PSU>. The Power Producer shall provide to the Purchaser a bill of materials listing the major equipment constituting the System. Such bill of materials shall be provided within 30 days of the Commercial Operation Date.
- b) The Power Producer shall have access as reasonably permitted by the Purchaser to perform the Installation Work at the Premises in a manner that minimizes

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inconvenience to and interference with the use of the Premises to the extent commercially practical.

- c) It is agreed between the Parties that the Power Producer shall commission the System with a capacity as per Schedule-I. Power Producer may construct a System of smaller size if it receives only part approval of government subsidies or for any other material commercial reason, as mutually agreed between the Parties in writing, In the event a System of smaller capacity is eventually agreed to be installed, the clauses pertaining to Purchase Price as set out under this Agreement shall be adjusted proportionately as per mutual agreement between the Parties in writing.
- d) The Power Producer shall provide and lay the dedicated electrical cables for transmission of Solar Power from the System up to the Delivery Point. Transmission or distribution of Solar Power beyond this point will be the responsibility of the Purchaser. The Delivery Point shall be where the Main Metering System is located.
- e) Unless otherwise agreed between the Parties, the Power Producer shall not do
- (a) Chipping of rooftop; or (b) water proofing of roof to be disturbed ;(c) Carry out any other modification of the Premises without the written consent of the Purchaser.
- f) The Power Producer shall maintain general cleanliness of area around the Project during construction and operation period of the Project. In case any damages is caused to the equipment / facilities owned by the Purchaser due to the Power Producer, the same shall be made good rectified by the Power Producer at their cost.
- g) The Power Producer shall, within fifteen (15) working days of the Effective Date, submit to the Purchaser shop drawings of the Project for approval ("Shop Drawings"). The drawings will have to be approved from the Power Purchaser within 3 working days from the submission of the drawings. If the Purchaser has any objection/recommendation in the Shop Drawings, he shall communicate the same to Power Producer within a period of ten (10) working days of the date of submission of the Shop Drawings. Any delay will extend the Effective Date and such approval shall not be unreasonably withheld. Subject to any punch-list items which shall be agreed by the. Purchaser as not being material to completion of the Project, the Power Producer agrees that it shall achieve the completion of the Project/ Commissioning of the Project within the scheduled completion period from the Effective Date ("Scheduled Completion Date"). Purchaser shall ensure that sufficient load is available at the Delivery Point to ensure synchronization and drawl of power from System.
- h) If the Power Producer is unable to commence supply of Solar Power to the Purchaser by the Scheduled Completion Date, other than for the reasons specified in

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Article 11 and 12.2 (Force Majeure or Purchaser Default), the Power Producer or its contractor shall pay to <NAME OF EXPERT PSU> genuine pre-estimated liquidated damages for the delay in such commencement of supply of Solar Power as per the clause of the <NAME OF EXPERT PSU> NIT appended as schedule -VI as per respective NIT document to this Agreement.

- i) The Purchaser shall ensure that all arrangements and infrastructure for receiving Solar Power beyond the Delivery Point are ready on or prior to the Commercial Operation Date and is maintained in such state in accordance with applicable laws through the Term of the Agreement.
- j) Power Producer shall fulfill all obligations undertaken by it under this Agreement.

## 4.2 Approvals and Permits

Each of the Parties shall assist the other Party in obtaining all necessary Government Approvals, third party approvals and permits including but not limited to those listed in Schedule V hereto and any waivers, approvals or releases required pursuant to any applicable CCR.

## 4.3 System Acceptance Testing

- (a) The Power Producer shall give 10 days advance notice to conduct the testing of the Project and shall conduct testing of the Project in the presence of Purchaser's designated representative.
- (b) If the results of such testing indicate that the System is capable of generating electric energy (at full rated KWp) for 5 continuous hours using such instruments and meters as have been installed for such purposes, then the Power Producer shall send' a written notice to Purchaser to that effect, and the date of successful conducting such tests and injection of Power at Delivery Point shall be the "**Commercial Operation Date**"

## 5 System Operations

### 5.1 The Power Producer as Owner and Operator

The System will be legally and beneficially owned by the Power Producer and will be operated and maintained and, as necessary, repaired by the Power Producer at its sole cost and expense. Replacement of spare parts if any shall be responsibility of Power Producer for the complete period of Agreement. If any repair or maintenance costs incurred by the Power Producer as a result of Purchaser's breach of its obligations, shall be reimbursed in full by Purchaser.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 107 of 142	बोली दाता के हस्ताक्षर
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Power Producer shall not be responsible for any work done by others on any part of the System/Project authorized by the Purchaser and not authorized in advance by the Power Producer in writing. Power Producer shall not be responsible for any loss, damage, cost or expense arising out of or resulting from improper operation or 'maintenance of the System by Purchaser or anyone instructed to do such work by Purchaser. In the event of a problem with the System, as a result of the Purchaser actions for which Power Producer is not responsible as provided in this Agreement, Purchaser may choose and pay Power Producer for diagnosing and correcting the problem at Power Producer or Power Producer's contractors standard rates.

## 5.2 Metering

- (a) The Power producer shall install the Main Metering System with due certification for the measurement of electrical energy produced by the System.
- (b) The meter will be read by Power Producer's personnel on the Metering date. The authorized representative of the Purchaser shall be present at the time of meter reading. Both the Parties shall sign a joint meter reading report. However, in case the Joint meter reading report is not signed in the first three business days of any month due to non-availability of the Purchaser's authorized representative, the report signed by the Power Producer shall be considered as Joint Meter Reading Report. The Parties agree that such Joint meter reading Report shall be final and binding on the Parties.
- (c) The Main Metering System at the Delivery Point and any additional meters required by Applicable Law shall be tested, maintained and owned by the Power Producer.
- (d) The Power Producer shall connect the Solar output to the existing system of the Purchaser as per the requirements and guidelines of the state DISCOM
- (e) The Purchaser may, at its own discretion, install a check meter, at its cost, to verify the measurements of the Main Metering System.
- (f) The title to the Solar Power supplied by the Power Producer shall pass to the Purchaser at the Delivery Point.
- (g) Power Producer shall be responsible for transformer etc. "if required" & metering as per respective clause of NIT (reference to be quoted).

## 5.3 System Disruptions

- (a) Availability of premises: Purchaser will provide full access of the site to Power Producer for installation, operation and maintenance of solar power plant during the

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 108 of 142	बोली दाता के हस्ताक्षर
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period of Agreement. Power Purchaser will also provide restricted access of the Premises to Power Producer for operation and maintenance of solar power plant.

- (b) Purchaser will not provide/construct any structure within its Premises or around its premises which shades the solar panels effecting the generation of the energy during the Agreement period.
- (c) Roof Repair and other System Disruptions In the event that (a) the Purchaser repairs the Premises' roof for any reason not directly related to damage, if any, caused by the System, and such repair required the partial or complete temporary disassembly or movement of the System, or (b) any act or omission of Purchaser or Purchaser's employees, Affiliates, agents or subcontractors (collectively, a "**Purchaser Act**" ) result in a disruption or outage in System production, and such events attributable to Purchaser (except Force majeure, then, in either case) Purchaser shall (i) pay the Power Producer for all work required by the Power Producer to disassemble or move the System and re-assemble the system after completion of the repair work and (ii) continue to make all payments for the Solar Power during such period of System disruption (the "**Disruption Period**"). For the purpose of calculating Solar Power Payments and lost revenue for such Disruption Period, Solar Power shall be deemed to have been produced at the average rate. Over the preceding 12 (Twelve) months, or, if the disruption occurs within the first 12 months of operation, the average over such period of operation (deemed generation). Power producer shall inform about the 'disruption or outage in System production, for reasons attributable to purchaser in 'writing with date and time of such occurrences, and Purchaser's liability shall start from the date of intimation for above of disruption or outage in system production, on account of Purchaser.

## 6 Delivery of Solar Power

### 6.1 Purchaser Requirement:

Purchaser agrees to purchase one hundred percent (100%) of the Solar Power generated by the System and made available by the Power Producer to Purchaser at the Delivery Point during each relevant month of the Term. In the event that the

Purchaser is unable to off take 100% of the electricity generated, when it is generated, then Deemed Generation will apply only in case following conditions:

- a) In the event Power Producer is generating power more than the available load, and the Purchaser is not able to export or record the excess units

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 109 of 142	बोली दाता के हस्ताक्षर
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generated due to faults in the equipment's of the Purchaser e.g., Net meter Cables, Equipment's etc., which may stop the feeding / record of the Solar Power generated.

- b) In the event that the Purchaser fails to ensure adequate space for solar equipment to ensure that other structures do not partially or wholly shade any part of the Solar Power Plant and if such shading occurs, the Power Producer may apply for Deemed Generation furnishing the calculation for loss in generation due to such shading supported by the relevant data, which shall be approved by Purchaser within one month of submission failing which the Power Producer shall claim provisional deemed generation till the issue is finally settled.

## 6.2 Estimated Annual Production

The annual estimate of Solar Power with respect to the System for any given year as determined pursuant to this Section shall be the "Estimated Annual Production". The Estimated Annual Production for each year of the Initial Term is set forth in Schedule IV hereof.

## 6.3 Suspension of Delivery

Power Producer shall be entitled to suspend delivery of electricity from the System to the Delivery Point for the purpose of maintaining and repairing the System upon giving one week's advance written notice to the Purchaser except in the case 'of emergency repairs. Such suspension of Service shall not constitute a breach of this Agreement provided that the Power Producer shall use commercially reasonable efforts to minimize any 'interruption in service to the Purchaser. However, any preventive maintenance shall be done only during the period when plant is not generating.

## 7 Tariff and Payments

- 7.1 Consideration Purchaser shall pay to the Power Producer a monthly payment (the "**Solar Power Payment**") for the Solar Power generated by the System as per the Metering clause 5.2 (b) above during each calendar month of the Term equal to the actual Monthly Production as recorded in Joint Meter Reading Report for the System for the relevant month multiplied by the Tariff irrespective of (i) whether any or all units of Solar Power

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 110 of 142	बोली दाता के हस्ताक्षर
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has been drawn, consumed or utilized by Purchaser and / or (ii) whether any Solar Power has been injected, whether inadvertently or otherwise, into the grid of the Distribution Utility. The Power Producer will bill the Purchaser for each KWh metered as above at the Delivery Point, at the Tariff prevailing at that point of time. As detailed in Schedule - II, the Tariff will be equal to Rs.----- /kWh levelized tariff as per <NAME OF EXPERT PSU> allocations. The 'year' Considered shall be the financial year which April 1st to 31st March of every year as per <NAME OF EXPERT PSU> Schedule II provides a detailed year on year tariff schedule.

## 7.2 Invoice

The Power Producer shall invoice Purchaser on the first day of each month (each, an "**Invoice Date**") commencing on the first Invoice Date to occur after the Commercial Operation Date, for the Solar Power Payment in respect of the immediately preceding month. The last invoice shall -include production only through the Expiration Date of this Agreement.

7.3 The invoice to the purchaser shall include.

- (a) The Solar Power calculations for the relevant billing period.
- (b) Supporting data, documents and calculations in accordance with this Agreement.

## 7.4 Time of payment

Purchaser shall pay all amounts due hereunder within 30 days after the date of the receipt of the invoice via email or post ("**Due Date**").

## 7.5 Method of Payment

Purchaser shall make all payments under the Agreement by cheque / demand draft/ electronic funds transfer only in immediately available funds to the' account designated by the Power Producer from time to time.. All payments made hereunder shall be non-refundable, subject to the applicable tax deduction at source, and be made free and clear of any other tax, levy, assessment; duties or other charges and not subject to reduction, set-off, or adjustment of any kind. Further, if any taxes and duties are leviable currently or in future, such taxes and duties shall be paid by the Purchaser over and above the solar electricity tariff mentioned in this agreement. Such taxes and duties could include, but not restricted to Electricity Duty,Cross Subsidy Surcharge,Additional Surcharge, Tax on Sale of Electricity (TOSE). If the Purchaser deducts any tax at source, the Purchaser will issue a tax credit certificates as per law.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 111 of 142	बोली दाता के हस्ताक्षर
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## 7.6 Late Payment Surcharge/ Early Payment Discount

In case payment of any invoice is delayed by the Purchaser beyond its Due Date, a late payment surcharge shall be payable by Purchaser to the Power Producer at the rate of 1.25% per month ("**Late Payment Surcharge**") calculated on the amount of outstanding payment, calculated on a day to day basis for each day of the delay, compounded on monthly rates. Late Payment Surcharge shall be claimed by the Power Producer, through its subsequent invoice.

## 7.7 Disputed Payments

In the event that the Purchaser disputes an invoice, it shall give notice of such a dispute within 15 days of receiving the invoice setting out details of the disputed amount. The Purchaser shall pay by the Due Date 100% of any undisputed amount and in case the invoice is disputed, the Purchaser shall pay an amount based on average consumption of last three consecutive undisputed invoices. Amount so recovered shall be subject to final adjustment on resolution of the dispute. Thereafter, the Parties shall discuss and try to resolve the disputed amount within a week of receipt of such notice of dispute. If the Parties resolve the dispute, an appropriate adjustment shall be made in the next invoice. If the dispute has not been resolved by the date of the next invoice the dispute shall be referred to a committee of one member from each of Purchaser and Power Producer, If the dispute is still-not resolved by the next following invoice it shall be 'referred to Arbitration as provided in the present Agreement.

## 7.8 Change in Law:

(a) For the Purpose of this section 7.8, the term "Change in Law" shall mean the occurrence of any of the following events after the dead line for bid submission , resulting into any additional recurring / non-recurring expenditure by the Power Producer or any income to the Power Producer. The enactment, coming into effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any Law, including rules and regulations framed pursuant to such Law: or

- (i) A change in the interpretation of any Law by any Governmental Authority having the legal power to interpret or apply such Law, or any competent court; or
- (ii) The imposition of a requirement, for obtaining any Government Approvals which was not required earlier; or

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 112 of 142	बोली दाता के हस्ताक्षर
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- (iii) a change in the terms and conditions prescribed for obtaining any Government Approvals or the inclusion of any new terms or conditions for Obtaining such Government Approvals; or
- (iv) Any introduction of any tax made applicable for supply of power by the Power Producer as per the terms of this Agreement. Any benefit due to change in tax on the sale of solar energy shall be passed on to Purchaser.
- (v) Any benefit arising due to change in above para (i) to (iv) shall be passed on to the Purchaser. But not include any change in any withholding tax on income or dividends distributed to the shareholders of the Power Producer.

(b) Application and Principles for computing impact of Change in Law:

While determining the consequence of Change in Law under this Article 7.8, the Parties shall have due regard to the Principle that the purpose of compensating the Party affected by such change in Law, is to restore through monthly bill payment, to the extent contemplated in this Article 7.8, the affected Party to the same economic position as if such Change in Law has not occurred and such impact shall be mutually decided in writing.

(c) Solar Power Payment Adjustment Payment on account of Change in Law Subject to provisions mentioned above, the adjustment in Solar Power Payment shall be effective from:

- (i) The date of adoption, promulgation, amendment, re-enactment or repeal of the Law or Change in Law; or
- (ii) The date of order/ judgment of the competent court; of tribunal or Governmental Authority, if the Change in law is on account of a change in interpretation of Law.

**8 General Covenants**

**8.1 Power Producer's Covenants**

The Power Producer covenants and agrees to the following:

- (a) **Notice of Damage or Emergency:** The Power Producer shall (a) promptly notify Purchaser if it becomes aware of any damage to or loss of the use of the System or that could reasonably be expected to adversely affect the System, (b) immediately notify Purchaser once it becomes aware of any

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 113 of 142	बोली दाता के हस्ताक्षर
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event or circumstance that poses an imminent risk to human health, the environment, the System or the Premises.

- (b) **System Condition:** The Power Producer shall take all actions reasonably necessary to ensure that the System is capable of providing Solar Power at a commercially reasonable continuous rate: Subject to there being no Purchaser Default, the Power Producer 'shall provide 24 x 7 offsite / offsite monitoring and maintenance of the System throughout the period of this agreement at no additional cost.
- (c) The System shall meet minimum guaranteed generation with Performance Ratio (PR) at the time of commissioning and related Capacity Utilization Factor (CUF) as per the daily normalized irradiance levels of the location during the O&M period. PR shall be minimum of 75% at the time of inspection for initial Project acceptance.
- (d) **Governmental Approvals :** While providing the Installation work, solar Power and System Operations, the Power Producer shall obtain and maintain and secure all Governmental Approval required to be obtained and maintained and secured by the Power Producer and to enable the Power Producer to perform such obligations
- (e) The interconnection of the rooftop solar system with the network of the distribution licensee shall be made as per the technical standards for connectivity of distributed generated resources regulation's .as may be notified by the competent authority. The interconnection of the rooftop solar system shall be as per the contracted load and / or respective voltage level applicable to the Purchaser as per the provisions of the guidelines issued by the competent authority.
- (f) **Health and Safety:** The Power Producer shall take all necessary and reasonable safety precautions with respect to providing the installation Work, Solar Power, and System Operations that shall comply with all Applicable Law pertaining-to the health and safety of persons and real and personal property.

## 8.2 Power Producer's Representatives

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 114 of 142	बोली दाता के हस्ताक्षर
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During the subsistence of this Agreement, the Power Producer undertakes to respond to all questions, concerns and complaints of the Purchaser regarding the System in a prompt and efficient manner. The Power Producer designates the following individual as its representative pertaining to performance of this Agreement till the Commercial Operation Date:

Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

The Power Producer designates the following individuals as its representative and primary point of contact pertaining to performance of this Agreement following the Commercial Operation Date till termination:

Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

### 8.3 Purchaser's Covenants

Purchaser covenants and agrees to the following:

- (a) **Notice of Damage or Emergency:** Purchaser shall (a) promptly notify the Power Producer if it becomes aware of any damage to or loss of the use of the System or that could reasonably be expected to adversely affect the System;
- (b) immediately notify the- Power Producer once it becomes aware of any event or circumstance that poses an imminent risk to human health, the environment, the System or the Premises.
- (b) **Liens:** Purchaser shall not directly or indirectly cause, create, incur, assume or suffer to exist any Liens on or with respect to the System or any interest therein. If

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 115 of 142	बोली दाता के हस्ताक्षर
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Purchaser breaches its obligations under this Clause, it shall immediately notify the Power Producer in writing, and shall promptly cause such Lien to be discharged and released of record without any cost to the Power Producer, and shall indemnify the Power Producer against all costs and expenses (including reasonable attorneys fees and court costs) incurred in discharging and releasing such Lien.

- (c) **Consents and Approvals:** Purchaser shall ensure that any authorizations required of Purchaser under this Agreement, including those required for installation of System at the Premises and to drawl consume Solar Power are provided in a timely manner. The Purchaser shall cooperate with the Power Producer to obtain such approvals, permits, rebates etc.
- (d) **Access to Premises Grant of License:** Purchaser hereby grants to the Power Producer a license co-terminus with the Term, containing all the rights necessary for the Power Producer to use portions of the Premises for the installation, operation and maintenance of the System pursuant to the terms of this Agreement, including ingress and egress rights to the Premises for the Power Producer and its employees and authorized representatives and access to electrical panels and conduits to interconnect or disconnect the System with the Premises electrical wiring with the consent and approval of the Purchaser's authorized representative identified by the Purchaser. Photo IDs will be provided by the Power Producer. Power Purchaser will assist in availing permissions to the site.
- (e) **Security:** The building which has enhanced security of Solar Power System Purchaser will keep the premises locked. Inspite of these measures, if any damages to the System takes place due to theft or vandalism then the same shall be claimed or reimbursed through insurances by Power producer. In case of theft and vandalism acts, the Purchaser will assist the Power Producer in procedures of filing FIRs, insurance claims and any other related activities.

Whenever, the damages to the System occurs (except due to negligence of Power Producer) then the same shall be jointly assessed by both the Parties and a severity level will be decided, which will further decide the duration offered to the Power Producer to correct the damage, and the Power Producer shall he paid the amount on the basis of 'Deemed generation' for such a period. Power Producer shall be entitled to any insurance proceeds received for damages in this clause. Purchaser

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 116 of 142	बोली दाता के हस्ताक्षर
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will not conduct activities on, in or about the Premises that have a reasonable likelihood of causing damage, impairment or otherwise adversely affecting the System. If System is damaged due to any such activity or through any other agency contracted by the Purchaser directly or indirectly, such damage will be borne by the Purchaser.

- (f) Regardless of whether Purchaser is owner of the Premises or leases the Premises from a landlord, Purchaser hereby covenants that (a) the Power Producer shall have access to the Premises and System during the Term of this Agreement, and (b) neither Purchaser nor Purchaser's landlord will interfere or handle any of the Power Producer's equipment or the System without written authorization from the Power Producer.
- (g) **Temporary storage space during installation** : Purchaser shall provide sufficient space at the Premises for the temporary storage and staging of tools, materials and equipment and for the parking of construction crew vehicles and temporary Construction, trailers and facilities reasonably necessary during the Installation Work, System Operations and access for rigging and material handling.
- (h) **Sunlight Easements**: Purchaser will take all reasonable actions as necessary to prevent other building, structures or flora from overshadowing or otherwise blocking access of 'sunlight to the System, including but not limited to-such actions as may be reasonably necessary to obtain a solar access easement for such purpose.
- (i) **Evacuation** — Purchaser shall off take 100% of the Solar Power generated from the Delivery Point, and pay all invoices raised by the Power Producer under this Agreement by the 'Due Date and pay interest on delayed payments, if any, as per this Agreement.
- (j) **Water** - Power Purchaser at zero cost shall arrange Raw Water at a given point as per the requirements of the Power Producer, for periodic cleaning of the solar panels (----- liters - twice a month).
- (k) **Auxiliary Power** — The Purchaser shall provide sufficient auxiliary power to the Power Producer for the maintenance and operation of its system, if available and possible, at the rate Purchaser is paying to the DISCOM.
- (l) **Relocation** - If one or more of the Solar Power Plant panels needs to be temporarily moved or its generation suspended, for any other reason requested by the Power Purchaser, the Power Purchaser will be responsible for pre-agreed costs on actuals

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 117 of 142	बोली दाता के हस्ताक्षर
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only, arising from moving, disassembling and re-installing/ commissioning the Solar Power Plant, as agreed between the Parties. The Power Producer will be responsible for providing detailed documentary proof of the actual pre-agreed costs borne for such relocation/disassembling. Within 30 days of these satisfactory documents being provided by the Power Producer, the Purchaser shall reimburse these pre-agreed expenses in full, and delayed payment beyond the date mentioned above will attract Late Payment charges as described in Clause 7.6. During any interruption in generation during such relocation, the Purchaser will continue to be billed as per Deemed Generation, during the period of interruption, for the affected Solar Power Plant(s).

## 9 Representations & Warranties

9.1 Representations and Warranties Relating to Agreement Validity In addition to any other representations and warranties contained in the Agreement, each Party represent and warrants to the other that:

- (a) It is duly organized and validly existing and in good standing in the jurisdiction of its incorporation;
- (b) It has the full right and authority to enter into, execute, deliver, and perform its obligations under the Agreement.
- (c) It has taken all requisite corporate or other action to approve the execution, delivery, and performance of the Agreement;
- (d) The Agreement constitutes its legal, valid and binding obligation enforceable against such Party in accordance with its terms;
- (e) There is not litigation, action, proceeding or investigation pending or, to the best of its knowledge, threatened before any court or other Governmental Authority by, against, affecting or involving any of it's business or assets that could reasonably be expected to adversely affect its ability to carry out the transactions contemplated herein; and
- (f) Its execution and performance of the Agreement and the transactions contemplated hereby do not constitute a breach of any term or provision of, or a default under (i) any contract or agreement to which it or any of its Affiliates is a party or by which it or any of its Affiliates or its or their property is bound, (ii) its organizational documents, or (iii) any Applicable Laws.

## 10 Taxes and Governmental Fees

### 10.1 Purchaser obligations

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 118 of 142	बोली दाता के हस्ताक्षर
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Purchaser shall pay for any taxes, fees or charges (such as Cross Subsidy Surcharge, Additional Surcharge, Electricity Duty, etc) imposed or authorized by any Governmental Authority in future on sale of the Solar Power to Purchaser pursuant to clause 7. The Power Producer shall notify Purchaser in writing with a detailed statement of such amounts, which shall be invoiced by the Power Producer in the monthly bills and payable by Purchaser. Purchaser shall timely report, make filings for, and pay any and all sales, use, income or other taxes, and any other amounts assessed against it due to its purchase of the Solar Power. This Section 10.1 excludes taxes specified in Section 10.2.

## 10.2 Power Producer Obligations

The Power Producer shall be responsible for all income taxes and any and all franchise fees or similar fees assessed against it due to its ownership of the System. The Power Producer shall not be obligated for any taxes payable by or assessed against Purchaser based on or related to Purchasers overall income or revenues.

## 11 Force Majeure

### 11.1 Definition

"**Force Majeure Event**" means any act or event that prevents the affected Party from performing its obligation in accordance with the Agreement, if such act or event is beyond the reasonable control of the affected Party and such Party had been unable to overcome such act or event with the exercise of due diligence (including the expenditure of reasonable sums). Subject to the foregoing conditions, "Force Majeure Event" shall include without limitation the following acts or events: (i) natural phenomena, such as storms, hurricanes, floods, lightning, volcanic eruptions and earthquakes; (ii) explosions or fires arising from lighting or other causes unrelated to the acts or omissions of the Party seeking to be excused from performance; (iii) acts of war or public disorders, civil disturbances, riots, insurrection, sabotage, epidemic, terrorist acts, or rebellion. A Force Majeure Event shall not be based on the economic hardship of either Party. In case of any damage because of force majeure event, the System shall be repaired / commissioned at its own cost by the Power Producer.

**11.2 Excused Performance:** Except as otherwise specifically provided in the Agreement, neither Party shall be considered in breach of the Agreement or liable for any delay or failure to comply with the Agreement, if and to the extent that such delay or failure is attributable to the occurrence of a Force Majeure Event; provided that the Party claiming relief under this Section 11 shall immediately (i) notify the other Party in writing of the existence of the Force Majeure Event, (ii) exercise all reasonable efforts necessary to

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 119 of 142	बोली दाता के हस्ताक्षर
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minimize delay caused by such Force Majeure Event, (iii) notify the other Party in writing of the cessation or termination of said Force Majeure Event and (iv) provided, however, that Purchaser shall not be excused from making any payments and paying any unpaid amounts due in respect of Solar Power delivered to Purchaser prior to the Force Majeure Event performance interruption.

### 11.3 Termination as a Consequence of Force Majeure Event

If a Force Majeure Event shall have occurred that has affected the Power Producer's performance of its obligations hereunder and that has continued for a continuous period of one hundred eighty (180) days, then Purchaser shall be entitled to terminate the Agreement and if such Force Majeure Event continues for further ninety (90) days period, the Agreement shall automatically terminate. Upon such termination for a Force Majeure Event, neither Party shall have any liability to the other (other than any such liabilities that have accrued prior to such termination).

## 12 Default

### 12.1 Power Producer Defaults and Power Purchaser Remedies

(a) **Power Producer Defaults:** The following events shall be defaults with respect to the Power Producer (each, a "**Power Producer Default**").

- (i) An Insolvency Event shall have occurred with respect to the Power Producer;
- (ii) Failure to achieve Commissioning of the System within the period as per NIT document; and
- (iii) The Power Producer breaches any material term of the Agreement and (a) if such breach can be cured within sixty (60) days after Purchaser's written notice of such breach and the Power Producer fails to cure the same; or (B) the Power Producer fails to commence and pursue a cure within such sixty (60) days period if a longer cure period is needed.

(b) **Purchaser's Remedies:**

- (i) If a Power Producer Default described in Section 12.1 (a) has occurred and is continuing, in addition to other remedies expressly provided herein, and subject to Section 13, Purchaser shall have a right to deliver a notice of its intention to terminate this Agreement ("Purchaser Preliminary Default Notice"), which shall specify in reasonable detail, the circumstances giving rise to the issue of such notice.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 120 of 142	बोली दाता के हस्ताक्षर
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- (ii) Upon the occurrence and continuation of Power Producer Default and the failure by the Power Producer to cure such default within the applicable cure period specified in this Article; the Purchaser shall be at liberty avail the services of any other firm / successful bidder.
- (iii) Following the issue of Purchaser Preliminary Default Notice, it shall be the responsibility of the Parties to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant Power Producer's Default having regard to all the circumstances: If the Power Producer Default is not cured within a period of sixty (60) days of the issue of Purchaser Preliminary Default Notice or any other such period mutually agreed upon by the Parties, the Purchaser shall have the right to terminate this Agreement by issuing a Purchaser Termination Notice.
- (iv) Upon the delivery of the Purchaser Termination Notice, this Agreement shall stand terminated. The Power Producer shall have the liability to-make payment within sixty (60) days from the date of Purchaser Termination Notice towards compensation to Purchaser equivalent to the difference between the Tariff and the grid rate notified by the relevant Government Authority for that point in time multiplied by the estimated Solar Power generated for a period of two years following the termination, considered on normative capacity utilization factor.
- (v) if the Power Producer fails to remove the System from the Premises within one month from me date of termination, the Purchaser shall be entitled to dispose of the System in any manner it deems fit.
- (vi) The Power Purchaser may exercise any other remedy it may have at law or equity or under the Agreement.

## 12.2 Power Purchaser Defaults and Power Producer's Remedies

- (a) Purchaser Default : The following events shall be defaults with respect to Purchaser (each, a "**Purchaser Default**")
  - (i) An Insolvency Event shall have occurred with respect to Purchaser;
  - (ii) Purchaser breaches any material term of the Agreement if (A) such breach can be cured within sixty (60) days after the Power Producer's notice of such breach and Purchaser fails to so Cure, or (B) Purchaser

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 121 of 142	बोली दाता के हस्ताक्षर
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fails to commence and pursue said cure within such sixty (60) day period if a longer cure period is needed; and

- (iii) Purchaser-fails to pay the Power Producer any undisputed amount or, if the amount is disputed, an amount based on average consumption of last three consecutive undisputed invoices to the Power Producer under Section 7.7 of this Agreement within sixty (60) days from the receipt of notice from the Power Producer of such past due amount
- (b) Power Producer's Remedies: If a Purchaser Default described in Sections 12.2 (a) has occurred and is continuing, in addition to other remedies expressly provided herein, and subject to Section 13, the Power Producer shall be entitled to terminate this Agreement by serving a fifteen (15) days' notice and upon such termination, (A) the Power Producer shall be entitled to receive from Purchaser the Purchase Price. The Purchase Price payable shall be the Purchase Price Specified in Schedule III that falls on such date. Upon the payment of the Purchase Price, the Power Producer shall cause the title of the System to transfer to the Purchaser and (b) the Power Producer may exercise any other remedy it may have at law or equity or under the Agreement.

### 13 Limitations of Liability

- 13.1 Except as expressly provided herein, neither Party shall be liable to the other Party or its Indemnified Persons for any special, punitive, exemplary, indirect, or consequential damages, losses or damages for lost revenue or lost profits, whether foreseeable or not, arising out of, or in connection with the Agreement.
- 13.2 Subject to the provisions of the Agreement, the Power Producer shall be solely responsible for the manner in which its obligations under this Agreement are to be performed. All employees and representatives of the Power Producer, or contractors engaged by the Power producer in connection with Power Producer and shall not be deemed to be employees, representatives, contractors of the Purchaser Nothing contained in the Agreement or in any agreement or contract executed by the Power Producer shall be construed to create any contractual relationship between any such employees, representatives or contractors and the Purchaser.
- 13.3 Notwithstanding any liability. or obligation that may arise under this Agreement, any loss, damage, liability, payment, obligation or expense which is insured or not or for

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 122 of 142	बोली दाता के हस्ताक्षर
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which the Purchaser can claim compensation under any insurance policy, shall not be charged to or payable by the Purchaser

## 14 Assignment & Novation

**14.1 Assignment:** Notwithstanding anything contained herein, the Power Producer has the right to assign all or any of its rights under this Agreement (including rights over any assets hereunder), to any third party including, though not restricted to any lender, equipment lesser or other party (“Assignment”), with the consent of the Power Purchaser. The Power Purchaser shall not unreasonably withhold such consent. In the event of such assignment, the Purchaser will be able to hold the Power Producer as well as the party to whom the benefits under this contract are assigned, to be jointly and severally responsible for performing the obligations under this contract. Further, in the event of assignment, the Purchaser agrees to make the payments due to the Power Producer under this agreement, directly to the assignee, upon receipt of such notice by the Power Producer. If the Power Producer were to sell the Solar Power Plant, then the new buyer(s) would need to abide by this Agreement. Further, the Power Producer reserves the right to assign whole or part of the assets to lenders/ leasing companies. Purchaser may assign its rights under this Agreement, without the prior consent of Power Producer, to an Affiliate or any successor in interest to Purchaser, whether by way of merger, reorganization or sale of assets (including any sale of a line of business). This Agreement shall insure to the benefit of and be binding upon Purchaser and its successors or assigns. However, any such actions as intended by the Power Producer under Article 14.1 and Article 14.2 shall be binding on Power Purchaser ,if there are zero material inconsistencies present in the contract provisions during the time of assignment/novation, else, it shall be construed as default in contract and appropriate actions shall be taken as deemed fit.

**14.2 Novation:** The Parties agree and acknowledge that the Power Producer may intend to novate the Agreement to a party, and has the right to transfer any or all of its rights and obligations under this Agreement to a party or any other third party (“New Party”), with the consent of the Power Purchaser. The Power Purchaser shall not unreasonably withhold such consent. Upon Novation, the New Party shall automatically and without any further action be entitled to all the same rights and assume the same obligations, under this Agreement, as if it were originally a party to this Agreement. Further, the Purchaser hereby agrees and undertakes that, promptly upon receiving a request from the Power Producer, the Purchaser shall execute such further writings, deeds and/or

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 123 of 142	बोली दाता के हस्ताक्षर
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agreements and take all such further actions as may be necessary for effecting or implementing the transfer of any or all of the Power Producer's rights and/or obligations under this Agreement to the New Party. If the parties agree to do Novation then separate Novation agreement shall be executed.

### 14.3 Notices

Unless otherwise provided in the Agreement, all notices and communications concerning the Agreement shall be in writing and addressed to the Parties at the addresses set forth below:

Power Producer's address and contact details:

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Purchasers address and contact details:

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### 14.4 Notice

Unless otherwise provided herein, any notice provided for in the Agreement shall be hand delivered, sent by registered post, or by courier delivery, or transmitted by facsimile and shall be deemed delivered to the addressee or its office when received at the address for notice specified above when hand delivered or sent toy courier delivered or sent by courier delivery, upon posting if sent by registered post and upon confirmation of sending when sent by facsimile on the next Business Day.

## 15. Confidentiality

### 15.1 Confidentiality obligation

- (a) If the Power Producer provides confidential information, including business plans, strategies, financial information, proprietary, patented, licensed, copy righted or trademarked information, and / or technical information regarding the , design, operation and maintenance of the System ("Confidential Information") to Purchaser or, if in the course of performing under the Agreement or negotiating the Agreement Purchaser learns Confidential Information regarding the facilities or plans of the Power Producer, Purchaser shall (a) protect the Confidential

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 124 of 142	बोली दाता के हस्ताक्षर
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information from disclosure to third parties with the same degree of care accorded its own confidential and proprietary information, and (b) refrain from using such Confidential Information, except in the negotiation and performance of the Agreement. Notwithstanding the above, Purchaser may provide such Confidential Information to its officers, directors, manager, employees and Affiliates (collectively "Representatives"), in each case whose access is reasonably necessary for purposes of the Agreement. Each such recipient of confidential information shall be informed by Purchaser of its confidential nature and shall be directed to treat such information confidentially and shall agree to abide by these provisions. Purchaser shall be liable for any breach of this provision by any entity to whom it improperly discloses Confidential Information. All Confidential Information shall remain the property of the Power Producer and shall be returned to. It after Purchaser's need for it has expired or upon the request of the Power Producer.

- (b) If the Purchaser provides confidential information, including business plans, strategies, financial information, proprietary, patented, licensed, copy righted or trademarked information, ("Confidential Information") to the Power Producer or, if in the course of performing under the Agreement or negotiating the Agreement the Power Producer learns Confidential Information regarding the facilities Or plans of the Purchaser, the Power Producer shall (a) protect the Confidential Information from disclosure to third parties with the same degree of care accorded its own confidential and proprietary information, and (b) refrain from using such Confidential Information, except in the negotiation and performance of the Agreement. Notwithstanding the above, the Power Producer may provide such Confidential Information to its officers, directors, managers, employees and Affiliates (collectively, "Representatives"), in each case whose access is reasonably necessary for purposes of the Agreement. Each such recipient of Confidential. Information shall be informed by the Power Producer of its confidential nature and shall be directed to treat such information confidentially and shall agree to abide by these provisions. The Power Producer shall be liable for any breach, of this provision by any entity to whom it improperly discloses Confidential Information. All Confidential Information shall remain the property

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 125 of 142	बोली दाता के हस्ताक्षर
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of the Purchaser and shall be returned to it after the Power Produce's need for it has expired or upon the request of the Purchaser.

## 15.2 Permitted Disclosures

Notwithstanding any other provision contained herein, neither Party shall be required to hold confidential any information that;

- (a) Becomes publicity available other than through the receiving Party.
- (b) Is required to be disclosed under Applicable Law or pursuant to a validity issued notice or required filing, but a receiving Party subject to any such requirement shall promptly notify the disclosing Party of such requirement
- (c) Is independently developed by the receiving Party ; or
- (d) Becomes available to the receiving Party without restriction from a third party under no obligation of confidentiality..

## 16 Indemnity

### 16.1 Power Producer's Indemnity

Subject to Section 13, the Power Producer agrees that it shall indemnify and hold harmless Purchaser and its members, officers, employees, students, casual laborers, persons permitted' to run any business or service, such as canteens, stores, photocopy units, banks, post office, courier service, hospital and to any lawful visitors (collectively, the "Purchaser Indemnified Parties") from and against any and all Losses incurred by the Purchaser Indemnified Parties to the extent arising from or out of the following any claim for or arising out of any injury to Or death of any Person or Loss or damage to Property of any Person to the extent arising out of the Power Producer's negligence or willful misconduct. The Power Producer shall not, however, be required to reimburse or indemnify any Purchaser Indemnified Party for any Loss to the extent such Loss is due to the negligence or willful misconduct of any Purchaser indemnified Party.

### 16.2 Purchaser's Indemnity

Subject to Section 13, Purchaser agrees that it shall indemnity, defend and hold harmless the Power Producer, its permitted successors and assigns and their respective directors, officers, employees, contractors, sub-contractors, and agents (collectively, the

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 126 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

"Power Producer indemnified Parties") from and against any and all Losses incurred by the Power Producer Indemnified Parties to the extent arising from or out of any claim for or arising out of any injury to or death or any Person or loss or damage to property of any Person to the extent arising out of Purchaser's negligence or willful misconduct. Purchaser shall not, however, be required to reimburse or indemnify any Power Producer Indemnified Party for any Loss to the extent such Loss is due to the negligence or willful misconduct of any Power Producer Indemnified Party.

## 17. Miscellaneous

### 17.1 Amendments

This Agreement may only be amended, modified or, supplemented by an instrument in writing executed by duly authorized representatives of the Power Producer and Purchaser.

### 17.2 Goodwill and Publicity

Neither Party shall use any name, trade name, service mark or trademark of the other Party in any promotional or advertising material without the prior written consent of such other Party. The Parties shall coordinate and cooperate with each other when making public announcements related to the execution and existence of this Agreement, and each Party shall have the right to promptly review, comment upon and approve any publicity materials, press releases and other public statements by the other Party that refer to, or that describe any aspect of, this Agreement; provided that no such publicity releases or other public statements (except for filings or other statements or releases as may be required by applicable law) shall be made by either Party without the prior written consent of the other Party. Without limiting the generality of the foregoing and whether or not the consent of the other Party is required or obtained, all public statements must accurately reflect the rights and obligations of the Parties under this Agreement.

### 17.3 Industry Standards

Except as otherwise set forth herein, for the purpose of the Agreement, the normal standards of performance within the solar photovoltaic power generation Industry in the relevant market shall be the, measure of whether a Party's performance is reasonable and timely. Unless expressly defined herein, words having well-known technical or trade meanings shall be so construed.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 127 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

#### 17.4 Cumulative Remedies

Except as set forth to the contrary herein, any right or remedy of the Power Producer or Purchaser shall be cumulative and without prejudice to any other right or remedy.

#### 17.5 No Waiver

The failure of the Power Producer or Purchaser to enforce any of the provisions of the Agreement, or the waiver thereof, shall not be construed as a general waiver or relinquishment on its part of any such provision in any other instance or of any other provision in any instance.

#### 17.6 Survival

The obligations under Section 8:1 (d) (Power Producer Covenant), Sections 8.3(d), (e), (f) and (g) (Purchaser Covenants), Section 10 (Taxes and Governmental Fees), Section 13 (Limitation of Liability) Section 12.2 (Notices), Section 15 (Confidentiality), or pursuant to other provisions of this Agreement that, by their nature and context, are intended to survive. Termination of this Agreement shall survive the expiration or termination of this Agreement for any reason.

#### 17.7 Governing Law & Jurisdiction

- (a) This Agreement shall be governed by and construed in accordance with the laws of India. The Parties agree that the courts in Jaipur shall have jurisdiction over any action or proceeding arising under the Agreement.
- (b) In the event of any Dispute, difference of opinion or dispute or claim arising out of or relating to this Agreement or breach, termination or the invalidity thereof, shall firstly be attempted to be resolved by conciliation. Any Dispute that cannot be settled through conciliation procedure shall be referred to arbitration in accordance with the procedure given below. The Parties agree to comply with the awards resulting from arbitration and waive their rights to any form of appeal insofar as such waiver can validly be made. Cost of conciliation shall be equally shared by both the parties.

#### (c) Arbitration Procedure:

##### Settlement of Dispute:

If any dispute of any kind whatsoever arises between Purchaser and Power Producer in connection with or arising out of the contract including without prejudice to the

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 128 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

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.

If the parties fail to resolve, such a dispute or difference by mutual consent, within 45 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. Any dispute in respect of which a notice of intention to commence arbitration has been given in

Accordance with Sub Clause \_\_\_\_\_, shall be finally settled by arbitration.

**In case the Contractor (Power Producer) is a Public Sector Enterprise or a Government Department:**

In case the Contractor is a Public Sector Enterprise or a Government Department, the dispute shall be referred for resolution in Permanent Machinery for Arbitration (PMA) of the Department of Public Enterprise, Government of India. Such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises

The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary / Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusive. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator

**In All Other Cases**

In all other cases, any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below.

The Purchaser and the Power Producer 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 Thirty (30) days after the later of the two arbitrators has been appointed, the third

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 129 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

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.

If one party fails to appoint its arbitrator within thirty (30) 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.

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 Clause (Governing Law) and a substitute shall be appointed in the same manner as the original arbitrator.

Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue or arbitration shall be Jaipur.

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.

The arbitrator(s) shall give reasoned award.

Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the agreement unless they otherwise agree.

Cost of arbitration shall be equally shared between the Power Producer and Purchaser.

## 17.8 Severability

If any term, covenant or condition in the Agreement shall, to any extent, be invalid or unenforceable in any respect under Applicable Law, the remainder of the Agreement shall not be affected thereby, and each term, covenant or condition of the Agreement shall be valid and enforceable to the fullest extent permitted by Applicable Law and if appropriate, such invalid or unenforceable provision shall be modified or replaced to give effect to the underlying intent of the Parties and to the intended economic benefits of the Parties.

## 17.9 Successors and Assigns

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 130 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

This Agreement and the rights and obligations under the Agreement shall be binding upon and shall inure to the benefit of the Power Producer and Purchaser and their respective successors and permitted assigns.

### 17.10 Counterparts

This Agreement may be executed in one or more counterparts, all of which taken together shall constitute one and the same instrument.

### 17.11 Independent Service Provider

This Agreement is on a principal to principal basis between the parties hereto Nothing contained in tills Agreement shall be construed or deemed to create any association, partnership or joint venture or employer employee relationship or principal-agent relationship in any manner whatsoever between the Parties

### 17.12 Non-Exclusive Agreement

This Agreement is on non-exclusive basis. The Purchaser is free to engage any other service provider's or may entrust services similar to those provided by the Power Producer under this Agreement to any other person/s, provided the Power Producer's rights under this Agreement are not affected in any manner.

### 17.13 Entire Agreement

This Agreement constitutes the entire agreement between the Parties hereto with respect of the subject matter of this Agreement and supersedes all prior agreements and undertakings; written or oral, with respect to the subject matter hereof except as otherwise expressly provided herein. The Schedules annexed to this Agreement also form a part of this Agreement.

### 17.14 Insurance

The Power Producer shall maintain at its own costs, throughout the tenure of this Agreement and any extensions thereof all mandatory insurance coverage for adequate amount including but not restricted to comprehensive general liability insurance including theft and vandalism, covering the System and accidental losses, bodily harm, injury, death of all individuals employed/ assigned by the Power Producer to perform the services required under this Agreement.

17.15 Annual accounts reconciliation shall be conducted annually between the Power Producer and Purchaser.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 131 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

**17.16 Entire Agreement**

This Agreement constitutes the entire agreement between the Parties hereto with respect to the subject matter of this Agreement and supersedes all prior agreements and undertakings, written or oral, with respect to the subject matter hereof except as otherwise expressly provided herein. The Schedules annexed to this Agreement also form a part of this Agreement.

IN WITNESS WHEREOF the Parties have caused the Agreement to be duly

Executed through their duly authorized representatives as of the date set forth above.

FOR & ON BEHALF OF		FOR & ON BEHALF OF	
POWER PURCHASER		POWER PRODUCER	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	

WITNESSES		WITNESSES	
1)	Signature:	1)	Signature:
	Name:		Name:
	Designation		Designation

2) Signature:

2) Signature

	Name:		Name:
	Designation		Designation



रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

### **SCHEDULE-I**

Description of the Premises:

Premises Overview	
Segment	
Type of Roof	
Hours of Operation	
Security	
	<b>Capacity and Area Requirement</b>
Capacity	___ KWp
Module Area	___ Sqr. Mtr. (PV System)
Number of Building	___
Roofs	
Capacity	_____
Distribution	

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 133 of 142	बोली दाता के हस्ताक्षर
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## SCHEDULE-II

Following are the details of the tariff agreed between the parties.

Purchase shall pay power producer for solar power at the rate equal to INR \_\_\_\_ /kWh which is the levelized tariff as per <NAME OF EXPERT PSU> allocation.

Year wise tariff is as follows;

Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	
Year 7	
Year 8	
Year 9	
Year 10	
Year 11	
Year 12	
Year 13	
Year 14	
Year 15	
Year 16	

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 134 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Year 17	
Year 18	
Year 19	
Year 20	
Year 21	
Year 22	
Year 23	
Year 24	
Year 25	

The fees and payment details are provided in detail under clause 7 of this agreement.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 135 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

### **SCHEDULE III**

The following is the purchase value of the system over a period of 25 years.

This may be applicable under the following conditions.

1. The Power Purchaser terminates the PPA before the 25 years PPA Tenure.
2. The Power Purchaser wishes to own the Project before the Tenure of the PPA.
3. The Solar Project is relocated or shifted owing to demolition of the Building, damage to the building, change of city plans or any other mason.

The Price reference taken for calculating the total cost of the system is as per NIT

Rates for the state of ~~have used~~ the CERC guidelines for arriving at the Project cost.

<b>Year of Term (End of Year)</b>	<b>Calendar Year</b>	<b>Purchase Price in Crores (Rs.)</b>
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 136 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

**SCHEDULE-IV**

	Project :	KWp Solar On-Grid Power Project ____		
	Location :			
			Design Criteria	
	Expected Yearly Energy Generation Sheet			
End of	Yearly Degradation	Global incident in	Energy injected	
Year	'MWh' (Modules &	coll. Plane (GlobInc)	into grid (E_Grid)	
	System)	'kWh/Sq.mtr' Yearly	'MWh' Yearly 'A'	

Client :	Degradation consider in PV system generation data		
1.	1.0%		
2.	1.0%		
3.	1.0%		
4.	1.0%		
5.	1.0%		
6.	1.0%		
7.	1.0%		
8.	1.0%		
9.	1.0%		



रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

10.	1.0%		
11.	1.0%		
12.	1.0%		
13.	1.0%		
14.	1.0%		
15.	1.0%		
16.	1.0%		
17.	1.0%		
18.	1.0%		
19.	1.0%		
20.	1.0%		
21.	1.0%		
22.	1.0%		
23.	1.0%		
24.	1.0%		
25.	1.0%		





रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

**SCHEDULE-V**

**Government approvals**

1.To be obtained by the power producer

All approvals including approvals/consents required under local regulations, building codes and approvals required from the distribution utility etc. relating to installation and operation of the system and generation and supply of solar power from the Project.

2.To be obtained by Power Purchaser

Any authorizations required of purchaser, including those required for installation of system at the premises. Permissions and coordination with DISCOM or any related organization for NET METERING. Power Purchaser will apply for net metering and bear the cost of net meter & Security Deposit and statutory charges only.

**REMAINDER OF THE PAGE IS INTENTIONALLY LEFT BLANK**

**Purchase Price for ..... ....KWp system @ Rs.\_\_ /- Watt.**

S.No.	Year	Salvage Value (Rs.)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
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24		
25		



रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

**SCHEDULE-VI**

Both the parties shall abide by the terms of NIT issued by RAJASTHAN ELECTRONICS AND INSTRUMENTS LIMITED with NIT No: -----Dated ----- and any amendments thereto.

**SCHEDULE-VII**  
(SELECTEE)

**1. Substitution of the Power Producer:**

The lender may seek to exercise the right of substitution by an amendment or novation of the Agreement executed between Power Producer and the Purchaser in favor of the Selectee, The Purchaser and the Power Producer shall cooperate with the lender to carry out such substitution.

**2. Substitution Notice:**

Upon the occurrence and continuation of Power Producer Default and the failure by the Power Producer to cure such default within the applicable cure period specified in this Article, the Lender, upon receipt of a written advice from the Purchaser confirming such failure, shall be entitled to notify the Parties of the intention of the Lender to substitute the Power Producer by the Selectee for the residual period of this Agreement (the “Substitution Notice”).

**3. Interim Operation of Project:**

- a. On receipt of a Substitution Notice, no further action shall be taken by any Party to terminate this Agreement, except under and in accordance with the terms of this Schedule VII of this Agreement.
- b. On issue of a Substitution Notice, the Lender shall have the right to request the Purchaser to enter upon and take over the Project for the interim and till the substitution of the Selectee is complete and to otherwise take all such steps as are necessary for the continued operation and maintenance of the Project, and the Power Producer shall completely cooperate in any such takeover of the Project by the Purchaser.
- c. If the Purchaser refuses to take over the Project on request by the Lender in accordance with clause 3(b) above, the Power Producer shall have the duty and obligation to continue to operate the Project. In accordance with this Agreement till such time as the Selectee is finally substituted.
- d. The Lender and the Purchaser shall simultaneously have the right to commence the process of substitution of the Power Producer by the Selectee in accordance with these terms, and the Power Producer hereby irrevocably consents to the same.

**4. Process of Substitution of Power Producer:**

- a. The Lender may, on delivery of a Substitution Notice notify the Purchaser and the Power Producer about the Lender’s decision to invite and negotiate, at the cost of the Lender, offers from third parties to act as Selectee, either through private negotiations or public auction and / or a tender process, for the residual period of this Agreement. Subject to and upon approval of the Purchaser, such Selectee shall be entitled to receive all the rights of the Power Producer and shall undertake all the obligations of the Power Producer under this Agreement and any other Project documents executed between the Power Producer and the Purchaser, in accordance with these terms of substitution.
- b. Upon the Purchaser approving the Selectee, the Power Producer shall transfer absolutely and irrevocably, the ownership of the Project to such Selectee simultaneously with the amendment or novation of this Agreement and other Project documents executed between the Power Producer and Purchaser in favor of the Selectee.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 140 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

## Annexure-I

### Draft of Price Schedule

**Name of Project:** Implementation of 10 MWp Grid Connected Roof Top and Small Ground Mounted Solar Photovoltaic Power Plants on State/Central Government buildings & Government under taking buildings in Rajasthan, India under RESCO Model.

S No.	Plant capacity	Applied Capacity(KWp)	Levelized Tariff (Rs./kWh) for 25 years without GST	Levelized Tariff in words
1.	Above 10 KWp and up to 25 KWp			
2.	Above 25 KWp and up to 1000 KWp			

**Note:** Levelized Tariff should be mentioned in two decimal places only. Tariff shall be excluding of taxes and duties (i.e. GST) if any. GST on levelized tariff will be paid extra as per applicable norms.

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 141 of 142	बोली दाता के हस्ताक्षर
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रेस्को मॉडल के तहत, राजस्थान में राज्य/केंद्र सरकार के सरकारी भवनों और सरकारी निर्माणाधीन भवनों के लिए, 10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु

Annexure-II

## TENTATIVE POTENTIAL FOR RAJASTHAN STATE

S.No.	State	Ministry / Department	Institute/CPSE	Tentative Potential (KWp)
1	Rajasthan	Department of Animal Husbandry, Dairying & Fisheries	CCBF	250
			RFS	40
		Ministry of Information & Broadcasting	AIR	1000
			DDK HPT	75
		Ministry of Labour & Employment	DGMS	50
			ESIC	500
		Ministry of Mines	Indian Bureau of Mines (IBM)	165
		Other Sites of Rajasthan	State Govt.	3900
		Cooperative Sectors of Rajasthan	Dairy	2510
	<b>TOTAL :</b>	<b>8490</b>		

**Note:** The capacity against the department name is indicative only. These capacities may be transferred from one Location/State/ Department to another Location / State / Department after the capacity allocation is made, based on the bidder request/requirement of REIL, as per terms and conditions of NIT and/or upon approval of REIL

10 मेगावाट ग्रिड कनेक्टेड रूफ टॉप एवं छोटे ग्राउंड माउंटेड सौर ऊर्जा संयंत्रों का कार्यान्वयन हेतु ई-निविदा	निविदा नं.: REIL/BID/PROJECT /2024-25/001	पृष्ठ 142 of 142	बोली दाता के हस्ताक्षर
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