Tender Notification for

Design, supply, erection, testing and commissioning including warranty, Comprehensive operation & maintenance of SPV Plant of grid interactive rooftop solar PV power plant in BSES Rajdhani Commercial offices – Under RESCO Model.

NIT No: CMC/BR/20-21/SV/RS/KG/886 dtd 19.02.2021

BSES RAJDHANI POWER LTD (BRPL)

Corporate Identification Number: **U74899DL2001PLC111527** Telephone Number: +91 11 3009 9999 Fax Number: +91 11 2641 9833 Website: <u>www.bsesdelhi.com</u>

BSES RAJDHANI POWER LTD. BRPL BHAWAN, NEHRU PLACE, NEW DELHI Telephone No.: 011 3009 9999; Fax No: 0112641 9833 Website: www.bsesdelhi.com

<u>Request for selection of firms for Design, Supply, Erection, Testing, Commissioning,</u> <u>Operation and Maintenance of Grid interactive rooftop Solar PV Power Plant under</u> <u>RESCO Model on BSES Rajdhani Grid stations / Offices across the Discom Area.</u>

BSES Rajdhani Power Limited (hereinafter called "BRPL"), invites project developers, System Integrators and Renewable Energy Service Companies (RESCO) to participate in the Request for Selection (RfS) for design, supply, erection, testing and commissioning including warranty, comprehensive operation & maintenance (i.e. for 25 Years) of Grid Connected Roof Top Solar PV power system in BSES offices (under RESCO Model) in the NCT of Delhi.

For the implementation of above-mentioned work, Bidders should submit their bid proposal offline complete in all aspect on or before Last date of Bid Submission as mentioned Bid Information Sheet.

Bidder shall submit bid proposal, complete in all respect as per the Bid Information sheet. Techno-Commercial bids will be opened offline as per the Bid Information Sheet in presence of authorized representatives of bidders who wish to be present. Bid proposals received without the prescribed Bid Bond 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.

Bid documents which include Eligibility criteria, "Technical Specifications", various conditions of contract, formats, etc. can be downloaded from BSES website <u>www.bsesdelhi.com</u>. Any amendment(s)/corrigendum/clarifications with respect to this Bid shall be uploaded on the tender page of BSES website only. **The Bidder should regularly follow up for any Amendment/ Corrigendum/ Clarification on the above website i.e.** www.bsesdelhi.com.

Bid Information Sheet

Bid Description	The bidding process under this Rooftop scheme is for approximately 1.7 MWp under RESCO Model. Bidders meeting the technical and financial eligibility criteria set forth must bid for entire capacity of 1.7 MWp.
Broad Scope	Design, Engineering, Manufacture, Supply, Storage, Civil work, Erection (with and without elevated structure), Testing & Commissioning of the grid connected rooftop solar PV project including Operation and Maintenance (O&M) of the project for a period of 25 years under RESCO Model after commissioning of project.
	Total timeline for the above Scope of Work up to Commissioning of project is 6Months only.
Pre-Bid Conference/Clarification meeting	Pre-bid conference shall be held on 08.03.2021 at 11:00Hrs virtually. Link:
	https://meet.google.com/dig-miqt-dcy
Bid submission Deadline	15.03.2021up to 15:30 Hrs.
Date of Techno-Commercial bids opening	15.03.2021 16:00 Hrs.
Validity of Bid	6 months after the date of Techno-Commercial Bid Opening date.
Tender Fee	The Tender fee is INR 1180/- (Including GST) to be submitted as DD in favour of BSES Rajdhani Power Ltd payable at New Delhi
Bid Bond	The Bid bond proposed for the tender is:
	Bid bond amount = INR 8.5 Lacks

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Bid Process	Two Part (Techno-Commercial Bid & Price Bid) followed by E- Reverse Auction of the technically and financially qualified bidders	
Name, Designation, Address	Mr. Robin Sebastian,	
and other details	C&M Department. 1 st Floor, D-Block,	
	BSES Rajdhani Power Ltd,	
	BSES Baan, New Delhi – 110019	
	Robin.sebastian@relianceada.com	

Important Note: Prospective bidders are requested to remain updated for any notices/amendments/clarifications etc. to the RFS document through the website <u>www.bsesdelhi.com</u>. No separate notifications will be issued for such notices/ amendments/ clarification etc. in the print media or individually. All the information related to this RFS shall be updated in the BRPL website <u>www.bsesdelhi.com</u>. The sale of tender documents will be issued from 24.02.2021 onwards on all working days upto 15.03.2021. The tender documents can also be downloaded from the website <u>www.bsesdelhi.com</u>.

Definitions & Abbreviations

1.0 DEFINITIONS & ABBREVIATIONS

In this "Bid / RFS 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;
 - i. controls or
 - ii. is controlled by or
 - iii. 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 **"Appropriate Commission"** shall mean the Central Electricity Regulatory Commission referred to in section 76 of the Electricity Act or the State Electricity Regulatory Commission referred to in section 82 of the electricity Act, as the case may be.
- 1.3 **"Bid"** shall mean the Techno Commercial and Price Bid submitted by the Bidder along with all documents/credentials/attachments annexure etc., in response to this RFS, in accordance with the terms and conditions hereof.
- 1.4 **"Bidder"** shall mean Bidding Company submitting the Bid.
- 1.5 **"Bidding Company"** shall refer to such single company that has submitted the response in accordance with the provisions of this RFS.
- 1.6 **"Bid Bond"** shall mean the unconditional and irrevocable bank guarantee to be submitted along with the Bid by the Bidder under Clause of this RFS, in the prescribed Format;
- 1.7 **"Bid Deadline"** shall mean the last date and time for submission of Bid in response to this RFS as specified in Bid information Sheet;
- 1.8 **"Bid Capacity"** shall means 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 XX (XX) (Name with Designation) of BSES Rajdhani Power 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 RFS.
- 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 **"Contract Year"** shall mean the period beginning from the Effective Date and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that:
 - i. in the financial year in which the Scheduled Commissioning Date would occur, the Contract Year shall end on the date immediately before the Scheduled Commissioning Date and a new Contract Year shall commence once again from the Scheduled Commissioning Date and end on the immediately succeeding March 31, and thereafter each period of twelve (12) months commencing on April 1 and ending on March 31, and
 - ii. provided, further that the last Contract Year of this Agreement shall end on the last day of the Term of this Agreement.
- 1.15 **"Capacity Utilization Factor" (CUF)** means the ratio of the annual output of the plant in kWh versus installed plant capacity for number of days.

CUF = plant output in kWh / (installed plant capacity in kW * 365X24).

- 1.16 **"Contractor"** shall mean the successful bidder to whom contract has been award to provide services under the present tender
- 1.17 **"DNI"** means Direct Normal Irradiation.
- 1.18 **"Eligibility Criteria"** shall mean the Eligibility Criteria as set forth in Clause 3.4 of this RFS.
- 1.19 **"Financially Evaluated Entity"** shall mean the company which has been evaluated for the satisfaction of the Financial Eligibility Criteria set forth in Clause 3.4.3 hereof;
- 1.20 "**IEC**" shall mean specifications of International Electro-technical Commission;

- 1.21 **"Inter-connection point / Delivery /Metering Point"** shall mean the point at distribution voltage level where the power from the solar power Project is injected. Metering shall be done at this interconnection point where the power is injected into the Distribution System i.e. the Delivery Point. For interconnection with grid and metering, the SPD shall abide by the relevant DERC Regulations, Grid Code, Central Electricity Authority (Technical Standards for Connectivity of the Distributed Generation Resources) Regulation, 2013 and Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 as amended and revised from time to time;
- 1.22 **"kWp**" shall mean Kilo-Watt Peak;
- 1.23 "**kWh**" shall mean Kilo-Watt-hour;
- 1.24 **"Letter of Intent" or "LOI"** shall mean the letter issued by BSES Rajdhani Power Limited (BRPL) to the Selected Bidder for award of the Project.
- 1.25 **"LOA"** shall mean Letter of Allocation.
- 1.26 "**MNRE**" shall mean Ministry of New and Renewable Energy, Government of India;
- 1.27 **"Model(s)"** shall mean RESCO.
- 1.28 **"O&M**" shall mean Operation & Maintenance of Rooftop Solar PV System for a period of 25 Years for RESCO Model
- 1.29 **"PBG"** shall mean performance Guarantee
- 1.30 **"Project capacity"** means Capacity in KWp/MWp allocated to the Bidder for various locations within the state of Delhi consisting of single or multiple roof tops.
- 1.31 **"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= (Measured output in kW /Installed Plant capacity in kW * (1000 W/m²/Measured radiation intensity in W/m²).

- 1.32 **"Parent Company"** shall mean a company that holds at least twenty six percent (26%) of the paid-up equity capital directly or indirectly in the Bidding Company as the case may be;
- 1.33 **"Price Bid"** shall mean Envelope II of the Bid, containing the Bidder's quoted Page | 7

Price as per the Section- IV of this RFS;

- 1.34 **"Project Cost"** shall mean the Cost offered by the bidder for the scope of work as per the RFS document.
- 1.35 **"Qualified Bidder"** shall mean the Bidder(s) who, after evaluation of their Techno-Commercial Bids and qualified for opening and evaluation of their Price Bid;
- 1.36 "**RFS**" shall mean Request for Selection (RFS)/Bid document/ Tender Document.
- 1.37 **"Renewable energy meter"** refers to a unidirectional energy meter, installed and used solely to record the renewable energy generation from the Renewable Energy System installed at the consumer's premises;
- 1.38 **"Rooftop Owner"** shall mean Distribution Licensee, the owner of Buildings at various locations within the state of Delhi consisting of single or multiple roof tops.
- 1.39 **"Statutory Auditor"** shall mean the auditor of a Company appointed under the provisions of the Companies Act,1956 or under the provisions of any other applicable governing law;
- 1.40 **"Project Developers(s)"** shall mean the Bidder(s)selected by BRPL pursuant to this RFS for Implementation of Grid Connected Rooftop Solar PV System as per the terms of the RFS Documents, and to whom an Allocation Letter/Work Order has been issued;
- 1.41 **"Solar Power Developer (SPD)"** shall mean selected Vendor to whom the project is/are allocated.
- 1.42 **"Tendered Capacity"** shall mean the Total aggregate capacity in MW/KW indicated to the prospective bidders through this bidding process as per terms and conditions specified therein;
- 1.43 **"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 in directly under the common control of such company;
- 1.44 **"Wp"** shall mean Watt Peak;
- 1.45 **"RESCO"** shall mean Renewable Energy Service Companies.

- 1.46 **"RESCO model"** shall mean where the bidders intend to take a roof top owned by some other entity on mutually agreed terms and conditions from the roof top owner(s) and enters into the PPA with rooftop owner / DISCOM / for supply of Solar power for 25 years from the date of Commissioning of project. All the expenses towards implementation of this tender shall be completely in the scope of SPD excluding meter cost
- 1.47 **"System"** means the cumulative capacity of all sites as specified in RfS and 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.
- 1.48 **"Tariff"** shall mean the fixed tariff offered by the bidder for 25 years.
- 1.49 "Limited Liability Partnership (LLP)" shall mean Limited Liability Partnership as per Limited Liability Partnership Act 2008. "Scheduled Commissioning Date" means 6 (six) months from the date of issuance of LOA
- 1.50 **"Unit/Part Commissioning"** means part commissioning of the System as per the test procedure and acceptance of commissioning certificate by the Power Purchaser "System" means the cumulative capacity of all sites as specified in RFS and 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.

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.

DISCLAIMER

- 1. Though adequate care has been taken while preparing the RfS document, the Bidders shall satisfy them that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within fifteen (15) days from the date of notification of RfS / Issue of the RFS document, it shall be considered that the RfS document is complete in all respects and has been received by the Bidder.
- 2. BSES Rajdhani Power Limited (BRPL) reserves the right to modify, amend or supplement this RFS document.
- 3. While this RFS has been prepared in good faith, neither BRPL nor their employees 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 RFS, even if any loss or damage is caused by any act or omission on their part.

Place: New Delhi Date:_____

INDEX:

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Section No.	CONTENTS
Section-I	A:Introduction, Bid details and instructions to the Bidders
	B:ConditionsofContract
Section-II	Evaluation Criteria
Section-III	Technical Specifications
Section-IV	Price Bids(To be submitted offline only)
Format A	PRICE BID - FORMAT A1 & FORMAT A2
Section - V	Formats for Submitting RFS & Checklist
Format-1	Covering Letter
Format-2	General Particulars of the bidder
Format-3	Performa for bank guarantee for bid bond
Format-4	Format for performance bank guarantee
Format-5	Check list for bank guarantees
Format-6	Power of attorney
Format-7	Financial eligibility criteria requirement
Format-8	Format for certificate of relationship of Parent Company or Affiliate with the Bidding Company
Format-9	Undertaking from the Financially Evaluated Entity or its Parent Company/ Ultimate Parent Company
Format-10	Share Holding certificate
Section-VI	Annexure (A to O)
Annexure A	Documents required for Project Approval
Annexure B	List of Banks
Annexure C	Guidelines for O&M
Annexure D	Quality Certification, Standards and Testing for Grid-connected Rooftop Solar PV Systems/Power Plants
Annexure E	Project Report Format

Annexure F	Declaration for Authorization
Annexure G	Monthly O&M report
Annexure H	Project Completion Report for Grid-Connected Rooftop
Annexure I	Checklist for Documents against Completion of Project
Annexure J	Joint Commissioning Report (JCR)
Annexure K	Typical parameters of dash board
Annexure L	Check list for Envelope III (Bid Bond and other Documents)
Annexure M	Check list for Envelope I (Technical)
Annexure N	Check list for Envelope II (Price Bid)
Annexure O	Model RESCO PPA Agreement (for RESCO)

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Section-I

A: Introduction, Bid details and instructions to the Bidders

B: Conditions of Contract

A.INTRODUCTION, BID DETAILSAND INSTRUCTIONS TO THE BIDDERS

1. INTRODUCTION

- 1.1 BSES Rajdhani Power Limited (BRPL) distributes power to an area spread over 750 sq. km with a customer density of ~3100 per sq km. and catering to around over 2.55 million customers. The peak power demand in June summers due to heat wave in the BRPL area reached 3211 MW in 2019 and 2720 MW in 2020. BRPL being a progressive utility is making all efforts to increase the share of Renewable Power in the Power Portfolio and also meet the Renewable Purchase Obligation set by the Honourable Delhi Electricity Regulatory Commission (DERC).
- 1.2 BRPL has envisaged a cumulative capacity of approximately 1.7 MW grid interactive Rooftop power plants in BRPL offices across Delhi under RESCO Model.

For identification of projects, BRPL has pre-identified the sites and tentative capacity that can be installed on these rooftops. However, the entire responsibility of reevaluating the capacity, getting necessary approvals and installing the systems will be the responsibility of the Vendor.

- 1.3 BRPL invites the bids from eligible bidders to participate in Request for Proposal (RFP) for selection of vendor for site survey, design, installation, supply, erection, testing and commissioning including warranty, operation and maintenance of roof top solar PV Power System for BRPL offices under RESCO category.
- 1.4 This RFP is not an agreement and further it is neither an offer nor an invitation by BRPL to bidders or any other person. The purpose of this RFP is to provide bidders with information that may be useful to them in preparation and submission of their bids.
- 1.5 BRPL, which expression shall also include its successors and permitted assigns, hereby invites interested companies to participate in the bidding process for the selection of vendor for implementation of grid-connected roof top Solar Photovoltaic Projects for aggregate capacity of approximately 1.7 MW under RESCO Model as per RFS.
- 1.6 The bidder, who is techno-commercially qualified, shall be selected who wish to provide their services on lowest fixed tariff discovered through bidding. The tenure for completion of the projects shall be six months from the date of letter of Allocation issued by BRPL. BRPL at its sole discretion and as per the requirement may extend the tenure of selected bidder.
- 1.7 The Bidder is advised to read carefully all instructions and conditions appearing in this Page | 14

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. This RFP includes statements which reflect various assumptions and assessments arrived at by BRPL and its advisers. Such assumptions assessments and statements do not purport to contain all the information that bidders may require. The information contained in this RFP may not be appropriate for all persons and it is not possible for BRPL and its employees or advisors to consider the data requirements investment objectives financial situation and particular needs of each person who reads this RFP. The assumptions assessment statements and information contained in this RFP may not be complete accurate adequate or correct.

- 1.8 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.
- 1.9 Except as provided in the RFP, BRPL and its employees and advisers make no representation or warranty and shall have no liability to any person, including any bidder, under any law statute rules or regulations or tort or otherwise for any loss damage cost or expense which may arise from or that may be incurred or suffered on account of anything contained in this RFP including the accuracy adequacy correctness completeness or reliability of this RFP and any assessment assumption statement or information contained in this RFP or deemed to be part of this RFP or arising in anyway.
- 1.10 It shall be deemed that by submitting a bid a bidder agrees to release BRPL and its employees agents and advisors irrevocably unconditionally fully and finally from any and all liability for any claims losses damages costs expenses or liabilities in anyway related to or arising from exercise of any rights and all performance of any obligations under this RFP and/ or in connection with the bid process to the fullest extent permitted by applicable law and waives any and all rights and all claims it may have in this respect whether actual or contingent whether present or in the future
- 1.11 BRPL and its employees and advisors also accept no liability of any nature whether resulting from negligence or otherwise arising from reliance of any bidder upon the contents of this RFP. BRPL in his absolute discretion but without being under any

obligation to do so update amend or supplement the information assessment statement or assumptions contained in this RFP

1.12 The issue of this tender document does not imply that BRPL is bound to qualify any bidder or to award the contract to any bidder. BRPL reserves the right to reject all or any of the bids without assigning any reasons whatsoever.

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2.0 BID DETAILS:

2.1 The bidding process under this scheme is as under:

RESCO Mode: Aggregate Capacity 1.7 MW (Approximately)

S. No.	Grid Name	Circle	Rooftop Capacity with Non- Elevated structure (kWp)	Ground- mounted capacity with Elevated structure (kWp)	Tentative Total Solar Capacity (kWp)
1	C-DOT	S-2	54.45	76.23	130.68
2	PALAM 66kV	S-2	51.4	50.16	101.56
3	VASANT KUNJ INSTITUTIONAL AREA	S-2	59.4	181.5	240.9
4	VASANT KUNJ C- BLOCK	S-2	97.02		97.02
5	PASCHIM VIHAR	W-1	68.64		68.64
6	VISHAL	W-1	61.38		61.38
7	BINDAPUR	W-2	108.9		108.9
8	PAPANKALAN G-5	W-2	82.5		82.5
9	PAPANKALAN G-6	W-2	97.02		97.02
10	MATHURA ROAD	S-1	101.64		101.64

Table no. 1

S. No.	Grid Name	Circle	Rooftop Capacity with Non- Elevated structure (kWp)	Ground- mounted capacity with Elevated structure (kWp)	Tentative Total Solar Capacity (kWp)
11	SARITA VIHAR	S-1	62.7	94.38	157.08
12	OKHLA PHASE - 1	S-3	72.6	47.52	120.12
13	BODELLA - 2	W-1	67.32		67.32
14	NANGLOI WATER WORKS	W-1	93.72		93.72
15	SHIVALIK and associated buildings	S-1	40		
16	BALAJI	S-1	50		50
17	BSES, Head Office, Nehru Place	S-1	50		50
			1218.69	449.79	1668.48

Bids are invited from the prospective bidders for the Tendered Capacity. Bidders will be required to furnish fixed tariff for 25 years starting from the date of commissioning of the Project uniformly for 25 years. The bidder has to quote for total aggregate capacity of approximately 1.7MW for all the **below 3 options**:

- a) Package Tariff for Solar plant installation with elevated structure of 3 meters for ground mounted plants and structure limited to 1 meter for rooftop installation as per the table no 1 in Clause no. 2.
- b) Tariff for Solar plant installation with elevated structure of 3 meters height on ground mounted as well as rooftop installations
- c) Tariff for Solar plant installation with structure height limited to 1 meter height for Page | 18

both ground mounted and rooftop installations.

The quoted tariff should be up to 2 decimal places.

2.2 Bids not in conformity with below provisions & sub-clauses of **Clause 2.0** will not be considered.

2.3 SIZE OF THE PROJECTS:

2.3.0 The size of each project shall be in the range for each part as under:

The total aggregate capacity is spread across multiple offices of different capacity. Each office may however comprise of several rooftop units. Each roof top unit can separately connect with the grid if they have separate meters.

- 2.3.1 Further, selected vendor to whom letter of allocation has been issued will be issued a single Load of all the projects.
- 2.3.2 The bidders can only quote for the total aggregate capacity of 1.7 MW.

3.0 INSTRUCTIONS TO THE BIDDERS

3.1 Bidder shall not be blacklisted from Ministry of Corporate Affair or any other Government bodies/PSUs/BRPL/Any other DISCOMs etc.

Bidder shall have valid PAN & GST Registration Numbers as per statutory requirement.

Bidder shall furnish General particulars of bidders as per Format-2.

Note: If the bidder's submitted information is found to be false declaration or misrepresentation, the bidder(s) offers shall be out rightly rejected or debarred or blacklisted from BRPL's future tenders.

- 3.2 Bidder must meet the eligibility criteria. Bidder will be declared as a Qualified Bidder based on meeting the eligibility criteria and as demonstrated based on documentary evidence submitted by the Bidder in the Bid.
- 3.2.1 Technical and Financial Consortium **is not allowed in** this Bidding Process. Further in-case where the bidding company (Affiliate) has used the financial eligibility criteria of its parent company then it needs to be ensured that no change in the controlling equity of the Bidding Company is done before 2 years from the date of commissioning

of the sanctioned capacity requires prior approval of BRPL.

Bidders may form the Project Company as specified in **Clause 3.5**.

3.2.2 Bidder can however use the technical and financial strength of its Parent Company to fulfill the Technical and/or Financial Eligibility criteria. In such case, Bidders shall submit an Undertaking from the Parent Company as per **Format - 9** and also furnish a certificate of relationship of Parent Company or Affiliate with the Bidding Company as per **Format-8**, Company Secretary certificate towards shareholding pattern of the Parent Company and the Bidding Company along with a Board resolution from the Parent Company.

3.3 TENDER

SPECIAL INSTRUCTIONS TO BIDDERS FOR TENDERING - GENERAL

The Special Instructions supplement Section 3.2 'Instruction to Bidders', as given in this Request for Selection (RFS) Document. All bids are to be submitted to BRPL office. There is no provision of online submission of the bids by the bidders.

Instructions

Tender Bidding Methodology: Techno Commercial bid opening followed by Financial Bid opening.

Broad Outline of Activities from Bidder's Perspective:

View 'Request for Selection (RFS)' on BRPL Portal

Download Official Copy of Tender Documents from BRPL Portal Clarification to Tender Documents on BRPL Portal Query to BRPL (directly through the email mentioned in the RFS) Bid-Submission in BRPL Offices (Address mentioned in the Bid Information Sheet) Respond to BRPL Post-Bid queries

Submission of Bid-Parts

- i. Envelope I (Technical-Bid)
- ii. Envelope II (Financial-Bid)

iii. Envelope III (submission of other offline documents)

The bidders are required to put the three Envelopes in a single envelope (Envelope IV). Each Envelope should clearly mention the heading of the envelope. The bidders

are required to submit the following documents physically in a Sealed Envelope III, failing which the technical bids will not be opened.

- a) Tender Document Fee in form of a Demand Draft in favor of "BSES Rajdhani Power Ltd", payable at New Delhi.
- b) Covering Letter as per the format given in Tender document.
- c) Original Copy of the Bid Bond/EMD in the form of a Bank Guarantee.
- d) Original Power-of-Attorney supplemented with Board resolutions
- e) DD/Banker's Cheque for Bid Security amount, drawn in favour of "BRPL", New Delhi, payable at New Delhi
- f) General Particulars of the bidder as per Format-2.

Contact Persons Name: Mr. Robin Sebastian (AVP), Head C&M department

The envelope shall bear {the name of State(s) and Capacity}, the RFS No. and the words 'DO NOT OPEN BEFORE' (due date & time).

Other Instructions

For further instructions, the vendor should visit the tender page of the BRPL website. The clarifications, Corrigendum, etc., related to the tender shall be uploaded on BRPL website.

3.4 ELIGIBILITY CRITERIA

3.4.1 General, Technical and Financial Eligibility:

GENERAL CONDITION:

Bidder should have one of the following:

The Bidder should be either a body incorporated in India under the Companies Act, 1956 or 2013 including any amendment thereto and engaged in the business of Solar Power.

Limited liability partnership firm.

Bidder should have valid PAN & GST registration certificate.

a. The Bidder shall submit an undertaking "No Litigation" is pending for the company and in case of any running litigation details and value to be provided (as per attached format)

b. An undertaking (self-certificate) that the bidder has not been blacklisted/ debarred by any central/ state government institution including electricity utilities.

TECHNICAL ELIGIBILITY CRITERIA:

Bidder should have designed, supplied, installed & commissioned at Grid connected Solar PV Power Projects having aggregate capacity not less than 200 KWp and at least one single project of minimum 50 KWp which should have been commissioned prior to Techno-Commercial Bid Opening date. Vendor has to submit scanned copy of the Commissioning certificate and Work order/ Contract/ Agreement/ from the Client/ Owner shall be submitted.

FINANCIAL ELIGIBILITY CRITERIA:

Bidder should have an Annual Turnover as indicated below:

The Average Annual turnover of the bidder shall be Rupees 3.0 Crores in the last 3 financial years ending FY 2019-20. Duly certified CA certificate along with 3 FY Balance sheets shall be provided by the Bidder.

For the purposes of meeting financial requirements, only unconsolidated audited annual accounts shall be used. However, audited consolidated annual accounts of the Bidder may be used for the purpose of financial requirements provided the Bidder has at least twenty six percent (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.

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.

3.5 **INCORPORATION OF AP ROJECT COMPANY**

- 3.5.1 In case the Bidder wishes to incorporate a Project Company, in such a case Bidder if selected 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.
- 3.5.2 The aggregate equity share holding of the selected vendor 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 Five (5) years from the date of commissioning of the entire Sanctioned Capacity of the Project Developer.

3.6 **BID SUBMISSION BY THE BIDDER**

3.6.1 The information and/or documents shall be submitted by the Bidder as per the formats specified in **Section-IV** & **Section-V** of this document.

- 3.6.2 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.
- 3.6.3 The Bidder shall furnish documentary evidence in support of meeting Eligibility Criteria as indicated in Clauses to the satisfaction of BRPL. Bidder shall also furnish unconsolidated/ 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 .
- 3.6.4 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. 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; for which the Audited Annual Report is not being provided.

Offline submission of documents:

In addition to the above, the bidders are required to submit the following documents physically offline also in a Sealed Envelope, failing which the technical bids will not be opened.

Envelope I (Technical Bid)

- 1. Proof of Technical eligibility criterion
- 2. Financial eligibility criterion (as per **format -7**).
- 3. Certificate for certificate of relationship of Parent Company or Affiliate with the Bidding Company (as per **Format -8**), if required.
- 4. Undertaking from the Financially Evaluated Entity or its Parent Company/ Ultimate Parent Company (as per **Format -9**), if required.
- 5. Share Holding certificate (as per **format -11**).
- 6. Self Declaration, as per **annexure-F**.

Envelope II (Financial Bid/ Price Bid)

1. Price Bid in the format provided in the RfP

Note: The three envelopes should be properly sealed with the titles Envelope I (Technical Bid),

Envelope II (Financial Bid/Price) Envelope III (Bid Bond) respectively and be placed in a larger envelope and addressed to Mr. Robin Sebastian, AVP (C&M), BSES Bhawan, New Delhi-110 019 super scribed with following:

- 1. NIT NO CMC/BR/20-21/SV/RS/KG/886
- 2. Offer for installation of Solar Power Plant under "Grid Connected Rooftop Solar Power Plant Scheme" under RESCO Model.
- 3. Name and address of the firm.

Envelope III (Other document including Bid Bond and Tender fee):

- 1. Covering letter as per **Format-1**.
- 2. General Particulars as per **Format-2**.
- 3. Original copy of the Bid Bond as per **Format -3** in the form of a Bank Guarantee/ DD. Check list as per **Format-5**.
- 4. Original Power of Attorney supplemented with Board resolutions. The sole proprietors have to produce a self-declaration.
- 5. Tender Fee in form of Demand Draft drawn in favour of BSES Rajdhani Power Ltd, payable at New Delhi

Time schedule of the bidding process

S.No.	Steps	Activity description	Due date
1.	Technical Queries	All Queries related to RfQ	On or before 10.03.2021 1500 Hrs
2.	Technical Offer	Documentary evidence in support of qualifying criteria. Technical Literature/ GTP/ Drawings/ Type test report, if any, etc., Testing facilities, any other relevant document, acceptance to commercial terms & conditions viz. delivery Schedule/ Period, Payment terms, PBG etc. Quality assurance plan, Deviation from the specification, list of plant & machinery and testing equipments Unpriced items.	
3.	Price Bid	Quoted Tariff	After Technical Evaluation and only for Technically qualified bidders
4.	Opening of Technical	As per RfP	As per Date and time given on Bid
			Dece 24

	bid		information	
			sheet	
4.	E-Reverse	As per RfP	Shall	be
	Auction		communicated at	
			a later stage	

3.7 BID SUBMITTED BY A BIDDING COMPANY

The Bidding Company should designate one person to represent the Bidding Company in its dealings with BRPL. 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.

3.8 CLARIFICATIONS AND PRE-BID MEETING

- 3.8.1 BRPL will not enter into any correspondence with the Bidders, except to furnish clarifications on RFS Documents, if necessary. The Bidders may seek clarifications or suggest amendments to RFS online, also soft copy by e-mail to reach BRPL at the address, date and time mentioned in Bid information sheet.
- 3.8.2 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 BRPL.
- 3.8.3 The purpose of the pre-bid meeting will be to clarify any issues regarding the RFS, including in particular, issues raised in writing and submitted by the Bidders. Bidders are requested to submit their questions regarding the RFS or the bidding process after review of this RFS. BRPL response to the questions raised by various bidders will be distributed to all the participating bidders through website.

BRPL is not under any obligation to entertain/ respond to suggestions made or to incorporate modifications sought for.

3.9 AMENDMENTS TO RFS BY BRPL

- 3.9.1 At any time prior to the deadline for submission of Bids, BRPL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFS document by issuing clarification(s) and/or amendment(s).
- 3.9.2 The clarification(s)/ amendment(s) (if any) may be notified on BRPL website www.bsesdelhi.com at least Two (2) days before the proposed date of submission of the Bid.

- 3.9.3 BRPL 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.
- 3.9.4 In case any amendment is notified after submission of the Bid (prior to the opening of Techno-Commercial Bid due date /time shall be extended and it will be for the Bidders to submit fresh Bids/supplementary bids as the date notified by the BRPL for the purpose.
- 3.9.5 All the notices related to this Bid which are required to be publicized shall be uploaded on <u>www.bsesdelhi.com</u>.

3.10 BIDDING PROCESS

3.10.1 BID FORMAT

- 3.10.1.1 The tender is uploaded in a single part of aggregated capacity 1.7 MW. The bidder(s) shall submit offline documents for each part.
- 3.10.1.2 The Bid in response to this RFS shall be submitted by the Bidders in the manner provided in **Clause 3.6 & Clause 3.10.1.1** of Section-I. The Bid shall comprise of the following:

(A) ENVELOPE-I (COVERING LETTER, BID BONDS etc) (TO BE SUBMITTED OFFLINE).

- 1. Covering letter as per Format-1.
- 2. General Particulars as per Format-2.
- 3. Original copy of the Bid Bond as per Format -3 in the form of a Bank Guarantee/ DD.
- 4. Original Power of Attorney supplemented with Board resolutions for Companies and Declaration for Sole Proprietor. (as per Format-6)
- 5. Financial eligibility criterion (as per format -7).
- 6. Certificate for certificate of relationship of Parent Company or Affiliate with the Bidding Company (as per Format -8), if required.
- 7. Undertaking from the Financially Evaluated Entity or its Parent Company/ Ultimate Parent Company (as per Format -9), if required.
- 8. Share Holding certificate (as per format -11).
- 9. Self Declaration, as per annexure-F for Sole Proprietor.

(B) ENVELOPE II (TECHNO-COMMERCIAL DOCUMENTS) (TO BE SUBMITTED OFFLINE)

- 1. Certificate of incorporation and updated Memorandum of Association (MoA).
- Declaration on bidder's letterhead for non-blacklisting from any Government department. / PSU/ SEB's/ BRPL.
- 3. PAN& GST registration.
- 4. Declaration on bidder's letterhead mentioning "No Litigation" is pending for the company

and in case of any running litigation, details and value to be provided (as per attached format)

- 5. For meeting technical eligibility criterion: scanned copy of the Commissioning certificate and Work order/ Contract/ Agreement/ from the Client/ Owner.
- 6. For meeting financial eligibility criterion: scanned copy of CA certificate and Balance sheets showing Annual Turnover.
- 7. Acceptance of RFS terms and conditions including amendments & clarification on letter head of the bidder.

(C) ENVELOPE II PRICE BID(S) AS PER SECTION-IV (TO BE SUBMITTED OFFLINE)

- i.) The Bidder shall submit Price Bid for in the Format given this RfP.
- ii.) Only price bids that are placed in ENVELOPE II shall be considered.

3.11 BID DUE DATE

The Bidder should submit the offline Bid documents so as to reach the address indicated below by on or before 15.03.2021 by 15:30 Hrs.

Head of the Department, 1st Floor, 'C' Block, Contracts & Material Department, BSES Rajdhani Power Ltd, BSES BHAWAN, Nehru Place, New Delhi - 110019

3.12 VALIDITY OF BID

- 3.12.1 The bid and the Price Schedule included shall remain valid for a period of 12 months 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 cancelling his offer or varying any term & conditions in regard thereof or not accepting letter of allocation, BRPL shall forfeit the Bid Bond furnished by him. Confirmation regarding the Bid offer validity shall be clearly mentioned in the covering letter. Bidders shall submit Bids, which comply with the bidding documents. Alternative bids will not be considered. Each bidder shall submit only one bid. A bidder who submits or participate in more than one bid will cause all those bids to be rejected.
- 3.12.2 BRPL shall provide the Letter of Allocation to L1 bidder subject to DERC approval and in exceptional circumstances when letter of allocation is not issued, the BRPL 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 provided under **Clause 3.14** 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.

3.12.3 METHOD OF BID SUBMISSION

- 3.12.3.1 Bids are required to be submitted in the offline mode only. The offline documents are to be submitted in a single sealed cover envelope containing Envelope-I, Envelope-II and Envelope-III (as referred under **Clause 3.10** above). It should be duly sealed and signed.
- 3.12.3.2 The envelope should be super scribed as **"Offline Documents for selection of vendor for Implementation of Grid connected Roof Top Solar PV System Under RESCO Model for1.7 MWp capacity"** along with the details of RFS No., "BID DUE DATE", Validity of Bid on the envelope.
- 3.12.3.3 The Bidders have the option of sending their Offline Documents either by registered post; or speed post; or courier; or by hand delivery, so as to reach before the Bid Deadline. Documents submitted by telex/telegram/fax/e-mail shall not be considered under any circumstances. BRPL 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 Envelope I and Envelope III shall not contain any information/document relating to Price Bid. BRPL shall not be responsible for premature opening of the Price Bids in case of non-compliance of above.
- 3.12.3.4 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 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 BRPL.
- 3.12.3.5 If the envelope (Covering Envelope) is not enclosed and not super scribed as per the specified requirement, BRPL will assume no responsibility for the Bid's misplacement or premature opening.

3.13 COST OF BIDDING

3.13.1 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 BRPL may elect to modify / withdraw the invitation of Bid.

3.14 BID BOND

The Bidder shall furnish Interest free Bid Bond in the form of Bank Guarantee (BG) / Demand Draft drawn in favor of "BSES Rajdhani Power Ltd", payable at New Delhi. The validity of Bid Bond shall be for a period of 12 months + 3 months claim period from the Bid Deadline. The Bid Bond of unsuccessful bidders shall be returned within 30 days from the date of issue of Letter of Allocation(s) on bidder's request. Bid bond(s) of Selected Vendor shall be released after the receipt of PBG in the format prescribed by BRPL and after the receipt of confirmation of their PBG's from their respective banker. The applicable Bid Bond to participate in the tender is as follows:

Bid Bond amount = INR 8.5 Lakhs.

- 3.14.1 The Bid Bond 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 a List of banks as given in **Annexure-B**.
 - ii. be submitted in its original form; copies will not be accepted; and remain valid for a minimum period of 12_months + 3 months claim period from the date of Techno Commercial bid opening, or beyond any period of extension subsequently requested under Clause 3.12.2.
- 3.14.2 Selected Vendors shall sign and stamp the Letter of allocation and return the signed & stamped duplicate copy of the same to BRPL within 30 days from the date of its issue.
- 3.14.3 The Bid Bond shall be forfeited without prejudice to the Bidder being liable for any further consequential loss or damage incurred to BRPL under following circumstances:
 - 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 RFS document and in accordance with the **Clause 3.12.2** of Section-I.
 - b. Hundred percent (100%) of Bid Bond amount of the proposed capacity, if the Selected Vendor fails to unconditionally accept the Allocation letter within 30 days from the date of its issue.
 - c. Hundred percent (100%) of Bid Bond amount of the proposed capacity, if the Selected Vendor fails to furnish the "Performance Security" after 60 days of issue of allocation letter.

3.15 PERFORMANCE SECURITY/PERFORMANCE BANK GUARANTEE (PBG)

3.15.1 Performance security for Erection Phase:

For Erection phase to BRPL= INR 12Lakhs per MWp

The PBG shall be submitted within 60 days from the date of issue of allocation letter and be valid for 01 year + 3 months.

- 3.15.2 Further, any delay in submission of PBG for erection period beyond 60 days, BRPL at its sole discretion may cancel the allocated capacity and forfeit 100% of Bid bond. Such Vendor (who has not submitted PBG) shall be debarred from participating in BRPLs future tenders for a period as decided by Competent Authority. Part PBG shall not be accepted.
- 3.15.3 The Performance security/ Performance Bank Guarantee shall be denominated in Indian Rupees and shall be in the following forms:

Bank guarantee shall be from the List of banks as given in **Annexure-B.**

- 3.15.4 The PBG for erection shall be forfeited as follows without prejudice to the Bidder being liable for any further consequential loss or damage incurred to BRPL.
 - a. If the Selected Vendor is not able to commission the projects to the satisfaction of BRPL, PBG amount, pro-rata to the capacity not commissioned by the Selected Vendor. However, Hundred percent (100%) PBG amount furnished for the Allocated Capacity, if the Selected Vendor fails to Commission the Projects(s) to the satisfaction of BRPL, for the already identified locations, which are notified by BRPL in the RFS or otherwise and for which Allocation letter/Sanction letter has been issued.
 - b. In all the above cases corresponding unidentified/non-commissioned capacity shall stand cancelled.
- 3.15.5 The Performance Security for erection shall be valid for a minimum period of 1 year + 3 months claim period. The Performance security for erection shall be released after commissioning of the plants with the compliance of entire obligations in the contract.

3.16 OPENING OF BIDS

3.16.1 Offline Document Envelope (Envelope-III), of the Bidders shall be opened at 15:30 hours on Bid Deadline date at the venue indicated herein above, in the presence of one representative from each of the Bidders who wish to be present.

The bidders are required to submit the offline documents in a Sealed Envelope as per **clause 3.10** above, failing which the Technical bids (Envelope-I) will not be

opened.

3.16.2 Name of the Bidder along with other details shall be read out to all the Bidders at the time of opening of Envelope.

3.17 RIGHT TO WITHDRAW THE RFS AND TO REJECT ANY BID

- 3.17.1 This RFS may be withdrawn or cancelled by the BRPL at any time without assigning any reasons thereof. BRPL 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.
- 3.17.2 BRPL reserve the right to interpret the Bid submitted by the Bidder in accordance with the provisions of the RFS and make its own judgment regarding the interpretation of the same. In this regard the BRPL shall have no liability towards any Bidder and no Bidder shall have any recourse to the BRPL with respect to the selection process. BRPL shall evaluate the Bids using the evaluation process specified in Section -I, at its sole discretion. BRPL decision in this regard shall be final and binding on the Bidders.
- 3.17.3 BRPL 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 BRPL will be full and final.
- 3.17.4 Tender will be summarily rejected if: Earnest Money Deposit (EMD) of INR 8.5 Lacs is not deposited in shape of a demand draft in favor of BSES Rajdhani Power Ltd, payable at New Delhi or Bank Guarantee executed in favour of BSES Rajdhani Power Ltd
- 3.17.5 The offer does not contain "FOR, New Delhi price indicating break-up towards all taxes and duties".
- 3.17.6 Complete technical details are not enclosed
- 3.17.7 Tender is received after due time due to any reason

3.18 ZERO DEVIATION

3.18.1 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.

3.19 EXAMINATION OF BID DOCUMENT

3.19.1 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.

- 3.19.2 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 labor involved etc. and as to all supplies he has to complete in accordance with the Bid document.
- 3.19.3 Bidder is advised to submit the bid on the basis of conditions stipulated in the Bid Document. Bidder's standard terms and conditions if any will not be considered. The cancellation / alteration / amendment / modification in Bid documents shall not be accepted by BRPL.
- 3.19.4 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.
- 3.19.5 BRPL intends to award the project on a lowest bid basis, so vendors are encouraged to bid competitively.
- 3.19.6 In case any supplier is found unsatisfactory during the delivery process, the award will be cancelled and BRPL reserves the right to award other suppliers who are found fit.
- 3.19.7 Quantity Variation BRPL reserves the rights to vary the aggregated capacity by +/-30% of the tendered capacity.

GENERAL CONDITIONS OF CONTRACT (GCC)

3.20 SCOPE OF WORK

3.20.1 The Scope of work for the bidder include prefeasibility of Identified buildings/ PPA agreement for 25 years, Obtaining No Objection Certificate (NOC)" from Distribution Company (DISCOM) for grid connectivity, complete design, engineering, manufacture, supply, storage, civil work, erection (with or without elevated structure), testing & commissioning of the grid connected rooftop solar PV project including operation and maintenance (O&M) of the project for a period of 25 years under RESCO Model after commissioning of the projects as per BRPL's acceptance.Power procurement under the contract to be awarded by this bidding process is subject to approval of the Appropriate Commission.

3.21 FIXEDTARIFF

- 3.21.1 **Fixed 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, 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.
- 3.21.2 **Fixed Tariff** quoted for is on turnkey basis and the bidder is responsible for the total Scope of work described at **Clause 3.20.1** above.
- 3.21.3 **Fixed 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.
- 3.21.4 **Fixed Tariff** shall be inclusive of all duties and taxes, insurance etc. The prices quoted by the firm shall be complete in all respect and no price variation /adjustment shall be payable by BRPL. However, statutory variation of taxes and duties may be paid by the roof top owner.
- 3.21.5 Operation & Maintenance of Solar PV 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.

- 3.21.6 **Fixed Tariff** shall be specified in letter of Award and letter of Intent based on Selected Vendor's quote. The Fixed tariff shall be in accordance with all terms, conditions, specifications and other conditions of the Contract as accepted by the BRPL and incorporated into the letter.
- 3.21.7 The Bidder shall complete the Price Bid as per applicable **Formats** only (Section-IV) furnished in the RFS Documents.
- 3.21.8 The Bidder shall provide the separate price bid for all the below 3 options:
 - a) Package Tariff for Solar plant installation with elevated structure of 3 meters for ground mounted plants and structure limited to 1 meter for rooftop installation as per the table no 1 in Clause no. 2.
 - b) Tariff for Solar plant installation with elevated structure of 3 meters height on ground mounted as well as rooftop installations
 - c) Tariff for Solar plant installation with structure height limited to 1 meter height for both ground mounted and rooftop installations.

BRPL reserves the right to place the LOA for either of the three options, subject to the approval of the Appropriate Commission.

3.22 INSURANCE

- 3.22.1 The selected vendor shall be responsible and take an Insurance Policy for transitcum- storage-cum-erection for all the materials to cover all risks and liabilities for supply and storage of materials at site, erection, testing and commissioning.
- 3.22.2 Before commencement of work, the Selected Vendor 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. The Selected Vendor 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.
- 3.22.3 The bidder shall also take appropriate insurance during O&M period.
- 3.22.4 The Insurance covers as mentioned in clause no. 3.22.1, 3.22.2 & 3.22.3 are mandatory and in case of any violation of not taking Insurance Cover may result in cancellation of the allotment.

3.23 WARRANTEES AND GUARANTEES

For all sites:

1. The Bidder shall warrant that the goods supplied under this Agreement are new, unused, of the most recent or latest technology and incorporate all recent improvements in design and materials as per standards specified in the technical specifications of this RFP. The Power Producer shall provide warranty covering the rectification of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of twenty five (25) Operational Years.

3.24 TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP

- 3.24.1 The design, engineering, manufacture, supply, installation, testing and performance of the equipment shall be in accordance with latest appropriate IEC/ Indian Standards (BIS) as detailed in the Section- III (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.
- 3.24.2 The specifications of the components should meet the technical specifications mentioned in Section III.
- 3.24.3 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 by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV plant.

3.25 OPERATION & MAINTENANCE (O&M) GUIDELINES TO BE MANDATORILY FOLLOWED BY BIDDERS.

- 3.25.1 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 under RESCO Model from the date of commissioning of the plant.
- 3.25.2 The below mentioned guidelines, shall be followed for the projects. In addition, O&M practices shall be strictly followed as per **Annexure C**.
- 3.25.3 O&M of Solar Power Plant shall be compliant with grid requirements to achieve committed energy generation.
- 3.25.4 Deputation of qualified and experienced engineer/ technicians till the O&M period at project site as & when required.
- 3.25.5 Fortnightly cleaning of solar modules.
- 3.25.6 Quarterly checks of the Modules, PCUs and BoS shall be carried out as a part of routine preventive and breakdown maintenance.

- 3.25.7 Immediate replacement of defective Modules, Invertors/PCUs and other equipment as and when required.
- 3.25.8 Supply of all spares, consumables and fixtures as required. Such stock shall be maintained for all associated equipment and materials as per manufacturer/ supplier's recommendations.
- 3.25.9 The entire equipment testing instrument required for Testing, Commissioning and O&M for the healthy operation of the Plant shall be maintained by the Bidder. The testing equipments must be calibrated once every 2 years from NABL accredited labs and the certificate of calibration must be kept for reference as required.
- 3.25.10 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.
- 3.25.11 Co-ordination with BRPL 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 as per billing cycle. Furnishing generation data (JMR) each month to BRPL positively by 1st week of every month for the previous month. Failure to adhere may result in non-disbursal of PBG.
- 3.25.12 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 maintenance, reasons for the breakdown, duration of the breakdown, steps taken to attend the breakdown, etc.
- 3.25.13 If any jobs covered in O&M Scope as per RFS are not carried out by the contractor/ Bidders during the O&M period, the Engineer-In-Charge shall take appropriate action as deemed fit. BRPL 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.
- 3.25.14 The SPDs should have their service network in or around Delhi, within a radius of 50 Kms and shall provide address of service center in O&M manual.
- 3.25.15 The bidder shall use the original parts in case of any fault in the PCU/Inverter during the AMC period of 25 years. In case the original part/parts are not available with the manufacturer of the PCU/Inverter (Based on certificate from the manufacturer), the bidder shall use the new parts of other standard brands available in the market or will use the repaired parts.

3.26 METERING AND GRID CONNECTIVITY

3.26.1 Metering and grid connectivity of the roof top solar PV system under this scheme would be the responsibility of the Selected Vendor in accordance with the prevailing guidelines of the concerned DISCOM and / DERC or CEA (if available by the time of

implementation).

3.27 PLANT PERFORMANCE EVALUATION

The Selected Vendor 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. The PR will be measured at Inverter output level during peak radiation conditions.

Minimum generation of 15% CUF annually should be maintained for a period of 25 years(after considering a degradation of power output of PV modules, it should not be less than 90% at the end of 10 years and 80% at the end of 25 years.).

3.28 OTHER CONDITIONS

The developer shall declare minimum guaranteed generation from the project on annual basis. In case if minimum generation is not achieved by the project, the compensation shall be applied to the amount of shortfall in generation during the year at the Cost of REC.

3.29 PROGRESS REPORT

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

3.29.1 Submission of Project Completion Report (PCR)

The Selected Vendor shall submit the Project Completion Report in (soft copy and signed copy) after commissioning of the project as per the Scope of RFS to BRPL as per the Format given in **Annexure J**. 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 including forfeiture of PBG. However, the decision of Engineer-in -charge shall be final in this regard.

3.29.2 Submission of O&M Report (OMR)

The bidder shall submit the Monthly O&M Report mandatorily to BRPL as per the Format enclosed at **Annexure I**. 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 including deduction of payment from the monthly invoice. However, the decision of Engineer-in -charge shall be final in this regard.

3.30 PROJECT INSPECTION

The progress of all the Projects will be monitored by BRPL 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 BRPL or any agency/ experts designated / authorized by BRPL from time to time. BRPL shall depute a technical person(s) from its list of Selected 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 shall be borne by Vendor only. 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 BRPL, BRPL officials or BEE Certified Energy Auditors or any other agencies to be notified by BRPL from time to time.

3.31 SUBSIDY

This project does not have any subsidy. Vendor should quote the price bid basis of the same.

3.32 APPLICABLE LAW

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

3.33 SETTLEMENT OF DISPUTE

To the best of their ability, the parties hereto shall endeavor to resolve amicably between themselves all disputes arising in connection with this work order. If the same remain unresolved within thirty (30) days of the matter being raised by either party, either party may refer the dispute for adjudication by arbitration. The arbitration shall be undertaken by the sole arbitrator jointly appointed by the parties. In case the parties fail to arrive at consensus to appoint the sole arbitrator, either party may approach the Court for appointing an arbitrator under Section 11 of the Arbitration and Conciliation Act, 1996 and the award of the said sole arbitrator, shall be final and binding upon the parties. The arbitration proceeding shall be conducted

in accordance with this provisions of the Indian Arbitration & Conciliation Act, 1996 (as amended up to date) and the venue of such arbitration shall be the city of New Delhi only. The Arbitration shall be conducted in English language only. The courts at Delhi shall have the exclusive jurisdiction over the subject matter of Arbitration/dispute. The cost of the Arbitration shall be equally shared by the parties as per directions of the Sole Arbitrator.

3.34 FORCE MAJEURE

- 3.34.1 Notwithstanding the provisions of clauses contained in this RFS document; BRPL shall not be liable to forfeit (a) PBG for delay and (b) termination of contract; if the contractors unable to fulfill his obligation under this contract due to force majeure conditions.
- 3.34.2 For purpose of this clause, "Force Majeure" means an event beyond the control of the contractor and not involving the contractor's fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restrictions, Grid Problems/ shut downs and fright embargoes etc. Whether a "Force majeure" situation exists or not, shall be decided by BRPL and its decision shall be final and binding on the contractor and all other concerned.
- 3.34.3 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, BRPL has the right to terminate the contract in which case, the PBG shall be refunded to him.
- 3.34.4 If a force majeure situation arises, the contractor shall notify BRPL in writing promptly, not later than 14 days from the date such situation arises. The contractor shall notify BRPL not later than 3 days of cessation of force majeure conditions. After examining the cases, BRPL shall decide and grant suitable additional time for the completion of the work, if required.

3.35 LANGUAGE

3.35.1 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 BRPL and the bidder shall be in English language. O&M manual and warranty card should be in English & Hindi languages.

3.36 OTHER CONDITIONS

- 3.36.1 The Selected Vendor 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 BRPL in writing.
- 3.36.2 The Selected Vendor or its subcontractors shall not display the photographs of the work and not take advantage through publicity of the work without written permission of BRPL and owner of the Rooftop.
- 3.36.3 The Selected Vendor 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.
- 3.36.4 BRPL will not be bound by any Power of Attorney granted/ issued by the Selected Vendor 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 BRPL after obtaining proper legal advice, the cost of which will be chargeable to the Selected Vendor concerned.

3.37 SUCCESSORS AND ASSIGNEES:

In case BRPL or Selected Vendor may undergo any merger or amalgamation or a scheme of arrangement or similar re-organization & this contract is assigned to any entity(is) 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.

3.38 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.

3.39 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 instruments.

3.40 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 BRPL & Selected Vendor hereto, any rights and / or remedies herein.

3.41 CORRESPONDENCE

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

Name& Designation	Contact Number	Email id
Naveen Nagpal	9350718386	Naveen.nagpal@relianceada.com
Abhishek R Ranjan		Abhishek.r.ranjan@ relianceada.com
Robin Sebastian		robin.sebastian@relianceada.com
Kumar Gaurav	7805993999	Kumar.ga.gaurav@ relianceada.com

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

SECTION-II

Evaluation Criteria

4 EVALUATION CRITERIA

4.1 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 as per Clause 3.4 of Section-I							
Step III	Evaluation of Price Bid							
Step IV	Successful Bidders(s) selection							

4.2 RESPONSIVENESS CHECK OF TECHNO COMMERCIAL BID

The Techno-Commercial Bid submitted by Bidders shall be scrutinized to establish responsiveness to the requirements laid down in the RFS subject to **Clause 3.4**. Any of the following may cause the Bid to be considered "Non-responsive", at the sole discretion of BRPL:

- 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, Bid Bond, etc.;
- b. Bid not signed by authorized signatory and /or stamped in the manner indicated in this RFS;
- 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 RFS;
- 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 BRPL as applicable;
- j. Bidder makes any misrepresentation.

Each Bid shall be checked for compliance with the submission requirements set forth in this RFS before the evaluation of Bidder's fulfillment of Eligibility Criteria is taken up. **Clause 3.4** shall be used to check whether each Bidder meets the stipulated requirement.

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of contract shall not be disclosed to bidders or any other persons not officially concerned with such process. Any effort by a bidder

to influence BRPL's processing of bids or award decisions may result in the rejection of the bidder's bid.

To assist in the examination, evaluation and comparisons of bids, BRPL may, at its discretion, ask the bidder for a clarification of its bid. All responses to requests for clarification shall be in writing and no change in the price of the bid shall be sought, offered or permitted.

5 PRELIMINARY EXAMINATION

- **5.1** BRPL 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.
- **5.2** Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total Amount that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total amount shall be corrected. If there is a discrepancy between words and figures, the amount written in words will prevail.

6 EVALUATION OF BIDDER'S FULFILMENT OF ELIGIBILITY CRITERIA

6.1 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 3.4**. Non-availability of information and related documentary evidence for the satisfaction of Eligibility Criteria may cause the Bid non- responsive.

6.2 EVALUATION OF PRICE BID

Price Bid of the Qualified Bidders shall be opened offline in presence of the representatives of such Qualified Bidders, who wish to be present, on a date as may be intimated by BRPL to the Bidders through BRPL website <u>www.bsesdelhi.com</u> 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 RFS. Any Bid not meeting any of the requirements of this RFS may cause the Bid to be considered "Non-responsive" at the sole decision of the BRPL.

6.2.1 RESCO Bid Evaluation:

- a. The Price bids shall be evaluated separately. Bidders to submit bids for all the 3 options mentioned in Section-I clause no 2.1
- b. The price bids for all the 3 options shall be evaluated separately.
- c. The bidders shall quote FIXED TARIFF for 25 years.
- d. The evaluated price shall be calculated up to two decimal places.

- e. REVERSE AUCTION BRPL reserves the right to use Reverse Auction through SAP-SRM as an optional tool as an integral part of the entire tendering process. All techno-commercially bidders shall participate in this event.
- f. Notwithstanding anything stated above, BRPL reserves the right to assess bidder's capability to perform the contract, should the circumstances warrant such assessment in the overall interest of BRPL. In this regard the decision of BRPL is final.
 - i. In case RA is not concluded/conducted for any reasons, a final "no regret" financial bid in a sealed envelope will be called for from all qualified bidders.
- g. BRPL reserves the right to opt for solar plant installation with elevated structures or without elevated structures or solar plant installation with both elevated structures and without elevated structures as per table no. 1 Section-I clause 2.1, subject to approval of Appropriate Commission.

6.3 SUCCESSFUL BIDDER(S) SELECTION

- 6.3.1 Bids qualifying in **Clause 3.4** shall only be evaluated in this stage.
- 6.3.2 Fixed Tariff of all Price Bids (quoted through offline price bid) of Qualified Bidders shall be ranked from the lowest to the highest. The bidder having quoted the lowest bid shall be the basis of conducting Reverse Auction.

6.4 ALLOCATION OF CAPACITY:

- 6.4.1 **RESCO:** Based on Tariff quoted by the bidders in the Reverse Auction, BRPL shall arrange the bids in the ascending order i.e. L1, L2, L3, _ _ _ and so on (L1 being the lowest quote).
- 6.4.2 Lowest bidder will be declared as the successful bidder. The L1 bidder shall be allocated the aggregate capacity (Mixed or with elevated structures or without elevated structures). BRPL reserves the right to decide the respective sites whether to be installed with elevated structures or without elevated structures or Mixed.
- 6.4.3 If the L1 fails to accept the Letter of Allocation (LoA) within the given timeline, allocation to other bidders is possible, based on the Lowest tariff quoted by the bidders, BRPL shall arrange the bids in the ascending order i.e. L2, L3, L4 _ _ _ and so on (L2 being the second lowest quote).Such bidders will be given 7 days' time for acceptance of work at L1 rate.
- 6.4.4 The selection process shall stand completed once the Tender Capacity has been achieved through the allocation of the capacity offered to the Successful Bidder.
- 6.4.5 The LOA shall be issued to Successful Vendor(s) selected as per the provisions of this **Clause6.3**.
- 6.4.6 Successful Vendor shall acknowledge the LOA and return duplicate copy with signature of the authorized signatory of the Selected Vendor to the BRPL within Thirty (30) days of issue of LOA.
- 6.4.7 If the Selected Vendor, to whom the LOA has been issued, does not fulfill any of the conditions specified in Bid document, the BRPL reserves the right to annul/cancel the

award of the LOA of the Vendor.

6.4.8 BRPL at its own discretion, has the right to reject any or all the Bids without assigning any reason whatsoever, at its sole discretion

6.5 DURATION OF PROJECT:

The selected firms/bidders will be selected initially for one year from the date of issuance of LoA. After completion of this period, the validity of rates may further be extended on the basis of performance of the firm and mutual consent between BRPL and interested firms.

6.6 INCREASE/DECREASE OF BIDDER ALLOCATED CAPACITY

- 6.6.1 BRPL reserves the right to increase/decrease the Bidder(s) Allocated Capacity at the sole discretion of BRPL on the request of the Selected Vendor.
- 6.6.2 In case capacity is enhanced by BRPL as per **Clause 6.6.1** above, Selected Vendor shall submit the equivalent amount of PBG to BRPL within 30 days from the date of issue of such letter, failing which additional capacity shall stands cancelled.

7 NOTIFICATION TO SUCCESSFUL BIDDERS

The name of Selected Vendor shall be notified on BRPL website <u>www.bsesdelhi.com</u> and also shall be notified individually through the LOA.

8 **PROJECT ALLOCATION**

- 8.1 The identification pre-feasibility 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, 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 Bond/PBG amount submitted by them.
- 8.2 The Successful Bidders selected as described in **Clause 6.3** above shall be selected for one year from the date of LoA and BRPL shall issue the Letter of Allocation (LOA) indicating the allocated capacity &Tariff etc.
- 8.3 The bidder, who has been notified as Selected Vendors, shall be given 6months from the date of issue of Letter of Allocation for identification and execution of the capacity.
- 8.4 After the Project Documents have been submitted by the Selected Vendor/ Project Developer and accepted by BRPL, BRPL will sign the PPA for the Project (s). The Selected Vendor shall complete the design, engineering, manufacture, supply, storage, civil work, erection, testing & commissioning of each project within 6 months from the date of issue of letter of allocation.

9 OTHER CONDITIONS

9.1 Bidder has to obtain all the necessary approvals/Consents/Clearances required for Erection, Testing, Commissioning and O&M of the project including Grid connectivity.

9.2 **BID BOND:**

Bid bond shall be submitted in Envelope-III as described in the previous sections.

9.3 TAX EXEMPTIONS:

Price bids are invited inclusive of taxes and duties. However, Tax exemptions including certificates of any sort, if available may be dealt with the concerned Department of Govt. of India/ Delhi by the bidder. BRPL in no case will be responsible for providing any tax exemptions to the bidder.

9.4 Eligibility of standalone system:

Standalone system is not allowed under this scheme. The system should be grid interactive.

9.5 Requirement of approvals on makes of the Components:

The modules used in the project 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 RFS.

9.6 **OPERATION OF THE SYSTEM DURING WEEKENDS AND GENERAL 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 BRPL. Then the period will be excluded in calculation of CUF.

10 LIQUIDATED DAMAGES(LD) FOR DELAY IN PROJECT IMPLEMENTATION

- 10.1 BRPL will issue the Allocation letter(s) for the Project (s) indicating the provisions of the RFS document. The Bidder shall complete identification of the roof(s), "submission of project documents as per the requirement of BRPL Engineer-in-Charge", Design, Engineering, Manufacture, Supply, Storage, Civil Work, Erection, Testing & Commissioning of each project within 6 months from the date of issue of Allocation letter.
- 10.2 If the bidder fails to commission the sanctioned project within specified time, LD on per day basis calculated for the performance security on a six months period would be levied. BRPL may increase the project duration at its own discretion, with a maximum permissible duration of 12 months from the date of issuance of LOA. After twelve months, the project will get cancelled and total PBG amount shall be forfeited by BRPL. For example, If a capacity of 0.5 MW is delayed out of the total capacity to be

<u>commissioned by 30 days then the Liquidated Damages will be levied as given below :</u> <u>Liquidated Damages = [Performance Security or Performance Bank Guarantee/180 days] * Delayed Days * Capacity non-Commissioned (MW) = (1,200,000/180) * 30 * 0.5 = INR 100,000/-</u>

11 TIME OF COMPLETION OF SANCTIONED CAPACITY

- 11.1 The selected vendor shall complete the roofs identification, submission of project sanction documents as per the requirement of BRPL Engineer-in-Charge, Design, Engineering, Manufacture, Supply, Storage, Civil Work, Erection, and Testing & Commissioning of sanctioned project(s) within 6 months from the date of issue of allocation letter(s).
- 11.2 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.
- 11.3 A joint programme of execution of the Work will be prepared by the Engineer-in-Charge or its representative nominated for the purpose and Successful bidders based on priority requirement of this project. This programme will take into account the time of completion mentioned in **clause 11.1** above and the time allowed for the priority Works by the Engineer-in-Charge.

12 UPDATING THE PROJECT PROGRESS ON BI-WEEKLY BASIS

Selected Vendor's authorized representative, in whose name Power of Attorney (PoA) has been executed and submitted along with the bid, shall update the project progress on bi-weekly basis in the Allocation letter. Selected Vendor should update the info as per the requirement. No update 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.

13 INSPECTION AND AUDIT BY BRPL

The selected vendor shall permit the BRPL to inspect the Vendor's site, accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the BRPL, if so required by the BRPL any time.

14 COMMISSIONING / COMPLETION CERTIFICATE:

14.1 Application for completion/commissioning certificate:

When the Selected Vendor fulfils his obligation under the Contract, he shall be eligible to apply for Completion/Commissioning Certificate. The Engineer-in-Charge shall normally issue the Completion Certificate to the Selected Vendor within one month after receiving any application from the Selected Vendor after verifying from the completion documents and satisfying that the Work has been completed in accordance with and as set out in Contract documents.

DOCUMENT SUBMISSION FOR ISSUE OF COMMISSINONING/ COMPLETION CERTIFICATE:

For the purpose of **Clause 14.1** above the following documents will be deemed to form the completion documents:

- a. Checklist for inspection of Roof top SPV power plants as per BRPL format.
- b. Project completion/satisfaction certificate

14.2 FINAL DECISION AND FINAL CERTIFICATE:

Upon completion of 5 years of O&M and subject to the Engineer-in-Charge being satisfied, the Engineer-in-Charge shall (without prejudice to the rights of the BRPL to retain the provisions of relevant Clause hereof) otherwise give a certificate herein referred to as the Final Certificate to that effect and the Selected Vendor shall not be considered to have fulfilled the whole of his obligations under Contract until Final Certificate shall have been given by the Engineer-in-Charge notwithstanding any previous entry upon the Work and taking possession, working or using of the same or any part thereof by BRPL.

14.3 DEDUCTIONS FROM THE CONTRACT PRICE:

14.3.1 All costs, damages or expenses which BRPL may have paid or incurred, which under the provisions of the Contract, the Selected Vendor is liable/will be liable, will be claimed by BRPL. All such claims shall be billed by BRPL to the Contractor within 15 (fifteen) days of the receipt of the payment request and if not paid by the Selected Vendor within the said period, BRPL may, then, deduct the amount from any moneys due i.e., Performance Security or becoming due to the contractor or Selected Vendor under the contract or may be recovered by actions of law or future invoices raised by the vendor or otherwise, if the Selected Vendor fails to satisfy BRPL of such claims.

14.4 CORRUPT OR FRAUDULENT PRACTICES

BRPL requires that Selected Vendors/ Contractors should follow the highest standard of ethics during the execution of contract. In pursuance of this policy, BRPL:

- 14.4.1 defines, for the purposes of this provision, the terms set forth as follows :
- 14.4.2 "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the bid process or in contract execution; and
- 14.4.3 "fraudulent practice" means a misrepresentation of facts in order to influence a bid process or the execution of a contract to the detriment of BRPL, 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 BRPL of the benefits of free and open competition;

- 14.4.4 A firm will be declared 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/ BRPL schemes.
- 14.4.5 We have a fair and competitive marketplace. The rules for bidders are outlined in the terms and conditions. Bidders must agree to these rules prior to participating. In addition to other remedies available, we reserve the terms & conditions. A bidder who violates the marketplace rules or engages in behavior that disrupts the fair execution of the marketplace restricts a bidder to the length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:
- 14.4.5.0 Failure to honor prices submitted to the marketplace
- 14.4.5.1 Breach of the terms of the published in Request for Proposal (RFS)

15 DEBARRED FROM PARTICIPATING IN BRPL'S ROOF TOP TENDER

15.1 BRPL 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 RFS, such Bidders may be debarred from participating in BRPL's any future tender for a period as decided by the competent authority of BRPL.

16 SUPPLIER CONFIDENTIALTY

All information contained in the RFS is confidential and may not be disclosed, published or advertised in any manner without written authorization from BRPL. This includes all bidding information submitted.

All RFS documents remain the property of BRPL and all suppliers are required to return these documents to BRPL upon request.

Bidders who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

17 EVENTS OF DEFAULT

Each of the following events or occurrences shall constitute an event of default (Event of Default) under the contract:

a. Vendor fails or refuses to pay amounts due under the contract

b. Vendor fails or refuses to deliver services conforming to this RFS / specifications, or fails to finish work within specified period in the Load or extension thereof

c. Vendor becomes insolvent or unable to pay its debts when due, or commits any act of bankruptcy, such as filing any petition in any bankruptcy, winding-up or reorganization proceeding, or acknowledges in writing its insolvency or inability to pay its debt; or the vendors' creditors file any petition relating to bankruptcy of vendor

d. Vendor otherwise fails or refuses to perform or observe any term or condition of the

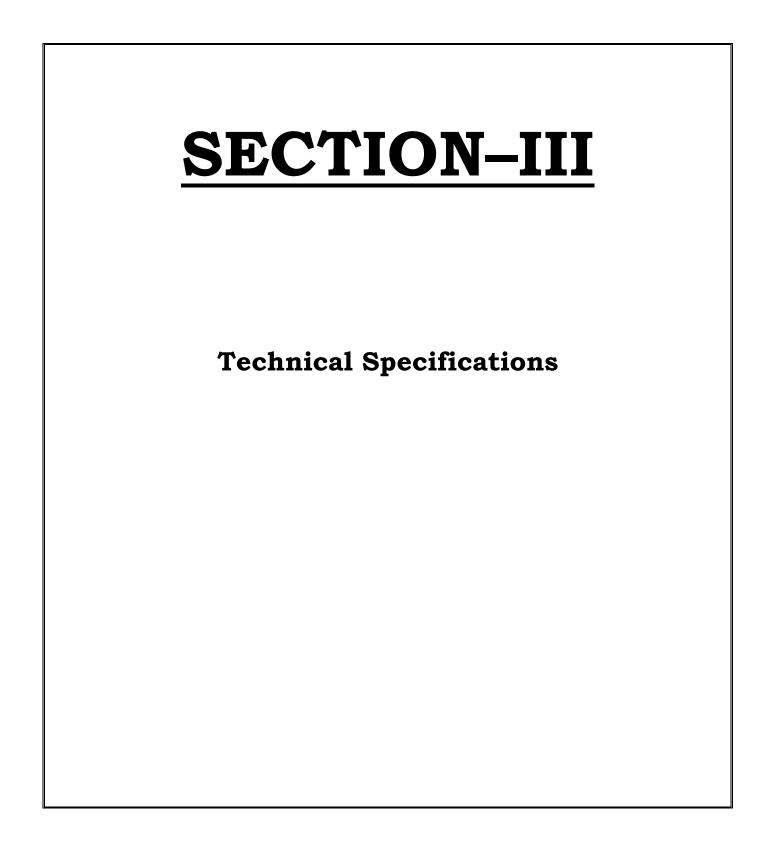
contract and such failure is not remediable or, if remediable, continues for a period of 30 days after the receipt by the vendor of notice of such failure from BRPL

Consequences of Default

a. If an event of default shall occur and be continuing, BRPL may forthwith terminate the contract by written notice

b. In the event of a default, BRPL may, without prejudice to any other right granted to it by law, or the contract, take any or all of the following actions:

- i. Present to the relevant bank for forfeiting the performance bond
- ii. Allot the work to another bidder
- iii. Recover any losses and/or additional expenses BRPL may incur as a result of Vendor's default



SCOPE OF WORK

8

TECHNICAL SPECIFICATIONS

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TECHNICAL SPECIFICATIONS

The proposed projects shall be commissioned as per the technical specifications given below. Any shortcomings will lead to cancelation of Project in full or part as decided by BRPL. Domestic Modules are to be used failing which it will be assumed that system is not matching the requirement of the RFS and bidder's PBG shall be forfeited. Competent Authority's decision will be final and binding on the bidder.

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 equipment/components:

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

1.1 SOLAR PHOTOVOLTAIC 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 325 Wp and above wattage. Module capacity less than 325 Wp shall not be accepted.

- C. Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- D. PV modules must be tested and approved by one of the IEC authorized test Centers.
- E. The module frame shall be made of corrosion resistant materials, preferably having anodized Aluminum.
- F. The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid. BRPL 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 tolerance within +/- 3%.
 - 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 (two) per cent 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.I-V curves at STC should be provided by bidder.

- 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, Im, Vm 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:
 - 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 Page | 55

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 ARRAY STRUCTURE

- a) Hot dip galvanized MS mounting structures may be used for mounting the modules/ panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum insolation. However, to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements. Minimum thickness of galvanization should be 85 microns.
- 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 Delhi-wind speed of 170 KM/ hour). It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard and submit wind loading calculation sheet to BRPL. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.
- c) The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759. The modules may be mounted on elevated structure or non-elevated structure. The elevated mounting structure used for installation of solar plants shall have a height of 3 m on the lower side of tilt angle.
- d) Structural material shall be corrosion resistant and electrolytic ally compatible with the materials used in the module frame, its fasteners, and 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 iodization.
- e) The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels
- f) Regarding civil structures the bidder need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof.
- g) The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m².
- h) Provision for safe and secure access to roof top and ground mounted shall be in the

scope of vendor (i.e., walkways, ladders, and platforms on elevated/above ground structures, etc.)

1.3 JUNCTION BOXES (JBs)

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

1.4 DC DISTRIBUTION BOARD:

- a) DC Distribution panel to receive the DC output from the array field.
- b) DC DPBs shall have sheet from enclosure of dust & vermin proof conform to IP 65 protection. The bus bars are made of copper of desired size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.
- c) DCDB not required, if PCU/ inverter having inbuilt DC fuses and SPD protection.

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, 50 Hz
- e) The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.

- f) All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- g) Should conform to Indian Electricity Act and rules (till last amendment).
- h) All the 415 AC or 230 volts devices / equipment like bus support insulators, circuit breakers, SPDs, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions.

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

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 provided maximum 10% DC overloading is allowed in a given string subject to technical specifications of the inverter.
- 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 MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit/inverter should also be DG set interactive, if necessary. Inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:

Switching devices	IGBT/MOSFET
Control	Microprocessor /DSP
Nominal AC output voltage and Frequency	415V, 3Phase, 50Hz (In case single phase inverters are offered, suitable arrangement for balancing the phases must be made.)
Output frequency	50 Hz
Grid Frequency Synchronization range	+/- 5 Hz
Ambient temperature considered	-20° C to 50° C
Humidity	95 % Non-condensing
Protection of Enclosure	IP-54(Minimum) for indoor

	IP-65(Minimum) for outdoor
Grid Frequency Tolerance range	+/- 5 Hz
Grid Voltage tolerance	+ / - 10%
No-load losses	Less than 1% of rated power
Inverter efficiency(minimum)	>93% (In case of 10 kW or above with in-built
	galvanic isolation)
	>97% (In case of 10 kW or above without in-
	built galvanic isolation)
Inverter efficiency (minimum)	> 90% (In case of less than 10 kW)
THD	As per IEEE 519 as amended from time to
	time
PF	> 0.9

- a) Three phase PCU/ inverter shall be used with each power plant system (10kW and/or above) but in case of less than 10kW single phase inverter can be used.
- b) PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- c) 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.
- d) Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- e) 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.
- f) Successful Bidders shall be responsible for galvanic isolation of solar roof top power plant (>100kW) with electrical grid or LT panel.
- g) In PCU/Inverter, there shall be a direct current isolation provided at the output by means of a suitable isolating transformer. If Isolation Transformer is not incorporated with PCU/Inverter, there shall be a separate Isolation Transformer of suitable rating provided at the output side of PCU/PCU units for capacity more than 100 kW.
- h) 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.
- i) 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.
- j) The MPPT units environmental testing should qualify IEC 60068-2 (1, 2, 14, 30)/ Equivalent BIS STD. The junction boxes/ enclosures should be IP 65 (for outdoor)/ IP Page | 59

54 (indoor) and as per IEC 529 specifications.

k) The PCU/ inverters should be tested from the MNRE approved test centers/ NABL/ BIS/ IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

a. INTEGRATION OF PV POWER WITH GRID:

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. In case of synchronization of PV with the DG set, it is to be ensured that solar power does not get exported to grid or DG. Any provisions related to electricity safety should be complied with.

b. DATA ACQUISITION SYSTEM / PLANT MONITORING

- i. Data Acquisition System 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 the high quality, suitable PC. Metering and Instrumentation for display of systems parameters and status indication to be provided.
- iii. The system should have feature of open API for inbuilt or external data loggers is mandatory for all plants above 25 KW. Typical parameters of dashboard are included at **Annexure-K**.
- iv. Weather Monitoring for Solar Plant capacity 50kW and above:
 - A. 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.
 - B. 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
 - 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/ DC 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.
- xviii. Remote Monitoring and data acquisition through Remote Monitoring System software at BRPL's 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.
- xix. The bidders shall be obligated to push real-time plant monitoring data on a specified

intervals (say 15 minute) through open protocol at receiver location (cloud server) in XML/JSON format, preferably. Suitable provision in this regard will be intimated to the bidders.

xx. The bidder shall be obligated to measure the harmonic current injection, Direct Current injection and flicker with calibrated meters before the commissioning of the project once in a year in the presence of the DISCOM official at a mutually convenient time.

c. 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) The electronic energy meter (0.5 S class) shall be installed for the measurement of energy.
- c) The Power Producer shall at its own cost install and maintain 4G modem with GSM SIM facility as specified by the BRPL for integration of Meters for real time data / monitoring.
- d) The bidder must take approval/NOC from DISCOM for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network and submit the same to BRPL before commissioning of SPV plant.
- e) Reverse power relay shall be provided by bidder (if necessary), as per the BRPL's requirement.

d. 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 and 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 standard and CEA (Measures relating to Safety and Electric Supply) Regulations as amended from time to time. The protection against induced high-voltages shall be provided by the use of metal oxide arrestors (MOVs) and suitable and separate earthing such that induced transients find an alternate route to earth.

The earthing conductor made up of dip galvanized steel, should be installed with GI strip insulator or 16 sq.mm or above copper conductor only.

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

- 6.3.1 The PV module structure components shall be electrically interconnected and shall be grounded.
- 6.3.2 Earthing shall be done in accordance with IS 3043-1986, provided that earthing conductors shall have a minimum size of 6.0 mm² copper, 10 mm² Aluminum or 70 mm² hot dip galvanized steel. Unprotected aluminum or copper-clad aluminum conductors shall not be used for final underground connections to earth electrodes.
- 6.3.3 A minimum of two separate dedicated and interconnected earth electrodes must be used for the earthing of the solar PV system support structure with a total earth resistance not exceeding 5 Ohm.
- 6.3.4 The earth electrodes shall have a precast concrete enclosure with a removable lid for inspection and maintenance. The entire earthing system shall comprise non-corrosive components.
- 6.3.5 In case LA earthing conductors made up of dip galvanized steel, the conductor should having GI Strip Insulator.
- 6.3.6 Total Nos. of Earth pits for Solar PV plant:
 - 6.3.6.1 For Solar PV plant upto 50 KW: 03 Nos. Earth pits: AC-01, DC-02 LA-01
 - 6.3.6.2 For Solar PV plant above 50 KW: 05 Nos. Earth Pits: AC-02, DC-02, LA-01 (double run of earthing conductors for AC & DC)

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/IS1554 standards
- ii. Temp. Range: -10°C to +80°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 (power loss) of the entire solar system to 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. Multi Strand, Annealed high conductivity Cable (As per MNRE Guideline issued) conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/ XLPE insulation for UV protection Armored cable for underground laying.
- 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) 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 mm² copper; the minimum AC cable size shall be 4.0 mm² copper. In three phase systems, the size of the neutral wire size shall be equal to the size of the phase wires. Aluminum cables of required size can be used from ACDB to LT panel only.
- 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. Armored cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BoS item / component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V, UV resistant for outdoor installation IS /IEC 69947.
- xviii. The total voltage drop on the cable segments from the solar PV modules to the solar grid inverter shall not exceed 2.0%.
- xix. The total voltage drop on the 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.

- a) There is no maximum permissible capacity for rooftop for a single metering point.
- b) Utilities may have voltage levels other than above; BRPL may be consulted before finalization of the voltage level and specification is made accordingly.
- c) Evacuation of Solar power to LT/ HT panel of Consumer at Ground floor level or as per requirement of DISCOM.

9 TOOLS & TACKLES AND SPARES:

- a) After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the bidder for maintenance purpose. List of tools and tackles to be supplied by the bidder for approval of specifications and make from BRPL.
- 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:

a) 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 BRPL.

11 FIRE EXTINGUISHERS:

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

- a) Portable fire extinguishers for fire caused by electrical short circuits.
- b) Sand buckets.
- c) The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided 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 BRPL before progressing with the installation work.

13 PLANNING AND DESIGNING:

- 13.3.1 The bidder should carry out Shadow Analysis at the site and accordingly design strings and arrays layout considering optimal usage of space, material and labor. The bidder should submit the array layout drawings along with Shadow Analysis Report to BRPL for approval.
- 13.3.2 BRPL 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.
- 13.3.3 The bidder shall submit preliminary drawing for approval and based on any modification or recommendation, if any. The bidder submits three sets and soft copy in pen-drive of final drawing for formal approval to proceed with construction work.

14 DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT

The Contractor shall furnish the following drawings Award/Intent and obtain approval:

- 14.1 General arrangement and dimensioned layout.
- 14.2 Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
- 14.3 Structural drawing along with foundation details for the structure.
- 14.4 Itemized bill of material for complete SV plant covering all the components and associated accessories.
- 14.5 Layout of solar Power Array.

14.6 Shadow analysis of the roof.

15 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.

16 DISPLAY BOARD

-

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

- a. Plant Name, Capacity, Location, and Date of commissioning, estimated Power generation.
- b. The size and type of board and display shall be approved by Engineer-in-charge before site inspection.

All the IEC standards to be mandatorily adhered as specified in this RFS.

FORMAT: A1

PRICE BID

(To be submitted offline in Sealed Envelope-II)

	unit (kWh) for 25 Years (up to 2 decimal places)
Design, Manufacturing, Supply, Erection, Testing & Commissioning including trial Operation, Operation & maintenance for a period of 25 years including Power Evacuation System and cost of replacement of all the parts, covered under Guarantee period for a period of 25 years from the date of commissioning of Roof top solar system under RESCO Model (For elevated structure of 3 meter for ground mounted plants and structure limited to 1 meter for installation on rooftop)	

Note: In case of discrepancy in price bid in Numbers and Words, the Quoted Tariff in Words will prevail.

- a. The Fixed tariff shall be calculated up to two decimal places.
- b. In case of a tie, provision given in the bid shall prevail.

Bids not in conformity with above provisions will be rejected.

_

Yours faithfully,

Date: Place:	Signature of the Authorized signatory: Printed Name:		
	Designation:		
	Business Address:		
	Country of Incorporation: (Common Seal)		

PRICE BID

(To be submitted offline in Sealed Envelope-II)

Reno	Description	Quoted Fixed Tariff per unit (kWh) for 25 Years (up to 2 decimal places)
1.	Design, Manufacturing, Supply, Erection, Testing & Commissioning including trial Operation, Operation & maintenance for a period of 25 years including Power Evacuation System and cost of replacement of all the parts, covered under Guarantee period for a period of 25 years from the date of commissioning of Roof top solar system under RESCO Model (For elevated structure of 3 meter height on ground mounted as well as installations on rooftop)	

Note: In case of discrepancy in price bid in Numbers and Words, the Quoted Tariff in Words will prevail.

- c. The Fixed tariff shall be calculated up to two decimal places.
- d. In case of a tie, provision given in the bid shall prevail.

Bids not in conformity with above provisions will be rejected.

Yours faithfully,

Date: Place:	Signature of the Authorized signatory: Printed Name: Designation:
	Business Address:

Country of Incorporation: (Common Seal).....

PRICE BID

(To be submitted offline in Sealed Envelope-II)

Reno	Description	Quoted Fixed Tariff per unit (kWh) for 25 Years (up to 2 decimal places)
1.	Design, Manufacturing, Supply, Erection, Testing & Commissioning including trail Operation, Operation & maintenance for a period of 25 years including Power Evacuation System and cost of replacement of all the parts, covered under Guarantee period for a period of 25 years from the date of commissioning of Roof top solar system under RESCO Model (For structure height limited to 1 meter for both ground mounted and installations on rooftop)	
Quote	ed Tariff in Rupees per kWh:	I

Note: In case of discrepancy in price bid in Numbers and Words, the Quoted Tariff in Words will prevail.

- e. The Fixed tariff shall be calculated up to two decimal places.
- f. In case of a tie, provision given in the bid shall prevail.

Bids not in conformity with above provisions will be rejected.

Yours faithfully,

Date:	 	 •••••	
Place:	 	 	

Signature of the Authorized signatory: Printed Name: Designation: Business Address: Country of Incorporation (Common Seal)

<u>SECTION –V</u> FORMATS FOR SUBMITTING RFS

Covering Letter

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

Refine. _____

Date:

From: _____(Insert name and address of Bidding Company)

Tel. #: Fax#:

E-mail address#

To, BSES Rajdhani Power LTD.

Sub: RFS for the selection of vendor for "Design, supply, erection, testing and commissioning including warranty, Comprehensive operation & maintenance of grid interactive rooftop solar PV power plant under RESCO Model.

Dear Sir,

- 1. We, the undersigned [insert name of the 'Bidder'] having read, examined and understood in detail the RFS Document for Implementation of Grid connected Roof-Top Solar PV System Scheme 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 in-directly in response to the aforesaid RFS.
- 2. We give our unconditional acceptance to the RFS, dated.....and RFS Documents attached thereto, issued by BRPL, as amended. As a token of our acceptance to the RFS Documents, the same have been initialed by us and enclosed to the Bid. We shall ensure that we execute such RFS Documents as per the provisions of the RFS and provisions of such RFS Documents shall be binding on us.

Bid Capacity: We have bid for the capacity of 1.7 MWp as per RFS terms and conditions.

Bid Bond: We have enclosed a Bid Bond 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 Formatfrom (Insert name of bank providing Bid Bond) and valid up toin terms of Clauseof this RFS. The offered quantum of power by us is 1.7Map UNDER RESCO Model.

- 1. We have submitted our Price Bid strictly as per Section IV of this RFS, without any deviations, conditions and without mentioning any assumptions or notes for the Price Bid in the said format(s).
- 2. Acceptance:

We hereby unconditionally and irrevocably agree and accept that the decision made by BRPL in respect of any matter regarding or arising out of the RFS 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.

3. Familiarity with Relevant Indian Laws & Regulations

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

4. Contact Person

Details of the contact person are furnished as under:

Name	:
Address	:
Phone Nos.	:
Fax No.	:
E-Mail	:

 We are enclosing herewith the Envelope-I (Techno-Commercial document), Envelope-II (Price Bid) and Envelope-III (Covering letter, Bid Bonds etc as per clause 3.10 of the RFS) (through Offline mode only) and sealed under a common envelope. It is confirmed that our Bid is consistent with all the requirements of submission as stated in the RFS and subsequent communications from BRPL. The information submitted in our Bid is complete, strictly as per the requirements stipulated in the RFS 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 a period of 12month from the Bid deadline. We confirm that we have not taken any deviation so as to be deemed non-responsive.

Dated the, 2021

Yours faithfully,

Signature:

Name:

Designation with Seal

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

Format-2

General Particulars of the bidder

S. No.	Particulars	Details
1.	Name of the Company	
2.	Registered 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. / BRPL/etc.	
8.	Reference of any document information attached by the Bidder other than specified in the RFS.	
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 (Details of persons owning 10% or more of the Total Paid up equity of the Bidding Company in the Format as below	

Please strike-off whichever is not applicable.

Signature:

Name:

-

Designation with Seal:

Format-3

PROFORMA FOR BANK GUARANTEE FOR BID BOND

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

Ref.:

Date: Bank Guarantee No.:

To,

BSES Rajdhani Power Ltd.

This guarantee shall be valid and binding on this Bank up to and including [insertdateofvalidityinaccordancewith**Clause3.14** of this RFS] and shall not be determinablebynoticeoranychangeintheconstitutionoftheBankerthetermofcontractorbyany 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._ (Rs.only). Our Guarantee shall remain enforce until [insert date of validity in accordance with **Clause3.14** of this RFS]. BRPL shall been titled to invoke this Guarantee till______[Insert date which is 90days after the date in the preceding sentence].

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

The guarantor bank acknowledged that this Bank Guarantee may be assigned by the BRPL, in whole or in part (whether absolutely or by way of security) to the successor entity (is) coming into being as a result of any merger or amalgamation or scheme of arrangement or

similar re-organization of the BRPL.

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

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 BRPL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against BRPL in respect of any payment made hereunder.

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

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

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

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly BRPL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court to arbitral proceeding 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 BRPL or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

Notwithstanding anything contained hereinabove, 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 3.14** of this RFS] with an additional claim period of Ninety (90) days thereafter. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if BRPL 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 ____, 2020

Note: 1. (*) the amount shall be as specified in the Bid document.

(#) Complete mailing address of the Head Office of the Bank to be given.

-

The Performance Bank Guarantee (PBG) shall be executed by any of the Bank from the List of Banks enclosed as per Annexure-B.

2. The Stamp Paper of appropriate value shall be purchased in the name of guarantee issuing Bidder/bank issuing the guarantee.

FORMAT FOR PERFORMANCE BANKGUARANTEE (PBG)

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

In consideration of the [Insert name of the Bidder](Herein after referred to as selected Solar Power Developer') submitting the response to RFS interlaid for selection of the Project under RESCO Model of the capacity of 1.7 MWpunder Roof Top scheme in response to the RFS no. dated issued by BRPL and BRPL considering such response to the RFS of insert the name of the selected Solar Power Developer] (which expression shall unless repugnant to the context or meaning thereof executers, administrators, successors and assignees) and selecting the Solar include its 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 RFS 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 RFS, the [insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to BRPL at [Insert Name of the Place from the address of the BRPL forthwith on demand in writing from BRPL or any Officer authorized by 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.....

Our Guarantee shall remain in force until.....BRPL shall be entitled to invoke this Guarantee till[Insert date which is 90 days after the date in the preceding sentence].

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

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 BRPL to justify the invocation of this BANK Page | 79

GUARANTEE, nor shall the Guarantor Bank have any recourse against BRPL in respect of any payment made hereunder.

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

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

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

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly BRPL 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 Selected Vendor or to give any notice to the selected Solar Power Developer / Project Company or to enforce any security held by BRPL or to exercise, levy or enforce any distress, diligence or other process against the selected Solar Power Developer / Project Company.

Signature Name Power of Attorney No.

For, [Insert the bank name] Banker's Stamp and Full Address. Dated this day of , 2020

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 Page | 80

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.

Format-5

CHECKLIST FOR BANK GUARANTEES

SI.No.	Details of checks	YES/NO.
a)	Is the BG on non-judicial Stamp paper of appropriate value, as per applicable Stamp Act of the place of execution	
b)	Whether date, purpose of purchase of stamp paper and name of the purchaser 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).	
c)	Has the executing Officer of BG indicated his name, designation and Power of Attorney No.? /Signing Power no. on the BG?	-
d)	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?	
e)	Does the Bank Guarantees compare verbatim with the Performa prescribed in the Bid Documents?	
f)	Are the factual details such as Bid Document No.? / Specification No., / LOI No. (if applicable) / Amount of BG and Validity of BG correctly mentioned in the BG	
g)	Whether overwriting/cutting if any on the BG have been properly authenticated under signature & seal of executants?	
h)	Contact details of issuing bank including email id, mobile number etc.	

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.

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 executants 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)

(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 Designation Name and Address 2.SignatureDesignationName and Address

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)

FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT (AS PER CLAUSE 3.4) (To be submitted on the letterhead of Bidding Company)

To,

BSES RAJDHANI POWER LTD.

Sub: Bid for Implementation of Grid connected Roof Top Solar PV System scheme in response to the RFS No:

Dear Sir,

We submit our Bid for the total capacity of 1.7MWpunder RESCO Model put together for which details of our Financial Eligibility Criteria Requirements are as follows.

We certify that the Financially Evaluated Entity (ies) had an Annual Turnover as follows:

The Annual turnover of Rupees 3.0 Crore per MW of the capacity offered in its Bid in any one of the last 3 financial years preceding the Bid Deadline subjected to the condition that the Bidder should at least have completed one financial year.

Name of Financially Evaluated Entity*	Relationship with Bidding Company**	Financial year	Year of Incorporation	Annual Turnover (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 the case financial capability of Parent Company and/or Affiliate has been used for meeting Qualification Requirements.

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

Format for certificate of relationship of Parent Company or Affiliate with the Bidding Company.

To,

.....

Sub: Bid for Implementation of Grid connected Roof Top Solar PV System Scheme.

Dear Sir,

We hereby certify that M/s.....,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 RFS 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:

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

*Strike out whichever is not applicable.

.....

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

Format-9

Undertaking from the Financially Evaluated Entity or its Parent Company/ 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 RFS No......dated.....for "Implementation of Grid connected Roof Top Solar PV System Scheme".

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

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 RFS referred to above.

We have also noted the amount of the Performance Guarantee required to be submitted as per Clause....of the RFS the(Insert the name of the Bidding Company) in the event of it being selected as the Selected Vendor".

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 RFS, 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 RFS.

Signature of Authorized Signatory

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	

Format-10

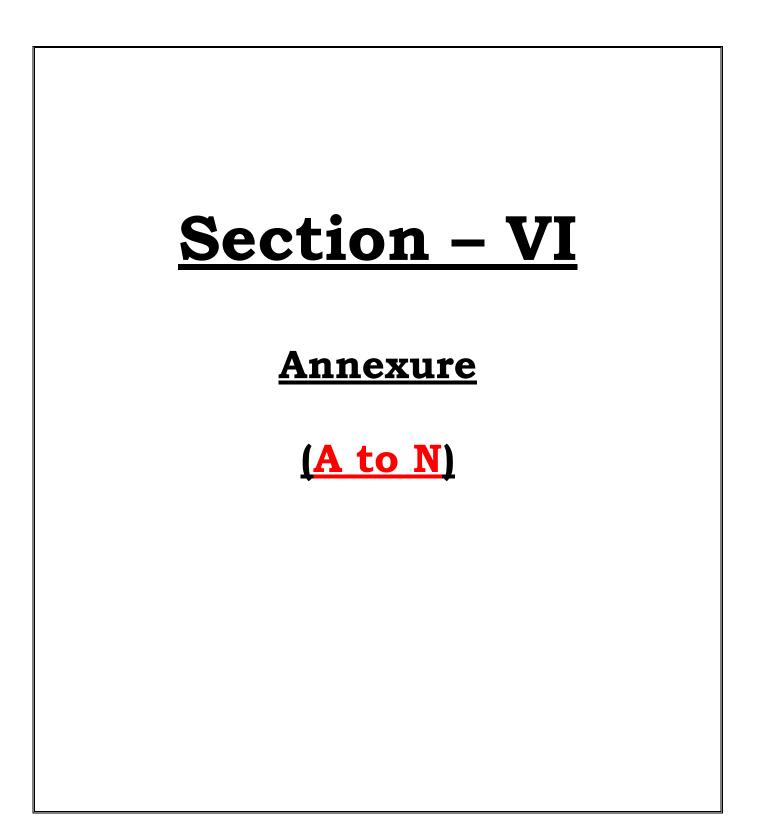
(Shareholding Certificate)

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)



Annexure A

DOCUMENTS REQUIRED FOR PROJECT APPROVAL

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

- 1. Agreement between the bidder and the owner of the Project and Building/Roof top (Copy of agreement on stamp paper of appropriate value should be enclosed).
- 2. All Agreement shall generally have reference to the BRPL's RFS No. and Letter of Allocation and provisions as per terms and conditions, technical specification and performance parameter in line with the BRPL's RFS Document against which Letter of Allocation has been issued. In addition, it shall indicate the price / tariff payable by the roof top Owner to the developer, payment terms, completion period along with other conditions of contract like insurance, warranty, force majeure, arbitration, jurisdiction, governing law, site access for the developer, and, site access for BRPL officials for the entire plant life, obligation of the roof top owner regarding providing of data to BRPL as per the RFS Document etc.
- 3. No Objection Certificate from the BRPL for grid connectivity or CEIG approval (In case CEIG approval is suffice for grid connectivity). Undertaking of Selected Vendor on stamp Paper for indemnification of BRPL shall be furnished in case approval of CEIG is only furnished for grid connectivity.

(Not mandatory during project identification, however mandatory for project commissioning/operation).

4. Summary Project Report (2-3 pages only) as per Format at Annexure E.

<u>Check List</u>

For issuance of BRPL Approval

S. No.	Documents	Yes / NO	Page No.
1.	Covering letter on Letter head		
2.	Copy of RESCO Agreement		
3.	NOC/ Acknowledgement from DISCOM		
4.	Copy of Electricity Bill		
5.	Colored Site Photos with Date & Time stamping		
6.	Annexure – G (BOM & SLD)		
7.	Solar PV Module Specs Sheet		
8.	Solar PV Module IEC Certificates		
9.	Inverter Specs Sheet		
10.	Inverter IEC Certificates		

-

Signature

Annexure B

<u>List of Banks</u>

1.SCHEDULEDCOMMERCIAL BANKS	2. OTHER PUBLIC SECTOR BANKS
SBIANDASSOCIATES	1.IDBI Bank Ltd.
1.StateBank of India	3. FOREIGN BANKS
2.StateBank of Bikaner & Jaipur	1. Bank of America NA
3.StateBank of Hyderabad	2. Bank of Tokyo Mitsubishi UFJ Ltd.
4.StateBank of Indore	3. BNP Paribas
5.State Bank of Mysore	4. Calyon Bank
6.StateBank of Patiala	5. City Bank N.A.
7.StateBank of Travancore	6. Deutsche Bank A.G
NATIONALISED BANKS	7.The Hong Kong and Shanghai Banking Corpn. Ltd.
1.AllahabadBank	8. Standard Chartered Bank
2.AndhraBank	9.SocieteGenerale
3.Bank of India	10.Barclays Bank
4.Bank of Maharashtra	11.Royal Bank of Scotland
5.Canara Bank	12.BankofNova Scotia
6.Central Bank of India	13. Development Bank of Singapore (DBS, Bank Ltd.)
7.CorporationBank	14.CreditAgricoleCorporateandInvestment Bank
8.DenaBank	4.SCHEDULED PRIVATE BANKS

9.IndianBank	1.Federal Bank Ltd.
10.Indian Overseas Bank	2.INGVysya Bank Ltd.
11.OrientalBankofCommerce	3.Axis Bank Ltd.
12.PunjabNationalBank	4.ICICI Bank Ltd.
13.Punjab&SindBank	5.HDFC Bank Ltd.
14. Syndicate Bank	6. Yes Bank Ltd.
15. Union Bank of India	7. Kodak Mahindra Bank
16. United Bank of India	8. Inducing Bank Ltd
17. UCO Bank	9. Karur Vysya Bank
18. Vijay Bank	
19. Bank of Baroda	

Operation and Maintenance Guidelines of Grid Connected PV Plants

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

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

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

SOLAR PANELS

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

- i. The panels are cleaned at least once every fifteen days.
- ii. Any bird droppings or spots should be cleaned immediately.
- iii. Use water and as of sponge or cloth for cleaning.
- iv. Do not use detergent or any abrasive material for panel cleaning.
- v. Isopropyl alcohol may be used to remove oil or grease stains.
- vi. Donotspraywateronthepanelifthepanelglassiscrackedorthebacksideis perforated.
- vii. Wipe water from module as soon as possible.
- viii. Use proper safety belts while cleaning modules at inclined roofs etc.
- ix. The modules should not be cleaned when they are excessively hot. Early morning is particularly good time for module cleaning.
- x. 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.
- xi. Ensure that the module terminal connections are not exposed while cleaning; this poses a risk of electric shock.
- xii. Never use panels for any unintended use, e.g. drying clothes, chips etc.
- xiii. Ensure that monkeys or other animals do not damage the panels.

CABLES AND CONNECTION BOXES

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

INVERTER

- i. The inverter should be installed in a clean, dry, and ventilated area which is separated from, and not directly above, the battery bank.
- ii. Remove any excess dust in heat sinks and ventilations. This should only be done with a dry cloth or brush.
- iii. Check that vermin have not infested the inverter. Typical signs of this include spider webs on ventilation grills or wasps' nests in heat sinks.
- iv. Check functionality, e.g. automatic disconnection upon loss of grid power supply, at least once a month.
- v. Verify the state of DC/AC surge arrestors, cable connections, and circuit breakers.

SHUTTING DOWN THE SYSTEM

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

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 dishwashing detergent. Do not use brushes, any types of solvents, abrasives, or harsh detergents.	Fortnightly or as per the site conditions	User/Technician
	Inspection (for plants>100kWp)	Use infrared camera to inspect for hot spots; bypass diode failure	Annual	Technician

INSPECTION AND MAINTENANCE SCHEDULE:

Component	Activity	Description	Interval	By
PV Array	Inspection	Check the PV Modules and rack for any damage.	Annual	User/Technician
		Note down location and serial number of damaged modules.		
	Inspection	Determine if any new objects, such as vegetation growth, are causing shading of the array and move them if possible.	Annual	User/Technician
	Vermin Removal	Remove bird nests or Vermin from array and rack area.	Annual	User/Technician
Junction Boxes	Inspection	Inspect electrical boxes for corrosion or intrusion of water or insects. Seal boxes if required. Check position of	Annual	Electrician
		switches and breakers. Check operation of all protection devices.		
Wiring	Inspection Inspect cabling for signs of cracks, defects, loose connections, overheating, arcing, short or open circuits, and ground faults. Ar		Annual	Electrician
Inverter	Inspection	Observe	Monthly	Electrician
Component	Activity	Description	Interval	By
		Instantaneous Operational indicators		
Inverter	Service	Clean or replace any Air filters.	As needed	Electrician

		Spot-check monitoring instruments (pyranometer etc.) with		
Transformer	Inspection	Inspect transformer oil level, temperature gauges, breather, silica gel, meter, connections etc.	Annual	Electrician
	Inspection	Inspect gears, gear boxes, bearings as required.	Annual	Technician
	Service	Lubricate tracker mounting bearings, gearbox as required.	Bi-annual	Technician
Plant	Monitoring	Daily Operation and Performance Monitoring	Daily	Site in charge
Inverter	Inspection	Observe instantaneous operational indicators on the faceplate of the inverter to ensure that the amount of power being generated is typical of the conditions. Inspect Inverter housing or shelter for physical maintenance, if required.	Monthly	Electrician
Inverter	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, breather, silica gel, meter, connections etc.	Annual	Electrician
Tracker	Inspection	Inspect gears, gearboxes, bearings as required.	Annual	Technician

(if present)	Service	Lubricate tracker mounting bearings, gearbox as required.	Bi-annual	Technician
Plant	Monitoring	Daily Operation and Performance Monitoring	Daily	Site in charge
Spare Parts	Management	agement Manage inventory of As needed spare parts.		Site in charge
Log Book	Documentation	Document all O&M activities in a workbook available to all service personnel	Continuous	Site in charge

ANNEXURE D

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/IS 14286	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) moduleperformancetestingandenergyrating:Irradianceandtemperatureperformance measurements,andpowerrating		
IEC 62716	Photovoltaic (PV) Modules–Ammonia(NH3) Corrosion Testing(As per the site condition like dairies, toilets)		
IEC 61730-1,2	Photovoltaic (PV) ModuleSafetyQualification-Part1:Requirementsfor Construction,Part2:RequirementsforTesting		
IEC 62804	Photovoltaic (PV) modules-Test methods for the detection of Potential-induced degradation. IECTS62804-1:Part1: Crystalline silicon(mandatory for applications where the system voltage is> 600VDCandadvisory for installations where the system voltage is<600 VDC)		
IEC 62759-1	Photovoltaic (PV) modules–Transportationtesting,Part1: Transportation and shipping of module package units		

IEC 62109-	Safety of power converters for use in photovoltaic power
1,IEC	systems-
62109-2	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
	54for indoor mounting)
IEC/IS 61683	Photovoltaic Systems – Power conditioners: Procedure for
(as applicable)	Measuring Efficiency (10%, 25%, 50%, 75% & 90-100% Loading Conditions)
BS EN 50530	Overall efficiency of grid-connected photovoltaic inverters:
(as applicable)	This European Standard provides a procedure for the measurement of the accuracy
(11)	of the maximum power point tracking (MPPT) of inverters, which are used in grid-
	connected photovoltaic systems. In that case the inverter energizes a low voltage
	grid of stable AC voltage and constant frequency. Both the static and dynamic
	MPPT efficiency is considered.
IEC 62116/	Utility-interconnected Photovoltaic Inverters - Test Procedure
UL	of Islanding Prevention Measures
1741/ IEEE	
IEC 60255-27	Measuring relays and protection equipment – Part 27:
	Product safety requirements
IEC 60068-2	Environmental Testing of PV System – Power Conditioners
(1, 2,	and Inverters
14, 27, 30 &	a) IEC 60068-2-1: Environmental testing - Part 2-1: Tests - Test A: Cold
64)	b) IEC 60068-2-2: Environmental testing - Part 2-2: Tests -
	Test B: Dry heat
	c) IEC 60068-2-14: Environmental testing - Part 2-14: Tests - Test N: Change of
	d) IEC 60068-2-27: Environmental testing - Part 2-27: Tests -
	Test Ea and guidance: Shock
	e) IEC 60068-2-30: Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)
	f) IEC 60068-2-64: Environmental testing - Part 2-64: Tests - Test Fahd: Vibration, broadband random and guidance
IEC 61000 –	Electromagnetic Interference (EMI) and Electromagnetic
2,3,5	Compatibility (EMC) testing of PV Inverters
(as applicable)	
Fuse	
	I

	
IS/IEC 60947 (Part	General safety requirements for connectors, switches, circuit breakers (AC/DC):
1, 2 & 3), EN 50521	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, disconnections, switch-disconnections 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 Arrestor	
-	
IEC 62305-4	Lightening Protection Standard
IEC 60364-5-	Electrical installations of buildings- Part 5-53:Selectionand
53/	erection of electrical equipment- Isolation, switching and control
IS15086- 5(SPD)	
IEC 61643-	Low-voltage surge protective devices- Part
11:2011	11:Surgeprotectivedevicesconnectedtolow-voltage power systems- Requirements
	and test methods
Cables	
IEC	General test and measuring method for PVC (Polyvinyl chloride) insulated cables
60227/IS694,	(for working voltages up to and including 1100V,andUV resistant for outdoor
IEC	installation)
60502/IS1554	
BS EN 50618	Electric cables for photovoltaic systems (BT(DE/NOT)258), mainly for DC Cables
Earthing/Lig	
htning	
IEC	IEC 62561-1: Lightning protection system components(LPSC)- Part 1: Requirements
62561Series	for connection components
(Chemical	IEC 62561-2: Lightning protection system components(LPSC)- Part 2: Requirements for conductors and earth electrodes
Earthing)	IEC 62561-7: Lightning protection system components(LPSC)- Part 7: Requirements for earthing enhancing compounds
Junction Boxe	S
IEC 60529	Junction boxes and solar panel terminal boxes shall be of the
	thermo-plastic type with IP65 protection for outdoor use, and
	IP 54protectionfor indoor use
	· ·

Energy Meter			
IS 16444 or asA.C. Static direct connected watt-hour Smart Meter Class 1and2— Specispecified by the(with Import &Export/Net energy measurements)DISCOMs			
Solar PV Roof	Solar PV Roof Mounting Structure		
IS 2062/IS4759	Material for the structure mounting		

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 Rhineland
- UL

Annexure E

PROJECT REPORT FORMAT

Format for Summary Project Report for Grid Connected Rooftop and Small SPV Power Plants

- 1. Name of Bidder:
- 2. RFS 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

Sino.	Component	Specifications	Quantity	Make
А	Solar PV module			
A.1	Aggregate Solar PV Capacity(kWp)			
В	Grid Tie inverter(Type and Capacity)			
B.1	Aggregate Inverter capacity(KVA)			
С	Module mounting structure (Certified by a Structural Engineer (Mandatory for10kW upto 500kWp)			
D	Array Junction Box			
Е	AC Distribution Board			
F	Cable (All type)			
G	Earthing Kit (maintenance free)			
Η	Meters			
Ι	Online monitoring system			
J	Any other component			
Κ	Transformer			

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 RFS

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 of.....to do in our name and on our behalf, all such acts, deeds and things position necessary in connection with or incidental to submission of our Bid for implementation of grid connected Roof top solar PV scheme in response to the NIT No..... dated.....issued by BRPL, New Delhi 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 BRPL may require us to submit.

The aforesaid undertaking is further authorized for making representations to the BRPL, New Delhi and providing information/responses to BRPL, New Delhi representing us in all matters before BRPL, New Delhi and generally dealing with BRPL, New Delhi 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 executants company Name:

Company:

Phone

E-mail: Address :

Sincerely

Annexure G

Monthly O&M report

Month and year:

Name of the bidder:

RFS ref no.:

Project Capacity:

Address of the site:

<u>Part A</u>

Component	Activity	Description	Date	Name/	*Remarks	
				Signature		
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>100kWp)	Infrared camera inspection for hot spots; bypass 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 the array. Remove if any.				
	Vermin Removal	Remove bird nests 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.		
Inverter	Inspection	Observe instantaneous operational indicators on the faceplate.		
		Inspect Inverter housing or shelter for any physical maintenance.		
		Check for connection tightness.		
Inverter	Service	Clean or replace any air filters.		
Instruments	Validation	Verify monitoring instruments (pyranometer etc.) with standard instruments to verify their operation within tolerance limits.		
Transformer	Inspection	Inspect transformer oil level, temperature gauges, breather, silica gel, meter, connections etc.		
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	tion Inspect gears, gearboxes, bearings, motors.		
	Service	Lubricate bearings, gear as required.		

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

*Daily register is to be maintained by the bidder at each location greater than 50kWp. The same may be inspected by BRPL or its authorized representative at anytime 25 years of O&M period. The Register will have the information about the daily generation, Inverter downtime if any, Grid outages.

<u>Part B</u>

Date	Generation kWh	Grid outage (him)	Inverter down period (him)	Remarks
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				

Page | 112

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:

-

Signature of the Authorised signatory of the Bidder

Annexure H

Project Completion Report for Grid-Connected Rooftop

Financial year * :	
Approval No. * :	
Proposal Title :	
Installed by agency :	
Title of the Project* :	SPV Capacity (KWp)*:
Category of the	Name of the
organization/	contact
beneficiary*:	person* :
Address of contact person*	
:	
State* :	District/City*:
Mobile* :	Email*:
Adhere Card Number (For	Latitude:
Residential) Copy to be	
attached.	
	Longitude:
Other info	
Electricity Distribution	Sanction Load
Company	
Name :	
Electricity consumer	
account no. as per electricity	
bill :	

Technology Description	n & System Design /Specification
(Compliance to BIS/ IEC Sta	andards is mandatory – Attach Copies)
1. Solar PV Module:	
Power of each PV Module /	
Nos.(Wp)* / Make	
Cumulative Capacity of	
Modules(KWp):	
Solar cell technology :	Tilt Angle of
	Modules:
Module efficiency (in	Azimuth
Percentage) :	

-

Page | 114

Indigenous or imported		RFID passed	
B		inside or	
		outside:	
2. Inverters:			
Type of inverter :			
Power of each PCU/			
Nos. of inverters			
(KVA)* / Make			
Capacity/Power of		Type of Charge	
PCU/inverters		Controller /	
(KVA) :		МРРТ	
Inverter efficiency (Full			
load) :			
(in percentage)			
Grid connectivity level	Single Phase/	Grid connectivity	230 V/ 415 V
phase	Three Phase	level Voltage	
3. Mounting Structures			
Туре		Surface Finish	
Material		Wind Speed	
		Tolerance	
4. Cables:			
DC Cable Make & Size		Length:	
AC Cable Make & Size		Length:	
(Inverter to ACDB)			
AC Cable Make & Size		Length:	
(ACDB to Electric Panel)			
Conductor	Multi strand	Insulation/sheath	PVC /XLPE
	high		Insulated
	conductivity		
	Copper		
5. JUNCTION BOX & DISTRI	1		
Туре	weatherproof,	Nos.:	
	dust & vermin		
	proof		
Make			
6. EARTHING & LIGHTNING	PROTECTION	r	
EQUIPMENT EARTHING			
AC (Nos.)		Earth Resistance	
		Forth Desistance	
DC (Nos.)		Earth Resistance	

(LA)		
Туре		
LA (Nos.)	Earth Resistance	
7. Online Monitoring		
Mechanism :		
Web Portal :		
USER ID :	Password:	
8. Weather monitoring:		
Solar Irradiance	Temperature	Ambient &
(Pyranomerter - Class Kind		Module
or better)		
Wind speed sensor		
9. Fire Fighting Device /		
System		
10. Danger Board		

(Signature of Vendor)

With Stamp

Annex: Copy of System test & Earth test reports (annexed)

Commissioning Test Report KW

Inverter Testing (DC) Side: Nos. of Inverter: Nos.

Inverter S. No.	Capacity	String 1: Voc	String 2: Voc	Remark

Inverter Testing (AC) Side - Single / Three Phase

Inverter S. No.	Capacity	R - Y/ P- N	Y – B	B - R	R – N	Y – N	B - N	Remark

ACDB & Meter Panel Testing – Single / Three Phase

	R – Y/	Y – B	B - R	R – N	Y – N	B - N	Remark
	P-N						
ACDB I/C (V)							
ACDB O/G (V)							
Meter Panel I/C							
Meter Panel O/G							

Earthing Pit Details: Nos. of Earth Pit: Nos.

-

I	Earthing AC	Earthing DC	Earthing LA	Remark
---	-------------	-------------	-------------	--------

Page | 117

Earth Test Value		
(Ohm)		

-

Sign

Site Engineer

ANNEXURE I

Check List

Documents against Completion of Project

Name of Vendor:	Allocated Capacity : KWp	1
Allocation letter No.:		
Award letter No. :		
Name of Beneficiary:	Installed Capacity: K	W

S.	Documents	Yes / NO	Page No.
No.			
1.	Solar System Warrantee Certificate for 5 / 25 years		
2.	Copy of Inspection report		
3.	Copy of PR Test report		
4.	Copy of Completion report - Annexure J		
5.	Copy of Solar System (Electrical side) testing report		
6.	Copy of Joint Completion certificate (JCR)		
7.	Solar PV module & Solar Inverter Serial No.		
8.	Solar PV module & Solar Inverter test sheet		
9.	Solar PV module & Solar Inverter warranty		
	certificates		
10.	Solar PV plant Insurance Cover		
11.	PV Sys, StaddPro, Final BOM, As built drawing		
12	Metering Installation report		

-

Signature

Page | 119

Joint Commissioning Report (JCR)

COMMISSIONING REPORT (PROVISIONAL) FOR GRID CONNECTED SOLAR PHOTOVOLTAIC POWER PLANT

Certified that a Grid Connected SPV Power Plant ofkWp capacity has					
been		installed	at		the
site				distri	ct
	of				
which	has	been	installed	by	M/S

.....on.......The BIS/MNRE system is as per specifications. The system has been checked for its performance on.....with/without installation of bi-directional meter and it is working satisfactorily. The system is suitable for installation of bi-directional and gross energy meters.

Signature of the beneficiary (DISCOM)

Signature of the rep. of supplier-With name,seal and date

Annexure K

DASHBOARD COMPONENTS SITE LIST

Column	Description	
Site Name	Consumer Name or CA no. where solar PV	
	plant is installed	
Address, Zip code	Location and Division details	
Peak Power	Displays the peak power from solar array	
DIGUDOIDD		

DASHBOARD

Column	Description
Site Selection Menu	Typically a list of all the solar plants installed
	in the licensed area
Overview Bar	Displays the current power generated in AC
	from inverter/s, Energy today and Monthly
	total energy
Site Summary	Display the relevant details of the plant
Power & Energy	Displays the power and energy graphs which
	shows the power and energy over a period of
	time and enables the download of the graphs
	in all major formats, such as axles, png and
	jpg
Weather	Displays the local weather conditions, like
	minimum and maximum temperature, clouds
	conditions
Solar Radiation (Irradiation)	Displays the daily or monthly peak sun
	hours from NASA, IMD or MNRE database

PLANT DETAILS

Column	Description
Plant Capacity	Installed Capacity (in Kwp)
Module details	Make and electrical Specification
Module Serial No.	RFID
Last Measured	10-15 mins reading (data fetching frequency)
Current (Amp)	Module output current/Inverter input

	current
Voltage (V)	Module output voltage/Inverter AC voltage
V DC	Inverter DC voltage
Energy (Wh)	Inverter energy

Annexure L

Check list for documents (Envelope III):

S. No.	Documents Details	Attached, (Yes/ No)
1.	Covering letter as per Format-1 .	
2.	General Particulars as per Format-2.	
3.	Original copy of the Bid Bond as per format -3 in the form of a Bank Guarantee/ DD.	
4.	Original Power of Attorney supplemented with Board resolutions	
5.	Financial eligibility criterion (as per format -7).	
6.	Certificate for certificate of relationship of Parent Company or Affiliate with the Bidding Company (as per Format -8), if required.	
7.	Undertaking from the Financially Evaluated Entity or its Parent Company/ Ultimate Parent Company (as per Format -9), if required.	
8.	Original copy of the Consortium Agreement as per Format-10, if any	
9.	Share Holding certificate (Format -11).	
10.	Self Declaration, Annexure-F.	
11.	Tender Fee	

Annexure M

Check list for Envelope I (Technical):

S. No.	Documents Details	Attached, (Yes/ No)
1.	Certificate of incorporation and	
	Updated Memorandum of Association (MoA).	
2.	Scanned copy of DIPP registration certificate under	
	Renewable Energy sector.	
3.	Declaration on bidder's letterhead for Non	
	blacklisting from any Government department./	
	PSU/ SEB's.	
4.	PAN registration.	
	GST registration.	
5.	For meeting technical eligibility criterion:	
	Scanned copy of the Commissioning certificate and	
	Work order/ Contract/ Agreement/ from the Client/	
	Owner.	
6.	For meeting financial eligibility criterion:	
	scanned copy Balance showing Annual Turnover	
7.	Acceptance of RFS terms and conditions including	
	amendments & clarification on letter head of the	
	bidder.	

Annexure N

Check list for Envelope II (Price Bid):

S. No.	Documents Details	Attached, (Yes/ No)
1.	Duly signed and stamped Price Bid	
	(As per Format A)	

SAMPLE POWER PURCHASE AGREEMENT

POWER PURCHASE AGREEMENT

This Power Purchase Agreement (PPA) (Here-in-after referred to as "the Agreement") is executed on **[Date]___[Month],__[Year]** at New Delhi

BY & BETWEEN

[Name of the Firm] (CIN No._____) a company incorporated under the Companies Act, 2013 having its registered office at ______ [Registered Office Address] (hereinafter referred to as "Power Producer"){Here-in-after referred to as "Power Producer", which expression unless excluded by or repugnant to the context or meaning hereof, shall include its Successor (s), Administrator (s) or Permitted Assignee (s)}, being represented through its Authorized Signatory, ____[Name of the Authorized Signatory, ____[Designation] of the FIRST PART ;

AND

[Insert full legal Name], registered under the Companies Act, 2013 having its Headquarters at [Official Address], {Here-in-after, referred to as "the Purchaser" or "BRPL", which expression unless excluded by or repugnant to the context or meaning hereof, shall include its Successor (s), Administrator (s) or Permitted Assignee (s)}, being represented through its Authorized Signatory, [Name of Authorized Signatory], [Designation], of the SECOND PART.

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 BRPL for "Design, Manufacture, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance of _____ MWp [enter the capacity](approx.) Rooftop Solar PV System on Multiple Buildings at BRPL Offices in Delhi, and as per competitive bidding under RfS No. BRPL/XX/XX/2020 Dated XX.XX.XXXX.
- B. The Power Producer is engaged in the business of design, supply, erection, testing, commissioning, operating and maintenance of solar power plants, including grid connected rooftop power projects.
- C. The Power Producer has agreed to install and operate a solar photovoltaic power plant of <u>MWp</u> [enter the capacity](approx.) capacity 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.
- E. The agreement is subject to approval of DERC.

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:

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, statue, 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 such Governmental Authority.
- e) **"Assignment"** has the meaning set forth in Section 14.1
- f) **"Business Day"** means any day other than Sunday or any other day on which banks in National Capital Territory of Delhi are required or authorized by Applicable Law to be closed for business.
- g) "Commercial Operation Date" has the meaning set forth in Section 4.3(b)
- h) "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
- i) **"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.
- j) "DERC" means Delhi Electricity Regulatory Commission
- k) **"Dispute"** has the meaning set forth in Section 17.7(b)
- I) "Disruption Period" has the meaning set forth in Section 5.3(c)
- m) **"Distribution Utility"** means the local electric distribution owner and operator providing electric distribution and interconnection services to Purchaser at the Premises
- n) "Due Date" has the meaning set forth in Section 7.4
- o) **"Effective Date"** has the meaning set forth in Section 2
- p) **"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
- q) **"Expiration Date"** means the date on which the Agreement terminates by reason of expiration of the Term.
- r) **"Force Majeure Event"** has the meaning set forth in Section 11.1
- s) **"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.
- t) **"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.
- u) **"Indemnified Persons"** means the Purchaser Indemnified Parties or the Power Producer-indemnified Parties, as the context requires.
- v) **"Insolvency Event"** means with respect to a Party, that either Such party has:
 - i. 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 allow substantial part of its assets or business;
 - ii. been unable to pay its debts as such- debts become due;
 - iii. Made a general assignment for the benefit of its creditors,
 - iv. commenced a voluntary proceeding under any insolvency or bankruptcy law;
 - v. 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
 - vi. taken any corporate or other action for the purpose of effecting any of the foregoing; or It is clarified that a dissolution or liquidation will not be any 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.

- w) **"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.
- x) **"Invoice Date"** has the meaning set forth in Section 7.2
- y) "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)
- z) **"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.
- aa) **"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.
- bb) "Party" or "Parties" has the meaning set forth in the preamble to this Agreement.
- cc) **"Performance Ratio" (PR)** means the ratio of plant output versus installed plant capacity at any instance with respect to the radiation measured. PR = (Measured output in kW / Installed plant capacity in kW* 1000 W/m2 /Measured radiation intensity in W/m2).
- dd) **"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.
- ee) "Power Producer Default" has the meaning set forth in Section 12.1(a)
- ff) **"Power Producer Indemnified"** has the meaning set forth in Section 16.1
- gg) **"Premises"** means the premises described in Schedule 1 to this Agreement. For the avoidance of doubt, the Premises include, the entirely of any and underlying real property located at the address described in Schedule 1 to this Agreement.
- hh) **"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
- ii) **"Purchase Price"** means the fee payable by Power Purchaser to the Power Producer under the circumstances described in Section 3.2
- jj) "Purchaser Default" has the meaning set forth in Section 12.2(a)
- kk) **"Purchaser Indemnified Parties"** has the meaning set forth in Section 16.1
- II) "Representative" has the meaning forth in Section 15.1
- mm) "Scheduled Complete Date" has the meaning set forth in Section 4.1(g)
- nn) "Scheduled Commissioning Date" means 6 (six) months from the date of issuance of LOA
- oo) "Selectee" means, a new company
 - i. Proposed by the Lenders read with Schedule III here of 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"** means the cumulative capacity of all sites as specified in RfS and 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 therein.
- tt) **"Tariff"** means the price per kWh set forth in Schedule II hereto.
- uu) **"Term"** has the meaning set forth in Section 3.1
- vv) **"Unit/Part" Commissioning"** means part commissioning of the System as per the test procedure and acceptance of commissioning certificate by the Power Purchaser
 - 1.2. Interpretation

- 1.2.1. 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 integral part of this Agreement and shall have effect as though they were expressly set out in the body of this Agreement.
- 1.2.2. 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.

1.3 This Agreement is subject to prior approval of the DERC.

2. Effective Date

This Agreement shall be effective on the day that falls on the 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 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,

- 3.2.1 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
- 3.2.2 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 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.

- 3.3.1 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.
- 3.3.2 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 RfS No. BRPL/XX/XXXX Dated XX.XX.XXXX and the letter of award issued by BSES Rajdhani Power Ltd (BRPL). 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 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 of approx. <u>MWp</u> [enter the capacity] (approx.), 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 the following:
 - i. water proofing of roof not to be disturbed;
 - ii. Carryout 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 are 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 Article 11 and 12.2 (Force Majeure or Purchaser Default), the Power Producer or its contractor shall pay to BSES Rajdhani Power Ltd (BRPL) genuine pre-estimated liquidated damages for the delay in such commencement of supply of Solar Power as per the clause of the BSES Rajdhani Power Ltd (BRPL) RfS as per respective RfS 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 and Commercial Operation Date

- 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) To establish the System is capable of generating Electrical energy (full rated KWp) for 5 (five) continuous hours, using such instrument and meters as have been installed for such purposes, then the Power producer shall send a written notice to the Purchaser to that effect. "Commercial Operation Date" shall mean the date of successful conducting such tests, acceptance of commissioning certificate and injection of power at delivery point of the last site within the Scheduled Commissioning Date provided that incase of Unit/Part Commissioning, the Power Purchaser shall pay the 75% of the quoted tariff.

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.

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 O&M 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 contractor's 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 Power Producer shall at its own cost install and maintain 4G modem with GSM SIM facility as specified by the BRPL for integration of Meters for real time data / monitoring.
- d) 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.
- e) 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.
- f) The Purchaser may, at its own discretion, install a check meter, at its cost, to verify the measurements of the Main Metering System.
- g) The title to the Solar Power supplied by the Power Producer shall pass to the Purchaser at the Delivery Point.
- h) Power Producer shall be responsible for transformer etc. "if required" & metering as per respective clause of RfS (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 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
 - i. 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
 - ii. 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:
 - a. pay the Power Producer an amount not exceeding Rs. []for all work required by the Power Producer to disassemble or move the System and reassemble the system after completion of the repair work and

6 Delivery of Solar Power

6.1 Purchaser Requirement

Subject to grid stability/ grid constraints, 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.

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. If in any contract year it is found that the power producer has not been able to generate minimum energy of ______ MU till the end of ______years from the COD on account of reasons solely attributable to the power producer the non compliance by the power producer shall make the power producer liable to pay compensation to the power purchaser as per the following formula: [Shortfall in generation compared to minimum guaranteed generation at annual CUF of 15% X Cost of REC]. This will however be relaxable by the power producer. This compensation shall be applied to the amount of shortfall in generation during the contract year. However this compensation shall not be applicable in events of force majeure identified under the agreement affecting supply of solar

power by the solar producer.

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 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 INR ____/kWh [enter the discovered tariff] levelized tariff as per BSES Rajdhani Power Limited (BRPL) LoA. The 'year' Considered shall be the financial year which April 1st to 31st March of every year as per BSES Rajdhani Power Ltd (BRPL) Schedule II provides a detailed year on year tariff schedule.

iii. The Power Producer shall compensate to Power Purchaser for the shortfall in generation compared to the guaranteed generation at the cost of REC.

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 here under 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 livable 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, 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.

7.6 Late Payment Surcharge

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 or as approved by DERC ("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 Rebate

For payment of any Bill on or before Due Date, the following Rebate shall be paid by the Power Producer to Purchaser in the following manner:

- a) A Rebate of 2% shall be payable to the Purchaser for the payments made within a period of 3 working days of the date of presentation of bills through email.
- b) Any payments made beyond a period of 3 working days from the date of presentation up to the due date, shall be allowed a rebate of 1%.
- c) No Rebate shall be payable on the Bills rose on account of taxes, duties, cess etc.
- d) No rebate shall be allowed on partial payments made by the Purchaser.

7.8 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. 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 if shall be 'referred to dispute resolution procedure as provided in the present Agreement.

7.9 Change in Law

- a) For the Purpose of this section 7.9, the term "Change in Law" shall mean the occurrence of any of the following events after the Effective date, 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
 - 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 shareholder 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 7.9, 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 7.9, 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:
 - i. 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,
 - ii. Immediately notify Purchaser 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) 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 24x7 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. CUF shall be minimum of 15% on annual basis.
- 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 CEA (Technical standards for connectivity of distributed generated resources) Regulations, 2013 and as amended by the competent authority from time to time. 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

:

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:

Address

Name	
Designation	
Telephone	
Email	

Power Purchaser's Representatives

::

The Power Purchaser 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:

Address	:
Name	:
Designation	:
Telephone	:
Email	:

8.3 Purchaser's Covenants

Purchaser covenants and agrees to the following:

- a) Notice of Damage or Emergency: Purchaser shall:
 - 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;
 - ii. 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 herein. If 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 or other 'financial incentives.
- 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.

Power Producer shall be entitled to any insurance proceeds received for damages in this clause. Purchaser 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
 - i. the Power Producer shall have access to the Premises and System during the Term of this Agreement, and
 - ii. 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:** Subject to Article 6.1, 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) [Enter the water requirement].
- 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.
- I) 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 actual 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 at CUF of 15%, during the period of interruption, for the affected Solar Power Plant(s). In case of permanent removal of Solar plant at any of the sites due to BRPL requirement compensation payable shall be as per Schedule –III.

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 no 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 its 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 it's or their property is bound,
 - ii. its organizational documents ,or
 - iii. Any Applicable Laws.

10 Taxes and Governmental Fees

10.1 Purchaser Obligations

Purchaser shall pay for any taxes, fees or charges imposed or authorized by any Governmental Authority in future (as on date no such taxes/fees/charges are being levied) 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 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 shill 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 RfS 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) Power 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.
- (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 the 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 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 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 Section 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,
 - (I) 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
 - (II) 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 which the Purchaser can claim compensation under any insurance policy, shall not be charged to or payable by the Purchaser.

14 Assignment & Notation

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 less 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. 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/notation, 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 is 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 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

Address

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:

:

:

:

:

:

:

Name : Designation : Telephone : Email :

Power Purchaser's Address and Contact Details:

Address Name Designation Telephone Email

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

- i. protect the Confidential information from disclosure to third parties with the same degree of care accorded its own confidential and proprietary information, and
- ii. 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 properly 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, copyrighted 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
 - i. protect the Confidential Information from disclosure to third parties with the same degree of care accorded its own confidential and proprietary information, and
 - ii. 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 of 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 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 valid issued notice or required filling, 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's; 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 "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 arid 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 fillings 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.

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 Delhi 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 the DERC for dispute resolution.

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

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 the irrespective 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.

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.

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

	WITNESSES		WITNESSES
Signature		Signature	
Name		Name	
Designation		Designation	

	WITNESSES		WITNESSES
Signature		Signature	
Name		Name	
Designation		Designation	

SCHEDULE I

Description of the Premises

Premises Overview	
Segment	
Type of Roof	
Hours of Operation	
Security	

Capacity and Area Requirement

Capacity	
Module Area	
Number of Building	
Roofs	
Distribution	

SCHEDULE II

FEES

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

Purchaser shall pay power producer for solar power at the rate equal to INR____/kWh which is the levelized tariff as per BSES Rajdhani Power Limited (BRPL) Load.

Year Wise Tariff

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	
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.

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.

Provided that nothing herein shall apply in the event the solar project suffers any adverse change in applicable law.

The Price reference taken for calculating the total cost of the system is as per rates for the state of NCT of Delhi [RfS: IPGCL/RFS/CAPEX – RESCO/09/2020(Part D)] or MNRE benchmark prices for FY 2020-21, whichever is lower and has used the CERC guidelines for arriving at the Project cost.

Year of Term (End of Year)	Depreciation Rate in % (percent)	Purchase Price Factor per KW in INR (₹)
1 st Year		
2 nd Year		
3 rd Year		
4 th Year		
5 th Year		
6 th Year		
7 th Year		
8 th Year		
9 th Year		
10 th Year		
11 th Year		
12 th Year		
13 th Year		
14 th Year		
15 th Year		
16 th Year		
17 th Year		
18 th Year		
19 th Year		
20 th Year		
21 st Year		
22 nd Year		
23 rd Year		
24 th Year		
25 th Year		
26 th Year		

SCHEDULE IV

Project:_____MWp (approx.) [insert the capacity] Grid Connected Rooftop Solar Power PlantLocation:Design Criteria: As per shadow free area design

Expected Yearly Energy Generation Sheet

End of Year	Yearly Degradation 'MWh' (Modules & System)	Global incident in coll. Plane (Globins) 'kWh/Sq.mtr' Yearly	Energy injected into grid (E_grid) 'MWh' Yearly 'A'
1	1%		
2	1%		
3	1%		
4	1%		
5	1%		
6	1%		
7	1%		
8	1%		
9	1%		
10	1%		
11	0.65%		
12	0.65%		
13	0.65%		
14	0.65%		
15	0.65%		
16	0.65%		
17	0.65%		
18	0.65%	1	
19	0.65%		
20	0.65%	1	
21	0.65%	1	
22	0.65%		
23	0.65%		
24	0.65%		
25	0.65%		

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 (including the government incentives/subsidies available for the project) 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.

Purchase Price for MWp	[Insert Capacity	System @INR	/-Watt	[Insert Proj	ect Cost]

1st Year 2nd Year 3rd Year 4th Year 5th Year 6th Year 7th Year 8th Year 9th Year 10th Year 11th Year 12th Year	
3rd Year4th Year5th Year6th Year7th Year8th Year9th Year10th Year11th Year12th Year	
4th Year5th Year6th Year7th Year8th Year9th Year10th Year11th Year12th Year	
5th Year6th Year7th Year8th Year9th Year10th Year11th Year12th Year	
6th Year7th Year8th Year9th Year10th Year11th Year12th Year	
7 th Year 8 th Year 9 th Year 10 th Year 11 th Year 12 th Year	
8 th Year 9 th Year 10 th Year 11 th Year 12 th Year	
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15 th Year	
16 th Year	
17 th Year	
18 th Year	
19 th Year	
20 th Year	
21 st Year	
22 nd Year	
23 rd Year	
24 th Year	
25 th Year	
26 th Year	

ANNEXURE - VI

NAME OF THE BENEFICIARY	
PRINCIPAL PLACE OF BUSINESS & ADDRESS	
NAME OF THE BANK	
BANK ADDRESS	
BANK ACCOUNT NO.	
TYPE OF BANK ACCOUNT - SB/CA/CC	
IFSC/NEFT/RTGS CODE	
MICR CODE	
PAN CARD NO.	
PHONE NO. /FAX NO. WITH STD CODE	
EMAIL ID OF CONTACT PERSON	