



RAJASTHAN RENEWABLE ENERGY CORPORATION LIMITED

Revised Tender Document

Rate Contract for

**WORK FOR DESIGN, SUPPLY,
INSTALLATION, TESTING, COMMISSIONING AND
MAINTENANCE OF GRID CONNECTED SPV POWER
PLANTS**

UNDER

“ROOF TOP SOLAR POWER GENERATION SCHEME” 2015-16

IN

RAJASTHAN .

*NIT No: RREC/SPV Roof Top Prg./15-16
Dated: 30/01/2016.*

Note : Tender document cost : Rs. 5000/-

**E-166, Yudhisthir Marg, C-Scheme, Jaipur-302001 - INDIA
Tel:2225859 / 2221650 / 2229341 Fax : 0141-2226028**

**NIT No: RREC/SPV Roof Top Prg./15-16,
Dated: 30/01/2016.**

This tender by RREC is for selection of vendors for the work of supply, installation, commissioning of grid connected SPV Power Plants in Rajasthan under programme 2015-16.

This Tender Documents along with Formats, Annexures etc. is issued to -
M/s. _____

NOTE:

(i) This document is not transferable.

(ii) Though adequate care has been taken while preparing the tender Documents, the Bidder shall satisfy himself 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 seven days from the date of issue of the bid documents, it shall be considered that the bid document is complete in all respects and has been received by the Bidder.

(iii) The Rajasthan Renewable Energy Corporation Limited (RREC) may modify, amend or supplement this tender Document including Capacity Allocation.

(iv) The selection of Bidders shall be carried out through e-procurement process. Proposal/Bids are to be submitted online in electronic format on website <http://eproc.rajasthan.gov.in>. as per tender document.

(v) Please see regularly our website www.rrecl.com for latest up-date after issue of this tender. All modification / amendment /clarification / information etc shall be available on the website of e-procurementonly.

(vi) RREC may at its discretion, extend the deadline for submission of the Proposals.

(vi) **Correspond at:-**

The Managing Director,
Rajasthan Renewable Energy Corporation Ltd.,
E-166, Yudhisthir Marg, C-Scheme,
Jaipur (Raj.), 302001
Tel: 0141-2221650 / 2229341/ 2229055
Fax: 0141-2226028
Email:rrec2016@gmail.com
Email: rooftop25mw@gmail.com



RAJASTHAN RENEWABLE ENERGY CORPORATION LIMITED

(Government of Rajasthan Undertaking)

E-166, Yudhisthir Marg, C-Scheme, Jaipur

CIN No. U40101RJ 1995SGC009847, Phone: 0141-2229055 / 2221650 / 2225859, Fax: 2226028

Brief of Schedule of Dates of Tender

Programme & detail of work	Design, Supply, Installation, testing, Commissioning and Maintenance for 5 Years of grid connected SPV Power Plants for other than individuals in the State of Rajasthan under " Roof Top Power generation scheme " of RREC for 2015-16.		
Work Area:	Rajasthan.		
NIT No:	NIT No: RREC/SPV Roof Top Prg./15-16, Dated: 30/01/2016.		
Estimated Capacity of Project	25MW { This capacity of work can be increased as per availability of Capacity & CFA allocation as sanctioned by MNRE, GoI }		
Estimated Project Cost:	Rs. 200.00 Crores [For 25MW]		
Earnest Money Deposit:	For Established Suppliers	For new/local Entrepreneur	For Startups
	Rs. 32.00 Lakh	Rs.8.00 Lakh	Rs.3.20 Lakh
Date of downloading { The tender can be downloaded from web site http://eproc.rajasthan.gov.in }	1 st April, 2016, 03.00 p.m. to 18 th April, 2016, 02.00 p.m.		
Date of Pre-bid Meeting	16 th March, 2016 at 03.00 p.m. (Already held)		
Last Date of online submission of Tender	18 th April, 2016, upto 04.00 p.m.		
Date of submission of Envelope-1 and Envelope-2 at RREC Head Office { in Hard Copy }	18 th April, 2016, upto 04.00 p.m.		
Date of Opening of online Technical bid (Cover-1 & Cover-2)	20 th April, 2016, upto 02.00 p.m.		
Date of opening of Financial bid of eligible bidders (cover-3)	Shall be intimated to qualified bidders after evaluation of Technical bid.		
Date of Completion of work.	31st March, 2017.		
Validity of prices for taking up further work:	Till completion period.		
Cost of Tender:	Rs. 5000/- in favour of MD, RREC payable at Jaipur.		
e-proc Charges:	Rs.1000/- in favour of MD, RISL, payable at Jaipur.		

NOTE: Proposals are to be submitted online in electronic format on website www.eproc.rajasthan.gov.in. as detailed hereunder and Documents to be submitted in physical form are also detailed hereunder:

The bidders are requested to submit their bids prior to last date of submission to avoid Non-submission of their bids up to prescribed date & time due to non-availability / hanging of website, at either ends, at last moment or any reason whatsoever. The last date of submission of bids will not be extended on such account.

1. The bidder will have to deposit Hard copy of

Envelope-1: i.e (i) the DD/Banker's Cheque of prescribed cost of tender Rs. 5000/- and EMD Rs. 32.00 Lacs/Rs.8.00 Lacs/Rs.3.20 Lacs by way of DD/Banker's Cheque/Bank Guarantee (valid for six months) in favour of **The Managing Director, RREC, payable at Jaipur**; Government undertakings PSUs are exempted for EMD deposition **producing the certificate issued by competent authority.** (ii) the prescribed Processing Fee of RISL by way of DD/Banker's Cheque in favour of **Managing Director, RajCOMP Info Services Ltd. (RISL), payable at Jaipur**

(The tender cost, Earnest Money and e-tender processing fees of RISL, in original in Envelope-1, is to be deposited at RREC Head Office on 18/04/2016 up to 4.00 p.m. as per above time schedule. This is essential otherwise the bid in electronic form (Cover I, II & Cover III) will not be opened of that bidder.)

and

Envelope-2 : Technical Bid document

2. List of required Formats/documents to be submitted online duly signed digitally by Authorized Signatory:

- 1) **Cover-1:-** Up load the scanned copy of DD/Pay Order towards Cost of tender document, processing fee of RISL and EMD/Exemption certificate(in .pdf).
Government undertakings PSUs are exempted for EMD deposition **producing the certificate issued by competent authority.**
- 2) **Cover- 2: -** All Non-financial information in the Formats as per tender (in .pdf).
- 3) **Cover-3: -** Price bid as per Format attached.

NOTE:-The financial bid (Price bid) is to be submitted as per format **Annexure-4.** This format is to be downloaded from <http://eproc.rajasthan.gov.in>, filled & uploaded back to <http://eproc.rajasthan.gov.in>. Bid may be rejected if look alike format (.xls) is created/ filled and uploaded on <http://eproc.rajasthan.gov.in>

4. The Cover-1 will be opened on **20/04/2016 at 14.00 Hrs**, in the presence of bidders who wish to be present.
5. Cutting / overwriting if any in the figures of the tendered documents is required to be clarified / indicated in words, duly signed, failing which the tender may be rejected.
6. Deviation of any kind is ~~not~~ to be quoted in the financial bid. Such deviations shall not prevail.
7. The bidders should provide complete information at the time of submission of bid. If the bidders are asked to furnish some more clarification/confirmation/document, they shall be required to furnish the same within specified time, failing which the

case shall be finalized /decided on the basis of available information/documents. The responsibility of ignorance of their bid on account of delay in furnishing of desired information/documents shall be of the bidder. However, if there are any shortcomings in the submission of the information which not materially affects the qualification criterion, then the Bid Evaluation Committee shall have the power to consider the facts on the merit of the case and decide the bid evaluation accordingly.

8. All tender documents should essentially be signed digitally and submitted/uploaded on <http://eproc.rajasthan.gov.in> in time as per checklist as per note 14 below.

9. Bidders who wish to participate in this tender, will have to register on <http://eproc.rajasthan.gov.in> (bidders registered earlier on the eproc.rajasthan.gov.in, need not to get registered again). To participate in online tenders, Bidders will have to procure Digital Signature Certificate (Class II & Class III) as per requirement under Information Technology Act-2000 using which they can sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency or they may contact e-Procurement Cell, Department of IT & C, Government of Rajasthan on the following address:-

Address: e-Procurement Cell, RISL, Yojana Bhawan, Tilak Marg, C-Scheme, Jaipur, e-mail: eproc@rajasthan.gov.in

10. Bidders are also advised to refer %Bidders Manual+available under %Downloads+ section on <http://eproc.rajasthan.gov.in> for further details about the e-tendering process.

11. **All the required information shall be furnished strictly in the prescribed formats only. Any information indicated other than the prescribed formats shall not be entertained.** The bid shall be evaluated on the basis of information furnished in the prescribed formats only.

12. The Procurer may advise any bidder to furnish the documents in original or copy thereof duly attested by Notary for verification, in physical form on short notice of three days.

13. **Correspondence for enquiries and clarifications**

All correspondence in respect of the tender and submission of the Tender shall be addressed to:

The Managing Director,
Rajasthan Renewable Energy Corporation Ltd.,
E-166, Yudhisthir Marg, C-Scheme,
Jaipur (Raj.), 302001
Tel: 0141-2225859 / 2229341/ 2229055 ,Fax: 0141-2226028
Email: rrec2016@gmail.com

Contact Person:

Mr. R.K. Bhandari,
Director (Technical),
Rajasthan Renewable Energy Corporation,
E-166, Yudhisthir Marg, C-Scheme, Jaipur - 302001, Rajasthan.
Tel: 0141-2229341, Fax: 0141-2226028.
Email: rrec2016@gmail.com

Mr. Sunit Mathur,
General Manager (RE&O),
Rajasthan Renewable Energy Corporation,
E-166, Yudhisthir Marg, C-Scheme, Jaipur - 302001, Rajasthan.
Tel: 0141- 2229055, Fax: 0141- 2226028
Email: sunit2000@yahoo.co.in

Mr. K.C. Soni,
Project Manager (RE&O),
Rajasthan Renewable Energy Corporation,
E-166, Yudhisthir Marg, C-Scheme, Jaipur - 302001, Rajasthan.
Fax: 0141- 2226028
Email: rrecsoni15@gmail.com
Email: deepakalwar1219@gmail.com
Email : rooftop25mw@gmail.com

Note: All correspondence in reference to this tender by mail should essentially be sent to Email ID: rooftop25mw@gmail.com

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SECTION – 1

INTRODUCTION & ABBREVIATIONS

1. Background

With the help of Financial Assistance from MNRE under their SPV Roof Top Programme 2015-16, RREC wishes to select competent, experienced and financially sound manufacturers / suppliers to supply, install, commissioning and to maintain Solar Photovoltaic Grid connected Systems in area of various districts of Rajasthan. RREC would release the subsidy to the eligible manufacturer/supplier after installation of systems as per terms and conditions of this tender.

Above work is to be carried out on '**Turn Key Basis**' which includes identification of beneficiaries in Rajasthan, collection of their share of cost after adjusting MNRE financial assistance, design, supply of SPV systems with all accessories and equipments, installation, testing, commissioning and maintenance services for 5 years with free replacement warranty on spare parts against manufacturing defects for five years.

Expected capacity of SPV systems will be 25.00 MW. This quantity may further increase as per availability of allocations and CFA for this programme from MNRE, Gol.

2. Mode of Execution of Programme:

The basis of evaluation of the bids shall be the cost/rate quoted in the Price Schedule. To further clarify, installation and commissioning cost and taxes etc. shall be inclusive to the cost of supply of complete system including FIVE years comprehensive maintenance for comparison and evaluation. Proposers are required to quote rate / cost on firm basis and no price variation on any account shall be considered.

The selected manufacturers / authorised suppliers shall identify beneficiaries to supply, install, commission systems and **provide maintenance services for 5 years with free replacement warranty on spare parts against manufacturing defects for five years**. They shall also be required to set up their repair and maintenance centres for providing effective repair/maintenance services to the beneficiaries / users and meet conditions as given in Section 2.

The Programme shall be carried out as per guidelines at Section-2 and as given hereunder:-

- (i) The manufacturer/supplier shall be allowed to install the systems conforming to the MNRE specifications / guidelines after authorisation by RREC.
- (ii) For this RREC shall give specific targets / limits to each selected manufacturers and fix prices for sale of systems to the user (beneficiaries).

(iii) The bidder may claim subsidy from RREC by submitting complete list of buyers alongwith full addresses, date of sales, models and makes and serial numbers of systems & PV modules and BOS supplied along with the photographs of installed system duly verified by RREC's field Project Officer/Project Manager or authorised representative from RREC Head Office.

3. Abbreviations / Terms:

i)	RREC :	Rajasthan Renewable Energy Corporation Limited
ii)	Manufacturers /Suppliers:	Manufacturers/Suppliers of SPV Modules (Meeting technical specification and other parameters specified by MNRE).
iii)	RFP :	Request for Proposal.
iv)	EMD :	Earnest Money Deposit.
v)	SD :	Security Deposit.
vi)	Performance security (PSD):	Security amount as per clause 9.2 (iii) (which will be deducted from payment against supply and installation) for warrantee period.
vii)	Systems :	SPV Roof Top /Ground mounted grid connected Systems.
viii)	Proposal :	Tender / Bid / Quotation.
ix)	Proposer :	Tenderer/Bidder/Applicant.
x)	Cost of System :	Total Price of System.
xi)	Amount payable by RREC :	Subsidy amount only.
xii)	Subsidy :	Capital cost support to eligible beneficiary under MNRE, Gol Roof Top Scheme (@Rs.22/- per watt or 30% which ever will be less).
xiii)	CMC :	Maintenance services for 5 years with free replacement warranty on spare parts against manufacturing defects for five years.
xiv)	Envelope-1 :	Sealed Envelope having : (i) the DD/Banker's Cheque of prescribed cost of tender and EMD by way of DD/Banker's Cheque/BG(valid for six months) in favour of The Managing Director,RREC, payable at Jaipur, (ii) the prescribed Processing Fee of RISL by way of DD/Banker's Cheque in favour of Managing Director, RajCOMP Info Services Ltd. (RISL), payable at Jaipur.
xv)	Envelope-2:	Sealed Envelope having duly signed (by authorized person) Technical Bid document.

SIGNATURE OF AUTHORISED
SIGNATORY WITH SEAL

SECTION – 2

SCOPE OF WORK

Scope of work covers identification of beneficiaries as per RREC's conditions, Design, supply, installation, testing, commissioning and maintenance of SPV Grid connected Roof Top/Ground mounted Systems **in Rajasthan** conforming to technical specification enumerated in relevant JNNSM guidelines and amended from time to time.

Detailed scope of work is given here under:-

2.1 Work of installation of SPV grid connected Systems shall involve :

- (i) Identification and motivation of prospective beneficiaries.
- (ii) Preparation of Detailed Project Report (DPR) of the proposed Proposal of SPV Power Plant.
- (iii) Obtaining No objection certificate from concerned DISCOM for grid connectivity.
- (iv) Collection of balance cost payable by beneficiary after deducting subsidy payable by RREC.
- (v) Entering into supply and comprehensive maintenance contract (CMC) agreements with beneficiaries. CMC shall be for five years as per Maintenance services for 5 years with free replacement warranty on spare parts against manufacturing defects for five years..
- (vi) Design, supply, storage, civil work, erection, testing and commissioning of SPV grid connected Power Plant as per schedule given at the time of allotting targets.
- (vii) The work covers Design, supply, installation, commissioning and comprehensive maintenance for FIVE years.
- (viii) **Establishing “After sales service centres” in concerned area to cater the maintenance needs of beneficiaries.**

RREC reserves the right to allot any area(s) / districts to any approved Supplier firm among the all approved suppliers.

2.2 PROJECT COST

2.2.1 The Project cost 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 cover shall the obligations mentioned in the Bidding Documents in respect of Design, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for a period of 5 years goods and services including spares required if any, during the 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.

- 2.2.2 The price quoted is on lump sum turnkey basis including all taxes & duties applicable and the bidder is responsible for the total scope of work described as above.
- 2.2.3 The project cost shall remain firm and fixed and shall be binding on the Successful Bidder till completion of work for payment of subsidy amount irrespective of his actual cost of execution of the project. No escalation will be granted on any reason what soever. 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 what soever.
- 2.2.4 The cost 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.
- 2.2.5 The operation & maintenance of Solar Photo voltaic Power Plant would include warranty against wear, tear, overhauling, machine breakdown, insurance, and replacement of defective modules, invertors/ Power Conditioning Unit(PCU), spares, consumables&other parts for a period of 5 years.
- 2.2.6 The **Project cost** shall be specified by the successful **Bidder's quote @Rs/Wp (Wattpeak) for each project**.The project cost shall be in accordance with all terms, conditions, specifications and other conditions of the Contract as accepted by the RREC and incorporated into the Rate Contract order.
- 2.2.7 The Bidder shall be responsible and take an Insurance Policy for transit-cum-storage-cum-erection for all the materials to cover all risks and liabilities for supply of materials on site basis, storage of materials at site, erection, testing and commissioning. **The bidder shall also take appropriate insurance during O&M period,if required.**
- 2.2.8 The Bidder shall also take insurance for Third Party Liability covering loss of human life, engineers and work men and also covering the risks of damage to the third party / material/ equipment/ properties during execution of the Contract. Before commencement of the work, the Bidder will ensure that all its employees and representatives are covered by suitable insurance against any damage, loss, injury or death arising out of the execution of the work or in carrying out the Contract. Liquidation, Death, Bankruptcy etc., shall be the responsibility of bidder.

2.3 Net metering of Power :

Net metering is the concept which records difference between export of generated energy and import of energy from DISCOM grid during billing cycle. The SPV power consumer shall pay for the net energy in a billing period as per applicable retail supply

tariff as determined by regulatory commission, if the supplied energy by the Discom is more than the injected energy by the solar PV sources of the consumer(s).

Rajasthan Electricity Regulatory Commission (RERC) has issued “ **Regulation for net metering and grid connectivity**” on 26th February, 2015. **The SPV Power generators/beneficiaries going for installation of SPV Power Plants under this scheme will also be governed by the rules & regulations of Net Metering scheme as notified by RERC and amended time to time.**

The Empanelled supplier shall bear the entire cost of metering arrangement provided including its accessories. **The fee and other charges such as security deposit payable to office of DISCOM & Electrical inspector will be payable by beneficiary separately.** The installation of meters including CTs & PTs, wherever applicable, shall be carried out by the supplier as per the procedures in vogue of the Discom(s) with their permission.

2.4 PLANT PERFORMANCE EVALUATION:

RREC shall monitor the performance of the grid connected SPV Power Plants without battery back up above 25 kW PV capacity or as per feasible subject to availability of proper measuring equipment being in vogue in DISCOM as under :

The successful bidder shall be require to meet minimum guaranteed generation with **Performance Ratio (PR)** at the time of commissioning and related **Capacity Utilization Factor (CUF)** as per the DNI level for the location during the O&M period. PR should be shown minimum of 75% at the time of inspection for initial commissioning acceptance to qualify for release of subsidy. Minimum CUF of 15% should be maintained for a period of 5years for release of performance related security deposit. **For CUF less than 15%, the penalty can be imposed for the loss of energy generation @ APP of DISCOM for that year subject to force majeure conditions.**The bidder should send the periodic plant output details to RREC for ensuring the CUF. The PR will be measured at Inverter output level during peak radiation conditions. The PR & CUF will be evaluated considering 100% grid availability.

2.5 Eligible Beneficiary for SPV Grid connected Systems:

The details of eligible beneficiary buildings, adimmsible for CFA under MNRE, Roof Top Programme and CFA amount will be as per MNRE latest notification

No: 03/88/2015-16/GCRT, Dated: 04.3.2016. The detailed notification is attached as Annexure- 15 in the tender document.

2.6 PROJECT ALLOCATION AND SANCTION :

2.6.1 The identification of the projects (roof tops) at the time of bidding is not mandatory. The Bidders, however, in their own interest are advised to make a preliminary survey of availability of rooftops in the city/ cities mentioned under scope of work.

2.6.2 The Successful Bidders selected shall be issued Rate contract and Letter of Allocation (LOA) indicating the allocated capacity & Project Cost etc.

2.6.3 The bidders who have been notified as Successful Bidders, shall be given 6 months from the date of issue of Letter of Allocation for identification of rooftops and submission of **Project sanction documents** :

1. Detailed Project Report,

2. Agreement between the empanelled bidder and the owner of Project/ building.(Notarised original agreement should be enclosed).

3. No objection Certificate from the concerned DISCOM for grid connectivity

for sanction. Further, Successful Bidders can start submitting their Project sanction documents as soon as they receive **LOA from RREC**. If after 6 months (Six months), the successful bidder could not identify rooftop(s) capacity up to the allocated capacity and submit Project sanction documents, RREC may allow another 2 (two) more months provided the successful bidder could submit Project sanction document for at least 50% of the allocated capacity in first six months and also intimates RREC their intent to identify there remaining capacity in the next 2 months. **If the successful bidders fail to identify the projects for allocated capacity in full or part, within the time limit (i.e maximum 8 months), in such case, it will be assumed that the bidder is not capable to complete the allocated work and in this situation penalty will be imposed on the balance quantity @1.5% on subsidy amount and this balance allocation will be awarded to another bidder.**

2.6.4 If there is some left out quantity found due to incapability of the bidder at any time from the date of issue of LOA, this will be offered to other Successful Bidder(s) having ready proposals with them.

2.6.5 For identification of projects, RREC may provide help such as publicity etc and will also made available the list of interested beneficiaries available with RREC, **However the entire responsibility of finding the buildings lies with the Bidder.**

2.6.6 R R E C will issue the Sanction Letter(s) for the Project(s) indicating the subsidy amount(s) which will be disbursed in line with the provisions of the tender

document. The Bidder shall complete the design, engineering, manufacture, supply, storage, civil work, erection, installation, testing & commissioning of each project within 3 months period from the date of issue of sanction letter or date of completion of total project, **whichever is later.**

2.7 Subsidy Pattern:

As per guidelines of Ministry of New and Renewable Energy, GOI is providing 30% capital subsidy subject to maximum **@ Rs.22.50/- per Watt** (of PV capacity) under SPV Roof Top Programme to the buildings as detailed at clause : 2.5. The minimum capacity of rooftop SPV Power Plant to be installed shall be **more than 1kW and the maximum capacity shall be 500 kWp for single site.**

Note: (i) All provisions as amended by MNRE, GoI from time to time in respect of subsidy, norms of admissible beneficiary and allowable capacity of PV systems shall be applicable to this scheme accordingly.

(ii) Subsidy will be 30% of project cost arrived subject to maximum @ Rs. 22.50/- per watt . Remaining cost will be borne by beneficiary.

2.8 Model of SPV Systems and tentative Quantities:

RREC proposes to take up installation of grid connected PV Power Plants { without Battery Back up} under this programme. The details of tentative quantities are as under :

S.No.	PV System Models:	Individual system PV Capacity	Total Tentative Targets for 2014-15.
1.	SPV Grid connected Power Plants without Battery Bank:	Above 1 kW to 500 kW	25 MW { This capacity can further increased as per allocation by MNRE}

2.9 Minimum Capacity of proposals :

The bidders shall furnish their proposal for at least following PV Capacity Systems:

S.No.	Category of bidders:	Minimum PV Capacity for proposal :
1.	Established suppliers:	2000 kW
2.	New small/local Entrepreneurs:	500 kW
3.	Startup Firm	200 kW

SECTION – 3

EXPERIENCE AND COMPETENCE

Following are the required experiences for considering responsiveness of the bidders for different category bidders. To substantiate this, necessary documents, certificates shall have to be attached with the proposal.

(A) Established Suppliers:

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

The bidder should have minimum two years experience of successful installation of Grid connected PV projects.

- (a) The bidder should have installed at least one Grid connected Solar PV Power Plant having capacity of not less than 50 kW which should have been commissioned during 2013-14 and 2014-15 & up to date of submission of bid.
+
- (b) The bidder should have cumulative experience of execution of ≥ 500 kWp Grid connected SPV Power Plants &/off-grid SPV Power Plant/systems in India during 2013-14 and 2014-15 & up to date of submission of bid.
+
- (c) The details of projects executed during period mentioned above should be listed in Annexure-3(A) and Annexure-3(B).A certificate issued by the SNA/ Govt. Organisation/SECI/Project owner towards the satisfactory installation and functioning of the power plants to be furnished by the bidder.

(B) New small / local Entrepreneur :

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

The bidder should have minimum two years experience of successful installation of Grid connected PV projects.

- (a) The bidder should have cumulative experience of execution of ≥ 300 kWp Grid connected SPV Power Plants and Off-grid SPV systems installations in India during 2013-14 and 2014-15 & up to date of submission of bid.
+
- (b) The details of projects executed during period mentioned above should be listed in Annexure-3(A) and Annexure-3(B).A certificate issued by the SNA/ Govt. Organisation/SECI/Project owner towards the satisfactory installation and functioning of the power plants to be furnished by the bidder.

(C) Startup Firms :

- (i) The Bidder should be either a body incorporated in India under the Companies Act, 1956 or Company Act 2013 including any amendment thereto and framed for business of Solar Power/Renewable energy.

A copy of certificate of incorporation should be furnished along with the bid in support of above.

OR

The Bidder should be either a body incorporated in India under the the Limited Liability Partnership Act, 2008 : a subset of companies Act, 2003 and engaged in the business of Solar Power/Renewable energy.

A copy of certificate of incorporation should be furnished along with the bid in support of above.

OR

The Bidder should be a firm registered under Partnership Act in India.

A copy of certificate of FORM-G /copy of registered Partnership deed should be furnished along with the bid in support of above.

OR

The Bidder should be a firm registered as sole properitor under Shop Act.

A copy of certificate of TIN Number should be furnished along with the bid in support of above.

- (ii) The bidder firm\$ one of the director/proprietor should be BE/B.Tech/MBA in qualification.

SIGNATURE OF AUTHORISED
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SECTION – 4

FINANCIAL CAPABILITY

Following are required for considering responsiveness regarding financial capability of the bidders:

(A) Established Suppliers:

The bidder has financial capability to take up the proposed work to be supported by balance sheet for last three years { 2012-13, 2013-14 & 2014-15 } and there should be **minimum average turnover of 8.00 Crore per year in last three years**. It is further clarified that the total turnover of last three years {2012-13, 2013-14 & 2014-15 } should be **24.00 Crores or more**.

(B) New small/local Entrepreneur :

The bidder has financial capability to take up the proposed work to be supported by balance sheet for last three years { 2012-13, 2013-14 & 2014-15 } and there should be **minimum average turnover of 1.00 Crore per year in last three years**. It is further clarified that the total turnover of last three years {2012-13, 2013-14 & 2014-15 } should be **3.00 Crores or more**.

(C) New small/local Entrepreneur :

No financial turn over limit is mandatory for Startup firms.

SIGNATURE OF AUTHORISED
SIGNATORY WITH SEAL

SECTION – 5
PRICE SCHEDULE

The bidder shall quote their lowest rates / costs for Design, supply, installation, commissioning including FIVE years free comprehensive maintenance including all taxes etc. in format as **Annexure-4**.

The bidder has to execute a Annual Comprehensive maintenance Contract for a period of five years with the beneficiary. **Maintenance services for 5 years with free replacement warranty on spare parts against manufacturing defects for five years.**

Note: The startup firms are eligible for quoting their price offers for Slab – A (1 kW to 10 kW PV Capacity) only, therefore, startup firms are advised to submit their price bid in Annexure-4 for Slab-A only. If such firms submit their offers for slab-B and Slab-C, such offeres will be not considered for evaluation and the firm will be disallowed/rejected from eligibility consideration in tender.

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SECTION – 6

PART - A

PRE-REQUISITES AND PROPOSAL EVALUATION

1. **Pre-requisites:**

Following are the pre-requisites for the bidder to be considered responsive to this tender:

(A) Established Suppliers:

(i)	The Bidder should be either a body incorporated in India under the Companies Act, 1956 or Company Act 2013 including any amendment thereto and engaged in the business of Solar Power. A copy of certificate of incorporation should be furnished along with the bid in support of above.
(ii)	The bidder has financial capability to take up the proposed work to be supported by balance sheet for last three years { 2012-13, 2013-14 & 2014-15 } and there should be minimum average turnover of 8.0 Crore per year in last three years. It is further clarified that the total turnover of last three years {2012-13, 2013-14 & 2014-15 } should be 24.00 Crores or more. Please refer section 4 of this bid.
(iii)	The bidder should have minimum two years experience of successful installation of Grid connected PV projects. (a) The bidder should have installed at least one Grid connected Solar PV Power Plant having capacity of not less than 50 kW which should have been commissioned during 2013-14 and 2014-15 & up to date of submission of bid. + (b) The bidder should have cumulative experience of execution of ≥ 500 kWp Grid connected SPV Power Plants &/ Off-grid SPV Power Plants/systems in India during 2013-14 and 2014-15 & up to date of submission of bid. + (c) The details of projects executed during period mentioned above should be listed in Annexure-3(A) and Annexure-3(B). A certificate issued by the SNA/ Govt. Organisation/SECI/Project owner towards the satisfactory installation and functioning of the power plants to be furnished by the bidder.
(iv)	Details of 'After Sales & Service Centre' existing and proposed to be set up in the State of Rajasthan. Refer Annexure 3(C) & 3(D).
(v)	The bidder should have valid CST/State VAT/TIN registration certificate. Registration document (s) to be provided by the bidder where it is presently operational/Company is registered. (Copy to be furnished in support).

(B) New small/local Entrepreneur :

(i)	The Bidder should be either a body incorporated in India under the Companies Act, 1956 or Company Act 2013 including any amendment thereto and engaged in the business of Solar Power. A copy of certificate of incorporation should be furnished along with the bid in support of above.
(ii)	The bidder has financial capability to take up the proposed work to be supported by balance sheet for last three years { 2012-13, 2013-14 & 2014-15 } and there should be minimum average turnover of 1.0 Crore per year in last three years. It is further clarified that the total turnover of last three years {2012-13, 2013-14& 2014-15 } should be 3.00 Crores or more. Please refer section 4 of this bid.
(iii)	The bidder should have minimum two years experience of successful installation of Grid connected PV projects. (a) The bidder should have cumulative experience of execution of ≥ 300 kWp Grid connected SPV Power Plants and Offgrid SPV systems installations in India during 2013-14 and 2014-15 & up to date of submission of bid. + (b) The details of projects executed during period mentioned above should be listed in Annexure-3(A) and Annexure-3(B).A certificate issued by the SNA/ Govt. Organisation/SECI/Project owner towards the satisfactory installation and functioning of the power plants to be furnished by the bidder.
(iv)	Details of 'After Sales &Service Centre' existing and proposed to be set up in the State of Rajasthan. Refer Annexure 3(C) &3(D).
(v)	The bidder should have valid CST/State VAT/TIN registration certificate. Registration document (s) to be provided by the bidder where it is presently operational/Company is registered.(Copy to be furnished in support).

(C) For Startup Firms :

(i)	The Bidder should be either a body incorporated in India under the Companies Act, 1956 or Company Act 2013 including any amendment thereto and framed for business of Solar Power/Renewable energy. A copy of certificate of incorporation should be furnished along with the bid in support of above. OR The Bidder should be either a body incorporated in India under the the Limited Liability Partnership Act, 2008 : a subset of companies Act, 2003 and engaged in the business of Solar Power/Renewable energy. A copy of certificate of incorporation should be furnished along with the bid in support of above. OR The Bidder should be a firm registered under Partnership Act in India. A copy of certificate of FORM-G /copy of registered Partnership deed should be furnished along with the bid in support of above. OR The Bidder should be a firm registered as sole properitor under Shop Act. A copy of certificate of TIN Number should be furnished along with the bid in support of above.
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(ii)	The bidder firm's one of the director/proprietor should be B.E/B.Tech/MBA in qualification.
(iii)	Details of 'After Sales & Service Centre' existing and proposed to be set up in the State of Rajasthan. Refer Annexure 3(C) &3(D).
(v)	The bidder should have valid CST/State VAT/TIN registration certificate. Registration document (s) to be provided by the bidder where it is presently operational/Company is registered. (Copy to be furnished in support).

Note: (i) The bidder must fill up above information clearly in enclosed sheet and attach all required documents (Self attested) in support as at a glance Techno- Commercial qualification details.

(ii) If supporting documents (Self attested) are not attached for each eligible criteria above, the bid shall be rejected without further reference.

2. **Submission** :

- (a) First the **cover-1** containing scanned copies of DD's of (1) Tender Cost, (2) RISL e-proc charges and (3) EMD (May be in form of BG) / Exemption certificate (if applicable) shall be opened and checked for confirming the eligibility for opening cover-2 i.e- Technical bid.
- (b) Then **cover-2** (i.e- Technical bid) shall be opened of those bidders who Confirms as per 2(a).
- (c) The evaluation of techno- commercial bid will be done & price bids (**i.e. Cover-3**) through e-procurement only of those bidders will be opened who are found technically eligible and qualified.
- (d) The basis of evaluation shall be the cost/rate quoted in the Price Schedule Annexure-4 for each model separately. To further clarify, cost of supply, installation & commissioning along with maintenance and warranty and all applicable taxes shall be summed up for comparison and evaluation. Bidders are required to quote rate/cost on firm basis and no price variation on any account shall be considered.

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PART – B
PROPOSAL EVALUATION
Check list for evaluation

The bidder shall declare himself as Established bidder or New Entrepreneur as per pre-requisite requirement of RREC and then submit the details of their credentials as under :

Envelope 1

S. No.	Details required	Details of Attachment
1	Cost of Tender: in favour of Managing Director, RREC payable at Jaipur.	DD/ Banker's Cheque: Date: Amount :
2	e-proc Charges: in favour of Managing Director, RISL, payable at Jaipur.	DD/ Banker's Cheque: Date: Amount :
3	EMD in favour of Managing Director, RREC, payable at Jaipur;	DD/ Banker's Cheque/Bank Guarantee: (Exemption certificate, if applicable). Date: Amount :

Government undertakings PSUs are exempted for EMD deposition **on producing the certificate issued by competent authority.**

Envelope 2: (A) Technical Bid for Established bidder :

S. No.	Details required;	Details of Attachment	Page No. Of self attested attached document
1.	The Bidder should be either a body incorporated in India under the Companies Act, 1956 or Company Act 2013 including any amendment there to and engaged in the business of Solar Power. A copy of certificate of incorporation should be furnished along with the bid in support of above.		
2.	The bidder has financial capability to take up the proposed work to be supported by balance sheet for last three years { 2012-13, 2013-14 & 2014-15 } and there should be minimum average turnover of 8.0 Crore per year in last three years. It is further clarified that the total turnover of last three years {2012-13, 2013-14& 2014-15 } should be 24.00 Crores or more. Please refer section 4 of this bid.		

3.	<p>The bidder should have minimum two years experience of successful installation of Grid connected PV projects.</p> <p>(a) The bidder should have installed at least one Grid connected Solar PV Power Plant having capacity of not less than 50 kW which should have been commissioned during 2013-14 and 2014-15 & up to date of submission of bid. +</p> <p>(b) The bidder should have cumulative experience of execution of > = 500 kWp Grid connected SPV Power Plants &/ Off-grid SPV Power Plants/systems in India during 2013-14 and 2014-15 & up to date of submission of bid. +</p> <p>(c) The details of projects executed during period mentioned above should be listed in Annexure-3(A) and Annexure-3(B).A certificate issued by the SNA/ Govt. Organisation/SECI/Project owner towards the satisfactory installation and functioning of the power plants to be furnished by the bidder.</p>		
4.	<p>Details of 'After Sales &Service Centre' existing and proposed to be set up in the State of Rajasthan. Refer Annexure 3(C) &3(D).</p>		
5.	<p>The bidder should have valid CST/State VAT/TIN registration certificate. Registration document (s) to be provided by the bidder where it is presently operational/Company is registered. A. Copy to be furnished in support. B. Tax clearance certificate by the authority concerned.</p>		
6.	<p>Duly signed Bid Documents (on Each and every page in confirmation of acceptance of Terms and Condition of Bid)</p>		
7.	<p>Authorisation Certificate (If bid is submitting by the any authorised person/firm/agent on behalf of original bidder.)</p>		
8.	<p>Others Certificates (if required) in support of clarification of technical requirements.</p>		

(B) Technical Bid for New Small/Local Entrepreneur bidder :

S. No.	Details required;	Details of Attachment	Page No. Of self attested attached document
1.	The Bidder should be either a body incorporated in India under the Companies Act, 1956 or Company Act 2013 including any amendment thereto and engaged in the business of Solar Power. A copy of certificate of incorporation should be furnished along with the bid in support of above.		
2.	The bidder has financial capability to take up the proposed work to be supported by balance sheet for last three years { 2012-13, 2013-14 & 2014-15 } and there should be minimum average turnover of 1.0 Crore per year in last three years. It is further clarified that the total turnover of last three years {2012-13, 2013-14& 2014-15 } should be 3.00 Crores or more. Please refer section 4 of this bid.		
3.	The bidder should have minimum two years experience of successful installation of Grid connected PV projects. (a) The bidder should have cumulative experience of execution of ≥ 300 kWp Grid connected SPV Power Plants and offgrid SPV systems installations in India during 2013-14 and 2014-15 & up to date of submission of bid. + (b) The details of projects executed during period mentioned above should be listed in Annexure-3(A) and Annexure-3(B). A certificate issued by the SNA/ Govt. Organisation/SECI/Project owner towards the satisfactory installation and functioning of the power plants to be furnished by the bidder.		
4.	Details of 'After Sales &Service Centre' existing and proposed to be set up in the State of Rajasthan. Refer Annexure 3(C) &3(D).		
5.	The bidder should have valid CST/State VAT/TIN registration certificate. Registration document (s) to be provided by the bidder where it is presently operational/Company is registered. A. Copy to be furnished in support. B. Tax clearance certificate by the authority concerned.		
6.	Duly signed Bid Documents (on Each and every page in confirmation of acceptance of Terms and Condition of Bid)		
7.	Authorisation Certificate (If bid is submitting by the any authorised person/firm/agent		

	on behalf of original bidder.)		
8.	Others Certificates (if required) in support of clarification of technical requirements.		

(C) Technical Bid for Startup Firms :

S. No.	Details required;	Details of Attachment	Page No. Of self attested attached document
1.	<p>The Bidder should be either a body incorporated in India under the Companies Act, 1956 or Company Act 2013 including any amendment thereto and framed for business of Solar Power/Renewable energy. A copy of certificate of incorporation should be furnished along with the bid in support of above. OR The Bidder should be either a body incorporated in India under the the Limited Liability Partnership Act, 2008 : a subset of companies Act, 2003 and engaged in the business of Solar Power/Renewable energy. A copy of certificate of incorporation should be furnished along with the bid in support of above. OR The Bidder should be a firm registered under Partnership Act in India. A copy of certificate of FORM-G /copy of registered Partnership deed should be furnished along with the bid in support of above. OR The Bidder should be a firm registered as sole properitor under Shop Act. A copy of certificate of TIN Number should be furnished along with the bid in support of above.</p>		
2.	The bidder firm's one of the director/proprietor should be BE/B.Tech/MBA in qualification.		
3.	Details of 'After Sales & Service Centre' existing and proposed to be set up in the State of Rajasthan. Refer Annexure 3(C) &3(D).		
4.	The bidder should have valid CST/State VAT/TIN registration certificate. Registration document (s) to be provided by the bidder where it is presently operational/Company is registered.(Copy to be furnished in support).		
5.	Duly signed Bid Documents (on Each and every page in confirmation of acceptance of Terms and Condition of Bid)		
6.	Authorisation Certificate (If bid is submitting by the any authorised person/firm/agent on behalf of original bidder.)		
7.	Others Certificates (if required) in support of clarification of technical requirements.		

Note:-

1. The information in the above table should be filled properly.
2. If any document submitted in support of above parameters found false, the tender will be disqualified and EMD and security Deposit shall be forfeited and bidder shall be blacklisted.
3. Cutting should be verified by the signature with seal on every attempt and overwriting not allowed.

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SECTION – 7
COMPLETION PERIOD

RREC proposes to take up work of SPVGrid connected SPV systems installation under this programme as detailed at section-2 and allocations of PV capacity shall be carried out and **completed up to 31st March, 2017**. The firm shall submit bills to respective Project Managers/ Officers on monthly basis along with required papers and obtain receipt of the same from PO office. RREC HQ will be informed about this along with receipt of PM/PO office & list of beneficiaries within next 7 days (i.e. 7th day of every month).

The extension of time period for implementation of the programme is solely on the discretion of the tendering authority.

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SECTION – 8

INSTRUCTIONS TO TENDERERS

- 8.1 Bidders are required to furnish all information and documents as called for in this Document in English Language. Any printed literature furnished by the proposer may be in another language, provided that this literature is accompanied by an English translation, in which case, for the purpose of interpretation of the document, the English version will govern.
- 8.2 The consortium proposals shall be acceptable only from Established bidders along with any start Up/new small/local firms as under :**
- (a) The lead member (**always the established bidder**) would have to submit “**Consortium Agreement**” . Annexure-14 (Copy enclosed) along with the tender document.
 - (b) The lead member undertakes the responsibility for all obligations and liabilities relating to the project and in accordance with the terms of this Rfp.
 - (c) The work would be awarded to Lead member and RREC would acknowledge other consortium member in work award letter and other communications.
 - (d) All payment from RREC would be made only to Lead member.
 - (e) Only one agreement with only one party will be accepted under consortium agreement.
- This document is not transferable.**
- 8.3 The Proposal received after the closing date and time shall not be considered.
- 8.4 Government undertakings PSUs are exempted for EMD deposition on producing the certificate issued by competent authority.
- 8.5 The documents shall be properly checked and signed before uploading for submission of proposals.
- 8.6 Transfer of document purchased by one party to another is not permissible.
- 8.7 Intending bidders are required to carefully go through the instructions included in the document and furnish complete information, necessary documents and schedules.**
- 8.8 Any applicant wishing to undertake visit to area to become familiar with site conditions may do so. For any guidance in this respect, applicant may contact Director (Technical) / General Manager (RE&O), Rajasthan Renewable Energy Corporation.
- 8.9 All costs towards site visit and submission of documents etc. shall be borne by the applicants themselves.

- 8.10 Applicants are informed that RREC is neither under any obligation to select any applicant, nor to give any reason for either qualifying or disqualifying any applicant. RREC is also not under any obligation to proceed with the programme or any part thereof.
- 8.11 At any time prior to opening of price proposals, RREC either at their own initiative or in response to clarifications requested by a prospective tenderer , may modify tender by issuing an amendment. Such amendment(s) shall be up loaded on e-proc site.
- 8.12 The proposals as submitted shall invariably indicate that proposal is firm and that proposals shall remain valid and open for a period of not less than six months from the date of opening.
- 8.13 After opening of proposals and till final selection of successful suppliers/bidders(s) no correspondence of any type will be entertained, unless called for by RREC. Any type of uncalled for clarifications on prices and or rebates shall not be accepted.
- 8.14 Any deviation from any clause of this document must be properly spelt out in a deviation statement to be submitted along with the proposal, giving details of page number and clause number and detailing the deviation. RREC reserves the right to accept or reject any deviation or modify the relevant clause of the document to the extent required by the deviation. Deviation statements in the prescribed Performa (Annexure-5) must be attached with the proposal.**
- 8.15 RREC will review the proposals to determine whether the proposals are substantially responsive to the requirement of this document. **Proposals considered non-responsive are liable for rejection.**
- 8.16 RREC shall take up detailed evaluation of the responsive proposals only.
- 8.17 RREC attaches great importance to maintenance of the systems as it is felt that without proper maintenance after installation of system, consumers may be deprived of the benefits of electricity. To achieve this objective successful bidders shall **establish after-sales service network in the area of installation of systems. This may consist of service centre at a convenient place to be reached by a beneficiary.** It shall have spares for the system and repair facility.
- 8.18 Supplier shall provide a guarantee card and a operation and maintenance manual in English or Hindi script to each beneficiary. Beneficiaries shall also be educated through brochures about do's & don't on the system.** The details of after sales service centres along with telephone numbers & contact persons of firm & details of RREC offices, address, telephone numbers provided to each beneficiary.

- 8.19** It may be carefully noted that maintenance of SPV Systems includes maintenance of all items including all accessories. **Complete SPV systems shall bear a warranty for a minimum period of 5 years and solar modules shall have warranty for minimum 10 years against manufacturing defects and performance.**
- 8.20 The bidder must quote the prices strictly in the manner as indicated in the price schedule, failing which proposal is liable for rejection.
- 8.21** The bidder should sign the proposal form on each page and also at the specified location. **Each and every paper enclosed must be given a page no. like 1,2,3,..... etc. & a bid summery must be enclosed along with covering letter on letter Head of firm.**
- 8.22 Successful bidder will be required to enter into an agreement with submission of required Security deposit amount in the prescribed format (**Annexure-7**) within 15 days of issuing **letter of Allocation (LOA)**. In the vent of failure of bidder the full earnest money deposited can be stand forfeited.

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SECTION – 9

TERMS & CONDITIONS

THE WORK OF SUPPLY & INSTALLATION COMMISSIONING & COMPREHENSIVE MAINTENANCE FOR FIVE YEARS OF GRID CONNECTED SPV SYSTEMS

- 9.1 Intending bidder shall have to deposit Tender Cost, e-proc. Charges earnest money in the form of Demand Draft / Bankers cheque/ Bank Guarantee/ Exemption certificate (if applicable) without which tender will not be considered. (Amount and to whom /in favour of are mentioned.)** Government undertakings PSUs are exempted for EMD deposition on producing certificate issued by competent authority.
- 9.2** (i) The Earnest Money will be refunded to the unsuccessful proposers after finalisation of the proposals and agreements with successful bidders and in case of successful proposer it may be adjusted if deposited in cash or released after submission of required SD in form of BG valid upto beyond six months from date of stipulated completion period.
- (ii) The earnest money of successful bidder maybe adjusted towards required **5%** security deposit against order value at the time of execution of agreement. Balance amount of security deposit amount after adjusting EMD should be deposited in the form of DD/Bank guarantee (valid for 18 months) at the time of execution of agreement. Further it should be revised according to further allocation of work/targets also.
- (iii) The 20% amount deducted as per clause 9.7 B(v) will be the part of performance security which will retained with RREC upto the warranty period.
- (iv) After completion of total work under this contract, **the total requirement of 10% of cost of projects as Performance Security will be calculated**, if the supplier submit this required Performance Security in the form of Bank guarantee of RBI Scheduled banks valid for 66 months from date of completion of project, the amount with RREC as Performance Security deducted from payment will be released to the supplier firm.
- 9.3** At any time or at the end of agreement cost of damaged items not got repaired as per norms and laps of services during warranty period reported as default will be deducted from performance security on risk and cost basis.
- 9.4** Acceptance of the proposal(s) will rest with the Managing Director, RREC, Jaipur who does not bind himself to accept the lowest offer and may reject any proposal without assigning any reasons thereof.

9.5 No foreign exchange will be provided by the RREC.

9.6 The rates quoted for supply of SPV systems must be firm and fixed, FOR site(s) as per prescribed format.

9.7 (A) The payment of subsidy/balance system cost for supply of SPV systems shall be released after receipt of funds under the programme from MNRE, GoI after submission of following documents duly verified by Project Manager/officer, RREC or by officer nominated from Head office of RREC:

- (i) Bill/invoice issued to beneficiary by the supplier.
- (ii) Duly signed by beneficiary installation certificate (As per Annexure-10) with name, fathers name & full address of beneficiary with full details of material such as :
 - (a) Date of commissioning.
 - (b) Model
 - (c) Make
 - (d) Serial Nos. of PV modules, Batteries and Balance of systems.
- (iii) Address proof of beneficiary like Ration Card, Aadhar card, Voters Identification Card number and Electricity Bill etc.
- (iv) Two Photographs of beneficiary with installed system, wherein place and date of commissioning is indicated (The Photograph must match with the photograph in the ID proof). As far as possible, photograph of installed system should be taken with person whose ID proof is being taken but in case at the time of taking Photograph the ID proof person is not available at his residence, his/her spouse photograph may be taken with installed system.
- (v) Copy of Agreement with beneficiary for maintenance (Annexure-9).

{Two sets of documents (i) to (v) must be prepared & one copy be submitted to PM/PO & second copy to RREC HQ Jaipur along with bill of subsidy claim}.

(B) Procedure for verification of system for release of subsidy:

- (i) The approved vender having Rate Contract with RREC will arrange installation of system.
- (ii) The approved vender will charge and collect balance cost of the system after deducting subsidy payable by RREC from the beneficiary.
- (iii) After installation of system the vender will submit claim of subsidy with documents required under clause 9.7 (A) (i to v) to concerned Project Manager/Officer of RREC. RREC officer will verify the installed system as per conditions of the Rate Contract.
- (iv) RREC will release 80% of total payable capital subsidy to the approved vender/supplier firm on completion of installation, commissioning of the system and verification of the system and documents duly verified by the PO/PM, RREC concerned.
- (v) Remaining 20% balance subsidy will be released in five equal parts (i.e 4%) annually on submission of satisfactory performance reports confirmed by beneficiary. In this way, total subsidy will be paid on successful completion of FIVE years maintenance.
- (vi) If performance BG submitted under clause 9.2 (iv), it will be released only after completion of warrenty period (i.e. 5 years).

- (C) The bidder shall ensure timely attending to faults; it should be attended by the supplier within 3 days of lodging. **In case the supplier/bidderis failed to provide proper maintenance of the systemsto the beneficiary with in3 days period from lodging, on further delay in attending and rectifying the fault penalty @Rs.20/- per day per kW will be charged by RREC. This penalty will be in addition to clause: 2.4 of Tender document.**

Supplier will maintain a complaints & rectification dairy in two copies, one copy will remain with supplier and other copy will remain with beneficiary. This will be verified by PM/PO & other RREC officers during visits and copy of the same will be provided by the vendor to RREC at the time of final payment claim.

- (D) An agreement in the format at Annexure-7shall be entered into within15 days of placing of the work order/LOAwith required SD under clause 9.2(ii).

(E) **Invoicing Pattern :**

The supplier will directly sell the system to beneficiary through an invoice in the name of beneficiary. The invoice can be of the empanelled vendor and will clearly mention the full value of the system and tax components with deduction of subsidy amount. Supplier will submit beneficiary share &subsidy claims enclosing one copy of sale invoice and installation certificates etc as per clause no: 9.7 (a) of the tender document.

- 9.8 RREC may not authorise any bidder for the grid connected SPV Systems for which proposals have been invited or may authorise for less than the quantity communicated in the tender document or may not authorise for any quantity, the manufacturer(s) shall not be entitled to claim any compensation.

- 9.9 Proposals will be valid for a period of 6 months from the date of their opening for the purpose of communicating acceptance by the department. The proposals with validity of less than 6 months will not be considered. The validity can be further extended with mutual consent.

- 9.10 In the event of breach of any of the conditions of the contract at any time on the part of the manufacturer the contract may be terminated summarily by Managing Director, RREC, Jaipur without compensation to the contractor.

- 9.11 The price quoted for the systems must be including installation charges and comprehensive maintenance for 5 years charges as per maintenance and warranty clause 9.13and shall remain fixed and firm during the period of contract.

- 9.12 (a) Complete literature and specifications of the material offered must accompany the tender.

(b) **All type tests certificates as mentioned in the MNRE guidelines for Grid connected Roof top SPV scheme and amended time to time should be furnished.**

9.13 Warranty Clause:-

(i)The systems offered shall be warranted(including consumables)by the manufacturer for use and services for a period of five years from the date of commissioning and solar modules shall have warranty for minimum 10 years. Free replacement warranty on spare parts against manufacturing defects for five years.

(ii) Comprehensive Maintenance Services for 5 years should be provided by the supplier.

9.14 (i) The time specified for delivery and completion of work in the contract tender shall be deemed to be the essence of the contract and the successful supplier(s) shall arrange to complete work within the period on receipt of order from RREC.

(ii) If bidder does not comply to his proposed schedule RREC may reallocate the remaining work to any/all other interested firm, so as to achieve the targets and SD deposited will be forfeited.

9.15 Should the successful bidder(s) fail to complete the work in the period specified in the authorisation letter / contract, the RREC may at its discretion to allow an extension in time of completion, subject to recovery from the manufacturer an agreed liquidated damages a sum equal to the following percentage from the amount payable by RREC { i.e. the amount of LD shall be calculated on the total subsidy payment payable by RREC} for systems which the manufacturer has failed to complete the balance work of supply, erection, installation, testing and commissioning for period of delay as stated below:-

- (a) Delay up to one fourth period of the prescribed delivery period -2.5%.
 - (b) Delay exceeding one fourth but not exceeding half of the prescribed delivery period . 5%
 - (c) Delay exceeding half but not exceeding three fourth of the prescribed delivery period . 7.5%
 - (d) Delay exceeding three fourth but not exceeding the period equal to the prescribed delivery period . 10%
1. Fraction of a day in reckoning the period of delay in supply shall be treated one full day.
 2. The maximum amount of agreed liquidated damages shall be 10% of subsidy amount.
 3. If the supplier requires an extension of time in completion of contractual supply on account of occurrence of any hindrance, he shall apply in writing to the purchasing authority for the same immediately on occurrence of the hindrance but not after the stipulated date of completion of supply.
 4. Delivery period may be extended with or without liquidated damages if the delay in supply of goods is on account of hindrances beyond the control of the bidder.

- 9.16 (a) No price escalation on account of any statutory increase in or fresh imposition of customs duty, excise duty, sales tax or duty liveable in respect of the systems authorised to be installed, shall be applicable.
- (b) The benefit on account of decrease in taxes etc. shall be availed by the RREC if accrued during the stipulated / extended delivery period.**
- 9.17 The bidders are required to study carefully the conditions of the tender document, the enclosed specifications and the relevant provision of the relevant BIS/ISS/MNRE specifications wherever necessary before submitting the proposal. Technical particulars of the material offered must comply with the enclosed specifications and the relevant provisions of the BIS/ISS/MNRE as far as possible. In case tenders are called for ~~±~~SIqmarked stores, the material ~~±~~SIq marked only shall be accepted.
- 9.18 Any changes in the constitution of the firm/company shall be notified forth with by the supplier in writing to the Corporation and such change shall not relieve the tenderer from any liability under the contract.
- 9.19 Bidder will have to submit invariably Sales Tax registration certificate number and sales tax clearance certificate from the sales tax / commercial tax officer concerned along with the proposal without which proposals may not be considered provided that the purchasing authority has reason to believe (to be recorded in writing) that the bidder has not been able to submit clearance certificate of Income Tax and sales tax on bona-fide grounds, the authority may consider the tender asking the bidder to furnish the certificate later on but in any case before the execution of the agreement by the supplier.
- 9.20 The bidder shall sign on each page at the end in token of acceptance of all the terms and it would be attached /uploaded with the proposal along with the declaration. He should also sign at the bottom of each of the pages of his tender.**
- 9.21 The authorisation for installing SPV system can be repudiated at any time by the RREC if the systems are not supplied and installed to its satisfaction. The reasons for repudiation shall be recorded by RREC. In case of non-performance in any form and shape of the terms & conditions of the agreement the GMD, RREC, Jaipur has power to cancel the authorisation pertaining to the supply and installation of systems.
- 9.22 If a bidder imposes conditions, which are in addition to/or in contravention with the conditions mentioned herein, his tender is liable to be summarily rejected. In any case none of such conditions will be deemed to have been accepted unless specifically mentioned in the letter of authorisation issued by RREC.**
- 9.23 Legal proceedings, if any, arising out of the tender contract shall have to be lodged in courts situated in Jaipur, Rajasthan only.
- 9.24 If any dispute arises out of the contract with regard to the interpretation / meaning and the breach of the terms of the contract, the matter shall be referred

to by the parties to The Managing Director, RREC, Jaipur whose decision shall be final and binding.

9.25 If any question is raised or issue arises between the user (beneficiary) of the SPV Off-grid/grid connected SPV Systems and the manufacturer/supplier and matter is taken to a consumer court, RREC shall not be responsible in any manner and shall not be made a party in it.

9.26 RREC will go for Pre-despatch inspection of the material proposed to supply by the bidder by deputing technical officer from RREC. The successful bidder will offer the material for inspection along with routine test certificates. Detailed instructions for Pre-despatch inspection of material at works of the supplier or at point of source of material (i.e at works of the manufacturer) shall be made available to the supplier.

OR

Alternatively RREC, at its discretion, may collect upto 1% samples on random basis out of a lot supplied at site and get these tested at a MNRE recognised test house at supplier's cost, which includes transportation and inspection charges.

9.27 **After qualifying and deciding L-1 offer, if the qualified firm accepted L-1 offer and thereafter did not take up the work as per work order issued/award of work. RREC will forfeit the deposited amount of the supplier with RREC and take action for debarring and blacklisting of the firm.**

9.28 If the rate contract holder quotes/reduces its price to tender similar goods, works or services at the price lower than the rate contract price to anyone in the state at any time during the currency of the rate contract, the rate contract price shall be automatically reduced with effect from the date of reducing or quoting lower price, for all delivery of the subject matter of procurement under that rate contract and the rate contract shall be amended accordingly. The firms holding parallel rate contracts shall also be given opportunity to reduce their price by notifying them the reduce price giving them fifteen days time to intimate their acceptance to the revised price. Similarly, if a parallel rate contract holding firm reduces its during currency of the rate contract, its reduced price shall be conveyed to other parallel rate contract holding firms and original rate contract holding firm for corresponding reduction in their prices. If any rate contract holding firm does not agree to the reduced price, further transaction with it, shall not be conducted.

I/We have carefully read and understood the above terms & conditions of the tender document and agree to abide by them.

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SECTION – 10

MODE OF AWARD OF TARGETS

10.1 RREC intent to distribute the total work among following two category suppliers as under :

S.No.	Category of suppliers:	Work distribution (in %)
1.	Established suppliers:	75% (18.75 MW)
2.	New small/local Entrepreneurs	20% (5.00 MW)
3.	Startup firms	5% (1.25 MW)

10.2 RREC will finalise L-1 prices and takeup award of work asunder :

Financial offers (Price bid) of all the technically qualified bidders will be opened and the financial offers will be arranged in the ascending order of their quoted rates i.e. L-1, L-2, L-3, L-4, L-5.....Ln for all slabs separately.

All firms will be offered to give their consent to take up work on the lowest rates of slabs for which they applied. If the firm agrees to take up work on lowest offered rates.

RREC will arrange the firms for deciding L1, L2, L3, ...Ln with reference to price offer received for slab (B) [Price offer for “above 10 kW to 50 kW”] and the allocations will be awarded to the firms for quantities as under :

S. No.	Award of work quantity among firms :	Allowed working slab :
1.	First of all upto 5% work (i.e 1.25 MW capacity) will be awarded among %Startup firms +subject to maximum 200 kW to each firm.	1 kW to 10 kW slab only.
2.	15% of 95% of total work (23.75 MW) i.e. 3500 kW to L-1 firm (subject to maximum of 1000 kW in case of small/new entrepreneur)	1 kW to 10 kW slab-A, Above 10 kW to 50 kW slab-B & Above 50 kW to 500 kW slab-C.
3.	Balance quantity will be allotted equally among all remaining firms agreed to take up work on L-1 prices. (subject to maximum of total 5000 kW for small/new entrepreneurs)	1 kW to 10 kW slab-A, Above 10 kW to 50 kW slab-B & Above 50 kW to 500 kW slab-C.

(i) In case of non-availability of proposals in each category up to decided limit, balance allocation will be on discretion of MD, RREC.

(ii) If the bidder applied originally for quantity less than the quantity decided for award of work as above, it will be decided **with their mutual consent**.

10.2 The qualified bidders will have to submit their proposals along with DPRs in 6 months period from date of issue of LOA. In case, the firm/s fails to submit the proposals as per awarded allocations. Action will be taken as per tender clause No: 2.6.3 and ultimately the uncompleted quantity will be awarded to the other interested firm.

10.3 Further allocations of work quantity if arises from additional allocation from MNRE will be made on performance basis after reviewing the progress of the work already awarded to the firms and getting consent from the bidder.

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SECTION – 11

WORKS CONTRACT

WCT is not applicable in this project. However it should be clarify that RREC's role is limited to making payment of subsidy as received from MNRE towards cost of system & its installation as per the terms and conditions of tender & work order. Accordingly, it is of the view that this shall not attract provisions of work contract tax. However, if the revenue authorities are of the opinion that works contract tax is applicable to the above payments by RREC and insists to deduct the same from bidder's payment. RREC would deduct the same from suppliers due subsidy/other payments.

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SECTION – 12

STEPS To TAKE UP THE WORK :

Although the procedure of taking up work to complete as per requirement has already described in the document, in order to provide guidelines at a glance further, the steps to take up work under this programme are summarised as under :

1.	The Successful Bidders selected shall be issued Rate contract and Letter of Allocation(LOA) indicating the allocated capacity. The supplier shall submit agreement with required formalities as per clause 9.2(ii).
2.	The bidder will motivate the interested beneficiary for installation of SPV Power Plant for captive consumption. For identification of projects, RREC may provide help such as publicity etc and will also made available the list of interested beneficiaries available with RREC, However the entire responsibility of finding the buildings lies with the Bidder.
3.	The Firm's Engineer shall visit the site of beneficiary and prepare DPR of the project & will submit to RREC along with following documents as documents for Project sanction: 1. Detailed Project Report, 2. Agreement between the empanelled bidder and the owner of Project (Notarised original agreement should be enclosed). 3. No objection Certificate from the concerned DISCOM for grid connectivity.
4.	RREC will examine the DPR and issue sanction of the specific project indicating value of subsidy admissible [i.e Letter of sanction (LoS)] and project will be uploaded on SPIN of MNRE.
6	The firm will collect balance amount of cost of project after deducting subsidy payable by RREC from beneficiary in the form of cheque/DD / Cash from beneficiaries.
7	The firm shall offer the material as per project report to RREC for pre-despatch inspection.
8.	After material inspection by the inspector, Despatch clearance shall be issued by RREC and then firm can despatch the material for site of beneficiary for further installation and commissioning of the project.
9.	The Bidder shall complete the work of civil work, erection, testing & commissioning of Power Plant and submit claim of subsidy to concerned Project officer/Project Manager, RREC for verification as per clause 9.7(A).
10.	The firm will submit subsidy claim duly verified from PO/PM, RREC to Head office.
11	The firm will provide maintenance services up to the period of FIVE years from date of commissioning of Power Plant.

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SECTION – 13**ANNEXURES**

S.No.	Annexure No:	Brief Details of Annexure	Page No:
1.	1.	Brief details of the bidder.	41
2.	2	Technical Specifications for Grid Connected SPV Systems.	42-55
3.	3(A), (B) , (C) & D	Schedule of Experience	56-58
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6.	6.	Tender Form { Instructions to bidder to be signed by Authorised Signatory on behalf of the proposer}	61
7.	7.	Format of Agreement with supplier	62-63
8.	8.	Format of Undertaking to be submitted by the Supplier	64
9.	9.	Format for Agreement with beneficiary for maintenance of SPV Systems/Plant.	65-66
10.	10.	Format of Installation certificate	67
11.	11(A), 11(B), 11(C) & 11(D)	Instructions and formats to be filled / signed by bidder as per Transparency act 2013.	68-72
12.	12.	Format for Subsidy claim Note	73
13.	13.	Declaration of material proposed for supply under this programme by the bidder :	74
14.	14.	Format for consortium Agreement.	75-76
15.	15.	MNRE notification for CFA amount and Eligibility Dated: 04 th March, 2016.	77-80

Annexure-1**Brief details of the bidder :**

The brief details of the bidder should be filled in by the bidder as under :

S.No.	Particulars required:	Detailed :
1.	Name of Firm:	
2.	Registration Number :	
3.	Date of Registration :	
4.	Registered Address with Tel. Number :	
5.	Address of Manufacturing unit with Tel. Number :	
6.	Details of Product(s) being manufactured at their own:	
7.	Name of Directors of Company (at least Two directors with email IDs & contact Numbers):	(1) (2)
8.	Sales Tax/Vat Registration Number %	
9.	Year from which firm is in business in Renewable Energy Technology :	
10.	Major Area (Name of States) of working remained till date :	
11.	Technical Officers/Engineers and other officers/officials are working in the company :	(1)Technical Persons (Nos.)....., (2)Other officers/officials (Nos.....,
12.	Branch offices/Dealers network is available in Rajasthan or not :	
13.	The person(s) authorised by the company for work of Roof Top SPV Power Plants in Rajasthan :	

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TECHNICAL SPECIFICATIONS FOR GRID CONNECTED SPV SYSTEMS

The proposed projects shall be commissioned as per the technical specifications given below. Any shortcomings will lead to cancelation of subsidy in full or part as decided by RREC.

1. DEFINITION

A Grid Tied Solar Rooftop Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables 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 daytime. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

Solar PV system shall consist of following equipments/components.

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

a. 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-2- 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/IS 61701
 - b) The total solar PV array capacity should not be less than allocated capacity(kWp) and should comprise of solar crystalline modules of minimum **250 W** and above wattage. Module capacity less than minimum **250** watts should 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. **RREC** 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 of +/-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 bypass 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 modules (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).
- a) Name of the manufacturer of the PV module
 - b) Name of the manufacturer of Solar Cells.
 - c) Month & year of the manufacture (separate for solar cells and modules)
 - d) Country of origin (separately for solar cells and module)
 - e) I-V curve for the module Wattage, I_m , V_m and FF for the module
 - f) Unique Serial No and Model No of the module

- g) Date and year of obtaining IEC PV module qualification certificate.
- h) Name of the test lab issuing IEC certificate.
- i) Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001.

1.1.4. **Warranties:**

a) **Material Warranty:**

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

b) **Performance Warranty:**

- i. The predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 25 year period and not more than 10% after ten years period of the full rated original output.

2. **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.
- 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 in Rajasthan. 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 RREC. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.
- c) The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.
- d) Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts. Aluminium structures

also can be used which can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided either by coating or anodization.

e) The fasteners used should be made up of stainless steel. The structure shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels

f) Regarding civil structures the bidder need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof.

g) The total load of the structure (when installed with PV modules) on the terrace should be less than **60 kg/m²**.

h) The minimum clearance of the structure from the roof level should be **300 mm**.

3. JUNCTION BOXES (JBs)

a) The junction boxes are to be provided in the PV array for termination of connecting cables. The J. Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminium /cast aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.

b) Copper bus bars/terminal blocks housed in the junction box with suitable termination threads conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single /double compression cable glands. Provision of earthing. It should be placed at **5 feet** height or above for ease of accessibility.

c) Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs) / SPDs, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups.

d) Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification

4. DC DISTRIBUTION BOARD:

a) DC Distribution panel to receive the DC output from the array field.

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

5. AC DISTRIBUTION PANEL BOARD:

- a) AC Distribution Panel Board (DPB) shall control the AC power from PCU/inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- b) All switches and the circuit breakers, connectors should conform to IEC60947, 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 Panels 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 : +/- 3 Hz

6. PCU/ARRAY SIZE RATIO:

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

7. PCU/ Inverter:

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

should be compatible with the grid frequency. Typical technical features of the inverters shall be as follows:

- Switching devices : IGBT/MOSFET
- Control : Microprocessor /DSP
- Nominal AC output voltage and frequency : 415V, 3 Phase, 50 Hz (In case single phase inverters are offered, suitable arrangement for balancing the phases must be made.)
- Output frequency : 50 Hz
- Grid Frequency Synchronization range : + 3 Hz or more
- Ambient temperature considered : -20°C to 50°C
- Humidity : 95 % Non-condensing
- Protection of Enclosure : IP-20 (Minimum) for indoor.
: IP-65 (Minimum) for outdoor.
- Grid Frequency Tolerance range : + 3 or more
- Grid Voltage tolerance : - 20% & + 15 %
- No-load losses : Less than 1% of rated power
- Inverter efficiency (minimum): >93% (In case of 10kW or above)
- Inverter efficiency (minimum) : > 90% (In case of less than 10 kW)
- THD: < 3%
- 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) 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.

f) The charge controller (if any) / 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 54 (indoor) and as per IEC 529 specifications.

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

8. INTEGRATION OF PV POWER WITH GRID:

The output power from SPV would be fed to the inverters which convert 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.

9. 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. **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 [**This will be provided with SPV Power Plants of PV capacity more than 50 kW**].

iv. **Temperature:** Temperature probes for recording the Solar panel temperature and/or ambient temperature to be provided complete with readout integrated with the data logging system [**This will be provided with SPV Power Plants of PV capacity more than 50 kW**].

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, Overfrequency, Under frequency ground fault, PV starting voltage, PVstopping voltage.
- vi. All major parameters available on the digital bus and logging facility forenergy auditing through the internal microprocessor and read on the digitalfront panel at any time) and logging facility (the current values, previousvalues for up to a month and the average values) should be made availablefor energy auditing through the internal microprocessor and should be readon the digital front panel.
- vii. Solar Meter : Digital Energy Meters to log the actual value of energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.5 accuracy class/ as per DISCOM guidelines.
- viii. Computerized DC Array monitoring and AC output monitoring shall beprovided as part of the inverter and/or string/array combiner box orseparately.
- ix. Array DC Voltage, Current and Power, Inverter AC output voltageand current (All 3 phases and lines), AC power (Active, Reactive andApparent), Power Factor and AC energy (All 3 phases and cumulative) andfrequency shall be monitored.
- x. Computerized AC energy monitoring shall be in addition to the digital ACenergy meter.
- xi. The data shall be recorded in a common work sheet chronologically datewise. The data file shall be MS Excel compatible. The data shall berepresented 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 ACparametric data for individual plant.
- xiv. Provision for Internet monitoring and download of data shall be alsoincorporated.
- xv. Remote Server and Software for centralized Internet monitoring system shallbe also provided for download and analysis of cumulative data of all theplants. The data of the solar radiation and temperature monitoringsystem should also be available on Remote Monitoring server [**This will be provided with SPV Power Plants of PV capacity more than 50 kW**].

xvi. Ambient / Solar PV module back surface temperature shall be also monitored on continuous basis [**This will be provided with SPV Power Plants of PV capacity more than 50 kW**].

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 [**This will be provided with SPV Power Plants of PV capacity more than 50 kW**].

xviii. Remote Monitoring and data acquisition through Remote Monitoring System software at the owner /RREC location with latest software/hardware configuration and service connectivity for online / realtime data monitoring/control complete to be supplied and operation and maintenance/control to be ensured by the supplier. Provision for interfacing these data on RREC server and portal in future shall be kept.

10. 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. (**If the transformer is required, the cost of the same will be borne by beneficiary and will not be the part of project cost**).

b) The bi-directional electronic energy meter (0.5 S class) shall be installed for the measurement of import/Export of energy.

c) The bidder must take approval/NOC from the Concerned DISCOM for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network and submit the same to RREC before commissioning of SPV plant.

d) Reverse power relay shall be provided by bidder (if necessary), as per the local DISCOM requirement.

11. POWER CONSUMPTION:

a) Regarding the generated power consumption, priority need to give for internal consumption first and thereafter any excess power can be exported to grid. Finalization of tariff is not under the purview of RREC . Decisions of appropriate authority like DISCOM, RERC may be followed.

12. PROTECTIONS

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

12.1. LIGHTNING PROTECTION

The SPV power plants shall be provided with lightning & overvoltage protection. The main aim in this protection shall be to reduce the overvoltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmospheric 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 IEC62305 standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and suitable earthings such that induced transients find an alternate route to earth.

12.2. SURGE PROTECTION

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

12.3. EARTHING PROTECTION

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

12.4. GRID ISLANDING:

- i. 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.
- ii. 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.

13. 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: . 10oC to +80oC.
- 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. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.
- vii. 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.
- viii. The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25 years.
- ix. The ratings given are approximate. Bidder to indicate size and length as per system design requirement. All the cables required for the plant provided by the bidder. Any change in cabling sizes if desired by the bidder/ approved after citing appropriate reasons. All cable schedules/layout drawings approved prior to installation.
- x. Multi Strand, Annealed high conductivity copper conductor PVC type ~~A~~ pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armoured cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/equivalent BIS Standards as specified below:
BoS item / component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V, UV resistant for outdoor installation IS /IEC 69947.
- xi. The size of each type of DC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 1%.
- xii. The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.

14. CONNECTIVITY

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the RERC regulation for Grid connectivity and norms of DISCOM and amended from time to time.

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

15. TOOLS & TACKLES AND SPARES:

- i. 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 RREC.
- ii. 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.

16. DANGER BOARDS AND SIGNAGES:

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

17. FIRE EXTINGUISHERS:

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

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

c) The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCUs as well as on the Roof or site where the PV arrays have been installed.

18. DRAWINGS & MANUALS:

i. 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.

ii. Approved ISI and reputed makes for equipment be used.

iii. For complete electro-mechanical works, bidders shall supply complete design, details and drawings for approval to RREC before progressing with the installation work

19. PLANNING AND DESIGNING:

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

ii. RREC 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.

iii. The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidder submit three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

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

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

ii. General arrangement and dimensioned layout

iii. Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.

iv. Structural drawing along with foundation details for the structure.

v. Itemized bill of material for complete SV plant covering all the components and associated accessories.

vi. Layout of solar Power Array

vii. Shadow analysis of the roof

21. SOLAR PV SYSTEM ON THE ROOFTOP FOR MEETING THE ANNUAL ENERGY REQUIREMENT

The Solar PV system on the rooftop of the selected buildings will be installed for meeting the annual energy requirements of PV capacity permissible by Discom as per regulation issued by RERC.

22.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.

Note: It is informed that Ministry of New and Renewable Energy is under process of Review of Minimum Technical standards for Grid connected SPV Roof Top plants for further Revision. On issuance of revision on these standards, same will be applicable.

Annexure-3(A)

A. SCHEDULE OF EXPERIENCE (Supply & Installation)

(Please attach certificates in support from the concerned nodal agency /Govt. Organisation/ MNRE authorised Agency /Project owner for work executed)

S. No.	Details of SPV systems installed during 2013-14, 2014-15 and till date of submission of BID.	Year	Deptt./Agency /Beneficiary for which work carried out	Total kW size of work.	Cost of works in { Amt in Lakhs.}	Attachment at Page No. Of Techno-Commercial bid
1.						
2.						
3.						
4.						
.....N						
TOTAL :						

SIGNATURE & SEAL OF PROPOSER

{ Please refer section 6 – Prerequisite, For eligibility in this tender.}

Annexure-3(B)

B. SCHEDULE OF EXPERIENCE (Supply & Installation)

(Please attach certificates in support from the concerned nodal agency /Govt. Organisation/ MNRE authorised Agency /Project owner for work executed)

S. No.	Details of SPV Power Plant of 50 kW and above installed during 2013-14, 2014-15 and till date of submission of BID.	Year	Deptt./Agency /Beneficiary for which work carried out	Total kW size of work.	Cost of works in lakhs of Rs.	Attachment at Page No. Of Techno-Commercial bid
1.						
2.						
3.						
4.						
.....N						
TOTAL :						

SIGNATURE & SEAL OF TENDERER

{ Please refer section 6 – Prerequisite, to be eligible in this tender.}

Annexure-3(C) & (D)

C. Details of after sale service centres existing in the state of Rajasthan

S. No.	Name of Dealer/centre	Village	Tehsil	District	Name of contact Person & Phone Number

SIGNATURE & SEAL OF TENDERER

D. Details of after sale service centres proposed in the state of Rajasthan.

S.No.	Name of Dealer/centre	Village	Tehsil	District

- Note: 1. Final details can be given later on.
2. This is for information purpose only.

**SIGNATURE & SEAL
OF Tenderer**

PRICE BID

Bidder shall quote rates / costs in the format given below for Design, supply, erection/ installation, commissioning & maintenance of grid connected SPV Power Plants as per guidelines and specifications/standards specified in the MNRE grid connected guidelines under JNNSM and amended time to time complete with all accessories, auxiliaries and components F.O.R. site including installation, commissioning and FIVE YEARS comprehensive maintenance.

NIT No: RREC/SPV Roof Top Prg./2015-16, Dated :30/01/2016.

Slab :	Description of Systems	Total Project cost Inclusive CMC for 5 Years along with all taxes & duties etc. (Rs./Wp) (i)	Total PV Capacity work offered by the bidder (ii)
A.	Grid connected SPV Power Plants without Battery Bank %above 1 kW & up to 10 kW+ including FIVE years free comprehensive maintenance.		
B.	Grid connected SPV Power Plants without Battery Bank %above 10 kW & up to 50 kW+ including FIVE years free comprehensive maintenance.		
C.	Grid connected SPV Power Plants without Battery Bank %above 50 kW & up to 500 kW+ including FIVE years free comprehensive maintenance.		----

**Signature of the Tenderer/
authorised Signatory.**

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

DEVIATION STATEMENT

Details of Deviations from the Tender are as under:-

S.No.	Page No. of Documents	Clause No.	Details of deviations

Note: RREC is at liberty to accept or not to accept any deviation. No tender will be accepted with deviation without prior approval from competent authority of RREC.

SIGNATURE OF AUTHORISED
SIGNATORY WITH SEAL

AGREEMENT

(On Non judicial stamp paper of value as under :
Work order worth upto Rs.10.00lakh.....Rs.500/-
Work order worth above Rs.10.00lakh.....Rs.1000/-
Work order worth above Rs. 50.00 lakh.....Rs. 5000/-.

1. An agreement made this _____ day of _____. Between _____ (hereinafter called the "approved supplier") which expression shall, where the context so admits, be deemed to include his/ hers successors, executors and administrators, of the one part and the RREC (hereinafter called "the corporation") which expression shall, where the context so admits, be deemed to include his successors in office and assigns of the other part.

2. Whereas the approved supplier M/s. _____ has agreed with the Corporation to take up the work under rate contract order no. _____ date _____ and award of work order no. _____ date _____ for work of design, supply, installation, testing commissioning and maintenance of the Grid connected SPV Power Plants under "Roof Top Power Generation Scheme 2015-16 + at the beneficiary's site in the State of Rajasthan in the allowed area. All those articles set forth as per tender document & the Rate contract issued by RREC at the rates set forth in the said schedule.

3. And whereas the approved supplier has deposited as Security Deposit a sum of Rs. _____ as Cash/Bank Draft/Banker Cheque/Bank Guarantee No. _____ Dated _____. With adjustment of Rs. _____ deposited vide DD/BC/BG No. _____ Dated : _____ as EMD.

4. (i) In consideration of the payment to be made by the Corporation through _____ at the rates set forth in the Schedule hereto appended the approved supplier will duly supply the said articles set forth in _____. And _____ thereof in the manner set forth in the conditions of the tender and contract.

(ii) The conditions of the tender and contract for open tender enclosed to the tender notice No. _____ dated _____ and also appended to this agreement will be deemed to be taken as part of this agreement and are binding on the parties executing this agreement.

(iii) Letters Nos. _____ received from tenderer and letters Nos. _____ issued by the corporation and appended to this agreement shall also form part of this agreement.

5. We are abide by all terms and conditions as per bid documents.

6. All disputes arising out of this agreement and all questions relating to the interpretation of this agreement shall be decided by the Corporation and the decision of the Corporation shall be final.

In witness where of the parties here to set their hands on the day of _____ 2016.

Signature for and as behalf of
RREC

Signature of the approved
Supplier

Date:

Date:

Witness No. 1
Witness No. 2

1. Witness
2. Witness

**UNDERTAKING TO BE SUBMITTED BY A FIRM FOR FAITHFULLY CARRYING
OUT THE ASSIGNED WORK**

In consideration of the MD, RREC, E-166, Yudhishtir Marg, C-Scheme, Jaipur (hereinafter called RREC) having authorised us _____ (name of the supplier), office at _____ (hereinafter called the supplier) for installation work of grid connected SPV systems/Plants in Rajasthan and on successful completion of the job (hereinafter referred as grid connected SPV Roof Top Programme RREC having been agreed to disburse the financial assistance due under the programme supplier does hereby undertake to carryout the work as per terms and condition of the Tender document and authorisation letter issued to us by RREC.

We do hereby further undertake that in case we are unable to carryout out duties as undertaken above. RREC would have the right to forfeit the entire /EMD/security amount deposited by us for Off-grid SPV Programme work with them.

We at _____ (Name of the firm) further agree that the undertaking herein contained shall remain in full force and effect for the period of the year from the date of this undertaking or for such period for which this undertaking is executed.

Dated this _____ day of _____ . 2016.

Signature of the constituted
Attorney of M/s. _____ .

अनुबन्ध पत्र

(राशि रु.100/- के नॉन ज्यूडिशियल स्टाम्प पर)

(राजस्थान अक्षय ऊर्जा निगम के 'रूफ टॉप पावर जनरेशन स्कीम' के अन्तर्गत एस.पी.वी. ग्रिड कनेक्टेड पावर प्लान्ट हेतु सप्लायर व लाभान्वित के मध्य स्थापना व संधारण के लिए किये जाने वाला अनुबन्ध पत्र)

आज दिनांकको मैं 0.....(सप्लायर) व M/s.
.....(लाभार्थी संस्था) पताजिला.....
.....के मध्य एस.पी.वी. ग्रिड कनेक्टेड पावर प्लान्ट के क्रय एवं संधारण हेतु यह अनुबन्ध क्रय निष्पादित किया गया है। इस अनुबन्ध की सभी निम्नलिखित शर्तों से सप्लायर व लाभार्थी पाबन्द रहेगे।

1. यह कि यह उपकरण / पावर प्लान्ट राजस्थान अक्षय ऊर्जा निगम द्वारा प्रायोजित रूफ टाप पावर जनरेशन स्कीम 2015-16 के तहत लगाया जा रहा है।
2. यह कि लाभार्थी द्वारा अपनी आवश्यकता के अनुरूपकिलोवाट क्षमता का एस.पी.वी. ग्रिड कनेक्टेड पावर प्लान्ट लगाया जाना प्रस्तावित किया गया है/सहमति दी गई है।
3. यह कि राजस्थान अक्षय ऊर्जा निगम द्वारा जारी किये गये रेट कान्ट्रैक्ट द्वारा निर्धारित दरो के अनुसार इस पावर प्लान्ट की कुल लागत रूपये है। यह तथ्य सप्लायर द्वारा लाभार्थी को भली-भांति अवगत/समझा दिया गया है।
4. यह कि लाभार्थी को यह अवगत करवा दिया गया है कि राजस्थान अक्षय ऊर्जा निगम की रूफ टाप पावर जनरेशन स्कीम 2015-16 के तहत कुल 30 प्रतिशत राशि अथवा अधिकतम रु. 22.50 प्रति वाट अनुदान स्वरूप निगम द्वारा उपलब्ध करवायी जावेगी।

यह कि इस पावर प्लान्ट की स्थापना हेतु विभिन्न पक्षों के दायित्व एवं शर्तें निम्न प्रकार रहेगी :

लाभार्थी के दायित्व:-

5. यह कि लाभार्थी सप्लायर को वांछित छाया रहित क्षेत्र सोलर मोड्यूल स्थापना हेतु उपलब्ध करवायेगा।
6. यह कि इस पावर प्लान्ट की स्थापना हेतु लाभार्थी उपकरण लागत की शेष राशि सप्लायर को भुगतान स्वरूप देने के लिये सहमत है। इसके अनुसार उपकरण की कुल लागत रूपये..... है जिसमें से राशि रूपयेलाभार्थी द्वारा भुगतान किया जाना है। लाभार्थी इस राशि का भुगतान सप्लायर को करेगा
7. यह कि यदि लाभार्थी उपकरण स्थापना के साथ ही सप्लायर द्वारा उपयोग हेतु दिये गये निर्देशों के अनुसार ही पावर प्लान्ट का उपयोग करेगा। दिये गये निर्देशों के विपरित किसी प्रकार की अवांछित छेड़-छाड़ जैसे स्थानान्तरण करना, के सिद्ध होने पर, उपकरण की पाँच वर्ष की गारन्टी स्वतः ही समाप्त मानी जाएगी।
8. यह कि लाभार्थी सिस्टम खराब होने पर सप्लायर के कर्मचारियों को सूचित करेंगे न कि स्वयं सिस्टम को ठीक करने का प्रयास करेंगे।
9. यह कि सप्लायर द्वारा रख-रखाव न करने पर परियोजना अधिकारी, राजस्थान अक्षय ऊर्जा निगम को तत्काल सूचित करेंगे।
10. यह कि लाभार्थी लगाये गये उपकरण की सुरक्षा के लिए पूर्णतया जिम्मेदार होगा व चोरी होने पर पुलिस में तत्काल एफआईआर दर्ज करा के सम्बन्धित परियोजना अधिकारी को सूचित करेगा।

सप्लायर के दायित्व:-

11. यह कि सप्लायर लाभार्थी को उसकी वर्तमान विद्युत आवश्यकता/लोड का अधिकतम 80 प्रतिशत क्षमता का सोलर पावर प्लान्ट स्थापना हेतु सुझाव देगा एवं उसके अनुसार ही पावर प्लान्ट की डीपीआर तैयार कर राजस्थान अक्षय ऊर्जा निगम को स्वीकृति हेतु प्रस्तुत करेगा।
12. यह कि सप्लायर, लाभार्थी से उपकरण लागत की शेष राशि बैंक/बैंकर चेक/डीमान्ड ड्राफ्ट के

रूप में self एकत्रित करेगा।

13. यह कि सप्लायर लाभार्थी के स्थल पर निगम से रेट कान्ट्रैक्ट एवं निविदा शर्तों के अनुरूप पावर प्लान्ट स्थापना का कार्य पूर्ण करेगा।
14. यह कि (i) राजस्थान अक्षय ऊर्जा निगम शर्तानुसार उपकरण स्थापना पश्चात् लाभार्थी को संभालने (Handing Over) के दिन उपकरण पूर्णतया कार्यशील होगा व कोई हिस्सा टूटा-फूटा या बेकार नहीं होगा। (ii) सप्लायर लाभार्थी को देव नागरी लिपि/अंग्रेजी भाषा में सिस्टम की पूर्ण जानकारी एवं क्या करें क्या ना करें तथा संचालन मैन्युअल उपलब्ध करवाएंगे।
15. यह कि इस उपकरण में वो सब सुविधायें/पार्ट्स होंगे जो कार्यादेश के संबंधित संलग्नक में दिये गये हैं।
16. यह कि राजस्थान विधुत नियामक आयोग द्वारा 26.02.2015 को जारी नेट मीटरिंग एवं ग्रिड कनेक्टिविटी के विनियम के तहत नेट मीटरिंग से संबंधित उपकरण स्थापना का संपूर्ण दायित्व सप्लायर का होगा एवं यह कार्यवाही सप्लायर द्वारा तुरन्त प्रभाव से की जावेगी ताकि लाभार्थी को पावर प्लान्ट से उत्पन्न होने वाली एवं ग्रिड में जाने वाली अतिरिक्त उर्जा का लाभ मिल सके। इस कार्यवाही में डिस्काम एवं इलेक्ट्रिकल इंस्पेक्टर कार्यालय को देय फीस एवं सिक्योरिटी राशि का भुगतान लाभार्थी को अपने स्तर पर अतिरिक्त करना होगा।
17. यह कि सप्लायर उपकरण स्थापना के पश्चात् पाँच वर्षों तक सामान्य रखरखाव एवं ब्रेक डाउन मेन्टेनेन्स सेवाये लाभार्थी को उपलब्ध करवायेगा।
18. यह कि सप्लायर अपने कर्मचारियों /एजेन्ट को इस कार्य के लिए तहसील मुख्यालय (or at proper place) पर नियुक्त रखेंगे जिससे लाभार्थी इनसे सीधे सम्पर्क रख सकेंगे। इस बाबत कर्मचारी के सम्पर्क नम्बर आवश्यक रूप से लाभार्थी को उपलब्ध करवायेगा।
19. सप्लायर के कर्मचारियों/एजेन्ट को पहचान पत्र देकर रखेंगे जो दिखाने पर ही लाभान्वित उनको पावर प्लान्ट स्थापना स्थान पर प्रवेश करने देगा।
20. अन्य किसी बिन्दु पर राजस्थान अक्षय ऊर्जा निगम के प्रबन्ध निदेशक का फैसला अन्तिम व मान्य होगा।

यह अनुबन्ध आज दिनांक.....को दोनों पक्षों ने अपनी पूर्ण समझ बूझ एवं आपसी सहमति से निष्पादित किया है एवं उक्त शर्तों से भविष्य में पाबन्द रहेंगे।

हस्ताक्षर

हस्ताक्षर

सप्लायर के अधिकृत प्रतिनिधि नाम..... पद..... विभाग..... मो.न.	लाभार्थी संस्था/संस्थान के अधिकृत प्रतिनिधि का नाम..... पुत्र श्री..... पता..... जिला.....
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**FORMAT OF
INSTALLATION CERTIFICATE**

RST No:	M/s.....	Phone No:
CST No:	Address:	Fax No:
TIN No:		E-mail :

INSTALLATION CERTIFICATE

Date Of Installation :

Subsidy claim Note No:

Name of Beneficiary :

.....

Address of Place of Installation

.....

Name of City :, Tel.No:/Mobile No:

Certified thatkW PV Capacity SPV Roof Top/ Ground mounted Grid connected Power Plant in reference to RREC RC order No:.....Dated:..... and further sanction letter No: Dated:..... has been installed and commissioned at the place mentioned and taken over the system by beneficiary in good working condition: The details of material supplied and installed are as under :

S.No.	Item:	Make & capacity of each	Quantity	Serial Numbers.
1.	SPV Module ofWp each:			
2.	Charge Controller/Invertor			
3.	Invertor/PCU			
4.	Module Stand			
5.	Cable			
6.	Lighting Arrestor			
7.	Surge Protection device			
8.	Other items.....			

Signature of Beneficiary:

Signature of representative of Firm/dealer
who installed the system
(Name:)

Signature of Firm's authorised Person
With seal.

PO/PM, RREC verification.

Note:RST/CST/TIN no. Should be printed or stamped properly .

**Compliance with the Code of integrity
and No Conflict of interest**

Any person participating in a procurement process shall .

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

Conflict of Interest:-

The Bidder participating in a bidding process must not have a Conflict of Interest.

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

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

**SIGNATURE OF AUTHORISED
SIGNATORY WITH SEAL**

Declaration by the Bidder regarding Qualifications

Declaration by the Bidder

In relation to my/our Bid submitted to _____ for procurement of _____ in response to their Notice Inviting Bids No. _____. Dated _____. I/we hereby declare under Section 7 of Rajasthan Transparency in Public Procurement Act, 2012, that:

1. I/we possess the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Procuring Entity;
2. I/we have fulfilled my/our obligation to pay such of the taxes payable to the Union and the State Government or any local authority as specified in the Bidding Document;
3. I/we are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended and not the subject of legal proceedings for any of the foregoing reasons;
4. I/we do not have, and our directors and officers not have, been convicted of any criminal offence related to my/our professional conduct or the making of false statements or misrepresentations as to my/our qualifications to enter into a procurement contract within a period of three years preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
5. I/we do not have a conflict of interest as specified in the Act, Rules and the Bidding Document, which materially affects fair competition;

SIGNATURE OF AUTHORISED
SIGNATORY WITH SEAL

Date:

Name :

Designation:

Address:

Grievance Redressal during Procurement Process

The designation and address of the First Appellate Authority is Director (Technical), RRECL Jaipur.

The designation and address of the Second Appellate Authority is Chairman & Managing Director RRECL Jaipur

(1) Filing an appeal

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

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

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

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

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

(4)Appeal not to lie in certain cases

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

- (a) determination of need of procurement;
- (b) provisions limiting participation of Bidders in the Bid process;
- (c) the decision of whether or not to enter into negotiations;
- (d) cancellation of a procurement process;
- (e) applicability of the provisions of confidentiality.

(5) Form of Appeal

- (a) An appeal under para (1) or (3) above shall be in the annexed Form alongwith as many copies as there are respondents in the appeal.
- (b) Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee.

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

(6) Fee for filing appeal

- (a) Fee for first appeal shall be rupees two thousand five hundred and for second appeal shall be rupees ten thousand, which shall be non-refundable
- (b) The fee shall be paid in the form of bank demand draft or banker's cheque of a Scheduled Bank in India payable in the name of Appellate Authority concerned.

(7) Procedure for disposal of appeal

- (a) The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.
- (b) On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall,-
 - (i) hear all the parties to appeal present before him; and
 - (ii) peruse or inspect documents, relevant records or copies thereof relating to the matter.
- (c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.
- (d) The order passed under sub-clause (c) above shall also be placed on the State Public Procurement Portal.

SIGNATURE OF AUTHORISED
SIGNATORY WITH SEAL

Additional Conditions of Contract

1. Correction of arithmetical errors

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

- i. if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected, unless in the opinion of the Procuring Entity there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected;
- ii. if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- iii. if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.

If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited or its Bid Securing Declaration shall be executed.

2. Procuring Entity's Right to Vary Quantities

- (i) At the time of award of contract, the quantity of Goods, works or services originally specified in the Bidding Document may be increased or decreased by a specified percentage, but such increase or decrease shall not exceed twenty percent, of the quantity specified in the Bidding Document. It shall be without any change in the unit prices or other terms and conditions of the Bid and the conditions of contract.
- (ii) If the Procuring Entity does not procure any subject matter of procurement or procures less than the quantity specified in the Bidding Document due to change in circumstances, the Bidder shall not be entitled for any claim or compensation except otherwise provided in the Conditions of Contract.
- (i) In case of procurement of Goods or services, additional quantity may be procured by placing a repeat order on the rates and conditions of the original order. However, the additional quantity shall not be more than 25% of the value of Goods of the original contract and shall be within one month from the date of expiry of last supply. If the Supplier fails to do so, the Procuring Entity shall be free to arrange for the balance supply by limited Bidding or otherwise and the extra cost incurred shall be recovered from the Supplier.

SIGNATURE OF AUTHORISED
SIGNATORY WITH SEAL

Format of Subsidy Claim Note

RST No: CST No: TIN No:	M/s..... Address:	Phone No: Fax No: E-mail :
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Subsidy Claim Note**Subsidy claim note No:**

Date:

The Managing Director,
Rajasthan Renewable Energy Corp. Ltd.,
E-166, Yudhisthir Marg, C-Scheme, Jaipur.

Sir,

Please arrange to issue subsidy to M/s -----against supply, installation and commissioning of SPV Roof Top/Ground mounted grid connected Systems under Roof Top solar Power generation scheme 2015-16 in reference to RRECL, Jaipur Rate contract order No:Dated :, Letter of allocation (LOA) No. -----Dated:.....and letter of Project sanction No: Dated:

Maintenance services for this system shall be provided by our local representative M/s. Or Mr.....(Tel./Mob. No:) .

Details of Beneficiary :.....
Place of Installation of System:
Invoice No / Date: :.....(As issued to beneficiary Copy Enclosed),
PV Capacity of system installed :

S. No.	Details:	Amount:
1.	Total Price of system :	
	1. Supply Price including CST/VAT etc. Rs.	
	2. Installation & commissioning price: Rs.	
	3. Charges for CMC of 5 Years: Rs.	
	4. Service tax on 2&3 Rs.	
	5. Total : Rs.	
2.	Amount already received as beneficiary share { 70% or balance after deducting RREC subsidy of the system cost} :	(-)
3.	Total admissible subsidy receivable from RREC :	
4.	Amount presently receivable as per terms & conditions of RC { 80% of subsidy} :	

Firm's Authorized Signature with seal

Certificate from Project Officer, RRECL

Following are certified in reference to RREC , Project order referred above for supply, installation & commissioning of -----kW SPV Roof Top/Ground mounted grid connected system installed by the supplier:

1. A CMC contract agreement as per the format at Annexure -9 of Tender Document has been executed with the beneficiary.
2. The material supplied is as per pre-despatch inspection clearance of RREC.
3. The Power Plant has been installed & commissioned in good condition as per technical specification of tender document and Rate Contract.
4. The work has been completed on dated:{ with in stipulated period / with a delay of ---- days}.
5. Instruction Manual, Guarantee Card & Invoice of system has been provided to beneficiaries.
6. The performance of the Power plant for 1 month period has been checked and found as per requirement.

Verified for payment of subsidy amount Rs. -----(Rs.-----).

Signature of Project Officer,
RRECL, with seal

Joint Bidding/ Consortium Agreement Format for “Award &/ or Empanelment of Partners for Design, Supply, Installation, Commissioning and maintenance of Grid Connected SPV Roof Top Systems” in Rajasthan
(To be executed on Stamp Paper of INR 100/-)

THIS JOINT BIDDING AGREEMENT is entered into on this ____ day of ____ .2016.

BETWEEN

{____, lead member of consortium} and having its registered office at _____ (Hereinafter referred to as the “**First Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

____. Having its registered office at _____. (Hereinafter referred to as the “**Second Part**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above mentioned parties of the First and Second Part are collectively referred to as the “**Parties**” and each is individually referred as a “**Party**”

WHERE AS,

- i. Rajasthan Renewable Energy Corporation (hereinafter referred to as the “**Corporation**” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has invited applications (the “**Applications**”) by its RFP: RREC/Roof Top SPV Prg./15-16/____ dated 21.01.2016 for award of the rate contract/ work under %Roof Top Power Generation Scheme+ of Solar Roof Top System installation (hereinafter called “**Project**”) in Rajasthan and empanelment for the same.
- ii. The Parties are interested in jointly bidding for the Project as members of consortium in accordance with the terms and conditions of the RFP document and other bid documents in respect of the Project, and
- iii. It is a necessary condition under the RFP document that the members of the Consortium shall enter into a Joint Bidding Agreement and furnish a copy thereof with the Application.

NOW IT IS HEREBY AGREED as follows: Definitions and Interpretations

In this agreement, the capitalized terms shall, unless the context otherwise require, have the Meaning ascribed thereto under the RFP: RREC/Roof Top SPV Prg./15-16/____ dated 21.01.2016

1. Consortium

The Parties do hereby irrevocably constitute a consortium (the “**Consortium**”) for the purposes of jointly participating in the Bidding Process for the Project.

The Parties hereby undertake to participate in the Bidding Process only through this Consortium and not individually and/ or through any other consortium constituted for this Project, either directly or indirectly or through any of their Associates.

2. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

- (a) Party of the First Part shall be the Lead member of the Consortium and shall have the power of attorney from all Parties for conducting all business for and on behalf of the Consortium during the Bidding Process & after it once selected as successful bidder.
- (b) Party of the First Part would be responsible for successful execution of all work awarded to them by RREC and in no circumstances the same shall be the responsibility of Second Part.
- (c) Party of the Second Part shall work in accordance to roles and responsibilities assigned to them from First Part as a part of their internal understanding.
- (d) Parties have agreed and documented clearly stated roles and responsibilities between First Part and Second Part for execution of work awarded by RREC.

3. Joint and Several Liabilities

The Party of the First Part does hereby undertake the responsibility for all obligations and liabilities relating to the Project and in accordance with the terms of RFP.

4. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until the date of validity period of Award & /Or Empanelment and further in accordance with the Letter of Award subsequently issued if bid arrives as successful. However, in case the Consortium is either not pre-qualified for the Project or does not get selected for Award of the work, the Agreement will stand terminated in case the Applicant is not pre-qualified.

5. Miscellaneous

This Joint Bidding Agreement shall be governed by laws of India.

The Parties acknowledge and accept that this Agreement shall not be amended by Parties without the prior written consent of the Corporation.

Party of First Part would decide on the representative of Consortium at Corporation.

IN WITNESS WHERE OF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED For
and on behalf of
LEAD MEMBER by:

SIGNED, SEALED AND DELIVERED
SECOND PART

(Signature)

(Signature)

(Name)

(Name)

(Designation)

(Designation)

(Address)

(Address)

In Presence of :

Witness 1

Witness 1

Witness 2

Witness 2

**No. 03/88/2015-16/GCRT
GOVERNMENT OF INDIA
Ministry of New and Renewable Energy
(Solar Energy Group)**

Block No. 14, CGO Complex,
Lodhi Road, New Delhi,
Dated: 04.03.2016

To,
The Pay and Accounts Officers,
Ministry of New and Renewable Energy,
Government of India, New Delhi.

Subject:- Grid Connected Rooftop and small Solar Power Plants Programme- Scaling-up of budget from Rs. 600 Crore during the 12th Five Year Plan to Rs. 5000 crore for implementation over a period of five years upto 2019-20 under National Solar Mission (NSM)- Amendment regarding.

Sir,

In continuation to the Administrative Approval for '**Grid Connected Rooftop and Small Solar Power Plants Programme**' under ± Off-Grid and Decentralized Solar Applicationsq scheme issued vide no. 30/11/2012-13/NSM dated 26th May, 2014 and the guidelines for the same issued vide even no. dated 26th June, 2014, I am directed to convey the approval of the President of India for scaling-up of the budget outlay of %Grid Connected Rooftop and Small Solar Power Plants Programme+from Rs. 600 crore during the 12th Five Year Plan to Rs. 5000 crore for implementation over a period of five years i.e. 2015-16, 2016-17, 2017-18, 2018-19 and 2019-20 under National Solar Mission. Out of this Rs. 5000 crore, the outlay of Rs. 1750 crore will be allocated for implementation during the 12th Five Year Plan and balance outlay of Rs. 3250 crore will be allocated for implementation during the remaining period i.e. 2017-18 to 2019-20.

2. The pattern of Central Financial Assistance (CFA) of the grid connected solar rooftop systems will be retained as per existing on-going scheme under implementation as issued vide no 30/11/2012-13 /NSM dated 26th June, 2014 with following modifications:

- I. The existing pattern of capital subsidy at the rate upto 30% of benchmark cost for the general category States (upto 70% of benchmark cost for special category States i.e., North Eastern States including Sikkim, Uttarkhand, Himachal Pradesh, Jammu & Kashmir and Lakshadeep, Andaman & Nicobar Islands) is being modified to the extent that there will be no subsidy for commercial and industrial establishments in the private sector.
- II. The Government Institutions including Public Sector Undertakings (PSUs) shall not be eligible for subsidy; instead they will be given achievement-linked incentives/awards for which a separate notification will be issued.
- III. All remaining sectors including residential, institutional (hospitals, educations institutions etc.) social sectors etc. will be eligible for subsidy as above (irrespective of the type of electricity connection).
- IV. The details of sector-wise eligibility of Central Financial Assistance is given in Annexure.

3. The other terms and condition of the existing %Grid Connected Rooftop and Small Solar Power Plants Programme+under implementation vide no. 30/11/2012-13-/NSM dated 26th May, 2014 and the guidelines vide even no. dated 26th June, 2014 will remain same.

4. To ensure smooth and timely implementation of the scheme, MNRE will be authorized to make amendments in the terms and conditions of the scheme including subsidy pattern, within the broad parameters outlined, with the approval of Minister, NRE without increasing the total financial requirement.

5. The financial outlay is being revised from Rs. 600 crore to Rs. 5000 crore for implementation over a period of 5 years from 2015-16 to 2019-20. The year-wise estimated financial outlay and corresponding targets would be as follows:

(Rs. In Crore)

S. No.	Items	2015-16	2016-17	2017-18	2018-19	2019-20	Total
1	Physical Target (in MWp) to be sanctioned/awarded*	1000	1500	1500	200	--	4200
2	Capital Subsidy Including incentives/awards*	210	1445	1435	940	695	4725
3	Capacity building, Surya Mitra training, awareness generation, seminars/workshops literature/guidelines, consultancy/Project Management Cell, R&D, Innovative projects, monitoring, software/IT tools development, testing facilities etc. as per provisions in the programme.	25	35	35	30	10	135
4	Service charges to the State Nodal Agencies, DISCOMs, Solar Energy Corporation of India, IREDA, REC, NHB, Banks or any other Govt. organizations (upto 3% of total budget/CFA)	15	20	30	30	45	140
	Total	250	1500	1500	1000	750	5000

* Estimates based on present average benchmark cost as Rs. 7.5 crore per MWp. This will change from time to time. The above year-wise allocations may be changed within the overall provisions of the scheme as per demand and feasibility.

6. The expenditure involved will be debited to following budget heads for current Financial Year 2015-16:

Budget Heads
Demand No. 69-Ministry of New and Renewable Energy Major Head: 2810- New and Renewable Energy Minor Head: 101-Grid Interactive & Distributed Renewable Power 01- Grid Interactive Renewable Power 04-Solar Power 01.04.31- Grants-in-Aid General during the year 2015-16 (Plan). 01.04.33- Subsidy 01.04.20- Other Administrative Expenses

7. This is an amendment to the Administrative Approvals issued earlier for implementation of the %Grid Connected Rooftop and Small Power Plants Programme+ under %Off-Grid & Decentralized Solar Applications+ schemes of National Solar Mission vide order no. 30/11/2012-13/NSM dated 26th May, 2014 and the guidelines for the same issued vide even no.dated 26th June, 2014.
8. The implementation of above amendments in the programme will come into effect from the date of issue of this amendment.
9. This sanction issues in exercise of powers delegated to this Ministry and with the concurrence of IFD dated 15.02.2016 vide their Dy. No. 2027 dated 11.02.2016.

(Dr. Arun K. Tripathi)
Adviser/ Scientist -G

Telefax: 011-24363035, Email: aktripathi@nic.in

Copy for information and appropriate action to:-

1. All Central Ministries and Departments;
2. Department of Public Enterprises (DPE), Block 14, CGO Complex, New Delhi.
3. Principal Director of Audit, Scientific Audit-II, DGACR Building, I.P. Estate, Delhi.
4. Principal Secretaries/ Secretaries (Energy Departments) all States/UTs
5. All State/UT Nodal Agencies (by name)
6. All Municipal Commissioners.
7. CMD, IREDA, 1st floor, East Court, Indian Habitat Centre, Lodhi Road, New Delhi.
8. Director General, Bureau of Indian Standards, Manak Bhawan , 9, Bahadur Shah Zafar Marg, New Delhi.
9. D.G. National Institute of Solar Energy, Gwal Pahari, Gurgaon, Haryana.
10. MD, Solar Energy Corporation of India, D-3, A Wing 1st Floor, Religare Building, District Centre, Saket, New Delhi-110017.
11. National Housing Bank and all Nationalized/ Private Banks.
12. Director, National Institute of Wind Energy/Director, National Institute of Bio Energy.

Copy to:-

1. PS to Hon'ble Minister of State for Power, Coal and New and Renewable Energy, Shram Shakti Bhawan, New Delhi.
2. PSO to Secretary, MNRE.
3. PS to JS&FA, MNRE.
4. JS(VJ)/JS(TK)
5. All Advisers & Group Heads.
6. All under Secretaries in MNRE.
7. Director (NIC) to upload this on the Ministry's website.
8. CA, MNRE/Cash Section.
9. Hindi section for Hindi version.
10. Sanction Folder.

(Dr. Arun K. Tripathi)
Adviser/ Scientist -Gq

Sector-wise eligibility of Central Financial Assistance (CFA) and Achievement-linked Incentives/ Awards.

Sl. No.	Category	Coverage of buildings	Central Financial Assistance/ Achievement linked Incentives & awards
(i)	Residential	All types of residential buildings	CFA upto 30% of benchmark cost for General Category States/ UTs and upto 70% of benchmark cost for Special Category States i.e., North Eastern States Including Sikkim, Uttarakhand, Himachal Pradesh, Jammu & Kashmir and Lakshadweep, Andaman & Nicobar Islands.
(ii)	Institutional	Schools, health Institutions including medical colleges & hospitals, universities, educational institutions etc. [applicable to not-for-profit registered organization only, except those covered under Sl. No. (iv), (v) &(vi)]	CFA upto 30% of benchmark cost for General Category States/ UTs and upto 70% of benchmark cost for Special Category States i.e., North Eastern States Including Sikkim, Uttarakhand, Himachal Pradesh, Jammu & Kashmir and Lakshadweep, Andaman & Nicobar Islands.
(iii)	Social sector	Community centres, welfare homes, old age homes, orphanages, common service centres, common workshops for artisans or craftsman, facilities for use of community, Trusts/NGOs/Voluntary organizations/ Training Institutions, any other establishments for common public use etc. [applicable to not-for-profit registered organizations only, except those covered under Sl. No. (iv),(v) & (vi)]	CFA upto 30% of benchmark cost for General Category States/ UTs and upto 70% of benchmark cost for Special Category States i.e., North Eastern States Including Sikkim, Uttarakhand, Himachal Pradesh, Jammu & Kashmir and Lakshadweep, Andaman & Nicobar Islands.
(iv)	Government Buildings	Buildings of Both Central & State Government, local government covering all Government offices.	No CFA. Achievement linked Incentives/awards will be provided.
(v)	Government Institutions	Government Institutions, Public Sector Undertakings, all buildings owned by Government directly or by any Government owned societies, companies, corporations, Institutions or organizations, Government educational/ health Institutions.	No CFA. Achievement linked Incentives/awards will be provided.
(vi)	Private Commercial and Industrial sector	All types of buildings.	No CFA.

No CFA is applicable for any type of Government buildings, Government institutions/ Government organizations including PSUs. Only achievement linked Incentives/ awards will be eligible for which a separate notification will be issued.

(Dr. Arun K. Tripathi)
Adviser/ Scientist - G