DELHI METRO RAIL CORPORATION LIMITED

INVITES
REQUEST FOR SELECTION OF BIDDERS

FOR

IMPLEMENTATION OF 3 MWp
SOLAR PV POWER SYSTEM IN DMRC
UNDER VGF SCHEME

Contract: - CE/SPV-07

Technical Document

DMRC LIMITED
Metro Bhawan, Fire Brigade Lane, Barakhamba Road,
New Delhi-110001, India
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<th>Page No.</th>
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DMRC LIMITED

Contract: - CE/SPV-07

DMRC Ltd. (hereinafter called “DMRC”) invites open e-tenders from eligible applicants, who fulfill qualification criteria, for the work “Contract CE/SPV-07: Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd.”

For the implementation of above mentioned work, Bidders should submit/upload their bid proposal along with all supporting documents complete in all respect on or before the date and time given in the Notice of Invitation to Tender, online on e-tendering website https://eprocure.gov.in/eprocure/app

Bidder shall submit bid proposal along with non-refundable processing fee, complete in all respect as per the Bid Information sheet. Techno-Commercial bids will be opened in presence of authorized representatives of bidders who wish to be present. Bid proposals received without the prescribed processing fee and Bid Bond will be rejected. In the event of any date indicated above is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.

Bid documents which include Eligibility criteria, Technical Specifications, various conditions of contract, formats, etc. can be downloaded online on e-tendering website https://eprocure.gov.in/eprocure/app.

The Bidder should regularly follow up for any Amendment / Corrigendum / Clarification on the above website.
DISCLAIMER:

1. Though adequate care has been taken while preparing the RFS document, The Bidders shall satisfy themselves 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 upto the “Last Date of seeking clarifications”, it shall be considered that the RFS document is complete in all respects and has been received by the Bidder.

2. DMRC Limited (DMRC) reserves the right to modify, amend or supplement this RFS document including all formats and Annexures.

3. While this RFS has been prepared in good faith, neither DMRC nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFS, even if any loss or damage is caused by any act or omission on their part.
Name of Work:

Delhi Metro Rail Corporation (DMRC) Ltd. invites open e-tenders from eligible applicants, who fulfill qualification criteria, for the work “Contract CE/SPV-07: Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project on Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd.”

Key details:

<table>
<thead>
<tr>
<th>Approximate capital cost of work</th>
<th>Rs. 13.50 Crores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tender Security amount</td>
<td>Amount of Tender Security: INR 13.50 Lakhs</td>
</tr>
<tr>
<td></td>
<td>Tender Security in case of BG, FDR, Demand Draft, Banker’s Cheque (in original) as per clause 3.14 of Section-III/TS shall be accepted only up to 1500 hrs on 16.01.2020 in the office of Chief Engineer/Contract at the address mentioned hereinafter. (GST Registration No. shall also be provided along with the tender security).</td>
</tr>
<tr>
<td></td>
<td>In case of RTGS/NEFT &amp; IMPS transactions, bidders shall required to upload the scanned copies of transaction of payment (clearly indicating UTR No. &amp; tender number i.e. CE/SPV-07 in the remarks or description column) of tender security / EMD at the time of online bid submission. The detail of bank account of DMRC is mentioned below this table.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Bidders to note that the payment of tender security shall be made from the account of bidder only. However, in case of JV/Consortium the tender security can either be paid from JV/Consortium account or one of the constituent member of JV/Consortium.</td>
</tr>
<tr>
<td></td>
<td>If tender security has been made from other than the account mentioned above, same shall not be accepted and all such ids shall be considered ineligible and summarily rejected.</td>
</tr>
<tr>
<td>Completion period of the Work</td>
<td>12 months from Date of issue of Letter of Acceptance</td>
</tr>
<tr>
<td>Tender documents on sale</td>
<td>From 12.12.2019 to 16.01.2020 (upto 15:00 hrs) on e-tendering website</td>
</tr>
</tbody>
</table>
https://eprocure.gov.in/eprocure/app
Tender document can only be obtained online after registration of bidder on the website http://eprocure.gov.in/eprocure/app.

<table>
<thead>
<tr>
<th>Cost of Tender documents</th>
<th>Rs. 23,600/- (Non- Refundable)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Payment of tender document cost/ tender fee is to be made only by RTGS, NEFT &amp; IMPS shall be accepted only upto 1500 hours on 16.01.2020. No other mode of payment will be accepted. The detail of bank account of DMRC is mentioned below this table. The bidders are required to upload scanned copies of transaction of payment (clearly indicating UTR No. &amp; tender number i.e. CE/SPV-07 in the remarks or description column) of tender document cost/ tender fee at the time of online bid submission.</td>
</tr>
<tr>
<td></td>
<td><em>(Copy of GST registration no. to be provided along with Tender document cost/ tender fee)</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last date of Seeking Clarification</th>
<th>23.12.2019 (Queries from bidders after due date shall not be acknowledged)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-bid Meeting</td>
<td>24.12.2019 at 1100 Hrs</td>
</tr>
<tr>
<td>Last date of issuing addendum</td>
<td>08.01.2020</td>
</tr>
<tr>
<td>Tender submission Start Date and Time</td>
<td>09.01.2020 from 1500 hrs.</td>
</tr>
<tr>
<td>Tender submission End Date &amp; Time</td>
<td>16.01.2020 up to 15:00 Hrs.</td>
</tr>
<tr>
<td>Date &amp; time of opening of Tender</td>
<td>17.01.2020 at 15:00 Hrs.</td>
</tr>
<tr>
<td>Authority and place for submission of Tender Document cost, Pre-bid Meeting and seeking clarifications</td>
<td><strong>Chief Engineer /Contract,</strong> DMRC, 5th floor, A-Wing, Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi –110 001</td>
</tr>
</tbody>
</table>

**Important Note:** All correspondence from DMRC pertaining to this tender till the award of the work with bidder shall be done by Chief Engineer/Contract, DMRC. The bidders are advised to regularly check their email ID registered with their user account at e-tendering portal https://eprocure.gov.in/eprocure/app for any update / addendum / corrigendum / pre-bid and post-bid queries / any other correspondence by the Employer.
To facilitate payment of tender fee and tender security through RTGS, NEFT & IMPS the details of bank account of DMRC is mentioned below:

<table>
<thead>
<tr>
<th>Name of Bank</th>
<th>Bank’s Address</th>
<th>Account Name &amp; No.</th>
<th>Account Type</th>
<th>IFSC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICICI Bank</td>
<td>9A, Phelps Building, Connaught Place, New Delhi-110001</td>
<td>DMRC Ltd, Tender Cell A/c 000705045337</td>
<td>Current</td>
<td>ICIC0000007</td>
</tr>
</tbody>
</table>
1.0. **DEFINITIONS & ABBREVIATIONS**

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

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

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

1.2. **NOT USED**

1.3. **"B.I.S"** shall mean specifications of Bureau of Indian Standards (BIS).

1.4. **“Bid”** shall mean the Techno Commercial and Price Bid submitted by the Bidder along with all documents/credentials/attachments annexure etc., in response to this RFS, in accordance with the terms and conditions hereof.

1.5. **“Bidder/Bidding Company”** shall mean Bidding Company submitting the Bid. Any reference to the Bidder includes Bidding Company / including its successors, executors and permitted assigns as the context may require”.

1.6. **“Bid Bond”** shall mean the unconditional and irrevocable bank guarantee to be submitted along with the Bid by the Bidder under Clause 3.14 of this RFS, in the prescribed Format-

1.7. **“Bid Deadline”** shall mean the last date and time for submission of Biding response to this RFS as specified in Bid information Sheet.

1.8. **“Bid Capacity”** shall means capacity offered by the bidder in his Bid under invitation.

1.9. **“CEA”** shall mean Central Electricity Authority.

1.10. **“Chartered Accountant”** shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949.

1.11. **“Competent Authority”** shall mean Managing Director (MD) of DMRC Limited, himself and/or a person or group of persons nominated by MD for the mentioned purpose herein.

1.12. **“Commissioning”** means Successful operation of the Project / Works by the Contractor, for the purpose of carrying out Performance Test(s) as defined in RFS.

1.13. **“Company”** shall mean a body incorporated in India under the Companies Act, 1956 or Companies Act,2013 including any amendment thereto.

1.14. **“Capacity Utilization Factor”** (CUF) means the ratio of the annual output of the plant in kWh versus installed plant capacity for number of days. \[ CUF = \]
plant output in kWh / (installed plant capacity in kWp (DC side) * 365X24).

1.15. “City Limits” means Municipal Corporation limits / Master Plan / Industrial area includes SEZ and IT park etc.

1.16. “Eligibility Criteria” shall mean the Eligibility Criteria as set forth in Clause 3.4 of this RFS.

1.17. “Financially Evaluated Entity” shall mean the company which has been evaluated for the satisfaction of the Financial Eligibility Criteria set forth in Clause 3.4.3 hereof.


1.19. "kWp" shall mean Kilo-Watt Peak.

1.20. "kWh" shall mean Kilo-Watt-hour.


1.22. “Maximum Bid Capacity” shall mean the maximum capacity for which the Bidder can submit its Bid.

1.23. “Model(s)” shall mean Modified Annuity Model.


1.25. Owner of the project” shall mean anyone who has invested 100% of project cost in the rooftop Project or the Project Developer who has taken the roof on mutually agreed terms and conditions from the roof top owner(s) and enters into a AGREEMENT for supply of Rooftop Solar Power for at least 25 years from the date of Commissioning of project.

1.26. “Project” shall constitute all the roof top Solar PV Plants to be installed by the developer for a specific period and at a fixed cost for DMRC

1.27. “Project Cost / Project Price” shall mean the price offered by the Bidder for the Scope of work as per RFS document.

1.28. “Project capacity” means Capacity in kWp specified by DMRC for each station/site consisting of single or multiple roof tops. The project capacity specified is on “DC” output Side only.

1.29. “Performance Ratio” (PR) means

“Performance Ratio” (PR) means the ratio of plant output versus installed plant capacity at any instance with respect to the radiation measured. PR= (Measured output in kW /Installed Plant capacity in kW * (1000 W/m^2)/Measured radiation intensity in W/m^2).

1.30. “Parent Company” shall mean a company that holds at least fifty one percent (51%) of the paid-up equity capital directly or indirectly in the Bidding Company as the case may be.

1.31. “Project Company” shall mean Company incorporated by the bidder as per
Indian Laws in accordance with Clause no 3.5.

1.32. “Project Sanction Documents” shall mean the documents as specified in Annexure – A.

1.33. “Price Bid” shall mean Envelope III of the Bid, containing the Bidder’s quoted Price as per the Section- IV of this RFS.

1.34. “Qualified Bidder” shall mean the Bidder(s) who, after evaluation of their Techno Commercial Bid as per Clause 3.1 stand qualified for opening and evaluation of their Price Bid.

1.35. "RFS" shall mean Request for Selection (RFS)/Bid document/Tender document.

1.36. “RESCO” shall mean Renewable Energy Service Companies.

1.37. “Modified Annuity Model” shall mean where the bidders intend to install solar plant on a rooftop/sites owned by DMRC on mutually agreed terms and conditions from DMRC and enters into the Agreement with DMRC for supply of Solar power for 25 years from the date of Commissioning of project on a annual/monthly payment of a fixed amount. The ownership of the plant lies with DMRC from the date of Commissioning of project.

1.38. “Statutory Auditor” shall mean the auditor of a Company appointed under the provisions of the Companies Act, 2013 or under the provisions of any other applicable governing law.

1.39. “Successful Bidder(s) /Contractor/Project Developers(s)” SPD shall mean the Bidder(s) selected by DMRC pursuant to this RFS to work as EPC, for Implementation of Grid Connected Roof Top Solar PV System as per the terms of the RFS Documents, and to whom an Letter of Acceptance has been issued. He will be paid based on Modified Annuity Model.

1.40. “SECI” shall mean Solar Energy Corporation of India, New Delhi (A Govt.of India Enterprise) under MNRE.

1.41. “SNA” shall mean State Nodal Agency.

1.42. “Tendered Capacity” shall mean the Total aggregate capacity in8 MWp as indicated in table of Clause 2.2, proposed to be allocated by DMRC to the Successful Bidder through this bidding process as per terms and conditions specified therein.

1.43. “Ultimate Parent Company” shall mean a company which directly or indirectly owns at least fifty one percent (51%) paid up equity capital in the Bidding Company) and/or in the Financially Evaluated Entity and such Bidding Company and /or the Financially Evaluated Entity shall be under the direct control or indirectly under the common control of such company.

1.44. “Viability Gap Funding (VGF)” shall mean the fund which will be disbursed by SECI to the SPD, if eligible, as per terms and conditions of this RFS document.

1.45. “Wp” shall mean Watt Peak.
INTERPRETATIONS

1. Words comprising the singular shall include the plural & vice versa.

2. An applicable law shall be construed as reference to such applicable law including its amendments or re-enactments from time to time.

3. A time of day shall save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.

4. Different parts of this contract are to be taken as mutually explanatory and supplementary to each other and if there is any differentiation between or among the parts of this contract, they shall be interpreted in a harmonious manner so as to give effect to each part.

5. The table of contents and any headings or sub headings in the contract has been inserted for case of reference only & shall not affect the interpretation of this agreement.
SECTION - I

A. INTRODUCTION, BID DETAILS AND INSTRUCTIONS TO THE BIDDERS

1.0. INTRODUCTION

1.1 DMRC invites eligible applicants to participate in the bidding process for “IMPLEMENTATION OF 3 MWp SOLAR PV PROJECT IN DMRC UNDER VGF SCHEME” The generated solar power will be fed to the grid, on net metering basis where ever applicable.

1.1.1 MNRE has issued the “Central Public Sector Undertaking (CPSU) Scheme Phase- II (Government Producer Scheme) for setting up 12,000 MW grid-connected Solar Photovoltaic (PV) Power Projects by the Government Producers with Viability Gap Funding (VGF) support for self-use or use by Government/Government entities, either directly or through Distribution Companies (DISCOMS)” vide No. 302/4/2017- GRID SOLAR dated 05.03.2019. These Guidelines have been issued under the provisions of Section 63 of the Electricity Act, 2003 for long term procurement of electricity by the ‘Procurers’, from grid-connected Solar PV Power Projects, through competitive bidding. This RfS document has been prepared in line with the above Guidelines.

1.1.2 The total 12,000 MW capacity will be added in 4 years period i.e from financial year 2019-20 to 2022-23.

1.1.3 The Bidder is advised to read carefully all instructions and conditions appearing in this document and understand them fully. All information and documents required as per the bid document must be furnished. Failure to provide the information and / or documents as required may render the bid technically unacceptable.

1.2 The bidder shall be deemed to have examined the bid document, to have obtained his own information in all matters whatsoever that might affect the carrying out of the works in line with the scope of work specified elsewhere in the document at the offered rates and to have satisfied himself to the sufficiency of his bid. The bidder shall be deemed to know the scope, nature and magnitude of the works and requirement of materials, equipment, tools and labor involved, wage structures and as to what all works he has to complete in accordance with the bid documents irrespective of any defects, omissions or errors that may be found in the bid documents.

2.0 BID DETAILS

2.1 The bidding process is for Solar PV system to be installed on rooftop of different sites of DMRC and on the un-utilized land DMRC in Modified Annuity Model.

2.2 (Modified Annuity Model):- Bids are invited from the prospective bidders for the Tendered Capacity as indicated below against selected sites of DMRC.
DMRC shall be disbursing VGF according to sanctioned capacity, as per the approval of SECI.

Successful bidders will be selected based on the lowest annuity amount subject to clause 6.3 of RfS.

The successful bidder will install the plant complying to the condition of this RfS. The ownership of the plant will lie with DMRC post successful commissioning. DMRC will pay an equal annuity amount to the successful bidder for a period of 25 years. The payment will be done annually till 25 years post adjustment as per RfS clause 3.27.

The bidders in their financial bid shall quote the annuity amount in terms of percentage reduction from the base annuity amount of DMRC i.e. Rs. 38.6 Lakhs/MWp/annum.

Maximum allowable annuity amount to be quoted for Section-IV Format-C is Rs. 38.6 Lakhs per year per MWp and the bids with annuity amount in excess of Rs. 38.6 Lakhs per year per MWp will be rejected.

The tariff of energy (i.e. Rs. per kWh) will be calculated based on the annuity amount quoted in section-IV Format C corresponding to 13% CUF. The tariff thus calculated will be used for deciding the incentive/penalty to be paid to/by the developer based on the annual energy production.

Note: Bids not in conformity with above provisions will be rejected.

**List of Selected Sites by DMRC**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Tentative Sites of DMRC</th>
<th>Approx. Capacity (kWp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Station Roof tops Line-7 (Majlis Park – Shiv Vihar)</td>
<td>1200</td>
</tr>
<tr>
<td>2.</td>
<td>Station Roof tops Line-5 (Inderlok – B. Hoshiyar Singh)</td>
<td>600</td>
</tr>
<tr>
<td>3.</td>
<td>Khyber pass Depot Stabling Lines</td>
<td>1200</td>
</tr>
<tr>
<td></td>
<td><strong>Total Capacity</strong></td>
<td><strong>3,000</strong></td>
</tr>
</tbody>
</table>

The tender is being floated for a total capacity of 3000 kWp solar PV power system to be installed at different locations as listed above.

Above is indicative capacity. Bidders have to maximize as per site available. 25% variation can be operated in these sites and any other sites. The tentative list of Sites is attached as Section VII.

The above sites or capacities indicated above may vary. However final Letter of Acceptance will indicate the capacities and sites allocated.
2.3.1 For each site, where the projects are required to be installed along with the respective capacities for each site is indicated in the tables above in Clause no 2.2. However, DMRC reserves the right to allow the installation of projects in any other site at its own discretion depending on the merit of the case, as per the provisions provided hereinafter.

2.3.2 The preliminary survey details are attached as Section –VII, however bidder shall ensure survey of the site for the installation of capacities as indicated above and DMRC holds no responsibilities for the correctness of the above data. Attached Section –VII.

2.3.3 After the ‘Letter of Acceptance’ the Bidder has to carry out the detailed survey of the sites and submit the calculation, and complete engineering document for the approval of DMRC.

2.3 SIZE OF THE PROJECTS
2.4.1 The size of each project may be in the range of 10 kWp to 400 kWp or more on each roof top unit can separately connect with the grid and may have separate energy meters.

2.4.2 Further, Successful bidders to whom Letter of Acceptance has been issued will be allowed to submit proposal for approval and issue of sanction letter by DMRC. Sanction letter will be issued for the total aggregate capacity submitted by the bidder for approval as per above.

2.4 BID CAPACITY
2.5.1 The Bidder shall apply for 100% of Tendered capacity for selected sites indicated in table in Clause 2.2.

3.0 INSTRUCTIONS TO THE BIDDERS
INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR “e-TENDERING” FORMING PART OF BID DOCUMENTS TO BE POSTED ON WEBSITE

i) The intending bidders must read the terms and conditions carefully and should only submit his tender if he considers himself eligible and he is in possession of all the documents required.

ii) Information and instructions for bidders posted on website shall form part of tender documents.

iii) The complete Tender Document can only be obtained online after registration of bidder on the website https://eprocure.gov.in/eprocure/app and thereafter on providing details of Demand Draft or Pay Order or Banker’s cheque towards cost of Bid Documents (as prescribed in NIT). For further information in this regard bidders are advised to contact on 011-49424307, 011-49424365 or 011-23417910.

iv) Tender can only be submitted after uploading the mandatory scanned copy of documents such as Demand Draft or Pay Order or Banker’s cheque towards
cost of Bid Documents (as prescribed in NIT) and Tender Security (as prescribed in NIT and ITT).

v) Those bidders who are not registered on the website mentioned above shall be required to get registered beforehand. If needed, they can be imparted training on ‘Online Tendering Process’ as per details available on the website.

vi) The intending bidder must have valid class-III/II digital signature to submit the tender.

vii) On opening date, the bidder can login and see the tender opening process. After opening of tenders, bidder will receive the competitor bid sheets.

viii) Bidder can upload documents in the form of JPG format and PDF format.

ix) Bidder must ensure to quote rates only in excel sheet provided in bid document.

3.1. Bidder must meet the eligibility criteria independently as Bidding Company. Bidding consortium is allowed to participate in this bidding.

Bidder will be declared as a Qualified Bidder based on meeting the eligibility criteria and as demonstrated based on documentary evidence submitted by the Bidder in the Bid.

i. Bidder may be from any country, either a single entity or any combination of entities in the form of a joint venture or association (JVA) under an existing agreement. In the case of a JVA: all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms; and the JVA shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JVA during the tendering process and, in the event the JVA is awarded the Contract, during contract execution.

ii. A Bidder and all partners constituting the Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest with one or more parties in this tendering process, if:

a) Bidder and all partners constituting the Bidder has been engaged by the Employer to provide consulting services for the preparation related to procurement or for implementation of the project;

b) Bidder and all partners constituting the Bidder can be associates/affiliates (inclusive of parent firms) mentioned in subparagraph (a) above; or

c) A Bidder and all partners constituting the Bidder lends, or temporarily seconded its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement or for implementation of the project, if the personnel would be involved in any capacity on the same project.
iii. A Bidder and all partners constituting the Bidder shall submit only one tender in the same tendering process, either individually as a Bidder or as a partner of a JVA. A Bidder who submits or participates in, more than one tender will cause all of the proposals in which the Bidder has participated to be disqualified. No Bidder can be a subcontractor while submitting a tender individually or as a partner of a JVA in the same tendering process. A Bidder, if acting in the capacity of subcontractor in any tender, may participate in more than one tender, but only in that capacity.

iv. **IN CASE OF JV/JVA/CONSORTIUM**

a. Lead partner must have a minimum of 26% participation in the JV/Consortium.

b. Partners having less than 26% participation will be termed as non-substantial partner and will not be considered for evaluation which means that their financial soundness and work experience shall not be considered for evaluation of JV/Consortium.

c. In case of JV/Consortium, change in constitution or percentage participation shall not be permitted at any stage after their submission of application otherwise the applicant shall be treated as non-responsive.

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

3.3 Qualified Bidders who have submitted their proposal for this RFS may be empanelled by DMRC for an initial period of one year which can be further extended if required by competent authority of DMRC. This empanelment may be used by DMRC for inviting bids under Modified Annuity Model in future for the sites indicated in table of Clause 2.2 or any other sites as per instruction given by DMRC on case to case basis, whose terms and conditions of the bidding shall be communicated during the bid stage.

3.4 **ELIGIBILITY CRITERIA**

3.4.1 **GENERAL**

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

A copy of certificate of incorporation/ may be furnished along with the bid in support of above
i) A Bidder may be from any country, either a single entity or any combination of entities. In the case of a JVA/Consortium: all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms; and the JVA/Consortium shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the JVA/Consortium during the tendering process and, in the event the JVA is awarded the Contract, during contract execution.

ii) A Bidder and all partners constituting the Bidder, can be from any country and any areas. A non-Indian firm is permitted to tender only in a joint venture or consortium arrangement with any other Indian firm having minimum participation interest of 26% or their wholly owned Indian subsidiary registered in India under Companies Act-1956 or 2013 with minimum 26% participation.

iii) A Bidder and all partners constituting the Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest with one or more parties in this tendering process, if:

   (a) Bidder and all partners constituting the Bidder has been engaged by the employer to provide consulting services for the preparation related to procurement or for implementation of the project;

   (b) Bidder and all partners constituting the Bidder is any associates/affiliates (inclusive of parent firms) mentioned in subparagraph (a) above; or

   (c) A Bidder and all partners constituting the Bidder lends, or temporarily seconds its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.

iv) A Bidder and all partners constituting the Bidder shall submit only one tender in the same tendering process, either individually as a Bidder or as a partner of a JVA. A Bidder who submits or participates in, more than one tender will cause all of the proposals in which the Bidder has participated to be disqualified. No Bidder can be a subcontractor while submitting a tender individually or as a partner of a JVA in the same tendering process. A Bidder, if acting in the capacity of subcontractor in any tender, may participate in more than one tender, but only in that capacity.

v) Bidders shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
vi) A firm, who has purchased the tender document in their name, can submit the tender either as individual firm or in JV/JVA.

vii) Any DMRC/ Any Central / State government department or public sector undertaking/ other government entity or local body must not have banned business with the Bidder (including individual members in case of Consortium) as on the date of Bid submission. Also no work of the Bidder must have been rescinded/ terminated by DMRC/ any central or State Govt. Department/ Public Sector Undertaking/ Other Govt. entity or local body after award of contract during last 3 years (from the last day of the previous month of tender submission) due to non-performance of the Bid. The Bidder should submit undertaking to this effect in Format-15.

viii) Bidder (any member in case of JV/consortium) must not have paid liquidated damages of 10% (or more) of the contract value in a contract due to delay or penalty of 10% (or more) of the contract value due to any other reason during last five years. The Bidder should submit undertaking to this effect in Format-16.

ix) Bidder (any member in case of JV/consortium) must not have suffered bankruptcy/ insolvency during the last 5 years. The Bidder should submit undertaking to this effect in Format-17.

x) **IN CASE OF JV/JVA/CONSORTIUM**

   a. Lead partner must have a minimum of 26% participation in the JV/Consortium.

   b. Partners having less than 26% participation will be termed as non-substantial partner and will not be considered for evaluation which means that their financial soundness and work experience shall not be considered for evaluation of JV/Consortium.

   c. In case of JV/Consortium, change in constitution or percentage participation shall not be permitted at any stage after their submission of application otherwise the applicant shall be treated as non-responsive.

xi) **JV/Consortium: Consequences for deviation from JV/MOU**

   The Bidder, in case of JV/Consortium, shall clearly and unambiguously define the role and responsibilities for each substantial/non-substantial partner in the JV/ MOU submitted vide foot note (d) of Format A , providing clearly that any abrogation/subsequent re-assignment of any responsibility by any substantive/non-substantive partner of JV/Consortium in favour of other JV/Consortium partner (without written approval of Employer) or any change in constitution of partners of JV/Consortium from the one given in JV/MOU at tender stage, will be treated, as ‘breach of contract condition’ and/or ‘misrepresentation of facts’ (as the case may be).

   The Employer in such cases, may in its sole discretion rescind the contract
and/or take appropriate action against any member(s) for failure in tender obligation to declare a contractor ineligible for award of any tender in DMRC or take action to terminate the contract in part or whole as the situation may demand and recover the cost/damages as provided in contract besides forfeiting the performance and other guaranties.

(b) The bidder should have valid GST 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).*

### 3.4.2 TECHNICAL ELIGIBILITY CRITERIA

a) The Bidder should have total installed & commissioned

   (i) Grid connected Solar PV Project of **minimum 2 MWp (Total Capacity) during last 10 years ending 30.11.2019** and

   (ii) Roof top Solar PV Project of **minimum 1 MWp (Total Capacity) in the last 10 years ending 30.11.2019.**

The list of projects commissioned indicating whether the project is grid connected, along with a copy of the Commissioning certificate and Work order/ Contract/ Agreement/ from the Client/Owner shall be submitted. The format is attached as in **Format – 10.**

### 3.4.3 FINANCIAL ELIGIBILITY CRITERIA

a. The Bidder should have an Annual Turnover and Net worth as indicated below:-

   i. **Annual Turnover:** The annual turnover in any one of the last 5 financial years should be >Rs. 6 Crores. (i.e., Rs 2 Crores per MW)

   **In Case of JV/JVA/Consortium** – The Bidder must fulfill the following conditions:

   a. Lead partner must have a minimum of 26% participation in the JV/Consortium.

   b. Partners having less than 26% participation will be termed as non-substantial partner and will not be considered for evaluation which means that their financial soundness and work experience shall not be considered for evaluation of JV/Consortium.

   c. In case of JV/Consortium, change in constitution or percentage participation shall not be permitted at any stage after their submission of application otherwise the applicant shall be treated as non-responsive.

   **Example:** Let Member-1 has percentage participation = M and Member - 2 has = N. Let the average annual turnover of Member-1 is ‘A’ and that of Member-2 is ‘B’, then the average annual turnover of JV/JVA/Consortium will be
ii. **Net Worth:** Net Worth of Bidder during last audited financial year should be greater than Rs. 4.5 Crores. (i.e., Rs 1.5 Crore per MW)

**In Case of JV/JVA/Consortium,** the algebraic sum total of net worth of all the members as per the latest audited balance sheets shall be considered the Net Worth of the Bidder.

*Example:* Let Member-1 has percentage participation = M and Member - 2 has =N. Let the Net worth of Member-1 is ‘A’ and that of Member-2 is ‘B’, then the Net worth of JV/JVA/Consortium will be

\[
\frac{AM+BN}{100}
\]

- Where a work is undertaken by a group, only that portion of the contract which is undertaken by the concerned applicant/member should be indicated and the remaining done by the other members of the group be excluded. This is to be substantiated with documentary evidence.

- Financial data for latest last five audited financial years has to be submitted by the Bidder in Format -7 and Format-12 along with audited balance sheets. The financial data in the prescribed format shall be certified by Chartered Accountant with his stamp and signature in original. In case audited balance sheet of the last financial year is not made available by the bidder, he has to submit an affidavit certifying that ‘the balance sheet has actually not been audited so far’. In such a case the financial data of previous ‘4’ audited financial years will be taken into consideration for evaluation. If audited balance sheet of any year other than the last year is not submitted, the tender will be considered as non-responsive. But in case the company is operative for less than 5 years, it still can be considered provided its financial standing meets the tender requirement based on available audited balance sheets.

### 3.5 INCORPORATION OF A PROJECT COMPANY

3.5.1 In case the Bidder wishes to incorporate a Project Company, in such a case Bidder if selected as a Successful Bidder shall incorporate a Project Company. Bidder shall be responsible to get all clearances required/obtained in the name of the Bidding Company transferred in the name of the Project Company.

3.5.2 The aggregate equity share holding of the Successful Bidder (Individual or in case of JV/JVA/Consortium) minimum in proportion to their percentage participation in the issued and paid up equity share capital of the Project Company shall not be less than fifty one percent (51%) up to a period of Twenty Five (25) years from the date of commissioning of the entire project.
Sanctioned Capacity of the Project Developer. The Successful Bidder may invest in the equity share capital of the Project Company through its Affiliate(s) or Parent Company or Ultimate Parent Company. If the Successful Bidder so invests, the Successful Bidder shall be liable to ensure that minimum equity holding/Lock in limits specified above are still maintained.

3.5.3 In case of JV, JVA or Consortium being successful bidder, they must incorporate a project company, who will carry out the work and sign the AGREEMENT with DMRC.

Note: Procedure and List of Documents to be submitted by the successful bidder in regard to the incorporation of the Project Company are defined in Section-VIII.

3.6 **BID SUBMISSION BY THE BIDDER**

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

3.6.2 Strict adherence to the formats wherever specified, is required. Wherever, information has been sought in specified formats, the Bidder shall refrain from referring to brochures /pamphlets. Non-adherence to formats and / or submission of incomplete information may be a ground for declaring the Bid as non-responsive. Each format has to be duly signed and stamped by the authorized signatory of the Bidder.

3.6.3 The Bidder shall furnish documentary evidence in support of meeting Eligibility Criteria as indicated in Clause no. 3.4.1, 3.4.2 and 3.4.3 to the satisfaction of DMRC.

3.7 **BID SUBMITTED BY A BIDDING COMPANY**

3.7.1 The Bidder shall submit a duly notarized written Power of Attorney (POA) authorizing the signatory(ies) of the Tender to commit the Bidder of each member of the partnership, consortium or joint venture along with copy of Board Resolution/authorization in favor of signatory to POA. In case of Foreign Partners, Power of Attorney(s) and Board Resolution confirming authority on the persons issuing the Power of Attorney for such actions shall be submitted duly notarized by the notary public of country of origin and should be either stamped by Embassy/High Commission or Member Countries of Hague convention may submit all these documents with “Apostille” stamp. Also in case the documents are in foreign language the translation of the same shall be authenticated by Embassy/High Commission.

3.7.2 Each Bidder (each member in the case of joint venture or consortium) is required to confirm and declare with his Tender that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other item or work related to the award and performance of this Contract and declare that no agency commission or any payment which may be construed
as an agency commission has been, or will be, paid and that the tender price will not include any such amount. To fulfill this requirement, the Bidder (each member in case of JV/Consortium) has to sign the declaration given as Format 14 Section V. If the Employer subsequently finds to the contrary, the Employer reserves the right to declare the Bidder as non-compliant, and declare any Contract if already awarded to the Bidder to be null and void.

3.7.3 Canvassing or offer of an advantage or any other inducement by any person with a view to influencing acceptance of a Tender will be an offence under laws of India. Such action will result in the rejection of the Tender, in addition to other punitive measures.

3.8 CLARIFICATIONS AND PRE-BID MEETING

3.8.1 The Bidder shall check the pages of all documents against page numbers given in indexes and summaries and, in the event of discovery of any discrepancy; the Bidder shall inform the DMRC forthwith.

3.8.2 The tenderer for any reason whatsoever, be in doubt about the meaning of anything contained in the Invitation to Tender, Tender Documents, Technical Specifications and Tender Drawings, should seek clarification from CE/Contract by uploading the same on e-tendering portal, not later than the last date of seeking clarification given in the key details of Notice Inviting Tender. Any such clarification, together with all details on which clarification had been sought, will be copied to all tenderer without disclosing the identity of the tenderer seeking clarification.

3.8.3 Except for any such written clarification by CE/Contract, DMRC which is expressly stated to be by way of an addendum to the documents and/or for any other document issued by the Employer which is similarly described, no written or verbal communication, representation or explanation by any employee of the Employer or the Engineer shall be taken to bind or fetter the Employer or the Engineer under the Contract.

3.8.4 Correspondence: All correspondence from DMRC pertaining to this tender till the award of the work with Bidder shall be done by Chief Engineer/Contract, DMRC. The bidders are advised to regularly check their email ID registered with their user account at e-tendering portal https://eprocure.gov.in/eprocure/app for any update/addendum/corrigendum/pre-bid and post-bid queries/any other correspondence by the Employer.

3.8.5 The Bidder(s) or their authorized representative(s) is /are invited to attend pre-bid meeting(s), which will take place on date(s) as specified in Bid information sheet, or any such other date as notified by DMRC.

3.8.6 The purpose of the pre-bid meeting will be to clarify any issues regarding the RFS including in particular, issues raised in writing and submitted by the Bidders.

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

3.9 AMENDMENTS TO RFS BY DMRC

3.9.1 At any time prior to the deadline for submission of Bids, the DMRC may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFS document by issuing clarification(s) and/or amendment(s).

3.9.2 During the tender period, the Employer may issue further instructions to Bidders or any modifications to existing tender documents in the form of an addendum. Such an amendment in the form of an addendum will be made available at e-tendering website https://eprocure.gov.in/eprocure/app to all prospective Bidders who have purchased the tender document in the tender period.

Without prejudice to the order the provisions in such addenda shall take priority over the Invitation to Tender and Tender Documents issued previously. Bidders should acknowledge receipt of such addenda and include them in the tender submittal.

3.9.3 DMRC will not bear any responsibility or liability arising out of non-receipt of the information regarding Amendments in time or otherwise. Bidders must check the website for any such amendment before submitting their Bid.

3.9.4 The Bidder should note that there might be aspects of his Tender and/or the evaluation documents submitted with the Tender that will necessitate discussion and clarification. It is intended that any aspect of the said evaluation documents and any amendments or clarification which are to have contractual effect will be incorporated into the Contract either:

(a) by way of Special Conditions of Contract to be prepared by the Employer and agreed in writing by the Bidder prior to and conditional upon acceptance of the Tender; or

(b) by the Bidder submitting, at the written request of the Employer, documents which are expressly stated to form part of the Tender, whether requested before or after submission of the documents forming part of the Tender and whether as supplements to, or amended versions of such documents.

3.9.5 Save as aforesaid, all such amendments or clarifications shall have contractual effect.

3.9.6 All the notices related to this Bid which are required to be publicized shall be uploaded on-line on e-tendering website https://eprocure.gov.in/eprocure/app.

3.10 BIDDING PROCESS

i. Uploading of Tender

The Bidder shall submit their tender on-line on e-tendering website https://eprocure.gov.in/eprocure/app.

Only ‘Tender Security’ and ‘Cost of Tender Document’ shall be submitted in originals (in physical form) as described below:
• The Bidder shall seal the ‘Cost of Tender Documents’ in an envelope, bearing the following identification for cost of tender document:

“COST OF TENDER DOCUMENTS”, Tender Reference No.– Contract: - CE/SPV-07 and submit the same as per schedule mentioned in NIT at the address mentioned below. The Bidder shall also mention his Name and address on above envelope.

The instrument type for payment of tender fee/tender document cost is to be done only by RTGS, NEFT & UMPS. No other mode of payment will be accepted. The detail of Bank account of DMRC to facilitate the payment is mentioned NIT of RfS. The bidders will be required to upload scanned copies of transaction of payment of tender fee/tender document cost including e-receipt (clearly indicating UTR No. and tender reference i.e. CE/SPV-07 must be entered in remarks at the time of online transaction of payment, failing which payment may not be considered) to be uploaded in online bid submission.

No copies of transaction of payment are required to be sent to the office of Chief Engineer/Contract.

Note: The Payment of the tender cost is acceptable from any account. However, tenderer shall submit such transaction details along with their tender submission on e-portal. If the same transaction reference number has been submitted for more than one bids. All such bids shall be considered ineligible and summarily rejected.

• The Bidder shall seal the ‘Tender Security’ in an envelope, bearing the following identification for Tender Security:

“TENDER SECURITY”, Tender Reference No. – Contract: -CE/SPV-07 and submit the same before date and time of submission of tender mentioned in NIT at the address mentioned below. The Bidder shall also mention his Name and address on above envelope.

To,

The Chief Engineer/Contract

DMRC,
5th Floor, A-Wing, Metro Bhawan,
Fire Brigade Lane,
Barakhamba Road,
New Delhi.110001;

The Bidder shall ensure that they had received receipt/acknowledgement of their tender submission which is generated by the system itself on successful submission of tender online.

Bidder is required to submit Format-27 for refund of Tender Security, if the same has been submitted in the form of Demand Draft/Banker’s Cheque or by RTGS/NEFT/IMPS.
3.10.1 **BID FORMATS**

3.10.1.1 The Bid in response to this RFS shall be submitted by the Bidders in the manner provided in Clause 3.6 & Clause 3.10.1.1. The Bid shall comprise of the following:

**(A) COVERING LETTER, BID PROCESSING FEE AND BID BONDS**

i. Covering Letter as per prescribed Format-1.

ii. Cost of Bid Document/Bid processing fees @ Rs. 23,600/- (Twenty Three Thousand Six Hundred Only) Non-Refundable.

iii. Bid Bond, as per the prescribed Format-3 shall be submitted for the specified capacity as per Clause 3.14.

iv. Checklist for Bank Guarantee submission requirements as prescribed in Format-5.

**(B) TECHNO-COMMERCIAL DOCUMENTS (Technical Package of Contract:-CE/SPV-07)**

i. Power of attorney issued by the Bidding Company in favor of the authorized person signing the Bid, in the form attached hereto as Format-6 or standard power of attorney in favor of authorized person signing the Bid. **(Power of Attorney must be supplemented by Board Resolution to above effect for the company incorporated under Company Act 1956 or Company Act-2013).** However, Employer may accept general Power of Attorney executed in favor of Authorized signatory of the Bidder, if it shall conclusively establish that the signatory has been authorized by the Board of Directors to execute all documents on behalf of the Bidding Company.

In case of Indian firm, the power of Attorney shall be on Non Judicial stamp paper of suitable value, duly notarized. In case of foreign applicant the power of Attorney shall be notarized in their country, and attested by the Embassy/High Commission of their country in India.

ii. General particulars of bidders as per Format-2.

iii. Bidder’s composition and ownership structure as per prescribed Format-A.

iv. Document in support of meeting Eligibility Criteria as per Clause no. 3.4.1 & 3.4.2.

v. Details for meeting Financial Eligibility Criteria as per Clause no. 3.4.3 in the prescribed Format-9 along with documentary evidence for the same.


vii. Board Resolution of the Parent Company /Ultimate Parent Company of the Bidding Company duly certified by the Company Secretary or Authorized signatory to provide the Performance Bank Guarantee (PBG) in the event of failure of the Bidding Company to do so.

viii. The Bid must be complete in all technical and commercial respect and should
contain duly signed all formats of this RfS & requisite certificates, drawings, informative literature etc. as required in the Bid document.

(C) **PRICE BID(S) AS PER SECTION–IV, Format-B and Format-C (Financial Package of Contract: -CE/SPV-07)**

The Bidder shall inter-alia take into account the following while preparing and submitting the Price Bid duly signed by an authorized signatory. These are to be uploaded separately as financial package.

i) The Bidder shall submit Price Bid(s) in Format B and Format C.

3.11 **TENDER DUE DATE**

The Bidder shall, on or before the date and time given in the Notice of Invitation to Tender submit his Tender online on e-tendering website [https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app)

3.12 **VALIDITY OF TENDER**

3.12.1 The Tender shall be valid for a period of 180 days (both days inclusive i.e. the date of submission of tenders and the last date of period of validity of the tender) from the latest Date of Submission of Tenders, with bidder having no right to withdraw, revoke or cancel his offer or unilaterally vary the offer submitted or any terms thereof. In case of the bidder revoking or cancelling his offer or varying any term & conditions in regard thereof or not accepting Letter of Acceptance, DMRC shall forfeit the Bid Bond furnished by him. Confirmation regarding the Bid offer validity shall be clearly mentioned in the covering letter.

3.12.2 In exceptional circumstances when Letter of Acceptance is not issued, the DMRC may solicit the Bidder’s consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The Bid Bond provided under Clause 3.14 shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid Bond. A Bidder granting the request will neither be required nor permitted to modify its Bid in any manner.

3.13 **INSTRUCTION REGARDING ONLINE BID SUBMISSION**

3.13.1 The Bidder shall, on or before the date and time given in the Notice of Invitation to Tender submit his Tender online on e-tendering website [https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app), comprising of following.

Technical Package of "Contract: -CE/SPV-07"

Financial Package of "Contract: -CE/SPV-07"

3.13.2 Deleted

3.13.3 Deleted

3.13.4 Deleted

3.13.5 All pages of the Bid, except for the Bid Bond, and any other document
executed on non-judicial stamp paper, forming part of the Bid and corrections in the Bid, if any, must be signed by the authorized signatory on behalf of the Bidder. It is clarified that the same authorized signatory shall sign all pages of the Bid. However, any published document submitted with the Bid shall be signed by the authorized signatory at least on the first and last page of such document, duly signed by the authorized signatory of the Bidder. No change or supplemental information to a Bid will be accepted after the Bid Deadline, unless the same is requested for by DMRC.

3.13.6 The Bid must be complete in all technical and commercial respect and should contain requisite certificates, drawings, informative literature etc. as required in the Bid document. Each page of the Bid document should be signed & stamped. Bids with any type of change or modification in any of the terms/conditions of this document shall be rejected. If necessary, additional papers may be attached by the Bidder to furnish/submit the required information. Any term/condition proposed by the Bidder in his bid which is not in accordance with the terms and conditions of the RFS document or any financial conditions, payment terms, rebates etc. mentioned in Price Bid shall be considered as a conditional Bid and will make the Bid invalid.

3.13.8 **BIDDING METHODOLOGY**

Single-stage Two-Bid System (Technical Part and Financial Part to be submitted at the same time) shall be followed.

A. **Broad outline of activities from Bidders perspective:**
   i) Procure Digital Signature Certificates (DSC) for users of the organization (if not procured earlier)
   ii) Register your organization on e-Tendering Portal of DMRC ([https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app)) if not already registered
   iii) Download Official Copy of Tender Documents and Addendum/Clarification etc. uploaded on e-Tendering Portal.
   iv) Online Bid-Submission on e-tendering Portal.
   v) Attend Online Public Tender Opening Event (TOE) for Techno-Commercial Bid.
   vi) Post-TOE Clarification on e-Tendering Portal (Optional)

B. **Digital Certificates**

For integrity of data and its authenticity/non-repudiation of electronic records, and to become compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC), also referred to as Digital Signature Certificate (DSC), of Class III/II or above, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer
C. Registration
To use the e-Tendering Portal (https://eprocure.gov.in/eprocure/app) the Bidder need to register on the portal. Registration of bidder’s organization is to be done by one of its authorised representative.

D. Other Instructions
The following ‘FOUR KEY INSTRUCTIONS for BIDDERS’ must be assiduously adhered to:

i) Obtain individual Digital Signature Certificate (DSC or DC) well in advance of tender submission deadline on e-Tendering Portal.

ii) Register your organization on e-Tendering Portal well in advance of tender submission deadline on e-Tendering Portal.

iii) Get your organization’s concerned executives trained one-Tendering Portal well in advance of tender submission deadline on e-Tendering Portal.

iv) Submit your bids well in advance of tender submission deadline on e-Tendering Portal (There could be last minute problems due to internet timeout, breakdown etc.) While the first three instructions mentioned above are especially relevant to first-time users of e-Tendering Portal, the fourth instruction is relevant at all times.

E. Minimum Requirements at Bidders end
- Computer System with good configuration (Min PIV, 1GBRAM, Windows XP SP3)
- Broad band Internet Connectivity.
- Microsoft Internet Explorer7.0/8.0/9.0 or Google Chrome.
- Class-III/II Digital Certificate(s)

F. Submission of Tenders

Uploading of Tender: The Bidder shall submit their tender on-line on e-tendering website https://eprocure.gov.in/eprocure/app.

Only ‘Tender Security’ and ‘Cost of Tender Document’ shall be submitted in originals (in physical form) as described below:

- The Bidder shall seal the ‘Cost of Tender Documents’ in an envelope, bearing the following identification for cost of tender document: “COST OF TENDER DOCUMENTS”, Tender Reference No – Contract: -CE/SPV-07 and submit the same as per schedule mentioned in NIT at the address mentioned below. The Bidder shall also mention his Name and address on above envelope.

- The Bidder shall seal the ‘Tender Security’ in an envelope, bearing the following identification for Tender Security: “TENDER SECURITY”, Tender Reference No. – Contract: -CE/SPV-07 and submit the same before date and time of submission of tender mentioned in
NIT at the address mentioned below. The Bidder shall also mention his Name and address on above envelope.

To,

The Chief Engineer/Contract

DMRC,
5th Floor, A-Wing, Metro Bhawan,
Fire Brigade Lane,
Barakhamba Road,
New Delhi 110001;

The Bidder shall ensure that they had received receipt/acknowledgement of their tender submission which is generated by the system itself on successful submission of tender online.

G. Late or Delayed Tenders

i) Tenders have to be uploaded on e-tendering portal https://eprocure.gov.in/eprocure/app before the due date and time of tender submission. The tender security and cost of tender documents shall be submitted to Assistant Engineer in the office of CE/Contract, DMRC ‘A’- Wing, 5th Floor, Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi 110001. It shall be the responsibility of the bidder to ensure that the envelope containing ‘Tender Security’ and ‘Cost of Tender Document’ is submitted to designated officer (Assistant Engineer) before the dead line for submission.

ii) ‘Tender Security’ and ‘Cost of Tender Document’ submitted after due date and time shall not be accepted and online tenders of such Bidders shall liable to be rejected summarily.

iii) DMRC will not be responsible for delay, loss or non-receipt of ‘Tender Security’ and ‘Cost of Tender Document’ sent by post / courier.

iv) DMRC shall not be responsible for ‘Tender Security’ and ‘Cost of Tender Document’ delivered to any other place / person in DMRC (like Reception/ DAK section etc.) other than the designated officer and does not reach the designated officer before the dead line for submission.

v) The Employer may, at his discretion, extend the deadline for submission of tenders by issuing an amendment, in which case all rights and obligations of the Employer and the Bidder previously subject to the original deadline will thereafter be subject to the deadline as extended.

3.13 COST OF BIDDING

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

The Bidder shall furnish the Interest free Bid Bond of **Rs 13,50,000/- (Rupees Thirteen Lakhs Fifty Thousand only)** in any one of the form given in clause 3.14.1 given below.

The validity of Bid Bond shall be as specified in NIT. The Bid Bond/ Security shall be submitted in separate sealed envelope clearly marked on top “Bid Bond/ Security for CE/SPV-07” in the office of the Chief Engineer /Contract at the address given in the Tender Documents before date & time of submission of tender mentioned in the NIT. In case of RTGS/NEFT/IMPS transactions, bidders shall upload the scanned copies of transaction of payment of tender security/EMD including e-receipt (clearly indicating UTR No. and tender reference i.e. CE/SPV-07 must be entered in remarks at the time of online transaction of payment, failing which payment may not be considered) to be uploaded in online bid submission. The Bid Bond of tenderers who fail in technical evaluation shall be returned after opening of financial package.

The Bid Bond of the unsuccessful tenderers in financial opening shall be released after unconditional acceptance of the Letter of Acceptance (LOA) by the successful tenderer. The Bid bond of successful bidder shall be returned after award of work and submission of Performance BG and signing of Agreement. Any deviation in Bid Security with regard to amount, validity and format shall be considered as material deviation & shall be dealt with accordingly.

In case of a joint venture / consortium, the Bid Bond is to be submitted in the name of the JV/consortium not the individual member(s). However, there may be more than one BG but all must be in the name of JV/consortium.

**Note:** Bidders to note that the payment of tender security shall be made from the account of bidder only. However, in case of JV/Consortium the tender security can either be paid from JV/Consortium account or one of the constituent member of JV/Consortium.

If tender security has been made from other than the account mentioned above, same shall not be accepted and all such bids shall be considered ineligible and summarily rejected.

If an acceptable Tender Security is not submitted by a tenderer as mentioned above, then tender(s) of such tenderer(s) shall be rejected considering it as non-responsive and their Technical package shall not be opened and if opened then it will NOT be evaluated.

**No clarification shall be sought from the bidders regarding bid security.**

3.14.1 The Bid Bond shall be denominated in Indian Rupees and shall be in any one of the following forms:

i. Demand Draft / Pay Order / Bank Draft in favour of DMRC Ltd. payable at New Delhi from a Scheduled Commercial Bank based in India as given in Annexure-B.

ii. Irrevocable bank guarantee issued by a Scheduled Commercial bank (including scheduled Commercial Foreign Banks) in India in the form given in Format-3. The bank Guarantee must be issued on Structured Financial
Messaging System (SFMS) platform only, and shall comply with instructions given in RfS clause 3.15.

iii. Fixed Deposit Receipt (FDR) of a Schedule Commercial bank / Post Office based in India duly pledged in favour of DMRC Ltd.

iv. BG submitted in its original form; copies will not be accepted; and remain valid up to the date specified in NIT, or beyond any period of extension subsequently requested under Clause 3.12.2.

3.14.2 The Successful Bidder shall sign and stamp the Letter of Acceptance and return the duplicate copy of same to DMRC within 7 days from the date of its issue.

3.14.3 The Bid Bond shall be forfeited without prejudice to the Bidder being liable for any further consequential loss or damage incurred by DMRC:

a. If a Bidder withdraws/revokes or cancels or unilaterally varies his bid in any manner during the period of Bid Validity specified in the RFS document and in accordance with the Clause 3.12.2.

b. If the Successful Bidder fails to unconditionally accept the Letter of Acceptance within 7 days from the date of its issue.

c. If the Successful Bidder fails to furnish the “Performance Security” as per the Clause 3.15.

3.15 PERFORMANCE SECURITY/PERFORMANCE BANK GUARANTEE (PBG)

3.15.1 Within 30 days from the date of issue of Letter of Acceptance, Successful Bidder shall furnish the Performance Security calculated in the same manner as Bid specified hereunder.

The formula applicable to calculate the Performance Security amount will be:

Performance Security amount = 10% of total project cost (i.e. Rs 1.35 Crore).

The Performance security can be submitted in any of the following forms:-

(a) Bank Draft in favour of DMRC Ltd. payable at New Delhi from a Scheduled Commercial Bank based in India, or

(b) Fixed Deposit Receipt of a Scheduled Commercial bank / Post offices based in India duly pledged in favour of DMRC Ltd., or

(c) Irrevocable Bank Guarantee in the prescribed format issued by a Scheduled Commercial Bank based in India or from a branch in India of a scheduled foreign bank. The bank guarantee must be issued on the Structured Financial Messaging System (SFMS) platform. A separate invoice of the BG will invariably be sent by the issuing bank to the Employer’s bank through SFMS.

As per the recent clarification given by bank in regard to issuance and confirmation of Bank Guarantee including amendment thereof, the following codes are to be used by the issuing bank for the purposes mentioned below:
ISSUANCE & AMENDMENT OF BANK GUARANTEE

<table>
<thead>
<tr>
<th>Code</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT760/IFN760</td>
<td>Bank Guarantee Issuance</td>
</tr>
<tr>
<td>MT767/IFN767</td>
<td>Bank Guarantee Amendment</td>
</tr>
</tbody>
</table>

The details of Employer's bank are as under:

ICICI Bank Ltd.
9A, Phelps Building, Connaught Place, New Delhi – 110001.
IFSC Code; ICIC0000007

The bank guarantee issued on the SFMS platform shall only be acceptable to the Employer.

(d) In case of a joint venture / consortium, the performance security is to be submitted in the name of the JV/consortium. However, splitting of the performance security (while ensuring the security is in the name of JV / consortium) and its submission by different members of the JV / consortium for an amount proportionate to their scope of work or otherwise is also acceptable.

3.15.2 Not Used.
3.15.3 Not Used.
3.15.4 Not Used.
3.15.5 The Performance Security shall be denominated in Indian Rupees and shall be in one of the following forms:
   a. A demand draft, or a bank guarantee from the List of banks as given in Annexure-B
   b. Be confirmed for payment by the branch of the bank giving the bank guarantee at New Delhi.
3.15.6 The PBG shall be forfeited as follows without prejudice to the Bidder being liable for any further consequential loss or damage incurred to DMRC.
   a. If the Successful Bidder is not able to submit Project Sanction Documents and Design Documents to the satisfaction of DMRC.
   b. If the Successful Bidder is not able to commission the projects to the satisfaction of DMRC, for which Letter of Acceptance/sanction letter has been issued.
   c. If power producer is not able to pay penalty on account of not meeting CUF of minimum 13% in any year subject to acceptable degradation in modules as per tender.
d. In all the above cases corresponding allocated capacity shall stand cancelled.

e. Termination of agreement due to Power Producer's default.

3.15.7 The Performance Security initially shall be valid for a minimum period of 24 months from the date of issue of Letter of Acceptance(s). Thereafter PBG shall be extended every year for next one year upto tenure of agreement and value can be revised as per the % reduction in residual value of Plant cost to be mentioned in schedule III of Agreement format.

Agreement format will be provided to the successful bidder. Successful bidder shall submit the performance Bank Guarantee and shall sign the agreement with DMRC within 60 days of date of sign of Letter of Acceptance.

3.16 OPENING OF BIDS

3.16.1 The tenders shall be opened online by the opening committee on due date and time of tender opening. On opening of the Tender, DMRC will first check the tender cost and tender security through online mode by cross verifying with the hard copy submitted.

3.16.2 If the documents do not meet the requirements of the Employer, a note will be recorded accordingly by the Tender Opening Authority.

3.16.3 Deleted

3.16.4 The Technical Package of all bidders who have submitted a valid tender security and cost of tender document shall be opened in the presence of representatives of bidders who choose to attend on date & time as mentioned in tender document in the office of the Chief Engineer/Contract, DMRC, 5th Floor, A-Wing, Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi, 110001. Bidders may visit DMRC e-procurement web-site to know latest Technical Opening information after completion of opening process. Bidders can also see the Technical Sheets (check-list) of other bidders after completion of opening process by logging into the web-site. If such nominated date for opening of Tender is subsequently declared as a Public Holiday by the Employer, the next official working day shall be deemed as the date of opening of Technical Package. The Tender of any bidder who has not complied with one or more of the foregoing instructions may not be considered.

3.16.5 The Financial Package(s) which bidder(s) have uploaded online will be opened on a subsequent date after evaluation of technical packages. Financial packages of only those bidders whose submissions are found substantially responsive and technically compliant will be opened. The time of opening of financial package shall be informed separately to only the Bidders who have qualified during Technical evaluation stage and bidders can be present to witness opening of Financial Package. Bidder can visit to DMRC e-procurement website for updates in this regard.

3.17 RIGHT TO WITHDRAW THE RFS AND TO REJECT ANY BID

3.17.1 This RFS may be withdrawn or cancelled by the DMRC at any time without assigning any reasons thereof. The DMRC further reserves the right, at its
complete discretion, to reject any or all of the Bids without assigning any reasons whatsoever and without incurring any liability on any account.

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

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

3.18 ZERO DEVIATION

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

3.19 EXAMINATION OF BID DOCUMENT

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

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

3.19.3 Bidder is advised to submit the bid on the basis of conditions stipulated in the Bid Document. Bidder’s standard terms and conditions if any will not be considered. The cancellation / alteration / amendment / modification in Bid documents shall not be accepted by DMRC.

3.19.4 Bid not submitted as per the instructions to bidders is liable to be rejected. Bid shall confirm in all respects with requirements and conditions referred in this bid document.
SECTION - I

B. GENERAL CONDITIONS OF CONTRACT (GCC)

3.20 SCOPE OF WORK

3.20.1 The scope of work for the bidder include detailed survey of sites identification in this tender, Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd."

3.21 PROJECT COST

3.21.1 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 covers all the obligations mentioned in the Bidding Documents in respect of Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd., goods and services including spares required if any during O&M period. The Bidder has to take all permits, approvals and licenses, Insurance etc., provide training and such other items and services required to complete the scope of work mentioned above.

3.21.2 Not Used.

3.21.3 The project cost shall remain firm and fixed and shall be binding on the Successful Bidder till the tenure of the contract for payment of annuity amount irrespective of his actual cost of execution of the project. No escalation will be granted on any reason whatsoever. The bidder shall not be entitled to claim any additional charges, even though it may be necessary to extend the completion period for any reasons whatsoever.

3.21.4 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

3.21.5 The operation & maintenance of Rooftop Solar Photovoltaic Power Plant would include wear, tear, overhauling, machine breakdown, insurance, and replacement of defective modules, invertors / Power Conditioning Unit (PCU), spares, consumables & other parts for a period of 25 years.

3.21.6 Not Used.

3.21.7 The Bidder shall complete the Price Bid-I(Format-B) and Price Bid – II (Format-C) furnished in the RFS Documents.
3.22 Not Used.

3.23 INSURANCE

3.23.1 The Bidder shall be responsible and take an Insurance Policy for transit-cum-storage-cum-erection for all the materials to cover all risks and liabilities for supply of materials on site basis, storage of materials at site, erection, testing and commissioning. The bidder shall also take appropriate insurance during O&M period.

3.23.2 The Bidder shall also take insurance for Third Party Liability in the joint name of DMRC, covering loss of human life, engineers and workmen and also covering the risks of damage to the third party/material/equipment/properties during execution of the Contract including O&M period covering structural damages & fire hazard. 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.

3.23.3 WARRANTIES AND GUARANTEES

The Bidder shall warrant that the goods supplied under this contract are new, unused, of the most recent or latest technology and incorporate all recent improvements in design and materials.

The bidder shall ensure warrantee covering the rectification of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of minimum 2 years from the date of commissioning or more as considered suitable.

The successful bidder has to transfer all the Guarantees /Warranties of the different components to the Owner of the project. The responsibility of operation of Warrantee and Guarantee clauses and Claims/ Settlement of issues arising out of said clauses shall be joint responsibility of the Successful bidder and the owner of the project and DMRC will not be responsible in any way for any claims whatsoever on account of the above.

3.24 TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP

3.24.1 The design, engineering, supply, installation, testing and performance of the equipment shall be in accordance with latest appropriate IEC/Indian Standards as detailed in the Section- III (Technical specifications) of the bid document. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE shall be used.

3.24.2 The specifications of the components should meet the technical specifications mentioned in Section III.

3.24.3 Any supplies which have not been specifically mentioned in this Contract but which are necessary for the design, engineering, supply & performance or
completeness of the project shall be provided by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV plant.

3.24.4 PROJECT SCOPE & TECHNOLOGY SELECTION

Under this RfS, the SPD shall set up Solar PV Project, at its own cost and in accordance to the provisions of this RfS document. All approvals, permits and clearances required for setting up of the Project and/ or dedicated transmission network upto interconnection/ delivery point (including connectivity and Long Term Open Access (if required)) including those required from State Government and local bodies shall be in the scope of the SPD. The Projects to be selected under this scheme provide for deployment of PV Technology. However, the selection of Projects would be technology agnostic within PV technology and crystalline silicon or thin film or CPV, with or without Trackers can be installed.

The SPD shall be required to follow the applicable rules regarding project registration with the State Nodal Agency in line with the provisions of the applicable policies/regulations of the State where the Project are being located. It shall be the responsibility of the SPD to remain updated about the applicable charges payable to the SNA under the respective State Solar Policy.

3.24.5 DOMESTIC CONTENT REQUIREMENT

The RfS mandates use of both solar photovoltaic (SPV) Cells and modules manufactured domestically as per specifications and testing requirements fixed by MNRE. For the Projects to be implemented under this RfS, both the solar cells and modules used in the Solar Power Projects must be made in India. In case of crystalline Silicon technology, all process steps and quality control measures involved in the manufacture of the Solar Cells and Modules starting from wafers till final assembly of the Solar Cells into Modules shall be performed at the works of PV manufacturers in India.

3.25 OPERATION & MAINTENANCE (O&M)

The bidder shall be responsible for operation and maintenance of the 3 MWp Roof top Solar PV system for a period of 25 years during which DMRC will monitor the project for effective performance in line with conditions specified elsewhere in the bid document. During this period, the bidder shall be responsible for supply of all spare parts as required from time to time for scheduled and preventive maintenance, major overhauling of the plant, replacement of defective modules, inverters, PCU’s etc. and maintaining log sheets for operation detail, deployment of staff for continuous operations and qualified engineer for supervision of O&M work, complaint logging & its attending.
The developer is responsible for the water proofing of the roof disturbed / pierced for installation of Solar Power System for the whole O&M period (25 Years). To ensure the water proofing, a third party inspection jointly with power producer and power purchaser will be conducted annually. The developer should immediately take necessary action to repair any damage to the water proofing. DMRC may impose suitable penalty for the delay caused to resolve the issue.

**3.26 METERING AND GRID CONNECTIVITY**

Net metering with Discoms and grid connectivity of the roof top solar PV system under this scheme would be the responsibility of the Bidder in accordance with the prevailing guidelines of the DMRC and/or CEA (if available by the time of implementation). DMRC could facilitate connectivity; however the entire responsibility lies with bidder only. All the equipments used in this project shall comply to the technical specifications (Sec-III) and prevailing guidelines of CEA.

**3.27 PLANT PERFORMANCE EVALUATION**

The successful bidder shall be required to meet minimum guaranteed generation with Performance Ratio (PR) at the time of commissioning and related Capacity Utilization Factor (CUF) as per the GHI levels of the location during the O&M period. PR should be shown minimum of 75% at the time of inspection for initial commissioning acceptance to qualify for release of VGF as per Clause 6.8 of Section-II. **Minimum CUF of 13%** should be maintained for a period of 1 year for release of VGF and later on upto 25 years. The bidder should send the periodic plant output details to DMRC for ensuring the CUF. The PR will be measured at Inverter output level during peak radiation conditions.

**3.27.1 PENALTY/INCENTIVE BASED ON PLANT PERFORMANCE**

The successful bidder is responsible for the energy generation of the Solar PV power plant for the whole O&M period of 25 years. If in any year of the term of agreement the energy generation is found to be less than the value committed by successful bidder through Schedule IV of AGREEMENT (calculated on the basis of minimum CUF of 13% with acceptable degradation values as in tender), a penalty/incentive amount as per formula below will be applicable on payment due to successful bidder. The same will be adjusted in the subsequent bills post the operation of plant for one year and the amount will be paid to the bidder/recovered from the bidder.

\[
\text{Penalty} = (\text{committed generation as per Schedule-IV of Agreement} - \text{Actual generation during the same period}) \times (\text{Tariff as per schedule-II of Agreement}).
\]
**Incentive** = (Actual generation during the same period – committed generation as per Schedule-IV of Agreement) X (Tariff as per schedule-II of Agreement).

Post adjustment of incentive/penalty, the annual installment/payment to the developer will be paid.

**Illustration:** Base amount mentioned by DMRC in tender is Rs. 38.6 Lakhs/MWp/annum.

L1 has quoted a percentage reduction of 20%

Annual amount to be paid to developer per MWp = 38.6 – (0.2 x 38.6) = Rs 30.88 Lakhs

Annual amount to be paid to developer for 3 MWp = 3 x 30.88 = Rs 92.64 Lakhs

Monthly payment to be made by DMRC to bidder for 3 MWp = 92.64 / 12 = Rs 7.72 Lakhs.

The energy details based on the monthly joint meter reading signed by DMRC and solar developer for one year is compared with the guaranteed generation as per schedule IV of the agreement will be used for calculating incentive or penalty for the year, which shall be adjusted in the bills of subsequent year.

### 3.28 PROGRESS REPORT

The bidder shall submit the progress report fortnightly (15 days) to DMRC in Prescribed Performa. DMRC will have the right to depute his/their representatives to ascertain the progress of contract at the premises of works of the bidder.

### 3.29 PROJECT INSPECTION

The project progress will be monitored by DMRC and the projects will be inspected for quality at any time during commissioning or after the completion of the project either by officer(s) from DMRC or any authorized agency/experts.

DMRC may depute a technical person(s) for inspection, Third party verification, monitoring of system installed to oversee, the implementation as per required standards and also to visit the manufacturers’ facilities to check the quality of products as well as to visit the system integrators to assess their technical capabilities as and when required.

Any visit to the facility by DMRC or its representatives shall not be construed as an endorsement by DMRC of the operation, maintenance, modification and repair procedures employed by bidder at the facility unless the same is projected in the report.

### 3.30 RELEASE OF VGF (Viability Gap Fund)

As part of the Government of India’s target to achieve a cumulative capacity
of 100 GW Solar PV installation by the year 2022, SECI invited proposals for setting up of grid connected Solar PV projects anywhere in India for an aggregate capacity of 2000 MW under Phase-Il (Tranche-I). Under this SECI awarded the project of 3 MWp to the DMRC with a VGF of Rs. 69,75,000 per MWp in line with provisions of SECI RfS.

The plant installed by the developer shall be in compliance with the SECI Tender No. SECI/C&P/SPD/CPSU-I/RfS/2000MW/032019 and MNRE guidelines dated 03.07.2019, attached as schedule-VIII of AGREEMENT.

The successful bidder shall be responsible for compliance with the MNRE guidelines as amended from time to time.

VGF will be released in two tranches as follows;

1. 50 % on successful commissioning of the complete capacity of the project. No VGF will be provided if the complete capacity is not commissioned before the timeline.

2. Balance 50% after 1 year of successful operation of the successfully commissioned 3 MWp project. The project shall generate 13% CUF in 1 year for getting 2nd Tranche of VGF.

3.31 APPLICABLE LAW

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

3.32 SETTLEMENT OF DISPUTE :-

Please refer Clause 17.8 of Agreement.

Governing Law & Jurisdiction

(a) This Agreement shall be governed by and construed in accordance with the laws of India. The Parties agree that the courts in Delhi shall have jurisdiction over any action or proceeding arising under the Agreement.

(b) In the event of any Dispute, difference of opinion or dispute or claim arising out of or relating to this agreement or breach, termination or the invalidity thereof, shall firstly be attempted to be settled by conciliation.

(c) All Disputes relating to this Agreement or any issue whether arising during or after the completion thereof or any matter directly or indirectly connected with this agreement shall in the first place be referred to a sole conciliator appointed/nominated by GM /Civil Engineer/Director of Purchaser on receipt of such requests from either party. The conciliator shall make the settlement agreement after the Parties reach agreement and shall give an authenticated copy thereof to each of the Parties.

(d) The settlement agreement shall be final and binding on the Parties. The settlement agreement shall have the same status and effect of an arbitration award. The views expressed or the suggestions made or the admissions made by either Party in the course of conciliation
proceedings shall not be introduced as evidence in any arbitration proceedings.

(e) Any Dispute that cannot be settled through conciliation procedure shall be referred to arbitration in accordance with the procedure given below. The Parties agree to comply with the awards resulting from arbitration and waive their rights to any form of appeal insofar as such waiver can validly be made. Cost of conciliation shall be equally shared by both the parties.

(f) “Arbitration Procedure:

(i) If the efforts, to resolve all or any of the Disputes through conciliation fail, then such disputes shall be referred to a sole arbitrator if the total value of the claim is up to Rs.5 million; and to a panel of three arbitrators if total value of claims is more than Rs.5 million. For this purpose, Purchaser will make out a panel of engineers with the requisite qualification and professional experience relevant to the field to which the Agreement relates. This panel will be from among serving or retired government employees or of public sector. The Purchaser shall provide a panel of three arbitrators for claims up to Rs.5 million and a panel of five arbitrators for claims of more than Rs.5 million. Power Producer shall choose the sole arbitrator from the panel of three and/or one arbitrator from the panel of five in case three arbitrators are to be appointed. The Purchaser shall also choose one arbitrator from this panel of five and the two so chosen will choose the third arbitrator from the panel only. The arbitrator(s) shall be appointed within a period of 30 days from the date of receipt of written notice/demand of appointment of arbitrator from either Party.

(ii) The venue of such arbitration shall be Metro Bhawan, Delhi. The arbitral award shall be binding on both Parties. The cost of arbitration shall be equally shared by both Parties.

(iii) The sole arbitrator or the Arbitral Tribunal shall give his award within 12 months from the date of his entering on the reference or within extended time, as the parties may consent for the same, as the case may be on all the matters referred to him and shall indicated his/their finding, along with sum awarded, separately on each individual item of dispute.

In case the matter is referred to arbitral tribunal for adjudication and the views of two arbitrators differs on the issue then view of presiding arbitrator shall prevail.

The demand of arbitration shall specify the matters which are in question or subject of the dispute or differences as also the amount of claim item wise, together with counter claims or set off shall be
referred to arbitration and other matters shall not be included in the reference. The arbitration proceedings shall be governed by the Indian Arbitration and Conciliation Act, 1996, as amended from time to time including provisions in force at the time the reference is made.

(g) During the dispute resolution period, both the Parties shall continue to perform their respective obligations as per provisions of the Agreement.

(h) This Section 18 is severable from the rest of this Agreement and shall remain in effect even if this Agreement is terminated for any reason.

3.32.1 Not Used.
3.32.2 Not Used. In case the contractor is a public sector enterprise or a government department.
3.32.3 Not Used.
3.32.4 In case the contractor is not a public sector enterprise or a government department.

3.32.4.1 Not Used.
3.32.4.2 Not Used.
3.32.4.3 Not Used.
3.32.4.4 Not Used.
3.32.4.5 Not Used.
3.32.4.6 Not Used.
3.32.4.7 Not Used.
3.32.5 Not Used.

3.33 **FORCE MAJEURE**

3.33.1. Notwithstanding the provisions of clauses contained in this RFS document; the DMRC shall not forfeit (a) Security deposit for delay and (b) termination of contract; if Contractor is unable to fulfill his obligation under this contract due to force majeure conditions.

3.33.2. For purpose of this clause, "Force Majeure" means an event beyond the control of the contractor and not involving the contractor's fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, terrorist attacks, quarantine restrictions and fright embargoes etc.

Whether a “Force majeure” situation exists or not, shall be decided by DMRC and its decision shall be final and binding on the contractor and all other concerned.

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

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

As per the relevant law, in event of a disagreement between parties on existence of force majeure event arbitration shall decide.

3.34  LANGUAGE

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

3.35  OTHER CONDITIONS

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

3.35.2. The Successful bidder or its subcontractors shall not display the photographs of the work and not take advantage through publicity of the work without written permission of DMRC.

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

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

Consultancy and Labor contracts, cleaning & maintenance contractor can be sub contracted, with the approval of DMRC.

3.35.5. SUCCESSORS AND ASSIGNS

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

3.35.6. SEVERABILITY

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

3.35.7. **COUNTERPARTS**

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

3.35.8. **RIGHTS & REMEDIES UNDER THE CONTRACT ONLY FOR THE PARTIES**

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

3.35.9. **PRICE PREFERENCE FOR M.S.M.E/ STATE OR CENTRAL PSUs**

There is no relaxation in terms of any conditions of the RFS or price preference or processing fee or Bid Bond or PBG for M.S.M.E/ State or Central PSUs.

3.35.10. **CORRESPONDENCE**

Applicant requiring any Techno-Commercial clarification of the bid documents may contact in writing to Chief Engineer/Contract, DMRC or through email to gmcontracts@dmrc.org or through online portal.

Verbal clarifications and information given by the DMRC or its employees or its Representatives shall not be in any way entertained.
4. EVALUATION CRITERIA AND VIABILITY GAP FUNDING DISBURSEMENT

(i) BID EVALUATION AND VGF DISBURSEMENT

1. BID EVALUATION

The evaluation process comprises the following four steps:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step I</td>
<td>Responsiveness check of Techno Commercial Bid</td>
</tr>
<tr>
<td>Step II</td>
<td>Evaluation of Bidder’s fulfillment of Eligibility Criteria as per Clause 3.4 of Section-I</td>
</tr>
<tr>
<td>Step III</td>
<td>Evaluation of Price Bid</td>
</tr>
<tr>
<td>Step IV</td>
<td>Successful Bidders(s) selection</td>
</tr>
</tbody>
</table>

2. RESPONSIVENESS CHECK OF TECHNO COMMERCIAL BID

The Techno Commercial Bid submitted by Bidders shall be scrutinized to establish responsiveness to the requirements laid down in the RFS subject to Clause 3.4.1, Clause 3.4.2, and Clause 3.4.3. Any of the following may cause the bid to be considered “Non-responsive”, at the sole discretion of DMRC.

i. Bids that are incomplete, i.e. not accompanied by any of the applicable formats inter alia covering letter, power of attorney supported by a board resolution, applicable undertakings, format for disclosure, valid Bid Bond, etc.;

ii. Bid not signed by authorized signatory and /or stamped in the manner indicated in this RFS;

iii. Material inconsistencies in the information /documents submitted by the Bidder, affecting the Eligibility Criteria;

iv. Information not submitted in the formats specified in this RFS;

v. Bid being conditional in nature;

vi. Bid not received by the Bid Deadline;

vii. Bid having Conflict of Interest;

viii. More than one Member of a Bidding Company using the credentials of the same Parent Company /Affiliate;

ix. Bidder delaying in submission of additional information or clarifications sought by DMRC as applicable;

x. Bidder makes any misrepresentation.
Each Bid shall be checked for compliance with the submission requirements set forth in this RFS before the evaluation of Bidder’s fulfilment of Eligibility Criteria is taken up. Clause 3.4 shall be used to check whether each Bidder meets the stipulated requirement. In case of any non-conformity, the tenderer shall be disqualified and tender will be rejected.

5. PRELIMINARY EXAMINATION

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

5.2 Tenders determined to be technically acceptable after technical evaluation will be checked by the Employer for any arithmetical errors in computation and summation during financial evaluation. Errors will be corrected by the Employer as follows:

   a. Where there is a discrepancy between amounts in figures and in words, the amount in words will govern; and
   
   b. Where there is a discrepancy between the unit price and the total amount derived from the multiplication of the unit price and the quantity, the unit price as quoted will normally govern unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit price, in which event, the total amount as quoted will govern.

5.3 If a Bidder does not accept the correction of errors as outlined above, his tender will be rejected and the tender security forfeited.

6. EVALUATION OF BIDDER’S FULFILMENT OF ELIGIBILITY CRITERIA

6.1 EVALUATION OF ELIGIBILITY:

   a. Evaluation of Bidder’s Eligibility will be carried out based on the information furnished by the Bidder as per the prescribed Formats and related documentary evidence in support of meeting the Eligibility Criteria as specified in Clause 3.4. Non-availability of information and related documentary evidence for the satisfaction of Eligibility Criteria may cause the Bid to be non-responsive.

   b. Tenders not considered substantially responsive and not full-filling the requirements of the tender document as evaluated as per item clause 4 and clause 5 shall be rejected by Employer and shall not be allowed subsequently to be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

   c. If any tender is rejected, pursuant to paragraph (b) above, the Financial Package of such bidder shall not be opened.

   d. The decision of the Employer as to which of the tenders are not substantially responsive shall be final.

6.2 EVALUATION OF PRICE BID

   a. All technically acceptable tenders will be eligible for opening of their financial
proposals. The Employer shall notify all technically qualified Bidders to attend
the opening of the financial proposal. The financial proposal will then be
opened in front of attending Bidders.

b. The financial bids of the bidders shall be opened one at a time, reading out:
the name of the Bidder and whether there is a modification; the Tender
Price(s), including any discounts and any other details as the Employer may
consider appropriate.

Only Financial Package discounts read out and recorded during the opening
of Price Tenders shall be considered for evaluation.

The financial bids of those bidders found non-responsive as per clause
2.2 will not be considered for financial evaluation and will be rejected.

c. The Bidders’ representatives who are present shall be requested to sign the
record. The omission of a Bidder’s signature on the record shall not invalidate
the contents and effect of the record. A copy of the record shall be distributed
to all Bidders.

d. The evaluation of Financial proposals by the Employer will take into account,
in addition to the tender amounts, the following factors:

i) Arithmetical errors corrected by the Employer

ii) Such other factors of administrative nature as the Employer may consider
having potentially significant impact on contract execution, price and
payments, including the effect of items or unit rates that are unbalanced or
unrealistically priced.

e. Offers, deviations and other factors, which are in excess of the requirements
of the tender documents or otherwise will result in the accrual of unsolicited
benefits to the Employer, shall not be taken into account in tender evaluation.

f. Price adjustment provisions applicable during the period of execution of the
contract shall not be taken into account in tender evaluation.

g. Evaluation of financial offer will be based on rates quoted in BOQ. Any
alteration in BOQ will not be given any cognizance.

6.2.1 Not Used.

6.2.2 MODIFIED ANNUITY MODEL

a. The Price bids shall be evaluated separately.

b. Since the maximum allowable annuity amount is Rs. 38.6
Lakhs/MWp/annum, so bids above the maximum allowable price shall also
be rejected.

6.3 SUCCESSFUL BIDDER(S) SELECTION

6.3.1 Bids qualifying in Clause 3.4 shall only be evaluated in this stage.

6.3.2 Not used.

6.3.3 The bidders in their financial bid shall quote the annuity amount in terms of
percentage reduction from the base amount as mentioned by DMRC i.e. Rs. 38.6 Lakhs/MWp/annum. The percentage reduction quoted in FORMAT-C of all Price Bids of Qualified Bidders shall be used for evaluation.

6.3.4 Not Used

6.3.5 Evaluation:

6.3.5.1 Based on the percentage reduction to the DMRC’s base annuity amount as quoted by bidders, DMRC shall arrange the bids in the descending order i.e. L1, L2, L3, _ _ _ (L1 being the bidder quoted highest percentage reduction) as per clause 2.2.

Evaluated price = percentage reduction to the DMRC’s base annuity amount as obtained from the Financial BID Format-C.

In case, two or more technically qualified bidders quote the same annuity amount in the financial bid, and become lowest (i.e. L-1), then the tender would be awarded to the bidder having the highest annual turnover from the last audited financial year for the financially evaluated entity.

6.3.5.2 The bidder shall quote percentage reduction to the DMRC’s base annuity amount in –Financial BID for 25 years.

6.3.5.3 Not Used

6.3.5.4 Not Used

6.3.5.5 The evaluation will be done considering the percentage reduction to the DMRC’s base annuity amount quoted by the bidder, VGF will be released as per tender conditions clause 6.8 & 14.1.

6.3.5.6 Not Used

6.3.5.7 Not Used.

6.3.5.8 Not Used.

6.3.6 The Letter(s) of Acceptance (LOA) shall be issued to such Successful Bidders(s) selected as per the provisions of this Clause 6.3.5.

6.3.7 Successful Bidder shall unconditionally accept the LOA, and record on one (1) copy of the LOA, “Accepted Unconditionally”, under the signature of the authorized signatory of the Successful Bidder and return such copy to the DMRC within Seven (7) days of issue of LOA.

6.3.8 If the Successful Bidder, to whom the Letter of Acceptance has been issued, does not fulfill any of the conditions specified in Bid document, the DMRC reserves the right to annul/cancel the award of the Letter of Acceptance of such Successful Bidder and forfeit the Bid Bond / Performance security.

6.3.9 The DMRC at its own discretion, has the right to reject any or all the Bids without assigning any reason whatsoever, at its sole discretion.

6.3.10 There shall be no negotiation on the quoted Project cost or Annuity Amount between the DMRC and the Bidder(s), during the process of evaluation.

6.4 INCREASE/DECREASE OF BIDDER ALLOCATED CAPACITY

6.4.1 DMRC reserves the right to increase/decrease the Bidder Allocated Capacity
by up to twenty five percent (25%) for each station/site or any other site at the sole discretion of DMRC.

6.4.2 Not Used.

6.4.3 In case capacity is enhanced by DMRC as per Clause 6.4.1 above, Successful bidder shall submit the equivalent amount of PBG to DMRC within 30 days from the date of issue of Letter of Acceptance /sanction letter.

6.5 Not Used.

6.6 NOTIFICATION TO SUCCESSFUL BIDDERS

6.6.1 Prior to the expiry of the period of tender validity prescribed by the Employer, the Employer will notify the successful Bidder by letter or an email, that his tender has been accepted. This letter (hereinafter and in the Conditions of Contract called ‘the Letter of Acceptance’) shall name the sum which the Employer will pay to the Contractor in consideration of the execution, completion, maintenance and guarantee of the works by the Contractor as prescribed by the Contract (hereinafter and in the conditions of Contract called ‘the Contract Price’). The “Letter of Acceptance” will be issued under signature of a Director of DMRC or of the Chief Engineer/Contract. The “Letter of acceptance” will be sent in duplicate to the successful Bidder, who will return one copy to the Employer duly acknowledged and signed by the authorized signatory, within one week of receipt of the same by him. No correspondence will be entertained by the Employer from the unsuccessful Bidders.

Single letter of Acceptance for the complete tender capacity of 3MWp will be issued to the successful bidder. Letter of Acceptance and on submission of performance BG (PBG) corresponding to 3000 kWp, Agreement will be signed for this capacity.

6.6.2 The Letter of Acceptance will constitute a part of the contract.

6.6.3 Upon “Letter of acceptance” being signed and returned by the successful Bidder as per Clause 6.6.1, the employer will promptly notify the unsuccessful Bidders and discharge / return their tender securities.

6.7 PROJECT ALLOCATION AND SANCTION

6.7.1 The Bidders, in their own interest are advised to make a preliminary survey of the sites specified in this tender as well as issue of Grid connectivity, as failure to execute the project and non-completion of other formalities after allocation of project will result in forfeiture of Bid Bond/PBG amount submitted by them.

6.7.2 The Successful Bidders selected as described in Clause 6.3 above shall be issued Letter of Acceptance (LOA) indicating the allocated capacity & Project Cost etc.

6.7.3 The time for submission of project sanction documents and design documents
by the bidder to DMRC will be 60 days from the date of issue of Letter of Acceptance which can be extended depending upon the merit of the case. Failure of non-compliance of same shall lead to forfeiture of PBG.

6.7.3.1 Further, Successful Bidders can start submitting their Project sanction documents and Design documents as soon as they receive LOA from DMRC. Project sanction documents shall be submitted to DMRC. If within 60 days, the successful bidder does not submit Project sanction documents and design documents, in such case PBG shall be forfeited and the allocated capacity gets cancelled and bidder including its affiliates/GROUP COMPANIES/ Parent / Ultimate parent company may be debarred to participate in DMRC future tenders for a period of one year as decided by the competent authority of DMRC.

6.7.3.2 Not Used.
6.7.4 Not Used.
6.7.5 Not Used.
6.7.6 Not Used.
6.7.7 DMRC will issue the Letter of Acceptance(s) for the Project(s) indicating the VGF. Afterwards the Successful Bidder/ Project Developer and accepted by DMRC shall submit the Project Sanction and Design Documents.

6.7.8 If the Bidder fails to commission the sanctioned project within specified time, Liquidated damages (LD) on per day basis calculated for the Performance Security as per Clause 8 of RFS, may be levied by DMRC.

6.8. VIABILITY GAP FUNDING DISBURSEMENT

6.8.1. In line with MNRE guidelines No 318/33/2019-Grid Connected Rooftop dated 16.07.2019 benchmark project cost quoted by bidder for installation of grid connected rooftop projects at various locations as mentioned in section VII shall be as below:

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Benchmark cost (Rs/Wp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All solar plants installed in DMRC</td>
<td>45</td>
</tr>
</tbody>
</table>

The above benchmark costs are inclusive of total system cost and its installation, commissioning, transportation, insurance, five year AMC/CMC, and applicable fees and taxes.

6.8.2. Total liability of DMRC under this contract shall be limited to release of VGF as per clause 3.30.

6.8.3. NOT USED

6.8.4. The incentive will be disbursed as follows:

a) Incentive would be released after commissioning of the project and submission of PCRs in SPIN portal at the end of sanction period and submission of original audited Statement of Expenditure (SOE). Delhi
Metro Rail Corporation Ltd. will also make the sites/premises available for inspection by MNRE/SECI or its designated team/agency. No extension shall be given beyond time line specified by the sanction/ LOA.

b) VGF will be released in two tranches as follows:

1.) 50 % on successful commissioning of the complete capacity of the project. No VGF will be provided if the complete capacity is not commissioned before the timeline.

2.) Balance 50% after 1 year of successful operation of the successfully commissioned 3 MWp project. The project shall generate 13% CUF in 1 year for getting 2nd Tranche of VGF.

If any extra facilities are agreed between the Successful Bidder and the DMRC beyond the scope of this award letter than extra payment shall be made by the DMRC on mutually decided (DMRC & Successful Bidder) terms and conditions.

6.8.5. DMRC may consider to release as case to case basis depending on the actions taken by the Successful Bidder and the progress achieved in the process, the VGF amount indicated at Clause 6.8.4 (b) (1) above in case Grid connectivity of the Project has not been done although the Project is otherwise ready for the commissioning. However, the second tranche of VGF as indicated in Clause 6.8.4 (b) (2) above shall not be released till the project is connected with the Grid and generated 13% CUF over a period of one year.

7. OTHER CONDITIONS

7.1. Bidder has to obtain all the necessary approvals/Consents/Clearances required for Erection, Testing, Commissioning and O&M of the project including Grid connectivity. DMRC shall assist in this regard.

7.2. Bid bond and Processing fee submission:
Bid bond shall be submitted in a separate envelop (along with Processing fee) superscripted with name of Tender for which Bid is being quoted & other details.

7.3. TAX EXEMPTIONS
Price bids invited are inclusive of Taxes and duties. However, Tax exemptions including certificates of any sort, if available may be dealt with the concerned Dep't of Govt. of India by the bidder. DMRC in no case will be responsible for providing any tax exemptions to the bidder.

7.4. Eligibility of standalone system:
7.4.1 Standalone system is not allowed under this scheme. The system should be grid interactive.

7.5. Requirement of approvals on makes of the Components:
7.5.1. The modules should be manufactured in India only for availing VGF as per clause 14.1.1. Rest of the components can be procured from any source.
However these items should meet the Technical specification and standards mentioned in RFS.

7.6. **OPERATION OF THE SYSTEM DURING GRID FAILURE AND CALCULATION OF CUF**

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

7.7. **Not Used.**

8. **LIQUIDATED DAMAGES (LD) FOR DELAY IN PROJECT IMPLEMENTATION**

8.1. DMRC will issue the Letter of Acceptance (LOA) for the Project(s) indicating the VGF which will be disbursed in line with the provisions of the RFS document. The Bidder shall complete the design, engineering, supply, storage, civil work, erection of suitable structure, testing & commissioning, grid connectivity of the project within 12 months from the date of issue of Letter of acceptance (LOA).

If the bidder fails to commission the sanctioned project within specified time, Liquidated Damages (LD) on per day basis calculated for the Performance Security on a 6 months period would be levied. After 6 months the project will get cancelled and the total PBG amount would be forfeited.

Ex: If project is delayed by 36 days then the Liquidated Damages (LD) will be levied as given below.

\[
\text{Liquidated Damages (LD) = \left( \frac{\text{Performance Security}}{180 \text{days}} \right) \cdot \text{delayed days}.}
\]

8.2. Failure or delay by the Employer or the Engineer, to hand over to the Contractor the Site necessary for execution of Works, or any part of the Works, is the responsibility of the Employer, shall in no way affect or vitiate the Contract or alter the character thereof; or entitle the Contractor to damages or compensation thereof but in any such case, the Engineer shall extend the time period for the completion of the Contract, as in his opinion is/are reasonable.

The Contractor may apply for an extension of the Time for Completion if the Work is or will be delayed either before or after the Time for Completion by any of the following causes:

a. “Force Majeure”

b. The Contractor's work held up for not being given possession of or access to the Site for a considerable period.

c. Instruction of the Engineer to suspend the Works and the Contractor not being in default as to reasons of suspension.
d. Acts or omissions of other Designated Contractors in executing work not forming part of this Contract and on whose performance, the performance of the Contractor necessarily depends.

e. Any other event or occurrence which, according to the Employer is not due to the Contractor's failure or fault, and is beyond his control without Employer being responsible for the same.

8.3. However, the Contractor shall not be entitled to any Extension of Time where the instructions or acts of the Employer or the Engineer are necessitated by or intended to cure any default of or breach of Contract by the Contractor or where any delay is due to

a. The failure of sub-contractor, to commence or to carry out work in due time,
b. Non-availability, or shortage of Contractor's equipment, labour, utility services, Plant and Materials,
c. Inclement weather conditions, and

d. The Contractor not fulfilling his obligations

8.4. If the Contractor considers himself to be entitled to an extension of time for Completion, he shall give notice to the Engineer, of such intention as soon as possible, he shall notice the event giving rise to the delay and full and final supporting details of his application, together with any notice required by the Contract and relevant to such Clause.

The Engineer shall proceed in accordance with clause 8, to agree or determine either prospectively or retrospectively such extension of the Time for Completion as may be due. The Engineer shall notify the Contractor accordingly.

The Contractor shall not be entitled to an extension of time by reason of any delay to any activity in the carrying out of the Works unless in the opinion of the Engineer such delay results in or may be expected to result in a delay to completion of the Works, or achievement of completion of sanctioned capacity.

If the delay in the completion of the whole Works or a portion of the Works, for which an earlier completion period is stipulated, is due to the Contractor's failure or fault, and the Engineer is of the view that the remaining Works or the portions of Works can be completed by the Contractor in a reasonable and acceptable short time, then, the Engineer may allow the Contractor extension or further extension of time at its discretion with or without liquidated damages, for completion, as he may decide.

9. **TIME OF COMPLETION OF SANCTIONED CAPACITY**

9.1 DMRC will issue the LOA(s) for the Project(s) indicating the VGF amount (s) which will be disbursed in line with the provisions of the RFS document (Refer Clause 6.8). The Bidder shall complete the design, engineering, supply, storage, civil work, erection of suitable raised structure, testing & commissioning of the allocated/awarded project(s) within 12 months from the date of issue of LOA(s). In case of delay beyond scheduled commissioning period, the bidder shall be liable for Liquidated Damages (LD) as per Clause
8.

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

9.1.2. A joint programme of execution of the Work will be prepared by the Engineer-in-Charge or its representative nominated for the purpose and Successful bidders based on priority requirement of this project. This programme will take into account the time of completion mentioned in clause 9.1 above and the time allowed for the priority Works by the Engineer-in-Charge.

9.1.3. Monthly/Weekly implementation programme will be drawn up by the Engineer-in-Charge jointly with the Successful bidder, based on availability of Work fronts as per Clause 9.1.2 above. Successful bidder shall scrupulously adhere to these targets/programmes by deploying adequate personnel, tools and tackles and he shall also supply himself all materials of his scope of supply in good time to achieve the targets/programmes. In all matters concerning the extent of targets set out in the weekly and monthly programmes and the degree of achievements, the decision of the Engineer-in-Charge will be final and binding.

10. **THE PROJECT PROGRESS ON BI-WEEKLY BASIS**

Successful bidder authorized representative in whose name PoA has been executed and submitted along with the bid shall submit to DMRC the project progress report on biweekly basis (Every 15 days), non-submission of the progress report shall be considered as no progress and shall attract punitive actions as per the relevant provision of the Contract. However, the decision of Engineer-in-Charge shall be final in this regard.

11. **INSPECTION AND AUDIT BY THE DMRC**

11.1. The Successful bidder shall permit the DMRC or their authorized agency to inspect the Successful bidder’s site, accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the DMRC, if so required by the DMRC any time.

12. **COMMISSIONING /COMPLETION CERTIFICATE**

12.1. Application for completion/commissioning certificate:

When the Successful bidder fulfils his obligation under the Contract, he shall be eligible to apply for Completion Certificate. The Engineer-in-Charge shall normally issue to the Successful bidder the Completion Certificate within one month after receiving any application from the Successful bidder after verifying from the completion documents and satisfying himself that the Work has been completed in accordance with and as set out in Contract documents. The Successful bidder, after obtaining the Completion Certificate, is eligible to avail the VGF as per the Clause 6.8.

12.1.1 **DOCUMENT SUBMISSION FOR ISSUE OF COMMISSIONING /
COMPLETION CERTIFICATE
For the purpose of Clause 12.1 above the following documents will be deemed to form the completion documents:

a. Checklist for inspection of Roof top SPV power plants as per DMRC format.

b. Project completion report from successful bidder as per DMRC format.

c. Format attached in Section-V Format-11.

12.1.2 FINAL DECISION AND FINAL CERTIFICATE
12.1.2.1 Upon completion of 2 years of O&M and subject to the Engineer-in-Charge being satisfied, the Engineer-in-Charge shall (without prejudice to the rights of the DMRC to retain the provisions of relevant Clause hereof) otherwise give a certificate herein referred to as the Final Certificate to that effect and the Successful bidder shall not be considered to have fulfilled the whole of his obligations under Contract until Final Certificate shall have been given by the Engineer-in-Charge notwithstanding any previous entry upon the Work and taking possession, working or using of the same or any part thereof by the DMRC.

12.2 DEDUCTIONS
12.2.1 All costs, damages or expenses which DMRC may have paid or incurred, which under the provisions of the Contract, the Successful bidder is liable/will be liable, will be claimed by the DMRC. All such claims shall be billed by the DMRC to the bidder and if not paid by the Successful bidder within the 15 days within respect of payment request period, the DMRC may, then, deduct the amount from any money due i.e., Performance Security or becoming due to the contractor or Successful bidder under the contract or may be recovered by actions of law or otherwise, if the Successful bidder fails to satisfy the DMRC of such claims.

12.3 CORRUPT OR FRAUDULENT PRACTICES
The DMRC requires that Successful Bidders/ Contractors should follow the highest standard of ethics during the execution of contract. In pursuance of this policy, the DMRC -

12.3.1 Defines, for the purposes of this provision, the terms set forth as follows:

12.3.2 “Corrupt Practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the bid process or in contract execution and

12.3.3 “Fraudulent Practice” means a misrepresentation of facts in order to influence a bid process or the execution of a contract to the detriment of the DMRC/Govt. scheme, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the DMRC of the benefits of free and open competition.
12.3.4 Will declare a firm ineligible/debarred, either indefinitely or for a specific period of time, a Govt. contract if at any time it is found that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government/ DMRC schemes.

13. **DEBARRED FROM PARTICIPATING IN DMRC’s ROOF TOP TENDER**

13.1 DMRC reserves the right to carry out the performance review of each Bidder from the time of submission of Bid onwards. In case it is observed that a bidder has not fulfilled its obligations in meeting the various timelines envisaged, in addition to the other provisions of the RFS, such Bidders may be debarred from participating in DMRC’s any future tender for a period as decided by the competent authority of DMRC.

13.2 The Successful bidder must ensure that the VGF is available for newly commissioned plants i.e. for the plants whose construction/dispatch of equipments have been started only after the issue of sanction letter/Letter of Acceptance. Any project on which plants have been installed or commissioned before the issue of Letter of Acceptance/sanction letter shall be construed as fraudulent activity in which case Successful bidder(s) may be debarred from participating in DMRC’s future tender for a period as decided by the competent authority. However, such locations may be used for installation of additional capacity with the prior approval of competent authority.
SECTION-III

TECHNICAL SPECIFICATIONS

The proposed project shall be commissioned as per the technical specifications given below. Any contradiction/conflict in the specifications given below and MNRE guidelines/specification issued from time to time, the bidder shall bring to notice of DMRC before its use in the project. The responsibility of adhering to the MNRE guidelines for availing VGF lies with the developer.

Any shortcomings will lead to cancelation of VGF in full or part as decided by DMRC & Competent Authority’s decision will be final and binding on the bidder.

14. 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 day time. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, as specified herein or otherwise wherever such specifications are available and applicable.

Rooftop Solar PV system shall consist of following equipments/components.

- Solar PV modules consisting of required number of mono crystalline PV modules
- Grid interactive Power Conditioning Unit with Remote Monitoring System
- Mounting structures
- Junction Boxes.
- Earthing and lightening protections
- IR/UV protected FRLS/FRLSOH (for underground) Cables, pipes and accessories
- Metering & associated equipments.

14.1 SOLAR PHOTOVOLTAIC MODULES

14.1.1. The PV modules used should be PID (Potential Induced Degradation) resistant and tested for PID as per IEC 62804.

- Under this RfS, both Solar Photo Voltaic (SPV) cells and Modules shall be manufactured domestically as per specifications and testing requirement fixed by MNRE is mandatory for availing VGF as per clause 6.8.
The PV modules of foreign make can be used, but in such case the developer will not be eligible for VGF provided as per clause 6.8.

Irrespective of the fact whether the VGF is availed or not the developer must satisfy the Plant Performance as per the clause 3.27.

All the modules used in this contract shall be of Mono Crystalline technology.

All the modules used shall be equipped with factory made anti-soiling coating. Suitable confirmation from Module manufacturer to be submitted to DMRC at the time of supply of modules.

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

a. For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701

b. The total solar PV array capacity should not be less than allocated capacity (kWp) and should comprise of solar mono crystalline modules of minimum 330 Wp and above wattage. Module capacity less than minimum 330 watts shall not be accepted.

c. Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.

d. PV modules must be tested and approved by one of the IEC authorized test centers.

e. The module frame shall be made of corrosion resistant materials, preferably having anodized aluminium.

f. The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid. DMRC 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 by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.

iv. I-V (Current – Voltage) curves at STC (standard test conditions) should be provided by bidder.

14.1.3. Modules deployed must use a RF (Radio frequency) identification tag. The following information must be mentioned in the RFID used on each module (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, $I_{\text{max}}$, $V_{\text{max}}$ and FF (Fill Factor) 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

14.1.4. **Warranties**

a) **Material Warranty**

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

ii. Defects and/or failures due to manufacturing,

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

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

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 first ten years period of the full rated original output.

15. **ARRAY STRUCTURE**

a) Hot dip galvanized MS (with 650gm/m² zinc mass coating) (or) Aluminum mounting structures may be used for mounting the modules/ panels/arrays. New Technology Materials having better properties like PosMAC etc may also be used for mounting structures. Each structure should have angle of inclination as per the site conditions to take maximum irradiation. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements.

b) The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed (like Delhi-basic wind speed of 170 km/hour). It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard and submit wind loading calculation sheet to DMRC in compliance to standards governing, as on date like IS-875, NBC etc. Suitable fastening arrangement such as grouting and clamping 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. Aluminum 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 ionization.

e) The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels. Installation of solar structure should not damage the roof in any way. If any concrete or foundation is required, it should be pre-cast type.

f) Regarding civil structures the bidder need to take care of the load bearing capacity of the roof and need to 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) For Safety:-
   1. Safety ropes shall be provided on shed type structures
   2. Life Line
   3. Ladder caged/stairs case, where space is available stair case shall be
      provided else caged ladder where space is not there.
   4. Anti-fall edge protection.
   5. Walkway

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

   b) Copper bus bars/terminal blocks housed in the junction box with suitable
      termination threads Conforming to IP65 standard and IEC 62208 Hinged door
      with EPDM rubber gasket to prevent water entry with single 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) / surge arrestors, 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.

17. **NOT USED**

18. **AC DISTRIBUTION PANEL BOARD (ACDB)**
   a) AC Distribution Panel Board (ACDB) shall control the AC power from PCU/
      inverter, and should have necessary surge arrestors. Interconnection from
      ACDB to mains at LT Bus bar while in grid tied mode.

   b) All switches and the circuit breakers, connectors should conform to IEC
      60947, part I, II and III/ IS60947 part I, II and III. All cables shall be
      terminated onto a busbar by means of suitable MCB/MCCB.

   c) The changeover switches, cabling work should be undertaken by the bidder
      as part of the project.

   d) All the Panel’s shall be metal clad, totally enclosed, rigid, floor mounted, air -
      insulated, cubical type suitable for operation on three phase / single phase,
415 or 230 volts, 50 Hz  

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

f) All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.

g) Cable alley design needs to be compatible to allow easy access depending upon the number of AC Cables into the panel. Minimum width of cable alley shall be 300 mm. Location of bus bars should be such so as to avoid any overlapping/looping of cables in the panels.

h) Connections of cable with the bus bars should be properly tightened & check nuts must be provided to avoid any possibility of loosening of connections.

i) Bare/exposed portion of terminal/cables should be covered with appropriate sleeves instead of wrapping insulating tape.

j) Should conform to Indian Electricity Act and rules (till last amendment).

k) All the 415 Volt AC or 230 volts devices / equipment like bus support insulators, circuit breakers, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions

<table>
<thead>
<tr>
<th>Variation in supply voltage</th>
<th>+/- 10 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variation in supply frequency</td>
<td>+/- 3 Hz</td>
</tr>
</tbody>
</table>

19. **PCU/ARRAY SIZE RATIO:**

a) The combined wattage of all inverters should not be less than rated capacity of power plant under STC (Standard test conditions).

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

c) In addition to MPPT at inverter level, power optimizer at module level shall be used to increase the power generation.

20. **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 Smart Inverter and the associated control and protection devices. All these components of the system are termed the “Power Conditioning Unit (PCU)”.

In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit/inverter. If necessary inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:
- **Switching devices**: IGBT/MOSFET
- **Control**: Microprocessor / DSP (Digital Signal Processor)
- **Nominal AC output voltage and frequency**: 415V, 3 Phase, 50 Hz
- **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 Hz or more
- **Grid Voltage tolerance**: - 20% & + 15%
- **No-load losses**: Less than 1% of rated power
- **Inverter efficiency(minimum)**: >93% (In case of 5kW or above)
- **Inverter efficiency (minimum)**: > 90% (In case of less than 5kW)
- **THD**: < 3%
- **PF**: > 0.9

a) Three phase PCU/ inverter shall be used with each power plant system (10kW or above) but In case of less than 10 kW single phase inverter /Three phase PCU/ 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/ MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS standard. The junction boxes/ enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.

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

21. **INTEGRATION OF PV POWER WITH GRID:**

   The output power from SPV would be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization and availing net metering connection from DISCOM. 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.

22. **DATA ACQUISITION SYSTEM / PLANT MONITORING**

   **A. Data Acquisition System**

   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 (Class II or better, along with calibration certificate) provided, with the sensor mounted in the plane of the array readout integrated with data logging system.

   iv. **Temperature**: Temperature probes for recording the Solar panel temperature and ambient temperature to be provided complete with readouts integrated with the data logging system.

   v. **Wind**: Wind sensors for recording wind speed to be provided at the sites.

   All the above sensors shall be installed at locations as specified/decided by DMRC.

   vi. The following parameters are accessible via the operating interface display in real time separately for solar power plant:

   a. AC Voltage.

   b. AC Output current.

   c. Output Power

   d. Power factor.

   e. DC Input Voltage.

   f. DC Input Current.

   g. Time Active.

   h. Time disabled.
i. Time Idle.

j. Power produced

k. Protective function limits (viz. AC Over voltage, AC Under voltage, over frequency, under frequency, ground fault, PV starting voltage, PV stopping voltage, over current, short circuit etc.

vii. All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values, previous values for up to a month and the average values) should be made available for energy auditing through the internal microprocessor and should be read on the digital front panel.

viii. PV array energy production: Digital Energy Meters to log the actual value of AC/DC voltage, Current & Energy generated by the PV system provided. Energy meter should be of 0.5s accuracy class with CT/PT should be of 0.2s accuracy class.

ix. Computerized DC String/Array monitoring and AC output monitoring shall be provided as part of the inverter and/or string/array combiner box or separately.

x. String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.

xi. The time interval between two sets of data shall not be more than 15 minutes.

(A min. of 4 samples of data shall be recorded per hour)

xii. Data Acquisition System shall have real time clock, internal reliable battery backup (2 hours) and data storage capacity to record data round the clock for a period of min. 1 year.

xiii. Computerized AC energy monitoring shall be in addition to the digital AC energy meter.

xiv. The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular and graphical form.

xv. All instantaneous data shall be shown on the laptop screen. Two laptops with latest configuration for this purpose shall be provided by the developer to DMRC.

Software shall be provided for USB download and analysis of DC and AC parametric data for individual plant.

xvi. Provision for Internet monitoring and download of data shall be also incorporated.

xvii. Remote Server and Software for centralized Internet monitoring system shall also be provided for download and analysis of cumulative data of all the plants and the data of the solar radiation and environment monitoring system in the
central location.

B. Solar Radiation and Environment Monitoring System
   i. Computerized solar radiation and environment monitoring system shall be installed on one of the buildings along with the solar PV power plant.
   ii. The system shall consist of various sensors, signal conditioning, data acquisition, LCD display and remote monitoring.
   iii. Global and diffuse beam solar radiation in the plane of array (POA) shall be monitored on continuous basis. Global Horizontal Irradiation at the collector panel is required to be measured.
   iv. Solar PV module back surface temperature shall be also monitored on continuous basis.
   v. 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.
   vi. Solar radiation and environment monitoring system shall have real time clock, internal reliable battery backup and data storage capacity to record data round the clock for a period of min. 1 year.
   vii. The data shall be recorded in a common work sheet chronologically date wise. The data file should be MS Excel compatible. The data shall be represented in both tabular and graphical form.
   viii. All instantaneous data shall be shown on the computer screen.
   ix. Historical data shall be available for USB download and analysis.
   x. Provision for Internet monitoring and download of data shall be incorporated.
   xi. Remote Monitoring and data acquisition through Remote Monitoring System software at the DMRC site with latest software/hardware configuration and service connectivity for online / real time data monitoring/control complete to be supplied and operation and maintenance/control to be ensured by the supplier. Provision for interfacing these data on DMRC control server and portal in future.

23. METERING
   a) Metering panel shall be installed as near as possible, to the point of evacuation of power to grid.
   b) The bidirectional electronic energy meter (0.5 S class) shall be installed for the measurement of import/Export of energy.
   c) An additional bidirectional electronic multifunctional meter (0.5S class), displaying parameter details like energy, power, voltage, current and power factor etc shall be installed in solar ACDB having a spare RS 485 port for DMRC use.

   Multifunctional meter model shall be prescribed by DMRC as per site requirement.
   d) The bidder must take approval/NOC from DMRC for the connectivity, technical feasibility, and synchronization of SPV plant and submit the same to DMRC before commissioning of SPV plant.
e) The solar developer shall also integrate the solar plant with the DMRC’s existing online central Energy monitoring portal, where DMRC monitors energy data of all DMRC’s solar plants.

24. **POWER CONSUMPTION**

a) Regarding the generated power consumption, priority need to be given for internal consumption first and thereafter any excess power can be exported to grid.

25. **PROTECTIONS**

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

25.1. **LIGHTNING PROTECTION**

The SPV power plants shall be provided with lightning & overvoltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC 62305 standards. The protection against induced high-voltages shall be provided by the use of metal oxide arrestors (MOVs) and suitable earthing such that induced transients find an alternate route to earth.

25.2. **SURGE PROTECTION**

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

25.3. **EARTHING PROTECTION**

a) Each array structure of the PV yard should be grounded/ earthed properly as per IS: 3043-1987. In addition the lighting arrester/masts should also be earthed inside the array field. Earth Resistance shall be tested in presence of the representative of DMRC as and when required after earthing by calibrated earth tester. PCU and ACDB should also be earthed properly.

b) Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential.

25.4. **GRID ISLANDING:**

a) In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as “islands.”

Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to
under and over voltage conditions shall also be provided.

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

25.5. DC Protection:- An inline fuse shall be provided at the end of positive terminal of the first module of each string, to ensure protection from High DC voltage in case of fault.

26. CABLES:- Cables of appropriate size to be used in the system shall have the following characteristics:

i. Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards

ii. Temp. Range:-10°C to +80°C.

iii. Voltage rating:-1100V.

iv. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation

v. Flexible and Armoured. All AC cables used in this contract shall be of armoured type.

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 FRLS compound formulated for outdoor use. FRLSZH cables shall be used in all underground areas.

vii. DC cables manufactured with EBXL & having anti-rodent properties shall be used. The DC cables from the SPV module array shall run through a UV-stabilized PVC conduit pipe of adequate diameter with a minimum wall thickness of 1.5mm.

viii. 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 ferrule or by other means so that the cable easily identified.

ix. The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25 years. In three phase systems, the size of the neutral wire size shall be equal to the size of the phase wires.

x. 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.

xi. Multi Strand, Annealed high conductivity copper conductor with XLPE insulation. Overall PVC/XLPE insulation for UV protection Armored cable for underground laying. All cable trays including covers to be provided. All cables
shall conform to the latest edition of IEC / equivalent BIS Standards. Cables for AC power from inverters to combiner Box/ACDB of DMRC shall be of Copper/Aluminium conductor as per the guidelines of inverter manufacturer’s recommendation.

However, cables from combiner box/ACDB to LT Panel of DMRC can be of Aluminium/Copper conductor as per the design of developer.

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 2%.

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%.

27. CONNECTIVITY

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the Distribution Code/Supply Code and amended from time to time. However, in this project following criteria will be followed for selection of voltage level in the distribution system for ready reference of the solar suppliers.

<table>
<thead>
<tr>
<th>Plant Capacity</th>
<th>Connecting voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 10 kW</td>
<td>240 V-single phase or 415 V-three phase at the option of the consumer.</td>
</tr>
<tr>
<td>Above 10 kW &amp;up to 100 kW</td>
<td>415 V – three phase</td>
</tr>
<tr>
<td>Above 100 kW</td>
<td>415 V- three Phase / 33 kV</td>
</tr>
</tbody>
</table>

a) DMRC has voltage levels of 415 V for LT and 33 kV for MV.

b) For large PV system (Above 100 kW) for commercial installation having large load, the solar power can be generated at low voltage levels and may be connected to selected 415 V LT/33 kV HT panel of DMRC. The transformers and associated switchgear would be provided by the SPV bidders. Connection on LT/HT panel of DMRC is in the scope of Developer.

c) Similarly, for Solar PV systems the power has to be transmitted by the SPV bidders to the nearest LT Panel available with sufficient rating for complete evacuation or new panel of required rating to be provided as above.

d) For carrying current more than 800 A Bus duct shall be used and it shall be Sandwich Type (IEC 61439 or the latest). Air insulated bus duct will not be accepted.

e) In case the capacity of Solar Plant is more than 1 MWp and existing power distribution at 415 V is not adequate to evacuate the energy generated, solar Developer will step up the system to 33 kV voltage and connect at the 33 kV system. For this purpose, transformer, switchgear cable and all other
associated equipment duly coordinated with the existing/planned system of DMRC, shall be provided by Solar Developer as part of this project itself. The HT panel/switchgear to be provided by the developer, shall comply to same specs as being followed by DMRC at the evacuation point of solar power at HT.

f) In case of evacuation of power at HT i.e 33kV etc, the integration of solar power system in DMRC SCADA (Supervisory Control and Data Acquisition System) shall be in the scope of Solar developer(or) the cost involved in such integration activity by DMRC shall be borne by Solar developer.

g) The bidder must take sanction/approval/NOC from the DMRC and DISCOMS for the connectivity of the plants to grid on net metering basis in the name of DMRC.

h) The connectivity of 1-1.5 MWp solar plant to be installed on stabling shed of Khyber Pass Depot shall be done at 415 V, 3-phase by providing step-up transformer & associated switchgear followed by step-down transformer & associated switchgear at either ends, i.e. interconnecting cable will be of 11 kV / 33 kV to reduce voltage drop.

28. **TOOLS & TACKLES AND SPARES:**

a) After completion of installation & commissioning of the power plant, necessary tools & tackles shall be maintained by the bidder for maintenance purpose.

b) A list of requisite spares in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes. Fuses, MOVs / arrestors, MCCBs etc. along with spare set of PV modules be indicated, which shall be maintained. 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.

29. **DANGER BOARDS AND SIGNAGES:**

a) Danger boards should be provided as and where necessary as per IE Act. /IE Rules as amended up to date. Three signage’s shall be provided one each at battery –cum- control room, solar array area and main entry in to the area. Text of the signage’s may be finalized in consultation with DMRC.

30. **FIRE EXTINGUISHERS:**

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

i. Portable fire extinguishers in the control room for fire caused by electrical short circuits.

ii. Sand buckets in the control room

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

32. **PLANNING AND DESIGNING:**
   Developer will engage proof consultant for checking of all Structural, Electrical and all other drawings and designs relating to this solar power project
   a) 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 DMRC/Owner for approval.
   
b) DMRC reserves the right to modify the landscaping design, Layout and specification of sub-systems and components at any stage as per local site conditions/requirements.
   
c) Prior to submission of drawings to DMRC, Developer will engage third party agency (proof consultant / Chartered engineer) for checking of all Structural, Electrical and all other drawings and designs relating to this solar power project.
   
d) The same third party agency will have to verify the installation after completion, whether it is safe and is as per the design approved.
   
e) The third party agency employed by the developer should have earlier experience of such works.
   
f) The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidder shall submit three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

33. **DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT:**
   The Contractor shall furnish the following drawings after Award/Intent and obtain approval:-
   
a) General arrangement and dimensioned layout.
   
b) Schematic drawing showing the requirement of SPV panel, Power conditioning. Unit(s)/ inverter, Junction Boxes, AC and DC Distribution
Boards, meters etc.

c) Structural drawing along with foundation details for the structure.

d) Itemized bill of material for complete SPV plant covering all the components and associated accessories.

e) Layout of solar Power Array.

f) Shadow analysis of the area.

g) Guaranteed Technical Particular (GTP) of Solar PV modules, inverters, Remote monitoring system, DC cables, AC cables, Junction Box.

34. **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 maximum energy requirements depending upon the area of rooftop available, the remaining energy requirement of the office/residential buildings will be met by drawing power from grid.

35. **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.

35.1 **Safety at site**

(a) **One safety engineer per 1 MWp & penalty for not following safety**

- Solar developer shall engage one qualified safety engineer for every 1 MWp capacity or for every 3 km which ever is less, to ensure safe work environment during the execution stage of work.
- If found, that safety engineer is not available at site suitable penalty of Rs. 10,000/- (Rupees Ten Thousand Only) shall be imposed per violation/instance on solar developer after issuing of first warning.

(b) **Walkway Design specs**

- Solar developer has to install walkway on the rooftop to ensure safety during solar work. The minimum width of walkway to be installed shall be 400 mm with a railing height of minimum 750 mm.
- Walkway shall be installed on the rooftop before the start of actual solar installation work, so that the safety of worker can be ensured and also damage to roof sheet can be avoided.

(c) **Hot Works permit format & Compulsory submission of Certificate of welder**

- Solar developer shall mandatorily submit Certificate of welder engaged
before start of work for safe and proper operation.

(d) **Safety document format**

- Solar developer shall mandatorily conduct an overall safety analysis of all the execution sites and submit safety report to mitigate the probable hazards during the execution of work and shall ensure their compliance at site.
- The safety report thus prepared shall be submitted to DMRC for the approval of DMRC safety wing.

(e) **Uniform of workers & i-card**

- Solar developer shall mandatorily issue I-cards to all the workers engaged for work, the details of the same shall be submitted to DMRC to ensure controlled access.
- All the workers shall be provided with uniforms, if found not complied suitable penalty of Rs. 1,000/- (Rupees One Thousand Only) shall be imposed after issuing of first warning for each instance for each worker.

(f) **Lifeline runners**

- The solar developer shall provide atleast 15 lifeline runners during the installation of lifeline. If found not compliant suitable penalty shall be imposed.

(g) **Fall arrester design**

- As per site requirement, at times solar developer may have to install Fall arrester and safety net to ensure safe working, the design of Fall arrester and specifications of safety net to be installed shall be submitted to DMRC for review & approval prior to start of work to ensure uniformity of design and safety of worker during execution.

(h) **Indemnity bond format**

- The solar developer shall duly submit the indemnity bond before start of work at site. This shall be submitted in the format attached separately for each site.

(i) **Crane/Hydra certificate**

- To ensure safe material handling and movement in DMRC premises, the solar developer shall mandatorily submit max loading certificate of Hydra and its instructor license before start of material handling work.
- Solar developer shall prepare site specific method statement which shall include the placement of hydra/crane, calculations establishing the safe operation of hydra for this particular site based on loading curve of the boom of hydra etc.
36. **RE-POWERING:-**

   During the term of agreement, the power producer with the consent of purchaser can change the solar power producing equipments by replacing with higher efficient and higher capacity equipments in the same area as provided for solar PV power plant. This shall be without any change of conditions and tariff of this agreement and without any liability to the purchaser. Cost of shifting of any facilities in the premises or any other cost arising due to above change accrued by purchaser shall be compensated by the power producer.

37. **Automatic Cleaning System:-**

   Considering the limitation of time for carrying out O&M activities on the Metro Station & Depot, the developer shall strive to install an automatic cleaning system, which shall become an integral part of solar installation, till an full proof automatic cleaning system is developed/provided, atleast a network of sprinkler system covering the entire modules shall be installed, to reduce the requirement of manual cleaning (or) increase the frequency of carryout manual cleaning.
TECHNICAL PARAMETER OF PV MODULE AND VARIOUS OTHER COMPONENTS FOR USE IN GRID CONNECTED SOLAR POWER PLANTS

All components of the PV plant shall be in accordance with technical specifications given in relevant IS/ IEC Standards. The design and commissioning also shall be as per latest IS/ IEC standards. The following are some of the technical measures required to ensure quality of the major components used in grid connected solar power Projects.

Under this RfS, use of both Solar Photo voltaic (SPV) cells and Modules manufactured domestically as per specifications and testing requirement fixed by MNRE are mandatory for installation of awarded Solar PV power Plant.

1. PV MODULE QUALIFICATION

The PV modules used in the grid connected solar power Projects must qualify to the latest edition of any of the following IEC PV module qualification test or equivalent Indian standards.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC 61215-1 Ed. 1.0</td>
<td>Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1: Test requirements</td>
</tr>
<tr>
<td>IEC 61215-1-1 Ed. 1.0</td>
<td>Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-1: Special requirements for testing of crystalline silicon photovoltaic (PV) modules</td>
</tr>
<tr>
<td>IEC 61215-1-2 Ed. 1.0</td>
<td>Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-2: Special requirements for testing of thin-film Cadmium Telluride (CdTe) based photovoltaic (PV) modules</td>
</tr>
<tr>
<td>IEC 61215-1-3 Ed. 1.0</td>
<td>Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-3: Special requirements for testing of thin-film amorphous silicon based photovoltaic (PV) modules</td>
</tr>
<tr>
<td>IEC 61215-1-4 Ed. 1.0</td>
<td>Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-4: Special requirements for testing of thin-film Cu(In,GA)(S,Se) based photovoltaic (PV) modules</td>
</tr>
<tr>
<td>IEC 62108 Ed. 2.0</td>
<td>Concentrator photovoltaic (CPV) modules and assemblies - Design qualification and type approval</td>
</tr>
<tr>
<td>IEC 61730-1 Ed. 2.0</td>
<td>Photovoltaic (PV) module safety qualification - Part 1: Requirements for construction</td>
</tr>
<tr>
<td>IEC 61730-2 Ed.2</td>
<td>Photovoltaic (PV) module safety qualification - Part 2:</td>
</tr>
</tbody>
</table>
### Requirements for testing

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC 61701 Ed. 2</td>
<td>Salt mist corrosion testing of photovoltaic (PV) modules</td>
</tr>
<tr>
<td></td>
<td>(Applicable for coastal and marine environment)</td>
</tr>
<tr>
<td>IEC 62716 Ed. 1</td>
<td>Photovoltaic (PV) modules - Ammonia corrosion testing</td>
</tr>
<tr>
<td></td>
<td>(Applicable for wet atmospheres having high concentration of dissolved ammonia)</td>
</tr>
<tr>
<td>IEC TS 62804-1 Ed. 1</td>
<td>Photovoltaic (PV) modules - Test methods for the detection of potential-induced degradation - Part 1: Crystalline silicon</td>
</tr>
</tbody>
</table>

## 2. POWER CONDITIONERS/ INVERTERS

The Power Conditioners/Inverters of the SPV power plants must conform to the latest edition of IEC/ equivalent Indian Standards as specified below:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC 61683 Ed. 1</td>
<td>Photovoltaic systems - Power conditioners – Procedure for measuring efficiency</td>
</tr>
<tr>
<td>IEC 62109-1 Ed. 1</td>
<td>Safety of power converters for use in photovoltaic power systems - Part 1: General requirements</td>
</tr>
<tr>
<td>IEC 62109-2 Ed. 1</td>
<td>Safety of power converters for use in photovoltaic power systems - Part 2: Particular requirements for inverters</td>
</tr>
<tr>
<td>IEC 61000-6-2 Ed. 2</td>
<td>Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments</td>
</tr>
<tr>
<td>IEC 61000-6-4 Ed. 2.1</td>
<td>Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments</td>
</tr>
<tr>
<td>Reference</td>
<td>Description</td>
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<tr>
<td>IEC 60068-2-1:2007</td>
<td>Environmental testing - Part 2-1: Tests - Test A: Cold</td>
</tr>
<tr>
<td>IEC 60068-2-2:2007</td>
<td>Environmental testing - Part 2-2: Tests - Test B: Dry heat</td>
</tr>
<tr>
<td>IEC 60068-2-14:2009</td>
<td>Environmental testing - Part 2-14: Tests - Test N:Change of temperature</td>
</tr>
<tr>
<td>IEC 60068-2-30:2005</td>
<td>Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)</td>
</tr>
<tr>
<td>LVRT Compliance</td>
<td>As per the latest CERC Guidelines / Order/ Regulations</td>
</tr>
<tr>
<td>Grid Connectivity</td>
<td>Relevant CERC Regulations (including LVRT Compliance) and Grid Code as amended and revised from time to time</td>
</tr>
</tbody>
</table>

**As per the Solar Photovoltaics, Systems, Devices and Components Goods (Requirements for Compulsory Registration) Order, 2017, PV Modules and Inverters used in the grid connected solar power Projects shall conform to the Standards Specified as per below and bear the Standard Mark as notified by the Bureau of Indian Standards:**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Product</th>
<th>Indian Standard Number</th>
<th>Title of Indian Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Crystalline Silicon Terrestrial Photovoltaic (PV) Modules (Si wafer based)</td>
<td>IS 14286</td>
<td>Crystalline Silicon Terrestrial Photovoltaic (PV) modules - Design Qualification And Type Approval</td>
</tr>
<tr>
<td>No.</td>
<td>Sub-system Description</td>
<td>IS/Document Reference</td>
<td>Standard Description</td>
</tr>
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<tr>
<td>2</td>
<td>Thin-Film Terrestrial Photovoltaic (PV) Modules (a-Si, CIGS and CdTe)</td>
<td>IS 16077</td>
<td>Thin-Film Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval</td>
</tr>
<tr>
<td>3</td>
<td>PV Module (Si wafer and Thin film)</td>
<td>IS/IEC 61730 (Part 1)</td>
<td>Photovoltaic (PV) Module Safety Qualification Part 1 Requirements for Construction Photovoltaic (PV) Module Safety Qualification Part 2 Requirements for Testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IS/IEC 61730 (Part 2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IS 16221 (Part 2)</td>
<td>Safety of Power Converters for Use in Photovoltaic Power Systems Part 2 - Particular Requirements for Inverters</td>
</tr>
<tr>
<td>5</td>
<td>Utility – Interconnected Photovoltaic inverters</td>
<td>IS 16169</td>
<td>Test Procedure of Islanding Prevention Measures for Utility-Interconnected Photovoltaic Inverters</td>
</tr>
<tr>
<td>6</td>
<td>Storage battery</td>
<td>IS 16270</td>
<td>Secondary Cells and Batteries for Solar Photovoltaic Application General Requirements and Methods of Test</td>
</tr>
</tbody>
</table>

3. All cables and connectors to be used for installation of solar field must be of solar grade which can withstand harsh environment conditions for 25 years and voltages as per latest IEC standards. It is recommended that the Cables of 600-1800 Volts DC for outdoor installations should comply with the BS/ EN EN50618/ TUV 2pfg 1169/08/07 for service life expectancy of 25 years.

4. OTHER SUB-SYSTEMS/ COMPONENTS

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Other subsystems/ components used in the SPV Power Plants (Cables, Connectors, Junction Boxes, Surge Protection Devices etc.) must also conform to the relevant international/national Standards for Electrical Safety besides that for Quality required for ensuring Expected Service Life and Weather Resistance.

5. **AUTHORIZED TEST CENTRES**

The PV modules/ Power Conditioners deployed in the Power Plants must have valid test certificates for their qualification as per above specified IEC/ BIS Standards by one of the NABL Accredited Test Centres in India. In case of module types/ equipment for which such Test facilities may not exist in India at present, test certificates from reputed ILAC Member body accredited Labs abroad will be acceptable.

6. **WARRANTY**

PV modules used in grid connected solar power plants must be warranted for peak output wattage, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

The modules shall be warranted for at least 10 years for failures due to material defects and workmanship.

- The mechanical structures, electrical works and overall workmanship of the grid solar power plants must be warranted for a minimum of 5 years
- The Inverters/ PCUs installed in the solar power plant must have a warranty for 5 years.

7. **IDENTIFICATION AND TRACEABILITY**

Each PV module used in any solar power Project must use a RF identification tag. The following information must be mentioned in the RFID used on each module (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions):

i. Name of the manufacturer of PV Module
ii. Name of the Manufacturer of Solar cells
iii. Month and year of the manufacture (separately for solar cells and module)
iv. Country of origin (separately for solar cells and module)
v. I-V curve for the module at Standard Test Condition (1000 W/m², AM 1.5, 25°C)
vi. Wattage, Im, Vm and FF for the module
vii. Unique Serial No. and Model No. of the module
viii. Date and year of obtaining IEC PV module qualification certificate
ix. Name of the test lab issuing IEC certificate
x. Other relevant information on traceability of solar cells and module as per ISO 9000
Site owners would be required to maintain accessibility to the list of Module IDs along with the above parametric data for each module.

8. PERFORMANCE MONITORING

As part of the performance monitoring, the following shall be carried out:

a. The SPD shall maintain the list of Module IDs along with performance characteristic data for each module. This data shall be submitted to SECI/ MNRE.

b. The SPDs must install necessary equipment to continuously measure solar radiation on module plane, ambient temperature, wind speed and other weather parameters and simultaneously measure the generation of DC power as well as AC power generated from the plant. They will be required to submit this data to SECI and MNRE on line and/ or through a report on regular basis every month for the entire lifetime of the Project.

d. The SPDs shall provide access to SECI/ MNRE or their authorized representatives for installing any additional monitoring equipment to facilitate on-line transfer of data.

e. All data shall be made available as mentioned above for the entire lifespan of the project.

f. The plant SCADA should be Open Platform Communications (OPC) compliant with standard DNP3 and modbus control interfaces over TCP/ IP having the provision to add protocol converters to implement custom and secure communications protocol standard for providing real time online data (including but not limited to irradiance, plant generation (instantaneous/ daily/ monthly/ yearly), Daily Peak Generation, temperature, wind speed etc.) to SECI/ MNRE.

g. Fibre Optic Ethernet Ring network (Managed type Ethernet switches in each Control Room) should be provided between MCR & Inverter Control Rooms.

h. Web-based monitoring should be available, which should not be machine dependent. The web-based monitoring should provide the same screens as available in the plant. Also, it should be possible to download reports from a remote web-client in PDF or Excel format

9. SAFE DISPOSAL OF SOLAR PV MODULES

The SPD will ensure that all Solar PV modules from their plant after their ‘end of life’ (when they become defective/ non-operational/ non-repairable) are disposed in accordance with the “e-waste (Management and Handling) Rules, 2011” notified by the Government and as revised and amended from time to time.
Lifting Appliances and Gear

(a) Lifting appliances means a crane, hoist machinery, derrick, winch, gin pole, sheer legs, jack, hoist drum, slewing machinery, pulley blocks, hooks or other equipment used for lifting materials, objects or building workers and lifting gears means ropes, chain slings, web slings, shackles, hooks. Spreader beam, lifting lugs, wire ropes, lifting eyebolts and eye nuts and other accessories of a lifting appliance.

(b) No machine shall be selected to do any lifting on a specific job until its size and characteristics are considered against:

(i) the weights, dimensions and lift radii of the heaviest and largest loads;
(ii) the maximum lift height, the maximum lift radius and the weight of the loads that must be handled at each;
(iii) the number and frequency of lifts to be made;
(iv) how long the crane will be required on site;
(v) the type of lifting to be done (for example, is precision placement of loads important;
(vi) the type of carrier required (this depends on ground conditions and machine capacity In its operating quadrants: capacity is normally greatest over the rear, less over the side, and non-existent over the front;
(vii) whether loads will have to be walked or carried;
(viii) whether loads will have to be suspended for lengthy periods;
(ix) the site conditions, including the ground where the machine will be set up, access roads and ramps it must travel, space for erection and any obstacles that might impede access or operation.

(c) The contractor shall ensure that a valid certificate of fitness is available for all lifting appliances including synchronised mobile jacks, pre-stressing hydraulic jacks, jacks fitted with launching girders etc. and Employers approval before inducting to the site. Only after obtaining the approval from the Employer any lifting appliances and gear shall be used.
(d) The laminated photocopies of fitness certificate issued by competent person and plant & Machinery In-charge, the Employers' approval letter, the operators' photo, manufacturer's load chart and competency certificate shall always be either kept in the operator cabin or pasted on the lifting appliances however the same shall not hinder the operator/driver vision.

(e) All lifting appliances and loose gears shall be clearly marked for its safe working load and identification by stamping or other suitable means.

(f) The contractor shall also maintain a register containing a system of Identification of all tools and tackles, its date of purchase, safe working load, competent person date of examination etc.

**Test and periodical examination of lifting appliances and gears**

(a) All lifting appliances including all parts and gears thereof, whether fixed or movable shall be thoroughly tested and examined by a competent person once at least In every six months or after It has undergone any alterations or repairs liable to affect its strength or stability. Within the validity, if the lifting appliances are shifted to a new site, re-examination by the competent person for ensuring its safety shall also be done.

(b) Contractors can utilise the services of any competent person approved by Chief Inspector of Factories and as empanelled by the employer

(c) All alarms and signals like automatic safe load indicators (SLI), boom angle indicators, boom extension indicators, over lift boom alarm, swing alarm, hydraulic safety valves, mechanical radius indicators, load moment indicators etc. shall be periodically examined and maintained always in working condition.

(d) No lifting appliances or gears shall be over loaded in any circumstances except for testing under the supervision of Third party competent person & in controlled environment.

**Automatic safe load Indicators and Data Logger In Lifting Appliances**

(a) As stipulated in Rule 57 of DBOCW Rules, every lifting appliances and gears like cranes, hydraz etc, if so constructed that the safe working load may be varied by raising or lowering of the jib or otherwise shall be attached with an automatic indicator of safe working loads approved by Bureau of Indian
standards/ International certifying bodies which gives a warning to the operator whenever the load being handled exceeds the safe working limit.

(b) Provision of functional data logger with alert facility through SMS and web in all cranes shall be mandatory.

(c) Cut-out shall to be provided which automatically arrests the movements of the lifting parts of every crane if the load exceeds the safe working limit.

**Qualification of operator of lifting appliances etc**

(a) The contractor shall not employ any person to drive or operate a lifting machine like crane, hydra etc whether driven by mechanical power or otherwise to work as an operator unless he

   (i) IS above twenty eight years of age and possesses a valid heavy transport vehicle driving licence

   (ii) is absolutely competent and reliable;

   (iii) possesses the knowledge of the inherent risks involved in the operation of lifting appliances by undergoing a formal training at any institution of national importance acceptable to Employer;

   (iv) is medically examined periodically as specified in schedule VII of BOCW Rules.

**General requirements**

(a) The sweep area (work area) of the construction machinery shall be always free from obstructions.

(b) All hydraulic piping and fittings shall be maintained leak proof.

(c) The operator cab shall possess good and safe:

   i) Structure, windows and windshield wipers

   ii) Drivers chair and foot rest

   iii) Control handles

   iv) Cab Instrumentation

   V) Telecommunication

   vi) Cab out fitting
vii) Wind indicator with an adjustable set point shall be in a position representative for the wind Oh the crane. The indicator shall give continuous information regarding constant speeds and gusts.

**Mandatory rigging requirement**

(a) Rigging shall be done under experienced and qualified rigger only. All Load shall be adequately and safely rigged to prevent any danger.

(b) The primary requirement in rigging shall be to assess the weight of load before attempting any lift.

(c) All hooks shall be fitted with Master Rings having certificate of fitness from, competent person, so that the hooks are subjected to balanced vertical loading

(d) Only four legged slings shall be allowed which includes master link (ring), intermediate master link (ring) if necessary, chain / wire rope sling, sling hook or other terminal fitting.

(e) Hand spliced slings shall not be used at site for any lifting purpose.

(f) Requirements of outriggers

   i) All outriggers shall be fully extended and at all tyres are clear of the ground

   ii) Heavy duty blocking having large bearing area shall be necessary to prevent sinking of floats

   iii) Provision of heavy steel plates/ high density interconnected wooden logs of required dimension shall be used to uniformly distribute the load

   iv) The crane shall be setup on fully compacted ground.

(g) Minimum site illumination is to be ensured at all lifting operations.

(h) Slings shall not be wrapped in hook while lifting of material

**Overhead Gantries**

(a) All gantries shall have designed End Stoppers and Storm Brakes as per OEM. The design shall be submitted to DMRC after vetting by independent/Third party Designer

   As built certification by contractor's Plant & Machinery In charge shall be submitted.
(b) Railings shall be provided along the gantry track to avoid any worker getting injured from gantry crane or any of its part during its movement.

(c) Provision of anti collision devices shall be mandatorily ensured and kept in working condition.

(d) All gantry crane shall be provided with fail safe devices to avoid any hoist free fall in case of brake failure. Wireless operation of Gantry is prohibited.

(e) Fall arrestor arrangement shall be made at access location to the gantry to prevent free fall of the operator during ascend/descend.

(f) Preventive maintenance of Gantry Crane Hoist by OEM with safe worthiness certification during initial assembly and subsequently on six monthly basis shall be ensured.

(g) In respect of age of lifting appliances as specified in Appendix No. 16. contractor Plant & Machinery In-charge shall give indemnity/undertaking regarding the age of appliance.

(h) Helper shall be mandatory with each lifting appliances during their movement at site.

(i) Every Contractor shall appoint/nominate a qualified & competent Lifting Engineer or Lifting Consultant to monitor the lifting operation. The complete lifting operation shall be carried out under the supervision of lifting engineer/consultant. He shall be accountable for the lifting activity. Minimum age of 28 years for crane operators and 24 years for other site personnel like riggers, signalers and helpers etc. is mandatory.

**Pick & Carry Operation**

(a) Prohibition on Use of "Tractor transmission type Pick and Carry Hydra Crane":

Tractor transmission type Pick and Carry-1®’ Generation model is prohibited at DMRC works. Contractor shall mobilize "Truck transmission type" Pick and Carry (Hydra) Crane - minimum 2"'^ Generation model only.

(b) Pick and Carry operation is prohibited at all DMRC construction sites except for the tailing purpose for lowering of pile cage, erection of radio tower, electrical poles, exhaust structures etc.
(c) For transportation and lifting of small materials like rail sleepers, staging material, concrete blocks, shuttering material, barricade boards etc. loader cranes shall be used. Truck mounted cranes with storage facilities to be used for lifting of load and stowed in secured platform and then shifted.

(d) Pick & Carry cranes shall not be used for any lowering operation below the ground level.

Fixed lifting appliances

(a) Fixed lifting appliances like Tower Crane etc. shall be installed by competent person and in such a manner that appliance cannot be displaced by any load, vibration or other influence, operator is not exposed to danger from loads, ropes or drums.

(b) adequate clearance is provided between parts or loads of lifting appliance and the permanent structure such as walls & objects like posts or any electrical conductors.

(c) all tower crane operators shall be trained and capable to work at height are deployed to operate tower cranes

(d) the ground on which a tower crane stands has adequate bearing capacity and shall be firmed & levelled properly. Such cranes are erected at a reasonably safe distance from excavation and be operate within limits as specified by manufacturer.

(e) tower cranes are sited In such a way that the loads are not handled over any occupied premises, public thoroughfares, railways or near power cables etc other than construction work.

(f) when two or more cranes are operated at same place, measures to ensure positive and proper communication between operators of such cranes to avoid any danger or dangerous occurrences.

(g) fall arrestor arrangement shall be made at access location to the tower crane to prevent free fall of the operator during ascend/descend.

Moveable Lifting appliances

All moveable tower cranes shall be checked and certified for their safe worthiness by
the plant and machinery in charge of the contractor after its installation. All original equipment manufacturers (OEM) recommendation for Installation and use shall be strictly complied.

**Winches**

Every contractor shall ensure that;

(i) winches are not used if control levers operate with excessive friction or play.

(ii) adequate protection is prodded to winch operator against abnormal weather.

(iii) control levers are secured in the neutral position and winches shall be power shut-off whenever winches are left unattended.

(iv) No worker is authorised to transfer, alter or adjust electric control circuits except electrician along with winch operator.

(v) apart from mechanical brakes, winches shall also have the provision of OEM fitted Electrically operated braking system.

(vi) Anchoring and stability of the winches shall be ensured and certified by P&M team.

(vii) Standard counter weight as per OEM recommendation shall be used.

**Vacuum and Magnetic lifting gears**

Every contractor shall ensure that

(i) no vacuum lifting gear, magnetic lifting gear or any other lifting gear where load on it is held by adhesive power, be used while workers are performing operations beneath such gear.

(ii) lifting gear used in work shall be provided with an alternative supply of power, such as batteries which may come in operation incase of power failure.

(iii) no worker shall be allowed to work within the swinging zone of the lifting gear or load or material suspended to such gear.

**Operation of Lifting Appliances**

Every contractor shall ensure that:
(i) the complete lifting operation shall be governed by signals as per established standards.

(ii) Adequate measures to be taken to ensure that no worker is allowed to stand or pass under the load.

(iii) No lifting appliances shall be left by the operator while power is on or load is suspended.

(iv) After completion of the lifting operation, all doors of the appliances shall be closed by the operator and ignition/operation key should be handed over to competent reliever operator or site In-charge.

(v) No person shall (e) allowed to rides or sit on a suspended load.

(vi) Every receptacle/material bucket used for hoisting bricks, tiles, or other material shall be enclosed from all side including bottom completely to prevent fall of any material. No wheel barrow shall be used to lift or lower the material. Such receptacle or bucket shall not be overloaded or the material shall not cross the top level of the bucket.

(vii) No material shall be raised or lowered or slewed which can leads to sudden jerks to appliances.

(viii) No load shall be slewed over public areas without stopping the pedestrians and road traffic first. Measures shall be adopted to divert the traffic during lifting/lowering operation requiring long duration traffic stoppage.

(ix) All loads are provided with minimum two tag lines to ensure that the load can be controlled at all times.

(x) No close working to any live overhead power line is permitted without system of a ‘Permit to Work’ and prior permission of the employer shall be obtained before performing such operation.

(xi) During shifting of material near open edges, signalman and other workers shall not be allowed to lean out for communicating with ground staff unless they are provided with full body safety harness duly anchored with sturdy points.

(xii) Danger zone shall be identified and cordoned off for all lifting appliances during their operation.
(xiii) Appropriate measures shall be adopted to prevent foot of the derrick to lift out of its socket or support.

(xiv) All guy ropes of the derrick shall be adequately anchored to rigid points and should in tension with the use of turn buckle without any sagging.

(xv) A register shall be maintained for fitness of the derrick which shall include all elements like derrick setup, anchoring, lifting tools & tackles, means of access and should be filled & signed after every shifting of the derrick.

(xvi) All lifting appliances, gears, tools & tackles shall be maintained in good condition at all times to avoid any damage to them. Slings shall be discarded once they get any sign of deterioration beyond permissible limit defined by OEM and authenticated by Plant & Machinery in-charge.

(xvii) All lifting gears & slings shall be stamped or appropriate tags for their identification no & SWL

(xviii) Knotting/wrapping of chains & slings shall not be allowed at site.

(xix) No person shall be allowed to be raised, lowered or carried by lifting appliances except on man hoist/elevator or on suspended platform or elevated working platforms. Prior permission of employer shall be obtained before permit to use.

(xx) Lifting appliances shall not be used for any dragging or pulling purposes. Contract shall refer to 75% capacity load chart for ascertaining the suitability of crane for safe lifting of load.

(xxi) During tandem lift, available capacity of crane in respect of SWL shall be considered after reduction of 15% for 75% (DIN) load chart respectively. In addition, additional derating as advised by third party testing and certified agency shall also apply

(xxii) During hoisting of long material, use of suitable lifting beam is recommended.

(xxiii) Lifting operation for handling load above one ton shall not be allowed without approval of lift plan/study and permit to work. The lift plan/study as well as checklist & work permit shall be signed by the nominated lifting engineer before performing any lifting operation.
(xxiv) No person shall be allowed to rig or de-rig at height unless safe means of access is provided.

(xxv) Only original equipment manufacturer (OEM) supplied/provided load chart shall be used during lifting operation.

(xxvi) Before performing any lifting operation, all electronic devices, control levers, hydraulic oil, wind pressure etc. shall be checked and necessary spare parts to be kept in stock to handle any breakdown during time round lifting operation.

(xxvii) All underground utilities shall be identified and necessary measures shall be adopted before set up of cranes for lifting.

(xxviii) Loose as well as long material shall be adequately tied up with each other before lifting.

(xxix) All equipments including Electrical panels. Hoist if gantries etc shall only be lifted with the help of all lifting point/eye bolts as provided & recommended by the original equipment manufacturer. Safe slinging shall be ensured.

(XXX) Lifting point shall be considered on the I-Giders/U Girder/C Girder/Steel girdar/parapet etc during the casting of the same. Design load calculation for the same should be conducted.

(XXI) Lifting and lowering of the plant & machines like transit mixer, excavator, tractor etc shall be done as per recommendation from the Original Equipment Manufacturer.

(XXII) Certification from designer for the stability and load bearing of "A" frame used for lifting of the escalators shall be obtained before its use.

(XXIII) All lifting activities shall be stopped in case of high speed wind and similar adverse whether condition or as prescribed by the crane manufacturer.

(XXIV) All cranes shall be provided with fail safe devices to avoid any hoist free fall in case of brake failure.
## GENERAL INFORMATION ABOUT THE BIDDER

### A. BIDDER INFORMATION SHEET

<table>
<thead>
<tr>
<th>Name of the Equity</th>
<th>Type and Number Of shares owned</th>
<th>Equity % of</th>
<th>Extent of Voting Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>holder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Legal status of the Bidder

Sole Proprietorship Firm / Partnership Firm / Private Limited Company / Public Limited Company / Joint Venture / Consortium (Please tick one)

**In case of JV/Consortium, Legal name of each partner with percentage participation (also provide information of each member in separate sheet (page 2 of 2))**

<table>
<thead>
<tr>
<th>Legal Name of JV/Consortium member</th>
<th>% participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
</tbody>
</table>

### Lead member of JV/Consortium

**Bidder’s legal address in India, telephone numbers, fax numbers, email address for communication**

**Bidder’s authorized signatory (name, designation,**
Bidder’s authorized representative (name, designation, address, contact no.)

**FOLLOWING NEEDS TO BE SUBMITTED BY THE BIDDER: (by each member in case of JV/consortium):**

- **a)** Affidavit in case of Proprietary firm.
- **b)** Partnership Deed in case of partnership firm.
- **c)** Memorandum & Article of Association in case of a Public/Private limited company.
- **d)** In case of JV/Consortium, MoU/Agreement (duly notarized) entered into by the joint venture / consortium members, containing intended percentage participation, nomination of Lead Member and division of responsibility to clearly define the work of each member etc.
- **e)** Authorization/POA in favour of authorized signatory of bidder to sign the tender, and also in favour of authorized representative of each member in case of JV/Consortium.

**Note:** Bidder’s authorised representative shall be deemed to have authority of the Bidder to receive and deliver any correspondence and attend meetings with DMRC related to the tender.
## B. JV/CONSORTIUM MEMBER INFORMATION

<table>
<thead>
<tr>
<th>MEMBER – 1</th>
<th>MEMBER – 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JV/Consortium Member’s Legal Name</strong></td>
<td><strong>JV/Consortium Member’s Legal Name</strong></td>
</tr>
<tr>
<td><strong>Legal status of the Member</strong></td>
<td><strong>Legal status of the Member</strong></td>
</tr>
<tr>
<td>Sole Proprietorship Firm / Partnership Firm / Private Limited Company / Public Limited Company (Tick any one)</td>
<td>Sole Proprietorship Firm / Partnership Firm / Private Limited Company / Public Limited Company (Tick any one)</td>
</tr>
<tr>
<td><strong>Member’s country of constitution</strong></td>
<td><strong>Member’s country of constitution</strong></td>
</tr>
<tr>
<td><strong>Member’s legal address, telephone numbers, fax numbers, email address</strong></td>
<td><strong>Member’s legal address, telephone numbers, fax numbers, email address</strong></td>
</tr>
<tr>
<td><strong>Member’s authorized representative (name, designation, address)</strong></td>
<td><strong>Member’s authorized representative (name, designation, address)</strong></td>
</tr>
</tbody>
</table>

**SIGNATURE OF AUTHORIZED SIGNATORY**

**ON BEHALF OF BIDDER**
**SECTION-IV**

**FORMAT-B**

*(To be submitted in a separate package as financial bid as per clause 3.10.1 (C) of Section-1)*

Contract: -CE/SPV-07

**PRELIMINARY ESTIMATE OF COST OF SOLAR PV PROJECT**

Project Capacity: 3 MWp (refer clause 2.2)

Location: _______

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Particulars</th>
<th>Estimated Cost (in Lakh INR) (in figures)</th>
<th>Estimated Cost (in Lakh INR) (in words)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PV Modules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Land Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Civil and General Works</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Mounting Structures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Power Conditioning Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Evacuation Cost up to Inter-connecting point</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Cables and Transformers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Preliminary and Pre-Operative Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>including IDC and Contingency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Others (Please specify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td><strong>Total Project Cost for 3 MWp</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dated the _______day of _____, 20___

Thanking you,
We remain,
Yours faithfully,
Name, Designation, Seal an Signature of Authorized Person in whose name Power of Attorney/Board Resolution/Declaration.

(This shall be certified by CA also)
SECTION – IV

FORMAT FOR SUBMISSION OF FINANCIAL BID

(The Covering Letter should be submitted on the Letter Head of the Bidding Company/ Lead Member of Consortium)

Ref. No. ___________________________ Date: __________

From: ______ (Insert name and address of Bidding Company/ Lead Member of Consortium) ___________________________

Tel.#:________________________________________
Fax#:________________________________________
E-mail address#________________________________________

To
CE/Contract
Delhi Metro Rail Corporation
5th Floor, Metro Bhawan,
Barakhamba Road, Fire Brigade Lane,
Connaught Place, New Delhi-110001


Dear Sir/Madam,

I/ We, ___________________________ (Insert Name of the Bidder) enclose herewith the Financial Proposal for selection of my/ our firm capacity of 3 MW in India as Bidder for the above.

Our Equal Annual Installment quote is Rs._____________/year/MWp (In Words) with the VGF as specified in the RfS ____________.

Dated the ________ day of ______, 20__. 
Thanking you,

We remain,

Yours faithfully

Note:- The Equal Annual Installment shall not be greater than
Rs__________/year/MWp.

Name, Designation, Seal and Signature of Authorized Person in whose
name Power of Attorney/ Board Resolution/ Declaration.

Date:-…………………………… Signature:-

…………………………

Place:-…………………………… Name:-

……………………………

Address: - Company

Seal
SECTION -V
FORMATS FOR SUBMITTING RFS

Format-1

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

Contract: -CE/SPV-07 dated_________

From: ______________(Insert name and address of Bidding Company)
_________________
_________________

Tel.:-…………………
Fax: -…………………
E-mail address:-…………………….

To,
DMRC Limited
Metro Bhawan, Fire Brigade Lane,
Barakhamba Road, New Delhi -1100001

Sub:-Bid for “Contract CE/SPV-07 - Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd.”

Dear Sir,
We, the undersigned….[insert name of the ‘Bidder’] having read, examined and understood in detail the RFS Document for Contract CE/SPV-07 - Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd. in India hereby submit our Bid comprising of Price Bid and Techno Commercial Bid. We confirm that neither we nor any of our Parent Company / Affiliate/Ultimate Parent Company has submitted Bid other than this Bid directly or indirectly in response to the aforesaid RFS.
We give our unconditional acceptance to the tender dated………..and RFS Documents attached thereto, issued by DMRC, as amended. As a token of our acceptance to the RFS Documents, the same have been initialed by us and enclosed to the Bid. We shall ensure that we execute such RFS Documents as per the provisions of the RFS and provisions of such RFS Documents shall be binding on us.

1. Bid Capacity

We have bid for the following capacities in various sites as specified in this tender document and have accordingly submitted our Price Bids for the same:

<table>
<thead>
<tr>
<th>Modified Annuity Model</th>
<th>Approximate capacity in kWp</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TOTAL</td>
</tr>
<tr>
<td></td>
<td>3000</td>
</tr>
</tbody>
</table>

2. Bid Bond

We have enclosed a Bid Bond of Rs………..(Insert Amount), in the form of bank guarantee no………..(Insert number of the bank guarantee) dated………..(Insert date of bank guarantee) as per Format ……..from ……..(Insert name of bank providing Bid Bond) and valid up to ……..in terms of Clause ……..of this RFS.

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

4. In case we are a Successful Bidder, we shall furnish a declaration at the time of commissioning of the Project to the affect that neither we have availed nor we shall avail in future any VGF other than received from DMRC for implementation of the project.

5. Acceptance

We hereby unconditionally and irrevocably agree and accept that the decision made by DMRC Limited in respect of any matter regarding or arising out of the RFS shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process.

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

6. Familiarity with Relevant Indian Laws & Regulations

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

Details of the contact person are furnished as under:

<table>
<thead>
<tr>
<th>Name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Designation</td>
<td></td>
</tr>
<tr>
<td>Company</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Phone Nos.</td>
<td></td>
</tr>
<tr>
<td>Fax Nos.</td>
<td></td>
</tr>
<tr>
<td>E-mail address</td>
<td></td>
</tr>
</tbody>
</table>

8. We are enclosing/attaching herewith the Envelope-I (Covering letter, Processing fee and Bid Bonds) Envelope-II (Techno-Commercial documents) and Envelope III (Price Bids) containing duly signed formats, each one duly sealed separately, in one original as desired by you in the RFS for your consideration.

It is confirmed that our Bid is consistent with all the requirements of submission as stated in the RFS and subsequent communications from DMRC Limited. The information submitted in our Bid is complete, strictly as per the requirements stipulated in the RFS and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid. We confirm that all the terms and conditions of our Bid are valid for acceptance for a period of 180 days from the Bid deadline. We confirm that we have not taken any deviation so as to be deemed non-responsive.

Dated the ______________ day of ________, 20__

Thanking you,

We remain,

Yours faithfully,

Name, Designation and Signature of Authorized Person in whose name Power of Attorney/Board Resolution as per Clause ...............is issued.
### GENERAL PARTICULARS OF THE BIDDER

<table>
<thead>
<tr>
<th>Name of the Company</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Office Address</td>
<td></td>
</tr>
<tr>
<td>Telephone, Telex, Fax No</td>
<td></td>
</tr>
<tr>
<td>E-mail</td>
<td></td>
</tr>
<tr>
<td>Web site</td>
<td></td>
</tr>
<tr>
<td>Authorized Contact Person(s) with name, designation Address and Mobile Phone No., E-mail address/ Fax No. to whom all references shall be made</td>
<td></td>
</tr>
<tr>
<td>Year of Incorporation</td>
<td></td>
</tr>
<tr>
<td>Have the bidder/Company ever been Debarred By any Govt. Dept. / Undertaking for undertaking any work.</td>
<td></td>
</tr>
<tr>
<td>Reference of any document information attached by the Bidder other than specified in the RFS.</td>
<td></td>
</tr>
<tr>
<td>Whether the Bidder wishes to form a Project Company for execution of work</td>
<td>Yes / No</td>
</tr>
<tr>
<td><strong>Bidding company is listed in India</strong></td>
<td><strong>Yes/No</strong></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Details of the Ownership structure</strong> (Details of persons owning 10% or more of the Total Paid up equity of the Bidding Company in the Format as below)</td>
<td></td>
</tr>
</tbody>
</table>
FORMAT FOR BID BOND

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

Ref._______________  Bank Guarantee No._______________

Date:_______________

In consideration of the[Bidder] (hereinafter referred to as 'Bidder') submitting the response to RFS inter alia for selection of the Project under of the capacity of 3MWp in the selected sites of DMRC in response to the Contract CE/SPV-07 - Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd. dated___ issued by DMRC Limited (hereinafter referred to as DMRC) and DMRC considering such response to the RFS of........[insert the name of the Bidder] as per the terms of the RFS, the [insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to DMRC at [Insert Name of the Place from the address of DMRC] forthwith on demand in writing from DMRC or any Officer authorized by it in this behalf, any amount upto and not exceeding Rupees -----[Insert amount not less than that derived on the basis of clause 3.14 of RFS of cumulative capacity only, on behalf of M/s.[Insert name of the Bidder].

This guarantee shall be valid and binding on this Bank up to and including [insert date of validity in accordance with Clause 3.14 of this RFS] and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to (Rs. ________ only). Our Guarantee shall remain in force until [insert date of validity in accordance with Clause 3.14 of this RFS]. DMRC shall be entitled to invoke this Guarantee till [Insert date which is 30 days after the date in the preceding sentence].
The Guarantor Bank hereby agrees and acknowledges that the DMRC shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

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

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

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

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

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

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

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to (Rs. ________ only) and it shall remain in force until [Date to be inserted on the basis of Clause 3.14of this RFS] with an additional claim period of thirty (30) days thereafter. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if DMRC serves upon us a written claim or demand.

Signature ____________________
Name___________________
Power of Attorney No._______________

For
______[Insert Name of the Bank]__
Banker's Stamp and Full Address. Dated this ____ day of ____, 20__
FORMAT FOR PERFORMANCE BANK GUARANTEE (PBG)

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

In consideration of the_________________ [Insert name of the Bidder] (hereinafter referred to as selected Solar Power Developer’) submitting the response to RFS inter alia for selection of the Project for Contract CE/SPV-07—“Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd.” of the capacity of 3MWp, at ……………[Insert name of the place] in response to the RFS dated………… issued by DMRC Limited(hereinafter referred to as DMRC) and DMRC considering such response to the RFS of………[insert the name of the selected Solar Power Developer] (which expression shall unless repugnant to the context or meaning thereof include its executers, administrators, successors and assignees) and selecting the Solar Power Project of the Solar Power Developer and issuing Letter of Acceptance No ------- to (Insert Name of selected Solar Power Developer) as per terms of RFS and the same having been accepted by the selected SPD or a Project Company, M/s -------------- {a Special Purpose Vehicle (SPV) formed for this purpose}, if applicable ].

As per the terms of the RFS, the ______________ [insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally pay to DMRC without demur at New Delhi forthwith on demand in writing from DMRC or any Officer authorized by it in this behalf, any amount upto and not exceeding Indian Rupees__________ [Total Value] only, on behalf of M/s ______________ [Insert name of the selected Solar Power Developer / Project Company]

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

Our liability under this Guarantee is restricted to INR ___________ (INR. ___________ only). i) Nos ----- dated ----, Value ------; ii) Nos-----dated ----,
Value -----------------).

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

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

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

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by ___________ [Insert name of the selected Solar Power Developer / Project Company as applicable] and/or any other person. The Guarantor Bank shall not require DMRC to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against DMRC in respect of any payment made hereunder.

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

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

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

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

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to
DMRC and may be assigned, in whole or in part, (whether absolutely or by way of security) by DMRC to any entity to whom DMRC is entitled to assign its rights and obligations under the RfS.

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

Signature ............................
Name:- .................................
Power of Attorney No.: - ......................
For
[Insert Name of the Bank] ..........................................................
Banker's Stamp and Full Address.
Dated this ____ day of ____, 2017
Witness:
1. .................................
Signature
Name and Address

2. .................................
Signature
Name and Address

Notes:

1. The stamp papers of appropriate value shall be purchased in the name of the Bank, who issues the ‘Bank Guarantee’.
2. The ‘Bank Guarantee’ shall be from the Scheduled Commercial Bank based in India, acceptable to Employer, List of Banks enclosed as per Annexure-B
3. The ‘Bank Guarantee’ must be issued on the Structured Financial Messaging System (SFMS) platform.
4. A separate copy of the BG has to be sent by the issuing bank to the Employer's bank through SFMS. The details of Employer's bank are as under.

   ICICI Bank Ltd.,
   9A, Phelps Building, Connaught Place, New Delhi – 110001 IFSC
   Code: - ICIC000007.

5. Following codes are to be used by issuing bank for the purpose of Confirmation and amendment in Bank Guarantees:

<table>
<thead>
<tr>
<th>Code</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT760</td>
<td>Confirmation of Bank Guarantee</td>
</tr>
<tr>
<td>MT767</td>
<td>Amendment in bank Guarantee</td>
</tr>
</tbody>
</table>

6. Bank Guarantee issued on the SFMS platform with any other code other than mentioned above for the purpose shall not be acceptable to the Employer.
## CHECK LIST FOR BANK GUARANTEE

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Details of checks</th>
<th>YES/NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Is the BG on non-judicial Stamp paper of appropriate value, as per applicable Stamp Act of the place of execution.</td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td>Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on back of stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be purchased either in the name of executing Bank or the party on whose behalf the BG has been issued. Also the Stamp Paper should not be older than six months from the date of execution of BG).</td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td>Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG?</td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td>Is each page of BG duly signed / initialed by executants and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed Performa?</td>
<td></td>
</tr>
<tr>
<td>e)</td>
<td>Does the Bank Guarantees compare verbatim with the Performa prescribed in the Bid Documents?</td>
<td></td>
</tr>
<tr>
<td>f)</td>
<td>Are the factual details such as Bid Document No. / Specification No., / LOI No. (if applicable) / Amount of BG and Validity of BG correctly mentioned in the BG</td>
<td></td>
</tr>
<tr>
<td>g)</td>
<td>Whether overwriting/cutting if any on the BG have been properly Authenticated under signature &amp; seal of executants?</td>
<td></td>
</tr>
</tbody>
</table>
POWER OF ATTORNEY

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

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

Know all men by these presents, We …………………………………………………….

(Name and address of the registered office of the Bidding Company as applicable) do hereby constitute, appoint and authorize Mr./Ms. ………………………………………… as our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for Contract CE/SPV-07 – “Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd.” in response to the NIT No……………………………… dated …………..  issued  by DMRC Limited (DMRC), New Delhi including signing and submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which the DMRC may require us to submit. The aforesaid Attorney is further authorized for making representations to the DMRC Limited, New Delhi and providing information / responses to DMRC, New Delhi representing us in all matters before DMRC, New Delhi and generally dealing with DMRC, New Delhi in all matters in connection without Bid till the completion of the bidding process as per the terms of the above mentioned NIT.

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

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

Signed by the within named …………………………………………………… (Insert the name of the executant company)

through the hand of
Mr. …………………………………………………….
duly authorized by the Board to issue such Power of Attorney

Dated this …………………………………. day of …………………
Accepted
…………………………………………………………
Signature of Attorney
(Name, designation and address of the Attorney)

Attested
…………………………………………………………
(Signature of the executants)

(Name, designation and address of the executants)
…………………………………………………………
Signature and stamp of Notary of the place of execution

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

WITNESS

1. …………………………………………………………………
   (Signature)
   Name……………………………………………………
   Designation ………………………………………

2. …………………………………………………………………
   (Signature)
   Name……………………………………………………
   Designation ………………………………………

Notes:
The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants(s) and the same should be under common seal of the executants affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the power of attorney shall be duly authorized by the executants(s) in this regard.
The person authorized under this Power of Attorney, in the case of the Bidding Company / Lead Member being a public company, or a private company which is a subsidiary of a public company, in terms of the Companies Act, 1956/2013, with a paid up share capital of more than Rupees Five Crores, should be the Managing Director / whole time director/manager appointed under section 269 of the Companies Act, 1956/2013. In all other cases the person authorized should be a director duly authorized by a board resolution duly passed by the Company.

Also, wherever required, the executants(s) should submit for verification the extract of the chartered documents and documents such as a Board resolution / power of attorney, in favor of the person executing this power of attorney for delegation of power hereunder on behalf of the executants (s).
FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT (AS PER CLAUSE 3.4)
(To be submitted on the letterhead of Bidding Company)

To,
DMRC Limited
Metro Bhawan, Fire Brigade Lane,
Barakhamba Road, New Delhi-1100001

Dear Sir,

Sub: - Bid for Contract CE/SPV-07 – “Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd.”

We submit our Bid/Bids for the total capacity of 3 MWp (Insert total offered capacity in MW; for Bids for which we submit details of our Financial Eligibility Criteria Requirements.

We certify that the Financially Evaluated Entity (ies) had an Annual Turnover and Net worth as specified in clause 3.4.3 of section I

<table>
<thead>
<tr>
<th>Name of Financially Evaluated Entity*</th>
<th>Relationship with Bidding Company**</th>
<th>Financial year</th>
<th>Year of Incorporation</th>
<th>Annual Turnover (Rs. Crore) as per Clause 3.4.3 (inRs. Crore)</th>
<th>Net worth as per Clause 3.4.3 (inRs. Crore)</th>
</tr>
</thead>
</table>

- Attach Separately Format-12 with this format.
* The Financially Evaluated Entity may be the Bidding Company itself.
** The column for “Relationship with Bidding Company” is to be filled in only in case financial capability of Parent Company and/or Affiliate has been used for
meeting Qualification Requirements.

Yours Faithfully

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

Name: -………………………
Date: -………………………
Place: -………………………

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

Name: …………………………
Date: …………………………
Place: …………………………

Notes:

Audited consolidated annual accounts of the Bidder may also be used for the
purpose of financial criteria provided the Bidder has at least 26% equity in each
company whose accounts are merged in the audited consolidated accounts and
provided further that the financial capability of such companies (of which accounts
are being merged in the consolidated accounts) shall not be considered again for the
purpose of evaluation of the Bid.
Format-8

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

To,

........................................
........................................
........................................

Dear Sir,

Sub: - Bid for Contract CE/SPV-07 – “Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd.”

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

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

<table>
<thead>
<tr>
<th>Name of Bidding Company</th>
<th>Name of the Affiliate of the Bidding Company/ Name of the Parent Company of the Bidding Company</th>
<th>Name of the Company having common control on the Affiliate and the Bidding Company</th>
<th>Percentage of Equity Holding of Parent Company in the Bidding Company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Strike out whichever is not applicable.

(Insert Name and Signature of Statutory Auditor or in practice Company Secretary of the Bidder or certified by CA)
Undertaking from the Financially Evaluated Entity or its Parent Company/Ultimate Parent Company

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

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

To,

.......  

Dear Sir,

We refer to the RFS No.............dated.........for Contract CE/SPV-07 – “Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd.”

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

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

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

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

We have attached hereto certified true copy of the Board Resolution Whereby the Board of Directors of our Company has approved issue of this Undertaking by the Company.
All the terms used herein but not defined, shall have the meaning as ascribed to the said terms under the RFS.

Signature of Chief Executive Officer/Managing Director

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

WITNESS

………………………………

(Signature)

Name…………………………

Designation……………………

………………………………

(Signature)

Name…………………………

Designation……………………
ANNEXURE-1 Work Experience

Participant's legal name ........................................
Date..........................................................

Group Member's legal name................................. Page ..........of .......... pages

For similar works as per clause no. 3.4.2

<table>
<thead>
<tr>
<th>Work Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contract Number</strong></td>
</tr>
<tr>
<td><strong>Contract Identification</strong></td>
</tr>
<tr>
<td>Award date</td>
</tr>
<tr>
<td>Completion date</td>
</tr>
<tr>
<td>Employer’s Name</td>
</tr>
<tr>
<td>Employer’s Address:</td>
</tr>
<tr>
<td>Telephone / Fax number:</td>
</tr>
<tr>
<td>E Mail</td>
</tr>
<tr>
<td>Role in Contract (Individual/JV/JVA member)</td>
</tr>
<tr>
<td>Completion Cost</td>
</tr>
<tr>
<td>If JV member, specify percentage participation in contract &amp; amount (Please refer Note-1)</td>
</tr>
<tr>
<td>Quantum of similar work in support of clause no. 3.4.2</td>
</tr>
</tbody>
</table>

**NOTE:**

1. Only the value of contract as executed by the applicant/member in his own name should be indicated. Where a work is undertaken by a group, JV/JVA only that portion of the contract which is undertaken by the concerned applicant/member should be indicated and the remaining done by the other members of the group be excluded. This is to be substantiated with documentary evidence.
2. Separate sheet for each work along with Clients Certificate and performance certificate six months in operation after the completion of work, to be submitted.

3. Only work experience certificate having stamp of Name and Designation of officer along with the Name of client shall be considered for evaluation. However, if any work experience certificate has been issued prior to 01.07.2019, same shall be considered for evaluation even if it is not stamped.
**ANNEXURE - 1A: Summary of Information provided in Annexure-1**

**Applicant’s legal name ...........................................**

Date......................................................

**Group Member’s legal name.............................. Page ..........of ............ pages**

<table>
<thead>
<tr>
<th>Name of Applicant (each member in case of group, JV/JVA)</th>
<th>Total Number of works As per clause no. 3.4.2 at the price level of as on date 30.11.2019</th>
<th>No. of contracts delayed, i.e., completed beyond the original date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:-**

1. In case the work was done as JV/JVA, only the value of work done by the applicant as per his Percentage participation must be given.

2. Reasons of delay whether on contractors account or on account of Employer in each applicable case need to be enclosed separately.
RFS No: Date :

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Component</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Installed Rooftop Solar PV Project capacity in (kWp)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Whether training was provided by installer for operation and maintenance of SPV plant. Note: Operation &amp; Maintenance (O&amp;M) of SPV Plant.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Whether the following documents were provided or not</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Installation manual (SPV system), certificates, catalogue, As Built drawings for (DC SLD, AC SLD, Plant Layout, Civil &amp; Structural drawings, SCADA drawings, Earthing drawing, Lightning drawings, Bill of Quantity (BOQ), Design sheet for Earthing calculations, other drawings, etc.,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Copy of the Warrantees and Guarantees of the different components of Solar PV system.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insurance as per RFS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recommended list of spares for 25 years.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Web link for Remote monitoring of SPV plant including username &amp; password to be provided installer to DMRC.</td>
<td></td>
</tr>
</tbody>
</table>
Performance Ratio (PR) should be minimum of 75% for initial commissioning acceptance.

Capacity utilization factor (CUF) should be certified by Owner of the plant/beneficiary during 2 years O&M period.

<table>
<thead>
<tr>
<th>4</th>
<th>Project cost allocated is Rs./Wpto</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost break up</td>
</tr>
<tr>
<td></td>
<td>Owner share: Rs. .................. / Wp</td>
</tr>
<tr>
<td></td>
<td>MNRE/Govt Share: Rs. ............... / Wp</td>
</tr>
</tbody>
</table>

**Declaration:**

1. It is to certify that all the information given above is true and correct to best of my knowledge. We are satisfied with the installation of SPV system and working satisfactorily as per above details.

Signature of Authorized Signatory on each page: ____________________

Name __________________________ Designation ____________________

Seal:
ANNEXURE- 2
Financial DATA

Applicant's legal name ............................ Date: - /- /----
Group Member’s legal name ............................ Page ........... of ............

Each Applicant or member of a JV must fill in this form

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Description</th>
<th>Financial Data for Latest Last 5 Years (Indian Rupees) (audited data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Total Assets</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Current Assets</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Total External Liabilities</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Current Liabilities (inclusive of provisions, if any)</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Annual Profits Before Taxes</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Annual Profits After Taxes</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Net Worth ([= 1 - 3])</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Working Capital ([=2 - 4])</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Return on Equity</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Annual turnover</td>
<td></td>
</tr>
</tbody>
</table>
Attach copies of the audited balance sheets, including all related notes, income statements for the last five audited financial years, as indicated above, complying with the following conditions.

1. Separate Performa shall be used for each member in case of JV/JVA.
2. All such documents reflect the financial data of the Applicant or member in case of JV, and not sister or Parent Company.
3. Historic financial statements shall be audited by Statutory Auditor of the Company under their seal & stamp and shall be strictly based on Audited Annual Financial results of the relevant period(s). No statements for partial periods will be accepted.
4. Historic financial statements must be complete, including all notes to the financial statements.
5. Applicants whose financial year closure falls in months other than March, may submit all relevant data for the last 5 years i.e. 2015, 2016, 2017, 2018 and 2019.
6. Return on Equity = Net Income / Shareholders Equity
   
   Return on Equity = Net Income is for the full fiscal year (before dividends paid to common stock holders but after dividends to preferred stock).
   
   Shareholders equity does not include preferred shares.

7. The above Annexure shall be duly certified by Chartered Accountant / Company Auditor under his signature & stamp.
CONSORTIUM AGREEMENT

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

THIS Consortium Agreement (“Agreement”) executed on this_________ day of _______ 2019 between M/s [insert name of Lead Member]  a Firm / Company incorporated under the laws of ________________________________ and having its Registered Office at ___________________ (hereinafter called the “Lead Member”, which expression shall include its successors, executors and permitted assigns)

and

M/s ________________________________ a Firm / Company incorporated under the laws of ________________________________ and having its Registered Office at __________________ (hereinafter called the “Technical Member”, which expression shall include its successors, executors and permitted assigns)

WHEREAS, each Member individually shall be referred to as the “Member” and both the Members shall be collectively referred to as the “Members” in this Agreement.

WHEREAS the DMRC Limited (hereinafter called DMRC or Employer), has invited response to Contract CE/SPV-07 – “Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd.”

WHEREAS the RFS documents stipulates that the Lead Member may enter into a Technical Consortium Agreement with another Company / Corporate entity to fulfill the Technical Eligibility Criteria as stipulated in the RFS document. The Members of the Bidding Consortium will have to submit a legally enforceable Consortium Agreement in a format enclosed with the RFS document.

NOW THEREFORE, THIS AGREEMENT WITNESSTH AS UNDER:

In consideration of the above premises and agreements all the Members in this Consortium do hereby mutually agree as follows

1. We, the Members of the Consortium and Members to the Agreement do hereby unequivocally agree that (M/s_______________), shall act as the Lead Member as defined in the RFS for self and agent for and on behalf of Technical Member

2. The Lead Member is hereby authorized by the Technical Member of the Consortium to bind the Consortium and receive instructions for and on their behalf.

3. The Lead Member shall be liable and responsible for ensuring the individual and collective commitment of each of the Members of the Consortium in discharging all of their respective obligations. Each Member further undertakes to be
individually liable for the performance of its part of the obligations without in any way limiting the scope of collective liability envisaged in this Agreement.

4. Subject to the terms of this Agreement, the Technical member shall be responsible for providing technical knowledge for “Design, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for a period of 25 years of Roof Top Solar PV power system in selected Sites/locations in DMRC” to the lead member.

5. In case of any breach of any commitment by any of the Consortium Members, the Lead Member shall be liable for the consequences thereof.

6. This Agreement shall be construed and interpreted in accordance with the Laws of India and courts at Delhi alone shall have the exclusive jurisdiction in all matters relating thereto and arising thereunder.

7. It is hereby further agreed that in case of being shortlisted, the Members do hereby agree that they shall abide by the terms & conditions of the RFS document.

8. It is further expressly agreed that this Agreement shall be irrevocable and shall form an integral part of the RFS submitted to DMRC and shall remain valid till completion of the job assigned to the Contractor.

9. The Lead Member is authorized and shall be fully responsible for the accuracy and veracity of the representations and information submitted by the Members respectively from time to time in the response to RFS.

10. It is hereby expressly understood between the Members that no Member at any given point of time, may assign or delegate its rights, duties or obligations under this agreement without the explicit permission of DMRC.

11. This Agreement
(a) Has been duly executed and delivered on behalf of each Member hereto and constitutes the legal, valid, binding and enforceable obligation of each such Member;
(b) Sets forth the entire understanding of the Members hereto with respect to the subject matter hereof; and
(c) May not be amended or modified except in writing signed by each of the Members and with prior written consent of DMRC. IN WITNESS WHEREOF, the Members have, through their authorized representatives, executed these present on the Day, Month and Year first mentioned above.

For M/s-------------------------[Lead Member] ------------------------

(signature, Name & Designation of the person authorized vide **Board Resolution** and **power of attorney**)

Dated

Witnesses:

1) Signature------------------------

Name:
Address:

2) Signature ---------------------
Name: 
Address:

For M/s--------------------------[Technical Member]
----------------------------------
(signature, Name & Designation of the person authorized vide Board Resolution Dated [●])

Witnesses
Format-14

UNDERTAKING FOR CORRUPT & FRAUDULANT PRACTICE

It is confirmed and declared that we, or any of our associate, have not been engaged in any fraudulent and corrupt practice and that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other items of work related to the award and performance of this contract and no agency commission or any payment which may be construed as an agency commission has been, or will be, paid and that the tender price will not any such amount.

STAMP & SIGNATURE OF AUTHORIZED SIGNATORY

NOTE:
1. In case of JV/Consortium, the undertaking shall be submitted by each member of the JV/Consortium.
2. The undertaking shall be signed by authorized signatory of the bidder or constituent member in case of JV/Consortium.
FORMAT- 15

(Undertaking as per clause 3.4.1 vii of Section-I)
We do hereby undertake that DMRC/ any Central / State government department / public sector undertaking / other government entity or local body has not banned business with us as on the date of tender submission. Also none of the work has been rescinded / terminated by DMRC / any Central or State Govt. Department/ Public Sector Undertaking / Other Govt. entity or local body after award of contract to us during last 3 years (from the last day of the previous month of tender submission) due to our non-performance.

STAMP & SIGNATURE OF AUTHORISED SIGNATORY

__________________________

Note:

1. In case of JV/Consortium, the undertaking shall be submitted by each member of the JV/Consortium.

2. The undertaking shall be signed by authorized signatory of the bidder. In case of JV/Consortium by the authorized signatory of the constituent members counter signed by the authorized signatory of bidder.
(Undertaking as per clause 3.4.1 viii of Section-I)

(UNDERTAKING FOR NOT BEING PENALISED IN A CONTRACT)

We do hereby undertake that we have not paid liquidated damages of 10% (or more) of the contract value in a contract due to delay or penalty of 10% (or more) of the contract value due to any other reason during last five years.

STAMP & SIGNATURE OF AUTHORISED SIGNATORY

__________________________________________

Note:

1. In case of JV/Consortium, the undertaking shall be submitted by each member of the JV/Consortium.

2. The undertaking shall be signed by authorized signatory of the bidder. In case of JV/Consortium by the authorized signatory of the constituent members counter signed by the authorized signatory of bidder.
(Undertaking as per clause 3.4.1 ix of Section-I)

(UNDERTAKING FOR FINANCIAL STABILITY)

We do hereby undertake that we have not suffered bankruptcy/insolvency during the last 5 years.

STAMP & SIGNATURE OF AUTHORISED SIGNATORY

_________ ____________________________

Note :

1. In case of JV/Consortium, the undertaking shall be submitted by each member of the JV/Consortium.

2. The undertaking shall be signed by authorized signatory of the bidder. In case of JV/Consortium by the authorized signatory of the constituent members counter signed by the authorized signatory of bidder.
FORMAT- 18

UNDEARTAKING FOR DOWNLOADED TENDER DOCUMENT

We here by confirm that, we have downloaded / read the complete set of tender documents /addendum/clarifications along with the set of enclosures hosted on e-tendering portal https://eprocure.gov.in/eprocure/app. We confirm that we have gone through the bid documents, addendums and clarifications for this work placed upto the date of opening of bids on the e-tendering portal [https://eprocure.gov.in/eprocure/app]. We confirm our unconditional acceptance for the same and have considered for these in the submission of our financial bid.

Signature of authorised signatory
Certificate from the Solar Power Developer to DMRC/SECI regarding meeting of DCR norms under CPSU Scheme-Phase-II

(On the letter-head of the SPD)

To,

(Name and Address of DMRC)

Sub: Certificate for meeting Domestic Content Requirements for our project(s) selected under RfS No.__________

Ref: LoA/LoI issued by DMRC vide LoA/LoI No. .......(insert LoA/LoI no.) for the project allotted under Project ID.... (insert project ID)

Sir,

We, M/s______________ (name of the Solar Power Developer) hereby certify and declare the following:

1. As per the Letter of Award/Intent (LOA/LOI) issued by Delhi Metro Rail Corporation (DMRC) vide LOA/LOI no. ____________________ for our project(s) selected under the RfS No. ______________ dated __________, the cells and modules used in the following projects being executed by us, have been manufactured domestically and comply with the Domestic Content Requirements as laid down by Ministry of New and Renewable Energy and incorporated in the Guidelines and the tender documents under the CPSU Scheme Phase-II, being implemented by SECI:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Capacity of the Project (MW)</th>
<th>Project Location (Village, Tehsil, District, State)</th>
<th>No. of cells / modules utilized</th>
<th>Cells procured from the manufacturer through Invoice No.</th>
<th>Modules procured from the manufacturer through Invoice No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

2. The certificate from the manufacturers of the above mentioned items for complying with the Domestic Content Requirements is enclosed herewith.

3. The above information is complete and accurate in all material respects, and there is no material information omitted from this Certificate that makes the information contained herein misleading or inaccurate.
4. We shall comply with the guidelines of MNRE, “Implementation of public procurement order for renewable energy sector” dated 11.12.2018. Wherein we hereby certify that we shall be having 100% use of local content for solar modules and 40% local content for balance components such as inverters etc.

5. We shall maintain, and present upon request, to the Inspection committee of DMRC/MNRE/SECI, further documentation necessary to support this certificate. Further, we shall not bar the inspection committee of DMRC/MNRE/SECI from visiting our factories/installations in relation to the agreement between our Company and DMRC/SECI/MNRE or their representative.

5. In case of any discrepancies found upon the inspection conducted by the committee, it may be dealt as per the decisions of DMRC/MNRE/SECI.

   Signed this ___________day of ______
   For ___________________________ (Name of the SPD)
   Signature & name of the authorized representative of the SPD
Certificate from the Module Manufacturer to the SPD regarding meeting of DCR norms under CPSU Scheme-Phase-II

(On the letter-head of the SPD)

To,

(Name and Address of SPD)

Sub: Certificate for our modules meeting Domestic Content Requirements under RfS No.__

Sir,

We, M/s__________________(name of the manufacturer), having registered address at______________, hereby certify and declare the following:

1. Under the contract/purchase agreement executed between M/s (Name of the SPD) and M/s ____________________________(Name of the Manufacturer) vide Contract No./ID: ____________________________, the modules supplied to your Company under the Shipment ID(s) ______________________, bearing serial nos. of all the modules supplied along with respective invoices and receipt certificates enclosed herewith (insert shipment IDs of the batches despatched for modules to the SPD and enclose the list containing serial nos. and invoices/receipt certificates of the respective modules) have been manufactured indigenously, in our factories registered in India, and cells manufactured by M/S ______ of Regd address ____________ in India have been used in our modules. Our modules comply with the Domestic Content Requirements as laid down by Ministry of New and Renewable Energy as incorporated in the Guidelines for the CPSU Scheme Phase-II, being implemented by Solar Energy Corporation of India Limited.

2. The manufacturing process has been carried out in India from the stage of finished cells till modules at our facility and neither we nor our cell supplier have used semi-finished/blue cells in this process.

3. The above information is complete and accurate in all material respects, and there is no material information omitted from this Certificate that makes the information contained herein misleading or inaccurate.

4. We shall maintain, and present upon request, to the Inspection committee of MNRE/SECI, further documentation necessary to support this certificate. Further, we shall not bar the inspection committee of MNRE/SECI from visiting our factories/installations in relation to the agreement between our Company and SECI / MNRE or their representative.

Signed this ____________ day of ______

For____________________________________ (Name of the module manufacturer)
Signature & name of the authorized representative of the module manufacturer

Attestation by the SPD

(Note: in case the same manufacturer has supplied both cells and modules to the SPD, the details of both cells and modules will be enclosed herewith, with suitable changes in the format)
Certificate from the Cell Manufacturer to the Module manufacturer regarding meeting of DCR norms under CPSU Scheme-Phase-II

(On the letter-head of the SPD)

To,
(Name and Address of module manufacturer)

Sub: Certificate for our cells meeting Domestic Content Requirements under RfS No.________

Sir,

We, M/s_______________(name of the manufacturer), having registered address at______________, hereby certify and declare the following:

1. Under the contract/purchase agreement executed between M/s _________________(Name of the module manufacturer) and M/s ____________________________(Name of the cell manufacturer) vide Contract No./ID:_________________________ , the cells supplied to your Company under the Shipment ID(s) _________________ bearing serial nos. of all the cells supplied along with respective invoices and receipt certificates enclosed herewith (insert shipment IDs of the batches despatched for cells to the module manufacturer and enclose the list containing serial nos. and invoices/receipt certificates of the respective cells) have been manufactured indigenously, in our factories registered in India. Our cells comply with the Domestic Content Requirements as laid down by Ministry of New and Renewable Energy as incorporated in the Guidelines for the CPSU Scheme Phase-II, being implemented by Solar Energy Corporation of India Limited.

2. The manufacturing process has been carried out in India and we have not used semi-finished/blue cells in this process.

3. The above information is complete and accurate in all material respects, and there is no material information omitted from this Certificate that makes the information contained herein misleading or inaccurate.

4. We shall maintain, and present upon request, to the Inspection committee of MNRE/SECI, further documentation necessary to support this certificate. Further, we shall not bar the inspection committee of MNRE/SECI from visiting our factories/installations in relation to the agreement between our Company and SECI / MNRE or their representative.

Signed this _____________day of _____

For________________________________ (Name of the module manufacturer)

Signature & name of the authorized representative of the module manufacturer

Attestation by the SPD
(to be submitted by the SPD on its letter head)

To,
CE/Contract
Delhi Metro Rail Corporation
5th Floor, Metro Bhawan,
Barakhamba Road, Fire Brigade Lane,
Connaught Place, New Delhi-110001

Sub: Self-certification with respect to procurement of power from the Project(s) awarded under RfS No._____________ dated__________ meeting WTO requirements

Sir,
This has reference to the Project capacity of ____ MW awarded to M/s____________ (Enter name of the SPD) by Solar Energy Corporation of India Limited (SECI), under the RfS No._________________ dated____________.

In this regard, we hereby undertake that we are the SPD in the complete power procurement scheme, as per the power flow mapping submitted by the bidder/SPD to SECI. We further confirm that power generated from the said Project(s) being set up/commissioned under the said RfS shall only be procured by the Procurer/End Consumer, M/s____________ (enter name of the Procurer(s)/End Consumer(s)) in line with the “Government Procurement” derogation of Article III:8(a) of the GATT, 1994, and that we shall not sell power from such Project(s) to any entity other than the one(s) specified above.

We further undertake that we fully understand the risks of non-compliance with the above provisions as per the regulations of World Trade Organization (WTO), as well as MNRE Guidelines vide No. 302/4/2017-GRID SOLAR dated 05.03.2019, and we shall be responsible for non-compliance to the above guidelines as per the action deemed necessary by SECI/MNRE.

Regards,

(Name and Signature of the Authorized Signatory)

Date:
To,
CE/Contract
Delhi Metro Rail Corporation
5th Floor, Metro Bhawan,
Barakhamba Road, Fire Brigade Lane,
Connaught Place, New Delhi-110001

Sub: Self-certification with respect to procurement of power from the Project(s) awarded under RfS No._____________ dated__________ meeting WTO requirements

Sir,
This has reference to the Project capacity of _____MW awarded to M/s____________ (Enter name of the SPD) by Solar Energy Corporation of India Limited (SECI), under the RfS No._____________ dated_______________.

In this regard, we hereby undertake that we are the intermediary in the complete power procurement scheme, as per the power flow mapping submitted by the SPD to SECI. We further confirm that power flow from such Project(s) is being carried out through our infrastructure and we are not undertaking commercial resale of such power to the Procurer/End Consumer, i.e. M/s_________________ (enter name of the Procurer(s)/End Consumer(s)), in line with the “Government Procurement” derogation of Article III:8(a) of the GATT, 1994.

We further undertake that we fully understand the risks of non-compliance with the above provisions as per the regulations of World Trade Organization (WTO), as well as MNRE Guidelines vide No. 302/4/2017-GRID SOLAR dated 05.03.2019, and we shall be responsible for non-compliance to the above guidelines as per the action deemed necessary by SECI.

Regards,

(Name and Signature of the Authorized Signatory)

Date:
Format-24

(to be submitted by the Procure(s)/End Consumer(s), on their individual letter heads, if applicable)

To,
CE/Contract
Delhi Metro Rail Corporation
5th Floor, Metro Bhawan,
Barakhamba Road, Fire Brigade Lane,
Connaught Place, New Delhi-110001

Sub: Self-certification with respect to procurement of power from the Project(s) awarded under RfS No._______________ dated__________ meeting WTO requirements

Sir,

This has reference to the Project capacity of _____MW awarded to M/s_________________ (Enter name of the SPD) by Solar Energy Corporation of India Limited (SECI), under the RfS No._________________ dated__________.

In this regard, we hereby undertake that we are the End Consumer in the complete power procurement scheme, as per the power flow mapping submitted by the bidder/SPD to SECI. We further confirm that power from such Project(s) is being procured/shall be procured by us, in line with the “Government Procurement” derogation of Article III:8(a) of the GATT, 1994, and that we shall not undertake commercial resale of such power procured under this RfS.

We further undertake that we fully understand the risks of non-compliance with the above provisions as per the regulations of World Trade Organization (WTO), as well as MNRE Guidelines vide No. 302/4/2017-GRID SOLAR dated 05.03.2019, and we shall be responsible for non-compliance to the above guidelines as per the action deemed necessary by SECI.

Regards,

(Name and Signature of the Authorized Signatory)

Date:
Format-25

(To be submitted by the SPD on its letterhead)

Power flow mapping for the Projects being set up under the RfS, comprising the cumulative Project capacity quoted by the bidder/allocated to the SPD under the RfS No___________________ dated__________

Note:

1. The power flow mapping shall be submitted as a schematic diagram, specifying each intermediary and the Procurer/End Consumer clearly.

2. The above diagram shall be submitted for each individual Project, as per the break-down of the total cumulative quoted/allocated capacity under the RfS.

3. The power flow diagram(s) shall be finalized prior to disbursement of 2nd tranche of VGF by SECI, and shall remain unchanged thereafter.

4. Each power flow diagram shall be duly signed by the Authorized signatory of the SPD.
Format-26

(To be submitted by the SPD for each site before start of work)

ANNEXURE - ‘G’ (SC-02)

DELHI METRO RAIL CORPORATION LIMITED
(A Joint Venture of Government of India & Government of Delhi)

INDEMNITY BOND

I hereby indemnify Delhi Metro Rail Corporation, its Contractors, Representatives and Officials of DMRC from any claim for damage including any loss, injury, fatality or any other risks incidental / arising out of my visit to...............................

I hereby further state that no claims / damage, whatsoever shall be made by myself of my representatives against DMRC on the aforesaid context before any Court / Statutory Authorities.

Signed.................................................................

Name of Visitor ......................................................

Address ........................................................................

.................................................................................

WITNESS BY :

1. Signature of the Winess ..............................................
   Name ........................................................................
   Address .....................................................................

   ..................................................................................
   Proof of Identification .................................................

2. Signature of the Winess ..............................................
   Name ........................................................................
   Address .....................................................................

   ..................................................................................
   Proof of Identification .................................................

Time & Date of Entry ..................................................

Time & Date of Exit ....................................................
(To be filled by the DMRC Official)
Details of Bank Account for refund of Tender Security/EMD
(Applicable if EMD/Tender Security deposited through Demand Draft/Banker’s Cheque/RTGS/NEFT/IMPS)

1. Name of the Firm/Bidder:
2. Complete Address:
3. Name of the Bank:
4. Branch:
5. Address of the Bank Branch:
6. Name of the account holder in bank:
7. Account Type:
8. Account Number:
9. IFS Code of the bank branch:
10. Whether a copy of cancelled cheque of the bidder/firm submitted: Yes or No
    (Please tick)
    (A copy of cancelled cheque to be enclosed)

Signature of the Authorized person of the Bidder with seal & date

Notes:-

a) EMD/Tender Security will be refunded through NEFT/RTGS/IMPS/DD/Bankers Cheque/any other mode of payment, in the name of firm and bank account mentioned in this annexure, which shall be of same firm and account through which EMD/Tender Security has been paid to DMRC.

b) EMD/Tender Security shall be paid in compliance with RFP Clause 3.10.
Annexure-A

PROJECT SANCTION DOCUMENTS

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

1. Project Report

   (Project report should contain the following)
   - Context / background / Introduction
   - Project objectives
   - Target beneficiaries
   - Project strategy / Approach of work & methodology
   - Environmental Impact Assessment, if required.
   - Site details including photographs with date & time stamping
   - Solar resource assessment
   - Technology selection (Module, Inverter and BOS)
   - Design, Simulation, BOM and layout of SPV plant
   - Grid connectivity and metering scheme
   - Means of financing and project budget
   - Financial, Economic & Risk Analysis
   - Time frame / activity wise schedule of implementation
   - Shadow Analysis

2. Agreement between the DMRC and solar developer.
All Agreement shall generally have reference to the DMRC Contract CE/SPV-07 – “Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd.” and Letter of Acceptance and provisions as per terms and conditions, technical specification and performance parameter in line with the DMRC RFS Document against which Letter of Acceptance has been issued.

3. All drawings and activities as listed in clause 32 & 33 of this RfS
Annexure-B

All scheduled Commercial banks based in India and having branch in India.
SECTION- VI

Contract Agreement
DATED____

MODIFIED ANNUITY AGREEMENT

BETWEEN

M/s __________________________

AND

Delhi Metro Rail Corporation Limited
MODIFIED ANNUITY AGREEMENT

This Modified Annuity Agreement is made at New Delhi on___

Between

M/s____________________a company incorporated in India under the
provisions of the Companies Act 1956, with its registered office at
________________________0, India

hereinafter referred to as the “Concessionaire” (which expression shall
unless repugnant to the context mean and include it's successors and assigns); AND

Delhi Metro Rail Corporation Limited, a joint venture company of Central Government and Delhi Government incorporated under the Company Act, 1956, having its registered office at Metro Bhawan, Fire Brigade Lane, Barakhambha Road, New Delhi-110001, India, hereinafter referred to as the "DMRC' (which expression shall unless repugnant to the context mean and include it's successors and assigns).

The Concessionaire and the DMRC are each individually referred to as a "Party" and collectively as the "Parties".

WHEREAS;

A. The DMRC had invited proposals by its Notice No.(the “Tender Notice”) of "Contract CE/SPV-07: Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd."

B. For selection of bidders for Implementation of Roof Top Solar PV System at Depots and Metro Stations of DMRC. DMRC had prescribed the technical and commercial terms and conditions, and invited bids from the shortlisted bidders pursuant to the Tender Notice for undertaking the Project.

C. After evaluation of the bids received, the DMRC notified as the Successful Bidder for "Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd." and has been awarded 3000 kWp of capacity as per Technical Specification & other details of Contract:- CE/SPV-07 dated_______ of DMRC, and issued its Letter of Acceptance/ Letter of Allocation (hereinafter called the “LOA”) No_____________ to the Successful Bidder requiring, inter alia, the execution of this Modified Annuity Agreement 60 days of the date of issue thereof.

D. Pursuant to clause 3.5 of RFS documents, the Consortium/JV/Successful Bidder has since promoted and incorporated the Project Company ("Power Producer" herein) as a private limited company under the Companies Act 2013, and has requested the DMRC vide its letter no. ____________________________ dated ________, supported with its Board Resolution dated ____________, to accept the Project Company as the entity which shall undertake and perform the obligations and exercise the rights of the Successful Bidder under the LOA, including the obligation to enter into this Agreement pursuant to the LOA for executing the Project.
E. By its letter dated __________, supported by its Board Resolution dated __________, the said Project Company (herein) has also joined in the said request of the Consortium/JV/Successful Bidder to the DMRC to accept it as the entity which shall undertake and perform the obligations and exercise the rights of the Consortium/JV/Successful Bidder including the obligation to enter into this Agreement pursuant to the LOA. The Power Producer herein/Project Company has further represented to the effect that it has been promoted by the Consortium/JV/Successful Bidder for the purposes hereof.

F. The Concessionaire herein/Project Company has agreed to install and operate a solar photovoltaic power plant of 3000kWp capacity at the Premises as defined hereinafter. DMRC on the terms and conditions contained in this Agreement.

G. The DMRC has agreed to the said request of the Consortium/JV/Successful Bidder and the Concessionaire herein/Project Company, and has accordingly agreed to enter into this Agreement with the Concessionaire herein/Project Company for execution of the Project, subject to and on the terms and conditions set forth hereinafter.

H. Post execution of the project and charging of the solar plant and there after the ownership of the solar plant will be with DMRC. The DMRC has agreed to pay the monthly annuity amount after adjusting penalty/incentive to the Concessionaire on the terms and conditions contained in this Agreement.

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

Definitions and Interpretation

1.1 Definitions

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

(a) “Actual Monthly Production” means the amount of energy recorded by the Main Metering System during each calendar month of the Term, pursuant to Section 5.2;

(b) “Affiliate” means with respect to any specified Person, any other Person directly or indirectly controlling, controlled by or under common control with such specified Person;

(c) “Agreement” means this Modified Annuity Agreement executed hereof, including the schedules, amendments, modifications and supplements made in writing by the Parties from time to time;

(d) “Applicable Law” means, with respect to any Person, any constitutional provision, law, statute, rule, regulation, ordinance, treaty, order, decree, judgment, decision, certificate, holding, injunction, registration, license, franchise, permit, authorization, guideline, Governmental Approval, consent
or requirement of any Governmental Authority in India having jurisdiction over such Person or its property, enforceable by law or in equity, including the interpretation and administration thereof by such Governmental Authority;

(e) “Assignment” has the meaning set forth in Section 14.1;

(f) “Business Day” means any day other than Sunday or any other day on which banks in Delhi(or NCR)are required or authorized by Applicable Law to be closed for business;

(g) “Commercial Operation Date” has the meaning set forth in Section 4.3(b);

(h) “Confidential Information” has the meaning set forth in Section 16.1;

(i) “Consents, Clearances and Permits” shall mean all authorizations, licenses, approvals, registrations, permits, waivers, privileges, acknowledgements, agreements, or concessions required to be obtained from or provided by any concerned authority for the purpose of setting up of the generation facilities and/or supply of power;

(j) “Concessionaire Default” has the meaning set forth in Section 12.1(a);

(k) “Concessionaire Indemnified Parties” has the meaning set forth in Section 17.2;

(l) “Contingent Liability” that is not now fixed and absolute but which may become so in case of the occurrence of some future event.

(m) “Deemed Generation” has the meaning set forth in Section 5.3(b);

(n) “Delivery Point” shall be the single point, at a location mutually agreed by the Parties, in line with applicable regulation/rules where Solar Power is delivered by the Concessionaire from the System to the DMRC;

(o) “Dispute” has the meaning set forth in Section 17.8 (b);

(p) “Disruption Period” has the meaning set forth in Section 5.3(b);

(q) “Distribution Utility” means the local electric distribution owner and operator providing electric distribution and interconnection services to DMRC at the Premises;

(r) “DMRC Default” has the meaning set forth in Section 12.2 (a);

(s) “DMRC Indemnified Parties” has the meaning set forth in Section 17.1;

(t) “Due Date” has the meaning set forth in Section 7.4;

(u) “Effective Date” has the meaning set forth in Section 2;

(v) “Estimated Remaining Payments” means as of any date, the estimated remaining Solar Power Payments to be made through the end of the applicable Term, as reasonably determined by the Concessionaire in accordance with Section 7.1;
(w) “Expiration Date” means the date on which the Agreement terminates by reason of expiration of the Term;

(x) “Financing Party” means, as applicable (i) any Person (or its agent) from whom the Concessionaire (or an Affiliate of the Concessionaire) leases the System, or (ii) any Person (or its agent) who has made or will make a loan to or otherwise provide financing to the Concessionaire (or an Affiliate of the Concessionaire) with respect to the System;

(y) “Force Majeure Event” has the meaning set forth in Section 11.1;

(z) “Governmental Approval” means any approval, consent, franchise, permit, certificate, resolution, concession, license, or authorization issued by or on behalf of any applicable Governmental Authority for the purpose of setting up of the Project and/or for feeding of Solar Power of the Project pursuant to this Agreement;

(aa) “Governmental Authority” means any central, state, regional, district, town, city, or municipal government, whether domestic or foreign, or any department, agency, bureau, or other administrative, regulatory or judicial body of any such government;

(bb) “Indemnified Persons” means the DMRC Indemnified Parties or the Concessionaire Indemnified Parties, as the context requires;

(cc) “Insolvency Event” means with respect to a Party, that either:

(i) such Party has (A) applied for or consented to the appointment of, or the taking of possession by, a receiver, custodian, trustee, administrator, liquidator or the like of itself or of all or a substantial part of its assets or business; (B) been unable to pay its debts as such debts become due; (C) made a general assignment for the benefit of its creditors; (D) commenced a voluntary proceeding under any insolvency or bankruptcy law; (E) filed a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding up, or composition or readjustment of debts; or (F) taken any corporate or other action for the purpose of effecting any of the foregoing; or

(ii) It is clarified that a dissolution or liquidation will not be an Insolvency Event if such dissolution or liquidation is for the purpose of a merger, consolidation or reorganization, and the resulting company retains creditworthiness similar to the dissolved or liquidated entity and expressly assumes all obligations of the dissolved and liquidated entity under this Agreement and is in a position to perform them;

(dd) “Installation Work” means the construction and installation of the System and the start-up, testing and acceptance (but not the operation and maintenance) thereof, all performed by or for the Concessionaire at the Premises;
(ee) “Invoice Date” has the meaning set forth in Section 7.2;

(ff) “Lender” means such bank, or other financial institution, including their successors and assigns, who have agreed to provide the Concessionaire with debt financing of the Project.

(gg) “Losses” means all losses, liabilities, claims, demands, suits, causes of action, judgments, awards, damages, cleanup and remedial obligations, interest, fines, fees, penalties, costs and expenses (including all attorneys’ fees and other costs and expenses incurred in defending any such claims or other matters or in asserting or enforcing any indemnity obligation);

(hh) “Main Metering System” means all meter(s) and metering devices owned by the Concessionaire and installed at the Delivery Point for measuring and recording the delivery and receipt of energy;

(ii) “Metering Date” means the first Business Day of each calendar month subsequent to the month in which the Solar Power is generated by the Concessionaire. The billable units shall be equal to the difference between the meter reading on the Metering Date and the meter reading on the previous month’s Metering Date;

(jj) “Party” or “Parties” has the meaning set forth in the preamble to this Agreement;

(kk) “Performance Ratio” (PR) means the ratio of plant output versus installed plant capacity at any instance with respect to the radiation measured. PR = (Measured output in kW/ Installed Plant Capacity in kW * (1000 W/m²/Measured radiation intensity in W/m²))

(ll) “Person” means an individual, partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture, firm, or other entity, or a Governmental Authority;

(mm) “Premises” means the premises described in Schedule 1 to this Agreement. For the avoidance of doubt, the Premises includes the entirety of any structures and underlying real property located at the address described in Schedule 1 to this Agreement;

(nn) “Representative” has the meaning set forth in Section 16.1;

(oo) “Scheduled Completion Date” has the meaning set forth in Section 4.1 (g);

(pp) “Security Interest” has the meaning set forth in Section 9.2;

(qq) “Selectee” means a new company (i) proposed by the Lenders pursuant to Section 12.1 read with Schedule VI hereof and approved by the DMRC (ii) or proposed by the DMRC in accordance with
Schedule VI hereof and approved by the Lenders, for substituting the Concessionaire for the residual period of the Agreement by amendment of the Agreement or by execution of a fresh Modified Annuity Agreement in accordance with the terms and conditions contained in the said Schedule.

(rr) “Solar Power” means the supply of electrical energy output from the System;

(ss) “Solar Power Payment” has the meaning set forth in Section 7.1;

(tt) “System/Plant” includes the integrated assembly of photovoltaic panels, mounting assemblies, inverters, converters, metering, lighting fixtures, transformers, ballasts, disconnects, combiners, switches, wiring devices and wiring, and all other material comprising the Installation Work;

(uu) “System Operations” means the Concessionaire’s operation, maintenance and repair of the System performed in accordance the requirements herein;

(vv) “Takeover Date” means the date on which title to the System transfers to the DMRC pursuant to the DMRC exercising its takeover option under Section 3.2

(ww) “Takeover Price” means the fee payable by DMRC to the Concessionaire under the circumstances described in Section 3.2, Section 5.3(a) or Section 12.2(b);

(xx) “Tariff” means the price per kWh set forth in Schedule II hereto;

(yy) “Term” has the meaning set forth in Section 3.1;

(zz) “Transfer Time” has the meaning set forth in Section 5.3(a).

1.2 Interpretation

(a) Unless otherwise stated, all references made in this Agreement to “Sections”, “Clauses” and “Schedules” shall refer respectively to Sections, Clauses and Schedules of this Agreement. The Schedules to this Agreement form an integral part of this Agreement and shall have effect as though they were expressly set out in the body of this Agreement.

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

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

3. **Term and Termination**

   3.1 **Term**

      The term of the Agreement shall commence on the Effective Date and shall continue for twenty five (25) years from the Commercial Operations Date (the “Term”), unless and until terminated earlier pursuant to the provisions of the Agreement. After the Term, the ownership of the System shall be transferred to the DMRC free of cost.

   3.2 **Takeover Option**

      So long as a DMRC Default shall not have occurred and be continuing, DMRC has the option to takeover the System by paying the Concessionaire the Takeover Price as per Schedule III to this Agreement. To exercise its takeover option, the DMRC shall, not less than Ninety (90) days prior to the proposed takeover Date, provide written notice to the Concessionaire of DMRC’s intent to exercise its option to takeover the System on such takeover Date. In the event DMRC confirms its intention to exercise the takeover option in writing to the Concessionaire, (i) DMRC shall pay the applicable takeover price to the Concessionaire on the takeover date, such payment to be made in accordance with any written instructions delivered to DMRC by the Concessionaire for payments under the Agreement, and (ii) the Parties shall promptly execute all documents necessary to (A) cause title to the System to pass to DMRC on the Takeover Date, free and clear of all liens, and (B) assign all vendor warranties for the System to DMRC. Upon execution of the documents and payment of the applicable takeover price, in each case as described in the preceding sentence, the Agreement shall terminate automatically and the DMRC need not pay any annuity amount to the Concessionaire. Upon such termination, the Concessionaire shall offer its operations and maintenance (“O&M”) services to the DMRC and the Parties may enter into an O&M agreement in this regard. The terms and conditions of the O&M agreement will be negotiated in good faith between the Parties.

3.3 **Not Used**

   Not Used

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

   4.1 **Installation Work**

      (a) The Concessionaire will cause the Design, Engineering, Supply, Storage, Civil work, Erection of suitable structure, Net Metering, Testing & Commissioning of the 3 MWp Solar PV project including Operation and Comprehensive Maintenance (O&M) of the project in Modified Annuity Model for a period of 25 years on different sites of DMRC Ltd...
accordance with Contract: CE/SPV-07 dated ________ of DMRC and the site wise details attached as Schedule I hereto. The Concessionaire shall provide to the DMRC a bill of materials listing the major equipment constituting the System. Such bill of materials shall be provided within 30 days of the Commercial Operation Date.

(b) The Concessionaire shall have access as reasonably permitted by the DMRC to perform the Installation Work at the Premises in a manner that minimizes inconvenience to and interference with the use of the Premises to the extent commercially practical. The producer shall be given permission to work on station rooftop only during night hours post ceasing of metro revenue services.

(c) It is agreed between the Parties that the Concessionaire shall commission the System with a capacity of approximately 3000 kWp. Concessionaire may construct a System of smaller size if it receives only part approval of government subsidies or for any other material commercial reason, as mutually agreed between the Parties. In the event a System of smaller capacity is eventually agreed to be installed, the clauses pertaining to Takeover Price as set out under this Agreement shall be adjusted proportionately as per mutual agreement between the Parties.

(d) The Concessionaire shall provide and lay the dedicated electrical cables for transmission of Solar Power from the System up to the Delivery Point. Transmission or distribution of Solar Power beyond this point will be the responsibility of the DMRC. The Delivery Point shall be where the Main Metering System is located.

(e) Unless otherwise agreed between the Parties, the Concessionaire shall not do (a) chipping of rooftop; or (b) water proofing of roof to be disturbed (c) carry out any other modification of the Premises without the written consent of the DMRC. The Concessionaire shall maintain general cleanliness of area around the Plant during construction and operation period of the Project. In case any damages is caused to the equipment / facilities owned by the DMRC due to the Concessionaire, the same shall be made good / rectified by the Concessionaire at their cost.

(f) The Concessionaire shall, within thirty (30) days of the Effective Date, submit to the DMRC shop drawings of the Project for approval (“Shop Drawings”). If the DMRC has any objection/ recommendation in the Shop Drawings, he shall communicate the same to Concessionaire within a period of ten (10) days of the date of submission of the Shop Drawings. Any delay will extend the effective date and such approval shall not be unreasonably withheld.

(g) Subject to any punch-list items which shall be agreed by the DMRC as not being material to completion of the Project, the Concessionaire agrees that
it shall achieve the completion of the Project / Commissioning of the Project within 12 Months from the date of issue of Letter of Acceptance (which is ____________ (scheduled completion date). DMRC shall ensure that sufficient load is available at the Delivery Point to ensure synchronization and drawl of power from System.

(h) If the Concessionaire is unable to commence supply of Solar Power to the DMRC by the Scheduled Completion Date, other than for the reasons specified in Article 11 and 12.2 (Force Majeure or DMRCs Default), the Concessionaire or its contractor shall pay to DMRC genuine pre-estimated liquidated damages for the delay in such commencement of supply of Solar Power as per the clause of the DMRC RFS appended as Schedule 7 to this Agreement.

(i) The DMRC shall ensure that all arrangements and infrastructure for receiving Solar Power beyond the Delivery Point are ready on or prior to the Commercial Operation Date and is maintained in such state in accordance with applicable laws through the Term of the Agreement.

(j) Concessionaire shall fulfill all obligations undertaken by it under this Agreement

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

4.3 System Acceptance Testing
(a) The Concessionaire shall give 15 days advance notice to conduct the testing of the Plant and in the presence of DMRC’s designated representative conduct testing of the SPV Plant in accordance with procedure as approved by DMRC.

(b) If the results of such testing indicate that the System is capable of generating electrical energy (3000KWp) for 5 continuous hours using such instruments and meters as have been installed for such purposes, then the Concessionaire shall send a written notice to DMRC to that effect, and the date of successful conducting such tests and injection of Power at Delivery Point shall be the “Commercial Operation Date.”

5. System Operations
5.1 The Concessionaire, Operator and DMRC as owner
The System will be legally and beneficially owned by the DMRC and will be operated and maintained and, as necessary, repaired by the Concessionaire at its sole cost and expense; provided, that any repair or maintenance costs
incurred by the Concessionaire as a result of DMRC’s negligence or breach of its obligations hereunder shall be reimbursed in full by DMRC.

Concessionaire shall not be responsible for any work done by others on any part of the System/Project authorized by the DMRC and not authorized in advance by the Concessionaire in writing. Concessionaire shall not be responsible for any loss, damage, cost or expense arising out of or resulting from improper environmental controls or improper operation or maintenance of the System by DMRC or anyone instructed to do such work by DMRC. In the event of a problem with the System, as a result of the DMRC’s actions, for which Concessionaire is not responsible as provided in this Agreement, DMRC may choose and pay Concessionaire for diagnosing and correcting the problem at Concessionaire or Concessionaire’s contractors’ standard rates and charges then in effect.

To get the benefit of CDM/REC from generating Solar power, Concessionaire will be responsible for doing all necessary documentation, payment of fees, and site compliances etc. for registration with concerned departments. If required, the Developer may appoint a consultant who shall follow up for trading CDM/REC in International Exchanges. All the charges for the same shall be borne by Concessionaire. The amount accrued thereof shall be divided in the ratio of 20:40:40 (20% to the consultant and 40% each to the Concessionaire and DMRC). In case no consultant is appointed, the accruals shall be divided in the ratio of 60:40 (60% to the Concessionaire).

5.2 **Metering**

(a) The Concessionaire shall install the Main Metering System at the Delivery Point for the measurement of electrical energy produced by the System.

(b) The meter will be read by the Concessionaire’s personnel on the Metering Date. The authorized representative of the DMRC shall be present at the time of meter reading. Both the Parties shall sign a joint meter reading report. However, in case the Joint Meter Reading Report is not signed in the first three Business days of any month due to non-availability of the DMRC’s authorized representative, the report signed by the Concessionaires shall be considered as Joint Meter Reading Report The Parties agree that such Joint meter reading Report shall be final and binding on the Parties.

(c) The Main Metering System (One main meter + one check meter) at the Delivery Point and any additional meters required by Applicable Law shall be tested, maintained and owned by the Concessionaire.

(d) The DMRC may, at its own discretion, install a check meter, at its cost, to verify the measurements of the Main Metering System.

(e) The risk and title to the Solar Power supplied by the Concessionaire shall pass to the DMRC at the Delivery Point.
(f) The Concessionaire shall obtain the net metering from DISCOM for this plants installed. The Joint Meter Reading (JMR) will be done after the receipt of net metering permission. (As applicable)

(g) In addition the terms & condition of the agreement, Concessionaire shall install automatic meter reading system to ease the manual JMR.

5.3 System Disruptions

(a) Unavailability of Premises
If, for reasons other than the Concessionaire's breach of its obligations herein, the Concessionaire ceases to have access rights to the Premises as necessary to operate and maintain the System prior to the Expiration Date, then the Concessionaire shall be entitled to terminate the Agreement. DMRC shall pay the Takeover Price to the Concessionaire.

(b) Roof Repair and other System Disruptions
In the event that (a) the DMRC repairs the Premises’ roof for any reason not directly related to damage, if any, caused by the System, and such repair requires the partial or complete temporary disassembly or movement of the System, or (b) any act or omission of DMRC or DMRC’s employees, Affiliates, agents or subcontractors (collectively, a “DMRC Act”) results in a disruption or outage in System production, and such events attributable to DMRC except Force Majeure, then, in either case, DMRC shall (i) pay the Concessionaire for all work required by the Concessionaire to disassemble or move the System and (ii) continue to make all payments for the Solar Power during such period of System disruption (for continuous 24 generating hrs.) (the “Disruption Period”). For the purpose of calculating Solar Power Payments and lost revenue for such Disruption Period, Solar Power shall be deemed to have been produced at the average rate over the preceding twelve (12) months or, if the disruption occurs within the first twelve (12) months of operation, the average over such period of operation. (“Deemed Generation”). Concessionaire shall inform about the disruption or outage in System production, for reasons attributable to DMRC in writing with date and time of such occurrence, and DMRC’s liability shall start from the date of intimation of disruption or outage in system production, on account of DMRC.

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

The Concessionaire is responsible for the waterproofing of the roof disturbed/pierced for installation of Rooftop solar Power System for the Whole O&M period (25 Years). To ensure the water proofing a third party inspection jointly with Concessionaire and DMRCDMRC will be conducted annually. The developer should immediately take necessary action to repair any damage to the water proofing. DMRC may impose suitable penalty for the delay caused to resolve the issue.

6. **Delivery of Solar Power**

6.1 **Consumption Requirement**

DMRC agrees to consume one hundred percent (100%) of the Solar Power generated by the System and made available by the Concessionaire to DMRC at the Delivery Point during each relevant month of the Term. In the event that the DMRC is unable to take 100% of the electricity generated, when it is generated, then Deemed Generation will apply for the purpose of calculation of incentive/penalty. Moreover, if any part of the capacity of the Solar Power Plant is unable to operate at full capacity due to non-availability of load, Deemed Generation shall also apply subject to furnishing of documentary evidence in support of the same.

6.2 **Estimated Annual Production**

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

If Concessionaire is not able meet CUF of minimum 13% in any year subject to acceptance degradation in modules as per tender penalty for lower performance shall be levied as per tender clause 3.27.1. If Concessionaire does not pay the penalty, the performance bank guarantee is liable to be forfeited as per tender clause 3.15.6 of Tender. Generation greater than 13% will be incentivized.

6.3 **Suspension of Delivery**

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

Throughout the duration of the Agreement, the DMRC shall be the legal and beneficial owner of the System at all times, and the System shall remain the personal property of the DMRC.

DMRC covenants that it will use its best efforts to place all parties having an interest in or lien or encumbrance upon the real property comprising the Premises on notice of the ownership of the System and the legal status the System as the personal property of the Concessionaire. If there is any mortgage or other security interest created or granted upon the Premises which could reasonably be construed as attaching to the System as a fixture of the Premises, DMRC shall procure, at the Concessionaire’s request, a release from such lien holders.

7. Tariff and Payment

7.1 Consideration

DMRC shall pay to the Concessionaire a monthly annuity payment (the “Solar Power Annuity Payment”) adjusted with incentive/penalty based on the Solar Power generated by the System monthly annuity amount as obtained based on clause 3.27 of RfS followed by adjustment of incentive/penalty (as per the Metering clause 5.2 (b) above during each calendar month of the Term) (i) whether any or all units of Solar Power has been drawn, consumed or utilized by DMRC and/or (ii) whether any Solar Power has been injected, whether inadvertently or otherwise, into the grid of the Distribution Utility.

The Concessionaire will bill the DMRC, in the format finalized between both the parties, tariff prevailing.

For the sake of simplicity, the second year shall begin from the first date of the month following completion of one year from the Commercial Operation Date so as to maintain a monthly billing cycle. Schedule II provides a detailed year on year tariff schedule.

7.2 Invoice

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

7.3 The Invoice to the DMRC shall include:
   (a) The Solar Power calculations for the relevant billing period;
   (b) Supporting data, documents and calculations in accordance with this Agreement;

7.4 Time of Payment
DMRC shall pay all amounts due hereunder within Thirty (30) days after the date of the receipt of the invoice in DMRC’s office ("Due Date").

7.5 Method of Payment

DMRC shall make all payments under the Agreement by cheque or electronic funds transfer in immediately available funds to the account designated by the Concessionaire from time to time. All payments made hereunder shall be non-refundable, subject to the applicable tax deduction at source, and be made free and clear of any other tax, levy, assessment, duties or other charges and not subject to reduction, set-off, or adjustment of any kind. If the DMRC deducts any tax at source, the DMRC will issue a tax credit certificate as per law.

7.6 Late Payment

In case payment of any Invoice is delayed by the DMRC beyond its Due Date, a late payment surcharge shall be payable by DMRC to the Concessionaire at the rate of 1% per month (“Late Payment Surcharge”) calculated on the amount of outstanding payment, calculated on a day to day basis for each day of the delay, compounded on monthly rests. Late Payment Surcharge shall be claimed by the Concessionaire through its subsequent Invoice.

7.7 Disputed Payments

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

7.8 Not Used.

7.9 Change in Law:

(a) For the purpose of this Section 7.9, the term “Change in law” shall mean the occurrence of any of the following events after the Effective Date, resulting into any additional recurring / non-recurring expenditure by the Concessionaire or any income to the Concessionaire:

(i) the enactment, coming into effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any Law, including rules and regulations framed pursuant to such Law; or
(ii) a change in the interpretation of any Law by any Governmental Authority having the legal power to interpret or apply such Law, or any competent court; or

(iii) the imposition of a requirement for obtaining any Government Approvals which was not required earlier; or

(iv) a change in the terms and conditions prescribed for obtaining any Government Approvals or the inclusion of any new terms or conditions for obtaining such Government Approvals; or

(v) any introduction of any tax made applicable for installation of this solar capacity/project by the Concessionaire as per the terms of this Agreement. Any benefit due to change in tax on the supply of solar energy shall be passed on to DMRC.

(vi) However change in the rate of any existing tax will not be considered a change in law. Any risk of change of tax rate whatsoever related to the work lies with the Concessionaire.

(vii) Any benefit arising due to change in above para (i) to (vi) shall be passed on to the DMRC. But shall not include any change in any withholding tax on income or dividends distributed to the shareholders of the Concessionaire.

(b) Application and Principles for computing impact of Change in Law
While determining the consequence of Change in Law under this Article 7.9, the Parties shall have due regard to the principle that the purpose of compensating the Party affected by such Change in Law, is to restore through monthly bill payment, to the extent contemplated in this Article 7.9, the affected Party to the same economic position as if such Change in Law has not occurred and such impact shall be mutually decided.

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

(i) The date of adoption, promulgation, amendment, re-enactment or repeal of the Law or Change in Law; or

(ii) The date of order/judgment of the competent court or tribunal or Governmental Authority, if the Change in Law is on account of a change in interpretation of Law.

8. General Covenants
8.1 Concessionaire’s Covenants
The Concessionaire covenants and agrees to the following:

(a) Notice of Damage or Emergency: The Concessionaire shall (a) promptly notify DMRC if it becomes aware of any damage to or loss of the use of the System or that could reasonably be expected to adversely
affect the System, (b) immediately notify DMRC once it becomes aware of any event or circumstance that poses an imminent risk to human health, the environment, the System or the Premises.

(b) **System Condition**: The Concessionaire shall take all actions reasonably necessary to ensure that the System is capable of providing Solar Power at a commercially reasonable continuous rate. Subject to there being no DMRC Default, the Concessionaire shall provide 24X7 onsite / offsite monitoring and maintenance of the System throughout the period of this agreement at no additional cost.

(c) The System shall meet minimum guaranteed generation with Performance Ratio (PR) at the time of commissioning and related Capacity Utilization Factor (CUF) as per the daily normalized irradiance levels of the location during the O&M period. PR shall be minimum of 75% at the time of inspection for initial Project acceptance.

(d) **Governmental Approvals**: While providing the Installation Work, Solar Power and System Operations, the Concessionaire shall obtain and maintain and secure all Governmental Approvals required to be obtained and maintained and secured by the Concessionaire and to enable the Concessionaire to perform such obligations.

(e) The interconnection of the rooftop solar system with the network of the distribution licensee shall be made as per the technical standards for connectivity of distributed generated resources regulations as may be notified by the competent authority. The interconnection of the rooftop solar system shall be as per the contracted load and/or respective voltage level applicable to the DMRC as per the provisions of the guidelines issued by the competent authority.

(f) **Health and Safety**: The Concessionaire shall take all necessary and reasonable safety precautions with respect to providing the Installation Work, Solar Power, and System Operations that shall comply with all Applicable Laws pertaining to the health and safety of persons and real and personal property.

### 8.2 Concessionaire’s Representatives

During the subsistence of this Agreement, the Concessionaire undertakes to respond to all questions, concerns and complaints of the DMRC regarding the System in a prompt and efficient manner. The Concessionaire designates the following individual as its representative pertaining to performance of this Agreement till the Commercial Operation Date:

Name: ________________
Telephone: ________________
E-mail: _________________
The Concessionaire designates the following individual as its representative and primary point of contact pertaining to performance of this Agreement following the Commercial Operation Date till termination:

Name: _____________________
Telephone: _____________________
E-mail: _____________________

8.3 DMRC’s Covenants
DMRC covenants and agrees to the following:

(a) **Notice of Damage or Emergency:** DMRC shall (a) promptly notify the Concessionaire if it becomes aware of any damage to or loss of the use of the System or that could reasonably be expected to adversely affect the System; (b) immediately notify the Concessionaire once it becomes aware of any event or circumstance that poses an imminent risk to human health, the environment, the System or the Premises.

(b) **Not Used.**

(c) **Consents and Approvals:** DMRC shall ensure that any authorizations required of DMRC under this Agreement, including those required for installation of System at the Premises and to draw/consume Solar Power, are provided in a timely manner. The DMRC shall cooperate with the Concessionaire to obtain such approvals, permits, rebates or other financial incentives.

(d) **Access to Premises, Grant of License:** DMRC hereby grants to the Concessionaire a license co-terminus with the Term, containing all the rights necessary for the Concessionaire to use and occupy portions of the Premises for the installation, operation and maintenance of the System pursuant to the terms of this Agreement, including ingress and egress rights to the Premises for the Concessionaire and its employees, agents, contractors and subcontractors and access to electrical panels and conduits to interconnect or disconnect the System with the Premises’ electrical wiring with the consent and approval of the DMRC’s authorized representative identified by the DMRC.

(e) **Security:** DMRC shall be responsible for maintaining the physical security of the Premises. Security and Insurance of Rooftop solar PV System and all of its components have to be maintained by Concessionaire. DMRC will not conduct activities on, in or about the Premises that have a reasonable likelihood of causing damage, impairment or otherwise adversely affecting the System.

(f) Regardless of whether DMRC is owner of the Premises or leases the Premises from a landlord, DMRC hereby covenants that (a) the Concessionaire shall have access to the Premises and System during the
Term of this Agreement and for so long as needed after termination to remove the System pursuant to the applicable provisions herein, and (b) neither DMRC nor DMRC’s landlord will interfere or handle any of the Concessionaire’s equipment or the System without written authorization from the Concessionaire.

(g) **Temporary storage space during installation or removal**: DMRC shall provide sufficient space at the Premises for the temporary storage and staging of tools, materials and equipment and for the parking of construction crew vehicles and temporary construction trailers and facilities reasonably necessary during the Installation Work, System Operations or System removal, and access for rigging and material handling.

(h) **Sunlight Easements**: DMRC will take all reasonable actions as necessary to prevent other buildings, structures or flora from overshadowing or otherwise blocking access of sunlight to the System, including but not limited to such actions as may be reasonably necessary to obtain a solar access easement for such purpose.

(i) **Evacuation** – DMRC shall off take 100% of the Solar Power generated from the Delivery Point, and pay all invoices raised by the Concessionaire under this Agreement by the Due Date and pay interest on delayed payments, if any, as per this Agreement.

(j) **Water** – Concessionaire shall arrange water, as per the requirements of the Concessionaire, for periodic cleaning of the solar panels. The Raw Water connection point may be provided by DMRC at site as available Concessionaire obtains water by providing and laying pipes etc, from nearest water connection point made available.

(k) **Auxiliary Power** – The DMRC shall provide sufficient auxiliary power to the Concessionaire for the maintenance and operation of its System, if available and possible, at the rate it is paying to the DISCOM.

9. **Representations & Warranties**

9.1 **Representations and Warranties Relating to Agreement Validity**

In addition to any other representations and warranties contained in the Agreement, each Party represents and warrants to the other that:

(a) It is duly organized and validly existing and in good standing in the jurisdiction of its incorporation;

(b) It has the full right and authority to enter into, execute, deliver, and perform its obligations under the Agreement;

(c) It has taken all requisite corporate or other action to approve the execution, delivery, and performance of the Agreement;
(d) The Agreement constitutes its legal, valid and binding obligation enforceable against such Party in accordance with its terms;

(e) There is no litigation, action, proceeding or investigation pending or, to the best of its knowledge, threatened before any court or other Governmental Authority by, against, affecting or involving any of its business or assets that could reasonably be expected to adversely affect its ability to carry out the transactions contemplated herein; and

(f) Its execution and performance of the Agreement and the transactions contemplated hereby do not constitute a breach of any term or provision of, or a default under, (i) any contract or agreement to which it or any of its Affiliates is a party or by which it or any of its Affiliates or its or their property is bound, (ii) its organizational documents, or (iii) any Applicable Laws.

9.2 Representations Regarding Security Interest

DMRC has been advised that part of the collateral securing the financial arrangements for the System may be the granting of a first priority perfected security interest (the “Security Interest”) in the System to a Financing Party. Alternatively, the Concessionaire may assign all its rights and liabilities w.r.t. system under this Agreement to a Financing Party under intimation to the DMRC, such that the Financing Party becomes the owner of the System. In connection therewith, DMRC represents and warrants as follows:

(a) DMRC is aware of no existing lease, mortgage, security interest or other interest in or lien upon the Premises that could attach to the System as an interest adverse to the Concessionaire’s Financing Party’s Security Interest therein.

(b) DMRC shall extend all co-operation necessary to the extent required to enable the Concessionaire to assign its rights and liabilities to a Financing Party, in the event the Concessionaire chooses to do so.

Any Financing Party shall be an intended third-party beneficiary of this Section 9.2.

10. Taxes and Governmental Fees

10.1 DMRC Obligations

DMRC shall reimburse and pay for any taxes, fees or charges imposed or authorized by any Governmental Authority and paid by the Concessionaire due to the Concessionaire’s association with DMRC in this project (other than income taxes imposed upon the Concessionaire) pursuant to clause 7.9. The Concessionaire shall notify DMRC in writing with a detailed statement of such amounts, which shall be invoiced by the Concessionaire and payable by DMRC. This Section 10.1 excludes taxes specified in Section 10.2.
10.2 Concessionaire Obligations

Subject to Section 10.1 above, the Concessionaire shall be responsible for all income taxes and any and all franchise fees or similar fees assessed against it due to its ownership of the System. The Concessionaire shall not be obligated for any taxes payable by or assessed against DMRC based on or related to DMRC's overall income or revenues except for any reduction in the taxes when the developer shall reimburse any amount accrued because of reduction in taxes.

11. Force Majeure

11.1 Definition

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

11.2 Excused Performance

Except as otherwise specifically provided in the Agreement, neither Party shall be considered in breach of the Agreement or liable for any delay or failure to comply with the Agreement (other than the failure to pay amounts due hereunder), if and to the extent that such delay or failure is attributable to the occurrence of a Force Majeure Event; provided that the Party claiming relief under this Section 11 shall immediately (i) notify the other Party in writing of the existence of the Force Majeure Event, (ii) exercise all reasonable efforts necessary to minimize delay caused by such Force Majeure Event, (iii) notify the other Party in writing of the cessation or termination of said Force Majeure Event and (iv) resume performance of its obligations hereunder as soon as practicable thereafter; provided, however, that DMRC shall not be excused from making any payments and paying any unpaid amounts due in respect of Solar Power delivered to DMRC prior to the Force Majeure Event performance interruption.

11.3 Termination as a Consequence of Force Majeure Event

If a Force Majeure Event shall have occurred that has affected the Concessionaire’s performance of its obligations hereunder and that has
continued for a continuous period of one hundred eighty (180) days, then DMRC shall be entitled to terminate the Agreement upon ninety (90) days’ prior written notice to the Concessionaire. If at the end of such ninety (90) day period such Force Majeure Event shall still continue, the Agreement shall automatically terminate. Upon such termination for a Force Majeure Event, neither Party shall have any liability to the other (other than any such liabilities that have accrued prior to such termination), and the provisions of Section 3.2 (Takeover Option) shall be inapplicable.

12. Default

12.1 Concessionaire Defaults and DMRC Remedies

(a) Concessionaire Defaults: The following events shall be defaults with respect to the Concessionaire (each, a “Concessionaire Default”):

(i) An Insolvency Event shall have occurred with respect to the Concessionaire;

(ii) Failure to achieve Commissioning of the System within scheduled completion date; and

(iii) The Concessionaire breaches any material term of the Agreement and (A) if such breach can be cured within sixty (60) days after DMRC’s written notice of such breach and the Concessionaire fails to cure the same, or (B) the Concessionaire fails to commence and pursue a cure within such sixty (60) days period if a longer cure period is needed.

(b) DMRC’s Remedies:

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

(ii) Upon the occurrence and continuation of Concessionaire Default and the failure by the Concessionaire to cure such default within the applicable cure period specified in this Article, the Lenders shall have the right to seek substitution of the Concessionaire by a Selectee for the residual period of this Agreement for the purpose of performing the obligations of the Concessionaire. Such substitution of the Concessionaire by a Selectee shall be as per the procedure prescribed in Schedule VI to this Agreement and prior approval of DMRC. Selectee as aforesaid shall have the required qualification
and experience as prescribed under the Contract:-CE/SPV-07 dated ________.

(iii) In the event the Lender’s total debt obligations have been completely satisfied at the time of issue of DMRC’s Preliminary Default Notice and upon the occurrence and continuation of Concessionaire Default and the failure by the Concessionaire to cure such default within the applicable cure period specified in this Article, the DMRC may terminate this Agreement by serving a fifteen (15) days notice to the Concessionaire (“DMRC Termination Notice”).

(iv) Following the issue of DMRC Preliminary Default Notice, it shall be the responsibility of the Parties to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant Concessionaire’s Default having regard to all the circumstances. If the Concessionaire Default is not cured within a period of sixty (60) days of the issue of DMRC Preliminary Default Notice or any other such period mutually agreed upon by the Parties, the DMRC shall have the right to terminate this Agreement by issuing a DMRC Termination Notice.

(v) Upon the delivery of the DMRC Termination Notice, this Agreement shall stand terminated. The Concessionaire shall have the liability to make payment within sixty (60) days from the date of DMRC Termination Notice toward compensation to DMRC equivalent to the difference between the Tariff and the grid rate notified by the relevant Government Authority for that point in time multiplied by the estimated Solar Power generated for a period of two (2) years following the termination, considered on normative capacity utilization factor.

(vi) Save as otherwise provided in this agreement, Concessionaire will be responsible for all liabilities and obligations (including contingent liabilities) in connection with the ownership, operation, maintenance or repair of the facility and the site prior to the termination of this agreement. DMRC shall be responsible for all liabilities and obligations (including contingent liabilities) in respect of the same arising after the termination of this agreement save to the extent that these liabilities and obligations were caused by or attributable to a breach of Concessionaire’s obligations under this agreement prior to the date of termination of this agreement. Concessionaire shall use its reasonable endeavors to mitigate the amount of the costs and expenses relating to liabilities and obligations (including contingent liabilities) in connection with the ownership, operation, maintenance or repair of the facility and the site and incurred between the
termination date and the date on which transfer of the facility and the site to DMRC occurs.

In the event that DMRC is required to settle any of these liabilities or perform obligations with respect to the period prior to termination of this agreement which are necessary in order to comply with prudent utility practice in order to continue to operate the facility and in connections with the site, any cost or expense reasonably incurred in connection therewith shall be subtracted from the Termination amount.

If the Concessionaire fails to remove the System from the Premises within one month from the date of termination, the DMRC shall be entitled to dispose of the System in any manner it deems fit

(vii) The DMRC may exercise any other remedy it may have at law or equity or under the agreement.

12.2 DMRC Defaults and Concessionaire’s Remedies

(a) DMRC Default: The following events shall be defaults with respect to DMRC (each, a “DMRC Default”):

(i) An Insolvency Event shall have occurred with respect to DMRC;

(ii) DMRC breaches any material term of the Agreement if (A) such breach can be cured within sixty (60) days after the Concessionaire’s notice of such breach and DMRC fails to so cure, or (B) DMRC fails to commence and pursue said cure within such sixty (60) day period if a longer cure period is needed; and

(iii) DMRC fails to pay the Concessionaire any undisputed amount or, if the amount is disputed, an amount based on average consumption of last three consecutive undisputed Invoices to the Concessionaire under Section 7.7 of this Agreement within sixty (60) days from receipt of notice from the Concessionaire of such past due amount.

(b) Concessionaire’s Remedies: If a DMRC Default described in Sections 12.2(a) has occurred and is continuing, in addition to other remedies expressly provided herein, and subject to Section 13, the Concessionaire shall be entitled to terminate this Agreement by serving a Sixty (60) days notice and upon such termination, (A) the Concessionaire shall be entitled to receive from DMRC the Takeover Price. The Takeover Price payable shall be the Takeover Price specified in Schedule III that falls on such date. Upon the payment of the Takeover Price, the Concessionaire shall cease to receive annuity amount from DMRC; and (B) the Concessionaire may exercise any other remedy it may have at law or equity or under the Agreement.

(c) Not used
13. **Limitations of Liability**

13.1 Except as expressly provided herein, neither Party shall be liable to the other Party or its Indemnified Persons for any special, punitive, exemplary, indirect, or consequential damages, losses or damages for lost revenue or lost profits, whether foreseeable or not, arising out of, or in connection with the Agreement.

13.2 Subject to the provisions of the Agreement, the Concessionaire shall be solely responsible for the manner in which its obligations under this Agreement are to be performed. All employees and representatives of the Concessionaire, or contractors engaged by the Concessionaire in connection with the performance of the Agreement shall be under the complete control of the Concessionaire and shall not be deemed to be employees, representatives, contractors of the DMRC. Nothing contained in the Agreement or in any agreement or contract executed by the Concessionaire shall be construed to create any contractual relationship between any such employees, representatives or contractors and the DMRC.

13.3 Notwithstanding any liability or obligation that may arise under this Agreement, any loss, damage, liability, payment, obligation or expense which is insured or not or for which the DMRC can claim compensation under any insurance policy, shall not be charged to or payable by the DMRC.

14. **Assignment**

14.1 **Assignment by Concessionaire**

   (a) This Agreement shall be binding upon, and inure to the benefit of the Parties and their respective successors and permitted assigns. The Concessionaire may sell, transfer or assign (collectively, an “Assignment”) the System and/or the Agreement or any interest therein, to any person including the Concessionaire’s Financing Party as collateral security in connection with any financing of the System, provided that such person agrees in writing to be bound by the terms of this Agreement. The Concessionaire shall obtain prior approval of the DMRC of any Assignment pursuant to this clause. Such person as aforesaid must have the required qualification and experience as prescribed under the Contract-CE/SPV-07 dated __________.

   (b) In the event of an Assignment, the Concessionaire shall offer its O&M services to the assignee and the Parties may enter into an O&M Agreement in this regard.

14.2 **Assignment by DMRC**

DMRC may assign the Agreement or any interest therein to any Person provided that such Person agrees in writing to be bound by the terms of this Agreement, without the Concessionaire’s prior written consent. The DMRC
shall provide prior intimation to the Concessionaire of any Assignment pursuant to this clause.

14.3 Notices

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

Concessionaire’s address and contact details:

___________________________

DMRC’s address and contact details:

Delhi Metro Rail Corporation Limited
Fire Brigade Lane, Barakhambha Road
New Delhi-110001

14.4 Notice

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

15. Confidentiality

15.1 Confidentiality Obligation

(a) If the Concessionaire provides confidential information, including business plans, strategies, financial information, proprietary, patented, licensed, copyrighted or trademarked information, and/or technical information regarding the financing, design, operation and maintenance of the System (“Confidential Information”) to DMRC or, if in the course of performing under the Agreement or negotiating the Agreement DMRC learns Confidential Information regarding the facilities or plans of the Concessionaire, DMRC shall (a) protect the Confidential Information from disclosure to third parties with the same degree of care accorded its own confidential and proprietary information, and (b) refrain from using such Confidential Information, except in the negotiation and performance of the Agreement. Notwithstanding the above, DMRC may provide such
Confidential Information to its officers, directors, managers, employees and Affiliates (collectively, “Representatives”), in each case whose access is reasonably necessary for purposes of the Agreement. Each such recipient of Confidential Information shall be informed by DMRC of its confidential nature and shall be directed to treat such information confidentially and shall agree to abide by these provisions. DMRC shall be liable for any breach of this provision by any entity to whom it improperly discloses Confidential Information. All Confidential Information shall remain the property of the Concessionaire and shall be returned to it after DMRC’s need for it has expired or upon the request of the Concessionaire.

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

15.2 Permitted Disclosures

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

(a) becomes publicly available other than through the receiving Party;

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

16. **Indemnity**

16.1 **Concessionaire’s Indemnity**

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

16.2 **DMRC’s Indemnity**

Subject to Section 13, DMRC agrees that it shall indemnify, defend and hold harmless the Concessionaire, its permitted successors and assigns and their respective directors, officers, employees, contractors, sub-contractors, and agents (collectively, the “Concessionaire Indemnified Parties”) from and against any and all Losses incurred by the Concessionaire Indemnified Parties to the extent arising from or out of any claim for or arising out of any injury to or death of any Person or loss or damage to property of any Person to the extent arising out of DMRC’s negligence or willful misconduct. DMRC shall not, however, be required to reimburse or indemnify any Concessionaire Indemnified Party for any Loss to the extent such Loss is due to the negligence or willful misconduct of any Concessionaire Indemnified Party.

16.3 The both the parties hereby indemnity each other against any loss, damage or liabilities (including attorney’s fees) arising as a result of any act of omission or commission on ether party’s part or on part of their personnel or in respect of non-observance of any statutory requirements or legal dues of any nature which relates to this agreement.

17. **Miscellaneous**

17.1 **Amendments**

This Agreement may only be amended, modified or supplemented by an instrument in writing executed by duly authorized representatives of the Concessionaire and DMRC.
17.2 Goodwill and Publicity

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

17.3 Industry Standards

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

17.4 Cumulative Remedies

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

17.5 Sovereign Immunity

To the extent permitted by Applicable Law, DMRC hereby waives any defense of sovereign immunity that DMRC might otherwise have in connection with any action taken by the Concessionaire to enforce its rights against DMRC under this Agreement.

17.6 No Waiver

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

17.7 Survival

The obligations under Sections 3.2 (Takeover Option), Section 8.1(d) (Concessionaire Covenant), Sections 8.2(d), (e), (f) and (g) (DMRC
Covenants), Section 9.3 (Exclusion of Warranties), Section 9 (Taxes and Governmental Fees), Section 12 (Limitation of Liability), Section 15 (Notices), Section 16 (Confidentiality), Section 18 (Miscellaneous), or pursuant to other provisions of this Agreement that, by their nature and context, are intended to survive termination of this Agreement shall survive the expiration or termination of this Agreement for any reason.

17.8 Governing Law & Jurisdiction

(i) This Agreement shall be governed by and construed in accordance with the laws of India. The Parties agree that the courts in Delhi shall have jurisdiction over any action or proceeding arising under the Agreement.

(j) In the event of any Dispute, difference of opinion or dispute or claim arising out of or relating to this agreement or breach, termination or the invalidity thereof, shall firstly be attempted to be settled by conciliation.

(k) All Disputes relating to this Agreement or any issue whether arising during or after the completion thereof or any matter directly or indirectly connected with this agreement shall in the first place be referred to a sole conciliator appointed/nominated by GM /Civil Engineer/Director of DMRC on receipt of such requests from either party. The conciliator shall make the settlement agreement after the Parties reach agreement and shall give an authenticated copy thereof to each of the Parties.

(l) The settlement agreement shall be final and binding on the Parties. The settlement agreement shall have the same status and effect of an arbitration award. The views expressed or the suggestions made or the admissions made by either Party in the course of conciliation proceedings shall not be introduced as evidence in any arbitration proceedings.

(m) Any Dispute that cannot be settled through conciliation procedure shall be referred to arbitration in accordance with the procedure given below. The Parties agree to comply with the awards resulting from arbitration and waive their rights to any form of appeal insofar as such waiver can validly be made. Cost of conciliation shall be equally shared by both the parties.

(n) *Arbitration Procedure:*

(iv) If the efforts, to resolve all or any of the Disputes through conciliation fail, then such disputes shall be referred to a sole arbitrator if the total value of the claim is up to Rs.5 million; and to a panel of three arbitrators if total value of claims is more than Rs.5 million. For this purpose, DMRC will make out a panel of engineers with the requisite qualification and professional experience relevant to the field to which the Agreement relates. This panel will be from among
serving or retired government employees or of public sector. The DMRC shall provide a panel of three arbitrators for claims up to Rs.5 million and a panel of five arbitrators for claims of more than Rs.5 million. Concessionaire shall choose the sole arbitrator from the panel of three and/or one arbitrator from the panel of five in case three arbitrators are to be appointed. The DMRC shall also choose one arbitrator from this panel of five and the two so chosen will choose the third arbitrator from the panel only. The arbitrator(s) shall be appointed within a period of 30 days from the date of receipt of written notice/ demand of appointment of arbitrator from either Party.

(v) The venue of such arbitration shall be Metro Bhawan, Delhi. The arbitral award shall be binding on both Parties. The cost of arbitration shall be equally shared by both Parties.

(vi) The sole arbitrator or the Arbitral Tribunal shall give his award within 12 months from the date of his entering on the reference or within extended time, as the parties may consent for the same, as the case may be on all the matters referred to him and shall indicated his/their finding, along with sum awarded, separately on each individual item of dispute.

In case the matter is referred to arbitral tribunal for adjudication and the views of two arbitrators differs on the issue then view of presiding arbitrator shall prevail.

The demand of arbitration shall specify the matters which are in question or subject of the dispute or differences as also the amount of claim item wise, together with counter claims or set off shall be referred to arbitration and other matters shall not be included in the reference. The arbitration proceedings shall be governed by the Indian Arbitration and Conciliation Act, 1996, as amended from time to time including provisions in force at the time the reference is made.

(o) During the dispute resolution period, both the Parties shall continue to perform their respective obligations as per provisions of the Agreement.

(p) This Section 18 is severable from the rest of this Agreement and shall remain in effect even if this Agreement is terminated for any reason.

17.9 Severability

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

17.10 Successors and Assigns

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

17.11 Counterparts

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

17.12 Independent Service Provider

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

17.13 Non-Exclusive Agreement

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

17.14 Insurance

The Concessionaire shall maintain at its own costs, throughout the tenure of this Agreement and any extensions thereof all mandatory insurance coverage for adequate amount including but not restricted to, comprehensive general liability insurance covering the System and accidental losses, bodily harm, injury, death of all individuals employed/assigned by the Concessionaire to perform the services required under this Agreement. The Bidder shall take insurance for Third Party Liability in the joint name of DMRC.

17.15 Sale or Transfer of Premises

(a) In the event the DMRC sells or transfers the Premises or the building housing the System, it shall give at least 90 days prior notice to the Concessionaire and will ensure that this Agreement is transferred/novated to transferee, without any interruption in payments. The DMRC shall also ensure that a clause to this effect, to the satisfaction of the Concessionaire, is incorporated in the transfer documents between itself and the transferee. The DMRC shall not sell or otherwise transfer the Premises if the transferee fails to accept the terms and conditions of this Agreement for the remainder of the Term.
(b) If either the DMRC or the Concessionaire merges with any other entity, the terms of this Agreement shall continue to be binding upon the merged entity.

17.16 Entire Agreement

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

17.17 Annual accounts reconciliation shall be conducted annually between the Concessionaire and DMRC. The Concessionaire shall maintain proper records (like purchase price, AMC etc.) relating to the plant and submit all such documents to the DMRC in case of effectuation of clause no 3.2.

17.18 Where provision is made for the giving of any notice, certificate, determination, consent or approval by any person that notice, certificate, determination, consent or approval shall be in writing, and the words “notifies”, “certifies”, “determined”, “consent” or “approved” shall be construed accordingly.

IN WITNESS WHEREOF the Parties have caused the Agreement to be duly executed through their duly authorized representatives as of the date set forth above.

<table>
<thead>
<tr>
<th>FOR AND ON BEHALF OF DMRC</th>
<th>FOR AND ON BEHALF OF CONCESSIONAIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorised Signatory</td>
<td>Authorised Signatory</td>
</tr>
<tr>
<td>WITNESSES</td>
<td>WITNESSES</td>
</tr>
<tr>
<td>1. ______________________</td>
<td>1. ______________________</td>
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<td>( )</td>
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<tr>
<td>2. ______________________</td>
<td>2. ______________________</td>
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</table>
**SCHEDULE – I (of agreement)**

1. **Description of the Premises:**

   All the piece and parcel of terrace portion of rooftop measuring approximately ..........square feet and having shade free area of approximately ........square feet situated on building located at----------. It is proposed to install a System of 3 MWp capacity on the said premises.

2. **Description of the System:**

   The Concessionaire shall install a capacity of 3000 kWp Solar Power Plant on the roof of the building named----------------The key features of the system are as follows:

<table>
<thead>
<tr>
<th>S. No</th>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>System Size</td>
<td>3MWp</td>
</tr>
<tr>
<td>2</td>
<td>Expected Annual Energy Generation</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Module Type</td>
<td>To be finalized during detailed Engineering</td>
</tr>
<tr>
<td>4</td>
<td>Inverter Type &amp; Rating</td>
<td>To be finalized during detailed Engineering</td>
</tr>
<tr>
<td>5</td>
<td>Electrical Parameter for interconnection</td>
<td>To be finalized during detailed Engineering</td>
</tr>
<tr>
<td>6</td>
<td>Mounting type</td>
<td>To be finalized during detailed Engineering</td>
</tr>
<tr>
<td>7</td>
<td>Surface Azimuth Angle</td>
<td>To be finalized during detailed Engineering</td>
</tr>
<tr>
<td>8</td>
<td>Tilt Angle</td>
<td>To be finalized during detailed Engineering</td>
</tr>
<tr>
<td>9</td>
<td>Wind Resistance</td>
<td>To be finalized during detailed Engineering</td>
</tr>
</tbody>
</table>

The Concessionaire shall provide an online monitoring system to the DMRC that will enable easy access to Solar Power information

**REMAINDER OF THE PAGE IS INTENTIONALLY LEFT BLANK**
**Schedule II(Fees)**

Following are the details of the Tariff & Annuity payment agreed between the Parties: DMRC shall pay Concessionaire an equal annuity payment every year post adjustment as per clause 3.27.1.

<table>
<thead>
<tr>
<th>Tenure of 25 years</th>
<th>Annuity Amount per year (A)</th>
<th>Tariff (T=A / E*) [Tariff (per unit) shall be same for each years]</th>
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</thead>
<tbody>
<tr>
<td>First Year</td>
<td></td>
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<tr>
<td>Second Year</td>
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<tr>
<td>Third Year</td>
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<td>Fourth Year</td>
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<td>Fifth Year</td>
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<td>Sixth Year</td>
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<td>Seventh Year</td>
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<td>Eighth Year</td>
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<td>Twenty Fourth Year</td>
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<td></td>
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<tr>
<td>Twenty Fifth Year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*“E” is estimated annual production of 1st year as per schedule-IV of AGREEMENT.*

The Fee and Payment details are provided in detail under Clause 7 of this **Agreement**.
**Schedule III (Takeover Price)**

The Takeover Price with respect to the System under the Agreement shall be calculated as follows:

**Initial Cost:** - Cost quoted by the bidders or total cost calculated as per Rs 4.5 Cr per MWp whichever is lower. The Depreciation rate is taken as 6.50 % Per Year **

<table>
<thead>
<tr>
<th>Year of Term (End of Year)</th>
<th>Calendar Year #</th>
<th>% of Initial cost *</th>
<th>Takeover Price in Crores(Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2021</td>
<td>93.5 %</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2022</td>
<td>87.0 %</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2023</td>
<td>80.5 %</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2024</td>
<td>74.0 %</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2025</td>
<td>67.5 %</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2026</td>
<td>61.0 %</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2027</td>
<td>54.5 %</td>
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<td>8</td>
<td>2028</td>
<td>48.0 %</td>
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<tr>
<td>12</td>
<td>2032</td>
<td>22.0 %</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2033</td>
<td>15.5 %</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>2034</td>
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</table>

For the purpose of Section 3.2, the Takeover Price payable shall be the Takeover Price specified in this Schedule that falls on such date before the proposed Takeover Date.

* The takeover price shall be reduced by the amount of VGF paid to the Concessionaire.

# Based on date of signing of AGREEMENT.

**Cost as per clause 6.8.1**
Schedule IV
Estimated Annual Production

Estimated Annual Production commencing on the Commercial Operation Date with respect to the System shall be as follows:

<table>
<thead>
<tr>
<th>Year of Term</th>
<th>Indicative total production (kWh/Year) for 3 MWp (Minimum generation based on CUF of 13% as per tender) *</th>
<th>Indicative total production (kWh/Month) for 3 MWp (Minimum generation based on CUF of 13% as per tender) *</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>25</td>
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<td></td>
</tr>
</tbody>
</table>

*Actual generation may vary as per actual annual irradiation at site

*Degradation of modules as per tender conditions (Clause 14 of RFS document)
Schedule V

Governmental Approvals

1. To be obtained by the Concessionaire
   All approvals including approvals/consents required under local regulations, building codes and approvals required from the Distribution Utility etc. relating to installation and operation of the System (including the government incentives/subsidies available for the Project) and generation and supply of solar power from the Project.

2. To be obtained by DMRC
   Any authorizations required of DMRC, including those required for installation of System at the Premises.

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Schedule VI

Substitution Rights of the Lender

1. Substitution of the Concessionaire

The Lender may seek to exercise right of substitution by an amendment or novation of the Agreement executed between Concessionaire and the DMRC in favour of the Selectee, The DMRC and the Concessionaire shall cooperate with the Lender to carry out such substitution.

2. Substitution Notice

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

3. Interim Operation of Project

(a) On receipt of a Substitution Notice, no further action shall be taken by any Party to terminate this Agreement, except under and in accordance with the terms of this Schedule VI of this Agreement.

(b) On issue of a Substitution Notice, the Lender shall have the right to request the DMRC to enter upon and takeover the Project for the interim and till the substitution of the Selectee is complete and to otherwise take all such steps as are necessary for the continued operation and maintenance of the Project, and the Concessionaire shall completely cooperate in any such takeover of the Project by the DMRC.

(c) If the DMRC refuses to take over the Project on request by the Lender in accordance with clause 3(b) above, the Concessionaire shall have the duty and obligation to continue to operate the Project in accordance with this Agreement till such time as the Selectee is finally substituted.

The Lender and the DMRC shall, simultaneously have the right to commence the process of substitution of the Concessionaire by the Selectee in accordance with these terms, and the Concessionaire hereby irrevocably consents to the same.

4. Process of Substitution of Concessionaire

(a) The Lender may, on delivery of a Substitution Notice notify the DMRC and the Concessionaire about the Lender’s decision to invite and negotiate, at the cost of the Lender, offers from third parties to act as Selectee, either through private negotiations or public auction and / or a tender process, for the residual period of this Agreement. Subject to and upon approval of the DMRC, such Selectee shall be entitled to receive all the rights of the Concessionaire and shall
undertake all the obligations of the Concessionaire under this Agreement and any other Project documents executed between the Concessionaire and the DMRC, in accordance with these terms of substitution.

Upon the DMRC approving the Selectee, the Concessionaire shall transfer absolutely and irrevocably, the ownership of the Project to such Selectee simultaneously with the amendment or novation of this Agreement and other Project documents executed between the Concessionaire and DMRC in favour of the Selectee...III.

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Section VII
Site Details of Metro Stations and Depot

<table>
<thead>
<tr>
<th>S.No</th>
<th>Sites of DMRC</th>
<th>Approx. Capacity (kWp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stations, Depots and Station Parkings</td>
<td>3000</td>
</tr>
<tr>
<td></td>
<td><strong>Approx. Total Capacity</strong></td>
<td><strong>3000 kWp</strong></td>
</tr>
</tbody>
</table>

Note - Tentative Solar PV Plant capacities
- Locations are tentative and may change during execution

List of tentative site

<table>
<thead>
<tr>
<th>S.No</th>
<th>Tentative Sites of DMRC</th>
<th>Approx. Capacity (kWp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Station Roof tops Line-7 (Majlis Park – Shiv Vihar)</td>
<td>1200</td>
</tr>
<tr>
<td>2</td>
<td>Station Roof tops Line-5 (Inderlok – B. Hoshiyar Singh)</td>
<td>600</td>
</tr>
<tr>
<td>3</td>
<td>Khyber pass Depot Stabling Lines</td>
<td>1200</td>
</tr>
<tr>
<td></td>
<td><strong>Total Capacity</strong></td>
<td><strong>3,000</strong></td>
</tr>
</tbody>
</table>
Section-VIII

Procedure and List of Documents to be submitted by successful bidder ("Bidder") in regard to the incorporation of the Project Company (Power Producer in the AGREEMENT)

1. Letter of Acceptance ("LOA") issued by DMRC and Letter of Acceptance given by the Bidder.

2. Memorandum of Understanding or Joint Bidding Agreement submitted by the Bidder /Consortium at the time of bidding.

3. Board resolution(s) of Successful Bidder Company / Companies ("Company").
   (a) requesting the DMRC to accept the Project Company incorporated by it (the Company) as the entity which shall undertake and perform the obligations and exercise the rights of the Consortium/JV/Successful Bidder under the LOA, including the obligation to enter into the Agreement as the Power Producer pursuant to the LOA for executing the Project.
   (b) Authorizing the Company to invest in the equity of the Project Company. The Board resolution should clearly record the undertaking by the Company in terms of clause 3.5.2 of the contract, extracts of which are given below for convenience of ready reference, that it would at all times maintain equity participation in the Project Company as per the terms of the Contract, which is quoted below for convenience. [Note: in case the Bidder is a Consortium, each of the consortium members should submit its board resolution in the manner as stated in the contract.]

   “The aggregate equity share holding of the Successful Bidder Company (Individual or in case of JV/JVA) minimum in proportion to their percentage participation in the issued and paid up equity share capital of the Project Company shall not be less than fifty one percent (51%) up to a period of Twenty Five (25) years from the date of commissioning of the entire Sanctioned Capacity of the Project Developer. The Successful Bidder may invest in the equity share capital of the Project Company through its Affiliate(s) or Parent Company or Ultimate Parent Company. If the Successful Bidder so invests, the Successful Bidder shall be liable to ensure that minimum equity holding/Lock in limits specified above are still maintained.”
   (c) Specifying the person nominated by the company as the Authorised Signatory on behalf of the company, who will correspond with the DMRC in regard to introduction of the Project Company and requesting DMRC to allow the Project Company to sign the AGREEMENT as the Power Producer with DMRC.

4. Incorporation of Project Company/SPV:
   (a) Certificate of Incorporation of Project Company /SPV.
   (b) Memorandum of Association and Article of Association of SPV. It should be ensured that the ‘Main Object’ of the Project Company / SPV, as stated in
the MoA, is confined to the execution of the Project as per Letter of Acceptance.

5. Introduction of Project Company to the DMRC:

Letter from the Successful Bidder, signed by its authorized signatory, supported with its Board Resolution(s), addressed to DMRC, introducing the incorporation of the Project Company and requesting the DMRC to accept the Project Company as the entity which shall undertake and perform the obligations and exercise the rights of the Successful Bidder under the LOA, including the obligation to enter into the Agreement as the Power Producer with DMRC, pursuant to the LOA for executing the Project.

6. Letter supported by its Board Resolution from the Project Company:

Letter from the Project Company, supported by its Board Resolution, addressed to DMRC, stating as follows:

(a) It has been promoted by the Successful Bidder specifically for the Project, as clearly provided in its Memorandum of Association, also enclosing the copies of the Certificate of Incorporation, MoA and AoA.

(b) Requesting the DMRC to accept it as the entity which shall undertake and perform the obligations and exercise the rights of the Consortium/JV/Successful Bidder including the obligation to enter into this Agreement, as Power Producer, with DMRC, pursuant to the LOA.

(c) Confirming that it will install and operate a solar photovoltaic power plant of [●] KW capacity (the “Project”) at the Premises as defined in the AGREEMENT and supply the entire Solar Power of the Project to DMRC / Purchaser on the terms and conditions contained in this Agreement.

(d) Resolving to undertake the project as per the terms of the Letter of Acceptance / Contract, and

(e) Name, designation and other details of the person duly authorized to execute, on behalf of the Project Company as the Power Producer, the Agreement with the DMRC on behalf of the SPV.

7. Legal opinion from the legal counsel of the Project Company, supported by documentary proof, with respect to the authority of the Project Company to execute the Agreement with the DMRC and the enforceability of the provisions thereof.

8. In case, the Bidder intends to hold equity in the Project Company through its ‘affiliate’/‘associate’ (with reference to the specific provision in the MoU/Joint Bidding Agreement submitted by the Bidder to the DMRC at the time of the bid), the following documents may also be procured:-

(a) Board Resolution of the Bidder/Consortium recording the following:-

(i) Authorizing its ‘affiliate’ to invest in the equity of the Project Company.
(ii) Undertaking that the Bidder/Consortium shall, at all time during the project period, maintain adequate equity in the affiliate/associate so as to fall within the definition of ‘affiliate’/‘associate’ as provided in the Agreement.

[Note: In case, the Bidder is a Consortium and more than one consortium member intends to hold the equity in the SPV through its affiliate, each such consortium member should provide separate Board Resolution in the manner as stated above]

(b) Board Resolution of the ‘affiliate’ Company

i. Authorizing the Company to invest in the equity of the SPV.

ii. Undertaking that the Company shall at all times comply with the equity requirement as provided in the Agreement.