

**SOLAR ENERGY CORPORATION OF INDIA LIMITED
NEW DELHI**

Ref No. SECI/C&P/MI/00/0009/22-23/Amendment-01

Dated 12.01.2023

Amendment-01 to RfS for Selection of Solar PV Module Manufacturers for Setting up Manufacturing Capacities for High Efficiency Solar PV Modules in India under the Production Linked Incentive Scheme (Tranche-II)			
RfS No. SECI/C&P/MI/00/0009/22-23 dated 18.11.2022			
S. No.	Clause/ Article No.	Existing Clause/Article	Amended Clause/Article
Amendments in the RfS document			
1.	2.3 for which they are required to contact M/s ElectronicTender.com (India) Pvt. Limited, New Delhi to complete.... for which they are required to contact M/s ElectronicTender.com (India) Pvt. Limited, Gurugram to complete....
2.	2.8	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.	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 document.
3.	3.1 solar PV modules in India and thus reduce dependence in the area of Renewable Energy.... solar PV modules in India and thus reduce import dependence in the area of Renewable Energy....
4.	3.2	...Based upon the extent of integration proposed, the Bidder can opt for bidding for any one of the following three baskets.Based upon the extent of integration proposed, the Bidder can opt for bidding for any one/two or all the following three baskets.
5.	3.3	... Detailed provisions regarding sustainable manufacturing are provided in Clause 8.7 of the RfS.	... Detailed provisions regarding sustainable manufacturing are provided in Clause 8.4 of the RfS.
6.	5.2	... However, the maximum capacity that will be awarded to a single bidder under the PLI scheme, i.e. the maximum capacity which will be eligible for grant of PLI, will be 50% of the capacity to be set up by the Bidder. However, the maximum PLI capacity that will be awarded to a single bidder under the PLI scheme, i.e. the maximum capacity which will be eligible for grant of PLI, will be 50% of the capacity to be set up by the Bidder. ...
7.	5.2	Addendum to the clause	It is clarified that the above limit will be applicable on the bidder under this RfS, who is a Parent/Ultimate Parent/Group Company/Affiliate of any of the entities which has won any capacity under Tranche-I. In other

		words, the limits under each Basket will be applicable on the entire Group of the entity which has won any capacity under Tranche-I.
8.	5.3	<p>Modified as follows:</p> <p>The evaluation of bids shall be carried out as described in Section-5 of the RfS. The methodology for allocation of Solar PV Manufacturing Projects is elaborated in Section-5 of the RfS. While Bidders are allowed to bid for all the three Baskets as per Clause 3.2 above, a single Bidder shall be allocated manufacturing and PLI capacity for only one Basket under this RfS. The capacity allocation will be carried out by SECI in the following order:</p> <ol style="list-style-type: none"> 1. Basket No.1 2. Basket No.2 3. Basket No.3 <p>Bidding capacity limits for each Basket shall be applicable as per Clause 5.2 above. In case a Bidder chooses to split its total bid capacity across the three Baskets, and is allocated in one of the three Baskets based on the order of allocation as above, it shall forego the capacity submitted in the remaining Baskets.</p> <p>For example, considering the following manufacturing capacity quoted by a Bidder across the three baskets: 8 GW under Basket 1, 6 GW under Basket 2 and 5 GW under Basket 3.</p> <p>Based on bid evaluation, in case the above Bidder is awarded a manufacturing capacity of 5 GW in Basket 1, its bids submitted under Baskets 2 and 3 will not be considered for evaluation. Similarly, in case it fails to be allocated any capacity in Basket 1 and is awarded a capacity of 5 GW in Basket 2, its bid under Basket 3 will not be opened.</p>
9.	6.2	<p>Modified as follows:</p> <p>At the time of submission of response to RfS, as part of the first envelope, the Bidders will be required to submit the following details in the Covering Letter as per Format 7.1:</p> <ol style="list-style-type: none"> a. Extent of Integration b. Manufacturing Capacity proposed to be set up (in GW) <p>and as part of the second envelope, the Bidders will be required to submit the following details in the Performance Parameters Matrix (PPM) as per Format 7.10:</p> <ol style="list-style-type: none"> a. Year-wise percentage of Local Value Addition (LVA) b. Year-wise performance parameters of manufactured modules (module efficiency and module's temperature co-efficient of P_{max}). <p>The Bidder shall also be required to declare the plan for local value addition, and the estimated employment generation and exports during the tenure of the Scheme, in the Performance Parameter Matrix at the time of bid submission.</p>

		Note: It is further clarified that if the Successful Bidder is able to achieve the quoted performance parameters (modules efficiency and module's temperature co-efficient of P_{max} , and Local Value Addition) by adopting a technology which is different from the technology declared at the time of the bid submission, the same shall be allowed under this RfS.	
10.	7.1	Addendum to the Clause: The above details may be changed by the Successful Bidder subsequent to issuance of LoA.	
11.	7.2	SMM shall be required to submit the Quarterly Progress Report to SECI containing the Project progress updates with respect to above parameters as part of its response to RfS, along with reasons for delay, if any.	SMM shall be required to submit the Quarterly Progress Report to SECI containing the Project progress updates with respect to above parameters, along with reasons for delay, if any.
12.	8.2	SECI reserves the right to visit the Manufacturing Facility(ies) of the SMM at any point of time after issuance of LoA, for verification of manufacturing capacity and nature of the Facility (Greenfield/Brownfield), as proposed by the Bidder...	SECI reserves the right to visit the Manufacturing Facility(ies) of the Bidder/SMM at any point of time after bid submission, for verification of manufacturing capacity and nature of the Facility (Greenfield/Brownfield), as proposed by the Bidder...
13.	8.4.a.	Addendum to the Clause	Extant rules and regulations pertaining to recycling and circular manufacturing, as issued by the Government from time to time, will be applicable on the Projects set up under this RfS.
14.	8.4.b.	Addendum to the Clause	SMM will have to meet applicable RPO targets. No additional benefit will be provided for sourcing 20% RE.
15.	9.2	A detailed commissioning procedure will be provided in due course. ...	A detailed commissioning procedure will be issued subsequent to the issuance of LoA and prior to SCD. ...
16.	9.2	Addendum to the Clause: Site inspection and verification of parameters as per the RfS may also be carried out by agencies authorized by MNRE/SECI/NISE. Qualitative Requirements and Testing, which contains, inter alia, SoP for Throughput calculation and Throughput assessment for Si Wafer and Polysilicon Manufacturing Facility has been provided as Annexure-B of the RfS.	
17.	9.5	<u>Penalty for delay beyond SCD:</u>	<u>Liquidated Damages for delay beyond SCD:</u>
18.	10.1	Addendum to the Clause	The term "unit" in this clause shall refer "capacity", as per the illustration in Clause 10.2 of the RfS.

			In case of shared infrastructure of ancillary services like electricity, water, captive power project (owned or sourced) etc of a PLI project with any additional project including but not limited to the additional capacity developed under SIPS/M-SIPS/SPECS, such Project will not be considered under Brownfield Project and will be considered as Greenfield Projects.
19.	10.4	New Clause	Bidders participating in this RfS are allowed to apply for benefits under SIPS/M-SIPS/SPECS schemes of the Government of India. However, upon issuance of Notification of Award (NoA) by SECI, the Bidders shall be required to submit an undertaking prior to issuance of Letter of Award (LoA) by SECI, stating that they have withdrawn/will withdraw their application under SIPS/M-SIPS/SPECS schemes of the Government of India, and that they shall not avail any other benefits upon issuance of LoA by SECI. In case of failure to submit the above undertaking, the NoA issued by SECI will be cancelled and the bidder will be removed from the list of Successful Bidders under this RfS.
20.	11.2.a	... Samples will be chosen by the inspection team during each visit, and testing of the same shall be conducted at the testing facility of NISE. For measurement of temperature coefficient, any one of the 4 quarters will be chosen for sample testing, and the results obtained on the batch being sampled, will be applicable for the total production considered for PLI disbursement for the complete year.	... Samples will be chosen by the inspection team during each visit, and testing of the same shall be conducted at the testing facility of NISE. If required, SECI may also designate any other NABL accredited labs, etc. for such testing. For measurement of temperature coefficient, any one of the 4 quarters will be chosen for sample testing. In case of module efficiency, the results obtained on the batch being sampled will be applicable on the total production being considered for PLI disbursement in the respective quarter. In case of temperature coefficient, the results obtained on the batch being sampled, will be applicable for the total production considered for PLI disbursement for the complete year. Results of the tests carried out on the chosen samples will be

			shared with the SMM soon after they are made available by NISE/its authorized testing agency.																		
21.	11.2.b	In this case, the above site visit will take place within the last 2 weeks of the end of the corresponding quarter. ...	To verify the Manufacturing commitments that have been fulfilled by the SMM, first visit after the commissioning shall be conducted in the first month of commissioning. Thereafter, from the quarter next to the quarter in which the commissioning falls, the site visits envisaged in Clause 11.2.a will take place within the last 2 weeks of the end of the corresponding quarter. ...																		
22.	11.2.c	... The percentage of Local Value Addition will be calculated as follows: [(Sale value of Module as per GST invoice excluding net domestic indirect taxes) – (Value of direct and indirect imported materials and services (including all Customs Duty) as per Bill of Entry filed in Customs, used in manufacturing of module)] / [Sale value of Module as per GST invoice excluding net domestic indirect taxes] x 100% It is clarified that indirect import of raw material by the SMM to be used in the Manufacturing Facility will not be counted as part of Local Value Addition under the RfS.	... The percentage of Local Value Addition will be calculated as follows: [(Sale value of Module as per GST invoice excluding net domestic indirect taxes) – (Value of direct and indirect imported materials and services (including all Customs Duty) as per Bill of Entry filed in Customs, used in manufacturing of module)] / [Sale value of Module as per GST invoice excluding net domestic indirect taxes] x 100% Any product used in manufacture of module will be considered as made in India, if same is manufactured in India, however the raw materials for the same can be imported. For example: If solar glass is manufactured in India using imported silica, and is used in manufacturing of solar PV modules, the value of the glass used in solar modules will counted towards LVA of solar PV modules.																		
23.	11.6	<p>Table modified as follows:</p> <table border="1"> <thead> <tr> <th colspan="2">PLI Year</th> <th>Scheduled PLI disbursement as per LoA</th> </tr> </thead> <tbody> <tr> <td>PLI-1</td> <td>01.06.2026 to 20.01.2027</td> <td>20.01.2027</td> </tr> <tr> <td>PLI-2</td> <td>21.01.2027 to 20.01.2028</td> <td>20.01.2028</td> </tr> <tr> <td>PLI-3</td> <td>21.01.2028 to 20.01.2029</td> <td>20.01.2029</td> </tr> <tr> <td>PLI-4</td> <td>21.01.2029 to 20.01.2030</td> <td>20.01.2030</td> </tr> <tr> <td>PLI-5</td> <td>21.01.2030 to 20.01.2031</td> <td>20.01.2031</td> </tr> </tbody> </table>		PLI Year		Scheduled PLI disbursement as per LoA	PLI-1	01.06.2026 to 20.01.2027	20.01.2027	PLI-2	21.01.2027 to 20.01.2028	20.01.2028	PLI-3	21.01.2028 to 20.01.2029	20.01.2029	PLI-4	21.01.2029 to 20.01.2030	20.01.2030	PLI-5	21.01.2030 to 20.01.2031	20.01.2031
PLI Year		Scheduled PLI disbursement as per LoA																			
PLI-1	01.06.2026 to 20.01.2027	20.01.2027																			
PLI-2	21.01.2027 to 20.01.2028	20.01.2028																			
PLI-3	21.01.2028 to 20.01.2029	20.01.2029																			
PLI-4	21.01.2029 to 20.01.2030	20.01.2030																			
PLI-5	21.01.2030 to 20.01.2031	20.01.2031																			
24.	14.1	Earnest Money Deposit (EMD) as per the values in the table below, in the form of	Earnest Money Deposit (EMD) as per the values in the table below, in the form of Bank																		

		Bank Guarantee according to Format 7.3A and valid for a period upto 15 months from the last date of bid submission, ...	Guarantee according to Format 7.3A and valid for a period upto 9 months from the last date of bid submission, ...
25.	14.1	... The Bank Guarantees towards EMD have to be issued in the name of the Bidding Company/ Lead Member of Bidding Consortium/JV. The Bank Guarantees towards EMD have to be issued in the name of the Bidding Company/ any Member of Bidding Consortium/JV. ...
26.	14.4.d.	If the selected bidder does not meet the eligibility criteria upon submission of documents;	Deleted
27.	15.10	The PBGs of SMMs shall be returned to them, immediately after successful commissioning of their Project in line with the commissioning procedure as per the RfS after taking into account any liquidated damages/penalties due to delays in commissioning/non-achievement of manufacturing commitments as per Clause 9 of the RfS.	The PBGs of SMMs shall be returned to them after the completion of time as mentioned in Clause 15.1 above after taking into account any liquidated damages/penalties, as applicable, as per terms and conditions of the RfS.
28.	17.	<p>Modified as follows:</p> <p><i>Force Majeure</i></p> <p>“Force Majeure” means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and makes a Party’s performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible under the circumstances, and subject to those requirements, includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action confiscation or any other action by Government agencies.</p> <p>In such cases of Force Majeure event, any request from the SMM shall be referred to the Scheme Monitoring Committee of the MNRE constituted as per Clause 10.2 of the Guidelines, which shall assess the request of the applicant and decide on the SMM’s request for necessary time extension.</p> <p>Similarly, in case of such Force Majeure event happening post commissioning, affecting the operations of the SMM, any request from the SMM shall be referred to the above Committee, which shall assess the request of the applicant and decide on disbursement of PLI.</p> <p>Applicable relief in case of Force Majeure events shall be limited to providing time extension in the SCD or PLI disbursement year, as decided by the above Committee.</p>	

29.	19.3	<p>In case of the selected Bidder itself executing the Project, it shall ensure that its promoters shall not cede control (Control shall mean the ownership, directly or indirectly, of more than 50% of the voting shares of such Company or right to appoint majority Directors), from the date of issuance of LoA until commissioning of the Manufacturing Facility. However, in case the Project is being set up by a listed Company, this condition will not be applicable</p>	<p>In case the Successful Bidder is itself executing the Project (i.e. the Successful Bidder itself is SMM), it shall ensure that its shareholders at the time of bid submission maintain a minimum shareholding of 51% in the SMM subsequent to issuance of LoA until commissioning of the Project.</p> <p>For example, in case the shareholding pattern of a Successful Bidder is as follows: A: 30% B: 40% C: 30%;</p> <p>It can modify its shareholding to the extent that either A or B or C individually own minimum 51% shareholding in the SMM, or a combination of A, B and C may hold minimum 51% shareholding in the SMM until Project commissioning. This scenario would also include either one or two of the shareholders exiting the SMM until Project commissioning. However, in case the Project is being set up by a listed Company, this condition will not be applicable. The SMM shall take prior approval of MNRE for any change in majority shareholding subsequent to commissioning of the Project.</p>
30.	19.4	<p>In case of companies having multiple promoters (but none of the shareholders having more than 51% of voting rights and paid up share capital), it shall be considered as a company under Joint Control. In such cases, the shareholding pattern in the company as submitted at the time of bidding, shall be maintained from the date of issuance of LoA until commissioning of the Manufacturing Facility</p>	<p>In case of a Successful Bidder/JV/Consortium implementing the Project through an SPV (i.e. the SPV is SMM), it shall maintain minimum 51% shareholding in the SMM from the date of issuance of LoA until the date of Project commissioning.</p> <p>The SMM shall take prior approval of MNRE for any change in majority shareholding subsequent to commissioning of the Project.</p>
31.	19.5	<p>In case of Project being executed through SPVs: The Selected Bidder executing the project, if being a single company, shall ensure that Controlling shareholding of the SPV/Project Company, shall not fall</p>	<p>Not Used.</p>

		below 51% at any time prior to commissioning of the Manufacturing Facility. In the event the selected Bidder is a consortium, then the combined Controlling shareholding of the consortium members in the SPV/ Project Company, shall not fall below 51% at any time prior to commissioning of the Manufacturing facility. However, in case the Project is being set up by a listed Company, this condition will not be applicable.	
32.	20.x.iii.	...SECI reserves the right to seek additional information relating to shareholding in promoter companies, their parents/ ultimate parents and other group companies to satisfy themselves that RfS conditions have been complied with and the bidder will ensure submission of the same within the required time lines.	...SECI reserves the right to seek additional information relating to shareholding in promoter companies, their Parents/Ultimate Parents/Affiliates and other Group Companies to satisfy themselves that RfS conditions have been complied with and the bidder will ensure submission of the same within the required time lines.
33.	20.x.iv	Certified copies of annual audited accounts for the last financial year, i.e. FY 2021-22, and provisional audited accounts, along with certified copies of Balance Sheet, Profit & Loss Account, Schedules and Cash Flow Statement supported with bank statements as on the date at least 7 days prior to the due date of bid submission (if applicable), shall be required to be submitted.	Certified copies of annual audited accounts for the last financial year, i.e. FY 2021-22, or provisional audited accounts, along with certified copies of Balance Sheet, Profit & Loss Account, Schedules and Cash Flow Statement supported with bank statements as on the date at least 7 days prior to the due date of bid submission (whichever is applicable), shall be required to be submitted.
34.	29.1	Addendum to the Clause	An SPV executing a project under Tranche-I can participate as a Bidding Company under this RfS.
35.	29.2	...Consortium/JV shortlisted and selected based on this RfS, has to necessarily form a Project Company and get it registered under the Companies Act, 2013 within 90 days of issuance of LoA...	...Consortium/JV shortlisted and selected based on this RfS, has to necessarily form a Project Company and get it registered under the Companies Act, 2013 within 180 days of issuance of LoA...
36.	29.3	...In case of foreign company participating on standalone basis and its	...In case of foreign company participating on standalone basis and its selection as Successful

		<p>selection as Successful Bidder, it has to form a “Special Purpose Vehicle” (SPV), i.e. an Indian Company registered under the Companies Act, 2013 as its subsidiary Company, with at least 51% shareholding in the SPV, within 90 days of issuance of LoA.....</p> <p>.....In case the foreign company participating as a member of consortium/JV, Clause 29.7 of the RfS shall be applicable.</p>	<p>Bidder, it has to form a “Special Purpose Vehicle” (SPV), i.e. an Indian Company registered under the Companies Act, 2013 as its subsidiary Company, with at least 51% shareholding in the SPV, within 180 days of issuance of LoA.....</p> <p>.....In case the foreign company participating as a member of consortium/JV, Clause 29.2 of the RfS shall be applicable.</p>
37.	29.8	<p>For avoidance of doubt, it is clarified that the fully owned subsidiary Company as mentioned in Clauses 29.3 and 29.6 above should be an immediate subsidiary of the bidder, without any intermediaries involved....</p>	<p>A Successful Bidder may choose to implement the Project through a “Special Purpose Vehicle” (SPV), which can be a newly incorporated entity or an existing Company registered in India.</p> <p>For avoidance of doubt, it is clarified that the fully owned subsidiary Company as mentioned in Clauses 29.3 and 29.6 above should be an immediate subsidiary of the bidder, without any intermediaries involved....</p>
38.	30.1.i.	<p>Net-worth (Rs. Cr./GW)</p>	<p>Net-worth (Rs. Cr./GW of the proposed Manufacturing Capacity)</p>
39.	30.1.ii.	<p>The Net-Worth to be considered for the above purpose will be the cumulative Net-Worth of the Bidding Company or Consortium together with the Net Worth of those Affiliates of the Bidder(s) that undertake to contribute the required equity funding and PBG/POI in case the Bidder(s) fail to do so in accordance with the RfS.</p>	<p>The Net-Worth to be considered for the above purpose will be the cumulative Net-Worth of the Bidding Company or Consortium together with the Net Worth of those Affiliates/shareholders of the Bidder(s) that undertake to contribute the required equity funding and PBG/POI in case the Bidder(s) fail to do so in accordance with the RfS.</p>
40.	30.1.iv.	<p>New Clause</p>	<p>The SPV formulated for PLI Tranche-I may also participate in this RfS, and the cumulative net-worth of the shareholders of the SPV formulated for Tranche-I will be considered in assessing the net-worth requirement in this tender. Where the SPV has been successful in Tranche-I, it will have to satisfy the Net-Worth requirement of Tranche-I plus the quantum it seeks to bid for in this tender.</p>

			For eg. In Tranche-I, the net-worth requirement for P+W+C+M basket was Rs. 605 Cr./ GW and in this tender, the net-worth requirement for P+W+C+M basket is Rs. 380 Cr./ GW, so if a Bidder was awarded 4 GW in P+W+C+M basket in Tranche-I and it wants to bid for 6 GW in P+W+C+M basket in this tender, it has to satisfy the net-worth of $(605 \times 4) + (380 \times 6) = \text{Rs. } 4700 \text{ Crores.}$
41.	30.2	The term “Affiliate(s)” in this Clause shall be read as “Affiliate(s)/shareholder(s)”.	
42.	30.2	Addendum to the Clause	The Bidder may also seek qualification on the basis of financial capabilities of “Alternate Investment Funds” (AIFs) as registered under SEBI. “AIF” shall be as defined by SEBI. For this purpose, the Bidder shall submit a Letter of Undertaking from the AIF, committing to contribute the required equity funding and performance bank guarantees in case the Bidder fails to do so in accordance with the RfS. Financial credential of such AIFs shall be evaluated based on the Asset Under Management (AUM) or investible funds, calculated in accordance with applicable SEBI (AIF) Regulations.
43.	30.7	In case the response to RfS is submitted by a Consortium/JV, then the financial requirement to be met by each Member of the Consortium/JV shall be computed in proportion to the equity commitment made by each of them in the Project Company.	In case the response to RfS is submitted by a Consortium/JV, then the financial requirement is required to be met by the Consortium/JV members on an aggregate basis.
44.	32.1	... For e.g., if the bid submission deadline is 18:00 hrs. on 31.12.2022, the online bid opening will be conducted on 02.01.2023. For e.g., if the bid submission deadline is 18:00 hrs. on 31.01.2023, the online bid opening will be conducted on 03.02.2023. ...

45.	34.3	<p>Clause modified as follows:</p> <p>An illustration to this effect is brought out as follows:</p> <ul style="list-style-type: none"> • Proposed Greenfield manufacturing capacity of W+C+M category: 2000 MW • Assuming net sale of 1000 MW on an annual basis for calculation of PLI <table border="1" data-bbox="300 405 1412 1136"> <thead> <tr> <th></th> <th>Year 1</th> <th>Year 2</th> <th>Year 3</th> <th>Year 4</th> <th>Year 5</th> </tr> </thead> <tbody> <tr> <td>Module Efficiency (%)</td> <td>21.5</td> <td>21.5</td> <td>21.5</td> <td>22</td> <td>22.5</td> </tr> <tr> <td>Temperature Coefficient of Pmax (% per degree Celsius)</td> <td>-0.38</td> <td>-0.38</td> <td>-0.38</td> <td>-0.29</td> <td>-0.29</td> </tr> <tr> <td>Sales (Wp)</td> <td>1,00,00,0 0,000</td> <td>1,00,00,0 0,000</td> <td>1,00,00,0 0,000</td> <td>1,00,00,0 0,000</td> <td>1,00,00,0 0,000</td> </tr> <tr> <td>LVA</td> <td>60%</td> <td>65%</td> <td>70%</td> <td>80%</td> <td>90%</td> </tr> <tr> <td>LVA Factor</td> <td>0.79</td> <td>0.79</td> <td>0.85</td> <td>0.92</td> <td>1</td> </tr> <tr> <td>Tapering Factor</td> <td>1.4</td> <td>1.2</td> <td>1</td> <td>0.8</td> <td>0.6</td> </tr> <tr> <td>Base PLI Rate</td> <td>1.05</td> <td>1.05</td> <td>1.05</td> <td>1.40</td> <td>1.55</td> </tr> <tr> <td>Sales eligible for PLI (Wp)</td> <td>50,00,00, 000</td> <td>50,00,00, 000</td> <td>50,00,00, 000</td> <td>50,00,00, 000</td> <td>50,00,00, 000</td> </tr> <tr> <td>PLI (Rs.)</td> <td>58,06,50, 000</td> <td>49,77,00, 000</td> <td>44,62,50, 000</td> <td>51,52,00, 000</td> <td>46,50,00, 000</td> </tr> <tr> <td>Total PLI (Rs. Cr.)</td> <td colspan="5" style="text-align: center;">250.48</td> </tr> </tbody> </table>			Year 1	Year 2	Year 3	Year 4	Year 5	Module Efficiency (%)	21.5	21.5	21.5	22	22.5	Temperature Coefficient of Pmax (% per degree Celsius)	-0.38	-0.38	-0.38	-0.29	-0.29	Sales (Wp)	1,00,00,0 0,000	1,00,00,0 0,000	1,00,00,0 0,000	1,00,00,0 0,000	1,00,00,0 0,000	LVA	60%	65%	70%	80%	90%	LVA Factor	0.79	0.79	0.85	0.92	1	Tapering Factor	1.4	1.2	1	0.8	0.6	Base PLI Rate	1.05	1.05	1.05	1.40	1.55	Sales eligible for PLI (Wp)	50,00,00, 000	50,00,00, 000	50,00,00, 000	50,00,00, 000	50,00,00, 000	PLI (Rs.)	58,06,50, 000	49,77,00, 000	44,62,50, 000	51,52,00, 000	46,50,00, 000	Total PLI (Rs. Cr.)	250.48				
	Year 1	Year 2	Year 3	Year 4	Year 5																																																																
Module Efficiency (%)	21.5	21.5	21.5	22	22.5																																																																
Temperature Coefficient of Pmax (% per degree Celsius)	-0.38	-0.38	-0.38	-0.29	-0.29																																																																
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LVA	60%	65%	70%	80%	90%																																																																
LVA Factor	0.79	0.79	0.85	0.92	1																																																																
Tapering Factor	1.4	1.2	1	0.8	0.6																																																																
Base PLI Rate	1.05	1.05	1.05	1.40	1.55																																																																
Sales eligible for PLI (Wp)	50,00,00, 000	50,00,00, 000	50,00,00, 000	50,00,00, 000	50,00,00, 000																																																																
PLI (Rs.)	58,06,50, 000	49,77,00, 000	44,62,50, 000	51,52,00, 000	46,50,00, 000																																																																
Total PLI (Rs. Cr.)	250.48																																																																				
46.	36.	<p>.... In case of a Consortium/JV being selected as the successful Bidder, the LoA shall be issued to the Lead Member of the Consortium/JV. SECI reserves the right to annul the bid process without any financial implications to any of the parties concerned....</p>	<p>.... In case of a Consortium/JV being selected as the successful Bidder, the LoA shall be issued to the Lead Member of the Consortium/JV. In case the successful bidder fails to submit the PBG and success fee within prescribed time line its NOA shall stand canceled. SECI reserves the right to annul the bid process without any financial implications to any of the parties concerned....</p>																																																																		
47.	38.7.a.	<p>New Clause</p>	<p>“CHARTERED ENGINEER” shall mean shall mean a person practicing in India or a firm whereof all the partners practicing in India is/are registered as “Professional Engineer(s)/Chartered Engineer(s)” under the Indian Institute of Engineers or other recognized institution in India.</p>																																																																		
48.	38.23	<p>“MANUFACTURING CAPACITY” ...</p>	<p>“MANUFACTURING CAPACITY” or “AWARDED CAPACITY” ...</p>																																																																		

49.	38.42	<p>New Clause: “PLI ELIGIBLE CAPACITY” shall mean the capacity which shall be eligible for PLI, as per the terms and conditions of this RfS. For Greenfield Projects, the maximum PLI eligible capacity shall be 50% of the Awarded Capacity, and in case of Brownfield Projects, it shall be 25% of the Awarded Capacity. Further this is clarified that for the calculation of sales in any given year, sales eligible for PLI shall be 50%/25% as applicable (Greenfield/Brownfield) of the total sales reported to SECI in that year.</p>													
50.	Format -7.1	<p>...We confirm that we including our Ultimate Parent Company/ Parent Company/ Affiliate/ Group Companies directly or indirectly have not submitted response to RfS for ‘Setting up Manufacturing Capacities for High Efficiency Solar PV Modules’ under the Production Linked Incentive (PLI) scheme (Tranche-II), other than this response to RfS....</p>	<p>...We confirm that we, including our Ultimate Parent Company, Parent Company, Affiliate, Group Companies, directly or indirectly, have not submitted response to RfS for ‘Setting up Manufacturing Capacities for High Efficiency Solar PV Modules’ under the Production Linked Incentive (PLI) scheme (Tranche-II), other than this response to RfS....</p>												
51.	Format -7.1	<p>Table modified as follows:</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Basket selected (P+W+C+M / W+C+M / C+M)</th> <th>Manufacturing Capacity (MW)</th> <th>Nature of Proposed Manufacturing Facility</th> <th>Proposed technology</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td></td> <td></td> <td>Greenfield/Brownfield (Choose one)</td> <td></td> </tr> </tbody> </table>				S. No.	Basket selected (P+W+C+M / W+C+M / C+M)	Manufacturing Capacity (MW)	Nature of Proposed Manufacturing Facility	Proposed technology	1.			Greenfield/Brownfield (Choose one)	
S. No.	Basket selected (P+W+C+M / W+C+M / C+M)	Manufacturing Capacity (MW)	Nature of Proposed Manufacturing Facility	Proposed technology											
1.			Greenfield/Brownfield (Choose one)												
52.	Format-7.1 Cl. 6.	<p>.....Further, we understand that if same is found to be true for our units under the scheme, SECI will be entitled to cancel the allocation to our Manufacturing Facility and we agree to pay any Fees towards penalties/recoveries as imposed by SECI including the encashment of PBG, if submitted.</p>	<p>..... Further, we understand that if same is found to be true for our units under the scheme, SECI will be entitled to cancel the allocation to our Manufacturing Facility and we agree to pay any Fees towards penalties/recoveries as imposed by SECI including the encashment of PBG, if submitted. <i>(Instructions to bidders: Not applicable for bidders selected under Tranche-I)</i></p>												
53.	Format-7.1 Cl. 13.	<p>.... Further we will submit a Board Resolution within 90 days of issuance of LoA, committing total equity infusion in the SPV as per the provisions of RfS...</p>	<p>.... Further we will submit a Board Resolution within 180 days of issuance of LoA, committing total equity infusion in the SPV as per the provisions of RfS...</p>												
54.	Format -7.6	<p>The term “Affiliate(s)” in this Format shall be read as “Affiliate(s)/shareholder(s)”.</p>													
55.	Format -7.7	<p>We undertake that, the Manufacturing units proposed to be set up in respect to our response to RfS vide RfS No.</p>	<p>We undertake that for the Manufacturing units proposed to be set up in respect to our response to RfS vide RfS No.</p>												

	SECI/C&P/RfS/2GWMANUFACTURING/P-3/R1/062019 dated 25.06.2019, we have not availed any benefit under the MNRE's tender(s) for solar Power Purchase Agreements linked to PV manufacturing or SIPS/ M-SIPS/ SPECS schemes of Ministry of Electronics & Information Technology (MEITY). ...	SECI/C&P/MI/00/0009/22-23 dated 18.11.2022, we have not availed any benefit under the MNRE's tender(s) for solar Power Purchase Agreements linked to PV manufacturing or SIPS/ M-SIPS/ SPECS schemes of Ministry of Electronics & Information Technology (MEITY). ...
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56.	Format -7.10	Table modified as follows:					
		Parameter	Values for 1st year after commissioning	Values for 2nd year after commissioning	Values for 3rd year after commissioning	Values for 4th year after commissioning	Values for 5th year after commissioning
		Module Efficiency* (in %)					
		Module's temperature co-efficient of P_{max} (in % per degree Celsius)					
		Local Value Addition (LVA) (in %)					

57.	Annexure-I to Format 7.10	Following details to be provided:		
		<ul style="list-style-type: none"> Estimated Employment Generation: 		
		Parameter	Indirect	Direct
		Construction Period (from issuance of LoA to SCD)		
	SCD + 5 years			
	<ul style="list-style-type: none"> Exports during the tenure of the Scheme (Year-wise exports trajectory till 5 years from SCD. No standard format) Plan for Local Value Addition (No standard format) 			

QUALITATIVE REQUIREMENTS AND TESTING

1. Throughput Calculation

1.	For PV Cells and PV modules	As enclosed in Appendix 1.
2.	For polysilicon and wafer	As enclosed in Appendix 2.

2. Qualitative Testing

For Efficiency Testing		
1.	Standard / Procedure followed	As per the latest IEC 61215/IS 14286 At NISE PV testing facility.
2.	Frequency of test	Once in every three months. (starting from the first month of commissioning performed at the end of quarter)
3.	Number samples to be selected* by NISE at manufacturing facility	15 numbers for every model
4.	Number of samples to be submitted to NISE Gurugram by the manufacturer	12 numbers for every model (3 numbers sealed and retained at manufacturing facility)
5.	Number of samples subjected for testing	9 numbers for every model
* <i>Sample selection based on production data on the day of visit.</i>		

For Temperature Coefficient Testing		
1.	Standard / Procedure followed	As per the latest IEC 61215/IS 14286 At NISE PV testing facility.
2.	Frequency of test	Once in every year (starting from the first month of commissioning performed at the end of year)

3.	Number samples to be selected* by NISE at manufacturing facility	15 numbers for every model
4.	Number of samples to be submitted to NISE Gurugram by the manufacturer	12 numbers for every model (3 numbers sealed and retained at manufacturing facility)
5.	Number of samples subjected for testing	9 numbers for every model
* <i>Sample selection based on production data on the day of visit.</i>		

Note:

1. *Checklist for verification of the commissioning of major Equipment shall be shared in due course, after the award of tender.*
2. *The procedures laid out as Appendices to this Annexure may be modified during the Project implementation, base on mutual agreement between MNRE/SECI/NISE and the SMM.*

Appendix 1: SoP for Throughput Calculation

1.0 Definition of Maximum Throughput:

The maximum capacity of PV Cells/ Modules (in MW) that can be manufactured from machinery line/ Manufacturing Facility over a period of time (generally over a period of 1 year).

1.1 Assumptions/Definitions:

- The manufacturing line operates for 360 days in a year.
- The manufacturing line operates for 24 hrs in a day.
- Downtime of equipment and manufacturing facility (Scheduled maintenance/other unforeseen downtime) assumed to be 10% of the total operational time (to be estimated on yearly basis)
- The throughput shall be calculated from the SPV Cell/ Module herein called as “Representative Capacity” having the highest claimed peak power output.
- **Time Taken per cycle** is defined as the time taken by the equipment to complete a cycle.
- **Set up Time per cycle** is defined as time required to prepare an equipment for its next cycle after it has completed the previous cycle (Only in Semi-Automatic/ Manual Equipment)
- **Equipment that gives Output per cycle** are defined as the equipment that processes a batch of SPV Cells/ Modules simultaneously in a cycle. The throughput of the equipment is measured by the time taken to complete one cycle.
- **Equipment that gives Output per unit time** are defined as equipment that processes a single SPV Cell/ Module at a given time. The throughput of the equipment is measured by the No. of cells/ Modules processed in a given time period.

1.2 Pre-Requisites for the assessment:

- The SPV cell & module manufacturing line should be stabilized to manufacture Representative Capacity.
- All equipment to be in working condition with required manpower & raw material inventory to run line for a week at least.
- The manufacturer should have Golden Reference for SPV Cells & Modules with valid Calibration certificates.

1.3 Steps Followed for Assessment:

Step 1:

- The cell tester/ module tester shall be calibrated with the golden reference.

Step 2:

- **For equipment that give output per cycle**
 - i. The operator of equipment shall facilitate witness for operating process.
 - ii. The machinery equipment/ Line/ Manufacturing Facility shall be made to operate for minimum period of 4 hrs in presence of NISE officials.
 - iii. The number of SPV Cell/ Module (representative capacity) processed by the equipment in a cycle shall be recorded.
 - iv. The time taken by the operator to start new/next cycle i.e. set-up time shall be recorded.
 - v. The time taken by the equipment to complete one cycle shall be recorded.
 - vi. All the readings shall be recorded as per the Observation Table 2.

Observation Table 2						
Manufacturing Line (Line 1, Line 2 etc)	Equipment Name	Equip. Make	Equip Model No.	No. of SPV Cells/ Modules per Cycle	Time Taken Per Cycle (in Minutes)	Setup Time Per Cycle (in Minutes)
				A	B	C
Line 1 - Auto	Equip 1	Make 1				
	Equip 2	Make 1				
	Equip 3	Make 1				
Line 2 - Auto	Equip 1	Make 1				
	Equip 2	Make 1				
	Equip 3	Make 1				

- vii. Cell/Module capacity “G” is the average of the capacity of all the PV modules manufactured during the period of verification/inspection, or representative capacity, whichever is lower.
- viii. Capacity of the individual Cell/Module shall be measured using the cell/module tester.

- **For equipment that give output per time**
 - i. The operator of equipment shall facilitate witness for operating process.
 - ii. The number of SPV Cells/ Modules (representative capacity) processed in a given duration by the equipment shall be recorded.
 - iii. All the readings shall be recorded as per the Observation Table 3.

Observation Table 3						
Manufacturing Line (Line 1, Line 2 etc)	Equipment Name	Equip. Make	Equip Model No.	No. of SPV Cell/ Module Processed in observation Duration	Observation Start Time in HH:MM:SS	Observation End Time in HH:MM:SS
				P	Q	R
Line 1 - Auto	Equip 1	Make 1				
	Equip 2	Make 1				
	Equip 3	Make 1				
Line 2 - Auto	Equip 1	Make 1				
	Equip 2	Make 1				
	Equip 3	Make 1				

Note:
For SPV Cell Manufacturing Line: P is the number of Cells processed
For SPV Module Manufacturing Line: P is the number of Modules processed, if cells are counted during the observation then $P = (\text{Number of Cells counted} / \text{Total number of cells in a representative capacity Module})$
** Any break in between the observation time and end time, may be accordingly compensated.

- iv. Cell/Module capacity “G” is the average of the capacity of all the PV modules manufactured during the period of verification/inspection, or representative capacity whichever is lower.
- v. Capacity of the individual Cell/Module shall be measured using the cell/module tester.

1.4 Calculation Procedure:

- For Maximum Throughput Calculation of equipment that give **output per cycle**, given in Calculation Table 4:

Calculation Table 4		
Step 1	Total Time Taken Per Cycle, ‘D’ (in minutes)	B+C
Step 2	Total Working Minutes per year, ‘E’	518400 minutes (360 Days X 24 X 60 min)
Step 3	Total number of Cycles that can run per year, ‘F’	(E / D)
Step 4	Annual Capacity in MWp, ‘H’	(F * A * G) * 10⁻⁶

Step 5	Maximum Annual Throughput in MWp, 'M1'	'H' * 0.9 (0.9 based on Downtime of equipment's and manufacturing facility)
A representative example of the Maximum Throughput Calculation of equipment that give output per cycle is given in Appendix 1.		

- For Maximum Throughput Calculation of equipment that give **output per time**, given in Calculation Table 5:

Calculation Table 5		
Step 1	Observation duration is 'S' (in minutes)	(R – Q)
Step 2	Total Working Minutes per year, 'E'	518400 minutes (360 Days X 24 X 60 min)
Step 3	Total No. of SPV Cell/ Module Produced per year, 'T'	(P / S) * E
Step 4	Annual Capacity in MWp, 'H'	(T * G) * 10⁻⁶
Step 5	Maximum Annual Throughput in MWp, 'M2'	'H' * 0.9 (0.9 based on Downtime of equipment and manufacturing facility)
A representative example of the Maximum Throughput Calculation of equipment that give output per time is given in Appendix 2.		

The Maximum annual throughput for the Cells and Modules shall be calculated separately.

1.5 General:

- Throughput calculation shall be carried out for all the Equipment.
- Selection of representative capacity samples shall be as advised by NISE officials.
- Categorize the equipment either as output per cycle or output per unit time.
- If the claimed wattage of Representative capacity SPV Cell/ Module is more than that observed at the time of average efficiency measurement, then the manufacturer needs to make suitable arrangements to produce SPV Module of claimed wattage from in-house cells which shall be processed at the time of visit for throughput calculation.
- The throughput (calculated) of each piece of equipment of the same type in a manufacturing line shall be added up to arrive at the throughput of that equipment in a line.

- The throughput of each manufacturing line shall be added up to arrive at the throughput of Manufacturing Facility.
- Throughput of the bottleneck equipment will be considered to arrive at the final throughput of Manufacturing Facility.

1.6 Documents to be submitted by Manufacturer prior to NISE officials visit for throughput assessment: (All the documents to be signed and stamped by competent authority)

- Self-Declaration by the manufacturer regarding number of operational days and shifts of SPV Cell / Module Manufacturing Facility.
- Datasheet of each equipment, clearly mentioning the equipment Model Number & Throughput.
- Calibration Certificate of SPV Cell/ Module Tester Equipment.
- Calibration Certificate of reference / Golden SPV Cell / Module that is used to calibrate the Cell / Module I-V Tester Equipment.
- If any other document/ information required by NISE officials, it shall be intimated before inspection.

Appendix 2: Throughput Assessment for Si Wafer & Polysilicon Manufacturing Facility

1. Throughput of the silicon wafer manufacturing can be assessed as:

Number of qualified silicon wafers processed in four hours (qualified - crack /defect free)	“n”
Assessed value of Silicon wafer production (millions per year)	$W_a = n \times 0.25 \times 8760 \times 0.9 \times 10^{-6}$ where, {365days* 24Hrs = 8760} & {0.9 is Factor for downtime/preventive maintenance}
<p>Note:</p> <ul style="list-style-type: none"> The detailed method of assessment of throughput of any equipment in a Si-Wafer Manufacturing Facility can be referred with the methodology given in the document for Assessment of Throughput in a SPV Cell / Module Manufacturing Facility. 	

Verification criteria for silicon wafers Manufacturing Facility as per PLI:

- Calculated value (required) of Si Wafers Production, W_c ($\frac{Millions}{Year}$) =**

$$\frac{\text{Number of cell Produced in a year}}{(Y_c) * 1000000}$$

Where,

- Number of Cells to be required in a year = $X(\text{in watts}) * (\frac{100}{Y_m * P_c})$
- For a Module Manufacturing Capacity of “X” (in watts),
- Cell Manufacturing Yield: “ Y_c ”; absolute value
- Module Manufacturing Yield: “ Y_m ”; absolute value
- Average Cell Output Power: “ P_c ” Watts calculated from claimed Module efficiency in the 1st year of production.

2. Throughput of Polysilicon Manufacturing Facility can be assessed as:

Weight of polysilicon crucibles produced in one batch (kg)	“ W_{poly} ”
Time taken for polysilicon crucibles produced in one batch (hours)	“ h_{poly} ”
Assessed value of Polysilicon production (tonnes per year)	$\{W_{poly} \times 8760 \times 0.9 \times 10^{-3}\} / h_{poly}$

	where, {365days* 24Hrs = 8760} & {0.9 is Factor for downtime/preventive maintenance}
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Verification criteria for poly silicon Manufacturing Facility as per PLI:

- Calculated value of *Polysilicon Production* $\left(\frac{\text{Tonnes}}{\text{Year}}\right) =$
Calculated value of Si Wafers produced $Wc \left(\frac{\text{Millions}}{\text{Year}}\right) \times W_{si} \times 10^{-6}$

Weight of polysilicon required to produce one Si-Wafer: “W_{si}” gms

This can be obtained by: (Weight of one ingot / number of qualified wafers produced from one ingot)

Illustration for calculation of Module Efficiency for PLI calculation for a particular year

(Please refer Clause 6.3(i)b. of the RfS)

Awarded Manufacturing Capacity- 6 GW in P+W+C+M category

Module efficiency quoted for a particular year- 22.10%

Quarter	Model	Sales in Wp (GW)	Minimum Value (Module Efficiency in %) <u>as per Sales Data*</u> (A)	Minimum Value (Module Efficiency in %) <u>as per NISE Report**</u> (B)	Quoted Module Efficiency (in %) (C)	Module Efficiency to be Considered for PLI (Min. of A, B & C)	Sales Group
Q1	M1	1	21.90	22.10	22.10	21.90	Sales Group -2
	M2	0.5	22.10	22.10	22.10	22.10	Sales Group -1
Q2	M1	1.5	22.10	21.80	22.10	21.80	Sales Group -2
	M2	0.5	22.10	21.80	22.10	21.80	Sales Group -2
Q3	M1	0.5	21.80	22.00	22.10	21.80	Sales Group -2
	M2	1	21.90	21.90	22.10	21.90	Sales Group -2
Q4	M1	0.5	22.10	22.00	22.10	22.00	Sales Group -2
	M2	0.5	22.00	21.40	22.10	21.40	Sales Group -3

* Based on Statutory Auditor's certificate

** Minimum of the results of testing of 9 samples

	Module efficiency (in %)	Sales in Wp (GW)	% of Total sales	Remarks
Sales Group -1	≥22.10	0.5	8.33 %	NIL PLI as Criteria of min 75 % Sales in Group-1 is not fulfilled
Sales Group -2	between 21.60 to 22.09	5	83.34 %	
Sales Group -3	between 21.00 to 21.59	0.5	8.33 %	