F. No. 283/62/2020-GRID SOLAR

भारत सरकार / Government of India

नवीन और नवीकरणीय ऊर्जा अंतर्गत / Ministry of New & Renewable Energy (MNRE)

ग्रिड सॉलर ऊर्जा प्रभाग / Grid Solar Power Division

Atal Akshay Urja Bhawan
Lodhi Road, New Delhi – 110003

Dated: 30th September, 2022

To

The Pay & Accounts Officer,
Ministry of New & Renewable Energy
New Delhi – 110003.

Sub: Production Linked Incentive Scheme (Tranche II) under ‘National Programme on High Efficiency Solar PV Modules’

Sir/ Madam,

I am directed to convey the sanction of the President for implementation of the Production Linked Incentive Scheme (Tranche II) under ‘National Programme on High Efficiency Solar PV Modules’ for achieving manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV Modules.

2.0 Aims and Objectives:

2.1 Aim: To promote manufacturing of high efficiency solar PV modules in India and thus reduce import dependence in the area of Renewable Energy.

2.2 Objectives:

i. To build up solar PV manufacturing capacity of high efficiency modules.

ii. To bring cutting-edge technology to India for manufacturing high efficiency modules. The scheme will be technology agnostic in that it will allow all technologies. However, technologies which yield better module performance will be incentivized.

iii. To promote setting up of integrated plants for better quality control and competitiveness.

iv. To develop an ecosystem for sourcing of local material in solar manufacturing.


vi. To encourage sustainable manufacturing practices and adoption of circular economy approaches.

3.0 Implementation Methodology: The Scheme will be implemented as per the detailed Scheme Guidelines enclosed at Annexure-I.

4.0 Necessary funds for implementation of this Scheme during 2022-23 (if any required) and subsequent years will be drawn from the budgetary allocations to Ministry of New & Renewable Energy.
5.0 This issues with the concurrence of IFD vide their Dy. No. 154 dated 30.09.2022.

Yours faithfully,

(Sanjay G. Karndhar)
Scientist-D
Email: karndhar.sg@nic.in

Copy for information and necessary action to:

1. All Central Government Ministries and Departments.
2. NITI Aayog, Sansad Marg, Sansad Marg Area, New Delhi.
3. Renewable Energy /Power/Energy Departments of all States & UTs.
4. State Nodal Agencies for Renewable Energy (SNAs) of all States / UTs.
6. Principal Director of Audit, Scientific Audit-II, DGACR Building, I.P. Estate, Delhi – 110002.
10. Indian Renewable Energy Development Agency Limited (IREDA), 3rd Floor, August Kranti Bhawan, Bhaiji Cama Place, New Delhi – 110 066

Internal Distribution:

1. PS to Hon’ble Minister for Power and New & Renewable Energy
2. PS to Hon’ble MoS for New & Renewable Energy
3. PSO to Secretary, MNRE
4. PPS to AS
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12. Hindi Section for Hindi version
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Yours faithfully,

(Sanjay G. Karndhar)
Scientist-D
Email: karndhar.sg@nic.in
Annexure-I

Sub: Scheme Guidelines for Implementation of the Production Linked Incentive Scheme (Tranche II) under ‘National Programme on High Efficiency Solar PV Modules’ for achieving manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV Modules.

1. Introduction & Background

1.1. The Union Cabinet approved the Production Linked Incentive (PLI) Scheme for National Programme on High Efficiency Solar PV Modules, for achieving manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV Modules) on 7th April, 2021. The outlay for this PLI Scheme was initially ₹ 4,500 crore (Tranche I) and the Ministry of New & Renewable Energy (MNRE) issued the Scheme Guidelines for Production Linked Incentive Scheme on ‘National Programme on High Efficiency Solar PV Modules’ on 28th April, 2021.

1.2. Under this tranche, Indian Renewable Energy Development Agency Limited (IREDA), the implementing agency on behalf of MNRE for the PLI Scheme (Tranche-I), issued the Bid Documents for selection of manufacturers for setting up manufacturing capacities for High Efficiency Solar PV Modules. In response, 18 bids corresponding to a Solar PV manufacturing capacity of 54,809 MW were received and Letters of Award were issued by IREDA on 11.11.2021/02.12.2021 to three successful bidders for setting up of 8,737 MW capacity of fully integrated Solar PV Module manufacturing units within PLI scheme outlay of ₹ 4,500 crore.

1.3. To establish a larger manufacturing base for solar PV modules, an additional allocation of ₹ 19,500 crore (Tranche II) for PLI for manufacture of high efficiency modules, with priority to fully integrated manufacturing units from polysilicon to solar PV modules, was announced in the Budget 2022-23, on 1st February 2022.

2. Aims and Objectives

The scheme aims to promote manufacturing of high efficiency solar PV modules in India and thus reduce import dependence in the area of Renewable Energy. The objectives of the scheme include the following:

i. To build up solar PV manufacturing capacity of high efficiency modules.
ii. To bring cutting-edge technology to India for manufacturing high efficiency modules. The scheme will be technology agnostic in that it will allow all technologies. However, technologies which yield better module performance will be incentivized.
iii. To promote setting up of integrated plants for better quality control and competitiveness.
iv. To develop an ecosystem for sourcing of local material in solar manufacturing.
vi. To encourage sustainable manufacturing practices and adoption of circular economy approaches.
3. Implementation Methodology

National Programme on Solar PV Manufacturing involving Production Linked Incentive (PLI) to enhance domestic manufacturing capacity of High Efficiency Solar PV Modules will be implemented through a transparent selection process, details of which are furnished in the succeeding paragraphs.

3.1. Implementing Agency

i. The PLI Scheme (Tranche-II) will be implemented by MNRE with Solar Energy Corporation of India Limited (SECI) as the Implementing Agency. SECI will be responsible for providing secretarial, managerial and implementation support and carrying out other responsibilities as assigned by MNRE from time to time. The responsibilities of SECI inter alia, include receipt of applications, examination and appraisal of applications as per the provisions of the scheme, issuing acknowledgements and letters of award to applicants, examination of claims of beneficiaries for disbursement of PLI, verification and reconciliation of disbursement claims with prescribed documents, compilation of data regarding progress and performance of the scheme through Quarterly Review Reports and other information / documents. SECI will also submit progress to MNRE on a quarterly basis along with details of disbursement claims received for PLI, amount disbursed, reasons for delay in disbursement of the incentives etc. SECI will be eligible to get 0.50% of the PLI amount disbursed as administrative charges on annual basis.

ii. SECI will have the right to carry out physical inspection of an applicant’s manufacturing units and offices. It may take help of National Institute of Solar Energy (NISE) for verification of efficiency and temperature co-efficient of modules. If required, MNRE may also designate National Accreditation Board for Testing and Calibration Laboratories (NABL) accredited labs, etc. for such verification. A Project Management Unit (PMU) shall be established in MNRE to assist MNRE & SECI in the implementation of the scheme. Expenditure for PMU will be met out of the administration charges cited at para 3.1 (i) above.

3.2. Criteria for Selection of Beneficiaries

i. Selection

The beneficiaries of the PLI Scheme will be selected through a transparent selection process. Applications will be shortlisted after consideration of the following parameters. It is proposed to call bids for the award of manufacturing capacities commensurate with the additional fund allocation of ₹ 19,500 crore announced in the Union Budget 2022-23.
ii. **Bidders eligible for PLI**

The bidder manufacturer can be a single company or a Joint Venture/Consortium of more than one company. However, in case of Joint Venture/Consortium, a partner/company will be allowed to tie up their manufacturing capacity (of any stage) with another partner/company for one bid only. Manufacturing units which have 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), will not be eligible for benefits under this programme. However, any benefit under SIPS/ M-SIPS/ SPECS/ Manufacturing Linked Tender can be availed by manufacturers for the difference of offered bid capacity and double the PLI awarded capacity. For example, for a bid capacity of Y, if a manufacturer has been awarded PLI capacity of X, then it may avail any benefit under SIPS/ M-SIPS/ SPECS /Manufacturing Linked Tender, for capacity in excess of double the PLI awarded capacity i.e. Y-2X. SECI shall obtain an undertaking from bidders in this regard. Goods, equipment and services for which contracts have been concluded by technically qualified bidders in earlier PLI bid, after 11.11.2021 (the date of issue of Letters of Award under Tranche-I), will be eligible for counting towards calculating benefits under the PLI Scheme Tranche-II. For any other case to be eligible for PLI disbursement, the contract for capital equipment / services, etc. should be concluded after the issuance of letter of award.

iii. **Greenfield & Brownfield projects**

Greenfield solar PV module manufacturing will involve installation of new plant, machinery and equipment. Such Greenfield units must be established in physically segregated premises from any existing manufacturing units.

If a bidder who was issued Letter of Award under earlier bid, is awarded additional capacity under new bid, the new capacity established, will be considered Greenfield, even if it shares common facilities / infrastructure built for the capacity under PLI Tranche-I.

Brownfield manufacturing units will involve expansion of existing manufacturing facilities with addition of new production lines within the existing physical infrastructure and will also be allowed to participate. PLI receivable for such Brownfield projects will be 50% of the PLI receivable for Greenfield projects.

iv. **Extent of Integration**

In order to qualify for the bid, the applicant manufacturer will have to promise minimum integration across solar cells and modules. Based upon the extent of integration proposed, the bidder can opt for bidding for any one of the following three baskets:
<table>
<thead>
<tr>
<th>Basket No.</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1         | P+W+C+M    | **Stage-1**: Manufacturing of Polysilicon  
            | + **Stage-2**: Manufacturing of Ingots-Wafers  
            | + **Stage-3**: Manufacturing of Solar Cells  
            | + **Stage-4**: Manufacturing of Modules  
            | or Fully integrated manufacturing of Thin Film plant  
            | or Fully integrated plant of any other technology |
| 2         | W+C+M      | **Stage-2**: Manufacturing of Ingots-Wafers  
            | + **Stage-3**: Manufacturing of Solar Cells  
            | + **Stage-4**: Manufacturing of Modules  
            | or similar level of integration of any other technology |
| 3         | C+M        | **Stage-3**: Manufacturing of Solar Cells  
            | + **Stage-4**: Manufacturing of Modules  
            | or similar level of integration of any other technology |

v. Manufacturing Capacity

In order to qualify for the bid, the applicant manufacturer will have to undertake to set up a manufacturing plant of minimum 1,000 MW capacity (1,000 MW each for all individual stages included in the manufacturer’s proposal). The maximum capacity that can be bid for, i.e. the manufacturing capacity that a bidder will set up will be 10 GW for P+W+C+M and 6 GW each for W+C+M and C+M categories. However, the maximum capacity that will be awarded to one bidder under the PLI scheme will be 50% of the capacity to be set up by the applicant. This awarded maximum bid capacity will include any capacity awarded as per LoA issued by IREDA in Tranche-I.

To illustrate, if a bidder was earlier issued LoA(s) in P+W+C+M category, with ‘manufacturing capacity to be installed’ as 4 GW and ‘eligible capacity (for claiming PLI)’ as 2 GW, it can bid for maximum [10-4] = 6 GW in the new bid and if it bids for his maximum possible (6 GW) in the new bid and is successful in the new bid, it will have to set up new 6 GW manufacturing capacity, in addition to the 4 GW capacity that it has to set up as per the LoA issued in respect of the earlier bid. However, it would be eligible for a PLI against a manufacturing capacity of 50%, i.e. 2GW from earlier LoA and 3GW from LoA awarded under these guidelines.

vi. Trajectories of Module Performance and Local Value Addition (LVA)

Manufacturers will have to fulfill certain minimum values of module performance (combination of module efficiency and module’s temperature co-efficient of $P_{max}$) and Local Value Addition (LVA) for being eligible for PLI, as follows:
### Parameter & integration category

<table>
<thead>
<tr>
<th></th>
<th>Minimum values required for 1st year after commissioning</th>
<th>Minimum values required for 2nd year after commissioning</th>
<th>Minimum values required for 3rd year after commissioning</th>
<th>Minimum values required for 4th year after commissioning</th>
<th>Minimum values required for 5th year after commissioning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module Efficiency</strong></td>
<td><strong>P+W+C+M</strong></td>
<td>Minimum module efficiency of 21.00% with temperature coefficient of Pmax equal to or better than -0.40% per degree Celsius OR Minimum module efficiency of 20.50% with temperature coefficient of Pmax better than -0.30% per degree Celsius</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Module’s temperature co-efficient of Pmax</strong></td>
<td><strong>W+C+M</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>C+M</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Local Value Addition (LVA)</strong></td>
<td><strong>P+W+C+M</strong></td>
<td>75%</td>
<td>78%</td>
<td>82%</td>
<td>86%</td>
</tr>
<tr>
<td></td>
<td><strong>W+C+M</strong></td>
<td>60%</td>
<td>65%</td>
<td>70%</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td><strong>C+M</strong></td>
<td>50%</td>
<td>55%</td>
<td>60%</td>
<td>65%</td>
</tr>
</tbody>
</table>

*Under Standard Test Conditions (STC), i.e. Irradiance 1000 W/m², cell temperature 25°C, air mass (AM)= 1.5;*

### vii. Category-wise Baskets

The capacities will be allocated in separate categories based on the fund allocated for each category. This will enable competition among bidders within a particular level of integration, while also promoting a diversified supply chain.

<table>
<thead>
<tr>
<th>Basket No.</th>
<th>Code</th>
<th>Fund Allocation (crore Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>P+W+C+M</td>
<td>12,000</td>
</tr>
<tr>
<td>2</td>
<td>W+C+M</td>
<td>4,500</td>
</tr>
<tr>
<td>3</td>
<td>C+M</td>
<td>3,000</td>
</tr>
</tbody>
</table>

In case a particular category is undersubscribed, i.e. funds are left over even after award of capacities in the category, there will be inter-category fungibility of funds, with preference to higher integration baskets for allocation of leftover funds. To illustrate, if capacity equivalent to only Rs. 2500 crore of W+C+M have been awarded among all bidders, the remaining Rs. 2000 crore would be allocated for any unmet bid capacity in P+W+C+M category first and then in C+M category.

### 4. Bid Submission

Bidders will submit the following details which will be used for determining the award of capacities for PLI and calculation of PLI:
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Extent of Integration</td>
</tr>
<tr>
<td>b</td>
<td>Manufacturing Capacity proposed to be set up (in GW)</td>
</tr>
<tr>
<td>c</td>
<td>Year-wise percentage of Local Value Addition (LVA)</td>
</tr>
<tr>
<td>d</td>
<td>Year-wise performance parameters of manufactured modules (module efficiency and module's temperature co-efficient of ( P_{\text{max}} ))</td>
</tr>
</tbody>
</table>

The applicant shall, in its application, also declare the type of technology proposed to be set up, plan for local value addition, and the estimated employment generation and exports during the tenure of the Scheme.

5. **Calculation of Production Linked Incentive (PLI) and Allocation of Capacities**

5.1. The PLI for allocated bid capacity will be calculated year-wise as a product of following four components:

   a. Base PLI Rate (in ₹/Wp) as identified from the applicable Performance Matrix, based on the module efficiency and module's temperature coefficient of \( P_{\text{max}} \), quoted by the bidder for the particular year;
   
   b. LVA Factor, which is a function of percentage of Local Value Addition (LVA), as quoted by the bidder for the particular year;
   
   c. Tapering Factor (TF) for the particular year;
   
   d. Yearly sales [in Watt peak (Wp)] corresponding to the manufacturing capacity eligible for claiming PLI.

5.2. Formula for calculation of PLI amount shall be as follows:

\[
\text{PLI (in Rs.)} = \sum_{i=year1}^{year5} (\text{Base PLI Rate}_i \times \text{LVA Factor}_i \times \text{TF}_i \times \text{Sales}_i)
\]

where,

a) ‘i’ is the year counted from date of scheduled or actual commissioning (whichever is earlier) ranging from 1 to 5;

b) **Base PLI Rate:** On the basis of module efficiency and module’s temperature co-efficient of \( P_{\text{max}} \) (hereinafter also referred to as module’s temperature co-efficient), ‘Base PLI Rate’ will be determined in ₹/Watt peak (₹/Wp) as per the Performance Matrix Tables given below. The Base PLI Rate (₹/Wp) increases with module efficiency to motivate and incentivize manufacturers for producing higher efficiency modules which also requires higher investment into R&D.
### PERFORMANCE MATRIX TABLE for P+W+C+M Basket

<table>
<thead>
<tr>
<th>Module Efficiency* (%) →</th>
<th>During five Year period after commissioning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base PLI Rate (₹/W&lt;sub&gt;p&lt;/sub&gt;)</td>
</tr>
<tr>
<td></td>
<td>≥20.50% &amp; ≥21.00% &amp; ≥21.50% &amp; ≥22.00% &amp; ≥22.50% &amp; ≥23.00%</td>
</tr>
<tr>
<td></td>
<td>&lt;21.00% &amp; &lt;21.50% &amp; &lt;22.00% &amp; &lt;22.50% &amp; &lt;23.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module’s Temperature Coefficient of P&lt;sub&gt;max&lt;/sub&gt;** (in % per degree Celsius)↓</th>
<th>Position</th>
<th>U</th>
<th>V</th>
<th>W</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.40 to -0.30</td>
<td>A</td>
<td>0.00</td>
<td>1.45</td>
<td>1.65</td>
<td>1.85</td>
<td>2.00</td>
<td>2.20</td>
</tr>
<tr>
<td>Better than -0.30</td>
<td>B</td>
<td>1.45</td>
<td>1.65</td>
<td>1.85</td>
<td>2.00</td>
<td>2.20</td>
<td>2.20</td>
</tr>
</tbody>
</table>

### PERFORMANCE MATRIX TABLE for W+C+M Basket

<table>
<thead>
<tr>
<th>Module Efficiency* (%) →</th>
<th>During five Year period after commissioning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base PLI Rate (₹/W&lt;sub&gt;p&lt;/sub&gt;)</td>
</tr>
<tr>
<td></td>
<td>≥20.50% &amp; ≥21.00% &amp; ≥21.50% &amp; ≥22.00% &amp; ≥22.50% &amp; ≥23.00%</td>
</tr>
<tr>
<td></td>
<td>&lt;21.00% &amp; &lt;21.50% &amp; &lt;22.00% &amp; &lt;22.50% &amp; &lt;23.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module’s Temperature Coefficient of P&lt;sub&gt;max&lt;/sub&gt;** (in % per degree Celsius)↓</th>
<th>Position</th>
<th>U</th>
<th>V</th>
<th>W</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.40 to -0.30</td>
<td>A</td>
<td>0.00</td>
<td>0.90</td>
<td>1.05</td>
<td>1.25</td>
<td>1.40</td>
<td>1.55</td>
</tr>
<tr>
<td>Better than -0.30</td>
<td>B</td>
<td>0.90</td>
<td>1.05</td>
<td>1.25</td>
<td>1.40</td>
<td>1.55</td>
<td>1.55</td>
</tr>
</tbody>
</table>
PERFORMANCE MATRIX TABLE for C+M Basket

<table>
<thead>
<tr>
<th>Module Efficiency* (%) →</th>
<th>During five Year period after commissioning</th>
<th>Base PLI Rate (₹/Wp)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≥20.50% &amp; ≥21.00% &amp; ≥21.50% &amp; ≥22.00% &amp; ≥22.50% &amp; ≥23.00%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module’s Temperature Coefficient of $P_{max}^{**}$ (in % per degree Celsius)</th>
<th>Position</th>
<th>U</th>
<th>V</th>
<th>W</th>
<th>X</th>
<th>Y</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.40 to -0.30</td>
<td>A</td>
<td>0.00</td>
<td>0.50</td>
<td>0.65</td>
<td>0.85</td>
<td>1.00</td>
<td>1.15</td>
</tr>
<tr>
<td>Better than -0.30</td>
<td>B</td>
<td>0.50</td>
<td>0.65</td>
<td>0.85</td>
<td>1.00</td>
<td>1.15</td>
<td>1.15</td>
</tr>
</tbody>
</table>

* Under Standard Test Conditions (STC), i.e. Irradiance 1000 W/m², cell temperature 25°C, air mass (AM) = 1.5;
**$P_{max}$ = Maximum Power at Standard Test Conditions (STC); Module’s temperature coefficient refers to percentage change in $P_{max}$ per degree Celsius rise in temperature.

c) **Local Value Addition (LVA) Factor**, is a function of the percentage of LVA, submitted for the $i^{th}$ year. LVA Factor is derived as per the following table:

<table>
<thead>
<tr>
<th>LVA%</th>
<th>LVA% less than 50%</th>
<th>LVA% ≥50% but less than 60%</th>
<th>LVA% ≥60% but less than 70%</th>
<th>LVA% ≥70% but less than 80%</th>
<th>LVA% ≥80% but less than 90%</th>
<th>LVA% ≥90%</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVA Factor</td>
<td>0</td>
<td>0.73</td>
<td>0.79</td>
<td>0.85</td>
<td>0.92</td>
<td>1</td>
</tr>
</tbody>
</table>

The PLI amount increases with increased LVA, in order to encourage manufacturers to source their material from the domestic market. The percentage of LVA will be calculated as follows: [(Sale value of Module as per the 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 manufacture of module)] / [(Sale value of Module as per GST invoice excluding net domestic indirect taxes] x 100%.

d) **TF or Tapering Factor**: In order to give a signal to Solar PV Manufacturing industry that they will need to be competitive after five years, the PLI rate (₹/Wp) will be higher in the beginning and lower towards the end of the five-years period.
over which the PLI will be paid. To achieve the objective of tapering down the PLI rate (Rs/Wp), the PLI rate (Rs/Wp) will be multiplied by a tapering factor of 1.4 for the 1st year of the five years PLI disbursement period followed by a tapering factor of 1.2, 1.0, 0.8 and 0.6 for the 2nd, 3rd, 4th and 5th year of the PLI disbursement period respectively.

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tapering Factor</td>
<td>1.4</td>
<td>1.2</td>
<td>1.0</td>
<td>0.8</td>
<td>0.6</td>
</tr>
</tbody>
</table>

e) **Sales (in Wp)** is the net sales of solar PV modules of performance parameters (efficiency and temperature coefficient) and LVA equal to or better than those given at para 3.2(vi). The PLI disbursed to a manufacturer will be calculated as per the formula at para 5.2 and will depend on sales or the maximum eligible capacity awarded under the PLI scheme, whichever is less; actual Performance and actual Local Value Addition achieved, provided that only those modules will be counted in sales whose performance and LVA satisfy the levels given at para 3.2(vi).

5.3. Sequence of Allotment and Tie Breaking

i. The bid with the highest efficiency in the first year of production shall be first allocated the admissible bid capacity. In case of a tie in efficiency in the first year, the bid with the highest efficiency in the second year of production shall be allocated the admissible bid capacity first and so on. In case two bids have the exact same efficiency trajectory over all five years, the LVA trajectory shall similarly be compared year wise. In case, both efficiency and LVA trajectory over all the five years are the same, such tied bids will be prioritized on the basis of bid capacity and if bid capacities are also the same, then such tied bidders will be given the same ranking and allotted manufacturing capacity accordingly. However, in case of insufficient funds, the remaining possible allocation shall be divided equally between such tied bidders.

ii. In case the funds available at any point are sufficient to allocate only a part capacity of a bid that is next in priority, such a bidder would be free to exercise refusal on accounts of economies of scale and this allocation shall be offered to the next bidder in sequence.

6. Disbursement of PLI

The manufacturing units sanctioned under the programme will be eligible for getting PLI on annual basis on sales of high efficiency solar PV modules for 5 years from commissioning or 5 years from scheduled commissioning date, whichever is earlier. Consequently, in case of delayed commissioning, the PLI period will reduce from 5 years by the period of the delay in commissioning. A team constituted by MNRE or SECI will visit the manufacturing unit immediately after its commissioning to verify promised extent of integration, manufacturing capacity, efficiency and temperature coefficient of modules. The manufacturers will be asked to give a self-declaration and a Statutory Auditor’s or Chartered or Cost Accountant’s certificate in support of claims of
PLI. The manufacturers will be required to provide documents in support of the PLI claimed for a particular year based on (i) sales (watt) of modules, (ii) percentage of local value addition and (iii) PLI rate (as per the position in Performance Matrix). Documents required to be submitted by manufacturer for availing PLI will be detailed in the tender documents. MNRE will also make provisions for adequate safeguards, including for periodical special audits and appointing technical organizations to conduct sample checks to verify claims of manufacturers in respect of module efficiency and temperature coefficient.

7. Timelines for commissioning of solar PV manufacturing facilities

The time-period allowed for commissioning of solar PV manufacturing units under the Scheme is as follows:

<table>
<thead>
<tr>
<th>Level of Integration</th>
<th>Time allowed for commissioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>P+W+C+M</td>
<td>Within 3 years from the date of the Letter of Award</td>
</tr>
<tr>
<td>W+C+M</td>
<td>Within 2 years from the date of the Letter of Award</td>
</tr>
<tr>
<td>C+M</td>
<td>Within 1.5 years from the date of the Letter of Award</td>
</tr>
</tbody>
</table>

8. Sustainable manufacturing

8.1. Manufacturers will be required to set up facilities for recovery and recycling of solar waste. Manufacturers will be encouraged to adopt circular economy principles in their manufacturing and supply chains.

8.2. Considering India’s International commitments, particularly to achieve about 50% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030, the scheme would encourage use of renewable energy in the manufacturing facilities set up under the scheme. The successful bidders will ensure that at least 20% of the electricity consumption for the solar PV manufacturing plant will be sourced from renewable energy sources. Different modalities for compliance of this requirement will be permitted. Detailed provisions in this regard will be specified in the tender documents.

9. Penalties

9.1. In case a selected manufacturer fails to meet the extent of integration or manufacturing capacity promised at the time of selection, it will not get any PLI till it overcomes these deficiencies. If the manufacturer achieves the promised levels subsequently, it will be eligible for PLI from the next month following the month in which it achieved the promised levels of integration and capacity. However, in such cases, the manufacturer will not be able to get PLI for full 5 years since 5 years PLI is counted from the scheduled date of commissioning of the plant or the actual date of commissioning, whichever is earlier. In case, the modules manufactured by a selected manufacturer do not meet the minimum parameters as per the table for trajectories of minimum module performance and minimum LVA at para 3.2 (vi), then it will not get any PLI in respect of such modules.
9.2. Bidders will have to submit, at the time of bid submission, Earnest Money Deposit (EMD) as prescribed in the tender document. The tender document will inter-alia, contain provisions regarding forfeiture of EMD in case of selected bidder refusing to submit the requisite documents/ Performance Bank Guarantees (PBG) as per tender document / extant guidelines or the selected bidder not meeting eligibility criteria upon submission of documents.

9.3. Bidders who have been awarded capacities will have to submit Performance Bank Guarantees (PBG), at the time of accepting the award as per extant Ministry of Finance guidelines. In case they fail to implement the promised ‘Extent of integration’ or the ‘Manufacturing capacity’ submitted by them in their bids, within the scheduled commissioning date, Bank Guarantees commensurate to the manufacturing commitments not fulfilled by the bidder will be forfeited by SECI and balance Bank Guarantees will be released by them. Detailed modalities in this regard will be given in tender documents. Encashment of bank guarantees, accrued interest or other charges collected by SECI will be remitted to the Consolidated Fund of India by SECI as per rule-230(8) of GFRs 2017.

9.4. To ensure that the bidder-manufacturers quote realistic levels of year-wise module performance and LVA, in case, for any given year, the bidder-manufacturer falls short on quoted level of module efficiency/ quoted level of temperature co-efficient of $P_{\text{max}}$ / quoted level of LVA, but meets the minimum requirements as prescribed in the trajectories of module performance and LVA at para 3.2(vi), the amount of PLI to be disbursed to it for that given year, will be limited to 75% of the PLI amount as per the actual achieved levels of module efficiency, temperature co-efficient of $P_{\text{max}}$ and LVA.

10. Monitoring of the PLI scheme and power to remove difficulties:

10.1. As approved by the Cabinet on 11th November 2020, the Empowered Group of Secretaries (EGoS) chaired by Cabinet Secretary will monitor implementation of the PLI scheme, undertake periodic review of the outgo under the Scheme, ensure uniformity of all PLI Schemes and take appropriate action to ensure that the expenditure is within the prescribed outlay. Any changes required in the modalities of the scheme, subject to the condition that the overall financial outlay remains within ₹ 19,500 crore, will be placed for consideration of the EGoS.

10.2. A Scheme Monitoring Committee (SMC) under the chairmanship of Secretary, MNRE, and comprising representatives from MNRE, SECI, NISE, other organizations, and experts as may be required for the purpose, shall take periodical review of the status of implementation/ performance of solar PV manufacturing capacities awarded/ set up under the scheme. The committee will also facilitate / recommend measures to resolve difficulties, if any including delay in commissioning.

10.3. Any changes required in the scheme guidelines, without changing the modalities which require placing before EGoS as mentioned in Para 10.1 above, will be done with the approval of Hon’ble Minister (Power and New & Renewable Energy), subject to the condition that the overall financial outlay remains within ₹ 19,500 crore.