

For PEM/SOEC/AEM Electrolysers:

LVA%	LVA < 30%	30% ≤ LVA < 40%	40% ≤ LVA < 50%	50 ≤ LVA < 60%	60 ≤ LVA < 70%	70 ≤ LVA ≤ 80%	LVA > 80%
LVA Factor	0	0.4	0.5	0.6	0.7	0.8	1.0

#### 5.3.4 Bid Process:

MNRE, through Solar Energy Corporation of India (SECI), will invite bids for competitive selection. Successful bidders will be eligible to access the incentives as detailed in this document.

The bidders will be required to quote the following:

- Annual Manufacturing capacity for which incentive is sought.
- Committed Specific Energy Consumption (SEC) of the electrolyser produced each year for the 5-year period.
- Committed Local Value Addition (LVA) on an annual basis for 5 years.

#### 5.3.5 Bid Selection Parameter:

The selection parameter will be calculated as the sum of products of the quoted LVA factor and Performance quotient over the 5-year period

$$\text{Selection Parameter} = \sum_{i=1}^5 (\text{LVA factor} \times \text{Performance Quotient})$$

#### 5.3.6 Selection Process:

- The bidders will be ranked in the decreasing order of the Selection Parameter for allocation of the admissible bid capacity.
- In case of a tie in the Selection parameter, the selection will be based on the average Performance quotient over the 5-year period.
- In case two or more bids have the exact same selection parameter, such tied bids will be prioritized based on 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.

### 5.3.7 Eligibility for bidding

- i. The bidder can be a single company or a Joint Venture/ Consortium of more than one company.
- ii. The Net Worth of the Bidder, as on the last date of Financial Year as specified in the tender document should be equal to or greater than ₹ 1 crore per MW of quoted manufacturing capacity. The Bidder may seek qualification based on financial capability of its Affiliate(s) for the purpose of meeting the qualification requirements.
- iii. The beneficiary will have to demonstrate minimum 50% of annual sales of electrolyzers for installation of projects in India
- iv. The electrolyzers manufactured by the bidders must fulfill the following requirements:
  - a. Specific Energy Consumption (SEC) to be equal to or less than 56 kWh per kg of Hydrogen production. For this purpose, the SEC shall be measured at 100% rated capacity at the stack level on DC side. The SEC values will need to be demonstrated at or prior to commissioning of the electrolyser as per the detailed procedure to be specified in RfP.
  - b. Guaranteed Life of electrolyser to be at least 60,000 hrs.
  - c. Minimum 40% Local Value Addition (LVA) during first year of production for Alkaline electrolyzers and minimum 30% for other technologies.

### 5.3.8 Separate bucket to encourage indigenous technologies

In order to promote indigenously developed electrolyser technologies, bids in the first tranche of 1500 MW will be called in two separate buckets as follows:

Bucket 1: Electrolyser manufacturing capacity based on any stack technology	Bucket 2: Electrolyser manufacturing capacity based on indigenously developed stack technology
1200 MW	300 MW

### 5.3.9 Capacity Allocation

- i. The capacity available for bidding under the first tranche of Mode I is 1500 MW.
- ii. Under "Electrolyser manufacturing capacity based on any stack technology" - The maximum capacity that can be allotted to a single bidder will be 300 MW. The minimum capacity that can be bid for shall not be less than 100 MW.
- iii. Under "Electrolyser manufacturing capacity based on indigenously developed stack technology" - The maximum capacity that can be allotted to a single bidder will be 300 MW.
- iv. The bidders can bid for either or both buckets. The bids for the "Electrolyser manufacturing capacity based on any stack technology" bucket will be decided first, followed by the bids for the "Electrolyser manufacturing capacity based on indigenously developed stack technology" bucket. However, the

maximum capacity that can be allotted to a single bidder is limited to 300 MW.

- v. Bidders who have been awarded capacity in Bucket I will be considered for the indigenously developed stack technology for balance capacity only if capacity awarded in Bucket I is less than 300 MW.
- vi. Any unallocated capacity under any tranche would be shifted to the subsequent tranche.

## 5.4 Payment of incentives to successful bidders

### 5.4.1 Base Incentive:

The base incentive available in each year will be as per a defined tapering trajectory, which is as follows:

Year of Sales	Year 1	Year 2	Year 3	Year 4	Year 5
Base Incentive Available (₹/kW)	4440	3700	2960	2220	1480

### 5.4.2 Electrolyser Sales Volume:

The quantum of electrolyser sales eligible for incentives in a given financial year would be the allocated capacity or Net sales of electrolysers (in kW), whichever is lower. For availing the incentive, the criteria, as specified in Section 5.3.7 (iii) and (iv) should be met.

### 5.4.3 Calculation of incentive payout

The incentive for each successful bidder for a particular year will be calculated as follows:

$$(\text{incentive})_i = (\text{Electrolyser Sales Volume})_i \times (\text{Quoted Base Support rate})_i \times (\text{Performance Multiplier})_i \times (\text{Domestic Value Addition})_i$$

Where,

Electrolyser Sales Volume: Net sales of electrolysers for the year (in kW) as defined in 5.4.2

Quoted Base Support Rate: Base incentive for year "i" as specified in table in 5.4.1 (in Rs./kW)

Performance Multiplier for a given year "i" is calculated as given in the following table:

S.No	Condition	Value of Performance Multiplier
1	SEC is within the same Category of the table in 5.3.1 as quoted by the bidder for that year	1
2	SEC degrades and falls in the subsequent category of table in 5.3.1 than the one as per SEC quoted by the bidder for that year, but is above 56kWh/kg of Hydrogen	0.8
3	SEC degrades and falls beyond one subsequent category of table in 5.3.1 as per SEC quoted by the bidder for that year but is above 56 kWh/kg of Hydrogen	0
4	SEC degrades below 56 kWh/kg of Hydrogen for that year	0

**Illustration:** If a bidder quotes 51.8 SEC (category 7) for the second year, and

1. Achieves SEC greater than or equal to 51 and less 52, (or better than 51), (Category number 7) Performance Multiplier would be 1
2. Achieves SEC greater than or equal to 52 and less 53, (Category number 8) Performance Multiplier would be 0.8
3. Achieves SEC equal to or more than 53, (Category number 9) Performance Multiplier would be 0
4. Achieves SEC more than 56kWh/kg of Hydrogen, Performance Multiplier would be 0

Domestic Value Addition (DVA) for a given year "i" is calculated as given in the following table:

S. No	Condition	Value of DVA
1	LVA is equal to or above 98% of the quoted value of LVA by the bidder for that year	1
2	LVA is above or equal to 95% but less than 98% of the value quoted by the bidder, but more than the minimum LVA specified for that year	0.8
3	LVA is less than 95% of the quoted value of LVA by the bidder for that year but more than minimum specified LVA for that year	0
4	LVA falls below minimum value as specified in 5.3.2	0

**Illustration:** If a bidder quotes 69% LVA for the year where the minimum specified is 60%, and

1. Achieves LVA of 67.62 (98% of 69) or more, DVA would be 1
2. Achieves LVA greater than or equal to 67.55(95% of 69) and less than 67.62, DVA would be 0.8
3. Achieves LVA less than 67.55, DVA would be 0
4. Achieves LVA less than 60%, DVA would be 0

## **5.5 Timelines for commissioning**

The successful bidders allotted capacities under the scheme must commence manufacturing in accordance with the timelines mentioned in the tender document.

## **5.6 Penalties**

- i. 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)/ or any other Performance Guarantee Instrument as per tender document/ extant guidelines or the selected bidder not meeting eligibility criteria upon submission of documents.
- ii. Successful bidders who have been awarded capacities will have to submit Performance Bank Guarantees (PBG)/other similar performance guarantee instruments, at the time of accepting the award as prescribed in the tender document. In case of default or delay in project commissioning, commensurate bank guarantees/other similar performance guarantee instruments will be forfeited by SECI, as penalty. Detailed modalities in this regard will be given in tender documents. Encashment of EMD, bank/other guarantees, accrued interest or other penalties collected by SECI will be remitted to the Consolidated Fund of India by SECI as per rule-230 (8) of GFRs 2017 after deducting the Legal expenditure (if any).

## **5.7 Monitoring**

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