



SOLAR ENERGY CORPORATION OF INDIA LIMITED

DRAFT 1000 MW GRID CONNECTED ROOF TOP SOLAR PV SCHEME

FOR GOVERNMENT BUILDINGS

UNDER CAPEX AND RESCO MODELS

1000 MW GRID CONNECTED ROOF TOP SOLAR PV SYSTEM SCHEME FOR GOVT. BUILDINGS - PAN INDIA

INTRODUCTION

- Scheme with aggregate capacity of 1000 MWp rooftop solar PV system.
- Two Models – CAPEX and RESCO

“CAPEX MODEL”

The bidder enters into an Agreement with the rooftop owner at the quoted project cost as per RFS for the scope of work not limited to that indicated in the RFS as per mutually agreed terms and conditions. This model also allows energy sale at a tariff as per RFS.

“RESCO MODEL”

The bidders intend to take a rooftop owned by some other entity on mutually agreed terms and conditions including lease agreement from the roof top owner(s) and enters into the PPA with rooftop owner (here it is Government Deptt., owner of the building) for supply of Solar power for 25 years at a tariff as per RFS from the date of Commissioning of project.

BROAD SCOPE OF BIDDER

- Design, Engineering, Manufacture, Supply, Storage, Civil work, Erection, Testing & Commissioning of the grid connected rooftop solar PV project
- Operation and Maintenance (**O&M**) of the project for a period of **5 years for PART-A and Part –C** (CAPEX model) and
- **25 years for PART-B** (RESCO Model) after commissioning of project.
- List of roof tops of various Government buildings shall be provided by SECI
- Sanction Documentation requirement:
 - EPC agreement between successful bidder and the rooftop owner (s) at the quoted project cost-under CAPEX Model
 - PPA with the buyer/ at the tariff as per RFS, and project report-under RESCO Model.

INCENTIVE AVAILABLE FROM SECI UNDER PART-A, PART-B & PART-C

<u>Sl. No.</u>	<u>Achievment vis-à-vis Target Allocation</u>	<u>Incentive for General Category States</u>	<u>Incentive for Special Category States/UTs</u>
<u>1.</u>	<u>80% and above within the sanctioned period.</u>	<u>Rs. 18,750/- per kW</u>	<u>Rs. 45,000/- per kW</u>
<u>2.</u>	<u>Below 80% and upto 50% within the sanctioned period.</u>	<u>Rs. 11,250/- per kW</u>	<u>Rs. 27,000/- per kW</u>
<u>3.</u>	<u>Below 50% / Delayed commissioning up to 6 months beyond the sanctioned period.</u>	<u>Rs. 7,500/- per kW</u>	<u>Rs. 18,000/- per kW</u>

- ❖ The incentive for the project executed under this scheme shall be provided by the MNRE and **no other incentive/subsidy can be claimed** by the bidder/rooftop owner from other agencies including state government.

EXAMPLE OF INCENTIVE

CASE 1 : Target achieved – 450kWp (>80% of the allocated target)

Incentive applicable for General Category states : Rs 18,750 per kW(for target achieved) plus Rs 7,500 per kW (for remaining part if completed with in six months from completion schedule) i.e.

$$450*18750 + 50*7500 = \text{Rs. } 88,12,500/-$$

CASE 2 : Target achieved – 300kWp (60% of the allocated target)

Incentive applicable for General Category states : Rs 11,250 per kW (for target achieved) plus Rs 7,500 per kW (for remaining part if completed with in six months from completion schedule) i.e.

$$300*11250 + 200*7500 = \text{Rs. } 48,75,000/-$$

CASE 3 : Target achieved – 200kWp (40% of the allocated target)

Incentive applicable for General Category states if sanctioned project capacity is completed within six months from the sanctioned completion schedule: Rs 7,500 per kW i.e.

$$500 * 7500 = \text{Rs. } 37,50,000/-$$

No incentive shall be applicable for the projects completed after six months from the sanctioned completion schedule.

CAPACITY UNDER DIFFERENT MODELS UNDER THE SCHEME

1000 MWp comprising of CAPEX Model (600 MWp) & RESCO Model (400 MWp)

PART A-400MW (CAPEX ONLY)

Project size

---More than 25 KWp to 500kWp

Min. aggregate capacity

---500 kWp

Max. aggregate capacity

---40 MW

Ceiling project cost

---Rs. 75 per Wp

PART B-400MW (RESCO ONLY)

Project size

---More than 25 KWp to 500kWp

Min aggregate capacity

--- 1 MWp

Max aggregate capacity

---80 MWp

Ceiling Tariff

Rs.7.00/kWh for Gen.Cat.States

Rs.5.37/kWh for Sp. Cat. States

PART C-200MW (CAPEX ONLY)

Project size

---up to 25 KWp

Min. aggregate capacity

---100 kWp

Max. aggregate capacity

---8 MW

Ceiling project cost

---Rs. 75 per Wp

ELIGIBILITY CRITERIA

FOR PART-A & PART-B

- The Bidder should be a body incorporated in India under the Companies Act, 1956 or 2013 including any amendment thereto and engaged in the business of Solar Power. Limited Liability Partnership firms are also eligible.
- Bidder can however use the technical and financial strength of its Parent Company/Affiliate's to fulfil the Technical and/or Financial Eligibility criteria.

However, In above case bidders shall submit the following documents :

- ✓ Undertaking from the Parent Company.
- ✓ Certificate of relationship of Parent Company or Affiliate with the Bidding Company
- ✓ Company Secretary certificate towards shareholding pattern of the Parent Company and the Bidding Company
- ✓ Board resolution from the Parent Company.

TECHNICAL ELIGIBILITY CRITERIA

- The Bidder should have designed, supplied, installed & commissioned at least **one Grid connected Solar PV** Power Project having a capacity of **not less than 50 kWp**.
- The Solar PV Power Project should have been **commissioned at least six months prior** to Techno- Commercial Bid Opening date.
- The list of project commissioned at least 6 months prior to Techno-Commercial Bid Opening date, indicating whether the project is grid connected, along with a scanned copy of the Commissioning certificate and Work order / Contract / Agreement/ from the Client/Owner shall be submitted.

FINANCIAL ELIGIBILITY CRITERIA

The Annual turnover of Rupees **2.0 Crore per MW** of the capacity offered in its Bid **in any one of the last 3 financial years** preceding the Bid Deadline subjected to the condition that the Bidder should at least have completed one financial year.

OR

Net worth equal to or greater than the value calculated at rate of Rupees **1.50 Crore per MW of capacity** offered by the Bidder in its Bid. The Computation of Net worth shall be based on unconsolidated audited annual accounts of the last financial year immediately preceding the Bid Deadline. Share premium can be included in the Net-worth calculation in case of listed companies in India only.

In case of more than one Price Bid submitted by the Bidder, the financial eligibility criteria must be fulfilled by such Bidder for the sum total of the capacities being offered by it in its Price Bid.

FOR PART-C

- All MSMEs registered with agencies / bodies specified by Ministry of MSME are eligible to participate under Part C category of the Tender.
- All Channel Partners / New Entrepreneurs registered with MNRE shall be eligible to participate in this tender. **Qualified bidders for Part-A are also eligible to participate in Part-C**
- It should not be blacklisted from Nodal Ministry / Ministry of Corporate Affairs or any other Government bodies/PSUs etc.
- It should have valid PAN / Sales Tax Registration Numbers under VAT/Sales Tax rules (PAN/TAN) or as per statutory requirement.

NB: If the bidder's submitted information is found to be false declaration or misrepresentation, the bidder(s) shall be outrightly rejected or debarred or blacklisted from SECI's future tenders.

BID CAPACITY UNDER THE SCHEME

- Bidder can bid for PART-A or PART-B or Part C or for all (PART-A & PART-B & PART-C) as per the eligibility criterion of RfS.
- Offer of the Bidders quoting cumulative capacity more than the maximum tendered capacity allowed shall be restricted to the maximum allowed capacity.
- However, bidders quoted cumulative capacity less than the minimum allowed capacity shall be out rightly rejected.
- Qualified bidders under PART-A are also eligible to bid in PART-C as per the capacity mentioned.
- Bidder is eligible to apply for a **maximum capacity of 128 MWp** under PART-A, PART-B and PART-C all clubbed.

BID BOND AMOUNT (EMD)

The formula applicable to calculate the Bid Bond amount under PART-A / PART-B / PART-C will be:

Bid Bond amount = (Rs.15 Lakhs) X Bid Capacity in MWp

(Bid bond and bid processing fee are waived off for MSME registered firms)

PERFORMANCE SECURITY / PERFORMANCE BANK GUARANTEE (PBG)

FOR GENERAL CATEGORY STATES

PBG amount for General Category state = (Rs. 18.75 Lakh) X Allocated Capacity in MWp in a state.

FOR SPECIAL CATEGORY STATES

PBG amount for Special Category state = (Rs. 45.00 Lakh) X Allocated Capacity in MWp in a state.

TARGET GROUPS TO BE COVERED IN DIFFERENT MODELS

Sl. No.	Category	Coverage of Buildings
Incentive shall be available to the following Categories		
(i)	Government Buildings	Buildings of Various Government Departments/ Ministries allocated to SECI, covering Government offices also.
(ii)	Government Institutions	Government Institutions, Public Sector Undertakings, all buildings owned by Government directly or by any Government owned societies, companies, corporations, Institutions or organizations, Government educational/ health institutions for the Government Departments/ Ministries allocated to SECI.

PART A : CAPEX ONLY

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Northern States		
1	Punjab	9
2	Rajasthan	9
3	Delhi/NCR	6
4	Haryana	9
5	Uttar Pradesh	20
Sub Total		53

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Southern States		
1	Andhra Pradesh	9
2	Karnataka	10
3	Kerala	5
4	Tamil Nadu	18
5	Telangana	10
Sub Total		52

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Special Category States and Islands		
1	J&K	2
2	Uttarakhand	1.5
3	Himachal Pradesh	2
4	North Eastern States/Sikkim	4.5
5	Lakshadweep	0.5
6	Andaman & Nicobar Islands	0.5
7	Daman & Diu	0.5
8	Puducherry	0.5
9	Dadra & Nagar Haveli	0.5
10	Chandigarh	0.5
Sub Total		13

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Eastern States		
1	Odisha	6
2	Bihar	6
3	Jharkhand	5
4	WestBengal	10
Sub Total		27

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Western States		
1	Chhattisgarh	5
2	Madhya Pradesh	11
3	Maharashtra	26.5
4	Goa	0.5
5	Gujarat	12
Sub Total		55

The capacities against the State name are indicative only. These capacities may be transferred from one state to another state after getting the accurate data of roof top capacities of buildings covered under this tender, based on the bidder,s request/requirement of SECI, as per terms and conditions of RFS and/or on approval of SECI.

The rate of Energy sale under CAPEX shall not exceed beyond the levelized ceiling tariff over 25 years assuming the discounting rate of 11% only as follows:

For General Category States	Rs.6.00/kWh
For Special Category States	As per the latest regulatory tariff of the concerned State.

- ❖ **Maximum allowable project cost under CAPEX model is Rs. 75/Wp.** Any bidder quoting more than the maximum allowable project cost shall be treated as non-responsive and shall not be consider for evaluation and the Bid bond shall be returned.

PART B : RESCO ONLY

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Northern States		
1	Punjab	10
2	Rajasthan	10
3	Delhi/NCR	8
4	Haryana	8
5	Uttar Pradesh	18
Sub Total		54

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Southern States		
1	Andhra Pradesh	10
2	Karnataka	9
3	Kerala	4
4	Tamil Nadu	13
5	Telangana	10
Sub Total		46

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Special Category States and Islands		
1	J&K	2
2	Uttarakhand	2
3	Himachal Pradesh	2
4	North Eastern States/Sikkim	16
5	Lakshadweep	2
6	Andaman & Nicobar Islands	2
7	Daman & Diu	2
8	Puducherry	2
9	Dadra & Nagar Haveli	2
10	Chandigarh	2
Sub Total		34

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Eastern States		
1	Odisha	5
2	Bihar	4
3	Jharkhand	4
4	West Bengal	8
Sub Total		21

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Western States		
1	Chhattisgarh	5
2	Madhya Pradesh	11
3	Maharashtra	14
4	Goa	2
5	Gujarat	13
Sub Total		45

The capacities against the State name are indicative only. These capacities may be transferred from one state to another state based on the requirement as per terms and conditions of RFS and/or on approval of SECI.

Maximum allowable levelized tariff for this part over 25 years assuming the discounting rate of 11% only as follow:

For General Category States	Levelised Ceiling Tariff (Rs.kWh)
With 30% CFA	Rs. 7.00/kWh (Calculated as per CERC norms)
For Special Category States	Levelised Ceiling Tariff (Rs.kWh)
With 70% CFA	Rs. 4.82/kWh (Calculated as per CERC norms)

PART C : CAPEX ONLY

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Northern States		
1	Punjab	6
2	Rajasthan	6
3	Delhi/NCR	2
4	Haryana	3
5	Uttar Pradesh	10
Sub Total		27

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Southern States		
1	Andhra Pradesh	6
2	Karnataka	6
3	Kerala	1
4	Tamil Nadu	11
5	Telangana	5
Sub Total		29

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Special Category States and Islands		
1	J&K	1
2	Uttarakhand	0.9
3	Himachal Pradesh	1
4	North Eastern States/Sikkim	1.1
5	Lakshadweep	0.1
6	Andaman & Nicobar Islands	0.1
7	Daman & Diu	0.1
8	Puducherry	0.1
9	Dadra & Nagar Haveli	0.5
10	Chandigarh	0.1
Sub Total		5

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Eastern States		
1	Odisha	1
2	Bihar	2
3	Jharkhand	1
4	West Bengal	6
Sub Total		10

Name of the State with Capacity Details		
S.No	Name of the State	Capacity (in MWp)
Western States		
1	Chhattisgarh	2
2	Madhya Pradesh	6
3	Maharashtra	13.5
4	Goa	0.5
5	Gujarat	7
Sub Total		29

The capacities against the State name are indicative only. These capacities may be transferred from one state to another state based on the requirement as per terms and conditions of RFS and/or on approval of SECI.

The rate of Energy sale under CAPEX shall not exceed beyond the levelized ceiling tariff over 25 years assuming the discounting rate of 11% only as follows

For General Category States With 30% CFA	Rs.6.00/kWh
For Special Category States With 70% CFA	As per the latest regulatory tariff of the concerned State

ALLOCATION OF CAPACITY

- For each state, bidder quoting lowest project cost/tariff will be declared as the successful bidder.
- 40% of the state's capacity or the bidder's quoted capacity whichever is lower shall be allocated to the L1 successful bidder for that State.

FURTHER ALLOCATION PROCEDURE

- After allocating the capacity to the L1 bidder, SECI shall arrange the bids in the ascending order i.e. L2, L3, L4 _ _ _ and so on (L2 being the second lowest quote) and give chance to L2 bidder to match the price of L1 Bidder in that state. After allocating to L2 bidder, if capacity is balance, next chance shall be given to L3 bidder. If L2 Bidder refuse to match the price of L1, then next chance shall be given to L3 bidder and so on till the balance capacity of that state is exhausted.
- For each state, SECI shall allocate the capacity until the tender capacity is fulfilled.
- Also, no bidder will be allocated more than 40% of the state's capacity irrespective of its proposed capacity.
- The amount of incentive per MWp to be provided to L1 bidder of a state, shall also be provided to all bidders to whom capacity has been allocated, for that state. As such the incentive amount per MWp shall be same for all the bidders for that state subject to completion schedule achieved.
- **In a state, there will be only one project cost for all the bidders.**

FOR GENERAL CATEGORY STATE

Transfer of allocated capacity from one state to another may be allowed in case rooftops are not available/ problems faced but at sole discretion of SECI however :

- Inter-State transfer of allocated capacity shall be done at the lowest project cost quoted by successful bidder in its state or at the project cost of L1 bidder in the proposed state, whichever is lower.
- In case no reference L1 subsidy is available then lowest project cost of all the general category states shall be taken as the reference for the capacity transfer

FOR SPECIAL CATEGORY STATES

Transfer of allocated capacity from one state to another may be allowed in case rooftops are not available/ problems faced but at sole discretion of SECI however :

- Inter-State transfer of allocated capacity shall be done at the lowest project cost claimed by successful bidder in its state or at the project cost of L1 bidder in the proposed state, whichever is lower.
- In case no reference L1 subsidy is available then lowest subsidy amount of all the special category states shall be taken as the reference for the capacity transfer.

AND VICE-VERSA

FROM GENERAL TO SPECIAL

- SECI may allow such transfer ,however, bidder has to submit the requisite differential amount PBG and SECI service charges to SECI accordingly.
- In such case, the project cost considered shall be the quoted project cost in the existing state or the L1 project cost of the proposed state, whichever is lower.
- The incentive shall be as applicable for the proposed state.

FROM SPECIAL TO GENERAL

- SECI may allow such transfer, however , SECI shall refund the additional PBG and SECI service charges paid by the bidder accordingly.
- In such cases applicable project cost is the lowest project cost claimed by L1 Successful bidder in its existing state or at project cost of L1 bidder in the proposed state, whichever is lower.
- Amended Performance security shall be submitted by bidder within 15 days from the date of issue of such notification.
- Capacity can be transferred from PART-A to PART-B or vice-versa, In such case lowest rate (project cost or tariff as the case may be) of the respective states shall be the reference price for capacity execution or as per this RfS.

INCENTIVE DISBURSEMENT (IF PROJECT IS COMMISSIONED WITHIN SANCTIONED PERIOD)

GENERAL CATEGORY STATES

- Rs. 12500 per kW incentive shall be disbursed by SECI after Successful Commissioning and acceptance of project.
- Rs. 6250 per kW incentive after completion of first year of successful O&M and receipt of NOC from concerned Roof Top owner by SECI.

SPECIAL CATEGORY STATES

- Rs. 30000 per kW incentive shall be disbursed by SECI after Successful Commissioning and acceptance of project.
- Rs. 15000 per kW incentive after completion of first year of successful O&M and receipt of NOC from concerned Roof Top owner by SECI.
- Similarly, for projects completed beyond sanctioned period, approx. 66.66% of the eligible incentive shall be released after commissioning of the project and balance, 33.33% of the eligible incentive shall be released after one year of the commissioning of the project.

LIQUIDATED DAMAGES AND PENALTIES

- The Bidder shall complete the roofs identification, submission of project sanction documents as per the requirement of SECI Engineer-in-Charge design, engineering, manufacture, supply, storage, civil work, erection, testing & commissioning of sanctioned project(s) within **12 months** from the date of issue of allocation letter(s).A further period of 6 months shall also be provided for completion of project with reduced incentive as per table shown.
- No incentive shall be provided if project gets delayed beyond 6 months from the sanctioned completion period.

LIQUIDATED DAMAGES AND PENALTIES

No incentive shall be provided if project gets delayed beyond 6 months from the sanctioned completion period and a penalty shall be imposed for delayed commissioning without complete forfeiture of PBG as per following:

CASE 1 : GENERAL CATEGORY STATES

If a project of 1 MWp in General Category State is delayed by 36 days then the Liquidated Damages will be levied as given below.

$$\begin{aligned}\text{Liquidated Damages} &= ((\text{Performance Security})/180 \text{ days}) * \text{delayed days} = (18,75,000 /180) * 36 \\ &= \text{Rs.}3,75,000.\end{aligned}$$

CASE 2 : SPECIAL CATEGORY STATES

If a project of 1 MWp in Special Category State is delayed by 36 days then the Liquidated Damages will be levied as given below.

$$\begin{aligned}\text{Liquidated Damages} &= ((\text{Performance Security})/180 \text{ days}) * \text{delayed days} = (45,00,000 /180) * 36 \\ &= \text{Rs.}9,00,000\end{aligned}$$

❖ **After 6 months the project will get cancelled and the total PBG amount would be forfeited.**

- If Operation & Maintenance issues are **not resolved within 72 hours**, then complaint may be raised to SECI , pursuant to which a **penalty of Rs. 10,000 for full month or more** shall be imposed for a system capacity above 100 kWp.
- Repetition of such instances for more than 2 times a year may lead to the stop the next tranche of subsidy by the SECI.
- If the outage of the plant is more than 30 days continuously, then the 50% PBG amount shall be encashed by SECI.
- If the outage is exceeding more than 60 days than complete PBG amount shall be encashed by SECI.

(This will be applicable till 5 years of O&M as per the Scope of the RfS.)

- Incentive will not be released for any shortcomings in commissioning as per technical specifications mentioned or for performance ratio (PR) below the specified limit (75%) after commissioning.
- PBG shall be forfeited in case average CUF falls below 15% during entire O&M period of 5 years.



THANKS