

SET up of Solar Plant BY Govt. Producer Say Jodhpur Nager Nigam under MNRE CPSU Scheme Phase-II A Best Scheme**

- 1 Ministry of New & Renewable Energy (Grid Solar Power Division) , Government of India has approved the implementation of CPSU Scheme Phase-II for setting up 12,000MW grid-connected Solar Photovoltaic (PV) Power Projects by CPSUs/ State PSUs/ Government Organisations, with Viability Gap Funding (VGF) support for self-use or use by Government/Government entities, either directly or through Distribution Companies (DISCOMS).
- 2 Ministry of New & Renewable Energy (Grid Solar Power Division) vide order nos 283j20/2019-GRID SOLAR dated 3.7.201 and 283/20/2019-Grid Solar 3.7.2019 with copy to MDs of Discoms has conveyed the Scheme modalities and Role of Discoms in MNRE'S CPSU Scheme.

2. Salient Points of Scheme:

- i. 12,000 MW Solar PV Power Projects to be set up by "Government Producers".
- ii. "**Government Producer**

Government Producer can be any entity which is either:

- Directly controlled by the Central or State Government or
 - Is under the administrative control of Central or State Government or
 - A company in which Government is having more than 50% shareholding.
- iii. Power Usage: for self-use, or use by Government/Government entities, either directly or through DISCOMS.

iv. Year wise allocation Targeted:

Sr	AY	
1	2019-20	4000MW
2	2020-21	4000MW
3	2021-22	400MW

- **Capacity Allocation:** By way of Bidding on VGF by SECI
- **Implementation Agency:** Solar Energy Corporation of India Limited (SECI)
- **Viability Gap Funding (VGF):** Maximum Rs 0.7 Crores /MW, to be decided through bidding
- **Usage Charge:**
 - Charges that can be collected for supplying power

- To be mutually agreed between producing and consuming Government entities, subject to limit of Rs 3.50/unit (other charges like wheeling, transmission, Load Dispatch Centre charges, extra)
- **Domestic Content Requirement (OCR):** Both Solar cells & modules to be domestically manufactured

3. **Allocation Methodology:**

- SECI will invite bids from Government Producers
- Bidders will quote VGF requirement, within the ceiling VGF
- Allocation on bucket filling basis, based on lowest VGP requirement

4. **First SECI BID: 2000 MW**

- SECI has issued bid for 2000 MW solar PV projects under Tranche-I of this scheme
- As of now, Last Date of bid submission is 15.07.2019

5. **Role Of Discoms In Different Scenarios Of Generation And Consumption Of Power Under The Scheme:**

Scenario - I: Govt. Producers Consuming the Power themselves

- Discoms to facilitate 'Open Access' to Government Producers intending to Use solar power generated by themselves through Open Access.

Scenario-II: Govt. Producers Supplying Power to other identified Government entities

- Discoms to facilitate 'Open Access' to Government Producers intending to supply power to other identified government entities through open access

Scenario -III: Govt. Producers Supplying Power to large pool of Unidentified Government entities through Discom

- Discoms to facilitate supply of power by Govt. Producers to other user Government entities, by ensuring that the billing reflects "usage charges" not more than Rs 3.50/unit, in addition to other charges.
- Since in such cases, Government Consumers will also be consuming power from sources other than solar, Discoms can just add one line in their bills to the Government Consumers stating that "*this includes supply of power at usage charges of not more than Rs. 3.50/unit, in addition to other regulator mandated charges*".

Scenario - IV: PSU Discoms themselves become Government Producers

Case-I:

- Power produced can be utilised for supply to other Government bodies or non-

commercial sectors (that is where power is not sold) like agriculture, local urban bodies, etc.

Case-2:

- Discoms can supply power to Identified/ unidentified government entities ensuring that the billing reflects "usage charges" not more than Rs 3.50/unit.

In this case *also*, since Government Consumers will also be consuming power from sources other than solar, Discoms can just add one line in their bills to the Government Consumers stating that “*this includes supply of power at usage charges of not more than Rs. 3.50/unit, in addition to other regulator mandated charges*”,

6. Considering the fact that most of the Discerns may not be comfortable in setting up the solar PV power plants under the Government Producer Scheme, as they might find it difficult to arrange upfront capital investment for setting up solar plants, following alternate methodology is suggested:

Alternate methodologies for setting up of solar PV power plants by Discoms without investing upfront capital cost (this methodology can even be deployed by other Government Producers interested to participate in the Scheme):

DISCOMs bring in the CAPEX amount upfront, and set up the plant on their own or through EPC contractors

Alternatively, where Capital Funds are scarce DISCOMs, may adopt a modified annuity model, which puts generation accountability on the EPC contractors, as follows:

Bid:-

- i) DISCOMS invite bids for design, construction and supply of Solar Power Generating Systems, with DCR - (*Just like EPC*)
- ii) Successful bidder to also provide Operation & Maintenance for 25 years
- iii) Land and transmission also to be in the scope of the bidder.
- iv) Discoms would be the Owner of the Plant

Evaluation:-

- i) Bidder to quote total cost of (solar plant & it's O&M)
- ii) Bidder to also quote min. generation/yr. for 25 yrs
- iii) Bid with least cost per unit generation to be L1 bidder

Payment:-

- i. Total quoted cost to be paid in 12x25 equal monthly installments, subject to following adjustments
- ii. Any increase in generation from quoted min. annual generation would qualify for incentive payment at the rate of quoted and accepted cost per unit generation

- iii. Any decrease in generation from quoted min. annual generation would be liable for penalty at the rate of quoted and accepted cost per unit generation.

These Scheme with Modalities stands approved by The Minister (Power-NRE) , Govt. of India.

Jodhpur Municipal Corporation as **Government Producer** can put their 10 MW SPV Solar plant under CPSU Scheme

1) Government Producer

Jodhpur Municipal Corporation is under Administrative control of Rajasthan Govt. so it meets the condition of **Government producer**.

2) Scheme for Solar Plant

Under CPSU Scheme/ Government Producer Scheme Solar plant can be put directly by JMC.

3) Domestic Content Requirement

JMC as Government Producer will ensure that modules used in solar plant will meet requirement of use of both solar photovoltaic (SPV) cell and Modules manufactured domestically as per requirement of MNRE.

4) VGF

Scheme allows the VGF of 0.7 Crores /MW with uses Charges of Rs 3.5/kWh, which indicates that a VGF of maximum 70lakhs will be admissible with tariff of 3.50 /kWh.

5) Equivalent Levelised Tariff as per RERC order

As per recent orders of RERC Viz Kusum Yozna etc the tariff declared by RERC is 3.14 /kWh. So Bench mark Tariff can be 3.14/kWh without VGF.

6) Role Of SECI

As JMC will submit the Bid against Tenders issued by SECI for allotment of VGF.

7) Third Party Charges

The Annuity payment is exclusive of any third party charges like wheeling Charges , Transmission Charges , wheeling losses , Transmission losses , Cross subsidy Charges (Nil for solar Plant) , SLDC / Regional Load Dispatch Charges(RLDC) etc.

8) Time line of Project Commissioning

The commissioning of Solar plant project under this scheme time period of 18 months from the date of letter of award. As JMC project is of only 10 MW solar plant and JMC has already set apart the land of 10 MW solar plant so shorter time line can also be specified. Thus JMC can go for 10-12 months Time period from date of letter of award.

9) Delay In Commissioning

In case, the commissioning of the project is delayed beyond six months from SCD the project capacity under the Scheme shall be reduces to the project capacity commissioned, and the balance capacity will stand terminated from the scheme.

10) Project to be Set up BOO basis

Under CAPEX mode Government producer (JMC) shall set up the solar project under Build Own–operate basis (BOO).

11) Modified Annuity Model Applicable for JMC

As per CPSU Scheme, if Capital Funds are scarce then Government Producer (JMC), may adopt a modified annuity model, which puts generation accountability on the EPC contractors, as follows:

A) Bid:-

- i) JMC invite bids for design, construction and supply of Solar Power Generating Systems, with DCR - (*Just like EPC*)
- ii) Successful bidder to also provide Operation & Maintenance for 25 years
- iii) Land and transmission also to be in the scope of the bidder.
- iv) Discoms would be the Owner of the Plant

B) Evaluation:-

- i) Bidder to quote total cost of (solar plant & it's O&M)
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C) Payment:-

- i) Total quoted cost to be paid in 12x25 equal monthly installments, subject to following adjustments
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- iii) Any decrease in generation from quoted min. annual generation would be liable for penalty at the rate of quoted and accepted cost per unit generation.

Based on above modalities JMC can go for bidding for 10 MW solar Power Plant. In this case Solar Power Plant will be setup by Solar power developer and payment will be made by JMC in 12x25 equal Monthly installment as EMI like paying EMI to bank for 25 years in Housing Loan.

**** Refer MNRE CPSU Phase-2 Scheme issued by MNRE for further details**