MODEL TENDER DOCUMENTS FOR 1000 MW GRID CONNECTED ROOF TOP SOLAR PV SYSTEM SCHEME FOR PSU / GOVERNMENT BUILDINGS

This model tender documents have been prepared by MNRE for inviting the bidders to participate in RFS for implementation of 1000 MW grid connected roof top solar PV system scheme for Government buildings under CAPEX and RESCO model for Design ,Manufacture, Supply, Erection, Testing and commissioning,Operation and maintenance of roof top solar power system. This is a model RFS documents/guidelines with a focus on roof top solar system for Government buildings for incentive scheme of MNRE.

DOCUMENTS DESCRIPTION

This tender of 1000 MW comprises CAPEX model (300 MWp) and RESCO model (700 MWp). The bidding process under this roof top scheme has been categorized in 2 parts. The minimum and maximum aggregate capacity in each part has been specified as under

- **1. Part A** This part is meant for CAPEX model only having total capacity of 300 MWp. The minimum and maximum aggregate capacity in this part has been fixed as 500 Kwp and 30 Mwp respectively..
- **2.** Part B This part is meant for RESCO model only having total capacity of 700 MWp. The minimum and maximum aggregate capacity in this part is 1 MWp and 140 MWp respectively.

Broad Scope

The scope covers Design, Engineering, Manufacture, Supply, Storage ,Civil works, Erection, Testing and commissioning of grid connected roof top solar PV project including operation and maintenance of project for a period of 5 years for Part - A and 25 years for Part -B after commissioning of project. The total time line for the above scope of work upto commissioning of project is 12 months only.

INCENTIVE STRUCTURE

Incentive structure has been categorized in 3 categories.

- 1. If the target achieved is 80% and above within the sanctioned period.
- 2. If the target achieved is below 80% and upto 50% within the sanctioned period
- 3. If the target achieved is below 50% and commissioning delayed upto 6 month beyond the sanction period.

In all the above 3 categories ,incentive has been allowed @ Rs 18,750 / kWp Rs 11250 / kWp and Rs 7500 / kWp in respect of general category States where as @ Rs 45,000 / kWp, Rs 27000 / kWp and Rs 18000 / kWp in respect of special category States.

For clarification, if target achieved is 90%, the incentive will be payable in the 1st category having more than 80% target. If balance target is achieved within 6 months from completion time, the extra incentive will be payable according to 3rd category.

Both the above models shall be available to Government buildings/Government institutions only and incentive will be provided as per MNRE guidelines circulated on 04-05-2016 (mentioned as above). No incentive shall be applicable for the projects completed after 6 months from the sanctioned completion time.

BIDS IN PART A (CAPEX)

The bidders will be required to quote the project cost for each State for the capacity proposed (not less than 500 kWp in a State). Incentive will be provided as above.

BIDS IN PART - B (RESCO)

The bidders will be required to furnish year on tear tariff for 25 years starting from the date of commissioning. Tariff stream quoted by the bidder shall then be levelised with a discounting rate of 11%.

MAXIMUM ALLOWABLE TARIFF

The maximum allowable levelised tariff for this part over 25 years assuming discounting rate of 11 % will be Rs 6.39 /kwh with 30% CFA for General category States and Rs 4.82/kwh with 70% CFA for special category States. This rate has been calculated as per CERC norms.

The State wise allocation has also been made in CAPEX as well as in RESCO model. Although it is indicative and can be transferred from 1 state to another state. Max allowable project cost under CAPEX model has been fixed as Rs 75/ kWp.

Size of the project shall be in the range from above 25 kWp to 500 kWp under Part – A and below 25 kWp under Part –B.

The maximum aggregate bid capacity for all the States for which the bidder can submit his bid is 170 MWp only for part A and B together.

The formula applicable for Performance Bank Guarantee will be Rs 18.75 lacs/MWp for general category States where as Rs 45.00 lacs /MWp for special category States

The outage of the plant/shortcomings has been linked to penalty, stoppage of incentive and encashment of bank guarantee depending upon duration of outage and repetition.

INCENTIVE DISBURSEMENT

- For general category States Rs 12500/kWp (i.e. 2/3 of amount) shall be disbursed after successful commissioning and balance Rs 6250 (i.e. 1/3 of amount) after completion of first year of successful O&M if project is commissioned in sanctioned time.
- 2. For special category States Rs 30000/ kWp (i.e.2/3 of amount) shall be disbursed after successful commissioning and balance Rs 15000/kWp (i.e.1/3 of amount) after completion of first year of successful O&M, if project is commissioned in sanctioned time.

The document contains Bid details, Instruction to the bidders, Tender bidding methodology along with broad outline of activities from bidder's perspective. Performance security/Performance bank guarantee, Conditions of contracts, Evaluation criteria, Eligibility criteria(general, technical as well as financial) Incentive disbursement, Technical specifications, Reference for calculation of levelised tariff, Guidelines for operation and maintenance, Quality certification and List of IEC standards, List of banks, Completion documents, Documents required for project sanction etc

In the model tender documents different types of formats required has also been standardized for reference like formats for price bids, general particulars of bidders, formats for bid bonds, performance bank guarantee, format for check list for bank guarantee formats for power of attorney, formats for financial eligibility criteria requirement, format for consortium agreement, format for O&M report, project report formats for submitting RFS documents, format required for project sanction, format for project completion report for grid connected roof top, formats for instruction to Discom, formats for undertaking from bidding company, list of Government buildings ,format for certificate of relationship of parent company, formats for undertaking from parent company etc.