TELANGANA STATE RENEWABLE ENERGY DEVELOPMENT CORP. LTD
(TSREDCO)
D. No. 6-2-910, The Institute of Engineers (India), Telangana State Center,
2nd Floor, Visvesvaraya Bhavan, Khairthabad, Hyderabad – 500 004. Telangana State
Tel: Off: 040 – 23201502 / 03, Fax: 040- 23201504
E. Mail: info@tnredcl.telangana.gov.in www.tnredcl.telangana.gov.in

Photograph of Beneficiary

APPLICATION FOR INSTALLATION OF SOLAR PV ON GRID ROOFTOP SYSTEMS

Sl no	Particulars	Information
1	Capacity of the System	
2	Category – Domestic / Non-Domestic	
3	Area – Urban / Rural	
4	Name of the Beneficiary	
	Father/ husband's name	
	Date of Birth (DD-Mon-YYYY)	
	Social Status	BC / SC / ST/ OTHERS
5	Detailed Address : H. No.	
	Street. Name.	
	Village / Town	
	Mandal.	
	District	
	Pin Code	
6	a) Mobile No/ alternate mobile no	
	b) E-Mail Id	
7	Land line No if any	
8	Application Fee	Amount: Rs.
		DD No:_____, Date_____, Bank_____& Branch_____
9	Aadhar card No	
10	Pan No	
11	Electricity Connections details (If available)	
12	White Ration Card Details / VRO Certificate Date	
13	Availability of shadow-free Area: (Yes / No) (Area to be mentioned)	
14	Technical Feasibility Details (Issued by DISCOMs)	
15	Name of the Integrator (If selected)	

16	**BENEFICIARY BANK ACCOUNT DETAILS**	
S.No	**Name of Bank & Address**	
a)	**Type of Account**	
b)	**Account No**	
c)	**IFS Code**	
d)	**Bank**	
e)	**Branch**	
17	**Enclosures**	
	a) Passport Size Photo	
	b) Aadhar Card	Yes/No
	c) Electricity Bill	Yes/No
	d) Under taking letter	Yes/No
	e) Affidavit/Declaration Certificate (MNRE format)	Yes/No
	F) Agreement/Consent/Certificate from User/Beneficiary (MNRE format)	Yes/No

DECLARATION:

I / We hereby declare that the particulars given above are true and correct to the best of my/our knowledge and belief.

I/We hereby declare that the system installed in our premises shall be maintained for a minimum period of 5 (five) years and shall not be shifted or disposed off.

I/We hereby undertake to abide by the terms and conditions that TSREDCO may stipulate in providing the ---- KWp Solar PV On Grid rooftop systems.

Applicant's name: **Signature(s)/Thumb Impression**

Place:
Date:

Application Fee

1. 1 - 10 KWp : 1000+ 18 % GST per KWp
2. 11-100 KWp : 15000+18% GST per Proposal
3. Above 100 KWp :25000 + 18% GST per Proposal

Form B

Ministry of New and Renewable Energy
(Jawaharlal Nehru National Solar Mission)

Form B for Project Proposals for
Grid Connected Rooftop and Small SPV Power Plants
(For the project above 5 kWp & upto 50 kWp)

Photo of the beneficiary with signature

PART- I : Project Details

[A] General Details

Sl. No.	Description	Remark
1.	**Title of the Project**	
2.	**Capacity of the plant (kWp)**	
3.	**Category of the Applicant/Project Proponent** Government Organization/ PSU/ State Nodal Agency/ SECI/ Channel Partner/ RESCO/ System Integrator/ Finance Integrator/ Manufacture/Supplier of Solar equipment's/ Developer/ NGO/Financial Institutions/Financial Integrator/ Any other (please specify)	
4.	**Details of the Applicant/ Representative/ Project Proponent** Name Designation Mailing Address Telephone, Fax & Email (Web site, if any)	
5.	**Executive Summary of the Proposal** (Please attach a separate sheet)	
6.	**Objective for implementing the Plant** (a) Sale of electricity to the distribution licensee at feed-in tariff or competitively discovered rate (b) Sale of electricity to the distribution licensee at Average Pooled Price Cost (APPC) and participation in REC Mechanism (c) Sale of electricity to third party (d) Self-consumption total or partial generation (e) Diesel saving (f) Combination of above (please mention) (g) Any other, please specify	
7.	**Any Other detail relevant for consideration of support under the scheme by the evaluation committee**	

[B] Details of the plant site/location

Sl. No.	Description	Remark
1.	**Is the plant located at the address mentioned in [A] 4 above; if No, Address of the location of the plant(s)** Name H. No. Street/Locality/Road District State Pin code	
2.	**Is the beneficiary same as [B] 1. If No, Details of Project Beneficiary/ Organization** Head of the organization Name of the contact person full address, phone, mobile and e-mail	
3.	**Details of Proposed Power Plant** (a) Proposed capacity of the SPV Power Plant (kWp) (b) Plant proposed at single site/multiple sites (c) Interconnection with the electricity network at single point or multiple point (d) Availability of shadow free south facing rooftop/ land area for the power plant with photograph (e) Total loads to be energized by SPV Power Plant (kW) (f) Calculations and justification for the proposed capacity (Please elaborate) (g) Expected annual energy generation (h) Space for housing the plant control systems and battery bank (if any)	
4.	**Details of electrical load where the plant is to be installed** i. Total connected electrical load in kW (as per electricity bill) ii. Applicable consumer category (domestic/commercial/individual/others, please specify) iii. Total electrical load to be met by the SPV power plant (kW)	
5.	**Technology Description & System Design /Specification**	

Sl. No.	Description	Remark
	i. Sketch/Line diagram of the complete SPV System with details (please attach drawing) ii. Capacity/ Power of each PV Module (kWp) iii. Number of modules and total array capacity (nos. & kWp) iv. Solar cell technology and Module efficiency proposed to be used (mono-crystalline/ poly-crystalline/ thin film/ any other) v. Details of Tracking of PV Array, if proposed (single axis/ double axis tracking etc.) vi. PCU/inverter capacity with detailed specifications (kVA) (Details of quality of output power, standards) vii. Type of inverter (central/ string/ multi string/any other), inverter efficiency viii. Number of PCU/inverters proposed to be used ix. DC Bus voltage x. Capacity of battery bank (Current, Voltage and AH), if used, any xi. Type of battery proposed (lead acid tubular/ lithium ion/ NaS/ any other) xii. Details of protections to be deployed on PV array and AC output side xiii. Details of Metering, Indication, Data logging operation xiv. Schematic diagram of the system including protecting interlocking devices, monitoring and data logging points to be provided. xv. Details of training of manpower to be provided for successful operation of the plant. (Compliance to BIS/IEC Standards is mandatory). xvi. Details of Mounting system: - Roof mounted system - Ground mounted system	
6.	**Details of Building to install the Electronics Control Panel and Battery Bank (if any)** i. Whether any existing building is to	

Sl. No.	Description	Remark
	be used as control room, if so, details to be provided. ii. If a new building is to be constructed, area, estimated cost and layout, etc. to be provided and time frame to construct the building.	

Notes:

- It is mandatory to provide technical performance specifications of each component of the power plant proposed to be installed under the project as applicable and for which the performance will be warranted.
- All technical parameters and warranty requirements must meet or exceed the requirements mentioned in the guidelines issued by the Ministry.

[C] Operation and Maintenance Arrangements

Sl. No.	Description	Remark
	– Details of Operation and Maintenance Arrangements – Arrangements for Generation Data Collection through remote monitoring *(applicable for SPV Power Plants having more than 5 kWp capacity)* – Is dedicated staff being trained for O&M of the plant? – No. of personnel to be trained in O&M	

[D] Project Duration and Implementation Schedule

Completion schedule with milestones *(Please attach PERT CHART preferably)*

[E] Monitoring Mechanism

Details of Data Monitoring on Daily, Monthly and Annual energy generation

(Data logging and compilation and sharing with MNRE)

Please provide details in the following format

Own Mechanism (up to 5 kWp)	
Third Party	
Remote Monitoring (for SPV power plants of 10kWp and above)	

[F] Costing of Project

Sl. No.	Systems	Unit Cost (Rs. in lakh)	Quantity	Total Cost (Rs. in Lakh)
1.	Cost of Systems Hardware – SPV modules – Inverters			

	– Installation structure – Electrical Wires – Battery Bank (if any) – Meter – Any other			
2.	Cost of transportation and insurance			
3.	Cost of civil works and electrical works			
4.	Cost of installation and commissioning			
5.	Cost of Annual Maintenance for 5 years			
6.	Cost of Battery replacement			
7.	Any other related costs			
	Total Cost			

[G] Means of Finance

(Rs. in lakh)

1.	Envisaged Central Financial Assistance from MNRE	Rs.
2.	Contribution of Beneficiaries	Rs.
3.	Contribution of Project Proponent	Rs.
4.	Other Source (s) of Funding	Rs.
5.	Envisaged Soft Loan assistance, if any	Rs.
	Details of Revenue to be collected with payback period	

[H] ANY OTHER INFORMATION

PART – II . Details of Grid Connectivity of the Project

(The developer shall submit "Single line diagram elaborating Interconnection of the Solar Photovoltaic Plant to the Grid")

Sl. No.	Description	Remarks
A.	**Grid Connectivity Level** • Low Voltage single phase supply (Up to 10 kW SPV system) • Three phases low voltage supply (Up to 100 kW SPV system) • Connected at 11kV level. (100 kW to 1.5 MW SPV systems) • Connected at 11kV/33 kV/66kV level (1.5 MW to 5.0 MW SPV systems) • Any Other level	
1.	Distance of interfacing point of the SPV Plant with the Grid	
2.	Type of Grid available	
3.	Letter of Consent for Synchronization of SPV Plant with the Network of Distribution Licensee/NOC (enclose letter)	
4.	Applicable Fee & Charges made for the Grant of Connectivity if any	
B.	**Details of Distribution Licensee providing Grid Interconnection** Name and complete address of Distribution Licensee Details of Contact Person E-mail Phone Number Mobile Fax	
C.	**Metering Arrangement for the Project** *(Along with the application for the consideration of Central Financial Assistance, the developer shall submit "Single line diagram elaborating type and location of Meter(s))* I. Export Import meters/ II. Two way meters III. Three Meter system	

	IV. Any other (Pl specify) V. Price of meter VI. Whether meter is approved by Distribution Licensee: VII. Class of Energy Meter	
D.	**Power Purchase Agreement** *(A copy of agreement made with distribution licensee and/or third party shall be enclosed)*	
E.	**Business Model Proposed for the project** i. Solar installations owned by consumer – *Solar Rooftop facility owned, operated and maintained by the consumer(s).* – *Solar Rooftop facility owned by consumer but operated and maintained by the 3rd party* ii. Solar installations owned, operated and maintained by 3rd Party – *Arrangement as a captive generating plant for the roof owners* – *Solar Lease Model, Sale to Grid* iii. Solar Installations Owned by the Utility – *Solar installations owned operated and maintained by the DISCOM* – *Distribution licensee provides appropriate viability gap funds* iv. Any Other Model (Pl specify)	
F.	**Commercial Arrangement** • Sale to Distribution Licensee – Sale at Feed-in-Tariff determined by SERC – Sale at rate discovered under competitive bidding and adopted by SERC – Sale at Average power purchase cost determined by SERC and participation in REC Mechanism • Self or Captive Consumption – Participation in Net Metering Mechanism – Sale of Surplus Power to Grid or 3rd party • Sale to 3rd Party – Rate committed for sale of electricity – Sale of Power on Short Term (Negotiation of rate at Regular Intervals) or – Sale of Power on Long Term Basis – Participation in REC Mechanism	

	• Any Other system, please specify	
G.	**Undertakings from Involved Parties** I. Undertaking from the consumer/ beneficiary regarding the acceptability and cost sharing of the project II. Undertaking from the third party/project developer regarding Quality assurance, installation, operation and maintenance of the system	
H.	**Any other relevant information** I. Incentives availed from any other Agency (National/International) II. Likely Capacity Utilization Factor III. Any other.	

Affidavit / Declaration Certificate

(To be furnished by Implementing Agency in Appropriate Stamp Paper)

1. It is certified that I/we have read the guidelines issued by the Ministry vide No.----------
----------dated ---------- and the related provisions/terms and conditions for availing Central
Financial Assistance (CFA) from the Ministry of New and Renewable Energy and I/ We agree to abide by these guidelines and related terms and conditions. Failure to comply with these guidelines will result in denial of CFA by the Ministry.

2. This is to certify that Shri …… (Name & Designation) of ……
(Organization) visited the proposed site on (Date) …….. and found that there is……
Sq.m of south facing shadow free area is available at the site for installation of the power plant. The latest Photograph of the front view of the proposed site with date is enclosed with the certificate. After installation photograph will be taken in same view and will be submitted with completion report.

3. We confirm that the present proposal in full or part has not been submitted / has been submitted to any other agency for seeking support (In case proposal has been submitted to any other agency or under consideration all details and a copy of the proposal must be submitted along with the present proposal). The present proposal has neither been submitted to MNRE nor the CFA has been availed from MNRE for the same proposal.

4. This is to certify that the various components of the PV module/ inverter/ meter/ battery(if any), electric wires, BOS etc. will conform to the Relevant Standards, as mentioned in the Guidelines for Off-grid and Decentralized Solar Applications for SPV modules and components/ Grid Connected Rooftop and Small Solar Power Plants under JNNSM. Copies of the Relevant IEC/ BIS certificates has been maintained in the office.

5. We confirm that the individual applications, beneficiary's identification, photograph of the systems and the beneficiary of each alongwith detailed specifications of various components have been received in the prescribed format. It has been kept and maintained in our office. For any audit and inspection, it will be shown to the concerned officer/ authority.

6. We agree to place the details and photographs of the system and beneficiary on our website for all systems.

7. We will provide/feed the data in the online monitoring system regularly as per instruction of MNRE.

8. The plant site has been/ will be inspected/ verified by us and the final claim will be made after the plant/system has been found satisfactory in all respect and Fit/ eligible for receiving subsidy/CFA from MNRE.

9. The failure to comply with these guidelines will result in denial of CFA by MNRE.

I also hereby declare that all information submitted in the proposal are true to the best of knowledge and belief. This is to confirm that in case of any dispute, the decision of Secretary, Ministry of New and Renewable Energy, Government of India will be final and binding on all.

Signature……..…
Name & Designation of Authorized Signatory*
of Implementing Agency

Place
:
Date:

***Authorized signatory should be at least in the rank of General Manager of SNA/PSU or MD/ CEO/ Director in case of Channel Partner.**

Agreement / Consent/ Certificate from User/ Beneficiary

(To be furnished by User/ beneficiary in Appropriate Stamp Paper)

1. This is to certify that I ……..... S/o Shri …….. Resident of ……..... herewith agree to install the Grid Connected Rooftop Project / Small Power Plant of ..... kWp capacity as per details submitted in the Form B / DPR of the proposal.

2. I confirm that the CFA received will be utilized for this project only and not for any other purpose. I herewith also confirm that the balance cost in addition to the CFA will be met by me from my own/ other resources.

3. I agree that the roof space will be made available in the proposed project site and is owned by me/ leased to me by the owner.

4. This is also confirmed that I will extend full cooperation including access to the project site premise to the implementing/ executing agency during installation and O&M, of the plant.

Signature…..……..……
Name & Designation, Organization, Address of the User/ Beneficiary (with Seal if available)

Place:
Date: