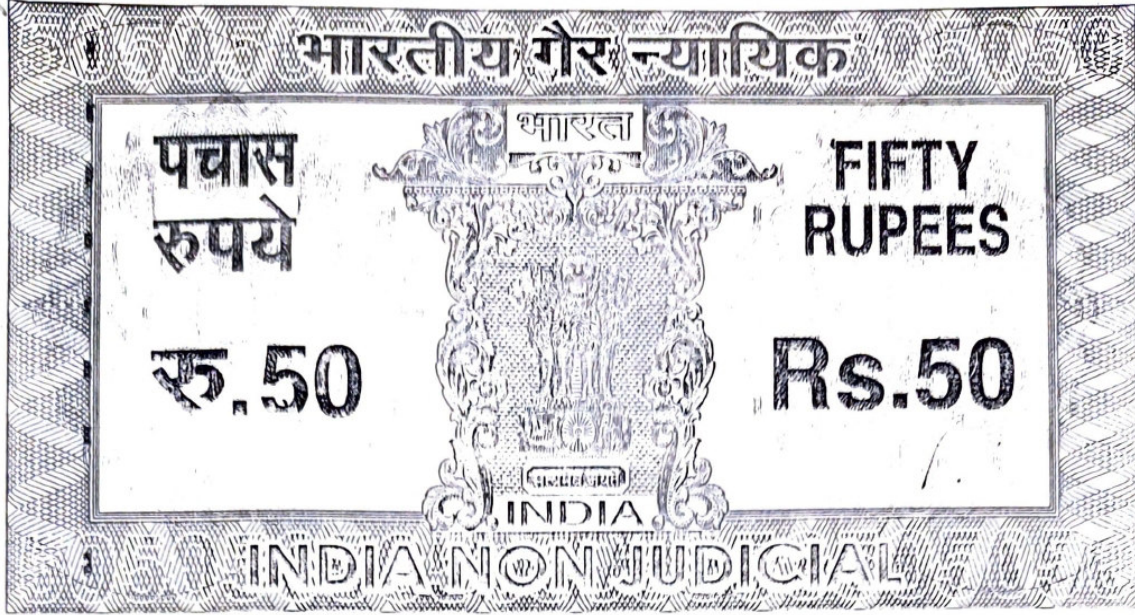


**WHEELING TO THE GRID
AGREEMENT FOR
500 kWP SOLAR PLANT**



ఆంధ్ర ప్రదేశ్ రాష్ట్రం ANDHRA PRADESH

S.No. 3026 Date : 27-07-2017

Rs.50/-

CHAIRMAN, SREE VIDYANIKETHAN EDUCATIONAL TRUST
SREE SAINATH NAGAR, A.RANGAMPETA.

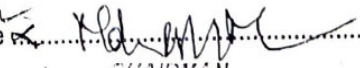
AP 846536
C. KAPRAMMA
LICENCED STAMP VENDOR
P. No. 19-22-034/2511, K. P. No. 18-22-012/2518
S. No. 5-234B, Sanjay Garden Colony, Koraganita
RUPATI-517 E01. Cell: 9542685474

Agreement / Consent/ Certificate from User/ Beneficiary

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

This is to certify that **Manchu Mohan Babu S/O M. Narayana Swamy Naidu** Chairman of **Sree Vidyanikethan Engineering college** at A.Rangampet in Chittoor (Dist) herewith agree to install the Grid Connected Rooftop Project / Small Power Plant of 500 Kwp capacity as per details submitted in the Form B / DPR of the proposal.

1. 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.
2. I agree that the 6000 sq.mtrs.of roof space will be made available in the proposed project site and is owned by me/ leased to me by the owner.
3. 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 
C. KAPRAMMA
CHAIRMAN

Place : A.Rangampet ,
Titupati,

Name & Designation, Organization, Address of
SREE VIDYANIKETHAN EDUCATIONAL TRUST
SREE SAINATH NAGAR, A.RANGAMPETA

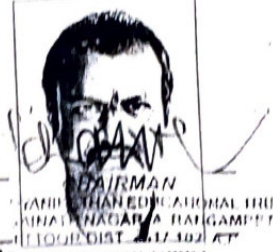
The User /Beneficiary.

Date :

**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

Form B



PART- I: Project Details


[A] General Details

Sl. No	Description	Remark
1.	Title of the Project	Solar photovoltaic Rooftop AP Net-metering Policy
2.	Capacity of the plant (kWp)	500 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)	System Integrator
4.	Details of the Applicant/ Representative/ Project Proponent Name & Address Designation Mailing Address Telephone, Fax & Email (Web site, if any)	Manchu Mohan Babu, S/O M Narayana Swamy Naidu , Sree Vidyanikethan educational Trust (Sree Vidyanikethan Engineering college),Sree Sainath nagar, A.Rangampet,Chandragiri(Mandal) Chittoor(Dist).A.P.,Pin:517102 CHAIRMAN ravisekhar@vidyanikethan.edu 0877-3066777;
5.	Executive Summary of the Proposal (Please attach a separate sheet)	Enclosed
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	Self Consumption total or partially generation,Going Eco Friendly
7.	Any Other detail relevant for consideration of support under the scheme by the evaluation committee	Nil

(Signature)
CHAIRMAN
SREE VIDYANIKETHAN EDUCATIONAL TRUST
SREE SAINATH NAGAR, A. RANGAMPET
CHITTOOR DIST - 517 102 A.P.

Details of Plant site Location

Sl. No	Description	Remark
1	<p>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</p>	Same as above
2	<p>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</p>	Same as above
3	<p>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)</p>	<p>500 KWP Single Site Single point 6000 Sq.Mts., 500.kva The 500 Kwp solar roof top plant is estimated to generate about 4.0kwh/kwp/day and thus annual generation from solar plant is expected to be 6,80,000 kwh in the year. During holidays the Excess power delivers will export to the grid. 6,80,000 kwh NA</p>
4	<p>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)</p>	<p>500 kva Government Body/if any,.....) 500 KW (Including the proposal Expansion)</p>
5	<p>Technology Description & System Design /Specification</p>	
	<p>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</p>	<p>Enclosed 320Wp 1563 No's & 500Kwp Polycrystalline Fixed Tilt 16 degrees</p>


 SRI VIDYAMITHAN EDUCATIONAL TRUST
 SREE SAINATH NAGAR, RANGAMPET
 CHITTOOR DIST - 517 102, A.P.

(KVA) (Details of quality of output power, standards)	
<p>vii. Type of inverter (central/ string/ multi string/any other), inverter efficiency</p> <p>viii Inverter efficiency</p> <p>iii. Number of PCU/inverters proposed to be used</p> <p>ix. DC Bus voltage</p> <p>x. Capacity of battery bank (Current, Voltage and AH), if used, any</p> <p>xi. Type of battery proposed (lead acid tubular/ lithium ion/ NaS/ any other)</p> <p>xii. Details of protections to be deployed on PV array and AC output side</p> <p>xiii. Details of Metering, Indication, Data logging operation</p> <p>xiv. Schematic diagram of the system including protecting interlocking devices, monitoring and data logging points to be provided.</p> <p>xv. Details of training of manpower to be provided for successful operation of the plant. (Compliance to BIS/IEC Standards is mandatory).</p> <p>xvi. Details of Mounting system: - Roof mounted system - Ground mounted system</p>	<p>We propose 10 .Nos. of 50kva rated solar PCU and which delivers peak efficiency of 98% and output is 415v with 3phase at 50Hz. Max. distortion factor of 3%</p> <p>String</p> <p>98%</p> <p>10</p> <p>NA</p> <p>NA</p> <p>NA</p> <p>AT array side SURGE protection and reverse polarity protection. At AC Output side Surge protection and overload protection and auto disconnect facility.</p> <p>Remote monitoring data logging is inbuilt in inverter and real time data logging and monitoring will be achieved by connecting the PCU with internet.</p> <p>Enclosed</p> <p>Enclosed</p> <p>Roof Mounting system.</p>
<p>5</p> <p>Details of Building to install the Electronics Control Panel and Battery Bank (if any)</p> <p>i. Whether any existing building is to be used as control room, if so, details to be provided.</p> <p>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</p>	<p>Existing vacant room available in the building.</p> <p>NA</p>

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.


 CHAIRMAN
 SRI SRI VIDYABIKSHANA EDUCATIONAL TRUST
 SRI SRI VIDYABIKSHANA, A. RANGAMPET
 CHITTOOR DIST - 517 102, A.P.

(C) Operation and Maintenance Arrangements

Sl.No	Description	Remark
	<p>- Details of Operation and Maintenance Arrangements</p> <p><input type="checkbox"/> Arrangements for Generation Data Collection through remote monitoring (applicable for SPV Power Plants having more than 5 kWp capacity)</p> <p><input type="checkbox"/> Is dedicated staff being trained for O&M of the plant?</p> <p><input type="checkbox"/> No. of personnel to be trained in O&M</p>	<p>Since the solar plant is grid tied without battery backup support, it shall be operate automatically during sunny hours. During sun offsets inverter connects to the grid. For power outages isolation device given the Ac Distribution board and inverter isolates the plant from the grid and upon resumption of grid voltage the plant automatically tied to grid again.</p> <p>Plant maintenance done by the proponent.....</p> <p>Remote monitoring data logging is inbuilt in inverter and real time data logging and monitoring will be achieved by connecting the PCU with internet.</p> <p>Yes</p> <p>3 No's</p>

[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

Description	Remark
Own Mechanism (up to 5 kWp)	NA
Third Party	NA
Remote Monitoring (for SPV power plants of 10kWp and above)	Remote monitoring data logging is inbuilt in inverter and real time data logging and monitoring will be achieved by connecting the PCU with internet.



CHAIRMAN
SREE VIDYAHIKETHAN EDUCATIONAL TRUST
SRI S. SATHYANAGAN, A, RANGAMPET
CHITTOOR DIST - 517 107 - A.P.

[F] Costing of Project

S.No.	System	Unit Cost(Rs.)	Qty.	Total Cost(Rs.)
1	Cost of Systems Hardware			
	<input type="checkbox"/> SPV modules	12160	1563	1,90,06,080
	<input type="checkbox"/> Inverters	400000	10	40,00,000
	<input type="checkbox"/> Installation structure	4000000	1	40,00,000
	<input type="checkbox"/> Electrical Wires	800000	1	7,00,000
	<input type="checkbox"/> Battery Bank (if any)	0.00		
	<input type="checkbox"/> Meter	0.00		
	<input type="checkbox"/> Any other	0.00		
2	Cost of transportation and insurance			
3	Cost of civil works and electrical works	500000	1	5,00,000
4	Cost of installation and commissioning	450000	1	4,50,000
5	Cost of Annual Maintenance for 5 years	593920	1	5,93,920
6	Cost of Battery replacement	150000	5	7,50,000
7	Any other related costs			
	Total Cost			3,00,00,000

[G] Means of Finance

(Rs. in lakh)

1.	Envisaged Central Financial Assistance from MNRE	Rs. 90,00,000
2.	Contribution of Beneficiaries	Rs. 2,10,00,000
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	

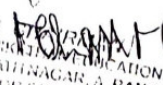
[H] ANY OTHER INFORMATION

NA

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 <input type="checkbox"/> Low Voltage single phase supply (Up to 10 kW SPV system) <input type="checkbox"/> Three phases low voltage supply (Up to 100 kW SPV system) <input type="checkbox"/> Connected at 11kV level. (100 kW to 1.5 MW SPV systems)	Plant will be connected to grid at 3 phase 415 volts/11KV.


 SRI SRI NATHANAGAR A RANGAMPET
 CHITTOUR DIST - 517 102

	<input type="checkbox"/> Connected at 11kV/33 kV/66kV level (1.5 MW to 5.0 MW SPV systems) <input type="checkbox"/> Any Other level	
1.	Distance of interfacing point of the SPV Plant with the Grid	Within the building premises
2.	Type of Grid available	3 Phase-415V/11KV
3.	Letter of Consent for Synchronization of SPV Plant with the Network of Distribution Licensee/NOC (enclose letter)	Enclosed
4.	Applicable Fee & Charges made for the Grant of Connectivity if any	Enclosed
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	Southern Power Distribution Company of A.P Limited, DE Operations, Tirupati Chittoor Dist.
C.	Metering Arrangement for the Project <i>(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> I. Export Import meters/ II. Two way meters III. Three Meter system IV. Any other (PI specify) V. Price of meter VI. Whether meter is approved by Distribution Licensee: VII. Class of Energy Meter	One single Import/Export Meter Will be connected in the place of existing Uni-directional meter.
D.	Power Purchase Agreement <i>(A copy of agreement made with distribution licensee and/or third party shall be enclosed)</i>	NA
E.	Business Model Proposed for the project i. Solar installations owned by consumer <input type="checkbox"/> Solar Rooftop facility owned, operated and maintained by the consumer(s). <input type="checkbox"/> Solar Rooftop facility owned by consumer but operated and maintained by the 3 rd party ii. Solar installations owned, operated and maintained by 3 rd Party <input type="checkbox"/> Arrangement as a captive generating plant for the roof owners <input type="checkbox"/> Solar Lease Model, Sale to Grid iii. Solar Installations Owned by the Utility <input type="checkbox"/> Solar installations owned operated and maintained by the DISCOM <input type="checkbox"/> Distribution licensee provides appropriate viability	Solar installation owned by consumer and operated and maintained by consumer.

7 3295
SAC

iv. Any Other Model (Pl specify)	
F. Commercial Arrangement <input type="checkbox"/> Sale to Distribution Licensee <input type="checkbox"/> Sale at Feed-in-Tariff determined by SERC <input type="checkbox"/> Sale at rate discovered under competitive bidding and adopted by SERC <input type="checkbox"/> Sale at Average power purchase cost determined by SERC and participation in REC Mechanism <input type="checkbox"/> Self or Captive Consumption <input type="checkbox"/> Participation in Net Metering Mechanism <input type="checkbox"/> Sale of Surplus Power to Grid or 3rd party <input type="checkbox"/> Sale to 3rd Party <input type="checkbox"/> Rate committed for sale of electricity <input type="checkbox"/> Sale of Power on Short Term (Negotiation of rate at Regular Intervals) or <input type="checkbox"/> Sale of Power on Long Term Basis <input type="checkbox"/> Participation in REC Mechanism • Any Other system, please specify	Self-consumption and export of excess energy, if any, under Net Metering Policy.
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	NA
H. Any other relevant information I. Incentives availed from any other Agency (National/International) II. Likely Capacity Utilization Factor III. Any other.	No Other Incentive's Availed.


Signature of the Beneficiary
CHAIRMAN
SREE VIDYANIKETHAN EDUCATIONAL TRUST
SRI RANGAM NAGAR, A. RANGAMPET
DIST - 517 102, A.P.

ఆంధ్రప్రదేశ్ నూతన మరియు పునరుద్ధరణీయ ఇంధన వనరుల అభివృద్ధి సంస్థ లి.
New & Renewable Energy Development Corporation of Andhra Pradesh Ltd.

(A State Government Company - ISO 9001:2015 Certified)

Regd. Office : # 5-8-207/2, Pishah Complex, Nampally, Hyderabad - 500 001. India.

Tel : Off : 040-23202391, 23202262, 23203376 Fax : 040-23201666.

E-mail : info@nredcap.in, Website : www.nredcap.in



NREDCAP/OSD/GCRT/Edu.Institutional/61A/2017 /1049

Dt.23.08.2017

To

speed post

The Chairman,
Manchu Mohan Babu,
M/s. Sree Vidyanikethan Educational Trust
(Sree Vidyanikethan Engineering College),
Sree Sainath Nagar, A.Rangampet, Chandragiri(M),
Chittoor Dist-517102.

Sir,

Sub: Installation of **500 KWp** Grid connected SPV Power Plants at **Sree Vidyanikethan Educational Trust(Sree Vidyanikethan Engineering College), Sree Sainath Nagar, A.Rangampet, Chandragiri(M), Chittoor Dist. - Reg.**

Ref: 1) MNRE in principal sanction letter no. 03/73/2015-16/GCRT Dt.01.12.2015.
2) Your proposal dated: 18.08.2017.

& &

We invite your attention to your proposal submitted vide reference 2nd cited for installation of **500 KWp** grid connected Solar roof top system at **Sree Vidyanikethan Educational Trust(Sree Vidyanikethan Engineering College), Sree Sainath Nagar, A.Rangampet, Chandragiri(M), Chittoor Dist.** Taking into consideration the in principle sanction communicated by MNRE vide reference 1st cited, in principle sanction is hereby accorded for taking up installation of **500 KWp** grid connected solar roof top system as per the terms and conditions detailed below:

1. The system shall installed as per minimum technical requirements / standards for SPV systems / plants given in sanction no.30/11/2012-13/NSM dt.26.6.2014 in vogue and amended time to time.(Refer to MNRE website: www.mnre.gov.in)
2. The installation shall be taken up through **NREDCAP empanelled suppliers only as per the finalised rate contract rates.**
3. Only indigenously manufactured PV modules will be used in the project.
4. The consent letter from respective DISCOM indicating their willingness / consent for /installation of grid connected solar roof top system shall be submitted.
5. The maximum CFA will be limited to 30% of the project cost subject to maximum of Rs.18.00 per watt. whichever is less. The eligibility of Central Financial Assistance (CFA) shall be as per the guidelines of Ministry of New and Renewable Energy (MNRE) in vogue and amended time to time.
6. Proper metering arrangement may be incorporated so that the generation data from the proposed SPV power plants will be available.
7. The installation of the system shall be completed and commissioned on or before 15.10.2017.

F. Solar
KA

8. The release of CFA is subject to sanction and release of funds by MNRE and submission of all relevant documents.
9. After completion and commissioning of the project the following documents shall be submitted in duplicate for considering release of CFA.
 1. Copy of work order
 2. Copy of Invoice
 3. Joint inspection report in original.
 4. Project completion report in original.
 5. Photographs (with beneficiary / organization)
 6. Synchronization Letter.
 7. Statement of Expenditure (SOE) duly certified by Chartered Accountant in original.
 8. One month electricity bill (after commissioning)
 9. Authorization letter for disbursement of subsidy to the System Integrator.
 10. Beneficiary Photo with copy of ID Proof (Aadhar card) and Sanction letter

Thanking you.

Sd/-

VC & MANAGING DIRECTOR

Copy to the District Manager, NREDCAP, Chittoor Dist. for information and necessary action
Copy to DGM (F&A), NREDCAP, for information.

// Forwarded :: by order//


General Manager (ESW)