



In the event ITI terminates the contract in whole or in part, ITI Ltd may procure, upon such terms and in such manner as it deems. Appropriate goods or services similar to those undelivered and the Contractor/Agency shall be liable to ITI Ltd for any excess costs for such similar goods or services. However, the Contractor/Agency shall continue the performance of the contract to the extent not terminated.

24. Applicable Law

The contract shall be interpreted in accordance with the laws of the Union of India.

25. Notices

Any notice given by one party to the other pursuant to this contract shall be sent to other party in writing or by cable, telex or facsimile and confirmed in writing to the other party's address specified. A notice shall be effective when delivered or on the notice's effective date, whichever is later.

26. Packing

- **A.** The Bidder shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the contract.
- **B.** The packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures during transit and open storage.
- C. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods final destination and the absence of heavy handlings facilities at all points in transit.
- **D.** The packing, marking and documentation within and outside the item shall comply strictly with such special requirements as shall be provided for in the contract including additional requirements, if any and in any subsequent instructions ordered by the ITI Ltd..

27. Danger plates

The bidder shall provide Danger Notice Plates at each project site near Inverter and Panel of 200 mm X 150 mm made of mild steel sheet, minimum 2 mm thick and vitreous enameled white on both sides and with inscription in signal red colour on front side as required. The inscription shall be in English and local language.





28. Insurance

- i. The Bidder shall be responsible and take an Insurance Policy for transit-cum-storage-cum-erection for all the materials to cover all risks and liabilities for supply of materials on site basis, storage of materials at site, erection, testing and commissioning. The bidder shall also take appropriate insurance during O&M period, if required.
- ii. The Bidder shall also take insurance for Third Party Liability covering loss of human life, engineers and workmen and also covering the risks of damage to the third party/ material/ equipment/ properties during execution of the Contract. Before commencement of the work, the Bidder will ensure that all its employees and representatives are covered by suitable insurance against any damage, loss, injury or death arising out of the execution of the work or in carrying out the Contract. Liquidation, Death, Bankruptcy etc., shall be the responsibility of bidder.
- iii. The bidder shall provide insurance coverage ex-factory until commissioning and acceptance for replacement or repair of any part of the consignment due to damage or loss.
- iv. The bidder shall provide insurance coverage of Complete Project documents effective from date of commissioning of the project for period of 05 years covering damage by force majeure, fire, forceful damage of project, theft ,etc.

29. Warranties and Guarantees

The Bidder shall warrant that the goods supplied under this contract are new, unused, of the most recent or latest technology and incorporate all recent improvements in design and materials. The bidder shall provide warrantee covering the rectification of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of 5 years from the date of commissioning of project. The successful bidder has to

transfer all the Guarantees/ Warrantees of the different components to the Owner of the project. The responsibility of operation of Warrantee and Guarantee clauses and Claims/ Settlement of issues arising out of said clauses shall be joint responsibility of the Successful bidder and the owner of the project and ITI Ltd. will not be responsible in any way for any claims whatsoever on account of the above.

30. Safety Equipment

The awarded bidder must provide fire extinguisher and other safety equipment as per tender/asked by ITI official.





Undertaking

(On Rs.100/- Stamp Paper)

I	Age	Authorized	years	Occup.	•••••	Addr	ess		the	;
Signator that,	ry of M/S	(Compa	any) hereb	y state		I/my to	company	is	intending
Testing	participate for TENDER NO Survey, Design, Fabrication, Supply, Installation, Testing and Commissioning of 1200 KWp Grid Connected Solar PV Power Plant GROUND MOUNTED									
Net- Me	tering with	n Zero Expor	t Polic	y with 05	Years of C	Compreh	ensive	Operation &	z, Ma	intenance
Contrac	t at ITI Lir	nited, Manka	apur , (Gonda (Ul	P) 271308	3.				
I have re	ead all the	terms &cond	ditions	mentione	d in the T	ender do	cumen	t of the ITI	Ltd.	
I hereb	y further u	ndertake and	l decla	re that all	the terms	&condit	tions m	entioned in	each	and every
page of	the said te	ender docume	ent alo	ng with th	ne clarific	ations re	leased,	if any, are	bindi	ng on me/
my com	pany and l	am fully aw	are tha	it, in case	of breach	of any te	rm or c	ondition of	the s	aid Tender
document, I am/my company is liable to be disqualified from the said tender process.										
Sign:										
	Name of	authorized S	ignato	ry:						
	Name of	Company wi	ith Sta	mp:						





Format: Commitment from the Tenderer

(To be submitted separately on Rs.100 stamp paper)

We here by confirm that the from proposed Survey, Design, Fabrication, Supply, Installation, Testing and Commissioning of 1200 KWp Grid Connected Solar PV Power Plant GROUND MOUNTED Net- Metering with Zero Export Policy with 05 Years of Comprehensive Operation & Maintenance Contract at ITI Limited, Mankapur, Gonda, 271308 (UP).

We will provide the assured minimum generation of 4.0 units per day per kW calculated as units 4* 320 days * 1200 kW = 1536000 units/year at energy meter in control cabin/room as certified by joint meter reading of manufacturers representative and user's representative.

However for 5 years we hereby commit to pay an amount of Rs.6/- per unit as compensation to ITI Limited for the amount of units unable to supply against the guaranteed generation.

Date	:	Signature of the Tenderer

Place: Seal





Affidavit (To be submitted on Rs. 100/- stamp paper)

I M/s(Name of bidder) shall do the
project of kW for M/s (Beneficiary
Name), Tender No
Hereby declare that the above-mentioned project shall be commissioned by a biding following:
The standards and norms set by Ministry of New and Renewable Energy (MNRE) is maintained while installation of project.
The project has been installed under the supervision of electrical contractor/supervisor, the electrical parameters involved in the project have been considered under supervision of electrical contractor/supervisor.
All electrical norms are followed, electrical safety measures are taken in consideration and the project is electrically safe. All electrical work will be carried out under the supervision of certified Electrical contractor/supervisor with all electrical safety measures and norms.
The mechanical safety norms while designing and installation of structure are strictly followed. The
solar hot dip structure is tested, approved from engineer and is capable of bearing the load of solar
panels, withstand natural parameters (wind, rain) over the duration of project life.
The roof of the building is capable of bearing the load of hot dip galvanized structure and solar panel over the period of project life.
I will be responsible for maintenance of the project over the period of Comprehensive Operation &
Maintenance Contract (COMC) i.e., 5 years and for the remaining 20 years the beneficiary is responsible
for undertaking the maintenance work of the project.
In case of any mishap from the solar project with the parameter mentioned above, I will be responsible.
I hereby undertake for the above.
Sign of Project Developer:
Stamp:





Undertaking

(On Rs.100/- Stamp Paper)

I	Ago	eyears Occu (Authorized	pAc	ddress the		
Signato intendi	•	/S (Company) he	ereby state that,	I/my company is to		
particip	oate for T	ΓENDER NO St	urvey, Design, Fa	brication, Supply, Installation	١,	
Testing	and Co	mmissioning of 1200 KWp	Grid Connected S	olar PV Power Plant GROUNI)	
MOUN	TED N	Net- Metering with Zero Exp	ort Policy with 05	Years of Comprehensive Ope	ration	
& Maintenance Contract at ITI Limited, Mankapur, Gonda UP 271308.						
	Sr no	Component	Make (Only-1)	Certification		
	1	Inverter				

Sr no	Component	Make (Only-1)	Certification
1	Inverter		
2	DC Cable		
3	AC Cable		
4	Net Meter/Solar Meter		
5	LT/HT Panel		
6	Transformer		
7	SCADA		
8	ABT meter		
9	VCB		
10	Zero Export Device		

In case of breach of any component of the said Tender document, I am/my company is liable to be disqualified from the said tender process.

Here, I declare that document which I attached for technical scrutiny; I will provide that company's component at actual site also

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Name of authorized Signatory:

Name of Company with Stamp:





SECTION-IV

A.TECHNICAL SPECIFICATION

1. TECHNICAL SPECIFICATION OF SPV POWER PLANT

(Survey, Design, Fabrication, Supply, Installation, Testing and Commissioning of 1200 KWp Grid Connected Solar PV Power Plant GROUND MOUNTED Net-Metering with Zero Export Policy with 05 Years of Comprehensive Operation &, Maintenance Contract at ITI Limited, Mankapur, Gonda 271308 (UP).)

DEFINITION

A Grid Tied Solar ground Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables and switches. PV Array is mounted on a suitable structure. Grid tied SPV system is without battery and should be designed with necessary features to supplement the grid power during day time. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box (ACDB & DCDB), switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

i. GENERAL SYSTEM:-

- 1. The operating life of the plants shall be minimum 25 years.
- 2. The plant shall feed AC power to the Low Tension (LT) distribution grid power supply through adjacent substation.
- 3. The plants shall monitor solar generated energy using plant DC / AC energy meter/Bidirectional energy meter independent of load energy monitoring. Remote monitoring facility must be made available.
- 4. The plant shall consist of PV array, fixed PV array support structure, String/Array combiner boxes, DC cabling, DC distribution box with SPD, Inverter, AC cabling, AC distribution box with SPD, plant AC energy meter, load energy meter and data acquisition system.
- 5. If SPD is already inbuilt in inverter but then also bidders need to install extra SPD&MCB in ACDB &DCDB.
- 6. Protection for Inverter provided by Mesh type box of GI.





- 7. The individual Solar PV array shall be installed on existing roof top of the building using fixed PV array support structure.
- 8. The individual string / array combiner boxes and DC cabling shall be installed on roof top of the building.
- 9. The inverter shall be installed in the control room /open space provided in the building.
- 10. The DC and AC distribution boxes, DC and AC cabling, energy meters and data acquisition system shall be installed in the control room / open space provided in (or near) the building.

ii. PVARRAY

The total grid Connected Solar ground solar PV array capacity shall not be less than 1200KWp comprise of solar polycrystalline modules with minimum capacity of.

- The PV modules used should be made in India.(ITI Ltd will provide 325Wp Poly crystalline Solar Module at site)
- 2. It is mandatory for bidder to use ITI make 325Wp Poly crystalline Solar modules in the project. ITI will make available the respective quantity of 325W solar modules at site at own cost whenever required by the qualified bidder. Bidder shall quote the total cost of the project without supply of Solar modules.
- The peak power rating of the Solar PV array under Standard Temperature Conditions (STC) shall be equal to the peak power rating of the plant. (ITI Ltd will provide PV Curve and Specifications)
- 4. The PV array shall consist of framed Poly-crystalline.
- 5. Individual PV modules rating should be of minimum 325 Wp at STC.
- 6. The rated maximum power rating of PV modules should have positive tolerance in range of 0 to +2%. And negative temperature co-efficient of power for PV modules should be less than or equal to 0.45% per degree C. The peak power point voltage and the peak-power point current of any supplied module and / or any module string (series connected modules) shall not vary more than 3 (three) percent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.





- 7. A suitable number of Solar PV modules shall be connected in a series string. A suitable number of series strings shall be connected in parallel to formulate a series parallel array.
- 8. The PV Array shall be designed to match the inverter input specifications.
- 9. The module shall be provided with junction box with provision of min. 3 Nos. of bypass diodes and external MC4 type or equivalent plug-in connectors. The junction box should have hinged, weatherproof lid with captive screws and cable gland entry points & should be IP65 rated.
- 10. The front surface of the module shall consist of impact resistant, low iron and high transmission toughened glass.
- 11. The module frame shall be made of corrosion resistant material electrically compatible with structural material used for mounting the modules.
- 12. Each PV module manufactured in India must have RF identification tag (RFID) compatible with MNRE requirements.(Trace ability requirement)
- 13. DC negative conductor shall be bonded to the ground via Ground Fault Detector Interrupter (GFDI). The grounding point shall be as close as possible to the PVArray.
- 14. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of bypass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP65 rated.
- 15. The PV module must have warranty of 25 years with not more than 20% degradation in performance/output over 25 years.
- 16. The PV module must have 10 years free replacement guarantee against material defect or craftsmanship.

Warranties:

Material Warranty:

- i. Material Warranty is defined as: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (05) years from the date of sale by the original customer("ITI")
- ii. Defects and/or failures due to manufacturing





- iii. Defects and/or failures due to quality of materials
- iv. Non-conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owners sole option.

Performance Warranty:

The predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 25-year period and not more than 10% after ten years period of the full rated original output.

