

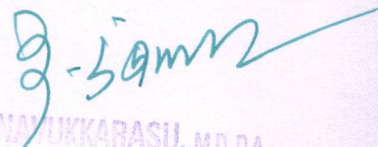


VELAMMAL MEDICAL COLLEGE
HOSPITAL AND RESEARCH INSTITUTE
MADURAI - 625009

7.1.3

Installation Receipts

Sl.No.	Particulars	Page. No.
1.	Cascade Helio Thermics Ltd	2
2.	Goodsun Industries Private Ltd	3 - 6
3.	Operation & Maintenance Contract Order	7
4.	Project Report	8 - 17
5.	Longman Suntech Energy	18 - 20
6.	Generation Details	21 - 24
7.	VMCH&RI - Supply of High bay Light Fittings for the Hospital Entrance Portico & Additional work	25


Prof. T. THIRUNAVUKKARASU, M.D., D.A.,
Dean
Velammal Medical College Hospital
and Research Institute
"Velammal Village"
Madurai-Tuticorin High Road
Anuppanadi, Madurai-621 009, T.N.

CASCADE

SOLAR POWER

Take the Heat off me

Cascade Helio Thermics Ltd

355/2 Abbas Garden Road
Luna Nagar
COIMBATORE-641025
Tel : 2402406
Email : solar@visitcascade.com
URL : www.visitcascade.com
TIN No: 33266202274
CST No : 688367/31.10.01

INVOICE

Invoice No CHH15SI-0439	Date 02-11-2015
Buyer's order No VMCH	Date PO 222/15-16
Delivery Challen No	Date
Despatched Through Employee	Date 11-11-2015
Employee Name Samson J	Csr No
Terms of Payment Immediate	

Buyer
elammal Medical College Hospital & Research Institute
elammal Village, Madurai - Tuticorin Ring Road, Anuppanadi, Madurai - 625009 Ph : 0452-2510000
Madurai.

S.No	Description of Goods	Rate	Qty	Disc. %	Subsidy	Tax. %	Tax.	Amount
1	Solar Water Heater Cascade - Expanza duojack 2500. SL No : I025001	440,476.19	1 NOS	0.00	0.00	5.00	22023.81	462,500.00
	Product Value							462,500.00
	Service Value							0.00
								0.00
	Freight							0.00
	Grand Total							462,500.00

Amount Chargeable (in words)
Indian Rupees Four Lakh Sixty Two Thousand Five Hundred Only
Panel SerialNo : PINO , IG0218 to 237

F & O E

Remarks : Being the solar sales made vide bill no CHH15SI-0439
Local Sales Tax No. : 33266202274

Inter State Sales Tax No. : 688367/31.10.01

Buyer's Local Sales Tax No. :

Declaration

We declare that this invoice shows the actual price of the goods described and that all particulars are true and correct.

for Cascade Helio Thermics Ltd

Authorised Signatory

03/11/15 H. coady agreed
Approved
60% of the Bill value
Rs 462,500 = Rs 2,77,500
Testing & Commissioning works are completed Found ok. The Sala amount is Rs 262,500/-

TAX INVOICE - CASH/CREDIT

Goodsun Industries Private Ltd
 Sf.6/42, Kallapalayam Village
 Near Kamachi Amman Kovil
 Kallapalayam
 Coimbatore - 641 201.
 PAN NO. AACCG 5387 P
 Contact : 0422 2592171 & 2592158
 E-Mail : goodsun@vsnl.net

Buyer

Velammal Medical College Hospital

And Research Institute
 Vellammal Village
 Madurai Tuticorin Ring Road
 Anuppanadi
 Madurai-625009
 99944 71848

Invoice No.

27

Dated

15-May-2015

Delivery Note

Mode/Terms of Payment

089

Supplier's Ref.

Other Reference(s)

Buyer's Order No.

Dated

Despatch Document No.

Dated

15-May-2015

Despatched through

Destination

Terms of Delivery

1. Our responsibility ceases ex-works.
2. We are not responsible for breakage or shortage.
3. Any claim in respect of this invoice must be made Within 15 days of receipt of goods.
4. Sales under invoice is subject to Coimbatore Jurisdiction and all disputes of this invoice is Subject to Coimbatore court only.
5. All payments should be settled before dispatch.
6. Price quoted and charged are strictly ex-works.
7. Goods once sold cannot be taken back.

SI No.	Description of Goods	Quantity	Rate	per	Amount
1	2500LPD Goodsun Solar Water Heater Scale Nil Tank No: Collector No: NOTE: Read the User Manual Carefully And install the Heater As Per the Guide Line	1 Nos	6,28,571.00	Nos	6,28,571.00
	Out Put Vat 5%			5 %	31,429.00
	Total	1 Nos			₹ 6,60,000.00

Amount Chargeable (in words)

R Six Lakh Sixty Thousand Only

E & O.E

Company's VAT TIN : 33661824153
 Company's CST No. : 292938
 Company's PAN : AACCG 5387 P

Declaration

We declare that this invoice shows the actual price of the goods described that all particulars are true and correct.

Prepared By _____ Checked By _____ Checked By _____

for Goodsun Industries Private Ltd

Authorised Signatory

This is a Computer Generated Invoice

Customer Signature: _____



Binu
 19.05.15
 Binu
 Mr. Rajendran
 Eby Fry

TAX INVOICE- CASH/CREDIT

(Quadruplicate)

Goodsun Industries Private Ltd

Sf.6/42, Kallapalayam Village
Near Kamachi Amman Kovil
Kallapalayam
Coimbatore - 641 201.
PAN NO. AACCG 5387 P
Contact : 0422 2592171 & 2592158
E-Mail : goodsun@vsnl.net

Buyer

VELAMMAL MEDICAL COLLEGE HOSPITAL
AND-RESEARCH INSTITUTE
VELAMMAL VILLAGE
MADURAI TUTICORIN RING ROAD
ANUPPANADI
MADURAI -625009
MOB: 9994471848

Invoice No.

29

Dated

18-May-2015

Delivery Note

094, 095

Mode/Terms of Payment

Supplier's Ref.

Other Reference(s)

Buyer's Order No.

Dated

Despatch Document No.

Dated

18-May-2015

Despatched through

Destination

Terms of Delivery

1. Our responsibility ceases ex-works.
2. We are not responsible for breakage or shortage.
3. Any claim in respect of this invoice must be made Within 15 days of receipt of goods.
4. Sales under invoice is subject to Coimbatore Jurisdiction and all disputes of this invoice is Subject to Coimbatore court only.
5. All payments should be settled before dispatch.
6. Price quoted and charged are strictly ex-works.
7. Goods once sold cannot be taken back.

Sl No.	Description of Goods	Quantity	Rate	per	Amount
1	2500LPD Goodsun Solar Water Heater Scale Nil Tank No: Collector No: NOTE: Read the User Manual Carefully And Install the Heater As Per the Guide Line	1 Nos	6,28,571.00	Nos	6,28,571.00
	Out Put Vat 5%			5 %	31,429.00
	Total	1 Nos			₹ 6,60,000.00

Amount Chargeable (in words)

NR Six Lakh Sixty Thousand Only

E & O E

Company's VAT TIN : 33661824153
Company's CST No. : 292938
Company's PAN : AACCG 5387 P

Declaration

We declare that this invoice shows the actual price of the goods described that all particulars are true and correct.

Prepared By

Checked By

Checked By

for Goodsun Industries Private Ltd

Authorised Signatory

This is a Computer Generated Invoice

R. Aravindhan

19.05.15
CK. Elan Kanna



Bill handed over to
Mr. Rajendran
E. Engg

GOODSUN INDUSTRIES PVT LTD.,

SF.6/42 Kallapalayam Village
Near:Kamachi Amman Kovil
Kallapalayam
Coimbatore - 641 201
Mob:98422 22042

TIN NO.33661824153

CST:292938

Date: 06/04/2006

(9)

INVOICE NO:110

DATE: 16.10.2014

M/s .VELAMMAL MEDICAL COLLEGE
HOSPITAL AND RESEARCH INSTITUTE
VELLAMMAL VILLAGE
MADURAI TUTICORIN RING ROAD
ANUPPANADI
MADURAI -625009

Your Order No .Nil Date:

Our D.C. No...358,359.../411.....

Date:...25.9.2014...../ 16.10.14..

Mode of Dispatch :

RR / LR No.....Date:.....

Item No.	Description	Qt y.	UNIT PRICE		AMOUNT	
			Rs.	Ps.	Rs.	Ps.
01	2500LPD GOODSUN SOLAR WATER HEATER Scale Nil MDL	01	7,45,000	00	7,45,000	00
	Out put vat @5%				37,250	00
	Less: Teda Subsidy				-1,20,000	00
NET TOTAL					6,62,250	00

E&OE

Terms & Conditions:

1. Our responsibility ceases Ex-works - Coimbatore.
2. We are not responsible for breakage or shortage
3. Any claim in-respect of this invoice must be made within 15 days of receipt of goods.
4. Payment should be made against this Proforma Invoice. Validity of this price - 15 days only.
5. Sales under invoices are subject to Coimbatore Jurisdiction and all disputes of this invoice are subjected to Coimbatore Courts only.
6. Price quoted and charged are strictly Ex-works
7. Goods once sold will not be taken back.

For GOODSUN INDUSTRIES (P) LTD.,

R. Reddy
AUTHORISED SIGNATORY

RUPEES : SIX LAKHS SIXTY TWO THOUSAND AND TWO HUNDRED AND FIFTY ONLY.

Prepared By: *KS*

Customer Signature:.....

Checked By:



Subject to verification
KS
16.10.14
(K. ELAN KANNAN)

TAX INVOICE- CASH/CREDIT

Bill Passed
(Triplicate)

Goodsun Industries Private Ltd

Sf.6/42, Kallapalayam Village
Near Kamachi Amman Kovil
Kallapalayam,
Coimbatore - 641 201.
PAN NO. AACCG 5387 P
E-Mail : goodsun@vsnl.net

Invoice No.

85

Delivery Note

318,319,320

Supplier's Ref.

Dated

6-Sep-2014

Mode/Terms of Payment

IMMEDIATELY

Other Reference(s)

08.09.14

*Bill handed out
R. Sathish
kumar.*

Buyer

M/s.Velammal Medical College Hospital

And Research Institute
Vellammal Village
Madurai tuticorin ring road
Anuppanadi
Madurai-625009

Buyer's Order No.

Despatch Document No.

Despatched through

Dated

Dated

6-Sep-2014

Destination

MADURAI

Terms of Delivery

- 1.Our responsibility ceases ex-works.
- 2.We are not responsible for breakage or shortage.
- 3.Any claim in respect of this invoice must be made Within 15 days of receipt of goods.
- 4.Sales under invoice is subject to coimbatore Jurisdiction and all disputes of this invoice is Subjected to coimbatore court only.
- 5.All payments should be settled before dispatch.
- 6.Price quoted and charged are strictly ex-works.
- 7.Goods once sold cannot be taken back.

Sl No.	Description of Goods	Quantity	Rate	per	Amount
	2500LPD Goodsun Solar Water Heater Scale Nil	1 Nos	7,45,000.00	Nos	7,45,000.00
	Tank No: 9503 Collector No: 67639, 67087, 67682, NOTE: Read the User Manual Carefully And Install the Heater As Per the Guide Line 67675, 67097 71037, 69955, 62595, 67697, 65383, 68881, 68497, Out Put Vat 5% Less: 65AA0, 65473, 65325, TEDA Subsidy 68877, 67737, 67728, 71133, 71123, Collector: 20 Nos model: Butterfly.			5 %	37,250.00 (-), 1,20,000.00 -2250 As per P.O Rate: Rs. 6,60,000.00
	Total	1 Nos			₹ 6,62,250.00 E & O E

Amount Chargeable (in words)

INR Six Lakh Sixty Two Thousand Two Hundred Fifty
Only

Company's VAT TIN : 33661824153
Company's CST No. : 292938
Buyer's VAT TIN : DIRECT SALES
Company's PAN : AACCG 5387 P

Declaration

We declare that this invoice shows the actual price of the
goods described that all particulars are true and correct.
Prepared By *dh* Checked By

for Goodsun Industries Private Ltd

Authorised Signatory

This is a Computer Generated Invoice

Subject to verification

08.09.14

Customer Signature

(K. ELANKANNAN)





VET/AMC/211/19-20

OPERATION & MAINTENANCE CONTRACT ORDER

To,

07/03/2020

M/s.Grand Solar Pvt. Ltd.,
46, Taylor's Road, Kilpauk,
Chennai – 600 010.

Dear Sir,

Subject: VET – Operations & Maintenance contract – 10MW Ground mount Solar Power Plant – Manjalkudi Village – Regarding

We are pleased to place limited Comprehensive Operations & Maintenance Service contract for 10MW Ground mount Solar Power Plant, Manjalkudi Village, Sivagangai Dist for the period of one year The Detailed Scope of work is as per the Annexure – A & the O&M Check list as per the Annexure – B enclosed.

O&M Contract Period: 10.03.2020 to 28.02.2021

Sl.No	Equipment Name	Capacity	AMC cost (Rs.)
1	10MW Ground Mounted, Fixed tilt type Solar power Plant. The list of equipments as per the Annexure – C enclosed.	10 Mega Watt	28,00,000.00
	Total Amount		28,00,000.00
Rupees Twenty Eight Lakhs Only			

Terms & Conditions:

1. GST Extra as actual.
2. Price including components as per the Annexure - D enclosed.
3. **Payment :** a) 10% Mobilization Advance. It will be deducted equally in the last 3 months Bills.
b) Monthly billing with 15 days credit period after submission of invoice & monthly report.

Kindly sign the duplicate copy of the order as a token of your acceptance.

Thanking you,


Authorized Signature

Encl: Annexure – A,B,C&D.

PROJECT REPORT



**10 MW GROUND MOUNT – GRID TIED
SOLAR PV POWER PLANT**

AT

**MANJAKUDI VILLAGE
THIRUPPUVANAM TALUK
SIVAGANGAI DISTRICT
TAMILNADU, INDIA.**


1. INTRODUCTION

1.1 Global Energy Scenario

Power is a vital input for economic development and sustenance of modern economy. Power is also important for eradication of poverty. However, providing adequate and clean power to arrest the growing environmental degradation has been a great challenge of the current century. Basically, the objective of sustainable development is the same.

The primary energy sources are based on Coal, Oil, Gas and Nuclear energy. Apart from those, energy can be generated by renewable energy sources like Wind, Solar and other Combustible wastes (biomass, animal products, municipal wastes, and industrial wastes), hydro and other sources.

The global energy scenario, so-called Energy Revolution Scenario shows how global CO₂ emissions can be reduced from 30 billion tonnes per year today to about ten billion tonnes per year by 2050. This drastic reduction of greenhouse gas emissions is necessary to ensure that the rise in the global average temperature relative to the pre-industrial level does not exceed two degrees Celsius. The study shows that these goals can be compatible with access to electricity for people around the world, a reliable and affordable supply of energy as well as global economic growth, as long as full use is made of all available options for efficient use of energy and for expansion of renewable energy.


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Dean
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Anuppanadi, Madurai-625 009, T.N.

2.0 PROJECT SUMMARY

A project of 11 Mega Watt ("MW dc"), green field solar photovoltaic grid connected power project in Manjakudi village, Thiruppuvanam Taluk in Sivagangai district of Tamil Nadu has been developed.

The project is developed by recognizing the potential of solar energy for the country and the need for augmentation of conventional grid through non-conventional sources of energy especially solar energy, Government of Tamil Nadu has come up with an encouraging solar policy which extends certain benefits to grid connected solar PV power plants.

This report highlights the basic details of the 10 MW(AC) Solar PV power generation scheme, plant layout, site details.

The system configuration of the proposed power plant is as follows:

- The capacity of the power plant will be of 10 MW(AC)/11 MWp (DC) with 1000 V system voltage.
- The electrical energy generation from the plant for the year 2019-2020 is 16,102,211 Units (kWh).

The project is designed to produce approximately 11 MWp DC of clean solar power and associated renewable energy attributes. The power is fed to the grid of Tamil Nadu TANGEDCO.

The Grid Connected Solar PV power generation scheme mainly consist of Solar PV array, Solar Inverter which convert DC to AC power, transformers and associated switch gear (with metering and protection. Approximately 42 acres of land is used for the project installations.

The Solar PV power plant shall consist of a Solar PV array of 11 MWp. It generates DC power. The DC power is fed into Solar Inverter to convert DC power to AC power at 3 Ph, 400 V, 50 Hz. The output of the Solar Inverter is connected to transformers with a total capacity of 6.3MVA x 2 nos. to step up the 400 V, 3 Ph AC supply to 11 kV, 3 Ph AC supply. The electrical power at 22 kV level is evacuated through appropriate transmission arrangements to a feeder in the nearby substation and connected to the 22 kV grid. Synchronization arrangements effected through electronics provided in the Solar Inverter / PCU ensure adequate synchronization of the two sources of power supply namely, the grid power and the solar power


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Dean


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and Research Institute
"Velammal Village"

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Anuppanadi, Madurai-625 009, T.N.

The following are the salient features of the power plant:

Table 1: Salient features of the project

1	Project Site	Manjakudi Village, Thiruppuvanam Taluk
2	District Name	Sivagangai.
3	Name of the State	Tamil Nadu
4	Location	Latitude 9°49'28.37"N Longitude 78°17'22.27"E
5	Type of Module Mounting	Fixed Structure - 10-degree tilt
6	Type of PV Modules Considered	Poly Crystalline
7	Proposed capacity	11 MWp (DC)
8	Module Wattage used	325 / 330 Wp
9	Inverter Capacity	1.732 MW X 6 Nos.
10	First Year Energy Production	16,102,211 units (kWh)
11	Project Owner	M/S Velammal Educational Trust
12	Name of the EPC	M/S Grand Solar Pvt Limited
13	Expected Life of Power Plant	25 years


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 and Research Institute
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 Anuppanadi, Madurai-625 009, T.N.

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LOCATION OF SITE

The proposed solar plant is located at village Manjakudi in Thiruppuvanam Taluk of Tamil Nadu district in Tamil Nadu. The site is approximately 10 km from Thiruppuvanam Town. The nearest Railway Station is in Thiruppuvanam, Airport is in Madurai and Sea port is in Thoothukudi.

Location of M/S Velammal Educational Trust Solar PV Power Plant Aerial View of Site

Google Photo of the site.



Project site Photos.





3.0 PROJECT DESCRIPTION

3.1 Power Generation Scheme

The project is the grid connect system type. The system operates only when the utility is available. The system consists mainly of the following:

- Solar PV array – which produces DC electricity when solar rays are incident on it.
- Solar Inverter / Power Conditioning Units (PCU) – which convert DC (Direct Current) electricity into AC (Alternating Current) electricity and facilitate synchronization with the grid power
- Transformers – which transform the AC output of the Power Conditioning Units to the level required at the grid

3.2 Typical System Components of Grid Connect SPV System

3.2.1 Solar PV Module Types

The solar PV modules availability is a function of time as the global demand far outweighs solar PV module production. As per the site details & conditions of Manjakudi village, Thiruppuvanam Taluk, Sivagangai (dist), Polycrystalline Silicon technology is preferred for this project.

3.2.1.1 Polycrystalline Silicon Solar Cells

Reported efficiencies are of the order of 15–17.5%, marginally lower than 'Monocrystalline' at the commercial level.

3.2.2 Balance of Systems (BOS)

3.2.2.1 Solar Inverter / Power Conditioning Units

The Solar Inverter / Power Conditioning Units used in grid connect SPV systems consist of Inverter and other electronics for MPPT, Synchronization and provision of remote data monitoring.

2.50m
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Dean
Velammal Medical College Hospital
and Research Institute
"Velammal Village"
Madurai-Tuticorin Bypass Road
Anuppanadi, Madurai-625 009, T.N.

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The main functions carried out by the PCU are as follows:

- Convert the incoming DC received from PV modules into AC with suitable power quality. The inverter produces sinusoidal AC wave forms with low harmonic distortion.
- The inverter also has to act as a protective device of the system. It needs to trip out if the voltage, current or frequency goes outside acceptable ranges.
- It provides reactive power support, LVRT/HVRT function.
- It works for 1000 V system voltage.
- It has highest efficiency of 98.5%.
- It is from ABB which has good reliability of Operation.

3.2.2.2 Other BOS Items

Solar PV module mounding structures, interconnection systems and protection system which are used to integrate the solar PV modules into the structural and electrical systems are known as other BOS items.

3.2.2.3 Schematic Diagram of Solar PV Grid Connect System

The concept of grid connected solar PV system with feed-in at 22 kV level is shown in the Figure 1 below.

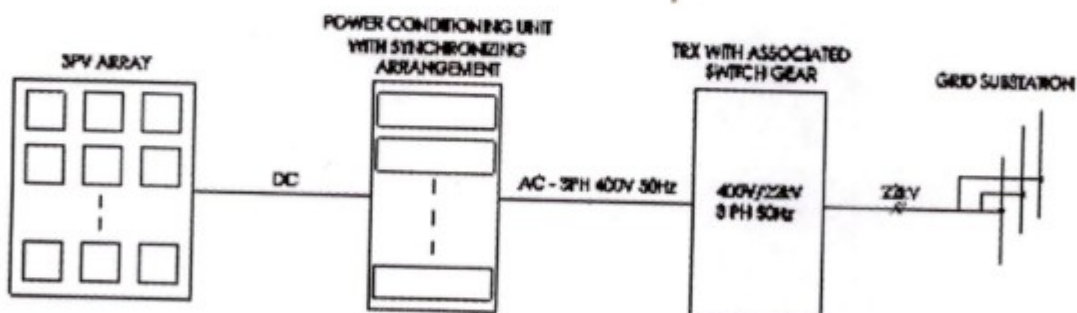


Figure 1: Typical Schematic diagram of Grid connect system Feed in to 22 kV

The SPV array (constituting solar PV modules of selected rating connected in series to build up the required voltage in parallel to build up the required current) of the designed DC power produces DC electricity when Solar insolation is incident on it. The DC power thus produced is

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Madurai-Tuticorin Ring Road
Anuppanadi, Madurai-625 009, T.N.

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taken through various String Monitoring Boxes and isolators and connected to the Solar Inverter / PCU.

The PCU houses the inverter circuitry which converts DC power supply into AC power supply, the synchronization circuitry which actualizes the tie-up of solar PV source to the grid source and the remote monitoring and control circuitry. The PCUs is generates required AC power & permit AC output power at 3 Ph, 400 V, 50 Hz to be fed into transformers.

Considering the fluctuations of the Grid Voltage, OLTC is considered with the transformer. In the project under consideration, as the grid voltage is at 22 kV level, there will be step-up from 400 V to 22 kV.

The protection and metering circuits are not shown in the schematic diagram but in the actual scheme of things these play a very significant role. Appropriate current transformers and potential transformers are used to tap required feedback signals to initiate action on metering and protection.

4.0 MONTHLY GENERATION DATA

GSPL [11 MW DC / 10 MW AC] Solar Power Plant / Inverter's Monthly Generation Readings

S. No	Month	Date		Plant Inverter Reading in kWh/(Units)
		From	To	
1	March	01/03/2019	31/03/2019	1,499,315.30
2	April	01/04/2019	30/04/2019	1,452,788.00
3	May	01/05/2019	31/05/2019	1,199,229.60
4	June	01/06/2019	30/06/2019	1,370,787.70
5	July	01/07/2019	31/07/2019	1,333,044.40
6	August	01/08/2019	31/08/2019	1,353,710.50
7	September	01/09/2019	30/09/2019	1,343,312.10
8	October	01/10/2019	31/10/2019	1,213,942.50
9	November	01/11/2019	30/11/2019	1,281,894.60
10	December	01/12/2019	31/12/2019	1,093,958.20
11	January	01/01/2020	31/01/2020	1,514,205.30
12	February	01/02/2020	29/02/2020	1,446,023.50
Annual 2019 - 2020 Total Generation				16,102,211.70

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Dean

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and Research Institute
"Velammal Village"

Madurai-Tuticorin Ring Road
Anuppanadi, Madurai-625 002

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LONGMAN SUNTECH ENERGY

Accelerating the Adoption of Solar Power in India

Client: Velammal Medical College, Hospital & Research Centre
Primary Contact: Mr Rajendran
Proposal Number: LSETN07SLC
Date of Preparation: January 29, 2015

Longman Suntech Energy is pleased to provide you with our Letter of Intent for installing, commissioning and operating a Solar Power plant at

5 Velammal Medical College, Hospital & Research Centre, Madurai

Longman Suntech Energy proposes to install, commission, operate and maintain the Solar Power plants at the above mentioned sites in exchange for the Hospital's commitment to purchase the electricity generated and delivered by these Solar Power plants up to the amount of electricity consumed at these sites according to the rate schedule listed below

This project will allow VMCH & RI to realize the benefits of Solar energy including energy conservation, long-term savings and economic development prospects without undertaking any financial and technical risks. Please do note that Longman Suntech Energy is not a Retail Electricity Service Provider. The Customer would be required to maintain retail electricity service at all times during the contract term from an appropriate provider, TANGEDCO, in this case.

The purposes of this Letter of intent and the adjoining DPR (Detailed Project) are to:

1. Outline the proposed on-site solar project as noted in Clause 1.0
2. Provide an overview of the process Longman Suntech Energy will follow in completing the project as detailed in Clause 2.0 and its sub-sections
3. Provide the Hospital a non-binding agreement to execute so that Longman Suntech Energy can proceed with planning steps
4. Effectuate required and desired Public Relations initiative as detailed in Clause 3.0 and its sub-sections
5. Inform the Hospital of the critical parameters which will be reflected in the Solar Power installation to be done at the aforesaid site. The critical parameters are as listed below

Rate Schedule: Rs. 6.38 per kWh (Current Grid Rate: Rs. 8.05 per kWh)

Fixed Discount to Grid Rate: 20.75 % Discount to Grid Rate

Public Affairs Support: No charge

Equipment Maintenance: No charge

Recurring Billing Terms: Monthly

Agreement Term: 25 years

Energy Attributes: Retained by Longman Suntech Energy and Associates

By signing this document, the parties acknowledge that this Letter of Intent for On-Site Energy Generation is an initial agreement containing estimates and projections based on information currently known and available. As such, the parties agree that this Letter of Intent is not a final agreement, but is rather a non-binding document. The terms, rights, and



LONGMAN SUNTECH ENERGY

Accelerating the Adoption of Solar Power in India

obligations contained herein are subject to revision prior to the execution of any final binding document.

Letter of Intent Approved by:

Priyam Venkat

Managing Partner

Longman Suntech Energy Pvt Ltd

29/1/15

Dr Asokan

Vice Chairman

Velammal Medical College, Hospital & Research Centre

Vice Chairman
**Velammal Medical College Hospital
and Research Institute**

29/1/15

Verified
S.M. Advait
29/01/15

Clause 1.0: Solar Power Plant Specifications

S. No.	Specification	Technical Value
1	Project Capacity	500 Kilo Watt peak
2	Units generated	8,30,500 units (kWhs) annually* 69208 monthly
3	Type of Photovoltaic used	Poly Crystalline
4	Expected Life of the Power plant	25 years
5	Maximum Wind Speed	140 km/hour
6	Area Required	4500 square meter approx **
7	Inverter used	3 Phase, Grid compatible
8	Power output from the plant	415 V AC
9	Input Supply Phase	3 phase, 4 wire
10	System Frequency	50 Hz
11	Power Factor	Greater than 0.99 ***
12	Total Harmonic Distortion (i)	Less than 3%
13	Switching Element	IGBT (Insulated Gate Bipolar Transistor)
14	Voltage Regulation	$\pm 2\%$
15	Voltage Stabilization	Complies with IEC/EN 62040 – 3 (Class I)
16	Charge Controller Element	MPPT (Multi Point Power Tracking)
17	Testing Standards	IEC 62040 – 3; IEC 61683; IEC 60068 -2
18	Active Filter Function	IEEE 519
19	Max Altitude without De-rating	1000 m above sea level
20	Safety Features provided	Under and Over Voltage on both Input and Output; Reverse Polarity; Overload; Surge Protection at both Input and Output; Over Temperature





VELAMMAL MEDICAL COLLEGE HOSPITAL AND RESEARCH INSTITUTE MADURAI - 625009

Generation Details

2017-2018

Site Name	Plant Capacity	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Total Generation
Chiller & Mortuary	60Kwp	0	25805	8239	4955		4041	3884	2236	2154	2968	6386	7332	68000
Medical College 70	80Kwp	13898	10117	8636	20822		11100	9367	6064	9960	10179	10131	11696	121970
Medical College 100	120Kwp	19863	14463	11736	24221		15972	13522	8800	14489	14786	14738	16920	169510
Nursing College, Library	120Kwp	0	0	0	0	0	8653	13838	8805	14489	15124	14643	16964	92516
Nursing Hostel	120kwp	0	6507	6525	29609			0	3793	14862	15086	14738	16542	107662
Total		33761	56892	35136	79607	0	39766	40611	29698	55954	58143	60636	69454	559658

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2018-19

Site Name	Plant Capacity	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total Generation
Chiller & Mortuary	60Kwp	5659	4321	5067	5806	6212	6391	5262	5736	5877	5686	3895	7422	67334
Medical College 70	80Kwp	8817	9827	9973	9863	10086	9844	7213	9047	9705	9749	10008	12057	116189
Medical College 100	120Kwp	12678	14011	13909	14125	14317	15856	12003	12631	13872	12603	14935	17304	168244
Nursing College, Library	120Kwp	12886	13804	14506	14356	14577	16177	12407	13558	14574	14731	14792	18291	174659
Nursing Hostel	120kwp	12643	14135	14289	14300	14505	16351	12284	13350	14426	14284	14695	15190	170452
Total		52683	56098	57744	58450	59697	64619	49169	54322	58454	57053	58325	70264	696878

T. Jan
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MADURAI - 625009

2019-20

Site Name	Plant Capacity	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Total Generation
Chiller & Mortuary	60Kwp	5950	6120	6587	5923	6381	7720	3032	6338	4840	7556	7303	7426	75176
Medical College 70	80Kwp	9391	9060	9671	9064	9717	10937	7966	10213	7838	12446	11086	10854	118243
Medical College 100	120Kwp	13498	12932	13830	13051	13946	16891	14898	14770	11375	18189	16108	15748	175236
Nursing College, Library	120Kwp	13548	13251	14043	8322	13843	16348	14852	15704	11901	18513	16347	16146	172818
Nursing Hostel	120kwp	13451	13389	14084	13217	14122	17143	15358	15568	11714	17777	15951	15779	177553
Total		55838	54752	58215	49577	58009	69039	56106	62593	47668	74481	66795	65953	719026
Total		55838	54752	58215	49577	58009	69039	56106	62593	47668	74481	66795	65953	719026

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2020-21

Site Name	Plant Capacity	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Total Generation
Chiller & Mortuary	60Kwp	3292	5226	6025	5943									20486
Medical College 70	80Kwp	8061	8590	10633	9931									37215
Medical College 100	120Kwp	11808	13282	14076	14142									53308
Nursing College, Library	120Kwp	12219	13692	14239	14171									54321
Nursing Hostel	120kwp	12175	13557	13799	10980									50511
Total		47555	54347	58772	55167	0	0	0	0	0	0	0	0	215841
Total		47555	54347	58772	55167	0	0	0	0	0	0	0	0	215841

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VELAMMAL
Medical College Hospital
& Research Institute

The healing touch

10/08/2019

VMCH/PO/088/2019-20

To,

M/s.ES.JE.Electro Systems

#80 1st Floor,

Dhanappa Mudali Street,

Madurai – 625001

Dear Sir,

Subject: VMCH&RI – Supply of Highbay Light Fittings for the Hospital Entrance Portico & Additional work @ VMCH&RI, Velammal Village - Regarding.

Kindly Supply the Following Highbay Light Fittings for the Hospital Entrance Portico @ Additional work @Velammal Medical College Hospital & Research Institute, Velammal Village, Anupanadi, Madurai

Sl.No	Description	Make	Qty	Rate/Unit	Amount
1	LHBY100 100W Highbay Light Fitting	Luker	12	5193.50	62,322.00
2	2 x 2 36W LED Light Fitting	Luker	25	2232.50	55,812.50
3	1 x 1 18W LED Light Fitting	Luker	60	669.70	40,182.00
4	1 x 1 30W LED Light Fitting	Luker	35	1126.00	39,410.00
5	18W LED 4 Feet Tube Light	Luker	50	259.00	12,950.00
6	1" MS Pipe Clamp		250	4.00	1,000.00
Total					211,676.50
Rupees Two Lakhs Eleven Thousand Six Hundred and Seventy Six Only					

Terms & Conditions:

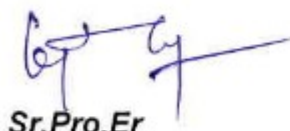
GST : Extra

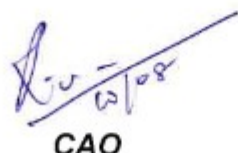
Freight : Extra.

Payment Terms & Conditions : Payment in 30 Days against supply

Kindly sign the duplicate copy of the order as a token of your acceptance.

Thanking you,


Sr.Pro.Er


CAO


CEO


Chairman

"Velammal Village", Madurai - Tuticorin Ring Road, Anuppanadi, Madurai - 625 009, Tamil Nadu, India.

Tel : +91 452 2510000, 7113333 Fax : +91 452 2510010, Toll Free No. 1800 425 00108

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