



Dr. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE UNIVERSITY

(Declared u/s 3 of the UGC Act 1956)

Maduravoyal, Chennai - 600 095, Tamilnadu, India

University Office :

Periyar EVR Salai (NH 4 Highway), Maduravoyal, Chennai - 600 095
Ph : 91 44 2378 2176 / 2186 / 2085 Fax : 91 44 2378 3165

Corporate Office :

No.22, G.N.Chetty Road, T.Nagar, Chennai - 600 017
Ph : 91 44 2834 5166 / 3696 Fax : 91 44 2834 1186

30-6-15

To

The Superintending Engineer,
Chennai Electricity Distribution Circle - West
TANGEDCO
Annanagar
Chennai

Sir,

Sub: Commissioning of 100KW Solar Power Plant at LT Connection - Reg

Ref: 1- Lr.No. CE/NCES/SE/Solar/EE/SCB/AEE3/F.Dr.M.G.R/D.841/15 dated 30.06.15

With reference to the above subject, we are pleased to inform that, we obtained NOC from CE/NCES - TANGEDCO for establishing 100KW Rooftop Solar inside our premises for captive purpose vide ref (1) and same has been established.

We request you kindly witness the synchronization of Rooftop Solar with our LT network as per TANGEDCO requirement we will be grateful to hear from you for your Convenient Date for the same.

Here we enclose the copy of NOC - TANGEDCO

Enclosed:

1. NOC - TANGEDCO

Thanking you,

Your faith fully,

For Dr. M.G.R. University

U. Lalitha
Director 30/6/15

Authorized signatory

CC to : - The Executive Engineer / O & M

TAMILNADU GENERATION & DISTRIBUTION CORPORATION LTD

D
30/6/15

From
Er.A.Subramanian B.E., M.I.E.,
Chief Engineer/NCES,
TANGEDCO,
2nd Floor, Eastern wing,
144, Anna Salai, Chennai-2.

✓ To
Dr. M.G.R. Educational and
Research Institute,
Periyar E.V.R. High Road,
NH-4, Chennai-Bangalore Highway,
Maduravoyal, Chennai-600 095.

Lr.No.CE/NCES/SE/Solar/EE/SCB/AEE3/F. Dr. M.G.R./ D 841 /15 dated 30.6.15.
Sir,

Sub: NCES – Dr. M.G.R. Educational and Research Institute - Establishment of 100 KW LT grid interactive roof top solar PV power plant within the institution premises located at Maduravoyal, Chennai – Parallel operation through company's LT network of existing HT SC.No.1811 of SE/EDC/Chennai (West) – Approval accorded – Reg.

Ref: 1. Your letter dated 04.06.2015.
2. Director/Generation Approval dated 29.06.2015.

Your proposal seeking tie up approval for the proposed 100 KW LT grid interactive roof top solar PV power plant within the institution premises located at Maduravoyal, Chennai has been approved.

Your proposed 100 KW LT grid interactive roof top solar PV power plant may be connected at your LT network through existing HT service connection (No.1811) of SE/EDC/Chennai (West) at the institution premises located at Maduravoyal, Chennai subject to the following conditions:

- 1.0) Balance works, if any, in respect of interfacing arrangements shall be completed and tested before commissioning and synchronizing the plant.
- 2.0) The solar PV power plant shall be synchronized with TANGEDCO grid in the presence of Board Engineers during initial commissioning.
- 3.0) Safety certificate from the CEIG should be obtained by the institution before commissioning the plant.
- 4.0) The institution has to provide reverse power relay in the consumer side which can be disabled or enabled according to the requirements of TANGEDCO.
- 5.0) As the reliability operation and safety of equipments in the synchronized condition is entirely dependent on the performance of the Inverter unit, the protection logics in the Inverter

TATA POWER SOLAR

ENABLING SOLAR EVERYWHERE

Tata Power Solar Systems Limited ,
No.78, Electronics City, Hosur Road,
Bangalore - 560100

INSTALLATION & COMMISSIONING CERTIFICATE

This is to certify that M/s. TATA POWER SOLAR SYSTEMS LIMITED, BANGALORE has designed, supplied, installed, commissioned and handed over the following system to our satisfaction.

Customer Order No. & System Capacity	100KWp
Type of System & SO number / Project code no.	Grid Connect,
Date of Installation & Commissioning	22.06.2015
Customer Name & Address , email ID	MGR UNIVERSITY CHENNAI
Name of Customer Contact person	Mr. KALIYAPERUMAL
Contact Person Phone / mobile No.	M: 9790961442
List of Trained Persons in Operation & maintenance & contact number	1) Mr.IYAPPAN Ph. 8939010587 2) Ph. 3) Ph.
User manual , drawing , Preventive Maintenance (PM) schedule handed over to Customer	Yes Scope of PM -- Customer

For Customer : <i>Kaliyaperumal</i>	For Tata Power Solar Systems Limited :
Sign:	Sign:
Name : <i>V. KALIYAPERUMAL</i>	Name : DAMODARA REDDY
Seal:	Seal:
Date : <i>24.06.2015</i>	Date :

Phase-I



100 kW Solar Power System

Location: VOC BLOCK- Roof Top

Power Generated through Solar System from 22.06.2015

Date	Consumption KWH	Amount in Rs.
07/2015	8556	94116/-
08/2015	9789	107679/-
09/2015	7618	83798/-
10/2015	8441	92851/-
11/2015	2532	27852/-
12/2015	5658	62238/-
Total	42594	468534

Notes: One KWH costs Rs.11/- Only (computed value)

Ushara
Director 24/10/15

Period	Power Generated through solar power system in KWH	Amount in Rs.
01/2016	9665	106315/-
02/2016	10750	118250/-
03/2016	11531	126841/-
04/2016	11554	127094/-
05/2016	9065	99715/-
06/2016	8770	96470/-
07/2016	9716	106876/-
08/2016	9793	107723/-
09/2016	8599	94589/-
10/2016	8667	95337/-
11/2016	10253	112783/-
12/2016	5420	59620/-
Total	114383	1251613

Period	Power Generated through solar power system in KWH	Amount in Rs.
01/2017	4835	53185/-
02/2017	10523	115753/-
03/2017	11618	127798/-
04/2017	6985	76835/-
05/2017	9945	109395/-
06/2017	7046	77506/-
07/2017	6372	70092/-
08/2017	9186	101046/-
09/2017	8698	95678/-
10/2017	6806	74860/-
11/2017	6435	70785/-
12/2017	7204	79244/-
Total	95653	1052183

Period	Power Generated through solar power system in KWH	Amount in Rs.
01/2018	7271	79981/-
02/2018	10341	113751/-
03/2018	11002	121022/-
04/2018	9900	108900/-
05/2018	10107	111177/-
06/2018	9801	107811/-
07/2018	9844	108284/-
08/2018	7900	86900/-
09/2018	8897	97867/-
Total	85063	935693

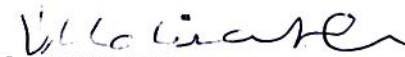
1. Solar system was commissioned from June 2015 for phase-I.
2. The increase in total TNEB bill is due to gradual increase of power load by way of increase in number AC units and other auxiliary systems.
3. By the introduction of solar system, we can say, that for the years 2015, 2016, 2017 and 2018 totally by way of generation of 3,50,694 units through solar system we have averted an additional payment of Rs.37 Lakhs ~~by the way~~ to TNEB.

We have derived benefit to the tune of Rs.37 Lakhs through introduction of solar power unit in the system or otherwise we would have paid that amount to TNEB over the 3 ½ years.

Summing up; The Introduction of solar power generation system is advantageous though the initial cost is high.

This is for your favour of information, please.

Whatever power generated through solar power system was consumed by the university in full.


V.KALIAPERUMAL
24/10/18
(Director Electrical)

Dr.M.G.R Educational & Research Institute
Madhuravoyal.

Dr. M.G.R. Educational and Research Institute
Maduravoyal

Note: - HT System in Phase – I was commissioned in the year 05.08.2011 and the details of energy generated through HT System alone is furnished for the year 2011, 2012, 2013, 2014,2015,2016,2017 and 2018.

H.T. S.C. NO. 1811

Period	Consumption KWH	Amount in Rs.
08/2011	45506	363627 /-
09/2011	71710	498600 /-
10/2011	52660	408217 /-
11/2011	69410	486912 /-
12/2011	52930	411884 /-
Total	292216	2169240

Madurai
Dr. M.G.R. 24/12/18

HT Bill

Period	Consumption KWH	Amount in Rs.
01/2012	52060	404274 /-
02/2012	75870	517116 /-
03/2012	73120	504802 /-
04/2012	81790	652586 /-
05/2012	58540	575074 /-
06/2012	52210	541582 /-
07/2012	71640	652076 /-
08/2012	65340	631557 /-
09/2012	78240	690221 /-
10/2012	64320	609793 /-
11/2012	49930	525801 /-
12/2012	52440	538406 /-
Total	775500	6842788

HT Bill

Period	Consumption KWH	Amount in Rs.
01/2013	39760	513173 /-
02/2013	37720	459931 /-
03/2013	26960	402605 /-
04/2013	37240	453774 /-
05/2013	39760	474829 /-
06/2013	34016	444382 /-
07/2013	40744	470325 /-
08/2013	38440	488877/-
09/2013	34208	446948 /-
10/2013	38072	4550741 /-
11/2013	81734	710403 /-
12/2013	44632	493174 /-
Total	493286	6013495

HT Bill

Period	Consumption KWH	Amount in Rs.
01/2014	44704	497518/-
02/2014	68576	687185/-
03/2014	73936	664516/-
04/2014	60816	589456/-
05/2014	55000	554621/-
06/2014	72136	653833/-
07/2014	72568	657048/-
08/2014	80344	701895/-
09/2014	74944	670686/-
10/2014	60048	584721/-
11/2014	61528	591960/-
12/2014	51944	577527/-
Total	776544	7430966

HT Bill

Period	Consumption KWH	Amount in Rs.
01/2015	44048	567752/-
02/2015	72128	756655/-
03/2015	74472	773320/-
04/2015	80040	811019/-
05/2015	79560	807972/-
06/2015	72288	758030/-
07/2015	67120	723797/-
08/2015	74480	773961/-
09/2015	72096	758150/-
10/2015	72824	762738/-
11/2015	44416	577970/-
12/2015	25424	442695/-
Total	778896	8514059

HT Bill

Period	Consumption KWH	Amount in Rs.
01/2016	49432	604350/-
02/2016	65824	714526/-
03/2016	68408	733084/-
04/2016	83200	832340/-
05/2016	54536	641083/-
06/2016	75360	779479/-
07/2016	71664	754654/-
08/2016	86080	851612/-
09/2016	82880	830304/-
10/2016	74568	774408/-
11/2016	68144	732192/-
12/2016	42696	559004/-
Total	822732	8807030

HT Bill

Period	Consumption in KWH	Amount in Rs.
01/2017	51328	618041/-
02/2017	70440	745681/-
03/2017	83960	837869/-
04/2017	95152	916579/-
05/2017	86296	852927/-
06/2017	70064	741849/-
07/2017	70288	744632/-
08/2017	63472	699553/-
09/2017	72464	759484/-
10/2017	62624	693716/-
11/2017	61632	686690/-
12/2017	44104	568099/-
Total	831824	8868120

HT Bill

Period	Consumption in KWH	Amount in Rs.
01/2018	42584	558145/-
02/2018	54480	638089/-
03/2018	63808	701511/-
04/2018	72368	75937/-
05/2018	67648	727505/-
06/2018	59640	677775/-
07/2018	74664	533021/-
08/2018	67704	729364/-
09/2018	65104	711246/-
Total	568000	6035693

Ullas
Director 24/10/18