Energy Consumed by the College from TSSEB Before & After Solar Power point Installation



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Date: 10/05/2022

ENERGY CONSUMED BY THE GCET INSTITUTION FROM TSSPDCL BEFORE AND AFTER SOLAR INSTALLATION

	Before Solar Plan	t Installation	After Solar Plant Installation		
S.No	Month & Year	Energy consumed in KWh(Units)	Month & Year	Energy consumed in KWh(Units)	
1	December 2016	26675	January 2018	13655	
2	January 2017	29467	February 2018	14736	
3	February 2017	30306	March 2018	19135	
4	March 2017	34643	April 2018	17670	
5	April 2017	40513	May 2018	15286	
6	May 2017	41992	June 2018	15107	
7	June 2017	25984	July 2018	19661	
8	July 2017	27073	August 2018	30445	
9	August 2017	36160	September 2018	21008	
10	September 2017	37425	October 2018	27883	
11	October 2017	28720	November 2018	18510	
12	November 2017	40833	December 2018	15265	
	TOTAL UNITS	3,99,791	TOTAL UNITS	2,28,361	

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Date: 10/05/2022

	Before Solar Pla	ant Installation	After Solar Plant Installation		
S.No	Month & Year	Electricity bill in Rupees	Month & Year	Electricity bill in Rupees	
1	December 2016	316129	January 2018	194970	
2	January 2017	338109	February 2018	232497	
3	February 2017	344785	March 2018	212279	
4	March 2017	378759	April 2018	137975	
5	April 2017	372741	May 2018	171959	
6	May 2017	428120	June 2018	180605	
7	June 2017	310816	July 2018	226970	
8	July 2017	319466	August 2018	317022	
9	August 2017	391793	September 2018	220919	
10	September 2017	401609	October 2018	274612	
11	October 2017	332778	November 2018	201893	
12	November 2017	430297	December 2018	173985	
	TOTAL	Rs 43,65,402/-	TOTAL	Rs 25,45,686/-	

ENERGY BILL OF GCET INSTITUTION FROM TSSPDCL BEFORE AND AFTER SOLAR INSTALLATION

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I/C ELECTRICAL MAINTENANCE

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HoD - EEE Department of Electrical and Electronics Engineering Cheeryol (V), Keesara (M), R.R. Dist. (A.P.) - 501 361 Cheeryol (V), Keesara (M), R.R. Dist. (A.P.) - 501 361

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RRE2780-12.2016.txt SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED HT C.C. Bill for the month of December 2016, Date: 29-Dec-16 PAYABLE ON OR BEFORE dated: 09-Jan-17 DISCONNECTION DATE: 24-Jan-17

Contracted MD (KVA/HP) Specified Voltage (KV) Actual Voltage (KV) Feeder Category	200 11 11 CF 2	Consumer No. Name ADDRESS1 ADDRESS2 ADDRESS3			SOCIETY.
· · ·	KWH	KVAH	KVA	TOD1	TOD2
Reading On 18-DEC-16 Reading On 18-NOV-1 Difference ST:01 Multiplying Factor Total Consumption Monthly Minimim Units Main Consumption	855549.00 6 83957 15973.00 1.00 15973.00 4000.00 15986.00	6.00 905776 15986.00 1.00 15986.00	1.00 1.00 77.80 160.00	2265.00	$\begin{array}{c} 113293.00\\ 1845.00\\ 1.00\\ 1845.00\end{array}$
	RATE		A/UNITS		AMOUNT Rs.
	NATE		A/ UNI 13		
Demand Charges Normal Demand Charges Penal Energy Charges TOD Charges Electricity Duty Colony Charges L&F Charges FSA Charges	Rs.390 Rs.780 Ps.780 Ps.100 Ps.6 Ps.630 Ps.780	C 1 4	.5986 110 .5986		$\begin{array}{r} 62400.00\\ 0.00\\ 124690.80\\ 4110.00\\ 959.16\\ 0.00\\ 0.00\\ 0.00\\ 0.00\end{array}$
Supplier Name NetKWH	KVA	TOD	Cust C AC UI C CS Sur Late Pm Interest Incentiv Incentiv Wheeling C vansmission Other C	e TOD1 e TOD2 harges	192159.96 1685.00 0.00 0.00 0.00 0.0 0 -2553.00 -901.00 0 0 0 0 0
*********Arrears as on C.C.(Court Cases Rs. Others Rs. Total Rs. ************************************	Charge S 0 0 0	urcharge Ir	Gross C. Rec. fro Other Credi Net Bill	Total m Govt. t Adj. Amount	190391 0 190391 0 190391

Note: ACD Due for 2016-17 Rs. 0 One Lakh Ninty Thousand Three Hundred and Ninty One Only Note: This bill is settled based on the provisions of inter state settlements. If any short fall occurred in this bill due to the inter state Open Access provisions, the same will be levied in your future bills.

Senior Accounts Officer OP.CIRCLE Note: PAY YOUR BILL THROUGH THE SBH A/C NO.62303697381 GUNFOUNDRY, HYDERABAD, IFSC CODE:SBHY0020066

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PRINCIPAL Geethanjali College of Engg. Tecn. Cheerrol (V), Keesara (N), R.R. Dist. (A.P.) - 501 301

RRE1682-11.2016 (2).txt SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED HT C.C. Bill for the month of November 2016, Date: 30-Dec-16 PAYABLE ON OR BEFORE dated: 10-Dec-16 DISCONNECTION DATE: 25-Dec-16

Contracted MD (KVA/HP) 125 Specified Voltage (KV) 11 Actual Voltage (KV) 11 Consumer No. RRE1682 M/S. TEJA EDUCATIONAL SOCIETY SY.NO.22&34, CHERIYAL(V), Name ADDRESS1 KEESARA(M), Feeder CF 2 ADDRESS2 Category ADDRESS3 R.R.DIST KWH **KVAH** KVA TOD1 TOD2 Reading On 18-NOV-16 Reading On 22-OCT-16 Difference ST:04 Multiplying Factor Total Consumption Monthly Minimim Units 263171.10 1632860.80 1777369.50 134.76 0.00 1611499.40 21361.40 0.50 10680.70 2500.00 1755990.80 21378.70 0.50 0.00 263171.10 0.00 0.00 0.50 0.50 67.38 100.00 10689.35 0.00 2492.00 Main Consumption 10689.00 Colony 0.00 L&F . 0.,00 _ _ _ RATE KVA/UNITS AMOUNT Rs. Demand Charges Normal Demand Charges Penal Energy Charges TOD Charges Electricity Duty Colory Charges Rs.390 Rs.780 Ps.780 Ps.100 100 39000.00 0.00 83374.20 2492.00 641.34 0 10689 2492 Ps.6 Ps.630 Ps.780 10689 Colony Charges L&F Charges 0.00 0 ŏ FSA Charges 0.00 Supplier Name NetKWH 125507.54 **KVA** TOD Sub Total Cust Charges | ACD Surc | UI Charges | CS Surcharge | Late Pmt Charg | Interest on ED | 1685.00 0.00 0 0.00 550.00 0 -2005.00 Incentive TOD1 Incentive TOD2 0.00 Wheeling Charges | Transmission Charges | Other Charges-I Other Charges-II Gross Total | 000 Õ 0 125738 C.C.Charge 0 Incentive Amount Other Credit Adj. Net Bill Amount Surcharge Court Cases Rs. .48 125738 Others Rs. 48 125738

Note: ACD Due for 2016-17 Rs. 0 One Lakh Twenty Five Thousand Seven Hundred and Thirty Eight Only Note:This bill is settled based on the provisions of inter state settlements. If any short fall occurred in this bill due to the inter state Open Access provisions, the same will be levied in your future bills. Senior Accounts Officer

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Geethagiali College of Engg. Tech. (heerpat (V), Keesara (M), R.R. Dist. (A.P.) - 501 30 SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED HT C.C. Bill for the month of January 2018, Date: 26-Jan-18 PAYABLE ON OR BEFORE dated: 09-Feb-18 DISCONNECTION DATE: 24-Feb-18

KWH 7060.40	KVAH	KVA	TOD1	TOD2
1060.40			successive state state war war and the	
1060.40		64.84 50	\$55 90	1720.30
	1312.000		542.00	1043.00
4561.00	4712.00	~ ~ ~	313.90	1.
2499.40	2629.00		2.00	e 00
2.00	2.00	2.00		
	.5258.00		0 628.00	1000100
			TEE	0.00
	Colony	0.00	Lør	
				AMOUNT Rs.
RATE	K	VA/UNITS		
		105		48750.00
Rs.390				3650.40
Rs.780		4.68		25287.60
Ps.780				1983.00
Ps.100				29.64
Ps.6				0.00
Ps.630		· · · · · · · · · · · · · · · · · · ·		0.00
Ps.780		0		0.00
				79700.64
KVA	TOD			1685.00
		Cust Char	rges I	0.00
				0.00
				0.00
1. A.		CS Surch	arge	0.0
		Late Pmt	Charg	0.0
	********	Interest O	n ED	
Details	0/2022 1	Incentive	TOD1	-1701.00
ling : 5215	.912032 1	Incentive	TOD2	-649.00
94		Wheeling Cha	rges	0
1 Units:0	· · · · · · · · · · · · · · · · · · ·	Transmission Ch	arges	0
nits : 0	++++******	Other Cha	rges-1	
*********		Other Char	ges-II	(
		Gross 3	otal	7903
on 23/01/18	standard l	Inc Rec. from	Govt.	
C.Charge	Surcharge	Other Credit	Adj.	(
0		Net Bill Ar	nount	7903
		Total Ar	rears	. 4
.48	 + + + + + + + * * * * * * * * *	Total Amount Pa	yable	7903
	4999.00 3242.00 3242.00 RATE Rs.390 Rs.780 Ps.780 Ps.100 Ps.6 Ps.630 Ps.780 Fs.780 KVA Details*** Hing : 5213 54 d Units:0 hits:0 totate	2300 5258.00 3242.00 Colony RATE K Rs.390 Rs.780 Ps.780 Ps.780 Ps.780 Ps.780 Ps.780 Ps.780 Ps.780 Ps.780 Ps.780 Ps.780 VX TOD Details************************************	2.00 129.68* 100.00 3242.00 100.00 3242.00 Colony 0.00 RATE KVA/UNITS Rs.390 125 Rs.780 4.68 Ps.780 3242 Ps.100 1983 Ps.630 0 Fx780 0 KVA TOD KVA TOD Sub 7 Cust Chai ACD 3 UI Chai CS Surch Late Pmt Interest 0 Incentive Interest 0 Incentive Mits:0 Wheeling Chai on 23/01/18******** Gross 7 0 Inc. Rec. from 0 Incerciti 148 Net Bill Ar	2.00 22.00 129.68* 100 60 3242.00 Colony 0.00 L&F RATE KVA/UNITS Rate KVA Ps.100 1983 Ps.630 0 Sub Total Cust Charges ACD Surc UI Charges Late Pmt Charge Incentive TOD1 Incentive TOD2 Wheeling Charges Other Charges-II Other Charges Other Charges-II Other Charges Other Charges-II Other Credit Adj. A8 Net Bill Amount

Note: ACD Due for 2017-18 Rs. 0 Seventy Nine Thousand and Thirty Six Only Note: This bill is settled based on the provisions of inter state settlements. If any short fall occurred in this bill due to the inter state Open Access provisions, the same will be levied in your future bills. Senior Accounts Offic

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Contracted MD (KVA/HP)	200 1	Consumer No.	HBG2780 M/S. TEJA ED	UCATIONAL	SOCIETY.
Specified Voltage (KV)	11)	Name	SY.NO.31, CHE	RYAL (V) ,	
Actual Voltage (KV)	11 ' 1	ADDRESS1 ADDRESS2	KEESARA (M) ,		
Feeder	CF	ADDRESS3	R.R.DIST		
Category	2	ADDRESSS			TOD2
	KWH	KVAH	KVA	TOD1	1002
		12182.70	98.40	1286.30	2832.50
Reading On 19-JAN-18	11756.60			867.00	1729.00
Reading On 20-DEC-17	7761.00			419.30	1103.50
Difference ST:01	3995.60		2.00	2.00	
Multiplying Factor	2.00			839.00	2207.00
Total Consumption	7991.00		160.00		
Monthly Minimum Units	4920.00		0.00	L&F	.0.00
Main Consumption	4920.00) Colony			
	RATE	ĸ	VA/UNITS		AMOUNT Rs.
			196.8		76752.00
Demand Charges Normal	Rs.390		0		0.00
Demand Charges Penal	Rs.780		4920	-	38376.00
Energy Charges	Ps.780		3046		3046.00
TOD Charges	Ps.100		2920		175.20
Electricity Duty	Ps.6				0.00
Colony Charges	Ps.630		0	1.1	0.00
L&F Charges	Ps.780		0		0.00
FSA Charges					
	KVA	TOD		Total	118349.2
Supplier Name NetKWH			Cust Ch	arges	1685.00
			ACE	Surc	0.00
			UI Ch	arges	0
			CS Surc	harge	0.00
			Late Pmt	Charg	0.00
		*********	Interest	on ED	0
*********** Net Meter	Details***	c/0000 1	Incentive	TOD1	-3005.00
IClosing/Opening Read	ding : 5661	1.5/2925	Incentive		-1095.00
IRecorded Units : 54	77		Wheeling Cl	narges	. 0
Current Month Banke	d Units:0	1	Transmission	Charges	. 0
Cumulative Banked U	nits : 0	1	Other C	harges-I	0
Cumulative Banked U	******	*****	Other Ch	arges-IT	0
		X	Other Ch	Total	115934
*********Arrears as	on 23/01/1	8*********	Gross	- Cout	0
	C.Charge	Surcharge	Inc. Rec. fro	m Gove.	
Court Cases Rs.	0	1	Other Credi	t Adj. I	115934
lothers Rs.	0	- 1	Net Bill		110001
Total Rs.	0		Total A Total Amount P	avable	115934
* * * * * * * * * * * * * * * * * * * *	********	********	TOLAT MILOUTE I		

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Note: ACD Due for 2017-18 Rs. 0 One Lakh Fifteen Thousand Nine Hundred and Thirty Four Only Note: This bill is settled based on the provisions of inter state settlements. If any short fall occurred in this bill due to the inter state Open Access provisions, the same will be levied in your future bills. Senior Accounts Officer

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Date: 10/05/2022

Summary of Renewable energy source: GCET SOLAR POWER PLANT

- Annual Power requirement met by the Renewable energy sources: 2,42,213 KWh (units)
- Total Annual Power requirement of the institution: 4,61,100 KWh (units)
- (2,18,887 KWh (units) from TSSPDCL + 2,42,213 KWh (units) from solar power plant =4,61,100 KWh (units)
- Percentage of Annual Power requirement met by the Renewable energy sources= 52.2%
- Formula= (2,42,213/4,61,100)*100= 52.2%
- Energy Exported to the grid by GCET solar plant is 1,06,722 KWh (units)
- Monthly average energy Exported to the grid by GCET solar plant is 8,893 KWh (units)
- In the month of August 2017 solar power plant was installed.
- Company Name: Four Solar Energy systems Pvt Ltd, Hyderabad.
- Plant capacity: 250 KW, 5 inverter each one= 25 KW and 5 inverter each one= 20 KW
- Solar Roof Top: Number of Panels (320 W*782)
- Before solar plant installation from December 2016 to November 2017 the energy consumed by the institution from TSSPDCL is 3,99,791 KWh (units), and the total electricity bill is Rs 43,65,402/-.

After solar plant installation from January 2018 to December 2018 the energy consumed by the institution from TSSPDCL is 2,28,361 KWh (units), and the total electricity bill is Rs 25,45,686/-.

- The annual electricity bill is reduced by Rs 18,19,716/-
- Monthly average electricity bill is reduced by Rs 1,51,643/-
- Installation cost for solar power plant Rs 1,41,95,000/-
- Return on Investment is 7.8 years.
- Energy exported by the solar power plant to the grid is 1,06,722 KWh (units)
- The monthly average Energy exported by the solar power plant to the grid is 8,893 KWh (units)

I/C ELECTRICAL MAINTENANCE

HEAD OF DEPARTMENT

PRINCIPAL RINCIPAL

HOD-EEE Principal College of Engg. Tech. Department of Electrical and Electronics Engineering: Geethanjall College of Engg. Tech. College of Englanding & Technology Mutomorpuls) Cherryal (V), Kessura (M), R.R. Dist. (A.R.) - 501 301 Cherryal (V), Kessura (M), R.R. Dist. (A.R.) - 501 301

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