Vasavi College of Engineering (Autonomous), Ibrahimbagh, Hyderabad-31 **Department of Electrical & Electronics Engineering**

Alternative Energy Resource: 275 kWp Roof Top Solar Power Plant

Year	Energy Requirement of the College (kWh)	Energy Requirement Met by Solar (kWh)	% Energy Requirement Met by Solar
2021-22	461762	334826	72.51
2020-21	325950	184919	56.73
2019-20	307254	225837	73.50
2018-19	652093	280724	43.04
2017-18	599202	273959	45.72
2016-17	526954	272237	51.66
2015-16	575268	294701	51.23
2014-15	444993	223548	50.24

<u>Vasavi College of Engineering (Autonomous), Ibrahimbagh, Hyderabad-31</u> <u>Department of Electrical & Electronics Engineering</u>

Month Wise Energy Requirement of Institute for the AY 2021-22

Month	Total Energy Requirement (kWh)	Energy Requirement met by RES (kWh)
July 21	35822	19717
August 21	49434	29418
September 21	42394	30267
October 21	41185	36692
November 21	50653	25819
December 21	51658	28792
January 22	24306	22000
February 22	10464	36269
March 22	26429	30038
April 22	27729	35067
May 22	55995	20568
June 22	45693	20179

Month Wise Solar Units Exported to Grid for the AY 2021-22

Month	Wheeling to grid
July 21	1408
August 21	2678
September 21	3512
October 21	9086
November 21	2824
December 21	2268
January 22	7596
February 22	20506
March 22	13930
April 22	19852
May 22	5260
June 22	5640

habarant

INVOICE

(Original)

MACIOE	Dated	
	22-Jun-2014	
Delivery Note	Mode/Terms of Payment	
Supplier's Ref.	Other Reference(s)	
Buyer's Order No.	Dated 16-Jan-2014	
Despatch Document No.	Dated	
Despatched through	Destination	
Terms of Delivery		
	Invoice No. SPP/14-15/2 Delivery Note Supplier's Ref. Buyer's Order No. PO NO. VCE/PO/Solar PV System/2014 Despatch Document No. Despatched through	

					-		
- T	Description of Goods		Quantity	Rate	per	Disc. %	Amount
Si No.	Cooring	2	00.00 kW	77,820.00	kW		1,55,64,000.00
1	Solar Power Pack Design Manufacture Supply Erection Testing & Commssioning of 200 KWP Grid Connected Roof Top Solar PV System	2	.00.00 KW				
	Less:	:I Subsidy					(-)35,64,000.00
-		Total	200.00 kV	,	+		₹ 1,20,00,000.0 E. & O

Amount Chargeable (in words)

dian Rupees One Crore Twenty Lakh Only

Company's VAT TIN Company's CST No. Declaration

: 27640840489V 27640840489C

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

for Aditya Green Energy Pvt. Ltd. 13-15

Authorised Signatory

ORIGINAL FOR RECIPIENT

SolarBull Energy LLP

Regd. Office: A202, Aditya Hilltop, Filmnagar, Near Senor Valley Villas. Hyderabad, Telangana 500096 +91-96180-74400 srini@solarbull.in GSTIN: 36ADOFS2724A1Z8



TAX INVOICE

INVOICE TO

Vasavi College of Engineering Ibrahimbagh, Hyderabad-500031. Hyderabad, Telangana 500031 India

State Code: 36 GSTIN: 36AAATV1119R1Z2

PLACE OF SUPPLY

Payment - within 30 days

36 - Telangana

SHIP TO

Vasavi College of Engineering Ibrahimbagh, Hyderabad-500031. Hyderabad, Telangana 500031 India State Code: 36

TAX INVOICE NO. INV/1197/19-20 DATE 16-03-2020 **DUE DATE 15-04-2020** TERMS Net 30

NO HSN/SAC	DESCRIPTION / ITEM		QTY	RATE	TAX	AMOUNT
NO HSN/SAC	Supply - Solar Rooftop System - 75	5.24KW	1	20,91,727.00		20,91,727.00
We declare that this in described and that all	nvoice shows the actual price of the goods particulars are true and correct	SUBTO	2.5%	on		20,91,727.00 52,293.18
Bank Account Details: Bank/Branch - SBI - Account Name - SOLA Account Number -000 IFS Code - SBIN0020	APSRTC BR.Hyderabad ARBULL ENERGY LLP 100037670495202		7.00 OFF AN	MOUNT		52,293.18 21,96,313.36 -0.36
Terms & Conditions:-		BALANG	CE DUE		₹21,9	96,313.00



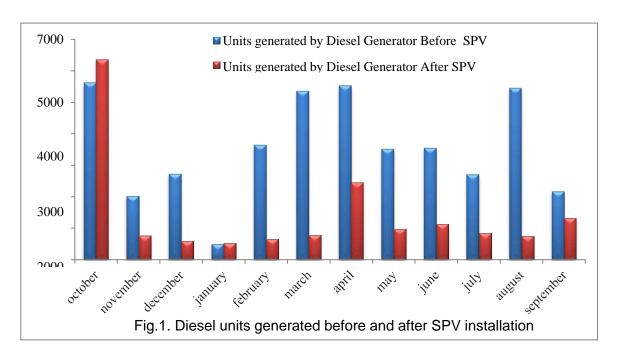
For SolarBull Energy LLP

Signature:

275 kWp Roof Top Grid Tied Solar Power Plant

As part of Green Campus Initiative Vasavi College of Engineering has initially commissioned 200 kWp rooftop grid tied fixed tilt solar power plant in the campus with the support of Electrical and Electronics Engineering department in the year 2014. The Vasavi college of Engineering has five buildings namely Viswesrayya block, Ramanujamblock, C.V. Raman block, Sarvepalli Radha Krishnan block and Jagdish Chandra Bose block. The rooftop solar PV plant was erected on J.C.Bose block and Viswesrayya block. A 41.53 Sq.mt area is available on J.C.Bose block on which 125 Kwp SPV Installed and a 25 Sq.mt area is available on Viswesrayya block on which 75 Kwp SPV installed.

Diesel generator sets of 625 kVA, 500 kVA and 125 kVA capacities are providing backup power. Load can be met by either 625 kVA DG set or 500 kVA DG set. A diesel generator of 125 kVA capacity is used to meet the load during holidays and for street lighting. Prior to the installation of 200kWp SPV, diesel generators are run to meet the load during the scheduled and unscheduled outages of the state electricity supply. The operation of these generators is not free from pollution.



After the installation of solar PV Power generation, the diesel generators were operated only when there is a failure on grid to meet the load that is in excess to the solar power generation. This reduced operation time and number of units produced by the diesel generators. Thus, the total diesel consumption has decreased considerably.

With the experience gained from the 200 kWp plant, another 75 kWp grid tied fixed tilt Solar Power plant is installed in Pendekanti Institute of Management (PIM) block and Library buildings to cater energy needs of the institute from time to time.

Installation of 275 kWP solar PV Power generation also resulted in a substantial saving of the energy charges per month. Also, the power generated during holidays, Sundays and excess power during working days is fed into the National Grid.

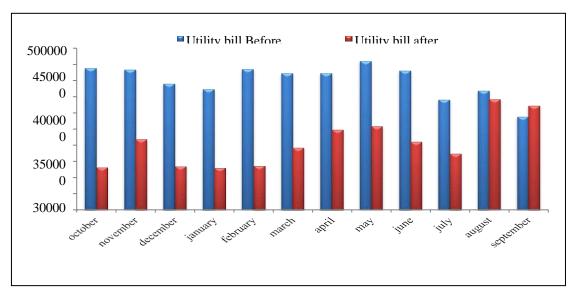


Fig.2. Utility bill (in INR) before and after SPV installation

The 275 kWp solar power plant generates approximately 250846 units of electrical energy annually that is equivalent to reduction in 300 Tons of CO_2 emission approximately. A true green initiative by Electrical and Electronics Engineering department and by the college.

The following table shows the Energy requirement met by the 275 kWp Solar plant year wise from the installation.

Year	Energy requirement of the college (kWh)	Energy requirement met by Solar (kWh)	%Energy requirement met by Solar
2014-15	444993	223548	50.24
2015-16	575268	294701	51.23
2016-17	526954	272237	51.66
2017-18	599202	273959	45.72
2018-19	652093	280724	43.04
2019-20	307254	225837	73.50
2020-21	325950	184919	56.73
2021-22	461762	334826	72.51

Reference: "Design, erection, testing and commissioning of 200Kwp rooftop grid tied solar photovoltaic system at Vasavi College of engineering". Dr.M.Chakravarthy, K.V.Ramanamurthy, B.Neelima Devi. Conference: 2015 IEEE IAS Joint Industrial and Commercial Power Systems / Petroleum and Chemical Industry Conference (ICPSPCIC), DOI: 10.1109/CICPS.2015.7974067

SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED HT C.C. Bill for the month of July 2021, Date: 26-Jul-21 PAYABLE ON OR BEFORE dated: 09-Aug-21 DISCONNECTION DATE: 24-Aug-21

	Contracted MD (KVA/HP) Specified Voltage (KV) Actual Voltage (KV) Feeder : 165111140106 Category	11 11	Consumer No. Name ADDRESS1 ADDRESS2 ADDRESS3	CBC373 PRINCIPAL VASAVI COLL 9-5-81 IBRA HYDERABAD 5	HIM BAGH	3
		KWH	KVAH	KVA	TOD1	TOD2
	Reading On 17-JUL-21	158455.30	164832.15	======================================		
	Reading On 16-JUN-21	156160.05		15.72	12175.25 12007.35	27331.10 26875.45
	Difference ST:01	2295.25			167.90	455.65
	Multiplying Factor	8.00		8.00	8.00	
	Total Consumption	18362.00		125.76		
	Monthly Minimum Units	6000.00		240.00		
	Main Consumption	17513.00	Colony	0.00	L&F	0.00
		RATE		A/UNITS	Α	MOUNT Rs.
ال	Demand Charges Normal	Rs.390		======== 10	========	03600.00
	Demand Charges Penal	Rs.780	0			93600.00
	Energy Charges	Ps.780		7513		0.00 136601.40
	TOD Charges	Ps.100		988		4988.00
	Electricity Duty	Ps.6		513		1050.78
	Colony Charges	Ps.630	0			0.00
	L&F Charges	Ps.780	0			0.00
	FSA Charges					0.00
	Supplier Name NetKWH	KVA	TOD	Sub	Total	236240.18
-	rapping rame neckini	KVA	100	Cust Cha		1685.00
					SCHG	0.00
				UI Cha		0
				CS Surch		0.00
				Addl.SCH		0.00
				Late Pmt C	harg	0.00
	*****Net Meter(KWH) Det	ails*****	*****	Interest o	n ED	0
	Closing/Opening Readin	g: 48994.	2/48818.	Incentive		-4788.00
	Recorded Units: 1408			Incentive		-1656.00
	Opening Balance Units:			Wheeling Cha		0
_	Cumulative Banked Unit			nsmission Ch	-	0
	*******	****	***	Other Cha		0.00
		00/07/0444	de ete ado cir de de ete ado ado	Other Char Gross T	_	0.00 231481.00
	********Arrears as on		SonArrear IT			0.00
	\$	harge TC: 21811		ther Credit		0.00
	Court Cases Rs.	0	0.00	Net Bill Am		231481.00
		21811	0.50	Total Arr		0.00
	IOCGT		*********Tota		•	231481.00
N	ote: ACD Due for 2021-2	2 Rs. 0	•	•		
T	wo Lakh Thirty One Thou	sana Four H	nunarea ana E	TRIILY OHE OH	± y	

Note: ACD Due for 2021-22 Rs. 0
Two Lakh Thirty One Thousand Four Hundred and Eighty 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.

Note: PAY YOUR BILL THROUGH THE SBI A/C NO.SPDCLPCBC373

SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED

H.T C.C. Bill for the Month of August 2021,

Date: 26-Aug-21

PAYABLE ON OR BEFORE Dated: 09-Sep-21

DISCONNECTION DATE: 24-Sep-21

Contracted MD (KVA/HP)	300	Consumer Number	CBC373
Specified Voltage(KV)	11	Name	PRINCIPAL
Actual Voltage(KV)	11	Address1	VASAVI COLLEGE OF ENGG
Feeder	165111140106 (CF)	Address2	9-5-81 IBRAHIM BAGH
Category	2	Address3	HYDERABAD 500 031

Main Consumption	22694	Colony	0	L&F	0
Monthly Minimum Units	6000		240		
Total Consumption	24346	25372	57.6	1914	4477
Multiplying Factor	8	8	8	8	8
Difference ST:01	3043.2	3171.55		239.25	559.6
Reading On 17-JUL-21	158455.30	164832.15		12175.25	27331.10
Reading On 24-AUG-21	161498.50	168003.70	7.20	12414.50	27890.70
DESCRIPTIONS	KWH	KVAH	KVA	TOD1	TOD2

The state of the s			
DESCRIPTIONS	RATE	KVA/UNITS	AMOUNT Rs.
Demand Charges Norma	Rs. 390	240	93600.00
Demand Charges Penal	Rs. 780	0	0.00
Energy Charges	Ps. 780	22694	177013.20
Incentive TOD1	(FR: 33349.4 IR: 32611.35)		-5904.00
Incentive TOD2	(FR: 11804.75 IR: 11541.25)		-2108.00
TOD Charges	Ps. 100	6391	6391.00
Electricity. Duty	Ps. 6	22694	1361.64
Colony Charges	Ps. 630	0	0.00
L&F Charges	Ps. 780	0	0.00
FSA Charges	Ps.		

Supplier Name Net KWH KVA TOD Sub Total 270353.84

1460	Meter (KVA) Fee	
Closing	Oper	(ecorde
Reading	Reac	Units
49329	48994.2	2678

Arr	ears as on the	After at the union state secretary as a communication and a contract contract of the contract
	C.C.Charge	TCS on Arrears
Court Case Rs.	21811	* ×
Others Rs.	0	0.00
Total Rs.	21811	
The state of the s		

Customer Charges	1685.00
ACD Surharge	0.00
UI Charges	0.00
Cross Subsidy Surcharge	0.00
Additional Surcharge on OA	0.00
RKVAH surcharge HYDEL	
RKVAH surcharge WIND	
Late Payment Charges	0.00
Interest on ED	0.00
Penal Interest	
Difference Voltage Surcharge	0.00
Wheeling Charges	0.00
Transmission Charges	0.00
Other Charges-I	0.00
Other Charges-II	0.00
Gross Total	272039.00
Inc. Rec. from Govt.	0.00
IT TCS U/s 206C(1H)	0.00
Net Bill Amount	272039.00
Total Arrears	0.00
Total Amount Payable	272039.00

Amount in Words: Two Lakh Seventy Two Thousand and Thirty Nine Rupees Only.

Note: ACD Due for 2021-22 Rs. 0

Note: PAY YOUR BILL THROUGH THE SBI A/C NO. SPDCLPCBC373

IFSC CODE: SBIN0004266

Dear Sir, order and the Jept 2021

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SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED HT C.C. Bill for the month of September 2021, Date: 26-Sep-21 PAYABLE ON OR BEFORE dated: 10-Oct-21 DISCONNECTION DATE: 25-Oct-21

	Contracted MD (KVA/HP) Specified Voltage (KV) Actual Voltage (KV) Feeder Category	300 11 11 CF 2	Consumer Name ADDRESSI ADDRESSI ADDRESSI	L 2	CBC373 PRINCIPAL VASAVI COI 9-5-81 IBI HYDERABAD	RAHIM BA	\GH	а	
		KWH	176707	/AH	KVA		OD1	TOD2	
	Reading On 21-SEP-21	163799.25			45.00				
	Reading On 24-AUG-21	161498.50			15.88		1.05	28316.	
	Difference ST:01	2300.75					4.50	27890.	
	Multiplying Factor	8.00		.00	8.00		6.55 8.00	425.	95
	Total Consumption	18406.00	-		127.04		2.00		
	Monthly Minimim Units	6000.00			240.00		2.00	2400.	00
	Main Consumption	15639.00	Colo	ny	0.00		L&F	0.	00
30.	_	RATE		KVA	/UNITS		AM	OUNT Rs.	
-	Cmand Changes Norwal		=======		========	======	=====	======	==
-	Demand Charges Normal Demand Charges Penal	Rs.390		24	.0			93600.	
	Energy Charges	Rs.780 Ps.780		0	c20			0.0	O. S.
	TOD Charges	Ps.100		49	639			121984.2	
	Electricity Duty	Ps.6			639			4980.6	
	Colony Charges	Ps.630		0	039	*		938.3	
	L&F Charges	Ps.780		0				0.6	
	FSA Charges							0.6 0.6	
	Supplier Name NetKWH	KVA	TOD						
	Supplier Name Netrwh	KVA	TOD			Total		221502.5	
						narges Surc		1685.0	
					UI Char			0.0 0.00	16
					CS Surc	25		0.0	10
					Addl.SC			0.0	
					Late Pmt	CONTRACT DOMESTICAL TO		0.0	
	Net Meter(KWH) Detail		***		Interest	0 1			0
	Closing/Opening Reading	3: 49767.	95/49329		Incentive	TOD1		-4247.0	0
	Recorded Units: 3512				Incentive			-1483.0	0
	Opening Balance Units:0)			Mheeling Ch	- 1		1	0
	Cumulative Banked Units			Tran	smission C			1	0
	**********	******	*****		Other Ch				0
	***	2 (00 (04 + +			Other Cha		100		0
	********Arrears as on 2			TT -	Gross		;	217458.00	
	C.C.Ch	arge Sui 1811	rcharge		CS U/s 206			0.00	0
e	Court Cases Rs. 2	1911			her Credit Net Bill A			217458.00	а
		1811	-		Total Ar			0.00	
	**************************************		 *********	Total				217458.00	
N	ote: ACD Due for 2021-22					,			

Note: ACD Due for 2021-22 Rs. 0

Two Lakh Seventeen Thousand Four Hundred and Fifty 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 provisions, the same will be levied in your future bills.

Senior Accounts Officer

Note: PAY YOUR BILL THROUGH THE SBI A/C NO.SPDCLPCBC373

IFSC CODE: SBIN0004266

OP.CIRCLE

SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED HT C.C. Bill for the month of October 2021, Date: 26-Oct-21 PAYABLE ON OR BEFORE dated: 09-Nov-21 DISCONNECTION DATE: 24-Nov-21

Contracted MD (KVA/HP) Specified Voltage (KV) Actual Voltage (KV) Feeder : 165111140106 Category	11	Consumer No Name ADDRESS1 ADDRESS2 ADDRESS3	PRINCIPAL VASAVI COLI 9-5-81 IBRA HYDERABAD 5	HIM BAGH	iG
=======================================	KWH	KVAH	KVA	TOD1	TOD2
Reading On 27-OCT-21	166497.70				
Reading On 21-SEP-21	163799.25		15.52	12809.10	
Difference ST:01	2698.45			12611.05	
Multiplying Factor	8.00			198.05	
Total Consumption	21588.00		124.16	8.00	
Monthly Minimum Units	6000.00	22005.00	240.00	1584.00	4625.00
· Main Consumption	13579.00		0.00	L&F	0.00
	RATE	K۱	/A/UNITS		AMOUNT Rs.
emand Charges Normal	Rs.390			========	
Demand Charges Penal	Rs.780		240		93600.00
Energy Charges	Ps.780	0	.3579		0.00
TOD Charges	Ps.100		209		105916.20
Electricity Duty	Ps.6		3579		6209.00
Colony Charges	Ps.630	9			814.74
L&F Charges	Ps.780	0			0.00
FSA Charges					0.00 0.00
Supplier Name NetKWH	KVA	TOD			
Tappella Hame Heckwii	KVA	100		Total	206539.94
			Cust Cha		1685.00
			UI Cha	SCHG	0.00
			CS Surch		0
			Addl.SCH		0.00
			Late Pmt C		0.00
*****Net Meter(KWH) Deta	ails*****	*****	Interest o		0.00
Closing/Opening Reading	g : 50903.6	55/49767	Incentive		-6119.00
Recorded Units : 9086			Incentive		-2070.00
Opening Balance Units:	9		Wheeling Cha		0
Cumulative Banked Units		Tra	ansmission Ch		9
**************	*********	******	Other Cha		0.00
			Other Char		0.00
********Arrears as on 2			Gross T		200036.00
c.c.ch	_	onArrear IT	TCS U/s 206C	(1H)	0.00
	1811		ther Credit /		
Others Rs.	0	0.00	Net Bill Amo		200036.00
Total	1811		Total Arre	ears	0.00
**************************************	Dc 0	*******Tota	I Amount Paya	able	200036.00
Two Lakh and Thirty Six O					
Note: This bill is settled	based on	the provisio	ns of inten	tate cot+1	ements
		THE PLOYESTO	" OI THICE 3	race serit	CIIICIICS.

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 Note: PAY YOUR BILL THROUGH THE SBI A/C NO.SPDCLPCBC373 OP.CIRCLE

SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED

H.T C.C. Bill for the Month of November 2021,

Date: 26-Nov-21

PAYABLE ON OR BEFORE Dated: 10-Dec-21

DISCONNECTION DATE: 25-Dec-21

Contracted MD (KVA/HP)	300	Consumer Number	(CBC373		
Specified Voltage(KV)	11	Name	·	PRINCIPAL		
Actual Voltage(KV)	11	Address1	,	VASAVI COLLEGE	OF ENG	G
Feeder	165111140106 (CF)	Address2		9-5-81 IBRAHIM BA	GH	
Category	2	Address3	8	HYDERABAD 500 0	31	
DESCRIPTIONS	KWH	KVAH	KVA	TOD1		TOD2
Reading On 25-NOV-21	170170.00	177040.90	22.42	13122.8	80	29497.90
Reading On 27-OCT-21	166497.70	173230.65		12809.1	0	28894.80
Difference ST:01	3672.3	3810.25		313.7	,	603.1
Multiplying Factor	8	8	8	8		8
Total Consumption	29378	30482	179.36	2510		4825
Monthly Minimum Units	6000		240			
	27658	Colony	0		L&F	0

DESCRIPTIONS	RATE	KVA/UNITS	AMOUNT Rs.
Demand Charges Normal	Rs. 390	240	93600.00
Editoria analgo casimia.			0.00
Demand Charges Penal	Rs. 780	0	215732.40
Energy Charges	Ps. 7'	7658	213/32.43

Incentive TOD1	(FR: 35345.55 IR: 346	45.45)		
Incentive TOD2				-5603.00
TOD Charges	(FR: 12492.85 IR: 122 Ps. 100	248.9)		-1952.00
Electricity Duty	Ps. 6		7335 27658	7335.00
Colony Charges	Ps. 630			1659.48
L&F Charges	Ps. 780		0	0.00
FSA Charges	Ps.			0.00
Supplier Name	Net KWH	KVA TOD	Sub Total	310771.88
			Customer Charges	1685.00
	Net Meter (KWH) Details		ACD Surharge	0.00
Closing Reading	Opening Reading	Recorded Units	UI Charges	0.00
51256.65	50903.65	2824	Cross Subsidy Surcharge	0.00
			Additional Surcharge on OA	0.00
	Arrears as on 23/11/21		RKVAH surcharge HYDEL	
Court Case Rs.	C.C.Charge 21811	TCS on Arrears	RKVAH surcharge WIND	A CONTRACTOR OF THE CONTRACTOR
Others Rs.	0	0.00	Late Payment Charges	0.00
Total Rs.	21811		Interest on ED	0.00
			Penal Interest	F. 111111111111111111111111111111111111
			Difference Voltage Surcharge	0.00
			Wheeling Charges	0.00
			Transmission Charges	0.00
			Other Charges-I	0.00

Other Charges-II	0.	00
Gross Total	312457.0	00
Inc. Rec. from Govt.	0.0	00
IT TCS U/s 206C(1H)	0.0	00
Net Bill Amount	312457.0	00
Total Arrears	0.0	00
Total Amount Payable	312457.0	00

Amount in Words: Three Lakh Twelve Thousand Four Hundred and Fifty Seven Rupees Only.

Note: ACD Due for 2021-22 Rs. 0

Note: PAY YOUR BILL THROUGH THE SBI A/C NO. SPDCLPCBC373

IFSC CODE: SBIN0004266

De Partment of Power House Dear Str. above ben in in order and Can
The above below December 9th 2021

Be Paid bedow

H. Chalmanth

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SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED

H.T C.C. Bill for the Month of June 2022,

Date: 26-Jun-22

PAYABLE ON OR BEFORE Dated: 10-Jul-22

DISCONNECTION DATE: 25-Jul-22

Contracted MD (KVA/HP) Specified Voltage(KV) Actual Voltage(KV) Feeder Category	300 11 11 165111140106 (CF) 2	Consumer Number Name Address1 Address3		CBC373 PRINCIPAL VASAVI COLLEGE OF ENGG 9-5-81 IBRAHIM BAGH HYDERABAD 500 031	
DESCRIPTIONS	KWH	KVAH	KVA	TOD1	TOD2
Reading On 16-JUN-22	194361.30	201974.10	34.92	14989.95	33648.70
Reading On 19-MAY-22	189900.60	197374.85		14692.10	33063.25
Difference ST:01	4460.7	4599.25		297.85	585.45
Multiplying Factor	8	8	8	8	8
Total Consumption	35686	36794	279.36	2383	4684
Monthly Minimum Units	6984		240		
Main Consumption	31154	Colony	0	L&F	0
DESCRIPTIONS	RATE	KVA	/UNITS		AMOUNT Rs.
Demand Charges Normal	Rs. 475	27	79.36		132696.00
Demand Charges Penal	Rs. 950		0		0.00
Energy Charges	Ps. 880	3	1154		274155.20
Incentive TOD1	(FR: 40406.35 IR: 39699.2)				-5657.00
Incentive TOD2	(FR: 14260.35 IR: 14013.3)				-1976.00
TOD Charges	Ps. 100	7	067		7067.00
Electricity Duty	Ps. 6	31	1154		1869.24
Colony Charges	Ps. 730		0		0.00
L&F Charges	Ps. 880		0		0.00
FSA Charges	Ps.				
Supplier Name	Net KWH	KVA TOD		Sub Total	408154.44

HT Billing System

是一种的一种。在1000年的1000年代	Net Meter (KWH) Details	
Closing Reading	Opening Reading	Recorded Units
58297.2	57592.2	5640
	Arrears as on 23/06/22	
	C.C.Charge	TCS on Arrears
Court Case Rs.	21811	
Others Rs.	0	0.00
Total Rs.	21811	

S. S. SES SES	(14)
Customer Charges	2000.00
ACD Surharge	0.00
UI Charges	0.00
Cross Subsidy Surcharge	0.00
Additional Surcharge on OA	0.00
RKVAH surcharge HYDEL	
RKVAH surcharge WIND	
Late Payment Charges	0.00
Interest on ED	0.00
Penal Interest	
Difference Voltage Surcharge	0.00
Wheeling Charges	0.00
Transmission Charges	0.00
Other Charges-I	0.00
Other Charges-II	0.00
Gross Total	410154.00
Inc. Rec. from Govt.	0.00
IT TCS U/s 206C(1H)	0.00
Net Bill Amount	410154.00
Total Arrears	0.00
Total Amount Payable	410154.00

Amount in Words: Four Lakh Ten Thousand One Hundred and Fifty Four Rupees Only.

Note: ACD Due for 2022-23 Rs. 0

Note: PAY YOUR BILL THROUGH THE SBI A/C NO. SPDCLPCBC373 IFSC CODE: SBIN0004266

SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED
HT C.C. Bill for the month of May 2022, Date: 26-May-22
PAYABLE ON OR BEFORE dated: 09-Jun-22 DISCONNECTION DATE: 24-Jun-22

Contracted MD (KVA/HP) Specified Voltage (KV)		Consumer Name		vi	
Actual Voltage (KV)	11				NCC
Feeder : 165111140106		ADDRESS1		COLLEGE OF E	
Category	2	ADDRESS2		BRAHIM BAGH	
cacegory		AUUKE333		AD 500 031	
	KWH	KVAH	ł K\	/A TOD	
Reading On 19-MAY-22	189900.66				
Reading On 19-APR-22	184323.85			02 14692.	
Difference ST:01	5576.75			14351.	
Multiplying Factor	8.00	The second secon		340. 00 8.	55 687.10 00 8.00
Total Consumption	44614.00				
Monthly Minimum Units	7204.00		240.		5497.66
Main Consumption	40687.00			00 L&	F 0.00
		-			
	RATE		KVA/UNITS		AMOUNT Rs.
Demand Charges Normal	Rs.475		288.16		136876.00
Demand Charges Penal	Rs.950	1	0		0.00
Energy Charges	Ps.880		40687		358045.60
TOD Charges	Ps.100		8221		8221.00
Electricity Duty	Ps.6		40687		2441.22
Colony Charges	P.S. 730	i i	0		0.00
&F Charges	Ps.886		0		0.00
SA Charges					0.00
Supplier Name NetKWH	KVA	TOD		Sub Total	505583.82
				Charges	2000.00
		3		ACD SCHG	0.00
		4		Charges	0
				urcharge .SCHG OA	0.00
		·		mt Charg	0.00 0.00
*****Net Meter(KWH) Det		*******		st on ED	0.00
Closing/Opening Reading				ive TOD1	-6584.00
Recorded Units : 5260	.6 . 5/552	.2/30334.		ive TOD2	-2350.00
Opening Balance Units	a	4		Charges	9
Cumulative Banked Unit		100	Transmission		0
***********	******			Charges-I	0.00
				Charges-II	0.00
*******Arrears as on	23/05/22*	*****		ss Total	498650.00
		CSonArrear :	IT TCS U/s	206C(1H)	0.00
Court Cases Rs.	21811	Ţ.	Other Cree	dit Adj.	
Others Rs.	0	0.00	Net Bil	1 Amount	498650.00
	21811	ľ		Arrears	0.00
************		**********T(otal Amount	Payable	498650.00
Note: ACD Due for 2022-2					
Four Lakh Ninty Eight Th	ousand Si	x Hundred ar	nd Fifty On	ly	
Note: This bill is settle	d based o	n the provis	sions of in	ter state se	ettlements.
If any short fall occurr	ed in thi	s bill due	to the inte	r state Oper	
provisions, the same wil	I be levi	ed in your	ruture bill		
Note: PAY YOUR BILL THRO	NICH THE C	DT A/C NO C	סחרו מרמר 272		counts Officer
NOTE: PAY YOUR BILL THRU	Journ Inc S	DI M/C 190.51	DCLFCBC3/3	OF .CI	1 % to b

SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED
HT C.C. Bill for the month of April 2022, Date: 26-Apr-22
PAYABLE ON OR BEFORE dated: 10-May-22 DISCONNECTION DATE: 25-May-22

Contracted MD (KVA/HP)	300	Consumer 1	No. CBC373		
Specified Voltage (KV)	11	Name	PRINCIPAL		
Actual Voltage (KV)	11	ADDRESS1		LEGE OF ENGG	
Feeder	CF i	ADDRESS2	9-5-81 IBRA		
Category	2	ADDRESS3	HYDERABAD S		
=======================================	KWH	KVA		TOD1	TOD2
Reading On 19-APR-22	184323.85	191631		14351.55	32376.15
Reading On 23-MAR-22	180460.70	187585		14089.40	31806.10
Difference ST:01	3863.15	4045		262.15	
Multiplying Factor	8.00	8.8			570.05
Total Consumption	30906.00	32366.6		8.00	8.00
Monthly Minimum Units		32300.6	W 1900 CONTROL TO THE	2097.00	4560.00
	6868.00	C-1	240.00		
Main Consumption	25941.00	Colony		L&F	0.00
Reading On 01-APR-22	182024.90	189237.1		14201.25	32023.10
Consumptions	12514.00	13211.0	0 274.72	895.00	1736.00
OldDays:9 NewDays:18	RATE	1	KVA/UNITS	AM	OUNT Rs.
Demand Charges Normal	Rs.390/475		91.572418/183.		122708.34
Demand Charges Penal	Rs.780/950		0/0	14/3	
Energy Charges	Ps.780/880	7. c. 10	12384/13557		0.00
TOD Charges	Ps.100/100		2631/4026		215896.80
Tlectricity Duty	Ps.6	1	25941		6657.00
Jolony Charges	Ps.630/730				1556.46
L&F Charges	g and a second		0/0		0.00
FSA Charges	Ps.780/880		0/0		0.00
Supplier Name NetKWH					
Supplier Name NetKWH	KVA	TOD		Total	346818.6
		1	Cust Ch	•	1895.00
				Surc	0.00
			UI Ch	arges	0.00
			CS Surci	harge	0.00
		9	Addl.SC	HG OA	0.00
		,	Late Pmt	Charg	0.00
**********Net Meter De			Interest of	on ED	0.00
Closing/Opening Readin	g: 56934.75	5/56131.	Incentive	TOD1	-5492.00
Recorded Units: 6425(8	27/5598)		Incentive	TOD2	-1968.00
Opening Balance Units:			Wheeling Cha	arges	0.00
Cumulative Banked Unit	s:0	1.7	ransmission Ch		0.00
********		******	Other Cha	•	0.00
ICD: 38858.17 TDS:	3886.00		ICD for FY		-34972.17
********Arrears as on		******	Gross 1		306281.00
I Company			T TCS U/s 2060		0.00
	21811	John Tear 1	Other Credit		0.00
Others Rs.	0	9 99			206201 00
		0.00	Net Bill An		306281.00
Total	*********	*************	Total Arr	able	306281.00
lote: ACD Due for 2022-2		4	rinounc ruj		20202100
hree Lakh Six Thousand	Two Hundred	and Eight	y One Only		
ote:This bill is settle	d based on	the provis	ions of inter	state settle	ements.
f any short fall occurr				ate Open Acc	ess
provisions, the same wil	l be levied	I in your f		College	and the second
		i i		nior Account	
Note: PAY YOUR BILL THRO	UGH THE SBI	A/C NO.SP	DCLPCBC373	OP.CI	RCLE

Note: PAY YOUR BILL THROUGH THE SBI A/C NO SPDCLPCBC373 IFSC CODE: SBIN0004266

SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED HT C.C. Bill for the month of March 2022, Date: 26-Mar-22 PAYABLE ON OR BEFORE dated: 09-Apr-22 DISCONNECTION DATE: 24-Apr-22

		3					
Contracted MD (KVA/HP) Specified Voltage (KV) Actual Voltage (KV) Feeder : 165111140106 Category	11	Consumer Name ADDRESS1 ADDRESS2 ADDRESS3	PRI VAS 9-5	NCIPAL		6G	
	KWH	KVA		KVA	TOD1	TOD2	
Reading On 23-MAR-22	180460.70	187585.	70	31.60	14089.46		
Reading On 21-FEB-22	177523.30	184554.	30		13850.15		
Difference ST:01	2937.40				239.25		
Multiplying Factor	8.00			8.00	8.06		
Total Consumption	23499.00	24251.	99	252.80	1914.00	4939.00	
Monthly Minimum Units	6320.00			240.00			
Main Consumption	10321.00	Colon	У	0.00	L&F	0.00	
	RATE		KVA/UN	ITS		AMOUNT Rs.	
		========	=====	.=======			
Demand Charges Normal	Rs.390		252.8	3		98592.00	6
Demand Charges Penal	Rs.780		0			0.00	0
Energy Charges	Ps.780	1	10321	L		80503.80	
TOD Charges	Ps.100	*	6853	NO.		6853.00	
Electricity Duty	Ps.6		10321	Ĺ		619.26	į.
Colony Charges	Ps.630		0			0.00	i)
L&F Charges	Ps.780	198	0			0.00	ĺ
FSA Charges						0.00	Ü,
Supplier Name NetKWH	KVA	TOD		Sub	Total	186568.06	0
Supplier Hame Health				Cust Cha		1685.00	
					SCHG	0.00	
				UI Cha		0	
		100		CS Surch		0.00	
				Addl.SCH	IG OA	0.00	
			L	ate Pmt (0.00	
*****Net Meter(KWH) De	etails****	*****	I	interest o	n ED	0	ii.
Closing/Opening Read			I	ncentive	TOD1	-5849.00	9
Recorded Units : 863	-		I	ncentive	TOD2	-2089.00	ŝ
Opening Balance Units		9	Whe	eling Cha	rges	0	
Cumulative Banked Uni	4900 married Control	È	Transm	ission Ch	arges	0	į.
*******	******	*****		Other Cha	rges-I	0.00	ě
		•	C	ther Char	ges-II	0.00	8
********Arrears as or	23/03/22*	*****		Gross 7	otal	180315.00	9
	Charge T	CSonArrear	IT TCS	U/s 2060	(1H)	0.00	ē =
Court Cases Rs.	21811	1		r Credit			
Others Rs.	0	0.00	Ne	t Bill An	nount	180315.00	ij
Total Rs.	21811	î		Total Arr		0.00	Ē.
	*******	*****	Total A	mount Pay	able	180315.00	0
Note: ACD Due for 2021	22 Rs. 0			0.1			

One Lakh Eighty Thousand Three Hundred and Fifteen 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 Office

Senior Accounts Officer

OP.CIRCLE

Note: PAY YOUR BILL THROUGH THE SBI A/C NO. SPDCLPCBC373

SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED HT C.C. Bill for the month of February 2022, Date: 26-Feb-22 PAYABLE ON OR BEFORE dated: 12-Mar-22 DISCONNECTION DATE: 27-Mar-22

Contracted MD (KVA/HP) Specified Voltage (KV) Actual Voltage (KV) Feeder : 165111140106 Category	11	Consumer No Name ADDRESS1 ADDRESS2 ADDRESS3	. CBC373 PRINCIPAL VASAVI COLLI 9-5-81 IBRAH HYDERABAD 50	HIM BAGH	
	KWH	KVAH	KVA	TOD1	TOD2
Reading On 21-FEB-22 Reading On 18-JAN-22 Difference ST:01 Multiplying Factor Total Consumption Monthly Minimum Units Main Consumption	177523.30 175631.05 1892.25 8.00 15138.00 6000.00 6000.00	184554.30 182653.40 1900.90 8.00 15207.00	13.74	13850.15 13664.15 186.00 8.00 1488.00	31188.75 30629.65 559.10 8.00 4473.00
	RATE	K1	/A/UNITS	ΛM	OUNT Rs.
					========
Demand Charges Normal Demand Charges Penal Energy Charges TOD Charges Electricity Duty Colony Charges L&F Charges FSA Charges		- - -	248 5 5000 5961 5		93608.00 0.00 46800.00 5961.00 0.00 0.00 0.00
Supplier Name NetKWH	KVA	TOD	Cust Cha	SCHG larges large lG OA	146361 1685.00 0.00 0.00 0.00 0.00
*****Net Meter(KWH) Det Closing/Opening Readir Recorded Units: 20506 Opening Balance Units:	g : 55052. 0	8/52489.	Interest o Incentive Incentive Wheeling Cha	TOD1 TOD2 TOBS	-5896.00 -2014.00
Cumulative Banked Unit		Tr	ansmission Ch Other Cha Other Char	rges-I	0 0.00 0.00
*********Arrears as on C.C.C		SonArrear IT	Gross T TCS U/s 206C Other Credit	otal (1H)	140136.00
Others Rs. Total Rs. ************************************	0 21811 ******	0.00	Net Bill Am	ount	140136.00 0.00 140136.00
Note: ACD Due for 2021-2 One Lakh Fourty Thousand Note: This bill is settle If any short fall occurr provisions, the same will	2 Rs. 0 One Hundred based on ed in this 1 be levie	red and Thirt the provisi bill due to d in your fu	y Six Only ons of inter the inter st ture bills.	state settle ate Open Acc	ements.

Mate: PAY YOUR BILL THROUGH THE SBI A/C NO.SPDCLPCBC373 OP.CIRCLE

SOUTHERN POWER DISTRIBUTION COMPANY OF TS LIMITED HT C.C. Bill for the month of January 2022, Date: 26-Jan-22 PAYABLE ON OR BEFORE dated: 09-Feb-22 DISCONNECTION DATE: 24-Feb-22

Contracted MD (KVA/HP) Specified Voltage (KV) Actual Voltage (KV) Feeder Category		Consumer No. Name ADDRESS1 ADDRESS2 ADDRESS3	PRINCIPAL VASAVI COLLI 9-5-81 IBRAH HYDERABAD 56	HIM BAGH	i
	KWH	KVAH	KVA	TOD1	TOD2
Reading On 18-JAN-22 Reading On 20-DEC-21 Difference ST:01 Multiplying Factor Total Consumption Monthly Minimim Units Main Consumption	175631.05 173496.00 2135.05 8.00 17080.00 6000.00 9902.00	182653.40	13.74 8.00 109.92 240.00 0.00	13664.15 13419.85 244.30 8.00 1954.00	30629.65 30109.10 520.55 8.00 4164.00
	RATE		'A/UNITS		MOUNT Rs.
Demand Charges Normal Demand Charges Penal Energy Charges TOD Charges Electricity Duty Colony Charges L&F Charges FSA Charges		2 0 9 6	43 902 118 902		93600.90 0.00 77235.60 6118.00 594.12 0.00 0.00
upplier Name NetKWH ***Net Meter(KWH) Deta: Closing/Opening Reading			Cust Cha	Surc ges harge harg harg harg	177547.72 1685.00 0.00 0.00 0.00 0.00 0.00 0.00
Recorded Units: 7596 Opening Balance Units Cumulative Banked Unit	:0 ts : 0	Tr	Incentive Wheeling Cha ansmission Ch Other Cha Other Char	TOD2 irges iarges irges-I	-1819.00 0 0
*********Arrears as on C.C.(Court Cases Rs. Others Rs. Total Rs.		rcharge IT	Gross T TCS U/s 206C Other Credit Net Bill Am Total Arr al Amount Pay	otal (1H) Adj. nount	172037.00 0.00 172037.00 0.00

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.

Senio Senio Counts Officer

Note: PAY YOUR BILL THROUGH THE SBI A/C NO.SPDCLPCEC373

IFSC CODE: SBIN0004266

OP.CIRCLE

<u>Vasavi College of Engineering (Autonomous), Ibrahimbagh, Hyderabad-31</u> <u>Department of Electrical & Electronics Engineering</u>

Lighting Load details

Type of Lights	Rating in Watts	No. of Fixtures	Total load in Watts
	40	1496	59840
Fluorescent lamp	5	150	750
Mercury-vapor lamp	200	2	400
	150	5	750
LED	100	21	2100
	50	31	1550
	36	14	504
	33	60	1980
	20	54	1080
	10	8	80
	10	Total	69034

Percentage of lighting load met by LED lights = 8444/69034=12.23%

HOD - EEE



<u>Vasavi College of Engineering (Autonomous), Ibrahimbagh, Hyderabad-31</u> <u>Department of Electrical & Electronics Engineering</u>

All classrooms are installed with 3600 PIR (Passive Infra-Red) motion sensors with light sensor(ceiling mounted). The sensors are used to control the fans and lights depending upon the presence/absence of people in the room. This is done with a view to conserve electricity which is the need of the hour.

These sensors have been developed by the faculty members, Department of Electrical and Electronics Engineering (EEE) of the institution.

Motion Sensor Installation Details:

	Floor	
Block Name		Classroom No.
		V-108
		V-109
		V-110
	FIRST	V-117
		V-118
		V-119
		V-209
		V-210
VISVESVARAYA BLOCK		V-211
	SECOND	V-212
		V-213
		V-214
		V-215
		V-311
	THIRD	V-312
	THIND	V-313
		V-316
J.C.BOSE BLOCK.	GROUND	J-012
	GROUND	J-007
	FIRST	J-106
	111(51	J-112
		J-206
	SECOND	J-207
		J-208
		J-215
		J-304
	THIRD	J-305
	HIND	J-306
		J-313
	FOURTH	J-419

CV RAMAN BLOCK		C-101
	FIRST	C-106
		C-107
	SECOND	C-202
	SECOND	C-207
		C-301
	THIRD	C-302/A
	THIND	C-304
		C-305
RAMANUNJAN BLOCK	FIRST	R-107
		R-201
	SECOND	R-202
		R-203
		R-204
		R-205
		R-206
		R-207
		R-208
Total		48































7.1.3.1.1 PIR SENSORS



PIR Sensor Switch



7.1.3.1SOLAR PANELS



