ENERGY & GREEN AUDIT REPORT

BALAJI INSTITUE OF TECHNOLOGY & SCIENCE

Laknepally, Narsampet, Warangal.

Submitted By

PowerTech Energy Solutions

ENERGY & GREEN AUDIT COMPLETION CERTIFICATE

This is to certify that following utility has carried out Energy & Green Audit as per guidelines laid down in The Energy Conservation Act, 2001 in the month of December 2019

Name of the society	Maheshwara Educational Society
Name of Institution	Balaji Institute of Technology and Science, Narsampet, waranagl. 506331
Details of Facilities Audited	Main engineering college buildings including laboratories, libraries, etc.
Date of Energy and Green Audit	23/12/2019
Name of Certified Energy Auditor	Mr. Swapnil Gaikwad
Certification No.	EA 20121
Validity of the Certificate	1 year

Name & Signature of Auditor

Swapnil Gaikwad

POWERTECH ENERGY SOLUTIONS

Company Facsimile

COLLEGE ENTRANCE VIEW

GOOGLE MAP


Mahbubabad - Warangal Rd
Balaji Girls Hostel
Balaji Campus Temple
Andhra Bank ATM
Warangal Narsampet Rd
Google
Balaji Institute of Technology & Science
Hostel Room
Balaji Techno School
BITS CAMPUS
ARIEL VIEW

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Sr. No	Area	Proposed Action	Expected Result	Monthly Energy Savings in kWh	Annual Reduction in t(CO_2) emission in Tons	Monthly Cost Savings in Rs	Investment in Rs.	Payback Period in Months
1	Lighting Recommendation 1	Replace the existing 45 W FTL tube lights into 20 W LED tubes	Replace the existing 45 W FTL tube lights into 20 W LED tubes • Total No. of light fittings = 698 Nos. • Total No. of Light fitting presently operated= 698 Nos. • Total No. of light fittings to be replace= 698Nos. • Present Energy Consumption = 4711 kWh • Expected Energy Consumption = 2049 kWh • Total Energy Saved per Month = 4711-2049= 2617 kWh • Total Saving = 2617 kWh • Monetary Savings = Rs.20416 • Investment = Rs.218125 • Simple Payback period = 11 Months	2617	15	20416	218125	11

2	Lighting Recommendation -2	Replace the existing DAYLIGHTS 400W lights into 100 W LED flood lights	Replace the existing 400 W FTL tube lights into 100 W LED flood lights • Total No. of light fittings = 39 Nos. • Total No. of Light fitting presently operated= 39 Nos. • Total No. of light fittings to be replace= 39Nos. • Present Energy Consumption = 1170 kWh • Expected Energy Consumption = 585 kWh • Total Energy Saved per Month = 1170-585= 585 kWh • Total Saving = 585 kWh • Monetary Savings = Rs 4563 • Investment = Rs.78000 • Simple Payback period = 18 Months	585	1.59	4563	78000	18

Executive Summary – Energy Audit

Sr. No	Area	Proposed Action	Expected Result	Monthly Energy Savings in kWh	Annual Reduction in t(CO_2) emission in Tons	Monthly Cost Savings in Rs	Investment in Rs.	Payback Period in Months
3	Fan Recommendation 1	Replace existing 80 watt conventional ceiling fans with 50 watt energy efficient fans	Replace existing 80 watt conventional ceiling fans with 50 watt energy efficient fans • Total No. of ceiling fans present = 1960 Nos. • Total No. of ceiling fans presently operated= 1960 Nos. • Total No. of ceiling fans to be replace= 1960 Nos. • Present Energy Consumption = 23520kWh • Expected Energy Consumption = 14700 kWh • Total Energy Saved per Month = 23520-14700= 8820 kWh • Total Saving = 8820 kWh • Monetary Savings = Rs.68,796 • Investment = Rs. 29,40000 • Simple Payback period = 43 Months	8820	7.4	68796	2940000	43
				3211	**29.92**	**31492**	**438810**	**13.93**

Executive Summary – Green Audit

Sr.No	Area	Observations	Remark
1	Tree Plantation	College has carried out tree plantation activity. Several type of trees has been planted by students and staffs as a Haritha haram program initiated by govt. of Telangana.	Good initiative taken by college toward green campus
2	Use of renewable energy – Solar PV system for power generation	Solar PV system of 290 kW has been installed by college to generate the electricity from solar energy. It helps to reduce 450 tons of CO2 emission annually	Good initiative taken by college towards use of renewable energy
3	Liquid Waste Management	At present, no any waste disposal system to reuse the waste water. Also no any standard operating procedure to dispose the chemicals used in laboratories	Sewage treatment plant can be installed in future to reuse the flushed water. Refer the guidelines mentioned in report for disposal of laboratory chemicals
4	E waste Management	At present, E -waste generated by college is sent to their Head office	College shall ensure that e-waste generated by them is channelised through collection centre or dealer of authorised producer or dismantler or recycler
5	Rain Water Harvesting	At present, rain water harvesting system is not available in the college campus. College has planned to make the system in coming months	Rain water harvesting system will help to make the water available in summer seasons Also same water can be used for gardening purpose
6	Plastic and Paper free campus	Till date, college has not issued any notification for plastic free and paper free campus. However staff and students are taking initiatives to reduce the use of plastic and papers in college campus	Management should make policy to avoid the use of plastic and paper wherever possible and publish to the student's staffs, etc.

Acknowledgement

We extends gratitude to Balaji Institute of Technology and Science for extending us the opportunity to conduct the Energy & Green Audit.

We are thankful to the professors & supporting staff of the college for their transparency & consistent support in sharing relevant information and for providing data about policies and projects along with their other valuable information. This report would have not been possible without their support.

The study team would like to acknowledge the following distinguished personnel's of Balaji Institute of Technology ans Science in person for the diligent involvement and cooperation.

Prof. Dr. V. S.Hariharan	**Principal**
Dr.P.Arul Kumar	**Head of Dept., EEE Dept.**
Mr.S.Mallikarjun Reddy	**Asst. Professor, EEE Dept.**
Mr. S.Sridhar	**Asst. Professor, EEE Dept.**

About College

Balaji Institute of Technology & Science is the one of the best Engineering college in warangal district, popularly known as BITS, was established by Maheshwara Educational Society in 2001 at Laknepally Village near Narsampet beside Warangal-Narsampet Main Road in an area of 35 acres with an in take of 180. The place is well connected by road and train and is only 20 minutes drive from Warangal. Presently the college offers B.Tech courses in EEE, ME, ECE, CIVIL & CSE with an intake of 660 besides MBA with an intake of 60. College offers M.Tech Courses in CSE(36), SE(18), DSCE(18), ES(18) & EPS(36) & CAD/CAM(18). College also offers Diploma (II Shift) Courses in DEE(60) and DME(60).

BITS has been consistent to maintain excellence in the academic standards since its inception. Discipline is hallmark of BITS. Learning is an enjoyable experience here, with experienced faculty, inspiring libraries and large playgrounds and state-of-the-art labs. The management has constructed magnificent buildings on the campus surrounded by serene and natural surrounding with plenty of greenery. All the laboratories are established with sophisticated and modern equipment.

The State-of-the-art facilities are provided in the institution to meet the Academic requirements of Staff & Students. Student's Welfare, Academic Growth, their Placements and overall Personality Development is the Motto. Round the Clock Security, ATM, Departmental Stores and Canteen are some of the facilities available in the Campus.

Mission

- To strive hard to produce technically trained human resources to serve the present and future global needs by providing quality education
- To provide value based training in technological advancements and employment opportunities to students by strengthening institute’s interaction with industries.
- To disseminate knowledge of need based technical education, innovative learning and research & development with holistic approach.

Vision

- To be a centre for excellence in preparing the graduates professionally committed, intellectually adept and ethically balanced with high standards by imparting quality education with international standards to excel in their career to meet the challenges of the modern world and adapt to the technologically changing environment.

Energy Audit

An energy audit is an inspection, survey and analysis of energy flows, for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s). In commercial and industrial real estate, an energy audit is the first step in identifying opportunities to reduce energy expense and carbon footprints.

Electricity Bill Analysis

At present, one electricity meter is there for all campus

Bill analysis for consumer number SC. No. WLR036/WGL199 shown below

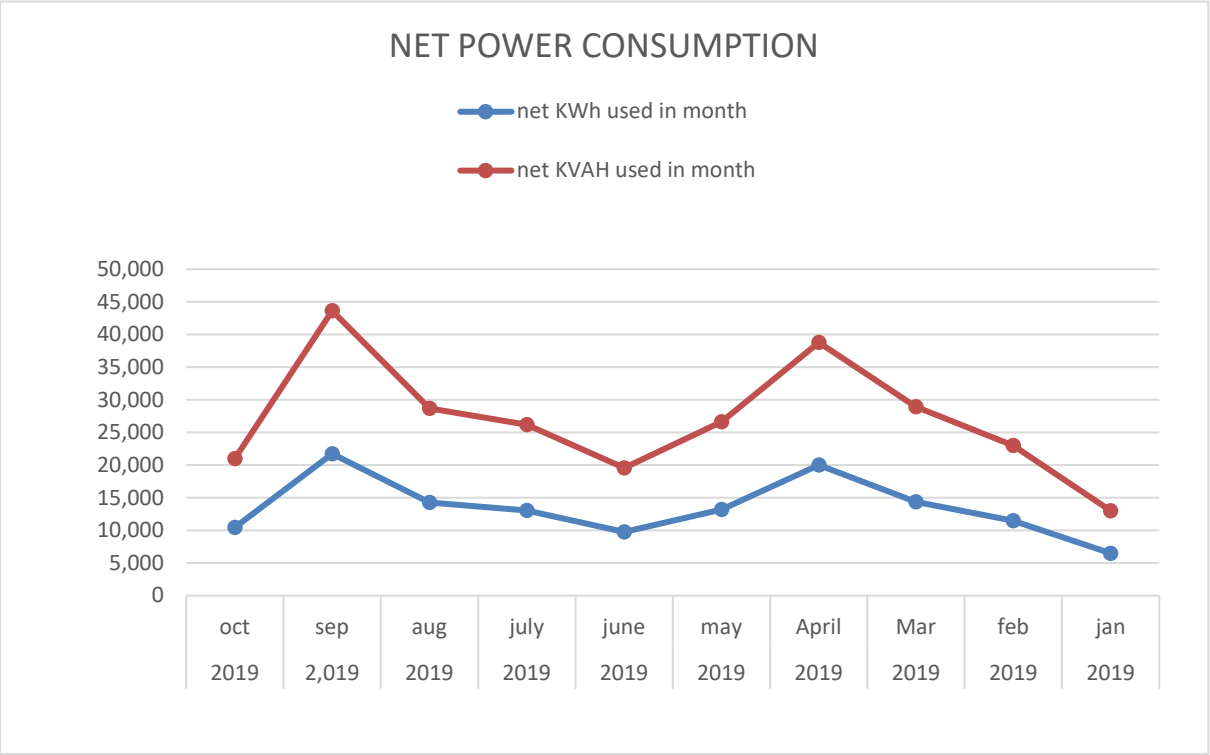
ELECTRICAL BILL-Balaji Institute of Technology and Science, Narsampet

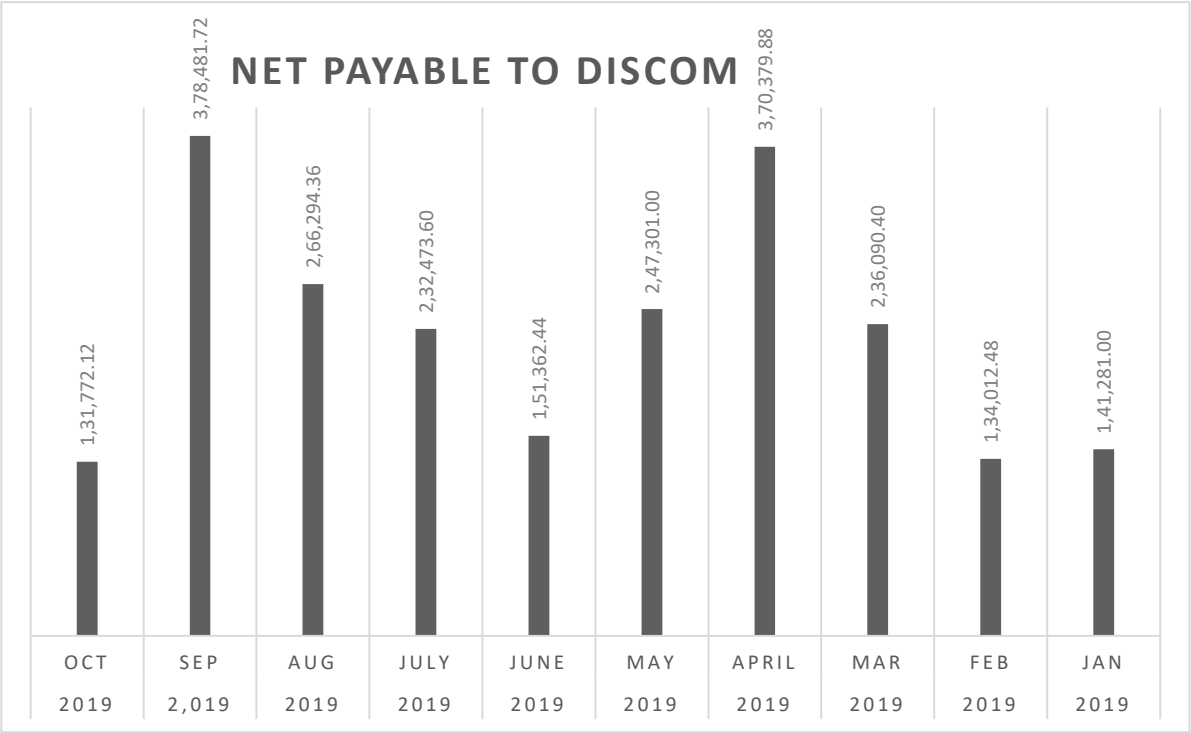
2019 Year 300 KVA Load

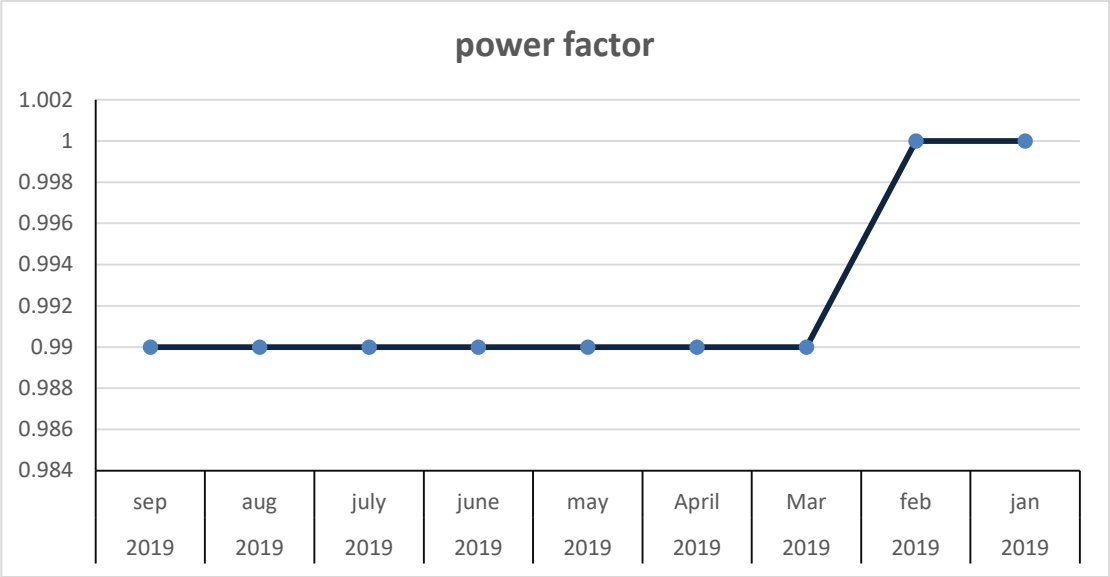
year	Month	Gross KWh used in month	Gross KVAH used in month	pf	Demand charges per KVA	Total demand KVA	Energy charges for units consumed	total energy in KVAH	energy charges KWH	gross energy charges KVAH	Gross total payable	solar KWh generated	solar @ per KWh	amount saved by solar	Net Payable to DISCOM
2019	OCT	20,918	21,052	0.99	390.00	234.40	7.80	21,052.00	91,416.00	1,64,205.60	2,57,211.72	16082	7.80	1,25,439.60	1,31,772.12
2,019	SEP	43,450	43,792	0.99	390.00	234.40	7.80	43,792.00	91,416.00	3,41,577.60	4,33,612.12	7068	7.80	55,130.40	3,78,481.72
2019	AUG	28,590	28,776	0.99	390.00	234.40	7.80	28,776.00	91,416.00	2,24,452.80	3,16,360.36	6570	7.80	51,246.00	2,66,294.36
2019	JULY	26,138	26,270	0.99	390.00	234.40	7.80	26,270.00	91,416.00	2,04,906.00	3,01,987.20	8912	7.80	69,513.60	2,32,473.60
2019	JUNE	19,520	19,564	0.99	390.00	234.40	7.80	19,564.00	91,416.00	1,52,599.20	2,48,332.04	12432	7.80	96,969.60	1,51,362.44
2019	MAY	26,370	26,888	0.99	390.00	234.40	7.80	35,000.00	91,416.00	2,73,000.00	3,68,201.00	15500	7.80	1,20,900.00	2,47,301.00
2019	APRIL	40,000	37,598	0.99	390.00	234.40	7.80	37,598.00	91,416.00	2,93,264.40	3,89,171.28	7168	7.80	55,910.40	3,70,379.88
2019	MAR	28,784	29,050	0.99	390.00	234.40	7.80	29,050.00	91,416.00	2,26,590.00	3,21,984.00	11012	7.80	85,893.60	2,36,090.40
2019	FEB	23,000	23,018	1.00	390.00	234.40	7.80	23,018.00	91,416.00	1,79,540.40	2,74,022.48	17950	7.80	1,40,010.00	1,34,012.48
2019	JAN	12,988	13,016	1.00	390.00	234.40	7.80	23,000.00	91,416.00	1,79,400.00	2,73,881.00	17000	7.80	1,32,600.00	1,41,281.00

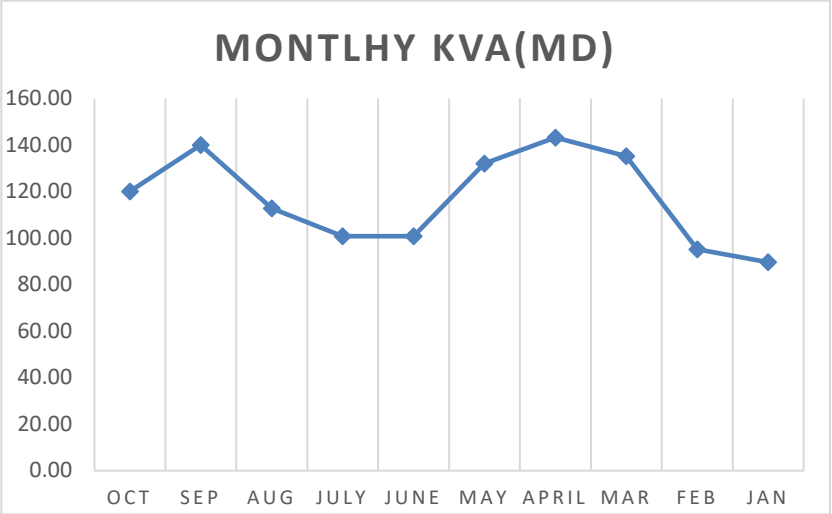
NET ENERGY CONSUMPTION

Year	Month	Net KWh used in month	Net KVAH used in month
2019	**oct**	**10,459**	**10,526**
2,019	**sep**	**21,725**	**21,896**
2019	**aug**	**14,295**	**14,388**
2019	**july**	**13,069**	**13,135**
2019	**june**	**9,760**	**9,782**
2019	**may**	**13,185**	**13,444**
2019	**April**	**20,000**	**18,799**
2019	Mar	**14,392**	**14,525**
2019	feb	**11,500**	**11,509**
2019	jan	**6,494**	**6,508**




NET PAYABLE TO DISCOM
1,31,772.12
3,78,481.72
2,66,294.36
2,32,473.60
1,51,362.44
2,47,301.00
3,70,379.88
2,36,090.40
1,34,012.48
1,41,281.00
OCT 2019
SEP 2,019
AUG 2019
JULY 2019
JUNE 2019
MAY 2019
APRIL 2019
MAR 2019
FEB 2019
JAN 2019


power factor
1.002
1
0.998
0.996
0.994
0.992
0.99
0.988
0.986
0.984
sep 2019
aug 2019
july 2019
june 2019
may 2019
April 2019
Mar 2019
feb 2019
jan 2019



Observations

- Monthly average energy consumption is 26975 kWh
- Monthly average maximum demand is 115 kVA
- Monthly average power factor is 0.99 which is close to unity.
- Monthly average electricity bill is Rs.215000/-
- Avg. unit rate is 7.80 Rs./kWh

BALAJI INSTITUTE OF TECHNOLOGY AND SCIENCE
Narsampet, warangal

CSE BLOCK

ROOM	Details	Total Qty	on	off	Wattage	Load in KW	Daily Op Hr	Monthly Op Hr	Daily KWh	Monthly Kwh	LED lighting	Fluroscent tube/CFL	Total lighting Requirement
101 D	Fan	26	26	0	80	2.08	6	150	12.48	312			0
	CFL	54	54	0	18	0.972	6	150	5.832	145.8		145.8	145.8
	AC	2	2	0	2000	4	6	150	24	600		0	0
	CC	2	2	0	2	0.004	6	150	0.024	0.6			0
	Computer	120	120	0	50	6	6	150	36	900			0
102 D	Fan	4	4	0	80	0.32	6	150	1.92	48			0
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15		15	15
	AC	1	1	0	2000	2	6	150	12	300			0
	Computer	3	3	0	50	0.15	6	150	0.9	22.5			0
103 D	Fan	10	10	0	80	0.8	6	150	4.8	120			0
	LED Tube Light	4	4	0	20	0.08	6	150	0.48	12	12		12
	Fluroscent Tube	26	26	0	50	1.3	6	150	7.8	195		195	195
	AC	3	3	0	2000	6	6	150	36	900			0
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Computer	44	44	0	50	2.2	6	150	13.2	330			0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9			0
201 D	Fan	4	4	0	80	0.32	6	150	1.92	48			0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9			0

	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fan	7	7	0	80	0.56	6	150	3.36	84			0
202 D	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15		15	15
	AC	1	1	0	2000	2	6	150	12	300			0
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Projector	1	1	0	100	0.1	6	150	0.6	15			0
	Fan	7	7	0	80	0.56	6	150	3.36	84			0
203 D	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15		15	15
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Fan	7	7	0	80	0.56	6	150	3.36	84			0
204 D	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15		15	15
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Fan	7	7	0	80	0.56	6	150	3.36	84			0
205 D	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15		15	15
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Fan	13	13	0	80	1.04	6	150	6.24	156			0
206 D	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5		22.5	22.5
	AC	2	2	0	2000	4	6	150	24	600			0
	Computer	60	60	0	50	3	6	150	18	450			0
	Fan	2	2	0	80	0.16	6	150	0.96	24			0
207 D	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	Fan	5	5	0	80	0.4	6	150	2.4	60			0
208 D	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5		22.5	22.5
	Computer	33	33	0	50	1.65	6	150	9.9	247.5			0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9			0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	3		3
	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5		22.5	22.5
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
301 D	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5

	Fan	6	6	0	80	0.48	6	150	2.88	72			0
302 D	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Fan	7	7	0	80	0.56	6	150	3.36	84			0
303 D	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Projector	1	1	0	100	0.1	6	150	0.6	15			0
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
304 D	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Fan	31	31	0	80	2.48	6	150	14.88	372			0
305 D	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9			0
	LED Tube Light	52	52	0	20	1.04	6	150	6.24	156	156		156
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15		15	15
	AC	8	8	0	2000	16	6	150	96	2400			0
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Computer	120	120	0	50	6	6	150	36	900			0
	Fan	3	3	0	80	0.24	6	150	1.44	36			0
306 D	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9		9
	Computer	3	3	0	50	0.15	6	150	0.9	22.5			0
	Fan	3	3	0	80	0.24	6	150	1.44	36			0
307 D	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	fridge	1	1	0	200	0.2	6	150	1.2	30			0
Corridor	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9			0
	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5		22.5	22.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
401 D	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5

	Fan	6	6	0	80	0.48	6	150	2.88	72			0
402 D	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
403 D	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Fan	4	4	0	80	0.32	6	150	1.92	48			0
404 D	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5		22.5	22.5
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
405 D	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
406 D	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
	Fan	12	12	0	80	0.96	6	150	5.76	144			0
408 D	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15		15	15
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9			0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9		9
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
Total						**75.796**	**624**	**15600**	**454.776**	**11369.4**	**228**	**640.8**	**868.8**

ECE BLOCK

NAME OF ROOM	Details	Total Qty	on	off	Wattage	Load in KW	Daily Op Hr	Monthly Op Hr	Daily KWh	Monthly Kwh	Room Kwh	LED lighting	Fluroscent tube/CFL	Total lighting Requirement
OFFICE	Fan	**5**	**5**	**0**	**80**	0.4	6	150	2.4	**60**				0
	LED Tube Light	4	4	0	20	0.08	7	175	0.56	**14**		14		14
	Fluroscent Tube	12	12	0	50	0.6	8	200	4.8	**120**			120	120
	CFL	8	8	0	18	0.144	9	225	1.296	**32.4**			32.4	32.4
	AC	2	2	0	2000	4	10	250	40	**1000**				0
	CC	3	3	0	2	0.006	11	275	0.066	**1.65**				0
	Computer	8	8	0	50	0.4	12	300	4.8	**120**				0
	printers	2	2	0	50	0.1	13	325	1.3	**32.5**				0
	LED Tube Light	2	2	0	20	0.04	14	350	0.56	**14**		14		14
	AC	1	1	0	2000	2	15	375	30	**750**				0
	CC	1	1	0	2	0.002	16	400	0.032	**0.8**				0
103 B	Fan	1	1	0	80	0.08	17	425	1.36	**34**				0
	Fluroscent Tube	1	1	0	50	0.05	18	450	0.9	**22.5**			22.5	22.5
	Fluroscent Tube	1	1	0	50	0.05	19	475	0.95	**23.75**			23.75	23.75
	CFL	8	8	0	18	0.144	20	500	2.88	**72**			72	72
	AC	1	1	0	2000	2	21	525	42	**1050**				0
	CC	1	1	0	2	0.002	22	550	0.044	**1.1**				0
	Computer	1	1	0	50	0.05	23	575	1.15	**28.75**				0
	printers	1	1	0	50	0.05	24	600	1.2	**30**				0
CC Tv Room	Fan	1	1	0	80	0.08	25	625	2	**50**				0

	monitor	1	1	0	80	0.08	26	650	2.08	**52**				0
	CFL	2	2	0	18	0.036	27	675	0.972	**24.3**			24.3	24.3
	CC	1	1	0	2	0.002	28	700	0.056	**1.4**				0
	Computer	1	1	0	50	0.05	29	725	1.45	**36.25**				0
106 B	Fan	12	12	0	80	0.96	30	750	28.8	**720**				0
	LED Tube Light	4	4	0	20	0.08	31	775	2.48	**62**		62		62
	AC	6	6	0	2000	12	32	800	384	**9600**				0
	Computer	7	7	0	50	0.35	33	825	11.55	**288.75**				0
	printers	2	2	0	50	0.1	34	850	3.4	**85**				0
Corridor	Fan	1	1	0	80	0.08	35	875	2.8	**70**				0
	LED Tube Light	2	2	0	20	0.04	36	900	1.44	**36**		36		36
	Fluroscent Tube	4	4	0	50	0.2	37	925	7.4	**185**			185	185
	CC	3	3	0	2	0.006	38	950	0.228	**5.7**				0
	fridge	1	1	0	200	0.2	39	975	7.8	**195**				0
201 B	Fan	2	2	0	80	0.16	40	1000	6.4	**160**				0
	LED Tube Light	2	2	0	20	0.04	41	1025	1.64	**41**		41		41
202 B	Fan	4	4	0	80	0.32	42	1050	13.44	**336**				0
	Fluroscent Tube	2	2	0	50	0.1	43	1075	4.3	**107.5**			107.5	107.5
203 B	Fan	4	4	0	80	0.32	44	1100	14.08	**352**				0
	Fluroscent Tube	2	2	0	50	0.1	45	1125	4.5	**112.5**			112.5	112.5
204 B	Fan	3	3	0	80	0.24	46	1150	11.04	**276**				0
	LED Tube Light	1	1	0	20	0.02	47	1175	0.94	**23.5**		23.5		23.5
	Fluroscent Tube	3	3	0	50	0.15	48	1200	7.2	**180**			180	180

205 B	Fan	3	3	0	80	0.24	49	1225	11.76	**294**				0
	LED Tube Light	2	2	0	20	0.04	50	1250	2	**50**		50		50
206 B	Fan	4	4	0	80	0.32	51	1275	16.32	**408**				0
	LED Tube Light	4	4	0	20	0.08	52	1300	4.16	**104**		104		104
	CC	1	1	0	2	0.002	53	1325	0.106	**2.65**				0
	Computer	6	6	0	50	0.3	54	1350	16.2	**405**				0
	printers	4	4	0	50	0.2	55	1375	11	**275**				0
207 B	Fan	4	4	0	80	0.32	56	1400	17.92	**448**				0
	Fluroscent Tube	2	2	0	50	0.1	57	1425	5.7	**142.5**			142.5	142.5
	CC	1	1	0	2	0.002	58	1450	0.116	**2.9**				0
	Projector	1	1	0	100	0.1	59	1475	5.9	**147.5**				0
208 B	Fan	4	4	0	80	0.32	60	1500	19.2	**480**				0
	Fluroscent Tube	2	2	0	50	0.1	61	1525	6.1	**152.5**			152.5	152.5
	CC	1	1	0	2	0.002	62	1550	0.124	**3.1**				0
Corridor	Fan	1	1	0	80	0.08	63	1575	5.04	**126**				0
	Fluroscent Tube	3	3	0	50	0.15	64	1600	9.6	**240**			240	240
	CC	1	1	0	2	0.002	65	1625	0.13	**3.25**				0
301 B	Fan	8	8	0	80	0.64	66	1650	42.24	**1056**				0
	Fluroscent Tube	6	6	0	50	0.3	67	1675	20.1	**502.5**			502.5	502.5
302 B	Fan	4	4	0	80	0.32	68	1700	21.76	**544**				0
	LED Tube Light	2	2	0	20	0.04	69	1725	2.76	**69**		69		69
303 B	Fan	4	4	0	80	0.32	70	1750	22.4	**560**				0
	Fluroscent Tube	3	3	0	50	0.15	71	1775	10.65	**266.25**			266.25	266.25

304 B	Fan	3	3	0	80	0.24	72	1800	17.28	**432**				0
	LED Tube Light	2	2	0	20	0.04	73	1825	2.92	**73**		73		73
305 B	Fan	10	10	0	80	0.8	74	1850	59.2	**1480**				0
	Fluroscent Tube	20	20	0	50	1	75	1875	75	**1875**			1875	1875
	AC	4	4	0	2000	8	76	1900	608	**15200**				0
	Computer	67	67	0	50	3.35	77	1925	257.95	**6448.8**				0
306 B	Fan	8	8	0	80	0.64	78	1950	49.92	**1248**				0
	Fluroscent Tube	25	25	0	50	1.25	79	1975	98.75	**2468.8**			2468.75	2468.75
	CC	3	3	0	2	0.006	80	2000	0.48	**12**				0
	Computer	58	58	0	50	2.9	81	2025	234.9	**5872.5**				0
	Fluroscent Tube	3	3	0	50	0.15	82	2050	12.3	**307.5**			307.5	307.5
	CC	1	1	0	2	0.002	83	2075	0.166	**4.15**				0
401 B	Fan	4	4	0	80	0.32	84	2100	26.88	**672**				0
	Fluroscent Tube	3	3	0	50	0.15	85	2125	12.75	**318.75**			318.75	318.75
402 B	Fan	4	4	0	80	0.32	86	2150	27.52	**688**				0
	LED Tube Light	1	1	0	20	0.02	87	2175	1.74	**43.5**		43.5		43.5
	Fluroscent Tube	1	1	0	50	0.05	88	2200	4.4	**110**			110	110
403 B	Fan	5	5	0	80	0.4	89	2225	35.6	**890**				0
	LED Tube Light	2	2	0	20	0.04	90	2250	3.6	**90**		90		90
404 B	Fan	4	4	0	80	0.32	91	2275	29.12	**728**				0
	Fluroscent Tube	4	4	0	50	0.2	92	2300	18.4	**460**			460	460
405 B	Fan	4	4	0	80	0.32	93	2325	29.76	**744**				0

	Fluroscent Tube	2	2	0	50	0.1	94	2350	9.4	**235**			235	235
	Exhaust Fan	1	1	0	50	0.05	95	2375	4.75	**118.75**				0
	LED Tube Light	1	1	0	20	0.02	96	2400	1.92	**48**		48		48
	Fluroscent Tube	2	2	0	50	0.1	97	2425	9.7	**242.5**			242.5	242.5
	CC	1	1	0	2	0.002	98	2450	0.196	**4.9**				0
406 B	Fan	8	8	0	80	0.64	99	2475	63.36	**1584**				0
	Fluroscent Tube	8	8	0	50	0.4	100	2500	40	**1000**			1000	1000
Total						**51.87**	**5035**	**125875**	**2643.5**	**66089**		**668**	**9201.2**	**9869.2**

MBA BLOCK/BOYS HOSTEL

NAME OF ROOM	Details	Total Qty	on	off	Wattage	Load in KW	Daily Op Hr	Monthly Op Hr	Daily KWh	Monthly Kwh	LED lighting	Fluroscent tube/CFL	Total lighting Requirement
101	**Fan**	9	9	0	80	0.72	6	150	4.32	108			0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9		9
102	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
103	**Fan**	9	9	0	80	0.72	6	150	4.32	108			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
104	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
106	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
201	**Fan**	9	9	0	80	0.72	6	150	4.32	108			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
202	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
203	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0

	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
204	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
205	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
206	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
207	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
208	**Fan**	9	9	0	80	0.72	6	150	4.32	108			0
	LED Tube Light	4	4	0	20	0.08	6	150	0.48	12	12		12
301	**Fan**	9	9	0	80	0.72	6	150	4.32	108			0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9		9
302	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
303	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
304	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
305	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
306	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0

	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
307	**Fan**	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
308	**Fan**	9	9	0	80	0.72	6	150	4.32	108			0
	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5		22.5	22.5
Corridor	**fridge**	1	1	0	200	0.2	6	150	1.2	30			0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9			0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9		9
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
Ground (Dormitary)	**Fan**	12	12	0	80	0.96	6	150	5.76	144			0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9		9
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
Computer Lab	**Fan**	12	12	0	80	0.96	6	150	5.76	144			0
	Fluroscent Tube	8	8	0	50	0.4	6	150	2.4	60		60	60
	Computer	60	60	0	50	3	6	150	18	450			0
Corridor	**fridge**	1	1	0	200	0.2	6	150	1.2	30			0
	Exhaust Fan	2	2	0	60	0.12	6	150	0.72	18			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fluroscent Tube	4	4	0	50	0.2	6	150	1.2	30		30	30
	CC	2	2	0	2	0.004	6	150	0.024	0.6			0
Mess	**Fan**	11	11	0	80	0.88	6	150	5.28	132			0

	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fluroscent Tube	4	4	0	50	0.2	6	150	1.2	30		30	30
MBA Library	**Fan**	12	12	0	80	0.96	6	150	5.76	144			0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9		9
	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5		22.5	22.5
	Computer	4	4	0	50	0.2	6	150	1.2	30			0
Corridor	**Fan**	1	1	0	80	0.08	6	150	0.48	12			0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9			0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9		9
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3			0
MBA office	**Fan**	9	9	0	80	0.72	6	150	4.32	108			0
	LED Tube Light	6	6	0	20	0.12	6	150	0.72	18	18		18
	Computer	5	5	0	50	0.25	6	150	1.5	37.5			0
						22.798				**3419.7**	**198**	**195**	**393**

ENGINEERING GIRLS HOSTEL

NAME OF ROOM	**Details**	**Total Qty**	**on**	**off**	**Wattage**	**Load in KW**	**Daily Op Hr**	**Monthly Op Hr**	**Daily KWh**	**Monthly Kwh**	**LED lighting**	**Fluroscent tube/CFL**	Total lighting Requirement

301	**Fan**	**6**	**6**	**0**	**80**	0.48	6	150	2.88	72	0.48	0.48	0.96
	Exhaust Fan	**1**	**1**	**0**	**60**	0.06	6	150	0.36	9		15	15
	Fluroscent Tube	**2**	**2**	**0**	**50**	0.1	6	150	0.6	15		0.1	0.1
302	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24		7.5	7.5
	Exhaust Fan	**1**	**1**	**0**	**60**	0.06	6	150	0.36	9		30	30
	Fluroscent Tube	**2**	**2**	**0**	**50**	0.1	6	150	0.6	15		0.1	0.1
303	**Fan**	**6**	**6**	**0**	**80**	0.48	6	150	2.88	72		7.5	7.5
	Fluroscent Tube	**1**	**1**	**0**	**50**	0.05	6	150	0.3	7.5		0.05	0.05
Seminar Hall	**Fan**	**36**	**36**	**0**	**80**	2.88	6	150	17.28	432		7.5	7.5
	Fluroscent Tube	**4**	**4**	**0**	**50**	0.2	6	150	1.2	30		0.2	0.2
1	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
2	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
3	**Fan**	**3**	**3**	**0**	**80**	0.24	6	150	1.44	36			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
4	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
5	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
6	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0

	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
	Fluroscent Tube	**1**	**1**	**0**	**50**	0.05	6	150	0.3	7.5		0.05	0.05
7	**Fan**	**3**	**3**	**0**	**80**	0.24	6	150	1.44	36			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
8	**Fan**	**3**	**3**	**0**	**80**	0.24	6	150	1.44	36			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
9	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
10	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
11	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
12	**Fan**	**3**	**3**	**0**	**80**	0.24	6	150	1.44	36			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
13	**Fan**	**3**	**3**	**0**	**80**	0.24	6	150	1.44	36			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
14	**Fan**	**3**	**3**	**0**	**80**	0.24	6	150	1.44	36			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
15	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
16	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0

	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
17	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
18	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
19	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	Fluroscent Tube	**1**	**1**	**0**	**50**	0.05	6	150	0.3	7.5		0.05	0.05
Dyning Hall	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	Fluroscent Tube	**1**	**1**	**0**	**50**	0.05	6	150	0.3	7.5		0.05	0.05
	CC	**2**	**2**	**0**	**2**	0.004	6	150	0.024	0.6			0
Seminar Hall	**Fan**	**17**	**17**	**0**	**80**	1.36	6	150	8.16	204			0
	LED Tube Light	**7**	**7**	**0**	**20**	0.14	6	150	0.84	21	0.14		0.14
Office Room	**Fan**	**4**	**4**	**0**	**80**	0.32	6	150	1.92	48			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
	Fluroscent Tube	**1**	**1**	**0**	**50**	0.05	6	150	0.3	7.5		0.05	0.05
Dyning Hall	**Fan**	**3**	**3**	**0**	**80**	0.24	6	150	1.44	36			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
	Fluroscent Tube	**1**	**1**	**0**	**50**	0.05	6	150	0.3	7.5		0.05	0.05
1st Floor	**Fan**	**5**	**5**	**0**	**80**	0.4	6	150	2.4	60			0
	Fluroscent Tube	**2**	**2**	**0**	**50**	0.1	6	150	0.6	15		0.1	0.1
	Led Bulb	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02

Dyning Hall	**Fan**	**4**	**4**	**0**	**80**	0.32	6	150	1.92	48			0
	LED Tube Light	**2**	**2**	**0**	**20**	0.04	6	150	0.24	6	0.04		0.04
SICK room	**Fan**	**2**	**2**	**0**	**80**	0.16	6	150	0.96	24			0
	Fluroscent Tube	**1**	**1**	**0**	**50**	0.05	6	150	0.3	7.5		0.05	0.05
1st floor Seminar Hall	**Fan**	**17**	**17**	**0**	**80**	1.36	6	150	8.16	204			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
Reception	**Fan**	**3**	**3**	**0**	**80**	0.24	6	150	1.44	36			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02
	Fluroscent Tube	**1**	**1**	**0**	**50**	0.05	6	150	0.3	7.5		0.05	0.05
	CC	**1**	**1**	**0**	**2**	0.002	6	150	0.012	0.3			0
	LED Tube Light	**2**	**2**	**0**	**20**	0.04	6	150	0.24	6	0.04		0.04
	Fluroscent Tube	**2**	**2**	**0**	**50**	0.1	6	150	0.6	15		0.1	0.1
	LED Tube Light	**2**	**2**	**0**	**20**	0.04	6	150	0.24	6	0.04		0.04
	Fluroscent Tube	**2**	**2**	**0**	**50**	0.1	6	150	0.6	15		0.1	0.1
	LED Tube Light	**2**	**2**	**0**	**20**	0.04	6	150	0.24	6	0.04		0.04
	Fluroscent Tube	**2**	**2**	**0**	**50**	0.1	6	150	0.6	15		0.1	0.1
Mess	**fridge**	**2**	**2**	**0**	**200**	0.4	6	150	2.4	60			0
	LED Tube Light	**1**	**1**	**0**	**20**	0.02	6	150	0.12	3	0.02		0.02

	Fluroscent Tube	**2**	**2**	**0**	**50**	0.1	6	150	0.6	15		0.1	0.1
Rice Room	**Fan**	**1**	**1**	**0**	**80**	0.08	6	150	0.48	12			0
	LED Tube Light	**2**	**2**	**0**	**20**	0.04	6	150	0.24	6	0.04		0.04
TOTAL						**14.8**				**2221**	**1.26**	**69.28**	**70.54**

BITS CAMPUS

Room no	Details	**Total Qty**	**on**	**off**	**Wattage**	**Load in KWh**	**Daily Op Hr**	**Monthly Op Hr**	**Daily KWh**	**Monthly Kwh**	**LED lighting**	**Fluroscent tube/CFL**	**Daylight**	Total lighting Requirement
gate	day lights	2	2	0	400	0.8	6	150	6.8	120			120	120
	CC	2	2	0	2	0.004	6	150	6.004	0.6				0
watch man room	LED tube light	2	2	0	20	0.04	6	150	6.04	6	6			6
	fan	1	1	0	80	0.08	6	150	6.08	12				0
Temple	LED tube light	3	3	0	20	0.06	6	150	6.06	9	9			9
	Fluroscent tube	1	1	0	50	0.05	6	150	6.05	7.5		7.5		7.5
	CC	1	1	0	2	0.002	6	150	6.002	0.3				0
	Fans	2	2	0	80	0.16	6	150	6.16	24				0
near inter block	day lights	5	5	0	400	2	6	150	8	300			300	300
	Fluroscent tube	2	2	0	50	0.1	6	150	6.1	15		15		15
	LED tube light	2	2	0	20	0.04	6	150	6.04	6	6			6
Hostel Watchmen Room	Fluroscent tube	2	2	0	50	0.1	6	150	6.1	15		15		15
	CC	1	1	0	2	0.002	6	150	6.002	0.3				0
Girls Campus	day lights	2	2	0	400	0.8	6	150	6.8	120			120	120
	Fluroscent tube	1	1	0	50	0.05	6	150	6.05	7.5		7.5		7.5
Generator room	LED tube light	2	2	0	20	0.04	6	150	6.04	6	6			6
	Fans	4	4	0	80	0.32	6	150	6.32	48				0
School watch	led tube light	1	1	0	20	0.02	6	150	6.02	3	3			3
	day lights	1	1	0	400	0.4	6	150	6.4	60			60	60

man room	CC	1	1	0	2	0.002	6	150	6.002	0.3				0
water plant	Fluroscent tube	3	3	0	50	0.15	6	150	6.15	22.5		22.5		22.5
	fan	1	1	0	80	0.08	6	150	6.08	12				0
inter circle	day lights	9	9	0	400	3.6	6	150	9.6	540			540	540
circle to CSE block	day lights	9	9	0	400	3.6	6	150	9.6	540			540	540
main block to circle	day lights	9	9	0	400	3.6	6	150	9.6	540			540	540
	flood light	4	4	0	400	1.6	6	150	7.6	240			240	240
	mic set	6	6	0	50	0.3	6	150	6.3	45				0
Electrical Machines	LED tube light	4	4	0	20	0.08	6	150	6.08	12	12			12
	fluroscent tube	3	3	0	50	0.15	6	150	6.15	22.5		22.5		22.5
	fans	5	5	0	80	0.4	6	150	6.4	60				0
	DC machines	5	5	0	3725	18.625	6	150	24.625	2793.75				0
	DC machines	4	4	0	2000	8	6	150	14	1200				0
	DC machines	3	3	0	3500	10.5	6	150	16.5	1575				0
	3 phase alternator	1	1	0	3500	3.5	6	150	9.5	525				0
	Synchronous machine	1	1	0	3725	3.725	6	150	9.725	558.75				0
	3 phase squirrel cage	2	2	0	3700	7.4	6	150	13.4	1110				0
	3 phase slip ringIM	1	1	0	3725	3.725	6	150	9.725	558.75				0
	1 phase slip ring IM	1	1	0	400	0.4	6	150	6.4	60				0
	2 phase slip ring IM	1	1	0	400	0.4	6	150	6.4	60				0

	led tube lights	3	3	0	20	0.06	6	150	6.06	9	9			9
	fluroscent tube	2	2	0	50	0.1	6	150	6.1	15		15		15
	fans	14	14	0	80	1.12	6	150	7.12	168				0
	SPOT WELDING			0	500	0	6	150	6	0				0
	INJECTION MOULDING			0	500	0	6	150	6	0				0
	BLOW MOULDING			0	500	0	6	150	6	0				0
	WATER PLASMA CUTTING			0	500	0	6	150	6	0				0
MECHANICAL WORKSHOP	TIG WELDING MACHINES			0	500	0	6	150	6	0				0
	PLASMA WELDING MACHINE			0	500	0	6	150	6	0				0
	PLASMA CUTTING MACHINE			0	500	0	6	150	6	0				0
	POWER HACKSA MACHINE			0	500	0	6	150	6	0				0
	PORTABLE DRILLER MACHINE			0	500	0	6	150	6	0				0
	WOOD TURNING MACHINE			0	500	0	6	150	6	0				0
	PEDESTAL GRINDING MACHINE			0	500	0	6	150	6	0				0

	ARC, GAS WELDING MACHINE			0	500	0	6	150	6	0				0
METROLOGY MACHINES LAB	LED tube light	2	2	0	20	0.04	6	150	6.04	6	6			6
	Day light	2	2	0	400	0.8	6	150	6.8	120			120	120
	fluroscent	2	2	0	50	0.1	6	150	6.1	15		15		15
	fans	5	5	0	80	0.4	6	150	6.4	60				0
	PLANNER MACHINES			0	600	0	6	150	6	0				0
	MILLING MACHINE			0	600	0	6	150	6	0				0
	SHARPING MACHINE			0	600	0	6	150	6	0				0
	SLOTTING MACHINE			0	600	0	6	150	6	0				0
	RADIAL DRILLING MACHINE			0	600	0	6	150	6	0				0
	SURFACE GRINDING MACHINE			0	600	0	6	150	6	0				0
	TOOL & CUTTING GRINDING MACHINE			0	600	0	6	150	6	0				0
	LATHE MACHINE			0	600	0	6	150	6	0				0
	CYLINDRICAL GRINDING MACHINE			0	600	0	6	150	6	0				0

STORE ROOM	fluroscent tube	3	3	0	50	0.15	6	150	6.15	22.5		22.5		22.5
□	fans	4	4	0	80	0.32	6	150	6.32	48				0
THERMAL ENGINEERING LAB	LED	2	2	0	20	0.04	6	150	6.04	6	6			6
	fluroscent	2	2	0	50	0.1	6	150	6.1	15		15		15
	fans	6	6	0	80	0.48	6	150	6.48	72				0
	AIR COMPRESSOR TEST TIG MACHINE			0	500	0	6	150	6	0				0
	4 STROKE 1 CYLINDER PETROL ENGINE			0	500	0	6	150	6	0				0
	4 STROKE 1 CY DES. EN.			0	500	0	6	150	6	0				0
	4 STROKE 4 CY PET ENG			0	500	0	6	150	6	0				0
	2 STROKE SI ENGINE			0	500	0	6	150	6	0				0
	JUNKERS GAS CALORIMEN M/C			0	500	0	6	150	6	0				0
CANTEEN :	Fluroscent light	2	2	0	50	0.1	6	150	6.1	15		15		15

	CC	1	1	0	2	0.002	6	150	6.002	0.3				0
	TBF	2	2	0	200	0.4	6	150	6.4	60				0
	fans	8	8	0	80	0.64	6	150	6.64	96				0
	GRINDER	1	1	0	400	0.4	6	150	6.4	60				0
	PULVARISOR	1	1	0	100	0.1	6	150	6.1	15				0
	1 DOUBLE DOOR FRIDGE	1	1	0	300	0.3	6	150	6.3	45				0
	1 MICROVEN	1	1	0	500	0.5	6	150	6.5	75				0
TET : 24FANS, 15FLT	fans	24	24	0	80	1.92	6	150	7.92	288				0
	fluroscent	15	15	0	50	0.75	6	150	6.75	112.5		112.5		112.5

TOTAL		**45895**	**83.73**				**12559**	**63**	**285**	**2580**	**2928**			

EEE BLOCK

NAME OF ROOM	**Details**	**Total Qty**	**on**	**off**	**Wattage**	**Load in KW**	**Daily Op Hr**	**Monthly Op Hr**	**Daily KWh**	**Monthly Kwh**	**Room Kwh**	**LED lighting**	**Fluroscent tube/CFL**	Total lighting Requirement
101	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
102	Fan	5	5	0	80	0.4	6	150	2.4	60	102			0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9				0
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
	Led Bulb	1	1	0	20	0.02	6	150	0.12	3		3		3
103	Fan	6	6	0	80	0.48	6	150	2.88	72				0
	Fluroscent Tube	3	3	0	20	0.06	6	150	0.36	9			9	9
104	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
105	Fan	17	17	0	80	1.36	6	150	8.16	204				0
	CFL	10	10	0	18	0.18	6	150	1.08	27			27	27
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0
	Projector	1	1	0	100	0.1	6	150	0.6	15				0

201	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
202	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9		9		9
	AC	2	2	0	2000	4	6	150	24	600				0
	Computer	40	40	0	50	2	6	150	12	300				0
	Projector	1	1	0	100	0.1	6	150	0.6	15				0
203	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9		9		9
	Computer	2	2	0	50	0.1	6	150	0.6	15				0
	Projector	1	1	0	100	0.1	6	150	0.6	15				0
204	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
	AC	1	1	0	2000	2	6	150	12	300				0
205	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
	AC	1	1	0	2000	2	6	150	12	300				0
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0
	Projector	1	1	0	100	0.1	6	150	0.6	15				0
206	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0
207	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0
	Exhaust Fan	2	2	0	60	0.12	6	150	0.72	18				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6

	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5			22.5	22.5
	Led Bulb	2	2	0	10	0.02	6	150	0.12	3		3		3
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0
301	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
302	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
303	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
304	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
305	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
306	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
307	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
308	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0
	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5			22.5	22.5

	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9		9		9
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0

CIVIL BLOCK

NAME OF ROOM	Details	Total Qty	on	off	Wattage	Load in KW	Daily Op Hr	Monthly Op Hr	Daily KWh	Monthly Kwh	Room Kwh	LED lighting	Fluroscent tube/CFL	Total lighting Requirement
101	Fan	14	14	0	80	1.12	6	150	6.72	168				0
	Fluroscent Tube	28	28	0	50	1.4	6	150	8.4	210			210	210
	Computer	35	35	0	50	1.75	6	150	10.5	262.5	805.5			0
102	Fan	13	13	0	80	1.04	6	150	6.24	156				0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9				0
	Fluroscent Tube	38	38	0	50	1.9	6	150	11.4	285			285	285
	Led Bulb	1	1	0	10	0.01	6	150	0.06	1.5		1.5		1.5
	Projector	60	60	0	100	6	6	150	36	900				0
103	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9		9		9
104	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9		9		9
105	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9		9		9
201	Fan	7	7	0	80	0.56	6	150	3.36	84				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	4	4	0	50	0.2	6	150	1.2	30			30	30
202	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
203	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
	Led Bulb	1	1	0	10	0.01	6	150	0.06	1.5		1.5		1.5
204	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5

205	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
206	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
207	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
302	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
303	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
304	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	Computer	1	1	0	50	0.05	6	150	0.3	7.5				0
305	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
306	Fan	13	13	0	80	1.04	6	150	6.24	156				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
	Fluroscent Tube	4	4	0	50	0.2	6	150	1.2	30			30	30
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9		9		9
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
	CC	2	2	0	2	0.004	6	150	0.024	0.6				0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9				0
	Led Bulb	1	1	0	10	0.01	6	150	0.06	1.5		1.5		1.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
	Fluroscent Tube	4	4	0	50	0.2	6	150	1.2	30			30	30
	Led Bulb	1	1	0	10	0.01	6	150	0.06	1.5		1.5		1.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0

	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5			22.5	22.5

MECHANICAL BLOCK														
NAME OF ROOM	**Details**	**Total Qty**	**on**	**off**	**Wattage**	**Load in KW**	**Daily Op Hr**	**Monthly Op Hr**	**Daily KWh**	**Monthly Kwh**	**Room Kwh**	**LED lighting**	**Fluroscent tube/CFL**	**Total lighting Requirement**
101	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
102	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5
103	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
104	Fan	10	10	0	80	0.8	6	150	4.8	120				0
	Fluroscent Tube	4	4	0	20	0.08	6	150	0.48	12			12	12
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
	Led Bulb	1	1	0	10	0.01	6	150	0.06	1.5		1.5		1.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0
201	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
	AC	1	1	0	2000	2	6	150	12	300				0
	Computer	30	30	0	50	1.5	6	150	9	225				0
202	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
	AC	1	1	0	2000	2	6	150	12	300				0

	Computer	30	30	0	50	1.5	6	150	9	225				0
203	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
204	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
205	Fan	2	2	0	80	0.16	6	150	0.96	24				0
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9				0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9		9		9
	Led Bulb	1	1	0	10	0.01	6	150	0.06	1.5		1.5		1.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9				0
	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5			22.5	22.5
	Led Bulb	1	1	0	10	0.01	6	150	0.06	1.5		1.5		1.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0
	Fan	4	4	0	80	0.32	6	150	1.92	48				0
	LED Tube Light	4	4	0	20	0.08	6	150	0.48	12		12		12
	AC	1	1	0	2000	2	6	150	12	300				0
	Computer	4	4	0	50	0.2	6	150	1.2	30				0
302	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
	AC	1	1	0	2000	2	6	150	12	300				0
	Computer	2	2	0	50	0.1	6	150	0.6	15				0
	Projector	1	1	0	100	0.1	6	150	0.6	15				0
303	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
304	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
305	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9				0
	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5			22.5	22.5
	Led Bulb	1	1	0	10	0.01	6	150	0.06	1.5		1.5		1.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3				0

401	Fan	2	2	0	80	0.16	6	150	0.96	24				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
402	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6		6		6
403	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	Fluroscent Tube	2	2	0	50	0.1	6	150	0.6	15			15	15
	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5			22.5	22.5
404	Fan	5	5	0	80	0.4	6	150	2.4	60				0
	Fluroscent Tube	3	3	0	50	0.15	6	150	0.9	22.5			22.5	22.5
405	Fan	3	3	0	80	0.24	6	150	1.44	36				0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3		3		3
	Fluroscent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5	7.5

BALAJI INSTITUTE OF TECHNOLOGY AND SCIENCE Narsampet, warangal

ENERGY SUMMARY

Description(From Elec.Bill)	Average	Unit	Supplier	Voltage (KV)	Connected load(KW)	% Solar Power generation sent to Grid
Total College load in KVA:	**300**	KVA	**TSNPDCL**	**11**	**440.13**	**48.68 %**
Total College load in KWh (Nov 2018-oct 2019)	**26,469.83**	KWh				
Solar energy generated in KWH (Nov2018-oct 2019) sent to Grid	**12886.33**	KWh				

7.1.3

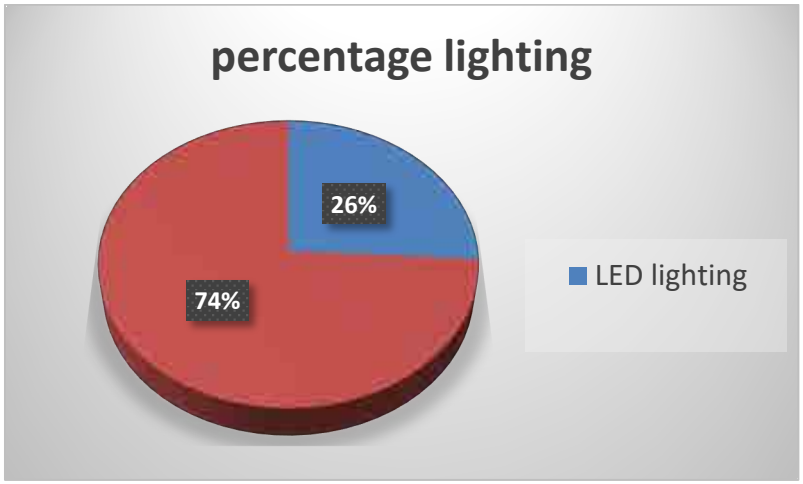
Annual power requirment met by renewable energy resoources(KWH)	Annual power requirement (KWh)	renewable energy resource type	Avg Renewable energy generated and Used(KWh)	Energy supplied to the Grid(Kwh)
163002	**3,17,638**	**Solar PV Plant**	**51.30 %**	**1,54,636**

7.1.4

Total LED lamps wattage	**19894**	KWh	**26**	**%**
Total CFL/Fluroscent lamp Wattage:	**56840**	KWh	**74**	**%**
Total wattage required for lighting	**77076**	KWh		

Percentage of annual lighting power requirements

Total Lighting Requirements	Percentage Lighting Through Led Bulbs	Percentage Lighting Through Other Sources
77076	**26 %**	**74 %**



Actual Load Measurement

The power logging is done at the mains of the 300 kVA transformer incoming. The following parameters are logged.

Summary Table for Voltage and Current						
	Voltage (Volt)			**Current (Amp)**		
Phase	R Phase	Y Phase	B Phase	R Phase	Y Phase	B Phase
Min	236.5	237.6	236.1	37.7	50.1	41.3
Average	236.9	237.8	238.9	37.8	50.3	43.8
Max	237.2	238	239.1	38.2	50.6	46.2

Summary Tables For kW & Power Factor					
	Power (kW)				**Power Factor**
Phase	R Phase	Y Phase	B Phase	Total	Total

Min	8.85	11.80	9.63	30.29	0.988
Average	8.86	11.85	10.34	31.05	0.988
Max	8.88	11.91	10.92	31.72	0.989

Observations

- Average and maximum phase voltage is 238.9 volts and 239.1 volts respectively.
- Average and maximum load is 31.05 kW and 31.72 kW respectively
- Average and minimum power factor recorded is 0.988 and 0.989 respectively during recorded period

BLOCK WISE CONNECTED LOAD

Block	Connected Load In KW	Monthly KWh	LED lighting	Fluroscent tube/CFL	Total lighting Requirement	no. of LED lamps	no of fluroscent lamps	No. of fans	daylights
Civil bock-A	20.643	3096.45	100.5	600.75	701.25	35	89	99	0
ECE block-B	51.118	7667.7	117	723.6	840.6	39	100	115	0
EEE Block -C	24.577	3686.55	96	222.75	318.75	43	29	97	0
CSE Block	75.466	11319.9	228	591.3	819.3	130	66	200	0
MECH Block	19.735	2960.25	78	206.55	284.55	28	33	89	0
Nursing	11.295	1694.25	43.5	249.75	293.25	19	37	84	0
School	26.506	3975.9	268.5	297	565.5	89	44	241	0
School Hostel	26.486	3972.9	87	162	249	29	24	204	0
Pharmacy	51.86	7779	162.3	931.5	1093.8	52	138	276	0

Campus	83.537	12530.55	63	256.5	348	21	38	39	39
Girls Hostel	14.676	2201.4	117	175.5	292.5	41	26	152	0
Boys Hostel MBA	26.486	3972.9	198	175.5	373.5	66	26	201	0
Inter College	15.135	2270.25	99	144	243	33	48	163	0
Total Connected load	**447.52**	**67128**	**1657.8**	**4736.7**	**6423**	**625**	**698**	**1960**	**39**

1875	**4711.5**	**23520**	**1170**
KWh	KWh	KWh	KWh

Lighting Recommendation -1

Replace the existing 45 W FTL tube lights into 20 W LED tubes

- Total No. of light fittings = 698 Nos.
- Total No. of Light fitting presently operated= 698 Nos.
- Total No. of light fittings to be replace= 698Nos.
- Present Energy Consumption = 4711 kWh
- Expected Energy Consumption = 2049 kWh
- Total Energy Saved per Month = 4711-2049= 2617 kWh
- Total Saving = 2617 kWh
- Monetary Savings = Rs.20416
- Investment = Rs.218125
- Simple Payback period = 11 Months

Lighting Recommendation -1

Replace the existing 400 W FTL tube lights into 100 W LED flood lights

- Total No. of light fittings = 39 Nos.
- Total No. of Light fitting presently operated= 39 Nos.
- Total No. of light fittings to be replace= 39Nos.
- Present Energy Consumption = 1170 kWh
- Expected Energy Consumption = 585 kWh

• Total Energy Saved per Month = 1170-585= 585 kWh
• Total Saving = 585 kWh
• Monetary Savings = Rs 4563
• Investment = Rs.78000
• Simple Payback period = 18 Months

Fan Recommendation 1

Replace existing 80 watt conventional ceiling fans with 50 watt energy efficient fans

• Total No. of ceiling fans present = 1960 Nos.
• Total No. of ceiling fans presently operated= 1960 Nos.
• Total No. of ceiling fans to be replace= 1960 Nos.
• Present Energy Consumption = 23520kWh
• Expected Energy Consumption = 14700 kWh
• Total Energy Saved per Month = 23520-14700= 8820 kWh
• Total Saving = 8820 kWh
• Monetary Savings = Rs.68,796
• Investment = Rs. 29,40000
• Simple Payback period = 43 Months

Summary of Lighting requirements

Block	LED lighting (kwh)	Fluroscent tube/CFL(kwh)	Total lighting Requirement(kwh)
Civil bock-A	100.5	600.75	701.25
ECE block-B	117	723.6	840.6
EEE Block -C	96	222.75	318.75
CSE Block	228	591.3	819.3
MECH Block	78	206.55	284.55
Nursing	43.5	249.75	293.25

School	268.5	297	565.5
School Hostel	87	162	249
Pharmacy	162.3	931.5	1093.8
Campus	63	256.5	348
Girls Hostel	117	175.5	292.5
Boys Hostel MBA	198	175.5	373.5
Inter College	99	144	243
Total Connected load	**1657.8**	**4736.7**	**6423**

Description(From Elec.Bill)	Average	Unit	Supplier	Voltage (KV)	percentage Solar Power Generation and sent to grid
Total College load in KVA:	**300**	KVA	**TSNPDCL**	**11**	**48.68%**
Total Avg. College load in KWh (Nov 2018-oct 2019)	**26,469.83**	KWh			
Avg. Solar energy generated in KWH & sent to Grid	**12886.33**	KWh			

Requirements of NAAC

7.1.3 Alternative Energy Initiative Percentage of power requirement met by renewable energy sources (Average Calculation) = (Power requirement met by renewable energy sources / Total power requirement) X 100 = (163002/317638) X 100 **= 51.31%**
7.1.4 Percentage of lighting power requirement met through LED bulbs Percentage of lighting power requirement met through LED bulbs = (Lighting power requirement met through LED bulbs / Total lighting power requirement) X 100 = (19894/ 77076) = **26 %**

Green Audit

Green audit was initiated earlier in 1970s with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. It exposes the authenticity of the proclamations made by multinational companies, armies and national governments with the concern of health issues as the consequences of environmental pollution. It is the duty of organizations to carry out the Green Audits of their ongoing processes for various reasons such as; to make sure whether they are performing in accordance with relevant rules and regulations, to improve the procedures and ability of materials, to analyze the potential duties and to determine a way which can lower the cost and add to the revenue. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit. Some of the incidents like Bhopal Gas Tragedy (Bhopal; 1984), Chernobyl Catastrophe (Ukraine; 1986) and Exxon- Valdez Oil Spill (Alaska; 1989) have cautioned the industries that setting corporate strategies for environmental security elements have no meaning until they are implemented.

Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade A, Grade B or Grade C according to the scores assigned at the time of accreditation.

The intention of organizing Green Audit is to upgrade the environment condition in and around the institutes, colleges, companies and other organizations. It is carried out with the aid of performing tasks like waste management, energy saving and others to turn into a better environmental friendly institute.

Goals of Green Audit

- The objective of carrying out Green Audit is securing the environment and cut down the threats posed to human health.
- To make sure that rules and regulations are taken care of
- To avoid the interruptions in environment that are more difficult to handle and their correction requires high cost.
- To suggest the best protocols for adding to sustainable development

Benefits of Green Audit

- It would help to shield the environment
- Recognize the cost saving methods through waste minimizing and managing
- Point out the prevailing and forthcoming complications
- Authenticate conformity with the implemented laws
- Empower the organizations to frame a better environmental performance
- It portrays a good image of a company which helps building better relationships with the group of stakeholders
- Enhance the alertness for environmental guidelines and duties

Initiatives by College towards Sustainable Environment

Tree Plantation

Tree-planting is the process of transplanting tree seedlings, generally for forestry, land reclamation, or landscaping purpose. It differs from the transplantation of larger trees in arboriculture, and from the lower cost but slower and less reliable distribution of tree seeds.

In silviculture the activity is known as reforestation, or afforestation, depending on whether the area being planted has or has not recently been forested. It involves planting seedlings over an area of land where the forest has been harvested or damaged by fire, disease or human activity. Tree planting is carried out in many different parts of the world, and strategies may differ widely across nations and regions and among individual reforestation companies. Tree planting is grounded in forest science, and if performed properly can result in the successful regeneration of a deforested area. Reforestation is the commercial logging industry's answer to the large-scale destruction of old growth forests, but a planted forest rarely replicates the biodiversity and complexity of a natural forest.

Because trees remove carbon dioxide from the air as they grow, tree planting can be used as agro engineering technique to remove CO_2 from the atmosphere. Desert greening projects are also motivated by improved biodiversity and reclamation of natural water systems, but also improved economy and social welfare due to increased number of jobs in farming and forestry.

College has planted the trees campus area to make it more environments friendly.

Fig. Greenary in the front area of college premesis with street lighting.

(a)

(b)

(c)

(d)

(e)

Fig. (a)-(e) Greenary at various places of college.

Activites related to plantation is mentioned below:

Event Name	**Date**	**A.Y.**
Haritha Haram	16.07.2015	2015-16
Haritha Haram	18.07.2016	2016-17
Haritha Haram	25.07.2017 & 23.08.2017	2017-18
Haritha Haram	03.08.2018 ,04.08.2018 & 30.08.2018	2018-19
Haritha Haram	10.08.2019	2019-20

Activity Organized Report – Tree Plantation- 2016-17 (Academic Year: 2016-17)

Name of Activity organized	Tree Plantation
Title of the Activity	Tree Plantation
Date of Activity organized	18/7/2016
Name of the coordinator of Activity	Radha krishna
Place of the Activity	BITS Campus
Objective of the Activity	To save environment , Reduce global warming
Outcome of the Activity	Improves Air quality ,reduces erosion and pollution
News published (if any)	
Photo Gallery	
 fig. Plantation	

Activity Organized Report –Tree Plantation-2017-18 (Academic Year: 2017-18)

Name of Activity organized	**Tree Plantation**
Title of the Activity	Tree Plantation
Date of Activity organized	25.07.2017 & 23.08.2017
Name of the coordinator of Activity	B.Jeevan
Place of the Activity	BITS Campus
Objective of the Activity	To save environment , Reduce global warming
Outcome of the Activity	Improves Air quality ,reduces erosion and pollution
News published (if any)	
Photo Gallery	

Fig. Plantation

Activity Organized Report – Tree Plantation- 2018-19 (Academic Year: 2018-19)

Name of Activity organized	**Tree Plantation**
Title of the Activity	Tree Plantation
Date of Activity organized	03.08.2018 ,04.08.2018 & 30.08.2018
Name of the coordinator of Activity	K. Radha krishna
Place of the Activity	BITS Campus
Objective of the Activity	To save environment , Reduce global warming
Outcome of the Activity	Improves Air quality ,reduces erosion and pollution
News published (if any)	

Photo Gallery

Fig. plantation

Greenery in college

Fig. Plantation around Open air Basket Ball court.

Use of Solar PV System for power Generation

BITS has installed 290 kW solar PV plant to generate the electricity through solar energy. Solar power plant is generating almost 154636 units annually which results in reduction of more than 100 Tons of CO_2 emission

Fig: Solar Installed Capacity in BITS Campus

Following are the some images of installed solar PV plant

Image: Roof top solar PV plant- BITS MBA Block

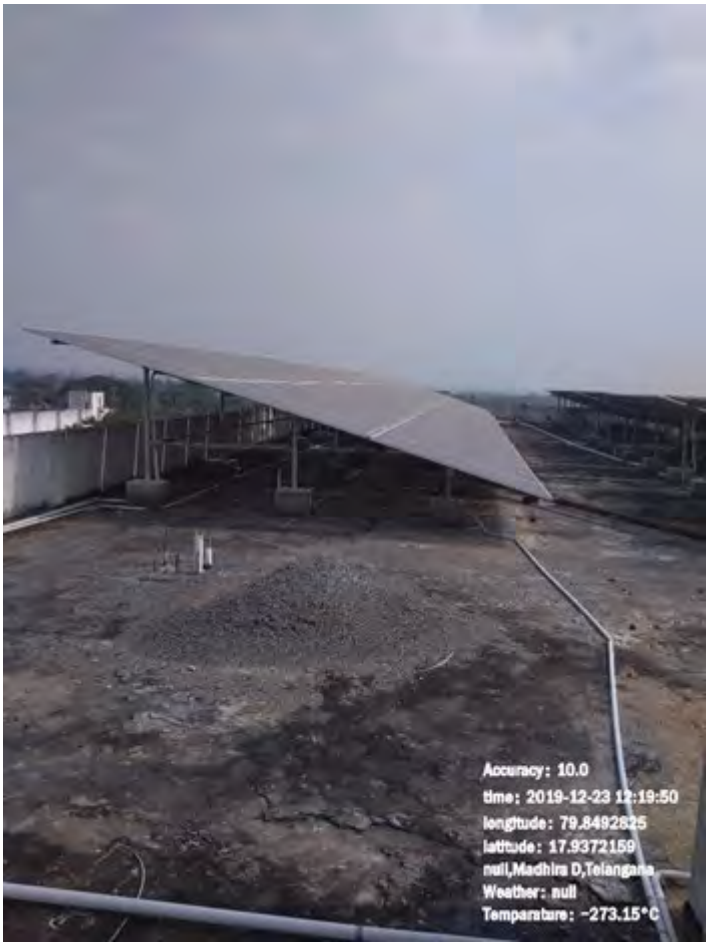


Image: Roof top solar PV plant- BITS Mechanical Block

Image: roof top solar panel

Image: Roof top solar PV plant-Inverter- BITS Block

Fig: Inverter Display

Scope for Improvement

Liquid Waste Management

The proper disposal of liquid waste is a must in order to maintain a good human and animal health. Because liquid waste has a high amount of dangerous compounds such as salts and metals, it is important for companies to get rid of it in a timely manner. Industrial wastes, including dangerous and hazardous liquids, can be disposed of by using a wide variety of techniques and methods.

Present Condition

There is an improvement opportunity for college. Sewage treatment facility can be provided to re-use the waste water for applications other than drinking. It is recommended that to make standard operating procedure (SOP) for disposal of chemicals which has been used in laboratories for practical purpose

Following details are given for guidance to dispose the laboratory chemical waste

Solution

Disposal Procedures for Laboratory Chemicals

It is the clear responsibility of all research workers to ensure the safe and correct disposal of all wastes produced in the course of their work. Improper and irresponsible disposal of chemical wastes down drains, to the Local Authority refuse collection, or into the atmosphere is forbidden by law.

Wash down drains with excess water

- Concentrated and dilute acids and alkalis
- Harmless soluble inorganic salts (including all drying agents such as $CaCl_2$, $MgSO_4$, Na_2SO_4, P_2O_5)
- Alcohols containing salts (e.g. from destroying sodium)
- Hypochlorite solutions from destroying cyanids, phosphines, etc.
- Fine (tlc grade) silica and alumina

It should be noted in particular that no material on the "Red List" should ever be washed down a drain. This list is as follows:

- Compounds of the following elements:- antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, tellurium, thallium, tin, titanium, uranium, vanadium and zinc.
- Organohalogen, organophosphorus or organonitrogen pesticides, triazine herbicides, any other biocides.
- Cyanides

- Mineral oils and hydrocarbons
- Poisonous organosilicon compounds, metal phosphides and phosphorus element
- Fluorides and nitrites

Incineration (Solvent Waste collection)

- All organic solvents including water miscible ones
- Soluble organic waste including most organic solids
- Paraffin and mineral oil (from oil baths and pumps)

Laboratory waste bins and controlled waste

All waste suitable for the Local Authority refuse collection, except recyclable paper and glass, is termed 'controlled waste'. Items in this category which includes dirty paper, plastic, rubber and wood, should generally be placed in the waste bins available in each laboratory and will be collected by the cleaners. However, each laboratory must also have a container for certain items which are not allowed to be put in the normal waste bins. In this special controlled waste container should be put:- all broken laboratory glassware, any sharp objects of metal or glass, all fine powders (preferably inside a bottle or jar) and dirty sample tubes or other items lightly contaminated with chemicals (but not any syringes or needles).

Laboratory controlled waste containers must be emptied regularly and never allowed to overflow. Under no circumstances must any item of glass, sharp metal or fine powder ever be put in a normal laboratory waste bin. The tops must be removed from all bottles put out for disposal and there should be no detectable smell of chemials from any bottle put for disposal.

Fig. Solid collection from the campus

Fig: Solid waste Collecting Bins in Campus and shifting

E Waste Management

Electronic waste or e-waste describes discarded electrical or electronic devices. Used electronics which are destined for reuse, resale, salvage, recycling, or disposal are also considered e-waste. Informal processing of e-waste in developing countries can lead to adverse human health effects and environmental pollution.

Electronic scrap components, such as CPUs, contain potentially harmful components such as lead, cadmium, beryllium, or brominated flame retardants. Recycling and disposal of e-waste may involve significant risk to health of workers and communities in developed countries and great care must be taken to avoid unsafe exposure in recycling operations and leaking of materials such as heavy metals from landfills and incinerator ashes.

College need to have E-waste management policy and all the E-waste disposals generated in the college campus should be disposed/ reuse as per standard procedures/norms

Fig. E-waste Store Room

The environmental impact of the processing of different electronic waste components

E-Waste Component	Process Used	Potential Environmental Hazard
Cathode ray tubes (used in TVs, computer monitors, ATM, video cameras, and more)	Breaking and removal of yoke, then dumping	Lead, barium and other heavy metals leaching into the ground water and release of toxic phosphor
Printed circuit board (image behind table – a thin plate on which chips and other electronic components are placed)	De-soldering and removal of computer chips; open burning and acid baths to remove metals after chips are removed.	Air emissions and discharge into rivers of glass dust, tin, lead, brominated dioxin, beryllium cadmium, and mercury
Chips and other gold plated components	Chemical stripping using nitric and hydrochloric acid and burning of chips	PAHs, heavy metals, brominated flame retardants discharged directly into rivers acidifying fish and flora. Tin and lead contamination of surface and groundwater. Air emissions of brominated dioxins, heavy metals, and PAHs
Plastics from printers, keyboards, monitors, etc.	Shredding and low temp melting to be reused	Emissions of brominated dioxins, heavy metals, and hydrocarbons
Computer wires	Open burning and stripping to remove copper	PAHs released into air, water, and soil.

Rain Water Harvesting

There is a good potential for rain water harvesting in a college. This water can be used for purposes like gardening, bores, wells, etc.

Feasibility study can be carried out to know the actual potential from rain water harvesting project

Plastic Free and Paper Free Campus

Concept of plastic free and paper free campus can be successfully implemented in the college. Management need to take initiative to make the policy for same. It will help to do reduce the use of plastic and papers which will be a good contribution towards sustainable environment

Backup Generators

In college the are two generators for emergency conditions

Fig: Backup generators for emergency conditions

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India Post

SUB POST MASTER
NARSAMPET 506 132

APPENDIX – II -A.

Agreement for Supply of Electricity of High Tension.

This agreement executed on this 22th day of February, 2016, by M/s. **BALAJI INSTITUTE OF TECHNOLOGY & SCIENCE,** in Sy. No. 60, 61 & 62, at Laknepally Village, Narsampet Mandal, Dist: Warangal – 506331 (TS), Represented by its Chairman **Dr. A. Rajendra Prasad Reddy, S/o: Late Sri. A. Sanjeeva Reddy,** Aged 58 years, R/o. H.No: 1-1-71, Narsampet, Warangal – Dist-506132, for themselves/ himself/ itself and for their his/.its/ her assigns and successors in favour of the Northern Power Distribution Company a statutory corporation constituted under Section 23 of the A.P. Electricity Act Reform 1998 henceforth referred to as the Company.

1. **SUPPLY OF POWER:**

I/ We the above mentioned have requested the Company to supply electricity at specified voltage of supply for the purpose of Education Institute and the Company agreed to afford such supply on the General terms and conditions notified by them from the time to time under section 21 of the License Distribution and Retail Supply License Conditions and those hereinafter mentioned .

2. **LOAD/ MIXIMUM DEMAND:**

We agree to take from the Company, electric power for a maximum load not exceeding 218+1% KVA which shall be taken to be my/ our contracted demand maximum for our exclusive use for the purposes above mentioned at our Mills/ Factory/ Premises situated at Laknepalli (v), Narsampet (m), Warangal Dist., My/ Our contracted load shall be _____ HP and / or _____ KW. We shall not effect any change in the contracted load without prior intimation to the company.

Principal

3. **RESALE OF ELECTRIC POWER:**
We undertake that, we shall not sell electrical energy obtained under this agreement without the sanction in writing of the Company.

4. **OBLIGATION TO COMPLY WITH REQUIREMENT OF ACTS, AND GENERAL TERMS AND CONDITIONS OF SUPPLY:**
I/We further undertake to comply with all the requirements of the Electricity Act, 2003 the Rules AND regulations framed thereunder, provisions of the tariffs scale of Miscellaneous and General charges and the General terms and conditions of supply prescribed by the Company with approval of the A.P. Electricity Regulatory Commission herein after called as Commission from time to time and agree not to dispute the same.

5. **DATE OF COMING INTO FORCE OF THE AGREEMENT:**
I/We shall begin/take electrical from the Company under the conditions of this Agreement with three months, from the date of issue of intimation in writing to me/us by the Designated Officer of the Company that supply of electrical energy is available. The Provisions of this agreement shall be deemed to come into force from the date of commencement of supply of energy or the date of expiry of three months notice above referred to whichever is earlier.

6. **PERIOD OF AGREEMENT:**
I/We undertake to avail supply for a minimum of 02 years from the date of this agreement comes into force.

7. **DETERMINATION OF AGREEMENT:**
I/We shall be at liberty to determine the Agreement by giving in writing three months notice expressing such intention at any time after the period of two years. If for any reason, I/We choose the three months to derate/terminate the agreement before the expiry of the minimum two years period of the agreement, the duration/termination will be done with effect from the date of expiry of the three month notice period or expiry of the initial two years period whichever is later. I/We agree that the Company may terminate this Agreement at any time giving three months notice if, I/We violate the terms of this agreement or to the General terms and conditions of supply notified by the Company with the approval of the Commission from time to time of the previsions of any law touching this agreement including the electricity Act, 2003, the rules and regulations framed there under. This Agreement shall remain in force until it is terminated as above indicate in computing the period of 02 years referred to above the period or periods for which the annual minimum guarantee has or have been waived or reduced shall be excluded.

8. **OBLIGATIN OF CONSUMER TO PAY ALL CHARGES LEVIED BY COMPANY:**
From the date of this agreement comes into force, I/we shall be bound by the shall pay the Company Maximum Demand Charges, energy charges, surcharges, meter rents and other charges if any, in accordance with the tariffs applicable and the General terms and conditions of supply prescribed by the Company from time to time for the particular class of consumers to which I/We belong.

9. **CORPORATIONS RIGHT TO VARY TERMS OF AGREEMENT:**
I/We agree that the Company shall have the unilateral right to vary, form the time to time tariffs, scale of general miscellaneous charges and the General terms and conditions of supply under this agreement by special or general proceedings. In particular, the Company shall have the right to enhance the rates chargeable for supply of electricity according to exigencies.

10. **MONTHLY MINIMUM CHARGES:**

I/We shall pay minimum charges every month as prescribed in tariff, and the General terms and conditions of supply, even if no electricity is consumed for any reason whatsoever and also if the chares for electricity actually consumed are less than the minimum charges. The minimum charges shall also be payable by me/us even if electricity is not consumed because of supply has been disconnected by the Company because of non-payment of electricity charges. Theft of Electricity or unauthorized use of electricity or for any other valid reason.

11. **SPECIAL ANNUAL MINIMUM GUARANTEE:**

a. In consideration of Company making arrangements for supplying electrical energy to me/us, I/we agree with effect from the date of commencement of this agreement for the period of _____ years to guarantee a minimum payment of _____(Rupees _____ _____ _____only) every year towards demand and energy chares only, exclusive of payment towards surcharges, or other payment by whatever name they may be called, If, the amount actually pay towards demand energy charges during any year fall short of the guaranteed minimum, the amount of difficult shall be deemed to be an arrears of electricity charges and recovered accordingly.

12. I/We hereby agree that if, I/We are found including in theft of electricity or unauthorized use of Electricity in respect of use of electrical energy. I/We shall pay additional charges as may be levied by the Company. I/We also agree that in such an event the Company shall in addition to levy of the additional charges have right to disconnect supply of electricity to my/our premises for such period as may be decided by the Company.

13. I/We requested the company to provide the meter for measuring the electricity supplied to me and the company has agreed for the same. Accordingly, I/We agree to pay the monthly meter rentals, as may be fixed by the commission from time to time.

Date and signature of the consumer

Signed by the Consumer in my presence.

Signature:

Asst. Divisional Engineer
Operation: NPDCL
Narsampet-Rural

Name and Address

Date:

Principal
Balaji Institute of Tech & Science
LAKNEPALLY Narsampet-506 331

Signature:

Divisional Engineer Elect.

Name and Address: Operation, NPDCL
Narsampet

Date:

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Rs. 100

ONE HUNDRED RUPEES

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OFFICE OF THE SUB REGISTRAR ASSURANCE 05 MAY 2018 NARSAMPET

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R 389467

EMMADI PULLAIAH CHARYAR
Licenced Stamp Vendor
Licence No.21-07-002/2012, R.L.No.21-07-24009/3
H.No.15-103/4, Beside Court, Narsampet
Warangal (R)Dist,TS,Cell: 9395 / 9197

Sl.No. 7725, Dt: 22-06-2018, Value: Rs.100/-

Sold to: Dr. A.Rajendra Prasad Reddy, S/o Sanjeeva Reddy, R/o Narsampet

For whom: Maheshwara Educational Society

APPENDIX – II –A

Agreement for Supply of Electricity of High Tension.

This agreement executed on this 22nd day of June, 2018, by M/s. MAHESHWARA EDUCATIONAL SOCIETY, in Sy. No. 60, 61 & 62, at Laknepally Village, Narsampet Mandal, Dist. Warangal-506331 (TS), Represented by its Chairman **Dr. A. Rajendra Prasad Reddy, S/o. Late Sri.A. Sanjeeva Reddy,** Aged 58 Years, R/o. H.No: 1-1-71, Narsampet, Warangal – Dist-506132, for themselves / himself / itself and for their his / its / her assigns and successors in favour of the Northern Power Distribution Company a statutory corporation constituted under Section 23 of the A.P. Electricity Act Reform 1998 henceforth referred to as the Company.

1. **SUPPLY OF POWER:**

I/ We the above mentioned have requested the Company to supply electricity at specified voltage of supply for the purpose of Educational Institutes and the Company agreed to afford such supply on the General terms and conditions notified by them from the time to time under section 21 of the License Distribution and Retail Supply License Conditions and those hereinafter mentioned.

2. **LOAD/ MIXIMUM DEMAND:**

We agree to take from the Company, electric power for a maximum load not exceeding 75 KVA which shall be taken to be my/ our contracted demand maximum for our exclusive use for the purpose above mentioned at our Mills/ Factory/ Premises situated at Laknepally(V), Narsampet(M), Warangal Dist., My/ Our contracted load shall be _____ HP and / or _____ KW. We shall not effect any change in the contracted load without prior to the company.

Principal

3. **RESALE OF ELECTRIC POWER:**
We undertake that, we shall not sell electrical energy obtained under this agreement without the sanction in writing of the Company.

4. **OBLIGATION TO COMPLY WITH REQUIREMENT OF ACTS, AND GENERAL TERMS AND CONDITIONS OF SUPPLY:**
I/We further undertake to comply with all the requirement of the Electricity Act, 2003. The Rules AND regulations framed thereunder, provisions of the tariffs scale of Miscellaneous and General charges and the General terms and conditions of supply prescribed by the Company with approval of the A.P. Electricity Regulatory Commission herein after called as Commission from time to time and agree not to dispute the same.

5. **DATE OF COMING INTO FORCE OF THE AGREEMENT:**
I/We shall begin/take electrical from the Company under the conditions of this Agreement with three months, from the date of issue of intimation in writing to me/us by the Designated Officer of the Company that supply of electrical energy is available. The Provisions of this agreement shall be deemed to come into force from the date of commencement of supply of energy or the date of expiry of three months notice above referred to whichever is earlier.

6. **PERIOD OF AGREEMENT:**
I/We undertake to avail supply for a minimum of 02 years from the date of this agreement comes into force.

7. **DETERMINATION OF AGREEMENT:**
I/We shall be at liberty to determine the Agreement by giving in writing three months notice expressing such intention at any time after the period of two years. If for any reason, I/We choose the three months to derate/terminate the agreement before the expiry of the minimum two years period of the agreement, the duration/termination will be done with effect from the date of expiry of the three month notice period or expiry of the initial two years period whichever is later. I/We agree that the Company may terminate this Agreement at any time giving three months notice if, I/We violate the terms of this agreement or to the General terms and conditions of supply notified by the Company with the approval of the Commission from time to time of the previsions of any law touching this agreement including the electricity Act, 2003, the rules and regulations framed there under. This Agreement shall remain in force until it is terminated as above indicate in computing the period of 02 years referred to above the period or periods which the annual minimum guarantee has or have been waived or reduced shall be excluded.

8. **OBLIGATIN OF CONSUMER TO PAY ALL CHARGES LEVIED BY COMPANY:**
From the date if this agreement comes into force, I/we shall be bound by the shall pay the Company Maximum Demand Charges, energy charges, surcharges, meter rents and other charges if any, in accordance with the tariffs applicable and the General terms and conditions of supply prescribed by the Company from time to time for the particular class of consumers to which I/We belong.

9. **CORPORATIONS RIGHT TO VARY TERMS OF AGREEMENT:**
I/We agree that the Company shall have the unilateral right to vary, from the time to time tariffs, scale of general miscellaneous charges and the General terms and conditions of supply under this agreement by special or general proceedings. In particular, the Company shall have the right to enhance the rates chargeable for supply of electricity according to exigencies

10. **MONTHLY MINIMUM CHARGES:**
I/We shall pay minimum charges every month as prescribed in tariff, and the General terms and conditions of supply, even if no electricity is consumed for any reason whatsoever and also if the charges for electricity actually consumed are less than minimum charges. The minimum charges shall also be payable by me/us even if electricity is not consumed because of supply has been disconnected by the Company because of non-payment of electricity charges Theft of Electricity or unauthorized use of electricity or for any other valid reason.

11. **SPECIAL ANNUAL MINIMUM GUARANTEE:**
    a. In consideration of Company making arrangements for supplying electrical energy to me/us, I/we agree with effect from the date of commencement of this agreement for the period of _____ years to guarantee a minimum payment of _____ (Rupees_____ _____only) every year towards demand and energy charges only, exclusive of payment towards surcharges, or other payment by whatever name they may be called, If, the amount actually pay towards demand energy charges during any year fall short of the guaranteed minimum, the amount of difficult shall be deemed to be an arrears of electricity charges and recovered accordingly.

12. I/We hereby agree that if, I/We are found including in theft of electricity or unauthorized use of Electricity in respect of use of electrical energy. I/We shall pay additional charges as may be levied by the Company. I/We also agree that in such an event the Company shall in addition to levy of the additional charges have right to disconnect supply of electricity to my/our premises for such period as may be decided by the Company.

13. I/We requested the company to provide the meter for measuring the electricity supplied to me and the company has agreed for the same. Accordingly, I/We agree to pay the monthly meter rentals as may be fixed by the commission from time to time.

Date and signature of the consumer

Signed by the Consumer in my presence.

Signature:

Name and Address

Date:

Principal
Balaji Institute of Tech & Science
LAKNEPALLY Narsampet-506 331

Signature

Name and Address

Date:

GOVERNMENT OF TELANGANA
ELECTRICAL INSPECTORATE

From:
The Electrical Inspector
Hyderabad
Stone Building,Mint Compound,
Hyderabad 500 063.

To
M/S Balaji Institute of Technology & Science,
H.No. 1-1-71
Laknepally,NARSAMPET,
NARSAMPET Mandal,
Warangal (Rural) District.

Lr.No: EI-HYD/TS/EI Ex. 650V/179/D.No266 /18 Dated: 02-02-2018.

Sir

Sub: The Electricity Act, 2003 and Central Electricity Authority(Measures relating to Safety and Electric Supply Regulations 2010 – Installation of Voltage Exceeding 650V of M/s Balaji Institute of Technology & Science, H.No. 1-1-71, Laknepally, NARSAMPET, Narsampet Mandal, Warangal (Rural) District –Statutory Approval under Section 54 of the Electricity Act-2003 and Regulation 43(4) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2010– Accorded.

Ref: 1. Inspection dated: 28-01-2018
2. Your letter Received on dated: 01-02-2018.

* * *

Under Section 54 of the Electricity Act-2003 and Regulation 43(4) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, the following equipment of your Electrical Installation of voltage Exceeding 650V are approved for energisation.

AS PER ANNEXURE ENCLOSED

Under Regulation 43(4) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, any additions or alteration in your above Electrical Installation shall not be connected to supply until the same are approved in writing by this office and offer for annual inspection under Regulation 30 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 every year to the concerned Deputy Electrical Inspector.

Under Regulation 13(4), 46(7) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, you are at all times solely responsible for the maintenance of the above installation on such condition as to be free from danger.

The above approval accorded is without prejudice to the statutory/ mandatory obligations to be fulfilled by you under various other acts and rules as the case may be.

The approval accorded for energizing the electrical equipment is the safety for men and machine from electrical hazards in your installation and ipso facto does not confer any right to be used for any other purpose other than for which the approval is accorded.

The original manufacturer Test certificates of Transformer etc. are accepted and returned.

Yours faithfully

ELECTRICAL INSPECTOR 2/2/18

HYDERABAD

Encl: Test Certificates & List of Load Particulars
1) Copy to the Divisional Engineer/Operation/TSNPDCL,Narsampet. The date of release of supply may be intimated to Deputy Electrical Inspector,Warangal,Sub-Division
2) Copy to the Deputy Electrical Inspector, Warangal Sub-Division along with enclosures.

Principal

ANNEXURE TO LR.NO.EI/HYD/TS/HT/3683/WGL/D.NO.1660 /17, DT: 02-02-2018.

M/s Balaji Institute of Technology & Science

H.No. 1-1-71, Laknepally, NARSAMPET, Narsampet Mandal, Warangal (Rural) District.

Sl. No.	Particulars of Equipment	Existing Load Capacity/Voltage Ratio	Additional Load Capacity/Voltage Ratio	Deleted Load Capacity/Voltage Ratio	Total Load
1.	**TRANSFORMERS**				
	TRANSFORMER	CAP:315 KVA,11000/433 V MAKE:ESENNAR S.NO:ET-391	NIL	NIL	CAP:315 KVA,11000/433 V MAKE:ESENNAR S.NO:ET-391
2.	**GENERATORS**				
	GENERATORS	1. CAP:125 KVA,415 V MAKE:KIRLOSKAR S.NO:ZZS3LZ07F38656 2. CAP:75 KVA,415 V MAKE:KIRLOSKAR S.NO:HM001K0385	NIL	NIL	1. CAP:125 KVA,415 V MAKE:KIRLOSKAR S.NO:ZZS3LZ07F38656 2. CAP:75 KVA,415 V MAKE:KIRLOSKAR S.NO:HM001K0385
3.	**M.V.LOADS**				
	1. MOTORS	76 HP,415V	NIL	NIL	76 HP,415V
	2. SOLAR INVERTERS	205 KVA,415V	90 KVA,415V		295 KVA,415V
	3. UPS	195 KVA,415V	NIL	NIL	195 KVA,415V
	4. CAPACITORS	125 KVAR,415V	NIL	NIL	125 KVAR,415V
4.	**L.V.LOADS**				
	1. LIGHTING LOAD	226 KW,230V	NIL	NIL	226 KW,230V
	2. L.V.LOAD	2.5 HP,230V+191.9 KW,230V	NIL	NIL	2.5 HP,230V+191.9 KW,230V
	3. A/C's	70.6 KW,230V	NIL	NIL	70.6 KW,230V
	4. RECTIFIER	15 KW,230V	NIL	NIL	15 KW,230V
	5. DC MOTORS	20.1 KW,230V	NIL	NIL	20.1 KW,230V
	6. SOLAR PANELS	255 W_P X 854 Nos	315 W_P X 240 Nos,	NIL	255 W_P X 854 Nos + 315 W_P X 240 Nos

S. Hini 2/2/18

ELECTRICAL INSPECTOR
HYDERABAD

Principal
Balaji Institute of Tech & Science
LAKNEPALLY Narsampet-506 331

Balaji Institute Of Technology & Science
Laknepally, Narsampet, Warangal

List of Equipments									
	Capative Power	KW	Inverter Make	SL.NO.	ModuleWatts	No. of Modules	Volts (DC)	Inveter KW	
1	BEd Block -1	25.2	GRO watt	FNA4719004	315	80	46.5	30	
2	BEd Block-2	25.2	GRO watt	FNA3714006	315	80	46.5	30	
3	Boys Hostel	25.2	GRO watt	FNA471900D	315	80	46.5	30	
	Total	75.6			945	240		90	

For Balaji Institute of Technology & Science

Director

For Kumar Engineers
License No. : A 2237 1-1556
Valid Upto : 25-02-2018

APPROVED
J. Kiri - 2/2/18
ELECTRICAL INSPECTOR
% CEIG, HYDERABAD.

Principal
Balaji Institute of Tech & Science
LAKNEPALLY Narsampet-506 331

S.V.L.NO.33/2003,R.L.NO.
H.NO.1-9-410,MAYURI COMPLEX
BALASAMUDRAM,HANUMAKONDA
WARANGAL DISTRICT-506 001
LICENSE NO.07/2007

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INDIA

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TELANGANA

This Engineering, Procurement & Construction Agreement (hereinafter referred to as the "**Agreement**") is entered into on this 14-Aug-2017, at Warangal, Telangana **BY** and **BETWEENFreyr Energy Services Pvt. Ltd.** a company incorporated under the Companies Act, 1956/2013 and having its registered office Plot no. 154, Phase 2, Kavuri Hills, Hyderabad - 500033 referred to as the " **CONTRACTOR**" which expression shall where the context so admits be deemed to include its executors, administrators, representatives and permitted assigns) of the ONE PART;

AND Dr. Andru Rajendra Prasad Reddy, B.Ed. Block1,Maheshwara Educational Society, Laknepally, Narsampet Mandal, Warangal - 506132 legal owner of the premises (address of the customer who he/she intend to get installed the GCRT solar PV system, say **Government Organization, PSU and Offices**),(hereinafter referred to as the "**CUSTOMER/BENEFICIARY**" which expression shall where the context so admits be deemed to include its heirs, executors, administrators, representatives and permitted assigns) of the OTHER PART;

The expressions "**CONTRACTOR**" and "**CUSTOMER/BENEFICIARY**", wherever the context so permits or requires shall collectively be referred to as "**Parties**" and individually as the "**Party**".

WHEREAS:

A. CONTRACTOR is a fully integrated solar solutions provider that offers comprehensive solar solutions to governments, corporate houses, villages, industries and other consumers.

B. CUSTOMER/BENEFICIARY is a Educational Society consumer.

C. CONTRACTOR has been notified as successful bidder by Solar Energy Corporation Of India Ltd. vide its Letter of Allocation dated 28th Oct 2016 for design, manufacture, supply, erection, testing and commissioning including

NOTARY T.S. WARANGAL
Ch. AGA REDDY
B.Sc., LL-B.
NOTARY FOR
Hanamkonda & Kazipet
Regd.No. 174/91

Principal
Tech & Science

Chairman
Maheshwara Educational Society

11. SITE ADDRESS

The Site address where Works need to be performed to construct the Power System is: B.Ed Block1, Maheshwara Educational Society, Laknepally, Narsampet, Warangal – 506132.

12. PROVISION OF DATA

The CONTRACTOR shall be under an obligation to provide all data pertaining to Works and Power System for 5 years to Solar Energy Corporation Of India Ltd, *inter alia*, about PV array energy production, solar irradiance, wind speed, temperature, etc. The customer/beneficiary as such will allow the CONTRACTOR to install a data logging system for power system monitoring.

12.1 The parameters of Works, and/or Power System shall be measured by using solar monitoring system to maintain and to study the performance of Power System.

12.2 For access to real-time data, the CUSTOMER/BENEFICIARY agrees to provide Solar Energy Corporation Of India Ltd. with the right to install any additional online monitoring equipment(s) on the Power System.

13. INDEMNITY

Both Parties shall fully Indemnify and hold harmless both parties and its affiliates, associates, directors and employees from and against, any and all losses, costs, damages, injuries, liabilities, claims and causes of action, including without limitation arising out of or resulting from claims by third Parties, acts, omissions or breach of any of the both parties affiliates, suppliers, employees, agents or contractors in the performance of both parties obligations under this Agreement or otherwise arising out of the Power System or its usage

14. NOTICES

Chairman
Maheshwara Educational Society
1-1-71, Beside Pavani Nursing Home
NARSAMPET, Dt Warangal-506 132 (A.P)
Regd. No. 1086/89

NOTARY T.S. INDIA
Ch. AGA REDDY
B.Sc., LL.B.
NOTARY FOR
Hanamkonda & Kazipet
Regd.No. 174/91

Principal
Balaji Institute of Tech & Science
LAKNEPALLY Narsampet-506 331

SCHEDULE 1: PERFORMANCE PARAMETERS

Project- Solar Power for B.Ed Block1 (Society)

Site Location- 17°56'13.6"N, 79°50'58"E

Total Rooftop Area (m^2)- 500

Total Usable Rooftop Area for solar installation (m^2)- 250

Type of Roof & Tilt- RCC and no tilt

Radiation data reference: Meteonorm

Energy Simulation:

Power evacuation: 3 Phase in client panel

Energy in Thousand kWp

End Of year	Global Horizontal (kWh/m2/year)	Global Inclined (kWh/m2/year)	Net Energy at Metering point ((kWh/kWp/year))	PR (%) at the metering point
1	1941.6	2045.6	1747	85.40
2	1941.6	2045.6	1745	85.30
3	1941.6	2045.6	1743	85.20
4	1941.6	2045.6	1741	85.10
5	1941.6	2045.6	1739	85.01

Chairman
Maheshwara Educational Society
8-1-1-71, Beside Pawani Nursing Home
NARSAMPET, DL Warangal-506 132 (A.P)
Regd. No 1086/89

NOTARY T.S. INDIA WARANGAL
Ch. AGA REDDY
B.Sc., LL.B.
NOTARY
Hanamkonda & Kazipet
Regd. No. 174/91

Principal
Balaji Institute of Tech & Science
LAKNEPALLY Narsampet-506 331

SCHEDULE 2: PAYMENT TERMS

Price including shall remain fixed and will not be subject to revision during the Agreement duration subject to the conditions mentioned within this Agreement.

PRICE

Total project capacity is 24.9KWp. Subsidy amount on 24.9KWp which is of price Rs.18.3Wp

Capacity (kWp)	Total price	Subsidy	Total Payable
24.9	15,18,900	4,55,670	10,63,230

TERMS

- 50% advance payment on signing of agreement & submission of Proforma Invoice
- 30% on Pro-rata basis upon submission of running bills/invoices for various services
- 10% upon completion of installation & commissioning
- 10% on final acceptance

TAXES:

The pricing given is inclusive of all taxes

Chairman
Maheshwara Educational Society
1-1-71, Beside Tiwari Nursing Home
NARSAMPET, Warangal-506 132 (A.P)
Regd. No. 1086/95

Principal
Balaji Institute of Tech & Science
Narsampet-506 331

NOTARY T.S. INDIA
Ch. AGA REDDY

Yathva

Yathva Energy Solutions Pvt. Ltd.

3-5-119/C, Plot # 880, Vivekananda Nagar Colony, Kukatpally, Hyd-72.
+91-40-2306 5789, 99899 11922, ✉: testlab@yathvaenergy.com
CIN No. : U40100AP2012PTC082554 PAN : AAACY5640B
Service Tax No. : AAACY5640BSD002 TIN No. : 36781722050

T-2581

TEST REPORT

Test Report No:835/YESPL/2015-16/01		Page: 1 of 3
Date Of Receipt for testing	Date Of Commencement of test	Date Of Completion of test
16-04-2016	16-04-2016	16-04-2016
Details of the Customer	M/s Balaji Institute Of Techonology & Sciences Sy No:199,Laknepally(V),Narsampet(M),Warangal(Dist)-506331.	
Details of the item tested	Name: 3Ø 4W Electronic Tri vector Meter Make & Type: Secure Premier 300 & E3M024 Range : 3×63.5V,Ib:5A, Imax:10A, PTR: 11KV//3/110V//3, CTR: 20A/5A Pulse rate:80 Pulses/Unit Serial No: XB593627 Accuracy : 0.2S Accessories : --	
Tested at	Site (Narsampet)	
Tests Conducted	Limits of Error for Active and Reactive Energy in Dual mode for Balanced & Unbalanced loads at 50Hz.	
Test Standard	IS 14697:1999	
Environmental Conditions	Temperature: 26 °C	Relative Humidity:48%
Condition of the item delivered	Good	

Equipment used and traceability details

Sl.no	Equipment used	Uncertainty (Best Case)	Calibration Agency/ Calibration No	Valid up to
1	3Ø Energy Meter Test Bench, PTS 400.3Serial No:44960, MTE, Germany	±0.040%	MSME,TDC,MUMBAI/ CC/ECL/1286/15-16	27-08-2016

Note:

1) Only the tests asked by the customer have been carried out.
2) This test report shall not be reproduced except in full, without written approval of the laboratory.
3) The results reported are valid at the time of and under the stated conditions of measurements and for the test items mentioned above.
4) Any Discrepancy in this report should be brought to the notice of the laboratory within ONE MONTH from the date of this report.

Remarks: Recommended testing due on : 15-04-2017

Test Procedure:

The testing was carried out by comparison method. The pulse output as per the meter constant of the DUT(Device Under Test) was used for testing of energy measurements. The pulse output of the DUT was given as the input of the reference standard.The percentage errors were directly displayed on the computer system of the reference standard.

Test Procedure No:03/WI/YESPL

Test witnessed by:

B.Raghu/ADE/HT Meters/Warangal

J.Devender/ADE/OP/ Narsampet(R)

P.Yadagiri/Manager/BITS

Date : 16-04-2016
Place : Narsampet

Tested by
P.PRUTHVI
TEST ENGINEER

Issuing Authority
G.RAVI MARUTHI REDDY
QUALITY MANAGER

Yathva Energy Solutions Pvt. Ltd. Hyderabad

Principal
Balaji Institute of Tech & Science
LAKNEPALLY Narsampet

Yathva

Yathva Energy Solutions Pvt. Ltd.

3-5-119/C, Plot # 880, Vivekananda Nagar Colony, Kukatpally, Hyd-72.
+91-40-2306 5789, 99899 11922, ✉: testlab@yathvaenergy.com
CIN No. : U40100AP2012PTC082554 PAN : AAACY5640B
Service Tax No. : AAACY5640BSD002 TIN No. : 36781722050

T-2581

REPORT No: 835/YESPL/2015-16/01				Meter Sl. No: XB593627		Page 3 of 3
Meter Type: 3P 4W Electronic Trivector Meter				Test Standard- IS 14697:1999		
Meter details	Voltage	Current		Frequency	Meter constant	Class
	3×63.5V	Ib: 5A	Imax:10A	50Hz	80 pulses/unit	0.2S

TEST: Limits of Error (CL: 11.1 & Table 12) (Polyphase meters carrying a single phase load but with balanced polyphase voltages): Unbalanced Loads, Voltage applied: 3×63.5 V, Frequency 50Hz.

Test Requirements			Active Energy			Reactive Energy			Remarks
Current (Amps)	phase	%Specified error limit	Cos Ø	% error observed +P (M to L)	% error observed -P (L to M)	SinØ	% error observed +Q (M to L)	% error observed -Q (L to M)	
5% Ib	R	±0.3	1.0	0.087	0.087	1.0	0.093	0.049	Pass
	Y	±0.3		0.069	0.069		0.057	0.072	
	B	±0.3		0.063	0.063		0.039	0.057	
100% Ib	R	±0.3		0.085	0.085		0.076	0.076	
	Y	±0.3		0.076	0.076		0.068	0.070	
	B	±0.3		0.050	0.050		0.044	0.042	
Imax	R	±0.3		0.056	0.056		0.053	0.057	
	Y	±0.3		0.046	0.046		0.042	0.042	
	B	±0.3		0.027	0.027		0.017	0.022	
10% Ib	R	±0.4	0.5 lag	0.110	0.110	0.5 lag	-0.014	0.004	
	Y	±0.4		0.068	0.068		0.021	0.007	
	B	±0.4		0.050	0.050		0.000	0.004	
100% Ib	R	±0.4		0.097	0.097		0.065	0.063	
	Y	±0.4		0.076	0.076		0.076	0.076	
	B	±0.4		0.031	0.031		0.055	0.068	
Imax	R	±0.4		0.053	0.053		0.053	0.055	
	Y	±0.4		0.033	0.033		0.060	0.070	
	B	±0.4		0.004	0.004		0.045	0.048	

Difference between Three Phase load and single phase load at Ib, UPF	% Specified error variation	%Error variation Observed				Pass
		+P	-P	+Q	-Q	
	0.4	0.028	0.035	0.017	0.029	

DATE: 16-04-2016
PLACE: Narsampet

Energy Solutions Pvt. Ltd.

TESTED BY
P.PRUTHVI
TEST ENGINEER

ISSUING AUTHORITY
G.RAVI MARUTHI REDDY
QUALITY MANAGER

Principal
Balaji Institute of Tech & Science
KNEPALLY Narsampet-506331

FILE

NORTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED

GSTIN: 36AABCN2875L321

Bill for the month of SEP-2019

Dated:26-09-20

Payable on or before	10-10-2019	SCNO: WLR036	(WGL199)
Disconnection Date	25-10-2019	M/S. BALAJI INSTITUTE OF TECH	
Contracted MD (KVA/HP)	293.0	AND SCIENCE,	
Specified Voltage (KV)	11.0	(V) LAKNEPALLY, NARSAMPET(M)	
Actual Voltage (KV)	11.0 (COMM-FEEDER)	WARANGAL DIST.	
Category	II	PhNo:(9963976541)	

	KWH	KVAH	KVA	PF	TOD	TOD1	TOD
Reading on 21-09-19	537004.00	539320.00	71.20	0.99	3692.00	4915.00	10729.
Reading on 20-08-19	515279.00	517424.00		0.99			
Difference	21725.00	21896.00		0.99			
Multiplying Factor	2.00	2.00	2.00	***	2.00	2.00	2.
Total Consumption	43450.00	43792.00	142.40	***	7384.00	9830.00	21458.
Monthly Minimum	5860.00		234.40				
Consumption Main		43792.00	Colony		L&F		

					Rs.Ps
Demand Charges	Normal Rate	Rs. 390.00	for	234.40 KVA	91416.00
Energy Charges	For Units consumed Ps.	780	for	43792.00 KVAH	341577.60
	TOD Chgs from 6PM TO 10PM Rs. 1		*	7384.00	7384.00
	TOD Chgs from 6AM TO 10AM Rs. 1		*	9830.00	9830.00
	TOD Chgs from 10PM TO 6AM Rs.-1		*	21458.00	-21458.00
Spl. rates if any					
	ED Charges	Ps. 6.00	for	43792.00	2627.50
				Sub Total	431377.10
				Customer Charges	1685.00

Note: Pay your bill to A/c No.62488011379
SBI, Nakkalagutta, Hanamakonda
IFSC Code: SBIN0020150

Late payment Charges 95120

Cheque No. 013876.

Other Charges: export units 706887.80=-55120.

ROUND AMT. 0.00

Current Bill Amount 376465.00

Arrears 0.00

Last Paid Amount 266298.00(09-SEP-2019) Bill Amount INCL. Arrears 376465.00

THOUSAND

NORTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED

36AABCN2875L3Z1

for the month of AUG-2019

Dated:26-08-2019

le on or before	09-09-2019	SCNO: WLR036	(WGL199)
nnection Date	24-09-2019	M/S. BALAJI INSTITUTE OF TECHN	
ected MD (KVA/HP)	293.0	AND SCIENCE,	
ied Voltage (KV)	11.0	(V) LAKNEPALLY, NARSAMPET(M),	
Voltage (KV)	11.0 (COMM-FEEDER)	WARANGAL DIST.	
ry	II	PhNo:(9963976541)	

	KWH	KVAH	KVA	PF	TOD	TOD1	TOD2
ng on 20-08-19	515279.00	517424.00	56.40	0.99	2160.00	3249.00	7144.00
ng on 22-07-19	500984.00	503036.00		0.99			
rence	14295.00	14388.00		0.99			
ying Factor	2.00	2.00	2.00	***	2.00	2.00	2.00
onsumption	28590.00	28776.00	112.80	***	4320.00	6498.00	14288.00
Minimum	5860.00		234.40				
ption Main		28776.00	Colony		L&F		

					Rs.Ps.
o Charges	Normal Rate	Rs. 390.00 for	234.40 KVA		91416.00
y Charges	For Units consumed Ps.	780 for	28776.00 KVAH		224452.80
	TOD Chgs from 6PM TO 10PM Rs. 1	*	4320.00		4320.00
	TOD Chgs from 6AM TO 10AM Rs. 1	*	6498.00		6498.00
	TOD Chgs from 10PM TO 6AM Rs.-1	*	14288.00		-14288.00
ates if any					
	ED Charges	Ps. 6.00 for	28776.00		1726.56

Sub Total	314125.36
Customer Charges	1685.00
Late payment Charges	550.00
ED Int.	3.18

Pay your bill to A/c No.62488011379
SBI, Nakkalagutta, Hanamakonda
IFSC Code: SBIN0020150

Cheque No. 013774

Other Charges: export units 6570 @7.80	-51246.00
ROUND AMT.	0.46
Current Bill Amount	265118.00
Arrears	1180.00
Bill Amount INCL. Arrears	266298.00

aid Amount 228049.00(09-AUG-2019)

D LAKH SIXTY SIX' THOUSAND
HUNDRED AND NINETY EIGHT ONLY

Senior Accounts Officer

NORTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED

GSTIN: 36AABCN2875L3Z1

Bill for the month of JUL-2019 Dated:26-07-2C

Payable on or before	09-08-2019	SCNO: WLR036	(WGL199)
Disconnection Date	24-08-2019	M/S. BALAJI INSTITUTE OF TECH	
Contracted MD (KVA/HP)	293.0	AND SCIENCE,	
Specified Voltage (KV)	11.0	(V) LAKNEPALLY, NARSAMPET(M),	
Actual Voltage (KV)	11.0 (COMM-FEEDER)	WARANGAL DIST.	
Category	II	PhNo:(9963976541)	

	KWH	KVAH	KVA	PF	TOD	TOD1	TC
Reading on 22-07-19	500984.00	503036.00	50.40	0.99	1659.00	3400.00	728
Reading on 20-06-19	487915.00	489901.00		0.99			
Difference	13069.00	13135.00		0.99			
Multiplying Factor	2.00	2.00	2.00	***	2.00	2.00	
Total Consumption	26138.00	26270.00	100.80	***	3318.00	6800.00	1456
Monthly Minimum	5860.00		234.40				
Consumption Main		26270.00	Colony		L&F		

					Rs
Demand Charges	Normal Rate	Rs. 390.00 for	234.40 KVA		91416
Energy Charges	For Units consumed Ps. 780 for		26270.00 KVAH		204906
	TOD Chgs from 6PM TO 10PM Rs. 1		*	3318.00	3318
	TOD Chgs from 6AM TO 10AM Rs. 1		*	6800.00	6800
	~~TOD Chgs from 10PM TO 6AM Rs. 1~~		~~*~~	~~14564.00~~	~~-14564~~
Spl. rates if any					
	ED Charges	Ps. 6.00 for	26270.00		1576
				Sub Total	293452
				Customer Charges	1685

Note: Pay your bill to A/c No.62488011379
SBI, Nakkalagutta, Hanamakonda
IFSC Code: SBIN0020150

Late payment Charges 2404
ED Int. 21

Cheque No. DIBFHS

Other Charges: 891207.80 -69513.60
Current Bill Amount 228049
Arrears 1180
Last Paid Amount 387017.00(03-JUL-2019) Bill Amount INCL. Arrears 229229

RS.TWO LAKH TWENTY NINE THOUSAND
TWO HUNDRED AND TWENTY NINE ONLY

E. & O.E

Senior Accounts Offi

NOTE: Please Contact the Senior Accounts Officer of the Operation Circle at h
for any information on bills discrepancies.

...tion on bills discrepancies.

NORTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED

GSTIN: 36AABCN2875L3Z1

Bill for the month of OCT-2019 Dated:26-10-2019

Payable on or before	09-11-2019	SCNO: WLR036	(WGL199)
Disconnection Date	24-11-2019	M/S. BALAJI INSTITUTE OF TECHN	
Contracted MD (KVA/HP)	293.0	AND SCIENCE,	
Specified Voltage (KV)	11.0	(V) LAKNEPALLY, NARSAMPET(M),	
Actual Voltage (KV)	11.0 (COMM-FEEDER)	WARANGAL DIST.	
Category	II	PhNo:(9963976541)	

	KWH	KVAH	KVA	PF	TOD	TOD1	TOD2
Reading on 22-10-19	547463.00	549846.00	75.60	0.99	1787.00	2558.00	5330.00
Reading on 21-09-19	537004.00	539320.00		0.99			
Difference	10459.00	10526.00		0.99			
Multiplying Factor	2.00	2.00	2.00	***	2.00	2.00	2.00
Total Consumption	20918.00	21052.00	151.20	***	3574.00	5116.00	10660.00
Monthly Minimum	5860.00		234.40				
Consumption Main		21052.00	Colony		L&F		

				Rs.Ps.
Demand Charges	Normal Rate	Rs. 390.00 for	234.40 KVA	91416.00
Energy Charges	For Units consumed Ps.	780 for	21052.00 KVAH	164205.60
	TOD Chgs from 6PM TO 10PM Rs. 1	*	3574.00	3574.00
	TOD Chgs from 6AM TO 10AM Rs. 1	*	5116.00	5116.00
	TOD Chgs from 10PM TO 6AM Rs.-1	*	10660.00	-10660.00
Spl. rates if any				
	ED Charges	Ps. 6.00 for	21052.00	1263.12

Sub Total	254914.72
Customer Charges	1685.00
Late payment Charges	550.00

Note: Pay your bill to A/c No.62468011379
SBI, Nakkalagutta, Hanamakonda
IFSC Code: SBIN0020150

Chq No{ - 013913

Other Charges:	160820.80	-125439.60
	ROUND AMT.	-0.12
	Current Bill Amount	131710.00
	Arrears	0.00
Last Paid Amount 378482.00(25-OCT-2019)	Bill Amount INCL. Arrears	131710.00

RS.ONE LAKH THIRTY ONE THOUSAND
SEVEN HUNDRED AND TEN ONLY

NORTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED

GSTIN: 36AABCN2875L3Z1

Bill for the month of NOV-2019 Dated:26-11-2019

Payable on or before	10-12-2019	SCNO: WLR036	(WGL199)
Disconnection Date	25-12-2019	M/S. BALAJI INSTITUTE OF TECHN	
Contracted MD (KVA/HP)	293.0	AND SCIENCE,	
Specified Voltage (KV)	11.0	(V) LAKNEPALLY, NARSAMPET(M),	
Actual Voltage (KV)	11.0 (COMM-FEEDER)	WARANGAL DIST.	
Category	II	PhNo:(9963976541)	

	KWH	KVAH	KVA	PF	TOD	TOD1	TOD2
Reading on 21-11-19	563581.00	566231.00	58.00	0.98	3016.00	4181.00	8105.00
Reading on 22-10-19	547463.00	549846.00		0.98			
Difference	16118.00	16385.00		0.98			
Multiplying Factor	2.00	2.00	2.00	***	2.00	2.00	2.00
Total Consumption	32236.00	32770.00	116.00	***	6032.00	8362.00	16210.00
Monthly Minimum	5860.00		234.40				
Consumption Main		32770.00	Colony		L&F		

				Rs.Ps.
Demand Charges	Normal Rate	Rs. 390.00 for	234.40 KVA	91416.00
Energy Charges	For Units consumed Ps.	780 for	32770.00 KVAH	255606.00
	TOD Chgs from 6PM TO 10PM Rs. 1	*	6032.00	6032.00
	TOD Chgs from 6AM TO 10AM Rs. 1	*	8362.00	8362.00
	TOD Chgs from 10PM TO 6AM Rs.-1	*	16210.00	-16210.00
Spl. rates if any				
	ED Charges	Ps. 6.00 for	32770.00	1966.20

Sub Total	347172.20
Customer Charges	1685.00
Late payment Charges	2819.32
ED Int.	25.92

Note: Pay your bill to A/c No.62488011379
SBI, Nakkalagutta, Hanamakonda
IFSC Code: SBIN0020150

Other Charges: 1074427.80 -83803.20

Cheque No. 014065

ROUND AMT.	-0.24
Current Bill Amount	267899.00
Arrears	0.00
Last Paid Amount 131710.00(08-NOV-2019) Bill Amount INCL. Arrears	267899.00

RS.TWO LAKH SIXTY SEVEN THOUSAND
EIGHT HUNDRED AND NINETY NINE ONLY

E. & O.E

Senior Accounts Officer

NOTE: Please Contact the Senior Accounts Officer of the Operation Circle at his office for any information on bills (screpancies.