

**ENERGY AUDIT REPORT
OF
KAKOJAN COLLEGE**

KAKOJAN, JORHAT



Prepared for

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
(NAAC)**

Academic Year

2025-26

Prepared By:

Energy Audit Committee / External Auditor

Date: 25-05-2026

CERTIFICATE

This is to certify that the Energy Audit of Kakojan College has been conducted for the purpose of NAAC accreditation. The audit includes assessment of energy consumption patterns, energy conservation practices, and recommendations for efficient utilization of energy resources within the campus.

Signature of Auditor/Committee

| | |
|--|--|
| Dr. Rashmi Rekha Saikia (Chairperson): Principal, Kakojan College | |
| Mr. Dhruvajyoti Sarmah (Coordinator): Assistant Professor, Department of Physics, Kakojan College | |
| Mr. Sanjib Borah (Member): Assistant Professor, Department of Physics, Kakojan College | |
| Mr. Jayanta Duarah (Member): Assistant Professor, Department of Botany, Kakojan College | |
| Dr. Himanshu Rajbongshi (External Audit Expert): Assistant Professor, Department of Physics, Bahona College | |

INDEX

| Sl. No. | Contents | Page No. |
|---------|---------------------------------------|----------|
| 1 | Introduction | 04 |
| 2 | Objectives of Energy Audit | 04 |
| 3 | Institutional Profile | 05 |
| 4 | Scope of Audit | 06 |
| 5 | Methodology | 06 |
| 6 | Energy Consumption Analysis | 07 |
| 7 | Existing Energy Conservation Measures | 18 |
| 8 | Findings and Observations | 20 |
| 9 | Recommendations | 20 |
| 10 | Conclusion | 20 |
| 11 | Annexure | 21 |

1. INTRODUCTION

Energy management and conservation are important aspects of sustainable campus development. An Energy Audit is a systematic process undertaken to evaluate energy consumption patterns and identify opportunities for energy savings.

This report presents the Energy Audit of Kakojan College prepared as part of the documentation for NAAC accreditation. The audit aims to assess present energy utilization practices and recommend suitable energy conservation measures.

2. OBJECTIVES OF ENERGY AUDIT

The major objectives of the audit are:

- 1) To study the pattern of energy consumption in the college campus.
- 2) To identify areas where energy is used inefficiently.
- 3) To recommend energy-saving measures.
- 4) To create awareness regarding energy conservation.
- 5) To encourage sustainable environmental practices in the institution.

3. INSTITUTIONAL PROFILE

| Particulars | Details |
|-----------------------|-------------------------------------|
| Name of Institution | Kakojan College |
| Location | Kakojan, Jorhat, Assam |
| Affiliated University | Dibrugarh University |
| Type of Institution | Government / Provincialized College |

Campus Area: The college campus spans a total area of 2 acres (8,093.72 m²), of which 447.51 m² is allocated for plantation activities, contributing to the green coverage within the premises. Additionally, Sector-B encompasses an extended area of 9 acres (39,995.89 m²), out of which 37,467.17 m² is covered under green areas, reflecting the institution's commitment to environmental sustainability and green campus initiatives.

Number of Students : 1326

Number of Teaching Staff : 43

Number of Non-Teaching Staff : 22

4. SCOPE OF THE AUDIT

The scope of the energy audit includes:

- Classrooms
- Laboratories
- Administrative Office
- Library
- Computer Centre
- Corridors and Common Areas
- Outdoor Lighting
- Electrical Appliances and Equipment

5. METHODOLOGY

The following methodology was adopted for conducting the audit:

1. Collection of electricity bills and energy consumption records.
2. Physical inspection of electrical installations.
3. Observation of energy usage practices.
4. Interaction with faculty members and office staff.
5. Analysis of energy consumption patterns.
6. Identification of energy-saving opportunities.

6. ENERGY CONSUMPTION ANALYSIS

Kakojan College has been imparting higher education in undergraduate level in Science and Art stream. The main energy source is electricity for application of various college activities. The electricity is procured from APDCL through 3 Phase connection, APDCL provides monthly electricity bill for payment and on receipt of monthly electricity bill it is paid. Standby power source DG (Diesel Generator) set of 45 KVA is available to use during power cut from APDCL.

6.1 Average Cost of Power- (From May 2025 – April 2026)

There is various type of electricity connection being power supplied by APDCL. Monthly electricity bill is provided by APDCL against electricity used and is paid by the college. A cost of power is worked out by summing up total KWH of all connections and their amount. By dividing total amount by total KWH works out average cost of power per KWH.

| Month | Energy consumption (kwh) | Bill Amount (Rs) |
|----------------|--------------------------|----------------------------------|
| May 2025 | 1154.78 | $1154.78 \times 7.99 = 9226.69$ |
| June 2025 | 2076.67 | $2076.67 \times 7.99 = 16592.59$ |
| July 2025 | 1131.51 | $1131.51 \times 7.99 = 9040.76$ |
| August 2025 | 2852.77 | $2852.77 \times 7.99 = 22793.63$ |
| September 2025 | 2202.09 | $2202.09 \times 7.99 = 17594.70$ |
| October 2025 | 1312.00 | $1312.00 \times 7.99 = 10482.88$ |
| November 2025 | 809.58 | $809.58 \times 7.99 = 6468.54$ |
| December 2025 | 573.6 | $573.6 \times 7.99 = 8583.14$ |
| January 2026 | 457.78 | $457.78 \times 7.99 = 3657.66$ |
| February 2026 | 516.48 | $516.48 \times 7.99 = 4126.68$ |
| March 2026 | 678.61 | $678.61 \times 7.99 = 5422.09$ |
| April 2026 | 722.46 | $722.46 \times 7.99 = 5422.46$ |

N.B. Average cost of power per KWH works out to be Rs- 7.99/KWH

6.2. Analysis of Connected Load in Campus:

Table:1 ELECTRICAL APPLIANCES IN DIFFERENT ROOMS

| Name of BLDG/RM | Fan | LED blub | Led t/l | 6 Ampr | 16 Ampr | Zerox machine | AC | Project or /sound system | Motor pump | Eye face machine | Cc tv camera /monitor /tv | Computer /printer | Aqua guard |
|------------------------|----------|----------|---------|--------|---------|---------------|----|--------------------------|------------|------------------|---------------------------|-------------------|------------|
| Teachers common room | 8+1=9 | 7 | 1 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 1 |
| Office | 6+1+4=11 | 1 | 3 | 25 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 6 | 0 |
| Principal room | 3 | 4 | 2 | 7 | 5 | 1 | 2 | 0 | 0 | 1 | 3, 2 | 2 | 0 |
| N1 | 4+1=5 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N2 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N3 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N4 | 4+1=5 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| GROUND FLOR BARANDA | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| Vice Principal room | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Room 9 | 6 | 2 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| KK handique store room | 2 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 15 | 5 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | | | | | |
|---------------------------------------|------------|----|---|----|---|---|---|---|---|---|---|-----|---|
| 16 | 5 | 2 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Girls Comm on room | 6 | 0 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | 3 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18 | 4 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Zoolog y lab | 2 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Zoolog y dept | 2 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| K K handiq ue office room | 3 | 2 | 1 | 2 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 1,1 | 0 |
| Student union room | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chemis try dept | 2 | 4 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Botany dept | 1 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Physics dept | 2 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Room 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Room7 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Room 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Room 8 | 9 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Library | 17+ 1=1 | 25 | 2 | 13 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 8,2 | 1 |

| | | | | | | | | | | | | | |
|---------------------------------|--------|---|---|---|----|---|---|---|---|---|---|-----|---|
| | 8 | | | | | | | | | | | | |
| Canteen | 4 | 5 | 5 | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 |
| Statistics dept | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Old math dept | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Room 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 st Floor exam room | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1,1 | 0 |
| IQAC room | 2 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Education classroom | 4 | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 st floor baranda | 0 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Computer lab | 4+1=5 | 3 | 0 | 1 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 |
| Digital room | 4+7=11 | 2 | 0 | 5 | 9 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| N5 | 2 | 2 | 1 | 0 | 0 | 0 | | | 0 | 0 | 0 | 0 | 0 |
| English dept | 2 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| N7 | 2+2=4 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | | | | | |
|----------------------------------|------------|-----------|---|---|---|---|---|------------------------------|---|---|---|---|---|
| N8 | 2+2 =4 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Toilet | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Top floor | 9+1 =10 | 4+4 =8 | 8 | 5 | 3 | 0 | 5 | 1,1 | 0 | 0 | 0 | 0 | 0 |
| Confer ence hall | | | | | | | | | | | | | |
| Confer ence side room | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Smart1 | 9 | 4 | 8 | 5 | 5 | 0 | 0 | 1,1 | 0 | 0 | 0 | 0 | 0 |
| Smart2 | 9 | 4 | 8 | 5 | 0 | 0 | 0 | 1 soun d syste m | 0 | 0 | 0 | 0 | 0 |
| Toilet | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stairca se and barand a | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TABLE:2 NAME OF LABORTORY EQUIPMENTS

| Laboratory | FAN | LED | LED TUBE | Fridge | INSRUMRNTS/Computer |
|------------|-------|-----|-------------|--------|---|
| Chemistry | 4+1=5 | 5 | 7 | 1 | Hot air oven (2kwh) Rotary checker (100w) Muffle furnace |

| | | | | | |
|---------|---|---|---|---|---|
| | | | | | (2kwh) Distil water plan 2 (4 kwh) |
| Botany | 5 | 3 | 0 | 1 | Laminar air flow (750 w) Hot water bath (1kwh) Muffle furnace (2kwh) Hot air oven 2 (4kwh) Hot plate (1.5 kwh) Autoclave (Vertical steam sterilizer) (2kwh) Growth chamber (1.5kwh) Incubator checker (1.5kwh) Distil water plant -1 (2 kwh) |
| Zoology | 4 | 2 | 0 | 1 | Hot air oven 3 (3x2=6kwh) Distil water plant -1 (2kwh) Water bath -1 (2kwh) Incubator -1(2kwh) Digital P ^H meter -3 (3x1kwh=3kwh) Digital spectrometer -1 Digital electronic balance -1- (1kwh) Digital calorimeter -1 (.5kwh) Digital turbidity meter -1- (1kwh) Centrifuge -1 – (.5kwh) Microscope -2 –(2x1=2kwh) |

| | | | | | |
|-------------|---|---|---|---|--|
| | | | | | Aquarium -1-(500w) |
| Physics | 8 | 3 | 0 | 1 | Heater -2 (2x1=2kwh) Sodium blub -1 (500w) Magnetic stirrer-1 (20wt) |
| Mathematics | 2 | 2 | 0 | 0 | 3 |
| English | 2 | 2 | 0 | 0 | 3 |

Table 3: List of equipment with the approximate energy consumption for the month of August 2025

| Serial no | Electrical Appliances | Number | Energy consumes per unit | Operating time | Total energy consumed in KWH |
|-----------|-----------------------|--------|--------------------------|--|------------------------------|
| 1 | LED blub (9watt) | 162 | 9 watt | 4 hours daily Average time for 24 days 4x24= 96 hr | 162x.009x96 =139.968 KWH |
| 2 | LED blub (20watt) | 84 | 20 watt | 4 hours daily Average time for 24 days 4x24= 96 hr | 84X.02X96 = 161.28KWH |
| 3 | Fan | 208 | 70 watt | 3 hours daily Average time for 24 days 3x24=96 hr | 208x.07x72 =1048.32 KWH |
| 4 | Computer | 65 | 100 watt | 1.5 hours daily | 65x.1x36 |

| | | | | | |
|------------------------|----------------------------|----|-----------|---|--|
| | | | | Average time for 24 days $1.5 \times 24 = 36$ hr | = 234KWH |
| 5 | Water purifier with cooler | 7 | 300 watt | 4 hours daily Average time for 24 days $4 \times 24 = 96$ hr | $4 \times 3 \times 96$ = 115.2KWH |
| 6 | Projector (LCD) | 3 | 150 watt | 1 hours daily Average time for 24 days $1 \times 24 = 24$ hr | $3 \times 150 \times 24$ = 10.8KWH |
| 7 | TV | 11 | 100 watt | 1 hours daily Average time for 24 days $1 \times 24 = 24$ hr | $11 \times 1 \times 24$ = 26.4 KWH |
| 8 | Refrigerator | 4 | 100 watt | 3 hours daily Average time for 24 days $3 \times 24 = 72$ hr | $3 \times 1 \times 72$ = 21.6 KWH |
| 9 | AC | 9 | 1000 watt | 2 hours daily Average time for 24 days $6 \times 24 = 144$ hr | $9 \times 1 \times 48$ = 432KWH |
| 10 | Xerox machine | 3 | 1000 watt | 0.5 hours daily Average time for 24 days $0.5 \times 24 = 12$ hr | $6 \times 1 \times 12$ = 72 KWH |
| 11 | Sound system | 3 | 100 watt | 0.4 hours daily Average time for 24 days $0.4 \times 24 = 9.6$ hr | $3 \times 1 \times 9.6$ = 2.88KWH |
| 12 | C.C Camera (Monitor) | 2 | 25 watt | 2 hours daily Average time for 24 days $2 \times 24 = 48$ hr | $2 \times 0.25 \times 48$ = 2.4KWH |
| 13 | C.C Camera | 31 | 3 watt | 24 hours daily Average time for 31 days $24 \times 31 = 744$ hr | $31 \times 0.03 \times 744$ = 69.19 KWH |
| 14 | Water Pump | 4 | 746 watt | 2.5 hours daily Average time for 24 days $2.5 \times 24 = 60$ hr | $4 \times 746 \times 48$ = 179.04 KWH |
| Total Estimated Energy | | | | | 2515.07 KWH |

Table 4: List of Laboratory equipment with the approximate energy consumption for the month of August 2025

| Serial no | Laboratory Equipment | Number | Energy consumed per unit | Operating time | Total energy consumed in KWH |
|-----------|-----------------------|--------|--------------------------|------------------|---|
| 1 | Hot air oven | 6 | 2KW | 7 hours monthly | $6 \times 2 \times 7$ =84KWH |
| 2 | Muffel Furnace | 2 | 2KW | 5 hours monthly | $2 \times 2 \times 5$ =20KWH |
| 3 | Distilled water Plant | 3 | 4KW | 10 hours monthly | $3 \times 4 \times 10$ =120 KWH |
| 4 | Rotarty Checker | 1 | 100 watt | 15 hours monthly | $1 \times 15 \times .1$ =1.5KWH |
| 5 | Laminar air flow | 1 | 750 watt | 15 hours monthly | $1 \times .75 \times 15$ =11.250 KWH |
| 6 | Hot Water bath | 1 | 1KW | 8 hours monthly | $1 \times 1 \times 8$ =8KWH |
| 7 | Hot Plate | 1 | 1KW | 7 hours monthly | $1 \times 1.5 \times 7$ =10.5 KWH |
| 8 | Autoclave | 1 | 2KW | 6 hours monthly | $1 \times 2 \times 6$ =12KWH |
| 9 | Growth Chamber | 1 | 1.5KW | 5 hours monthly | $1 \times 1.5 \times 5$ =7.5 KWH |
| 10 | Incubator Checker | 1 | 1.5 KW | 6 hours monthly | $1 \times 1.5 \times 6$ =9 KWH |
| 11 | Heater | 2 | 1KW | 8 hours monthly | $2 \times 1 \times 8$ =16KWH |

| | | | | | |
|------------------------|------------------|---|---------|------------------|---|
| 12 | Sodium Blub | 1 | 500Watt | 15 hours monthly | $1 \times .5 \times 15 =$ $=7.5\text{KWH}$ |
| 13 | Magnetic Stirrer | 1 | 20 Watt | 4 hours monthly | $1 \times .02 \times 4$ $=.08\text{KWH}$ |
| Total Estimated Energy | | | | | 307.33 KWH |

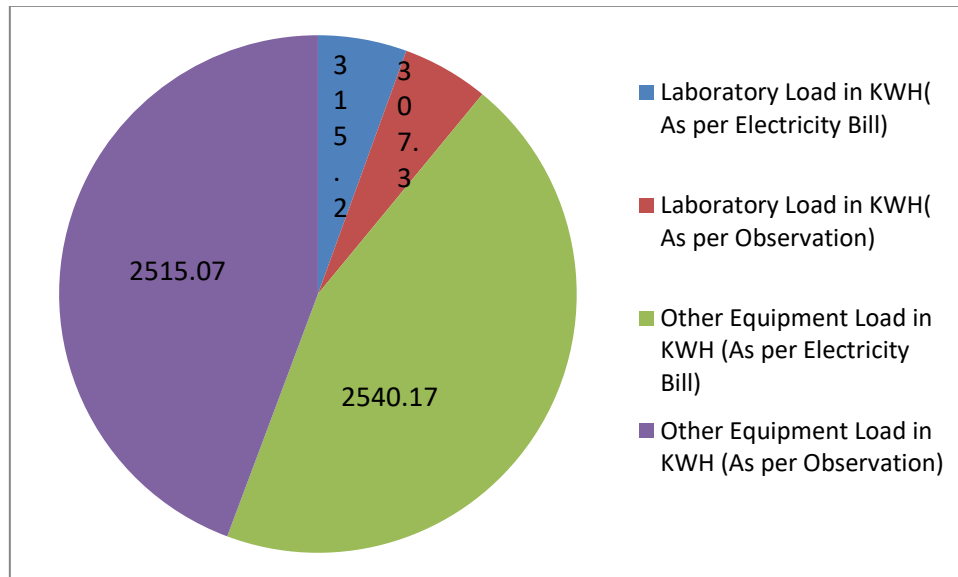
Table 5: Annual energy consumption as per APDCL Electricity Bill: (From May 25 – April 26)

| Month | Lighting load | Colling load | Pc/CC Camera/Monitoring/Sound Load | Water load | Laboratory load | Incinerator | Total consumed energy | Energy supplied by DG set | Total energy consumed by APDCL |
|--------------|---------------|--------------|------------------------------------|------------|-----------------|-------------|-----------------------|---------------------------|--------------------------------|
| May 25 | 213.42 | 560.28 | 185.21 | 423.21 | 200.67 | 35 | 1617.98 | 463.2 | 1154.78 |
| June 25 | 311.21 | 980.13 | 242.5 | 512.32 | 285.42 | 91.39 | 2424.97 | 348.3 | 2076.67 |
| July 25 | 281.53 | 431.62 | 174.2 | 419.37 | 0 | 0 | 1226.72 | 95.21 | 1131.51 |
| August 25 | 226.13 | 1258.32 | 341.6 | 326.42 | 315.2 | 85.1 | 2852.77 | 312.6 | 2540.17 |
| September 25 | 218.26 | 968.91 | 321.32 | 612.31 | 332.61 | 90 | 2543.41 | 341.32 | 2202.09 |
| October 25 | 201.41 | 269.55 | 312.12 | 418.62 | 280.3 | 76 | 1558.7 | 246.7 | 1312 |
| November | 198.2 | 0 | 265.1 | 221.4 | 195.4 | 53 | 933.1 | 123.52 | 809.58 |

| | | | | | | | | | |
|-------------|--------|--------|--------|-------|-------|----|---------|--------|--------|
| er 25 | | | | | | | | | |
| December 25 | 185.32 | 0 | 294.6 | 204.3 | 0 | 38 | 722.22 | 148.62 | 573.6 |
| January 26 | 201.4 | 0 | 229.38 | 192.4 | 0 | 46 | 669.18 | 211.4 | 457.78 |
| February 26 | 199.6 | 0 | 250.82 | 215.6 | 0 | 36 | 702.02 | 185.54 | 516.48 |
| March 26 | 212.43 | 0 | 228.61 | 196.8 | 203.6 | 71 | 912.44 | 233.83 | 678.61 |
| April 26 | 201.61 | 185.56 | 218.61 | 302.6 | 172.5 | 62 | 1080.88 | 358.42 | 722.46 |

Table 6: Comparative Energy Consumed of APDCL Electricity Bill versus Observation Data for the month of August 2025

| SL No | Laboratory Load in KWH(As per Electricity Bill) | Laboratory Load in KWH(As per Observation) | Other Equipment Load in KWH (As per Electricity Bill) | Other Equipment Load in KWH (As per Observation) |
|-------|--|---|---|--|
| 1 | 315.2 | 307.33 | 2540.17 | 2515.07 |



7. EXISTING ENERGY CONSERVATION MEASURES

The institution has adopted several measures for efficient energy utilization, such as:

- Use of LED bulbs and LED tube lights.
- Maximum utilization of natural lighting and ventilation.
- Switching off electrical appliances after use.
- Periodic maintenance of electrical equipment.
- Awareness among students and staff regarding energy conservation.

A) Energy Saving Opportunity:

There is major load of lighting & fan in college campus. Hence it is focused for identification of energy saving opportunity.

College has been taking initiative for energy conservation and energy saving work. For this purpose, college has replaced CFL bulb, FTL & incandescent lamp with LED bulb & LED Tube light during the year 2019-20

1)Implementation of Rainwater Harvesting Plant: To reduce the energy consumption the institution has implemented one Rainwater Harvesting Plant

which stores the rain water for future use. This attempt not only reduces the energy consumption during pumping of ground water but also provide water for use.

2) Introduction of Solar Lights in campus:

There is identified immense scope in campus to introduce solar power. There is lot of places available in campus for installation of solar Light. Solar Lights has been utilized from **2021-2022** year by college to generate and utilize solar power in the campus for own use in progressive manner. There are 17th no of solar Light installed in the institution main campus. Energy generated in solar (in Kilowatt/month)

| Total no of Solar Light | Energy generated per Light | No of days | Energy generated | % of energy needs met by Solar Energy |
|-------------------------|----------------------------|------------|----------------------|---------------------------------------|
| 17 | 1 KWH | 30 | 17X1X30 = 510 KWH | 29% |

The installed solar power generation has following benefits to college-

- 1) It helps to generate green power mitigating greenhouse gas emission for protection of environment as well as it is conserving conventional energy resources.
- 2) This mode of power generation saves energy cost for purchasing power from APDCL & overcome dependency on power supply.
- 3) This also helps the student as demonstrative model to imbibe technical knowledge

B) Awareness Program and Sign Board Display near switch board.

The Awareness program for optimum use of electricity and water as well as its saving has been reviewed among user about efficient and optimum use of energy and water to save. To create awareness , awareness Sign board displayed near each Switch-Board, Toilet Block to guide the user to reduce ,misuse and wastage of power and water.

8. FINDINGS AND OBSERVATIONS

- Most classrooms are adequately ventilated and receive natural light.
- LED lighting systems are installed in several sections of the campus.
- Electricity consumption is comparatively higher during examination and laboratory periods.
- Some old electrical appliances may be replaced with energy-efficient models.
- Fans and lights are generally switched off when not in use.

9. RECOMMENDATIONS

The following recommendations are suggested for improving energy efficiency:

1. Replacement of conventional lighting with complete LED systems.
2. Installation of more solar power systems in future.
3. Regular monitoring of electricity consumption.
4. Conducting awareness programs on energy conservation.
5. Adoption of energy-efficient electrical appliances for example sensor based lights.
6. Routine maintenance of electrical systems and wiring.

10. CONCLUSION

The Energy Audit of Kakojan College indicates that the institution has adopted several positive energy conservation practices. Further improvements can be achieved through continuous monitoring, awareness programs, and implementation of recommended energy-saving measures.

The institution is committed to sustainable development and environmentally responsible practices in accordance with NAAC quality parameters.

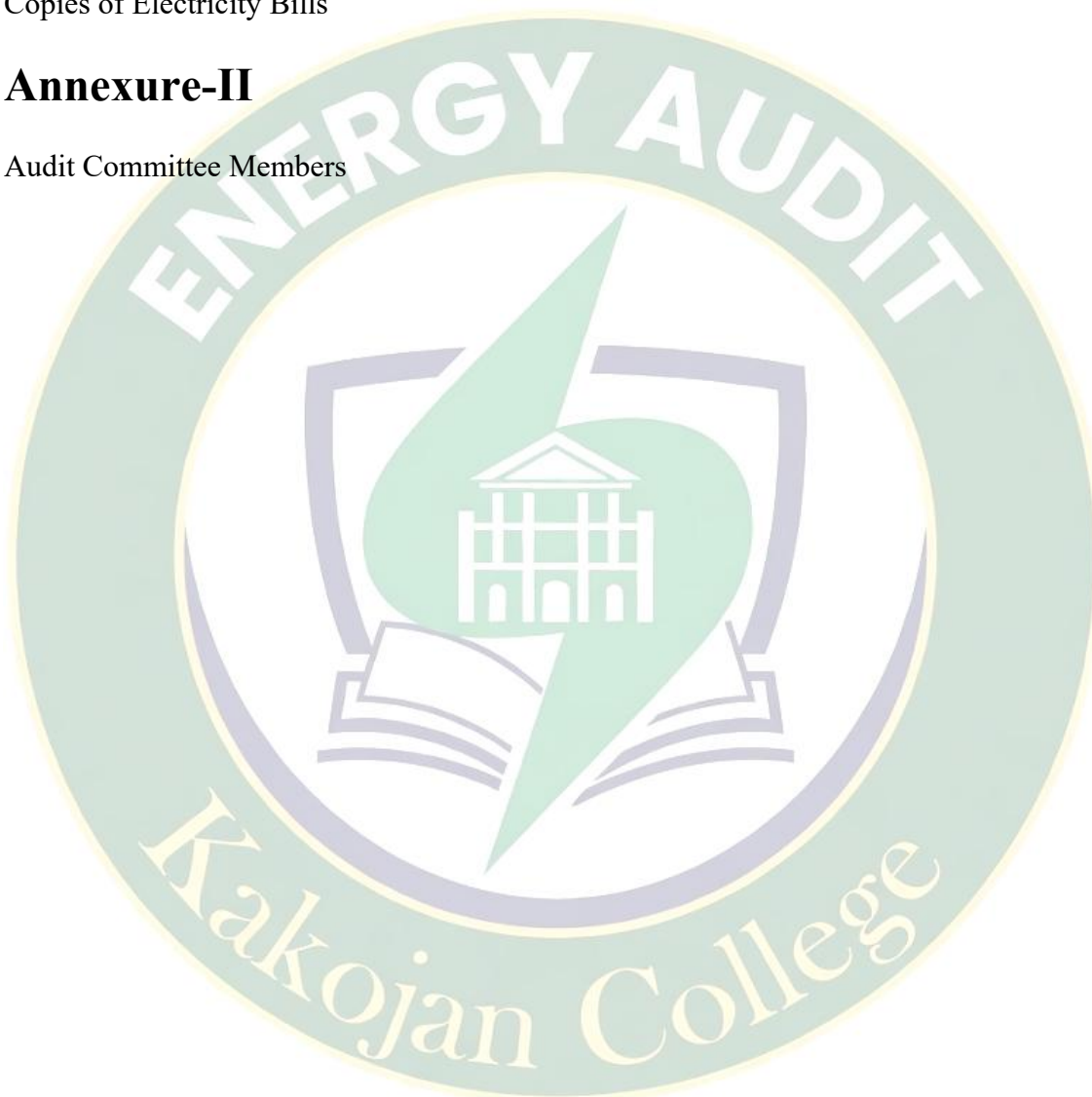
11. ANNEXURE

Annexure-I

Copies of Electricity Bills

Annexure-II

Audit Committee Members



Electricity Bill
Kakojan College, Jorhat, Assam

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/ICA, Jorhat
CIN: U40102AS1999000742
GSTIN: 18AAAG1334A12Z
ELECTRICITY BILL

Consumer Name: Principal, Kakojan College
Address: P.O. Kakojan, Jorhat
PIN No: 785435031
Contact Number: 985435031
Email: jakojancollege@gmail.com
Toll-free: 1800-120-1200
Supply Voltage Level: Supply Voltage Level 11 KV

Consumer Number: 17000001100
Old Consumer Number: 4000000100
DTB Number: 10130000
PA Number: 000
Contract Load in KW: 25.00
Committed Demand in KW: 25.00
Meter Number: 985435031
Main Status: RUNNING
Billing Status: NORMAL
Supply Voltage Level: Supply Voltage Level 11 KV

Bill Period: 01/06/2025
Due Date: 27/06/2025
Bill From: 01/06/2025 to 30/06/2025
Bill To: 01/06/2025
Number of Days: 30.00
Meter Status: RUNNING
Billing Status: NORMAL

Meter Reading Details

| Reading Type | Meter Number | MP | Previous Reading in kWh | Previous Reading in kWh | Current Reading in kWh | Current Reading in kWh | Difference Reading in kWh | Difference Reading in kWh |
|--------------|--------------|--------|-------------------------|-------------------------|------------------------|------------------------|---------------------------|---------------------------|
| Contractual | 985435031 | 10.000 | 985435031 | 985435031 | 10000.000 | 0 | 0 | 0 |

Unit Adjustment

| Applicable | 100 Normal | 100 Peak | 100 Night | Solar Unit Adjusted | Remaining Excess Unit |
|------------|------------|----------|-----------|---------------------|-----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Current Demand | Outstanding Amount | Adjustment Amount | Solar Rebate | Net Bill Amount |
|----------------|--------------------|-------------------|--------------|-----------------|
| 25000.00 | 0 | 0 | 0 | 21968.00 |

Energy Consumption (Last 6 Months Bill)

| Month | Unit | Rate | Amount |
|------------|----------|--------|----------|
| 01/06/2025 | 10000.00 | 2.1968 | 21968.00 |

Checked by: Prepared by: 40006052

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/ICA, Jorhat
CIN: U40102AS1999000742
GSTIN: 18AAAG1334A12Z
ELECTRICITY BILL

Consumer Name: Principal, Kakojan College
Address: P.O. Kakojan, Jorhat
PIN No: 785435031
Contact Number: 985435031
Email: jakojancollege@gmail.com
Toll-free: 1800-120-1200
Supply Voltage Level: Supply Voltage Level 11 KV

Consumer Number: 17000001100
Old Consumer Number: 4000000100
DTB Number: 10130000
PA Number: 000
Contract Load in KW: 25.00
Committed Demand in KW: 25.00
Meter Number: 985435031
Main Status: RUNNING
Billing Status: NORMAL
Supply Voltage Level: Supply Voltage Level 11 KV

Bill Period: 01/06/2025
Due Date: 27/06/2025
Bill From: 01/06/2025 to 30/06/2025
Bill To: 01/06/2025
Number of Days: 30.00
Meter Status: RUNNING
Billing Status: NORMAL

Meter Reading Details

| Reading Type | Meter Number | MP | Previous Reading in kWh | Previous Reading in kWh | Current Reading in kWh | Current Reading in kWh | Difference Reading in kWh | Difference Reading in kWh |
|--------------|--------------|--------|-------------------------|-------------------------|------------------------|------------------------|---------------------------|---------------------------|
| Contractual | 985435031 | 10.000 | 985435031 | 985435031 | 10000.000 | 0 | 0 | 0 |

Unit Adjustment

| Applicable | 100 Normal | 100 Peak | 100 Night | Solar Unit Adjusted | Remaining Excess Unit |
|------------|------------|----------|-----------|---------------------|-----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Current Demand | Outstanding Amount | Adjustment Amount | Solar Rebate | Net Bill Amount |
|----------------|--------------------|-------------------|--------------|-----------------|
| 25000.00 | 0 | 0 | 0 | 21968.00 |

Energy Consumption (Last 6 Months Bill)

| Month | Unit | Rate | Amount |
|------------|----------|--------|----------|
| 01/06/2025 | 10000.00 | 2.1968 | 21968.00 |

Checked by: Prepared by: 40006052

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/ICA, Jorhat
CIN: U40102AS1999000742
GSTIN: 18AAAG1334A12Z
ELECTRICITY BILL

Consumer Name: Principal, Kakojan College
Address: P.O. Kakojan, Jorhat
PIN No: 785435031
Contact Number: 985435031
Email: jakojancollege@gmail.com
Toll-free: 1800-120-1200
Supply Voltage Level: Supply Voltage Level 11 KV

Consumer Number: 17000001100
Old Consumer Number: 4000000100
DTB Number: 10130000
PA Number: 000
Contract Load in KW: 25.00
Committed Demand in KW: 25.00
Meter Number: 985435031
Main Status: RUNNING
Billing Status: NORMAL
Supply Voltage Level: Supply Voltage Level 11 KV

Bill Period: 01/06/2025
Due Date: 27/06/2025
Bill From: 01/06/2025 to 30/06/2025
Bill To: 01/06/2025
Number of Days: 30.00
Meter Status: RUNNING
Billing Status: NORMAL

Meter Reading Details

| Reading Type | Meter Number | MP | Previous Reading in kWh | Previous Reading in kWh | Current Reading in kWh | Current Reading in kWh | Difference Reading in kWh | Difference Reading in kWh |
|--------------|--------------|--------|-------------------------|-------------------------|------------------------|------------------------|---------------------------|---------------------------|
| Contractual | 985435031 | 10.000 | 985435031 | 985435031 | 10000.000 | 0 | 0 | 0 |

Unit Adjustment

| Applicable | 100 Normal | 100 Peak | 100 Night | Solar Unit Adjusted | Remaining Excess Unit |
|------------|------------|----------|-----------|---------------------|-----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Current Demand | Outstanding Amount | Adjustment Amount | Solar Rebate | Net Bill Amount |
|----------------|--------------------|-------------------|--------------|-----------------|
| 25000.00 | 0 | 0 | 0 | 21968.00 |

Energy Consumption (Last 6 Months Bill)

| Month | Unit | Rate | Amount |
|------------|----------|--------|----------|
| 01/06/2025 | 10000.00 | 2.1968 | 21968.00 |

Checked by: Prepared by: 40006052

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/ICA, Jorhat
CIN: U40102AS1999000742
GSTIN: 18AAAG1334A12Z
ELECTRICITY BILL

Consumer Name: Principal, Kakojan College
Address: P.O. Kakojan, Jorhat
PIN No: 785435031
Contact Number: 985435031
Email: jakojancollege@gmail.com
Toll-free: 1800-120-1200
Supply Voltage Level: Supply Voltage Level 11 KV

Consumer Number: 17000001100
Old Consumer Number: 4000000100
DTB Number: 10130000
PA Number: 000
Contract Load in KW: 25.00
Committed Demand in KW: 25.00
Meter Number: 985435031
Main Status: RUNNING
Billing Status: NORMAL
Supply Voltage Level: Supply Voltage Level 11 KV

Bill Period: 01/06/2025
Due Date: 27/06/2025
Bill From: 01/06/2025 to 30/06/2025
Bill To: 01/06/2025
Number of Days: 30.00
Meter Status: RUNNING
Billing Status: NORMAL

Meter Reading Details

| Reading Type | Meter Number | MP | Previous Reading in kWh | Previous Reading in kWh | Current Reading in kWh | Current Reading in kWh | Difference Reading in kWh | Difference Reading in kWh |
|--------------|--------------|--------|-------------------------|-------------------------|------------------------|------------------------|---------------------------|---------------------------|
| Contractual | 985435031 | 10.000 | 985435031 | 985435031 | 10000.000 | 0 | 0 | 0 |

Unit Adjustment

| Applicable | 100 Normal | 100 Peak | 100 Night | Solar Unit Adjusted | Remaining Excess Unit |
|------------|------------|----------|-----------|---------------------|-----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Current Demand | Outstanding Amount | Adjustment Amount | Solar Rebate | Net Bill Amount |
|----------------|--------------------|-------------------|--------------|-----------------|
| 25000.00 | 0 | 0 | 0 | 21968.00 |

Energy Consumption (Last 6 Months Bill)

| Month | Unit | Rate | Amount |
|------------|----------|--------|----------|
| 01/06/2025 | 10000.00 | 2.1968 | 21968.00 |

Checked by: Prepared by: 40006052

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION, NGA, Jorhat
CIN: L42304AS20030207324
GSTIN: 18AAAC1254122
ELECTRICITY BILL

CH-932196
24/12/23

Customer Name: Principal Engineer College
Address: P.O. Khasim, Jorhat

Customer Number: 11069001000
Old Consumer Number: 4400000000
Bill Number: 932196
Bill Period: 15/12/2023 To 15/01/2024
Meter Number: 241925
Number of Days: 31
Billing Cycle: Monthly
Supply Voltage Level: Supply Voltage Level 11 KV

Meter Reading Details

| Reading Type | Old Meter | MP | Reading in kWh | Previous Reading in kWh | Current Reading in kWh | Difference Reading in kWh | Difference Meter Reading in kWh |
|----------------|-----------|-------------|----------------|-------------------------|------------------------|---------------------------|---------------------------------|
| Actual Reading | 241925 | 11069001000 | 10000 | 10000 | 10000 | 0 | 0 |

Unit Adjustment

| Unit | Old Rate | Old Demand | Old Meter | Old Unit Adjusted | Remaining Demand Unit |
|------|----------|------------|-----------|-------------------|-----------------------|
| 1 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Category | Outstanding Amount | Adjustment Amount | Total Amount | Net Bill Amount |
|-------------|--------------------|-------------------|--------------|-----------------|
| Outstanding | 0 | 0 | 0 | 0 |
| Adjustment | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 |

Energy Consumption (Last 4 Months Bill)

Computation of Difference Meter of last 4 months bills (Nett being the least bill price in this operation bill)

| Month | Bill Number | Reading | Amount |
|--------|-------------|---------|--------|
| Dec-23 | 932196 | 10000 | 10000 |
| Nov-23 | 932195 | 9500 | 9500 |
| Oct-23 | 932194 | 9000 | 9000 |
| Sep-23 | 932193 | 8500 | 8500 |

Checked by: _____ Prepared by: 40006052 Signature with seal

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION, NGA, Jorhat
CIN: L42304AS20030207324
GSTIN: 18AAAC1254122
ELECTRICITY BILL

CH-932197
24/12/23

Customer Name: Principal Engineer College
Address: P.O. Khasim, Jorhat

Customer Number: 11069001000
Old Consumer Number: 4400000000
Bill Number: 932197
Bill Period: 15/12/2023 To 15/01/2024
Meter Number: 241925
Number of Days: 31
Billing Cycle: Monthly
Supply Voltage Level: Supply Voltage Level 11 KV

Meter Reading Details

| Reading Type | Old Meter | MP | Reading in kWh | Previous Reading in kWh | Current Reading in kWh | Difference Reading in kWh | Difference Meter Reading in kWh |
|----------------|-----------|-------------|----------------|-------------------------|------------------------|---------------------------|---------------------------------|
| Actual Reading | 241925 | 11069001000 | 10000 | 10000 | 10000 | 0 | 0 |

Unit Adjustment

| Unit | Old Rate | Old Demand | Old Meter | Old Unit Adjusted | Remaining Demand Unit |
|------|----------|------------|-----------|-------------------|-----------------------|
| 1 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Category | Outstanding Amount | Adjustment Amount | Total Amount | Net Bill Amount |
|-------------|--------------------|-------------------|--------------|-----------------|
| Outstanding | 0 | 0 | 0 | 0 |
| Adjustment | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 |

Energy Consumption (Last 4 Months Bill)

Computation of Difference Meter of last 4 months bills (Nett being the least bill price in this operation bill)

| Month | Bill Number | Reading | Amount |
|--------|-------------|---------|--------|
| Dec-23 | 932196 | 10000 | 10000 |
| Nov-23 | 932195 | 9500 | 9500 |
| Oct-23 | 932194 | 9000 | 9000 |
| Sep-23 | 932193 | 8500 | 8500 |

Checked by: _____ Prepared by: 40006052 Signature with seal

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION, NGA, Jorhat
CIN: L42304AS20030207324
GSTIN: 18AAAC1254122
ELECTRICITY BILL

CH-932222

Customer Name: Principal Engineer College
Address: P.O. Khasim, Jorhat

Customer Number: 11069001000
Old Consumer Number: 4400000000
Bill Number: 932222
Bill Period: 15/12/2023 To 15/01/2024
Meter Number: 241925
Number of Days: 31
Billing Cycle: Monthly
Supply Voltage Level: Supply Voltage Level 11 KV

Meter Reading Details

| Reading Type | Old Meter | MP | Reading in kWh | Previous Reading in kWh | Current Reading in kWh | Difference Reading in kWh | Difference Meter Reading in kWh |
|----------------|-----------|-------------|----------------|-------------------------|------------------------|---------------------------|---------------------------------|
| Actual Reading | 241925 | 11069001000 | 10000 | 10000 | 10000 | 0 | 0 |

Unit Adjustment

| Unit | Old Rate | Old Demand | Old Meter | Old Unit Adjusted | Remaining Demand Unit |
|------|----------|------------|-----------|-------------------|-----------------------|
| 1 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Category | Outstanding Amount | Adjustment Amount | Total Amount | Net Bill Amount |
|-------------|--------------------|-------------------|--------------|-----------------|
| Outstanding | 0 | 0 | 0 | 0 |
| Adjustment | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 |

Energy Consumption (Last 4 Months Bill)

Computation of Difference Meter of last 4 months bills (Nett being the least bill price in this operation bill)

| Month | Bill Number | Reading | Amount |
|--------|-------------|---------|--------|
| Dec-23 | 932196 | 10000 | 10000 |
| Nov-23 | 932195 | 9500 | 9500 |
| Oct-23 | 932194 | 9000 | 9000 |
| Sep-23 | 932193 | 8500 | 8500 |

Checked by: _____ Prepared by: 40006052 Signature with seal

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION, NGA, Jorhat
CIN: L42304AS20030207324
GSTIN: 18AAAC1254122
ELECTRICITY BILL

CH-932249

Customer Name: Principal Engineer College
Address: P.O. Khasim, Jorhat

Customer Number: 11069001000
Old Consumer Number: 4400000000
Bill Number: 932249
Bill Period: 15/12/2023 To 15/01/2024
Meter Number: 241925
Number of Days: 31
Billing Cycle: Monthly
Supply Voltage Level: Supply Voltage Level 11 KV

Meter Reading Details

| Reading Type | Old Meter | MP | Reading in kWh | Previous Reading in kWh | Current Reading in kWh | Difference Reading in kWh | Difference Meter Reading in kWh |
|----------------|-----------|-------------|----------------|-------------------------|------------------------|---------------------------|---------------------------------|
| Actual Reading | 241925 | 11069001000 | 10000 | 10000 | 10000 | 0 | 0 |

Unit Adjustment

| Unit | Old Rate | Old Demand | Old Meter | Old Unit Adjusted | Remaining Demand Unit |
|------|----------|------------|-----------|-------------------|-----------------------|
| 1 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Category | Outstanding Amount | Adjustment Amount | Total Amount | Net Bill Amount |
|-------------|--------------------|-------------------|--------------|-----------------|
| Outstanding | 0 | 0 | 0 | 0 |
| Adjustment | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 0 |

Energy Consumption (Last 4 Months Bill)

Computation of Difference Meter of last 4 months bills (Nett being the least bill price in this operation bill)

| Month | Bill Number | Reading | Amount |
|--------|-------------|---------|--------|
| Dec-23 | 932196 | 10000 | 10000 |
| Nov-23 | 932195 | 9500 | 9500 |
| Oct-23 | 932194 | 9000 | 9000 |
| Sep-23 | 932193 | 8500 | 8500 |

Checked by: _____ Prepared by: 40006052 Signature with seal

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/BSCA, Jorhat

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/BSCA, Jorhat
GSTIN: 18AAJCL1354J12J
ELECTRICITY BILL

Customer Name: Principal, Kishan College
Address: P. O. Kishan, Jorhat

Consumer Number: 1750001550
Old Consumer Number: 6400002668
MTR Number: M1268000
Pole Number: 000
Connected Load in KW: 25.00
Contracted Demand in KVA: 29.41
Load Security: S465.00
Meter Number: 80237247
Supply Voltage Level: Supply Voltage Level 11 KV

Bill Amount: 8202.81
Due Date: 23-Mar-2024
Bill Period: 01-Jan-2024 To 28-Feb-2024
Number of Days: 28.00
Meter Status: Running
Billing Status: NORMA

Handwritten: Ch-771657, 16/5/24

Meter Reading Details

| Reading Type | Meter Number | MP | Previous Reading in kWh | Previous Export Reading in kWh | Current Reading in kWh | Current Export Reading in kWh | Reference Reading in kWh | Difference Equpt Reading in kWh | Difference Export Reading in kWh |
|--------------|--------------|--------|-------------------------|--------------------------------|------------------------|-------------------------------|--------------------------|---------------------------------|----------------------------------|
| KWH(Normal) | 80237247 | 10.000 | 10834.106 | 0 | 10904.560 | 0 | 10904.560 | 70.454 | 0 |

Unit Consumed

| PF Penalty/Retable | LT Metering Penalty | OTF Penalty | HT Retable | Voltage Retable | Voltage Penalty | Subtle Units in kWh |
|--------------------------|---------------------|------------------------------|-------------------------------|----------------------|-----------------|-------------------------|
| Normal 1485.630 | 0.000 | 0 | 0 | 0 | 0 | 678.510 |
| Recorded Demand (in KVA) | 0.000 | Maximum Demand (in KVA) 8.50 | Billing Demand (in KVA) 29.41 | Average Power Factor | 0.70 | |
| Power on hours | 730.00 | Freeze Amount | 0 | Organ Plan Retable | 0 | Availability Percentage |

Unit Adjustment

| Non-TDD | TDD-Sub | TDD-Peak | TDD-Normal | Solar Unit Adjusted | Remaining Excess Unit |
|---------|---------|----------|------------|---------------------|-----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Current Demand | Outstanding Amount | Adjustment Amount | Solar Rebate | Net Bill Amount |
|----------------|--------------------|-------------------|--------------|-----------------|
| 10232.31 | 0 | 0 | 0 | 10232.31 |

Effective Energy Charge + Energy Charge - Subsidies

| Energy Charge(Normal) | Units | Rate | Amount |
|---------------------------------|--------|--------|-----------|
| Energy Charge(Normal) | 678.51 | 7.99 | 5422.090 |
| Total Energy Charge | | | 5422.090 |
| Energy Charge Re-estimated | | | 0 |
| Demand/Fixed Charge (KVA) | 25.000 | 165.00 | 4084.180 |
| PF/OTF Charge | 0 | 0 | 0 |
| Rooftop Solar Adjustment | 0 | 5.26 | 0 |
| Electricity Duty | 0 | 5.06% | 481.313 |
| Government Subsidy | 0 | 0 | 0 |
| Tariff Subsidy | 0 | 0 | 0 |
| Green Energy | 0 | 0 | 0 |
| Overhead Penalty | 0 | 0 | 0 |
| Meter Rent | 0 | 0 | 0 |
| Charge for dishonoured cheque | 0 | 0 | 0 |
| Power Prepaid | 0 | 0 | 0 |
| Arrear Surcharge | 0 | 0 | 0 |
| Adjustment Amount | | | 124.890 |
| Current Surcharge | | | 0 |
| Subsidy if paid before due date | | | 0 |
| Payable amount before due date | | | 10457.000 |
| Payable amount after due date | | | 10232.300 |

Consumption & payment history of last 6 electricity bills

| Bill No. | Bill Date | Bill Amt. | Bill Amt. | Bill Amt. | Bill Amt. | Bill Amt. |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 10232.31 | 01-Mar-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |
| 10232.31 | 01-Feb-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |
| 10232.31 | 01-Jan-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |

Checked by: Prepared by: 40002281 Signature with seal

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/BSCA, Jorhat

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/BSCA, Jorhat
GSTIN: 18AAJCL1354J12J
ELECTRICITY BILL

Customer Name: Principal, Kishan College
Address: P. O. Kishan, Jorhat

Consumer Number: 1750001550
Old Consumer Number: 6400002668
MTR Number: M1268000
Pole Number: 000
Connected Load in KW: 25.00
Contracted Demand in KVA: 29.41
Load Security: S465.00
Meter Number: 80237247
Supply Voltage Level: Supply Voltage Level 11 KV

Bill Amount: 8202.81
Due Date: 23-Mar-2024
Bill Period: 01-Jan-2024 To 28-Feb-2024
Number of Days: 28.00
Meter Status: Running
Billing Status: NORMA

Handwritten: Ch-700812, 24/3/24

Meter Reading Details

| Reading Type | Meter Number | MP | Previous Reading in kWh | Previous Export Reading in kWh | Current Reading in kWh | Current Export Reading in kWh | Reference Reading in kWh | Difference Equpt Reading in kWh | Difference Export Reading in kWh |
|--------------|--------------|--------|-------------------------|--------------------------------|------------------------|-------------------------------|--------------------------|---------------------------------|----------------------------------|
| KWH(Normal) | 80237247 | 10.000 | 10791.630 | 0 | 10824.100 | 0 | 10824.100 | 32.470 | 0 |

Unit Consumed

| PF Penalty/Retable | LT Metering Penalty | OTF Penalty | HT Retable | Voltage Retable | Voltage Penalty | Subtle Units in kWh |
|--------------------------|---------------------|------------------------------|-------------------------------|----------------------|-----------------|-------------------------|
| Normal 1485.630 | 0.000 | 0 | 0 | 0 | 0 | 678.510 |
| Recorded Demand (in KVA) | 0.000 | Maximum Demand (in KVA) 8.50 | Billing Demand (in KVA) 29.41 | Average Power Factor | 0.70 | |
| Power on hours | 730.00 | Freeze Amount | 0 | Organ Plan Retable | 0 | Availability Percentage |

Unit Adjustment

| Non-TDD | TDD-Sub | TDD-Peak | TDD-Normal | Solar Unit Adjusted | Remaining Excess Unit |
|---------|---------|----------|------------|---------------------|-----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Current Demand | Outstanding Amount | Adjustment Amount | Solar Rebate | Net Bill Amount |
|----------------|--------------------|-------------------|--------------|-----------------|
| 10232.31 | 0 | 0 | 0 | 10232.31 |

Effective Energy Charge + Energy Charge - Subsidies

| Energy Charge(Normal) | Units | Rate | Amount |
|---------------------------------|--------|--------|-----------|
| Energy Charge(Normal) | 678.51 | 7.99 | 5422.090 |
| Total Energy Charge | | | 5422.090 |
| Energy Charge Re-estimated | | | 0 |
| Demand/Fixed Charge (KVA) | 25.000 | 165.00 | 4084.180 |
| PF/OTF Charge | 0 | 0 | 0 |
| Rooftop Solar Adjustment | 0 | 5.26 | 0 |
| Electricity Duty | 0 | 5.06% | 481.313 |
| Government Subsidy | 0 | 0 | 0 |
| Tariff Subsidy | 0 | 0 | 0 |
| Green Energy | 0 | 0 | 0 |
| Overhead Penalty | 0 | 0 | 0 |
| Meter Rent | 0 | 0 | 0 |
| Charge for dishonoured cheque | 0 | 0 | 0 |
| Power Prepaid | 0 | 0 | 0 |
| Arrear Surcharge | 0 | 0 | 0 |
| Adjustment Amount | | | 124.890 |
| Current Surcharge | | | 0 |
| Subsidy if paid before due date | | | 0 |
| Payable amount before due date | | | 10457.000 |
| Payable amount after due date | | | 10232.300 |

Consumption & payment history of last 6 electricity bills

| Bill No. | Bill Date | Bill Amt. | Bill Amt. | Bill Amt. | Bill Amt. | Bill Amt. |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 10232.31 | 01-Mar-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |
| 10232.31 | 01-Feb-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |
| 10232.31 | 01-Jan-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |

Checked by: Prepared by: 40002281 Signature with seal

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/BSCA, Jorhat

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/BSCA, Jorhat
GSTIN: 18AAJCL1354J12J
ELECTRICITY BILL

Customer Name: Principal, Kishan College
Address: P. O. Kishan, Jorhat

Consumer Number: 1750001550
Old Consumer Number: 6400002668
MTR Number: M1268000
Pole Number: 000
Connected Load in KW: 25.00
Contracted Demand in KVA: 29.41
Load Security: S465.00
Meter Number: 80237247
Supply Voltage Level: Supply Voltage Level 11 KV

Bill Amount: 10485.00
Due Date: 27-Apr-2024
Bill Period: 01-Mar-2024 To 31-Mar-2024
Number of Days: 31.00
Meter Status: Running
Billing Status: NORMA

Handwritten: Ch-056119, 05/04/24

Meter Reading Details

| Reading Type | Meter Number | MP | Previous Reading in kWh | Previous Export Reading in kWh | Current Reading in kWh | Current Export Reading in kWh | Reference Reading in kWh | Difference Equpt Reading in kWh | Difference Export Reading in kWh |
|--------------|--------------|--------|-------------------------|--------------------------------|------------------------|-------------------------------|--------------------------|---------------------------------|----------------------------------|
| KWH(Normal) | 80237247 | 10.000 | 10834.106 | 0 | 10904.560 | 0 | 10904.560 | 70.454 | 0 |

Unit Consumed

| PF Penalty/Retable | LT Metering Penalty | OTF Penalty | HT Retable | Voltage Retable | Voltage Penalty | Subtle Units in kWh |
|--------------------------|---------------------|------------------------------|-------------------------------|----------------------|-----------------|-------------------------|
| Normal 1485.630 | 0.000 | 0 | 0 | 0 | 0 | 678.510 |
| Recorded Demand (in KVA) | 0.000 | Maximum Demand (in KVA) 8.50 | Billing Demand (in KVA) 29.41 | Average Power Factor | 0.70 | |
| Power on hours | 730.00 | Freeze Amount | 0 | Organ Plan Retable | 0 | Availability Percentage |

Unit Adjustment

| Non-TDD | TDD-Sub | TDD-Peak | TDD-Normal | Solar Unit Adjusted | Remaining Excess Unit |
|---------|---------|----------|------------|---------------------|-----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Current Demand | Outstanding Amount | Adjustment Amount | Solar Rebate | Net Bill Amount |
|----------------|--------------------|-------------------|--------------|-----------------|
| 10232.31 | 0 | 0 | 0 | 10232.31 |

Effective Energy Charge + Energy Charge - Subsidies

| Energy Charge(Normal) | Units | Rate | Amount |
|---------------------------------|--------|--------|-----------|
| Energy Charge(Normal) | 678.51 | 7.99 | 5422.090 |
| Total Energy Charge | | | 5422.090 |
| Energy Charge Re-estimated | | | 0 |
| Demand/Fixed Charge (KVA) | 25.000 | 165.00 | 4084.180 |
| PF/OTF Charge | 0 | 0 | 0 |
| Rooftop Solar Adjustment | 0 | 5.26 | 0 |
| Electricity Duty | 0 | 5.06% | 481.313 |
| Government Subsidy | 0 | 0 | 0 |
| Tariff Subsidy | 0 | 0 | 0 |
| Green Energy | 0 | 0 | 0 |
| Overhead Penalty | 0 | 0 | 0 |
| Meter Rent | 0 | 0 | 0 |
| Charge for dishonoured cheque | 0 | 0 | 0 |
| Power Prepaid | 0 | 0 | 0 |
| Arrear Surcharge | 0 | 0 | 0 |
| Adjustment Amount | | | 124.890 |
| Current Surcharge | | | 0 |
| Subsidy if paid before due date | | | 0 |
| Payable amount before due date | | | 10485.000 |
| Payable amount after due date | | | 10232.300 |

Consumption & payment history of last 6 electricity bills

| Bill No. | Bill Date | Bill Amt. | Bill Amt. | Bill Amt. | Bill Amt. | Bill Amt. |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 10232.31 | 01-Mar-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |
| 10232.31 | 01-Feb-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |
| 10232.31 | 01-Jan-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |

Checked by: Prepared by: 40006052 Signature with seal

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/BSCA, Jorhat

Assam Power Distribution Company Limited
ELECTRICAL SUB-DIVISION/BSCA, Jorhat
GSTIN: 18AAJCL1354J12J
ELECTRICITY BILL

Customer Name: Principal, Kishan College
Address: P. O. Kishan, Jorhat

Consumer Number: 1750001550
Old Consumer Number: 6400002668
MTR Number: M1268000
Pole Number: 000
Connected Load in KW: 25.00
Contracted Demand in KVA: 29.41
Load Security: S465.00
Meter Number: 80237247
Supply Voltage Level: Supply Voltage Level 11 KV

Bill Amount: 10485.00
Due Date: 27-Apr-2024
Bill Period: 01-Mar-2024 To 31-Mar-2024
Number of Days: 31.00
Meter Status: Running
Billing Status: NORMA

Handwritten: Ch-056119, 05/04/24

Meter Reading Details

| Reading Type | Meter Number | MP | Previous Reading in kWh | Previous Export Reading in kWh | Current Reading in kWh | Current Export Reading in kWh | Reference Reading in kWh | Difference Equpt Reading in kWh | Difference Export Reading in kWh |
|--------------|--------------|--------|-------------------------|--------------------------------|------------------------|-------------------------------|--------------------------|---------------------------------|----------------------------------|
| KWH(Normal) | 80237247 | 10.000 | 10834.106 | 0 | 10904.560 | 0 | 10904.560 | 70.454 | 0 |

Unit Consumed

| PF Penalty/Retable | LT Metering Penalty | OTF Penalty | HT Retable | Voltage Retable | Voltage Penalty | Subtle Units in kWh |
|--------------------------|---------------------|------------------------------|-------------------------------|----------------------|-----------------|-------------------------|
| Normal 1485.630 | 0.000 | 0 | 0 | 0 | 0 | 678.510 |
| Recorded Demand (in KVA) | 0.000 | Maximum Demand (in KVA) 8.50 | Billing Demand (in KVA) 29.41 | Average Power Factor | 0.70 | |
| Power on hours | 730.00 | Freeze Amount | 0 | Organ Plan Retable | 0 | Availability Percentage |

Unit Adjustment

| Non-TDD | TDD-Sub | TDD-Peak | TDD-Normal | Solar Unit Adjusted | Remaining Excess Unit |
|---------|---------|----------|------------|---------------------|-----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 |

Billing Details

| Current Demand | Outstanding Amount | Adjustment Amount | Solar Rebate | Net Bill Amount |
|----------------|--------------------|-------------------|--------------|-----------------|
| 10232.31 | 0 | 0 | 0 | 10232.31 |

Effective Energy Charge + Energy Charge - Subsidies

| Energy Charge(Normal) | Units | Rate | Amount |
|---------------------------------|--------|--------|-----------|
| Energy Charge(Normal) | 678.51 | 7.99 | 5422.090 |
| Total Energy Charge | | | 5422.090 |
| Energy Charge Re-estimated | | | 0 |
| Demand/Fixed Charge (KVA) | 25.000 | 165.00 | 4084.180 |
| PF/OTF Charge | 0 | 0 | 0 |
| Rooftop Solar Adjustment | 0 | 5.26 | 0 |
| Electricity Duty | 0 | 5.06% | 481.313 |
| Government Subsidy | 0 | 0 | 0 |
| Tariff Subsidy | 0 | 0 | 0 |
| Green Energy | 0 | 0 | 0 |
| Overhead Penalty | 0 | 0 | 0 |
| Meter Rent | 0 | 0 | 0 |
| Charge for dishonoured cheque | 0 | 0 | 0 |
| Power Prepaid | 0 | 0 | 0 |
| Arrear Surcharge | 0 | 0 | 0 |
| Adjustment Amount | | | 124.890 |
| Current Surcharge | | | 0 |
| Subsidy if paid before due date | | | 0 |
| Payable amount before due date | | | 10485.000 |
| Payable amount after due date | | | 10232.300 |

Consumption & payment history of last 6 electricity bills

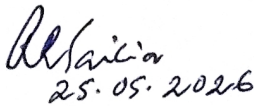
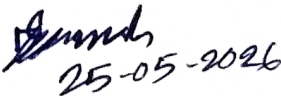
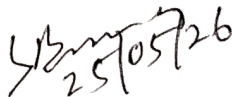
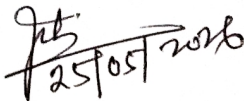
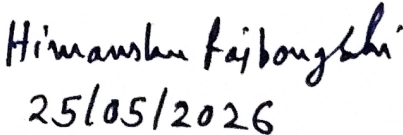
| Bill No. | Bill Date | Bill Amt. | Bill Amt. | Bill Amt. | Bill Amt. | Bill Amt. |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 10232.31 | 01-Mar-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |
| 10232.31 | 01-Feb-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |
| 10232.31 | 01-Jan-24 | 10457.00 | 10232.31 | 10232.31 | 10232.31 | 10232.31 |

Checked by: Prepared by: 40006052 Signature with seal

CERTIFICATE

This is to certify that the Energy Audit of Kakojan College has been conducted for the purpose of NAAC accreditation. The audit includes assessment of energy consumption patterns, energy conservation practices, and recommendations for efficient utilization of energy resources within the campus.

Signature of Auditor/Committee

| | |
|--|--|
| Dr. Rashmi Rekha Saikia (Chairperson): Principal, Kakojan College |  25.05.2026 |
| Mr. Dhrubajyoti Sarmah (Coordinator): Assistant Professor, Department of Physics, Kakojan College |  25-05-2026 |
| Mr. Sanjib Borah (Member): Assistant Professor, Department of Physics, Kakojan College |  25/05/26 |
| Mr. Jayanta Duarah (Member): Assistant Professor, Department of Botany, Kakojan College |  25/05/2026 |
| Dr. Himanshu Rajbongshi (External Audit Expert): Assistant Professor, Department of Physics, Bahona College |  25/05/2026 |