

ANNUAL ENERGY AUDIT REPORT



KASHMIR POWER DISTRIBUTION CORPORATION LIMITED

(KPDCL)

Exhibition Ground, Opposite High Court,
Jahanagir Chowk, Srinagar – 190009
(Jammu & Kashmir)

FY 2024 -25

Conducted by



A-Z Energy Engineers Private Limited

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Table of Contents

| | |
|--|----|
| List of Abbreviations | 5 |
| Acknowledgement | 6 |
| 1. Executive Summary | 7 |
| 1.1. Goals and Objectives | 7 |
| 1.2. About Energy Audit firm | 8 |
| 1.3. AT&C losses for FY 2024-25 | 8 |
| 2. Background | 9 |
| 2.1. Extant Regulations and role of BEE | 9 |
| 2.2. Purpose of Audit and Accounting Report | 11 |
| 2.3. Period of Energy Auditing and accounting | 12 |
| 3. DISCOM Introduction and Overview | 13 |
| 3.1. Name and address of DISCOM | 13 |
| 3.2. Name and contact details of energy manager (BEE Certified, if any) and Authorized signatory of DISCOM (Nodal Officer) | 13 |
| 3.3. Summary profile of DISCOM | 13 |
| 3.4. Electrical infrastructure and Assets Voltage wise | 18 |
| 3.5. Energy Conservation measures | 24 |
| 4. Energy flow analysis | 26 |
| 4.1. Energy flow across Service Levels | 26 |
| 4.2. Validation of metered data | 27 |
| 4.3. Validation of energy flow data and losses | 27 |
| 4.4. Energy accounts analysis for previous year | 30 |
| 4.5. Energy accounts analysis and performance in current year (based on quarterly data) | 33 |
| 4.6. Subsidy computation and analysis (based on quarterly data) | 47 |
| 4.7. Trend analysis and identification of key exceptions | 48 |
| 5. Energy Audit findings | 50 |
| 5.1. Review of capacity of DISCOM's energy accounting and audit wing | 50 |
| 5.2. Critical Analysis | 50 |
| 5.3. Revised findings based on data validation and field verification | 55 |
| 5.4. Inclusions and Exclusions | 55 |
| 6. Conclusion and Action Plan | 56 |
| 6.1. Summary of critical analysis and way forward proposed by Energy Auditor | 56 |
| 6.2. Summary of key findings – energy balance and losses | 57 |
| 6.3. Recommendations and best practices | 57 |
| 6.4. Action plan for line loss reduction | 58 |
| 6.5. Action plan for monitoring and reporting | 61 |
| 6.6. Action plan for automated energy accounting | 61 |
| Annexures | 64 |
| Annexure I - Introduction of Verification Firm | 64 |
| Annexure II - Minutes of Meeting with the DISCOM team | 66 |
| Annexure III - Check List prepared by auditing Firm | 68 |
| Annexure IV - Brief Approach, Scope & Methodology for audit | 69 |
| Annexure V - Infrastructure Details | 70 |
| Annexure VI - Power Purchase Details | 71 |
| Annexure VII - Single Line Diagram (SLD) | 75 |
| Annexure VIII - Category of service details (With Consumer and voltage-wise) | 80 |
| Annexure IX - Field Verification data and reports | 81 |
| Annexure X - List of documents verified with each parameter | 84 |
| Annexure XI - Brief Description of Unit | 85 |
| Annexure XII - Detailed Formats | 87 |

List of Tables

| | |
|--|----|
| Table 1: Energy Balance & Losses for FY 2024-25 | 8 |
| Table 2: Period of Energy Auditing and accounting | 12 |
| Table 3: Name and Address of DISCOM | 13 |
| Table 4: Details of energy manager and Authorized signatory of DISCOM | 13 |
| Table 5: Details of Energy Manager and Authorized Signatory of DISCOM | 15 |
| Table 6: Administrative hierarchy structure in KPDCL | 15 |
| Table 7: Administrative hierarchy in KPDCL upto section level | 15 |
| Table 8: Customer Profile for FY 2024-25 | 17 |
| Table 9: Network Infrastructure details | 18 |
| Table 10: Input Energy & Infrastructure details | 18 |
| Table 11: Voltage wise Meter Consumers | 19 |
| Table 12: Numbers of Distribution Transformers | 20 |
| Table 13: Voltage wise numbers of Feeders | 20 |
| Table 14: Length of Distribution Lines | 20 |
| Table 15: Energy Flow details | 21 |
| Table 16: Month wise Input Energy for FY 2024-25 | 23 |
| Table 17: Month wise Billed Energy for FY 2024-25 | 23 |
| Table 18: Voltage wise consumption pattern | 24 |
| Table 19: Energy Flow at different Voltage level Losses for FY 2024-25 | 26 |
| Table 20: AT&C losses in FY 2022-23 and 2023-24 | 30 |
| Table 21: Circle wise T&D and AT&C losses in FY 2022-23 & 2023-24 | 32 |
| Table 22: Month wise Purchase, input energy & billed energy for FY 2024-25 | 33 |
| Table 23: Energy Input and AT&C Losses for FY 2024-25 | 34 |
| Table 24: Voltage-wise AT&C Losses for FY 2024-25 | 34 |
| Table 25: Circle wise No. of consumers, Input energy and Sales in FY 2024-25 | 35 |
| Table 26: Circle wise T&D losses, Collection Efficiency and AT&C losses for FY 2024-25 | 36 |
| Table 27: Division wise T&D losses, Collection Efficiency and AT&C losses for FY 2024-25 | 37 |
| Table 28: Top 10 Divisions with higher AT&C losses (%) & T&D losses (%) | 43 |
| Table 29: Quarter wise – Division wise subsidy details | 47 |
| Table 30: Summary of AT&C & T& D Trends or Last two years | 49 |
| Table 31: Compliance status w.r.t Timelines and Pre-requisites | 51 |
| Table 32: Summary of Data gaps | 54 |
| Table 33: Comments by Energy Auditor and responses of DISCOM management | 55 |
| Table 34: Energy balance and losses | 57 |
| Table 35: Infrastructure details | 70 |
| Table 36: Metering details | 70 |
| Table 37: Month wise power purchase | 72 |
| Table 38: Circle wise monthly input & Billed energy (MU) | 73 |
| Table 39: Category of service details | 80 |
| Table 40: Field inspection details | 81 |
| Table 41: List of documents verified with each parameter | 84 |
| Table 42: Formulas used to derive the parameters | 86 |

List of Figures

| | |
|---|----|
| Figure 1: Regulatory framework for Energy Accounting & Audit | 10 |
| Figure 2: Organogram of Energy Accounting wing in the DISCOM..... | 14 |
| Figure 3: Month wise Purchase Energy (MU) pattern | 21 |
| Figure 4: Monthly Energy Input and Energy billed pattern..... | 22 |
| Figure 5: Circle wise Energy Input (MU) and Energy billed (MU) pattern..... | 22 |
| Figure 6: Circle wise T&D and AT&C Compression..... | 33 |
| Figure 7: Circle wise T&D losses (MUs) Vs T&D losses (%)..... | 36 |
| Figure 8: Division wise T&D losses (MUs) Vs AT&C losses (%)..... | 42 |
| Figure 9: Division wise Collection efficiency (%)..... | 43 |
| Figure 10: Single Line Diagram (SLD) of KPDCL..... | 75 |

List of Abbreviations

| | |
|--------|--|
| AMI | Advanced Metering Infrastructure |
| AMR | Automated Meter Reading |
| AMRUT | Atal Mission for Rejuvenation and Urban Transformation |
| AT&C | Aggregate Technical and Commercial |
| BEE | Bureau of Energy Efficiency |
| ckt | Circuit |
| CT | Current Transformer |
| DC | Designated Consumer |
| DEEP | Discovery of Efficient Electricity Price |
| DISCOM | Electricity Distribution Company |
| DT | Distribution Transformer |
| EA | Energy Auditor |
| EHT | Extra High Tension |
| EHV | Extra High Voltage |
| EM | Energy Manager |
| FY | Financial Year |
| HT | High Tension |
| HVDS | High Voltage Distribution System |
| KVA | Kilo Volt Ampere |
| LT | Low Tension |
| MoP | Ministry of Power |
| MU | Million Units |
| MW | Mega Watt |
| NO | Nodal Officer |
| OA | Open Access |
| POC | Point of Connection |
| PT | Potential Transformer |
| PX | Power Exchange |
| RE | Renewable Energy |
| RLDC | Regional Load Dispatch Centre |
| SDA | State Designated Agency |
| SLD | Single Line Diagram |
| SLDC | State Load Dispatch Centre |
| T&D | Transmission and Distribution |

Acknowledgement

We would like to express our heartfelt gratitude to the KPDCL, Jammu & Kashmir for providing us the opportunity to conduct the Annual Energy Audit of their DISCOM for FY 2024-25, in accordance with the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2022 and its Amendments.

We are immensely grateful to the management of KPDCL, Jammu & Kashmir for their invaluable cooperation and providing us with all the relevant information necessary for the successful completion of the Annual Energy Audit.

In this regard, we express our sincere thanks to Mr. Mahmood A Shah (KAS), Managing Director, KPDCL and Er. Nisar Ahmad Lone, Chief Engineer, KPDCL for reposing their faith in us to conduct Annual Energy audit of KPDCL for third year in running. We also express our sincere thanks to Er. Shabir Ahmad Khan, CEO, IT & C Division (Energy Manager) KPDCL and his team for extending necessary co-operation and providing all relevant information for successful completion of the Audit.

We look forward to a continued partnership with KPDCL, Jammu & Kashmir and we look forward to their continued support in all our future endeavours.



Signature

Name: Dr. P.P Mittal

Designation: Director

Registered No: AEA-011

Firm: A-Z Energy Engineers Pvt. Ltd.

1. Executive Summary

Kashmir Power Distribution Corporation Limited (KPDCL)—a state-owned Power Distribution Utility. KPDCL has the privilege of empowering millions of people by supplying electricity in their homes as well as to places where they do all kinds of activities – agricultural (or allied), commercial, industrial & others. KPDCL has a consumer base of more than Eleven Lakh consumers spread over 10 districts of Kashmir region. The Company, headquartered at Jehangir Chowk, Srinagar, functions with 06 Circles, 19 Divisions and 67 Sub-divisions. KPDCL has a unique mix of consumers i.e. on one hand it caters to industrial consumers alongside urban areas and on the other it caters to agricultural consumers, scattered tribal & forest area consumers. Thus, the expansive operational area and motley consumer mix sets KPDCL apart from private utilities which usually cater only to urban landscapes. In a bid to provide its valued consumers with quality power supply, the company undertakes various infrastructure revamping and technical upgradation programs on continual basis like laying of underground cables and installations of RMUs, creation of new feeders and bifurcation of existing feeders, erection of new sub-stations, creation of new transformer centers, etc. The consumer centric initiatives include dedicated fault restoration centers at the sub-divisional level, 24 x 7 centralized Customer Care Centre at Bemina, Srinagar and a range of services available online on KPDCL Website and Mobile Application. In addition, KPDCL also hears and redresses consumer grievances through public fora regularly.

While the Input Energy purchase, Net Input energy at DISCOM Periphery and Energy billed for the customer is **11271.73 MU**, **10695.20 MU** and **6581.22 MU**, the monthly consumption per customer stands at **447.83 kWh/Month**. KPDCL caters to area spread in 6 circles, 19 Division.

1.1. Goals and Objectives

KPDCL is a Designated Consumer in DISCOM sector. Being a Designated Consumer KPDCL need to have an Annual Energy Audit (Accounting) of their facilities as per BEE notification No 18/1/BEE/DISCOM/2021 dated 6th October 2021.

The Annual Energy Audit (Accounting) at KPDCL is conducted with the following Objectives:

- Verification of existing pattern of energy distribution across periphery of electricity Distribution Company.
- Verification of accounted energy flow submitted by electricity Distribution Company at all applicable voltage levels of the distribution network.
- Verification of the accuracy of the data collected and analysis and processes the data with respect to consistency, improvement in accounting and reducing loss of DISCOM.
- Verification of the information submitted by Designated Consumer to the SDA/BEE about status of Energy Input, Output and Loss for the previous two years.
- Access the past performance of the establishment.
- Quantification of Energy Losses, and Energy Saving Potential.

1.2. About Energy Audit firm

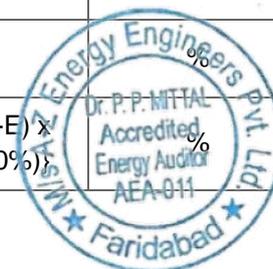
A-Z Energy Engineers Pvt. Ltd. is an Accredited Energy Auditor from BEE and an ISO 9001:2015 certified company that aims to assist all stakeholders in implementing energy efficiency and creating awareness about the merits of energy efficiency and safety practices. They are empaneled by BEE for PAT M & V Audits and Mandatory Energy Audit Projects and have completed more than 2000 projects, including 300 PAT projects. The founder director, Shri. P.P Mittal, has received several awards and recognitions for his services in the field of energy. We have a pool of experienced BEE Accredited & Certified Energy Auditors, Electrical Engineers, Mechanical Engineers and Technicians having experience of more than 30 years. The Energy Audits is being carried out with sophisticated instruments namely Power-Analyzer, Flue Gas Analyzer, Ultra-sonic flow meter, Techo-meter, Anemometer, Hygro-Meter, Digital Thermometer, Thermography Camera, Lux Meter, Leak detectors. Laser gun etc.

1.3. AT&C losses for FY 2024-25

Distribution area of KPDCL is dived into 6 circles & 19 divisions. The AT&C losses for FY 2024-25 are 33.65%. The AT&C losses for the FY 2024-25 are shown in the table below:

Table 1: Energy Balance & Losses for FY 2024-25

| Energy Input Details | Formula | UoM | Value |
|--|---|-----|----------|
| Input Energy Purchase (From Generation Source) | A | MU | 11271.73 |
| Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded) | B | MU | 10695.20 |
| Total Energy billed (is the Net energy billed, adjusted for energy traded)) | C | MU | 6581.22 |
| Transmission and Distribution (T&D) loss Details | D | MU | 4113.98 |
| | $E = D/B \times 100$ | % | 38.47% |
| Collection Efficiency | F | % | 107.83% |
| Aggregate Technical & Commercial Loss | $G = 1 - \{(1-E) \times \text{Min}(F, 100\%)\}$ | % | 33.65% |



2. Background

2.1. Extant Regulations and role of BEE

2.1.1. The Objectives of BEE

- To develop policies and programs on efficient use of energy and its conservation with the involvement of stakeholders.
- To plan, manage and implement energy conservation programs as envisaged in the EC Act.
- To assume leadership and provide policy framework and direction to national energy efficiency and conservation efforts and programs.
- To demonstrate energy efficiency delivery mechanisms, as envisaged in the EC Act, through Public-Private Partnership (PPP).
- To establish systems and procedures to measure, monitor and verify energy efficiency results in individual sectors as well as at the national level.
- To leverage multi-lateral, bi-lateral and private sector support in implementation of programs and projects on efficient use of energy and its conservation.
- To promote awareness of energy savings and energy conservation.

2.1.2. Role of BEE

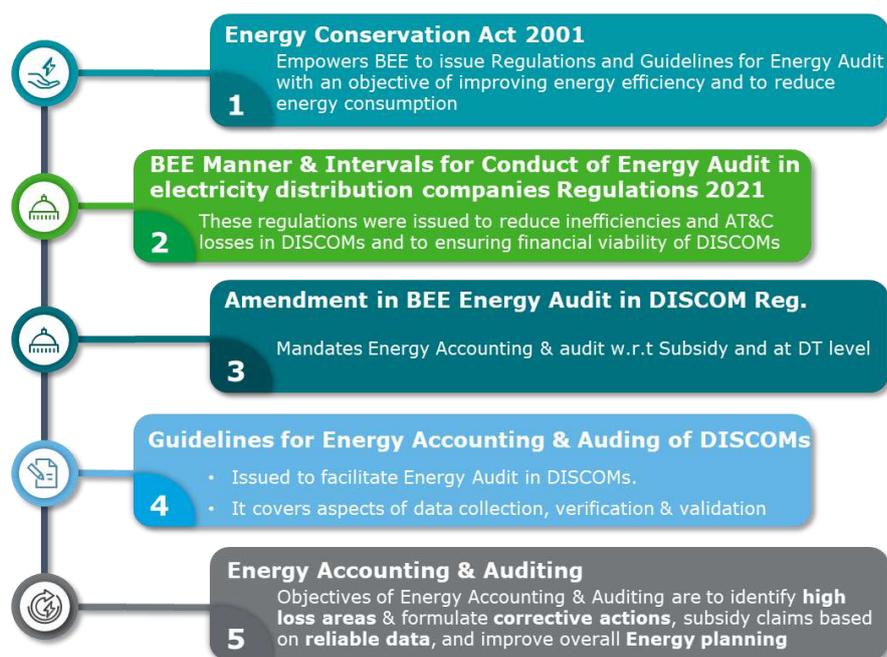
- BEE coordinates with designated agencies, designated consumers and other organization working in the field of energy conservation/efficiency to recognize and utilize the existing resources and infrastructure in performing the functions assigned to the Bureau under the Energy Conservation Act.
- The Act provides regulatory mandate for standards & labelling of equipment and appliances; energy conservation building code for commercial buildings; and energy consumption norms for energy intensive industries.
- The EC Act was amended in 2010 to incorporate few additional provisions required to better equip BEE to manage ever evolving sphere of energy efficiency in the country.
- Create awareness and disseminate information on energy efficiency and conservation.
- Arrange and organize training of personnel and specialists in the techniques for efficient use of energy and its conservation.
- Strengthen consultancy services in the field of Energy Efficiency.
- Promote research and development.
- Develop testing and certification procedures and promote testing facilities.
- Formulate and facilitate implementation of pilot projects and demonstration projects.
- Promote use of energy efficient processes, equipment, devices and systems.

- Take steps to encourage preferential treatment for use of energy efficient equipment or appliances.
- Promote innovative financing of energy efficiency projects.
- Give financial assistance to institutions for promoting efficient use of energy and its conservation.
- Prepare educational curriculum on efficient use of energy and its conservation.
- Implement international co-operation programmes relating to efficient use of energy and its conservation.

2.1.3. Regulatory framework for Energy Accounting & Audit

The Energy Conservation Act 2001 (hereafter referred to as EC Act 2001) was enacted on 29th September 2001. The EC Act 2001 empowers BEE to notify regulations regarding energy conservation and efficiency improvement. In accordance with the EC Act 2001, BEE notified the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit) Regulations, 2021, on 6th October 2021. BEE subsequently amended these regulations with the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit) (Amendment) Regulations, 2022. The Ministry of Power (MoP) issued guidelines on 17th January 2023, for energy accounting and auditing of distribution companies, in line with the BEE regulations. Distribution companies and energy audit firms must comply with this regulatory framework when preparing energy accounts and audit reports. The regulatory framework for Energy accounting and Energy Auditing is shown in the below figure:

Figure 1: Regulatory framework for Energy Accounting & Audit



Key highlights of the Regulatory framework are listed below:

- Bureau of Energy Efficiency (BEE) through Ministry of Power, Government of India issued regulations for Conduct of Mandatory Annual Energy Audit and Periodic Energy Accounting in DISCOMs. As per the regulation, all Electricity Distribution Companies are mandated to conduct annual energy audit and periodic energy accounting on quarterly basis.
- Owing to the impact of energy auditing on the entire distribution and retail supply business and absence of an existing framework with dedicated focus on the same, it was imperative to develop a set of comprehensive guidelines that all Distribution utilities across India can follow and adhere to.
- Accordingly, Regulations on Manner and Intervals for Conduct of Energy Audit and Accounting in Electricity Distribution Companies has been framed. Energy Accounting means accounting of all energy inflows at various voltage levels in the distribution periphery of the network, including renewable energy generation and open access consumers, and energy consumption by the end consumers. Energy accounting and a consequent annual energy audit would help to identify areas of high loss and pilferage, and thereafter focus efforts to take corrective action.
- These Regulations for Energy audit in Electricity Distribution Companies provides broad framework for conduct of Annual Energy Audit though and Quarterly Periodic Energy Accounting with necessary Pre-requisites and reporting requirements to be met.

2.2. Purpose of Audit and Accounting Report

KPDCL is a designated consumer in DISCOM sector. Being a designated Consumer KPDCL need to have Annual energy audit (Accounting) of their facilities as per BEE notification No 18/1/BEE/DISCOM/2021 dated 6th October 2021.

The energy intensity of India is higher with respect to GDP growth and there is an urgent need to address these issues on priority through integrated and comprehensive approach and by adopting latest techniques and technologies with active participation of all stakeholders.

Annual Energy Audit (Accounting) will not only help in reducing losses in system, but it also helps DISCOM in sustainable growth. The objective of this energy audit is to reduce T&D loss and AT&C loss of the DISCOM through identification of commercially viable and implementable schemes for reduction of technical and commercial loss in the DISCOM thus leading to sustainable energy cost reductions.

The Annual Energy Audit (Accounting) at KPDCL is conducted with the following Objectives:

- Verification of existing pattern of energy distribution across periphery of electricity Distribution Company.

- Verification of accounted energy flow submitted by Electricity Distribution Company at all applicable voltage levels of the distribution network.
- Verification of the accuracy of the data collected and analysis and processes the data with respect to consistency, improvement in accounting and reducing loss of DISCOM.
- Verification of the information submitted by Designated Consumer (KPDCL) to the SDA/BEE about status of energy input, Output and loss for the previous two years.
- Access the past performance of the establishment.
- Quantification of Energy Losses, and Energy Saving Potential.

2.3. Period of Energy Auditing and accounting

Energy audit activity for FY 2024-25 was started with a meeting at Head Office of KPDCL in the month of October 2025. Based on the requirement visit was made to Divisions, Subdivisions, Grid Sub stations etc. for data collection and technical discussion. The period of study was from April 2024 to March 2025

Table 2: Period of Energy Auditing and accounting

| Particulars | Energy Accounting | | | | Energy Audit |
|----------------------|--|---------------------------|--------------------------|----------------------------|--|
| | Q1 | Q2 | Q3 | Q4 | FY 2024-25 |
| Applicable period | 1-Apr-24 to 30-Jun-24 | 1-Jul-24 to 30-Sep-24 | 1-Oct-24 to 31-Dec-24 | 1-Jan-25 to 31-Mar-25 | 1-Apr-24 to 31-Mar-25 |
| Date of Commencement | 22 nd Aug 2024 | 21 st Nov 2024 | 1 st Feb 2025 | 11 th June 2025 | 15 Oct 2025 |
| Date of Publishing | - | - | - | - | - |
| Officer In charge | Er. Shabir Ahmad Khan, CEO, IT & C Division (Energy Manager) | | | | Dr. P P Mittal [AEA 0011] Registration No: EmAEA-0024 |



[Handwritten signature]

3. DISCOM Introduction and Overview

3.1. Name and address of DISCOM

KPDCL is having its office at Exhibition Ground Opposite High Court, Jahangir Chowk, Srinagar – 190009 (J&K)

Table 3: Name and Address of DISCOM

| Particulars | Details |
|-------------|--|
| Name of DC | Kashmir Power Distribution Corporation Ltd. |
| Address | Exhibition Grounds, Opposite High Court, Jahangir Chowk, Srinagar-190009 (J&K) |

3.2. Name and contact details of energy manager (BEE Certified, if any) and Authorized signatory of DISCOM (Nodal Officer)

The Energy Accounting / Audit wing is headed by Er. Nisar Ahmad Lone, Chief Engineer and Er. Shabir A Khan, (Energy Manager). Mr. PP Mittal, proprietor A-Z Energy Engineers is a BEE certified Energy Manager has been appointed to conduct the Annual Energy Accounting job in KPDCL. The details of DISCOM's energy manager and authorized signatory for this report are shown below:

Table 4: Details of energy manager and Authorized signatory of DISCOM

| Particulars | Details |
|----------------------|--|
| Energy Manager | Er. Shabir A Khan Mobile: 9419424639 Email: shabirkhanjk@gmail.com |
| Authorized Signatory | Er. Nisar Ahmad Lone, Chief Engineer Telephone Number: 0194-2452001 |

3.3. Summary profile of DISCOM

3.3.1. Jurisdiction of DISCOM

Kashmir Power Distribution Corporation Limited (KPDCL) – a state-owned Power Distribution Utility. KPDCL has the privilege of empowering millions of people by supplying electricity in their homes as well as to places where they do all kinds of activities – agricultural (or allied), commercial, industrial & other. KPDCL has a consumer base of more than Eleven Lakh consumers spread over 10 districts of Kashmir region. The Company, headquartered at Jahangir Chowk, Srinagar, functions with 06 Circles, 19 Divisions and 67 Sub-divisions. KPDCL has a unique mix of consumers i.e. on one hand it caters to industrial consumers alongside urban areas and on the other it caters to agricultural consumers,

scattered tribal & forest area consumers. Thus the expansive operational area and motley consumer mix sets KPDCL apart from private utilities, which usually cater only to urban landscapes. In a bid to provide its valued consumers with quality power supply, the Company undertakes various infrastructure revamping and technical upgradation programs on continual basis like laying of underground cables and installations of RMUs, creation of new feeders and bifurcation of existing feeders, erection of new sub-stations, creation of new transformer centers, etc. Our consumer centric initiatives include dedicated fault restoration centers at every sub-division and a 24 x 7 centralized Customer Care center at Bemina, Srinagar.

While the Purchase, Net Input & Billed Energy by KPDCL for the customer is 11271.73 MU, 10695.20 MU & 6581.22 MU the monthly consumption per customer stands at 447.83 kWh/Month. KPDCL caters to area spread in 6 circles, 19 Division.

3.3.2. Energy Accounting/Audit wing in the DISCOM:

The Energy Accounting/Audit wing in the DISCOM is in place. The Organogram of the DISCOM is as shown below:

Figure 2: Organogram of Energy Accounting wing in the DISCOM



|

As on Oct 2025, the Energy Accounting wing comprises of No. of employees as shown in the table below:

Table 5: Details of Energy Manager and Authorized Signatory of DISCOM

| Designation | No. of Officers |
|-------------------------|--------------------------|
| Managing Director | Mr. Mahmood A Shah (KAS) |
| Chief Engineer | Er. Nisar Ahmad Lone |
| CEO-IT (Energy Manager) | Er. Shabir A Khan |

3.3.3. Administrative hierarchy

KPDCL is having its office at Exhibition Ground Opposite High Court, Jehnagir Chowk, Srinagar – 190001 (J&K) and has 6 Circles. These Circles are further divided into Divisions, Sub-Divisions and Sections as shown in the below tables.

Table 6: Administrative hierarchy structure in KPDCL

| Parameters | Total |
|-------------------------|-------|
| Number of Circles | 6 |
| Number of Divisions | 19 |
| Number of Sub-Divisions | 67 |

The Circles are further divided into Divisions, Sub-Divisions and Sections as shown in the table below:

Table 7: Administrative hierarchy in KPDCL upto section level

| Circle | Division | Name of Sub-Divisions |
|------------------------|---------------------|-----------------------|
| Circle-1 st | DIV-I (BASANT BAGH) | SHEIKH BAGH |
| | | DALGATE |
| | | NISHAT |
| | | KHONMOH |
| | | HABBA KADAL |
| | DIV-IV (KHANYAR) | KHANYAR |
| | | RAINAWARI |
| | | KHANKAHI MOULLA |
| | | HAWAL |
| | | ZAKURA |
| Circle-2 nd | BUDGAM | BUDGAM |
| | | CHADURA |
| | | BEERWA |
| | | CHARAR-I-SHAREEF |
| | | NARBAL |

| Circle | Division | Name of Sub-Divisions |
|------------------|-----------------------|-----------------------|
| | DIV-II (RAJBAGH) | RAJBAGH |
| | | HAZURI BAGH |
| | | KARAN NAGAR |
| | | CHANAPORA |
| | | BAGHAT |
| | DIV-III (SHREEN BAGH) | WATAL KADAL |
| | | PATHER MASJID |
| | | NAWAKADAL |
| | | MR GUNJ |
| | | ZAINAKOTE |
| Circle-Bijbehara | ANANTNAG | ANANTNAG |
| | | ACCHBAL |
| | | DOORU |
| | BIJBEHARA | BIJBEHARA |
| | | AISHMUQAM |
| | KULGAM | KULGAM |
| | | D. H. PORA |
| | | QAZIGUND |
| | | RESHIPORA |
| Circle-Ganderbal | BANDIPORA | BANDIPORA |
| | | KULOOSA |
| | | GUREZ |
| | DIV SUMBAL | SUMBAL |
| | | HAJIN |
| | GANDERBAL | GANDERBAL |
| | | MANIGAM |
| | | TULMULLA |
| | | KANGAN |
| Circle-Pulwama | AWANTIPORA | AWANTIPORA |
| | | PAMPORE |
| | | TRAL |
| | PULWAMA | PULWAMA |
| | | NEWA |
| | | RAJPORA |
| | SHOPIAN | SHOPIAN |
| | | CHITRAGAM |
| | | KELLAR |
| Circle-Sopore | BARAMULLAH | BARAMULLAH-I |
| | | BARAMULLAH-II |
| | | MOHRA |
| | | WAGOORA |

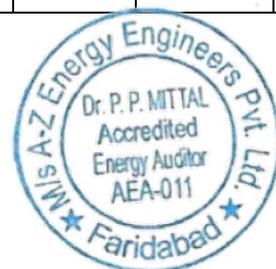
| Circle | Division | Name of Sub-Divisions |
|--------|--------------|-----------------------|
| | HANDWARA | WATREGAM |
| | | HANDWARA |
| | | LANGATE |
| | KUPWARA | KUPWARA |
| | | TREHGAM |
| | | TANGDHAR |
| | SOPORE | SOPORE-I |
| | | SOPORE-II |
| | | SOPORE-III |
| | | PATTAN |
| | SPL-TANGMARG | TANGMARG |

3.3.4. Consumer Details

Energy consumption with type of customer is given in the table:

Table 8: Customer Profile for FY 2024-25

| Category | No. of Connections | | Connected Load | | Energy | | Billed Amount in Rs. Crore | Collected Amount in Rs. Crore |
|--------------------------|--------------------|-------------|----------------|-------------|----------------|-------------|----------------------------|-------------------------------|
| | Nos | % | MW | % | MU | % | | |
| Residential | 1010893 | 82.5% | 1909.79 | 62% | 4698.11 | 71.4% | 1499.85 | 1238.07 |
| Agricultural | 2519 | 0.2% | 68.31 | 2% | 117.16 | 1.8% | 72.67 | 252.94 |
| Commercial/Industrial-LT | 201015 | 16.4% | 620.30 | 20% | 730.59 | 11.1% | 430.05 | 427.51 |
| Commercial/Industrial-HT | 497 | 0.0% | 200.52 | 7% | 433.46 | 6.6% | 230.82 | 239.62 |
| Others | 9718 | 0.8% | 276.46 | 9% | 601.90 | 9.1% | 488.26 | 776.64 |
| Total | 1224642 | 100% | 3075.39 | 100% | 6581.22 | 100% | 2721.64 | 2934.78 |



3.4. Electrical infrastructure and Assets Voltage wise

The following table provides the details of network infrastructure owned by KPDCL:

Table 9: Network Infrastructure details

| Asset | Particulars | Unit | FY24-25 |
|-----------------|-----------------------------------|---------|---------|
| 66 kV and above | 66/ 11 kV Sub station | Nos | - |
| | 66 kV Feeders | Nos | - |
| | 66 kV Line | Ckt. km | - |
| 33 kV | 33/ 11 kV Sub station | Nos | 338 |
| | 33 kV Feeders | Nos | 185 |
| | 33 kV Line | Ckt. km | 2411.1 |
| 11 kV | 11 kV Feeders | Nos | 1256 |
| | 11 kV Overhead Line | Ckt. km | 19176.4 |
| | 11 kV Underground Line | Ckt. km | 137.25 |
| LT | LT Line | Ckt. km | 50591.8 |
| PT | Power Transformer | Nos | 604 |
| | Power Transformer Capacity | MVA | 4833.85 |
| DT | Distribution Transformer | Nos | 45493 |
| | Distribution Transformer Capacity | MVA | 5724.3 |

The Input energy, consumption, transmission losses and key infrastructure details of the KPDCL for FY 2024-25 are summarized in table below:

Table 10: Input Energy & Infrastructure details

| Parameters | FY 2024-25 |
|--|------------|
| Input Energy purchased (MU) | 11271.73 |
| Transmission loss (%) | 5.11% |
| Transmission loss (MU) | 576.53 |
| Energy sold outside the periphery (MU) | 0 |

| Parameters | FY 2024-25 |
|---|------------|
| Open access sale (MU) | 0 |
| EHT sale | 0 |
| Net input energy (received at DISCOM periphery or at distribution point)-(MU) | 10695.20 |
| Is 100% metering available at 66/33 kV (Select yes or no from list) | Yes |
| Is 100% metering available at 11 kV (Select yes or no from list) | Yes |
| % of metering available at DT | 19% |
| % of metering available at consumer end | 46% |
| No of feeders at 66kV voltage level | 0 |
| No of feeders at 33kV voltage level | 185 |
| No of feeders at 11kV voltage level | 1256 |
| No of LT feeders' level | 0 |
| Line length (ckt. km) at 66kV voltage level | 0 |
| Line length (ckt. km) at 33kV voltage level | 2411.1 |
| Line length (ckt. km) at 11kV voltage level | 19176.4 |
| Line length (km) at LT level | 50591.8 |
| Length of Aerial Bunched Cables | 2510 |
| Length of Underground Cables | 137.25 |
| HT/LT ratio | 0.43 |

3.4.1. Metering Details

The status of meters installed in KPDCL as on 31st March are given in the below tables:

Table 11: Voltage wise Meter Consumers

| Parameters | 66kV and above | 33kV | 11/22kV | LT |
|---|----------------|------|---------|---------|
| Number of conventional metered consumers | 0 | 393 | 21292 | 159224 |
| Number of consumers with 'smart' meters | 0 | 0 | 0 | 69400 |
| Number of consumers with 'smart prepaid' meters | 0 | 0 | 0 | 307719 |
| Number of consumers with 'AMR' meters | | 0 | 0 | 0 |
| Number of consumers with 'non-smart prepaid' meters | 0 | 0 | 0 | 0 |
| Number of unmetered consumers | 0 | 0 | 0 | 666614 |
| Number of total consumers | 0 | 393 | 21292 | 1202957 |

3.4.2. Distribution Transformer (DT) details

The details of distribution transformers in KPDCL as on 31st March are given in the below tables:

Table 12: Numbers of Distribution Transformers

| Parameters | 66kV and above | 33kV | 11/22kV | LT |
|--|----------------|------|---------|----|
| Number of conventionally metered Distribution Transformers | 0 | 0 | 0 | 0 |
| Number of DTs with communicable meters | 0 | 0 | 7718 | 0 |
| Number of unmetered DTs | | 0 | 37775 | 0 |
| Number of total Transformers | 0 | 0 | 45493 | 0 |

3.4.3. Feeder details

The details of feeders in KPDCL as on 31st March are given in the below tables:

Table 13: Voltage wise numbers of Feeders

| Parameters | 66kV and above | 33kV | 11/22kV | LT |
|--|----------------|------|---------|----|
| Number of metered feeders | 0 | 185 | 0 | |
| Number of feeders with communicable meters | 0 | 0 | 1256 | 0 |
| Number of unmetered feeders | 0 | 0 | 0 | 0 |
| Number of total feeders | 0 | 185 | 1256 | 0 |

3.4.4. Distribution Line details

The details of distribution lines in KPDCL as on 31st March are given in the below tables:

Table 14: Length of Distribution Lines

| Particulars | 66kV and above | 33kV | 11/22kV | LT |
|---------------------------------|----------------|--------|---------|---------|
| Line length (ct km) | 0 | 2411.1 | 19176.4 | 50591.8 |
| Length of Aerial Bunched Cables | 2510 | | | |
| Length of Underground Cables | 137.25 | | | |

3.4.5. Energy Flow details

Energy flow details for FY 2024-25 are given in the below table:

Table 15: Energy Flow details

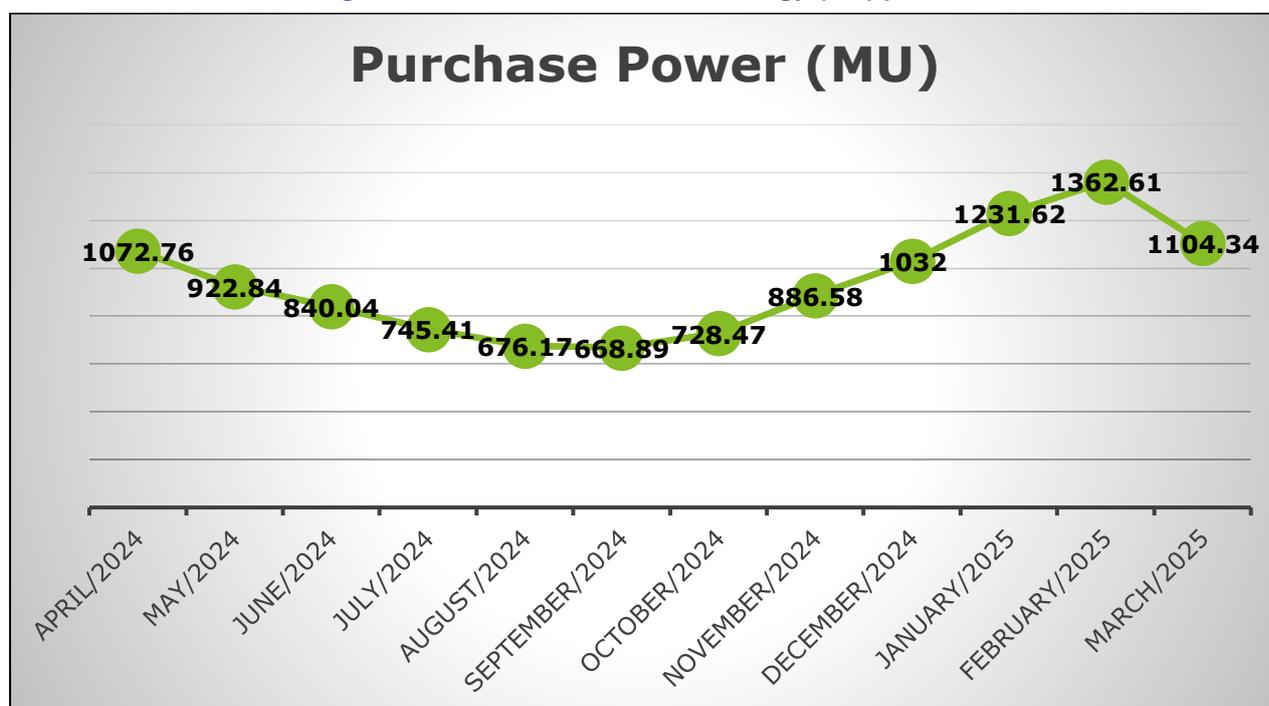
| Energy Input Details | Formula | UoM | Value |
|--|----------------------|-----|----------|
| Input Energy Purchase (From Generation Source) | A | MU | 11271.73 |
| Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded) | B | MU | 10695.20 |
| Total Energy billed (is the Net energy billed, adjusted for energy traded) | C | MU | 6581.22 |
| Transmission and Distribution (T&D) loss Details | D | MU | 4113.98 |
| | $E = D/B \times 100$ | % | 38.47% |

3.4.6. Pattern of energy distribution

Power Purchase:

During the analyzed period, KPDCCL purchased a maximum energy of 1362.61 million units (MUs) in Feb. 2025, while the least energy of 668.89 MUs was purchased in Sep. 2024. This shows that the company's energy purchase varies considerably from month to month depicting the seasonal impact.

Figure 3: Month wise Purchase Energy (MU) pattern



Energy Billed:

The chart below shows KPDCL Input & Billed energy pattern from April 2024 to March 2025:

Figure 4: Monthly Energy Input and Energy billed pattern

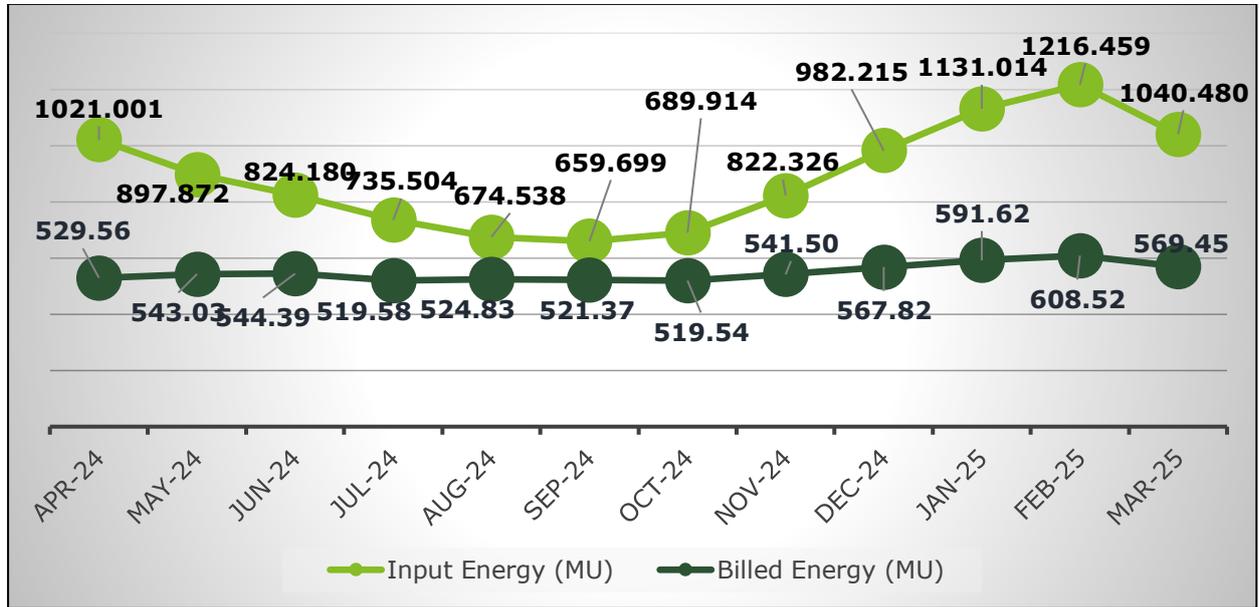
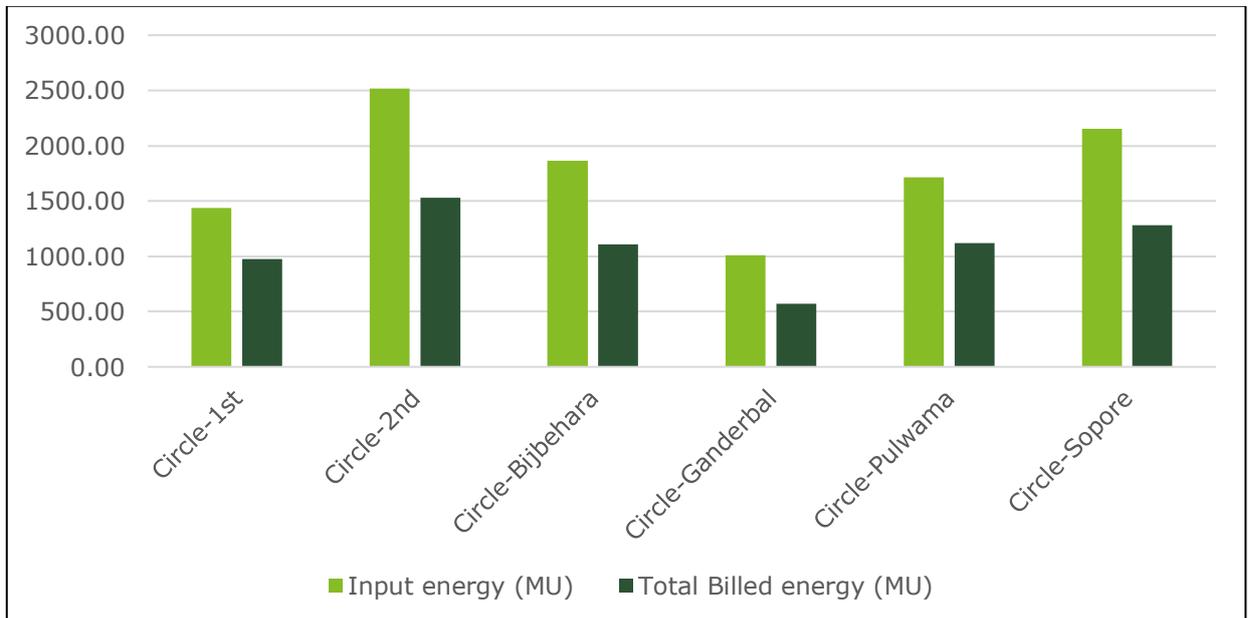


Figure 5: Circle wise Energy Input (MU) and Energy billed (MU) pattern



Above graphs indicates that KPDCL energy purchase pattern shows considerable variation from month to month. While the maximum energy was purchased in Feb 2025, the least energy was purchased in September 2024. The energy billed shows a major increasing trend from April 2024 to March 2025, indicating a gradual increase in energy consumption. The chart shows that the energy purchase pattern fluctuates considerably

The Month wise break up of input energy (MUs) parameter for all the circle is given below:

Table 16: Month wise Input Energy for FY 2024-25

| Circle Name | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
|------------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|------------------|
| Circle-1st | 146.047 | 127.264 | 111.675 | 100.952 | 95.657 | 92.852 | 91.848 | 106.182 | 129.423 | 149.297 | 154.369 | 131.590 | 1437.157 |
| Circle-2nd | 249.832 | 210.370 | 190.066 | 161.387 | 154.596 | 151.911 | 158.162 | 188.905 | 232.478 | 274.001 | 296.144 | 246.837 | 2514.688 |
| Circle-Bijbehara | 170.517 | 153.336 | 141.127 | 135.320 | 121.038 | 115.062 | 122.672 | 147.912 | 169.298 | 195.132 | 210.112 | 183.922 | 1865.447 |
| Circle-Ganderbal | 90.411 | 81.839 | 77.349 | 66.185 | 59.441 | 58.643 | 62.920 | 76.277 | 94.454 | 109.171 | 124.964 | 106.445 | 1008.098 |
| Circle-Pulwama | 162.637 | 139.923 | 132.774 | 125.413 | 115.509 | 113.398 | 114.826 | 136.836 | 154.540 | 172.307 | 186.591 | 162.400 | 1717.153 |
| Circle-Sopore | 201.558 | 185.140 | 171.188 | 146.247 | 128.297 | 127.833 | 139.487 | 166.213 | 202.022 | 231.108 | 244.279 | 209.286 | 2152.658 |
| Total | 1021.001 | 897.872 | 824.180 | 735.504 | 674.538 | 659.699 | 689.914 | 822.326 | 982.215 | 1131.014 | 1216.459 | 1040.480 | 10695.202 |

The Month wise break up of billed energy (MUs) parameter for all the circle is given below:

Table 17: Month wise Billed Energy for FY 2024-25

| Circle Name | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| Circle-1st | 79.400 | 80.028 | 76.629 | 75.840 | 74.815 | 71.446 | 71.548 | 76.845 | 88.788 | 91.993 | 99.727 | 86.444 | 973.506 |
| Circle-2nd | 125.932 | 122.988 | 120.717 | 114.621 | 116.256 | 113.202 | 110.109 | 127.469 | 134.775 | 150.259 | 153.310 | 139.645 | 1529.282 |
| Circle-Bijbehara | 90.481 | 90.858 | 89.350 | 88.031 | 90.734 | 91.291 | 90.387 | 92.635 | 93.678 | 95.149 | 99.174 | 94.570 | 1106.337 |
| Circle-Ganderbal | 46.680 | 48.788 | 49.821 | 45.837 | 45.969 | 48.324 | 44.536 | 46.495 | 48.207 | 48.071 | 50.542 | 49.216 | 572.487 |
| Circle-Pulwama | 93.210 | 94.912 | 99.084 | 93.773 | 94.582 | 93.390 | 88.130 | 93.226 | 94.550 | 92.325 | 93.582 | 90.166 | 1120.928 |
| Circle-Sopore | 93.856 | 105.454 | 108.792 | 101.475 | 102.478 | 103.713 | 114.827 | 104.831 | 107.827 | 113.828 | 112.186 | 109.410 | 1278.677 |
| Total | 529.559 | 543.029 | 544.394 | 519.577 | 524.834 | 521.365 | 519.538 | 541.501 | 567.825 | 591.624 | 608.521 | 569.452 | 6581.218 |

The voltage wise consumption pattern is given below:

Table 18: Voltage wise consumption pattern

| Voltage Level | Consumers | | Energy Consumption | |
|---------------|-----------|---------|--------------------|---------|
| | No. | %Share | MUs | %Share |
| 33kV | 393 | 0.03% | 488.13 | 7.42% |
| 11kV | 21292 | 1.74% | 943.31 | 14.33% |
| 440V | 1202957 | 98.23% | 5149.77 | 78.25% |
| Total | 1224642 | 100.00% | 6581.21 | 100.00% |

3.4.7. Salient features

KPDCL main objectives are to achieve efficiency gains and make necessary changes to make the company commercially viable, progressively self-sustainable, and less dependent on the government while balancing the interests of consumers with regards to quality of service and economical tariffs.

a) Vision

Customer Satisfaction through service excellence

b) Mission

- To provide reliable and quality power at competitive cost
- To attain national standards in reducing distribution losses

c) Core values

- Customer Satisfaction
- Participative Work Culture
- Pride of belongingness
- Excellence
- Being ethically and socially responsive

3.5. Energy Conservation measures

Energy conservation is a critical issue in today's world, as the demand for energy continues to increase while the resources available to produce it are finite. The energy conservation measures that have already been taken and propose some measures for the future are explained below.

Energy Conservation Measures taken by the DISCOM:

Several energy conservation measures have already been implemented to reduce energy consumption and promote sustainable energy use. Some of these measures are:

- Energy-Efficient Lighting: The company promoted use of energy-efficient LED bulbs, which has reduced energy consumption and saved power purchase costs.

- Energy Management Systems: The company has implemented energy management systems to monitor and control energy consumption, identify areas of energy waste, and optimize energy usage.
- Renewable Energy: The company is promoting the use of renewable energy sources, such as solar roof top systems on domestic and government installations.
- Energy Audits: Regular energy audits are conducted to identify energy waste and implement measures to reduce it.
 1. 100% Smart Consumer Metering.
 2. 100% System Metering (DT & Feeder Meters)
 3. 100% Smart Metering of Govt. Consumers
 4. Replacement of LT overhead conductor with LT AB Cables
 5. Creation of HVDS Network
 6. Segregation/Bifurcation of Lengthy/Overloaded 11 KV Feeders
 7. Reduction of LT/HT Ratio

Proposed Energy Conservation Measures for the Future:

1. Installation of Smart Meters.
2. Identify unmetered consumers and installing meters
3. Installation of Automatic Power factor controller (Capacitor Bank) at newly constructed Power Substations.
4. System improvement & automation.
5. Replacing worm out /under sized conductors.
6. Redesigning Distribution infrastructure to improve HT:LT Ratio.
7. Preventive & Periodic maintenance of lines& transformers.
8. Renewable Energy: The Company has increased and is promoting the use of renewable energy sources, such as solar power, to reduce reliance on fossil fuels and reduce carbon emissions.

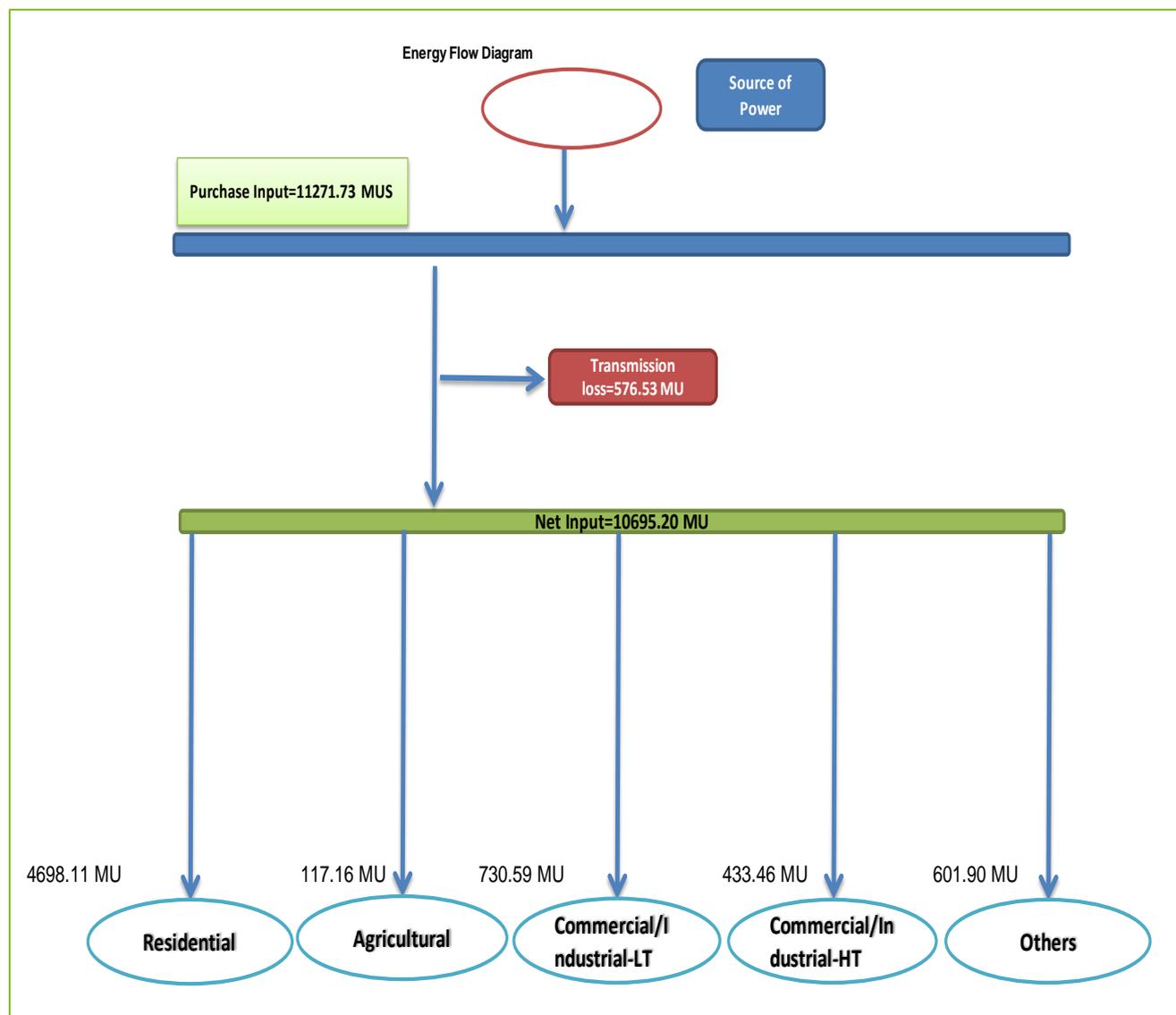
4. Energy flow analysis

4.1. Energy flow across Service Levels

The Energy at different voltage levels and the losses at different levels are shown in below table:

Table 19: Energy Flow at different Voltage level Losses for FY 2024-25

| | DISCOM | Input (in MU) | Sale (in MU) | Loss (in MU) | Loss % |
|-----|--------|---------------|--------------|--------------|--------|
| I | LT | 9216.59 | 5149.77 | 4066.82 | 44.12% |
| II | 11 KV | 990.48 | 943.31 | 47.17 | 4.76% |
| III | 33 KV | 488.13 | 488.13 | 0.00 | 0.00% |



4.2. Validation of metered data

The Category wise metered consumers and unmetered consumers are shown in below table. As per the consumers details most of the consumers are residential which is 82.55% and the energy share is 71.40% of total consumers and energy, commercial/industrial LT is 16.41% of total consumers and energy share is 11.1% of total billed energy, commercial/industrial HT is 0.04% of total consumers and energy share is 6.6% of total billed energy.

| Consumer category | Metered | Unmetered | Total Consumer | % share of Consumer | Metered Energy | Unmetered Energy | Total Billed Energy (MU) | % Share energy |
|--------------------------|---------------|---------------|----------------|---------------------|----------------|------------------|--------------------------|----------------|
| Residential | 368808 | 642085 | 1010893 | 82.55% | 1561.14 | 3136.97 | 4698.11 | 71.4% |
| Agricultural | 2302 | 217 | 2519 | 0.21% | 92.12 | 25.04 | 117.16 | 1.8% |
| Commercial/Industrial-LT | 177847 | 23168 | 201015 | 16.41% | 542.99 | 187.60 | 730.59 | 11.1% |
| Commercial/Industrial-HT | 497 | 0 | 497 | 0.04% | 433.46 | 0.00 | 433.46 | 6.6% |
| Others | 8574 | 1144 | 9718 | 0.79% | 570.02 | 31.88 | 601.90 | 9.1% |
| At Company | 558028 | 666614 | 1224642 | 100% | 3199.71 | 3381.50 | 6581.22 | 100% |

Field visit of 33/11kv Substations and 11/0.433kv DTs was conducted. It was observed that:

- CTs and PTs are in working condition and meters are recording energy.
- 85 No substations have AMR facility and meters are sending data to Control Center through Meter Data Acquisition system without any manual intervention. 8 No sub stations were visited and AMR data acquisition was found working in these stations.
- At the time of field visit it was observed that capacitor banks are not installed in most of the 33/11kv substations.
- It was observed that average power factor was found in the range of 0.97 to 0.99.
- It was observed that hourly load parameters are recorded in the logbook apart from transformer parameters like Oil and winding Temperature.
- The DT meters have become nonfunctional due to damage to cables and it can be concluded that very few DT meters are functional. No monitoring of DT meters is in place.
- It was observed that a good number of the consumers are billed on flat rate basis.

4.3. Validation of energy flow data and losses

The Energy at different voltage levels and the losses at different levels are show in below table long term energy, short term energy and renewable energy wise details are given below.

| 3 | Voltage level | Particulars | MU |
|---|----------------|------------------------|----|
| i | 66kV and above | Long-Term Conventional | |
| | | Medium Conventional | |

| 3 | | Voltage level | Particulars | MU |
|------|-------------|---------------|--|-----------|
| | | | Short Term Conventional | |
| | | | Banking | |
| | | | Long-Term Renewable energy | |
| | | | Medium and Short-Term RE | |
| | | | Captive, open access input | |
| | | | Sale of surplus power | |
| | | | Quantum of inter-state transmission loss | |
| | | | Power procured from inter-state sources | 0 |
| | | | Power at state transmission boundary | 0 |
| ii | 33kV | | Long-Term Conventional | |
| | | | Medium Conventional | |
| | | | Short Term Conventional | |
| | | | Banking | |
| | | | Long-Term Renewable energy | 10574.67 |
| | | | Medium and Short-Term RE | |
| | | | Captive, open access input | |
| | | | Sale of surplus power | |
| | | | Quantum of intra-state transmission loss | 0.00 |
| | | | Power procured from intra-state sources | 10574.67 |
| iii | | | Input in DISCOM wires network | 10574.67 |
| iv | 33 kV | | Renewable Energy Procurement | |
| | | | Small capacity conventional/ biomass/ hydro plants Procurement | 120.54 |
| | | | Captive, open access input | |
| v | 11 kV | | Renewable Energy Procurement | |
| | | | Small capacity conventional/ biomass/ hydro plants Procurement | |
| | | | Sales Migration Input | |
| vi | LT | | Renewable Energy Procurement | |
| | | | Sales Migration Input | |
| vii | | | Energy Embedded within DISCOM wires network | 120.54 |
| viii | | | Total Energy Available/ Input | 10,695.20 |
| 4 | | Voltage level | Energy Sales Particulars | MU |
| i | LT Level | | DISCOM' consumers | 5149.77 |
| | | | Demand from open access, captive | |
| | | | Embedded generation used at LT level | |
| | | | Sale at LT level | 5149.77 |
| | | | Quantum of LT level losses | 4066.82 |
| | | | Energy Input at LT level | 9216.59 |
| ii | 11 kV Level | | DISCOM' consumers | 943.31 |
| | | | Demand from open access, captive | |
| | | | Embedded generation at 11 kV level used | |

| 3 | Voltage level | Particulars | MU |
|---------------------------------|----------------------|---|-----------------|
| | | Sales at 11 kV level | 943.31 |
| | | Quantum of Losses at 11 kV | 47.17 |
| | | Energy input at 11 kV level | 990.48 |
| iii | 33 kV Level | DISCOM' consumers | 488.13 |
| | | Demand from open access, captive | |
| | | Embedded generation at 33 kV or below level | 120.54 |
| | | Sales at 33 kV level | 488.13 |
| | | Quantum of Losses at 33 kV | 0.00 |
| | | Energy input at 33kV Level | 488.13 |
| iv | > 33 kV | DISCOM' consumers | |
| | | Demand from open access, captive | |
| | | Cross border sale of energy | |
| | | Sale to other DISCOMs | |
| | | Banking | |
| | | Energy input at > 33kV Level | |
| | | Sales at 66kV and above (EHV) | 0.00 |
| Total Energy Requirement | | | 10695.20 |
| Total Energy Sales | | | 6581.22 |

Loss and subsidy computation

4.4. Energy accounts analysis for previous year

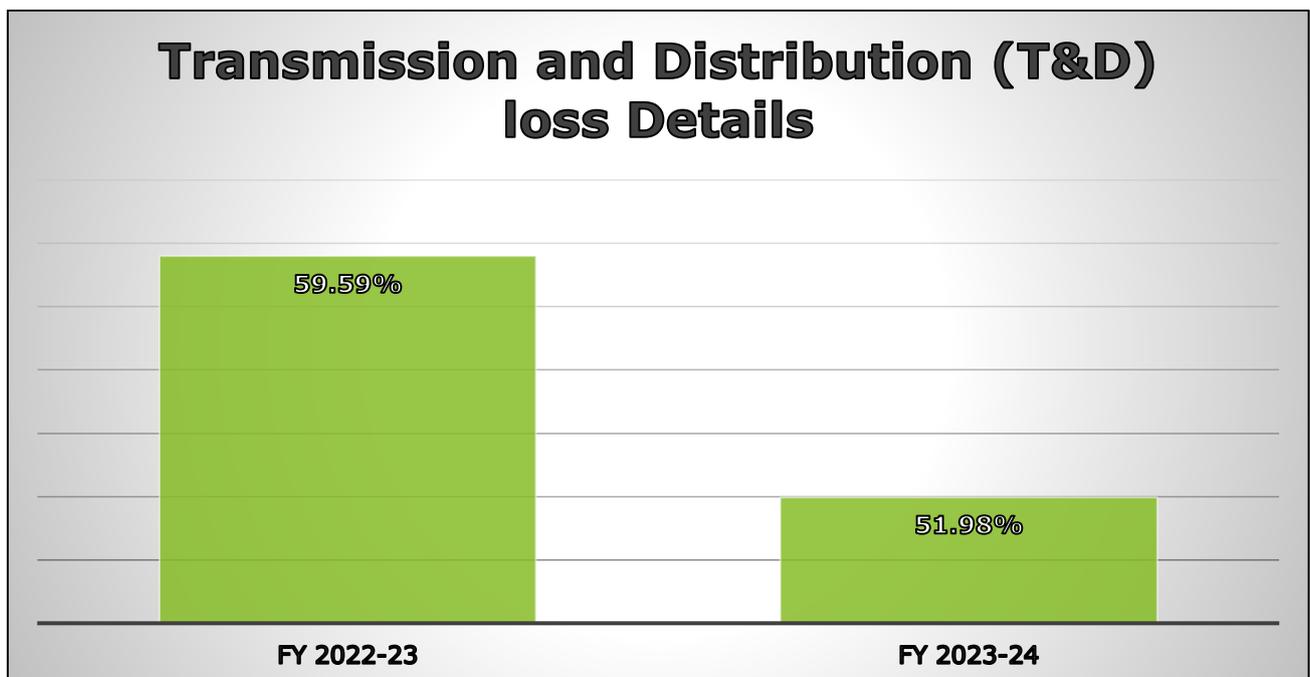
Previous cycle of audit is energy accounting base on the notification No. 18/1/BEE/DISCOM/2021 from Bureau of Energy Efficiency dated 6th October 2021.

a) Summary of AT&C losses

The AT&C losses over the annual AT&C losses for FY 2022-23 & 2023-24 are as shown below:

Table 20: AT&C losses in FY 2022-23 and 2023-24

| Energy Input Details | Formula | Units | Annual | Annual |
|--|---|-------|-----------|-----------|
| | | | FY 22-23 | FY 23-24 |
| Input Energy Purchase (From Generation Source) | A | MU | 10,991.62 | 11,124.05 |
| Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded) | B | MU | 10,661.88 | 10,841.30 |
| Total Energy billed (is the Net energy billed, adjusted for energy traded) | C | MU | 4,308.55 | 5,205.55 |
| Transmission and Distribution (T&D) loss Details | D | MU | 6,353.33 | 5,635.75 |
| | $E = D/B \times 100$ | % | 59.59% | 51.98% |
| Collection Efficiency | F | % | 115.45% | 123.61% |
| AT&C Losses | $G = 1 - \{(1-E) \times \text{Min}(F, 100\%)\}$ | % | 53.35% | 40.65% |



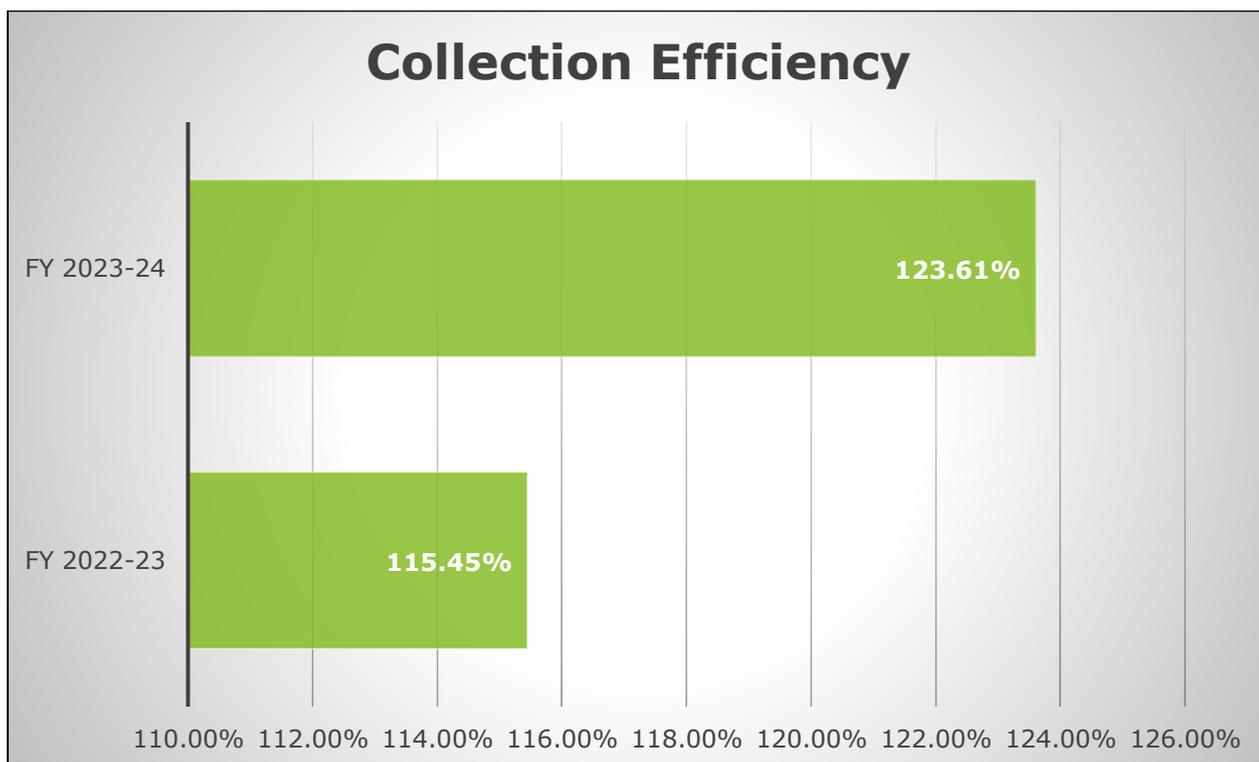
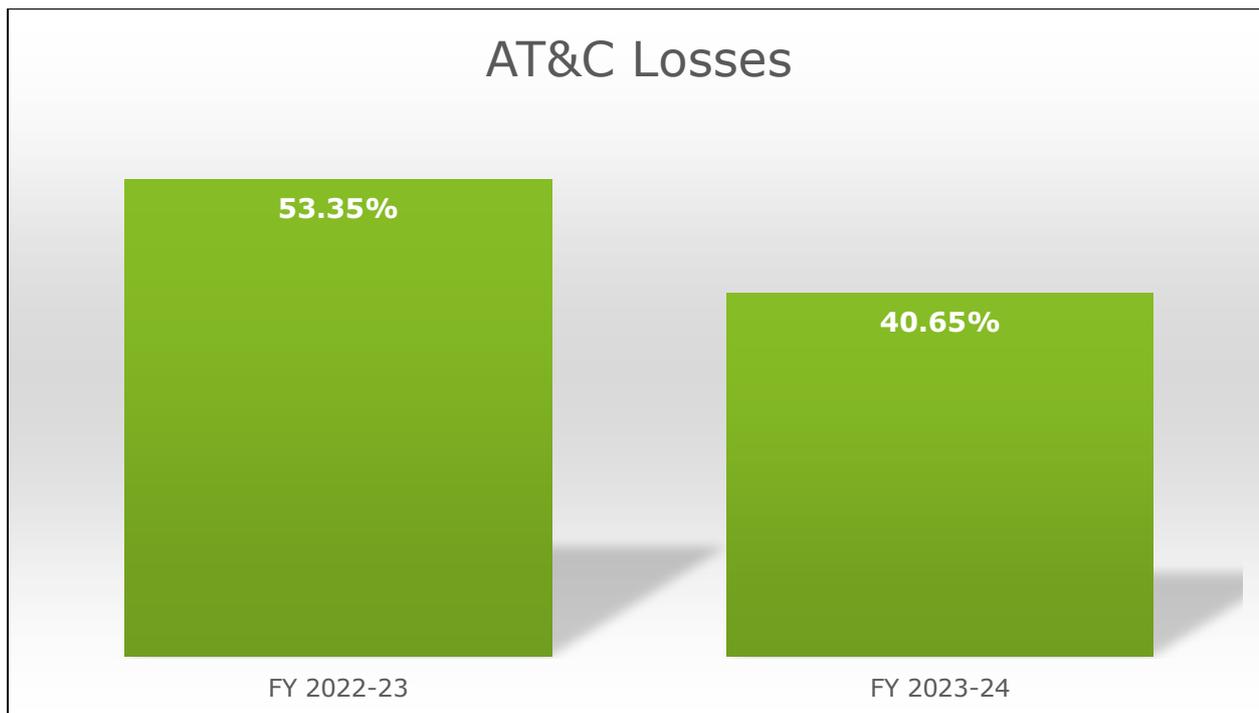


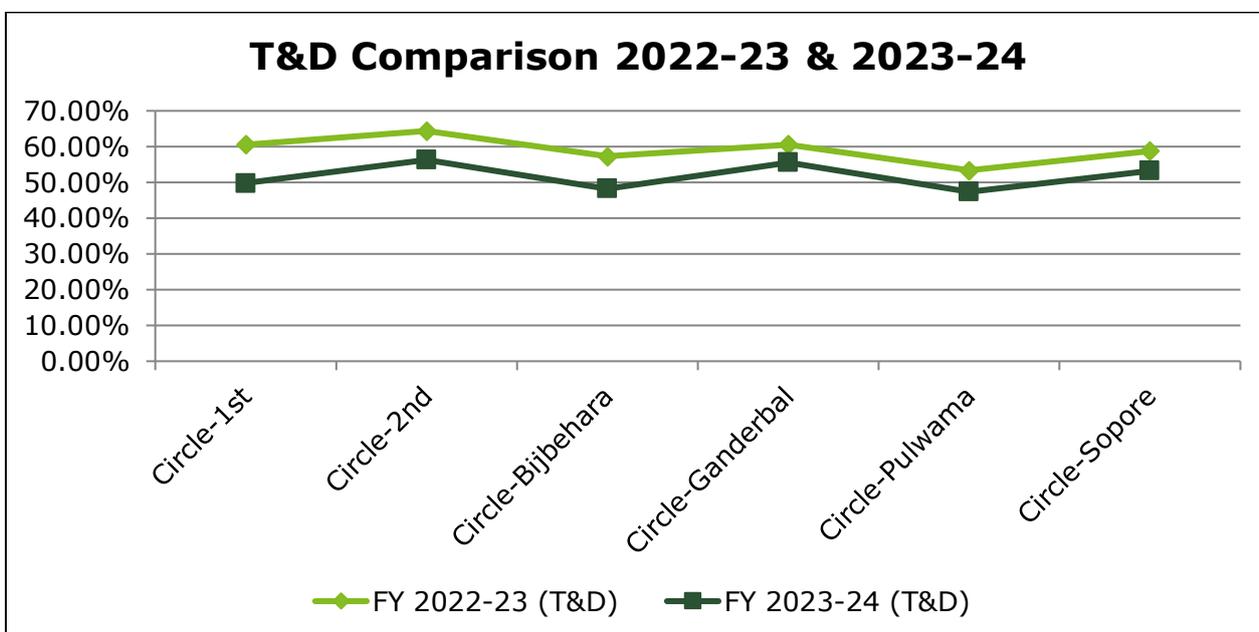
Table show the last two year’s trend of T&D loss, Collection efficiency and AT&C loss. The collection efficiency FY 2023-24 is increase as compare to previous year. AT&C losses in FY 2023-24 have been decreases as comparison to last two financial years.

b) Circle wise T&D and AT&C Losses FY 2022-23 & 2023-24

The circle wise comparison (FY 2022-23 & 2023-24) transmission& distributions losses and AT&C loss is given in following table:

Table 21: Circle wise T&D and AT&C losses in FY 2022-23 & 2023-24

| Name of circle | FY 2022-23 | | FY 2023-24 | |
|------------------------|---------------|---------------|---------------|---------------|
| | T&D loss (%) | AT&C loss (%) | T&D loss (%) | AT&C loss (%) |
| Circle-1 st | 60.54% | 56.71% | 49.74% | 45.24% |
| Circle-2 nd | 64.38% | 62.04% | 56.29% | 53.61% |
| Circle-Bijbehara | 57.31% | 56.30% | 48.30% | 41.48% |
| Circle-Ganderbal | 60.61% | 29.65% | 55.55% | 13.10% |
| Circle-Pulwama | 53.39% | 48.02% | 47.36% | 28.72% |
| Circle-Sopore | 58.79% | 50.76% | 53.29% | 40.85% |
| At DISCOM level | 59.59% | 53.35% | 51.98% | 40.65% |



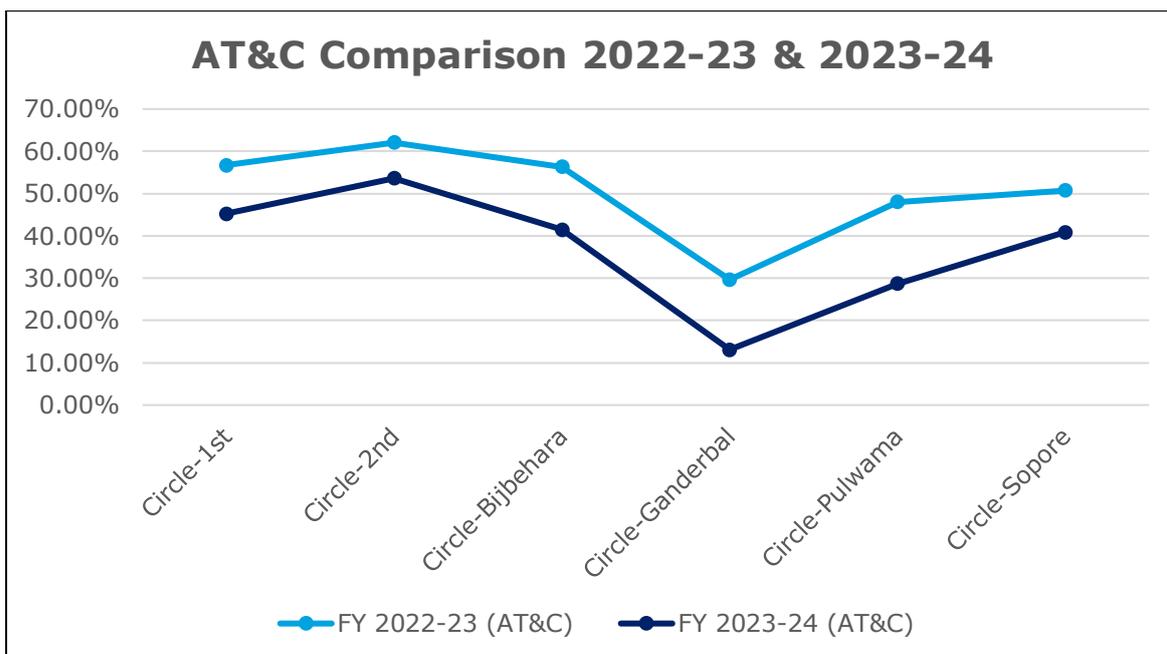


Figure 6: Circle wise T&D and AT&C Compression

4.5. Energy accounts analysis and performance in current year (based on quarterly data)

4.5.1. Month wise Purchase, Input energy and billed energy details

The Month wise Purchase, input energy & billed energy for FY 2024-25 of the Discom periphery is shown in below table.

Table 22: Month wise Purchase, input energy & billed energy for FY 2024-25

| Months | Purchase Energy (MU) | Net Input Energy (MU) | Billed Energy (MU) |
|--------------|----------------------|-----------------------|--------------------|
| Apr-24 | 1072.76 | 1021.001 | 529.56 |
| May-24 | 922.84 | 897.872 | 543.03 |
| Jun-24 | 840.04 | 824.180 | 544.39 |
| Jul-24 | 745.41 | 735.504 | 519.58 |
| Aug-24 | 676.17 | 674.538 | 524.83 |
| Sep-24 | 568.89 | 659.699 | 521.37 |
| Oct-24 | 728.47 | 689.914 | 519.54 |
| Nov-24 | 886.58 | 822.326 | 541.50 |
| Dec-24 | 1032 | 982.215 | 567.82 |
| Jan-25 | 1231.62 | 1131.014 | 591.62 |
| Feb-25 | 1362.61 | 1216.459 | 608.52 |
| Mar-25 | 1104.34 | 1040.480 | 569.45 |
| Total | 11271.73 | 10695.202 | 6581.22 |

Note: Details Sheet Attached in Annexure

4.5.2. Quarterly and annual AT&C losses

The Quarter wise and annual AT&C losses for FY 2024-25 is shown in below table.

Table 23: Energy Input and AT&C Losses for FY 2024-25

| Energy Input Details | Formula | UoM | Quarterly | | | | Annual |
|--|---|-----|-----------|---------|---------|---------|----------|
| | | | Q1 | Q2 | Q3 | Q4 | FY 24-25 |
| Input Energy Purchase (From Generation Source) | A | MU | 2835.64 | 2081.71 | 2524.60 | 3497.70 | 11271.73 |
| Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded) | B | MU | 2785.72 | 2042.20 | 2475.39 | 3422.04 | 10695.20 |
| Total Energy billed (is the Net energy billed, adjusted for energy traded) | C | MU | 1643.54 | 1587.94 | 1659.45 | 1797.04 | 6581.22 |
| Transmission and Distribution (T&D) loss Details | D | MU | 1142.18 | 454.26 | 815.93 | 1625.00 | 4113.98 |
| | $E = \frac{D}{B} \times 100$ | % | 41.00% | 22.24% | 32.96% | 47.49% | 38.47% |
| Collection Efficiency | F | % | 71.97% | 75.47% | 81.66% | 97.91% | 107.83% |
| Aggregate Technical & Commercial Loss | $G = 1 - \{(1-E) \times \text{Min}(F, 100\%)\}$ | % | 57.54% | 41.32% | 45.26% | 48.58% | 33.65% |

4.5.3. Voltage wise AT&C losses

The voltage wise AT&C losses of KPDCL for FY 2024-25 are as shown in the below table:

Table 24: Voltage-wise AT&C Losses for FY 2024-25

| S. No. | Particulars | Units | Values |
|----------|---|-------|--------|
| 1 | Losses in 132 KV System and Connected Equipment | | |
| 1.a. | Total Energy delivered into 132 KV Distribution System from EHT SSs | MUs | |
| 1.b. | Energy consumed by HT consumers at 132KV (Sales + Third Party) | MUs | |
| 1.c. | Energy Delivered to lower voltage | MUs | |
| 1.d. | Losses (132 kV System) | MUs | |
| 1.e. | % Losses (132 kV System) | % | |
| | | | |
| 2 | Losses in 33 KV System and Connected Equipment | | |
| 2.a. | Total Energy delivered into 33 KV Distribution System from EHT SSs | MUs | |
| 2.b. | Energy consumed by HT consumers at 33KV (Sales + Third Party) | MUs | |
| 2.c. | Energy Delivered into 11 KV and LT System from 33/11 KV SSs | MUs | |
| 2.d. | Losses (33 kV System) | MUs | |
| 2.e. | % Losses (33 kV System) | % | |
| | | | |
| 3 | Losses in 11 KV System and Connected Equipment | | |

| S. No. | Particulars | Units | Values |
|--------|---|-------|----------|
| 3.a. | Total Energy delivered into 11 KV and LT Distribution System | MUs | |
| 3.b. | Energy consumed by HT consumers at 11KV (Sales + Third Party) | MUs | |
| 3.c. | Total Output from 11kV to LT | MUs | |
| 3.d. | Losses (11kV System) | MUs | |
| 3.e. | % Losses (11kV System) | % | |
| | | | |
| 4 | Losses in LT system and connected equipment | | |
| 4.a. | Energy delivered to LT system from 11/400 V DTRs | MUs | |
| 4.b. | Energy sold at LT level | MUs | |
| 4.c. | Losses (LT System) | MUs | |
| 4.d. | % Losses (LT System) | % | |
| | | | |
| 5 | Total losses in the Distribution System | | |
| 5.a. | Total Input to the distribution system | MUs | 10695.20 |
| 5.b. | Total Output from the Distribution System | MUs | 6581.22 |
| 5.c. | Distribution System Losses | % | 4113.98 |
| 5.d. | % Distribution System Losses | % | 38.47% |

4.5.4. Circle wise AT&C losses analysis

1. Circle wise connections & energy consumptions for FY 2024-25

The circle wise connections, load, input energy & Billed energy with percentage share in different circle is given below the "Circle-Sopore" circle having maximum numbers of consumers and "Circle-1st" circle having minimum numbers of consumers. "Circle-2nd" have maximum input energy as well as billed units and "Circle-Ganderbal" have minimum input energy as well as billed units as shown in table:

Table 25: Circle wise No. of consumers, Input energy and Sales in FY 2024-25

| Circle | Total Number of connections | | Total Connected Load | | Input energy | | Billed energy | |
|------------------|-----------------------------|---------|----------------------|---------|--------------|---------|---------------|---------|
| | Nos. | % Share | MW | % Share | MU | % Share | MU | % Share |
| Circle-1st | 120134 | 10% | 414.122 | 13% | 1437.16 | 13% | 973.51 | 15% |
| Circle-2nd | 267216 | 22% | 721.563 | 23% | 2514.69 | 24% | 1529.28 | 23% |
| Circle-Bijbehara | 263475 | 22% | 513.442 | 17% | 1865.45 | 17% | 1106.34 | 17% |
| Circle-Ganderbal | 119131 | 10% | 269.887 | 9% | 1008.1 | 9% | 572.49 | 9% |
| Circle-Pulwama | 170070 | 14% | 511.253 | 17% | 1717.15 | 16% | 1120.93 | 17% |
| Circle-Sopore | 284616 | 23% | 645.122 | 21% | 2152.66 | 20% | 1278.68 | 19% |
| Total | 1224642 | 100% | 3075.39 | 100% | 10695.2 | 100% | 6581.22 | 100% |

2. Circle-wise AT&C losses

The circle wise AT&C losses are shown in the table below:

Table 26: Circle wise T&D losses, Collection Efficiency and AT&C losses for FY 2024-25

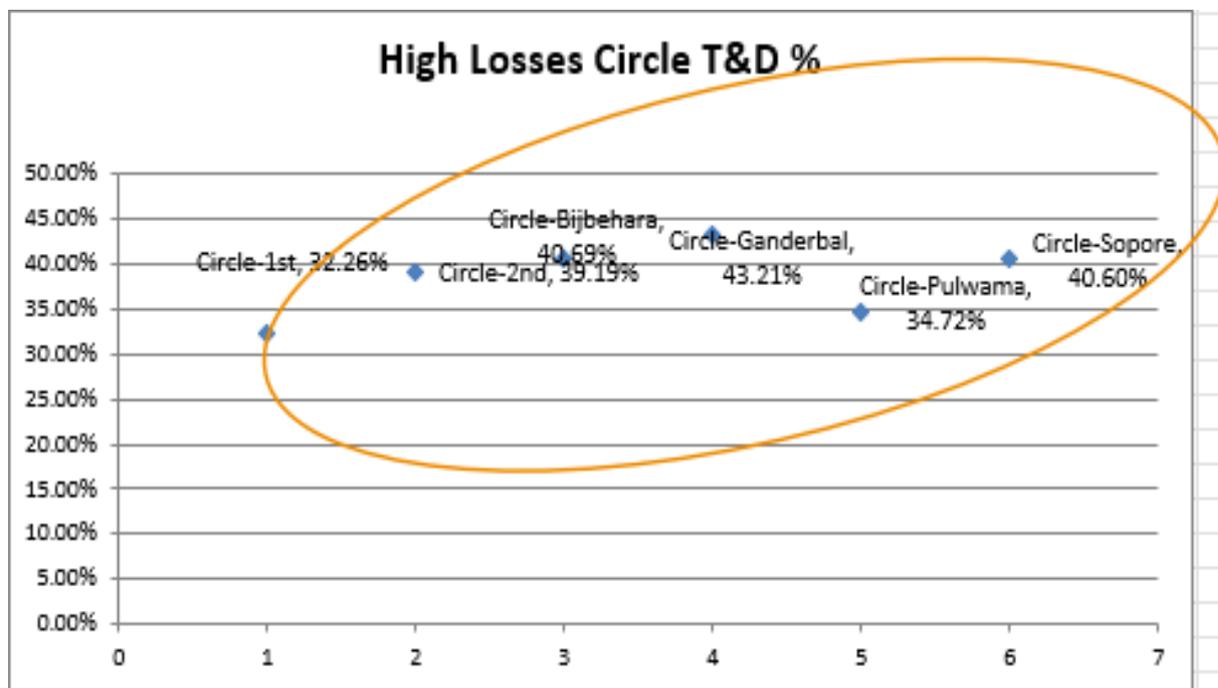
| Name of Circle | Input energy (MU) | Billed energy (MU) | T&D loss | | Collection Efficiency (%) | AT&C loss (%) |
|------------------------|-------------------|--------------------|-----------------|---------------|---------------------------|---------------|
| | | | (MU) | (%) | | |
| Circle-1 st | 1437.16 | 973.51 | 463.651 | 32.26% | 107.65% | 27.08% |
| Circle-2 nd | 2514.69 | 1529.28 | 985.406 | 39.19% | 98.43% | 40.14% |
| Circle-Bijbehara | 1865.45 | 1106.34 | 759.11 | 40.69% | 97.22% | 42.34% |
| Circle-Ganderbal | 1008.1 | 572.49 | 435.611 | 43.21% | 156.02% | 11.40% |
| Circle-Pulwama | 1717.15 | 1120.93 | 596.225 | 34.72% | 110.19% | 28.07% |
| Circle-Sopore | 2152.66 | 1278.68 | 873.981 | 40.60% | 104.64% | 37.84% |
| Total | 10695.2 | 6581.22 | 4113.984 | 38.47% | 107.83% | 33.65% |

Note: AT&C Losses calculation as per BEE proforma the calculation is as per actual Collection efficiency.

3. High loss Circles

Circle-2nd Circle had the highest T&D loss quantum of 1506.84 MUs and Circle-2nd had the highest T&D loss percentage of 39.19%. However, when T&D losses (MU) and T&D losses (%) are seen together then reducing T&D losses in Circle-2nd Circle must be prioritized in order to have overall reduction in AT&C losses of the DISCOM. Further, the circles with high loss that needs to be prioritized can be identified from the below chart:

Figure 7: Circle wise T&D losses (MUs) Vs T&D losses (%)



Division wise AT&C losses analysis

4. Division-wise AT&C losses

The Division wise AT&C losses are shown in the table below:

Table 27: Division wise T&D losses, Collection Efficiency and AT&C losses for FY 2024-25

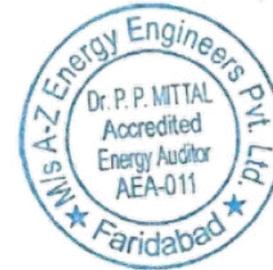
| S. No | Name of circle | Circle code | Name of Division | Consumer category | Total Number of connections (Nos) | Total Connected Load (MW) | Input energy (MU) | Total billed energy (MU) | T&D loss (MU) | T&D loss (%) | Billed Amount in Rs. Crore | Collected Amount in Rs. Crore | Collection Efficiency | AT & C loss (%) |
|------------------|----------------|-------------|---------------------|--------------------------|-----------------------------------|---------------------------|-------------------|--------------------------|---------------|---------------|----------------------------|-------------------------------|-----------------------|-----------------|
| 1 | Circle-1st | 0201 | DIV-I (BASANT BAGH) | Residential | 34190 | 75.50 | 773.75 | 191.18 | 219.06 | 28% | 64.64 | 60.86 | 94.15% | |
| | | | | Agricultural | 16 | 0.34 | | 0.58 | | | 0.39 | 0.92 | 235.66% | |
| | | | | Commercial/Industrial-LT | 15357 | 65.45 | | 94.03 | | | 54.86 | 52.82 | 96.30% | |
| | | | | Commercial/Industrial-HT | 91 | 44.39 | | 154.19 | | | 76.87 | 77.37 | 100.65% | |
| | | | | Others | 624 | 44.37 | | 114.69 | | | 94.16 | 137.22 | 145.73% | |
| Sub-total | | | | 50278 | 230.04 | 773.75 | 554.68 | 219.06 | 28% | 290.92 | 329.20 | 113.16% | 19% | |
| 2 | Circle-1st | 0201 | DIV-IV(KHANYAR) | Residential | 55775 | 109.90 | 663.41 | 311.24 | 244.59 | 37% | 104.87 | 99.27 | 94.66% | |
| | | | | Agricultural | 160 | 0.77 | | 0.57 | | | 0.27 | 0.60 | 225.27% | |
| | | | | Commercial/Industrial-LT | 13461 | 41.47 | | 42.27 | | | 25.05 | 22.58 | 90.13% | |
| | | | | Commercial/Industrial-HT | 8 | 1.66 | | 3.16 | | | 1.85 | 1.80 | 97.18% | |
| | | | | Others | 452 | 30.28 | | 61.58 | | | 51.55 | 57.34 | 111.23% | |
| Sub-total | | | | 69856 | 184.08 | 663.41 | 418.82 | 244.59 | 37% | 183.59 | 181.59 | 98.91% | 38% | |
| 3 | Circle-2nd | 0202 | BUDGAM | Residential | 109695 | 191.09 | 1258.26 | 574.16 | 579.73 | 46% | 186.33 | 115.24 | 61.85% | |
| | | | | Agricultural | 10 | 0.08 | | 0.65 | | | 0.39 | 0.89 | 228.92% | |
| | | | | Commercial/Industrial-LT | 20003 | 66.50 | | 71.92 | | | 42.78 | 36.52 | 85.37% | |
| | | | | Commercial/Industrial-HT | 39 | 8.23 | | 8.38 | | | 5.69 | 6.15 | 108.05% | |
| | | | | Others | 507 | 14.07 | | 23.42 | | | 18.95 | 33.35 | 176.01% | |
| Sub-total | | | | 130254 | 279.98 | 1258.26 | 678.53 | 579.73 | 46% | 254.13 | 192.14 | 75.61% | 59% | |
| 4 | Circle-2nd | 0202 | DIV-II(RAJBAGH) | Residential | 51770 | 142.56 | 617.56 | 275.88 | 138.01 | 22% | 95.34 | 94.02 | 98.62% | |
| | | | | Agricultural | 19 | 0.03 | | 0.03 | | | 0.01 | 0.00 | 90.35% | |
| | | | | Commercial/Industrial-LT | 19121 | 62.76 | | 77.30 | | | 47.65 | 46.08 | 96.70% | |
| | | | | Commercial/Industrial-HT | 65 | 17.45 | | 26.20 | | | 17.76 | 17.50 | 98.55% | |
| | | | | Others | 603 | 39.50 | | 100.13 | | | 81.04 | 108.39 | 133.74% | |

| S. No | Name of circle | Circle code | Name of Division | Consumer category | Total Number of connections (Nos) | Total Connected Load (MW) | Input energy (MU) | Total billed energy (MU) | T&D loss (MU) | T&D loss (%) | Billed Amount in Rs. Crore | Collected Amount in Rs. Crore | Collection Efficiency | AT & C loss (%) |
|------------------|------------------|-------------|----------------------|--------------------------|-----------------------------------|---------------------------|-------------------|--------------------------|---------------|--------------|----------------------------|-------------------------------|-----------------------|-----------------|
| Sub-total | | | | | 71578 | 262.29 | 617.56 | 479.55 | 138.01 | 22% | 241.80 | 266.00 | 110.01% | 15% |
| 5 | Circle-2nd | 0202 | DIV-III(SHREEN BAGH) | Residential | 51019 | 114.65 | 638.87 | 285.68 | 267.66 | 42% | 97.04 | 81.73 | 84.22% | |
| | | | | Agricultural | 24 | 1.11 | | 2.51 | | | 1.58 | 9.10 | 575.06% | |
| | | | | Commercial/Industrial-LT | 13926 | 37.58 | | 37.59 | | | 22.17 | 19.76 | 89.15% | |
| | | | | Commercial/Industrial-HT | 14 | 2.84 | | 3.37 | | | 2.50 | 2.60 | 104.33% | |
| | | | | Others | 401 | 23.11 | | 42.05 | | | 34.24 | 71.84 | 209.81% | |
| Sub-total | | | | | 65384 | 179.29 | 638.87 | 371.20 | 267.66 | 42% | 157.54 | 185.05 | 117.46% | 32% |
| 6 | Circle-Bijbehara | | ANANTNAG | Residential | 91127 | 147.26 | 756.14 | 369.39 | 308.62 | 41% | 113.17 | 106.47 | 94.08% | |
| | | | | Agricultural | 72 | 1.48 | | 2.31 | | | 1.33 | 0.25 | 18.66% | |
| | | | | Commercial/Industrial-LT | 19569 | 47.35 | | 49.58 | | | 29.16 | 30.95 | 106.12% | |
| | | | | Commercial/Industrial-HT | 15 | 7.70 | | 3.02 | | | 3.54 | 3.15 | 88.99% | |
| | | | | Others | 693 | 15.85 | | 23.21 | | | 18.73 | 24.18 | 129.10% | |
| Sub-total | | | | | 111476 | 219.65 | 756.14 | 447.52 | 308.62 | 41% | 165.93 | 164.99 | 99.43% | 41% |
| 7 | Circle-Bijbehara | | BIJBEHARA | Residential | 49473 | 85.71 | 396.99 | 200.81 | 138.73 | 35% | 61.28 | 54.62 | 89.13% | |
| | | | | Agricultural | 345 | 6.15 | | 8.02 | | | 5.23 | 16.98 | 324.93% | |
| | | | | Commercial/Industrial-LT | 9684 | 26.92 | | 31.96 | | | 19.32 | 18.95 | 98.11% | |
| | | | | Commercial/Industrial-HT | 12 | 3.07 | | 5.04 | | | 3.60 | 3.62 | 100.81% | |
| | | | | Others | 487 | 4.74 | | 12.43 | | | 11.00 | 9.94 | 90.39% | |
| Sub-total | | | | | 60001 | 126.59 | 396.99 | 258.26 | 138.73 | 35% | 100.42 | 104.12 | 103.68% | 33% |
| 8 | Circle-Bijbehara | | KULGAM | Residential | 78510 | 117.15 | 712.31 | 340.63 | 311.75 | 44% | 104.55 | 87.11 | 83.32% | |
| | | | | Agricultural | 27 | 0.25 | | 1.02 | | | 0.58 | 0.76 | 130.57% | |
| | | | | Commercial/Industrial-LT | 13069 | 36.84 | | 42.34 | | | 24.87 | 28.52 | 114.71% | |
| | | | | Commercial/Industrial-HT | 24 | 4.69 | | 7.87 | | | 4.62 | 3.15 | 68.04% | |
| | | | | Others | 368 | 8.28 | | 8.70 | | | 7.94 | 8.91 | 112.18% | |
| Sub-total | | | | | 91998 | 167.21 | 712.31 | 400.56 | 311.75 | 44% | 142.56 | 128.45 | 90.10% | 49% |
| 9 | Circle-Ganderbal | | BANDIPORA | Residential | 32931 | 73.22 | 173.72 | 94.84 | 59.35 | 34% | 28.30 | 25.03 | 88.42% | |
| | | | | Agricultural | 4 | 0.08 | | 0.14 | | | 0.09 | 0.68 | 745.39% | |
| | | | | Commercial/Industrial-LT | 3768 | 8.35 | | 10.09 | | | 5.91 | 5.49 | 92.96% | |
| | | | | Commercial/Industrial-HT | 5 | 2.91 | | 1.73 | | | 1.67 | 1.21 | 72.47% | |

| S. No | Name of circle | Circle code | Name of Division | Consumer category | Total Number of connections (Nos) | Total Connected Load (MW) | Input energy (MU) | Total billed energy (MU) | T&D loss (MU) | T&D loss (%) | Billed Amount in Rs. Crore | Collected Amount in Rs. Crore | Collection Efficiency | AT & C loss (%) |
|------------------|------------------|-------------|------------------|--------------------------|-----------------------------------|---------------------------|-------------------|--------------------------|---------------|--------------|----------------------------|-------------------------------|-----------------------|-----------------|
| | | | | Others | 387 | 5.86 | | 7.58 | | | 6.33 | 5.76 | 90.96% | |
| Sub-total | | | | | 37095 | 90.42 | 173.72 | 114.37 | 59.35 | 34% | 42.30 | 38.16 | 90.21% | 41% |
| 10 | Circle-Ganderbal | | DIV SUMBAL | Residential | 26285 | 35.17 | 278.85 | 122.15 | 111.24 | 40% | 37.65 | 23.93 | 63.55% | |
| | | | | Agricultural | 172 | 12.51 | | 14.95 | | | 10.26 | 107.20 | 1045.21% | |
| | | | | Commercial/Industrial-LT | 3439 | 11.63 | | 12.64 | | | 7.08 | 5.02 | 70.92% | |
| | | | | Commercial/Industrial-HT | 3 | 0.46 | | 0.33 | | | 0.23 | 0.21 | 92.02% | |
| | | | | Others | 316 | 7.78 | | 17.55 | | | 15.00 | 68.21 | 454.67% | |
| Sub-total | | | | | 30215 | 67.55 | 278.85 | 167.62 | 111.24 | 40% | 70.22 | 204.58 | 291.35% | -75% |
| 11 | Circle-Ganderbal | | GANDERBAL | Residential | 43808 | 63.22 | 555.52 | 224.70 | 265.03 | 48% | 71.79 | 50.81 | 70.78% | |
| | | | | Agricultural | 50 | 2.16 | | 2.52 | | | 1.72 | 4.98 | 290.12% | |
| | | | | Commercial/Industrial-LT | 7285 | 24.27 | | 34.09 | | | 19.68 | 21.44 | 108.93% | |
| | | | | Commercial/Industrial-HT | 19 | 10.56 | | 9.60 | | | 7.00 | 7.54 | 107.78% | |
| | | | | Others | 659 | 11.70 | | 19.57 | | | 16.66 | 30.33 | 182.04% | |
| Sub-total | | | | | 51821 | 111.91 | 555.52 | 290.50 | 265.03 | 48% | 116.85 | 115.11 | 98.51% | 48% |
| 12 | Circle-Pulwama | | AWANTIPORA | Residential | 49551 | 81.40 | 747.73 | 247.32 | 254.43 | 34% | 78.15 | 73.25 | 93.72% | |
| | | | | Agricultural | 433 | 19.35 | | 46.63 | | | 27.44 | 48.96 | 178.41% | |
| | | | | Commercial/Industrial-LT | 9460 | 30.82 | | 38.80 | | | 21.57 | 19.68 | 91.26% | |
| | | | | Commercial/Industrial-HT | 22 | 42.59 | | 122.82 | | | 58.24 | 64.20 | 110.23% | |
| | | | | Others | 448 | 13.97 | | 37.72 | | | 30.23 | 46.64 | 154.26% | |
| Sub-total | | | | | 59914 | 188.13 | 747.73 | 493.29 | 254.43 | 34% | 215.64 | 252.73 | 117.20% | 23% |
| 13 | Circle-Pulwama | | PULWAMA | Residential | 44607 | 104.22 | 526.83 | 230.47 | 170.50 | 32% | 75.17 | 70.34 | 93.58% | |
| | | | | Agricultural | 687 | 7.93 | | 9.96 | | | 6.19 | 16.90 | 273.07% | |
| | | | | Commercial/Industrial-LT | 9939 | 41.23 | | 41.77 | | | 23.55 | 24.05 | 102.12% | |
| | | | | Commercial/Industrial-HT | 126 | 39.90 | | 63.98 | | | 34.21 | 33.77 | 98.70% | |
| | | | | Others | 484 | 5.47 | | 10.17 | | | 9.25 | 16.86 | 182.18% | |
| Sub-total | | | | | 55843 | 198.74 | 526.83 | 356.34 | 170.50 | 32% | 148.37 | 161.91 | 109.13% | 26% |
| 14 | Circle-Pulwama | | SHOPIAN | Residential | 46747 | 93.50 | 442.60 | 228.63 | 171.29 | 39% | 72.98 | 64.42 | 88.28% | |
| | | | | Agricultural | 308 | 2.81 | | 5.37 | | | 2.92 | 6.15 | 210.45% | |
| | | | | Commercial/Industrial-LT | 6598 | 18.13 | | 18.78 | | | 11.30 | 10.59 | 93.71% | |

| S. No | Name of circle code | Circle | Name of Division | Consumer category | Total Number of connections (Nos) | Total Connected Load (MW) | Input energy (MU) | Total billed energy (MU) | T&D loss (MU) | T&D loss (%) | Billed Amount in Rs. Crore | Collected Amount in Rs. Crore | Collection Efficiency | AT & C loss (%) |
|------------------|---------------------|--------|------------------|--------------------------|-----------------------------------|---------------------------|-------------------|--------------------------|---------------|--------------|----------------------------|-------------------------------|-----------------------|-----------------|
| | | | | Commercial/Industrial-HT | 11 | 3.74 | | 11.07 | | | 5.16 | 5.19 | 100.68% | |
| | | | | Others | 649 | 6.20 | | 7.45 | | | 6.52 | 9.05 | 138.85% | |
| Sub-total | | | | | 54313 | 124.39 | 442.60 | 271.30 | 171.29 | 39% | 98.87 | 95.40 | 96.49% | 41% |
| 15 | Circle-Sopore | | BARAMULLAH | Residential | 66260 | 161.19 | 562.64 | 279.59 | 188.68 | 34% | 86.50 | 70.77 | 81.82% | |
| | | | | Agricultural | 39 | 7.37 | | 11.12 | | | 7.61 | 12.58 | 165.37% | |
| | | | | Commercial/Industrial-LT | 10852 | 25.25 | | 30.56 | | | 17.71 | 15.94 | 89.97% | |
| | | | | Commercial/Industrial-HT | 4 | 1.35 | | 2.43 | | | 1.25 | 1.18 | 94.42% | |
| | | | | Others | 1156 | 21.33 | | 50.26 | | | 42.14 | 61.18 | 145.20% | |
| Sub-total | | | | | 78311 | 216.49 | 562.64 | 373.96 | 188.68 | 34% | 155.21 | 161.65 | 104.15% | 31% |
| 16 | Circle-Sopore | | HANDWARA | Residential | 39082 | 41.89 | 312.85 | 154.60 | 131.67 | 42% | 45.36 | 30.55 | 67.36% | |
| | | | | Agricultural | 29 | 1.36 | | 2.53 | | | 1.58 | 6.36 | 403.61% | |
| | | | | Commercial/Industrial-LT | 4576 | 12.62 | | 20.16 | | | 11.60 | 11.70 | 100.80% | |
| | | | | Commercial/Industrial-HT | 1 | 0.35 | | 0.54 | | | 0.29 | 0.29 | 100.09% | |
| | | | | Others | 208 | 2.67 | | 3.35 | | | 2.79 | 3.98 | 142.52% | |
| Sub-total | | | | | 43896 | 58.90 | 312.85 | 181.18 | 131.67 | 42% | 61.61 | 52.87 | 85.81% | 50% |
| 17 | Circle-Sopore | | KUPWARA | Residential | 53420 | 55.01 | 404.53 | 197.63 | 140.59 | 35% | 57.27 | 36.69 | 64.06% | |
| | | | | Agricultural | 0 | 0.00 | | 0.00 | | | 0.00 | 3.71 | 0.00% | |
| | | | | Commercial/Industrial-LT | 5712 | 18.69 | | 36.52 | | | 21.41 | 33.75 | 157.61% | |
| | | | | Commercial/Industrial-HT | 1 | 0.32 | | 0.18 | | | 0.19 | 0.43 | 227.71% | |
| | | | | Others | 440 | 6.00 | | 29.61 | | | 14.38 | 14.77 | 102.68% | |
| Sub-total | | | | | 59573 | 80.01 | 404.53 | 263.94 | 140.59 | 35% | 93.25 | 89.34 | 95.81% | 37% |
| 18 | Circle-Sopore | | SOPORE | Residential | 62575 | 146.34 | 611.64 | 316.00 | 227.60 | 37% | 102.65 | 70.70 | 68.88% | |
| | | | | Agricultural | 89 | 4.40 | | 8.22 | | | 5.10 | 15.91 | 312.12% | |
| | | | | Commercial/Industrial-LT | 11840 | 30.95 | | 30.80 | | | 18.70 | 14.91 | 79.75% | |
| | | | | Commercial/Industrial-HT | 10 | 2.64 | | 3.22 | | | 2.11 | 1.96 | 93.10% | |
| | | | | Others | 508 | 9.88 | | 25.80 | | | 21.85 | 56.14 | 256.89% | |
| Sub-total | | | | | 75022 | 194.20 | 611.64 | 384.03 | 227.60 | 37% | 150.40 | 159.62 | 106.13% | 33% |
| 19 | Circle-Sopore | | SPL-TANGMARG | Residential | 24068 | 70.82 | 261.00 | 53.23 | 185.43 | 71% | 16.81 | 22.26 | 132.38% | |
| | | | | Agricultural | 35 | 0.11 | | 0.02 | | | 0.00 | 0.01 | 476.40% | |

| S. No | Name of circle | Circle code | Name of Division | Consumer category | Total Number of connections (Nos) | Total Connected Load (MW) | Input energy (MU) | Total billed energy (MU) | T&D loss (MU) | T&D loss (%) | Billed Amount in Rs. Crore | Collected Amount in Rs. Crore | Collection Efficiency | AT & C loss (%) |
|------------------|----------------|-------------|------------------|--------------------------|-----------------------------------|---------------------------|-------------------|--------------------------|---------------|----------------|----------------------------|-------------------------------|-----------------------|-----------------|
| | | | | Commercial/Industrial-LT | 3356 | 13.49 | | 9.39 | | | 5.69 | 8.76 | 153.96% | |
| | | | | Commercial/Industrial-HT | 27 | 5.68 | | 6.28 | | | 4.04 | 8.28 | 204.97% | |
| | | | | Others | 328 | 5.42 | | 6.65 | | | 5.48 | 12.55 | 228.97% | |
| Sub-total | | | | | 27814 | 95.52 | 261.00 | 75.57 | 185.43 | 71% | 32.03 | 51.86 | 161.93% | 53% |
| 76 | Total | | | Residential | 1010893 | 1909.79 | 10695.20 | 4698.11 | 4113.98 | 38% | 1499.85 | 1238.07 | 82.55% | |
| | | | | Agricultural | 2519 | 68.31 | | 117.16 | | | 72.67 | 252.94 | 348.09% | |
| | | | | Commercial/Industrial-LT | 201015 | 620.30 | | 730.59 | | | 430.05 | 427.51 | 99.41% | |
| | | | | Commercial/Industrial-HT | 497 | 200.52 | | 433.46 | | | 230.82 | 239.62 | 103.81% | |
| | | | | Others | 9718 | 276.46 | | 601.90 | | | 488.26 | 776.64 | 159.06% | |
| | | | | 1224642 | 3075.39 | 10695.20 | 6581.22 | 4113.98 | 38% | 2721.64 | 2934.78 | 107.83% | 33.65% | |

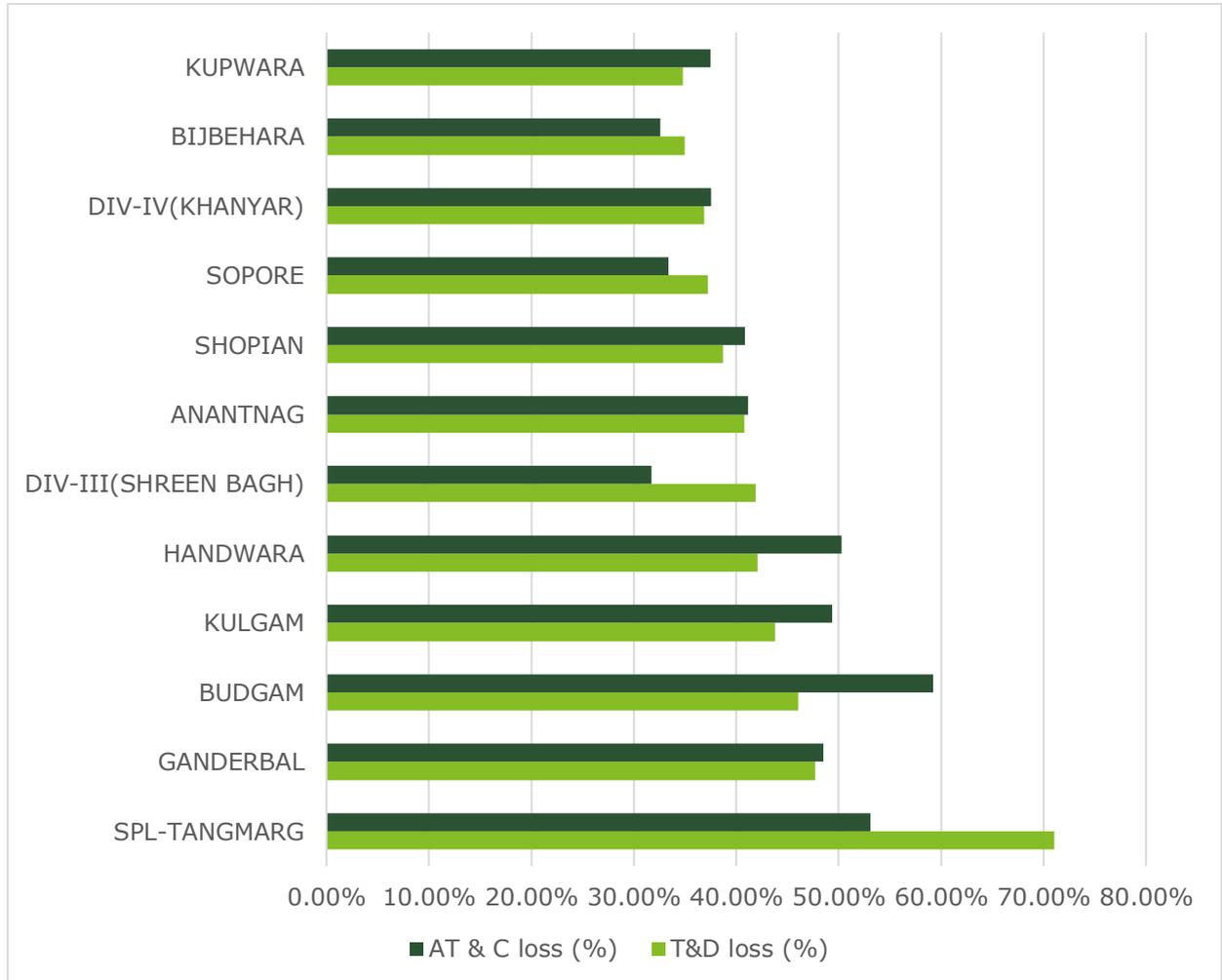


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5. High loss divisions

Operations & Maintenance Division Budgam has the highest T&D loss quantum of 579.73 MU and “Budgam” Division had the highest AT&C loss percentage of 59%. Further, the circles with high loss that needs to be prioritized can be identified from the below chart:

Figure 8: Division wise T&D losses (MUs) Vs AT&C losses (%)



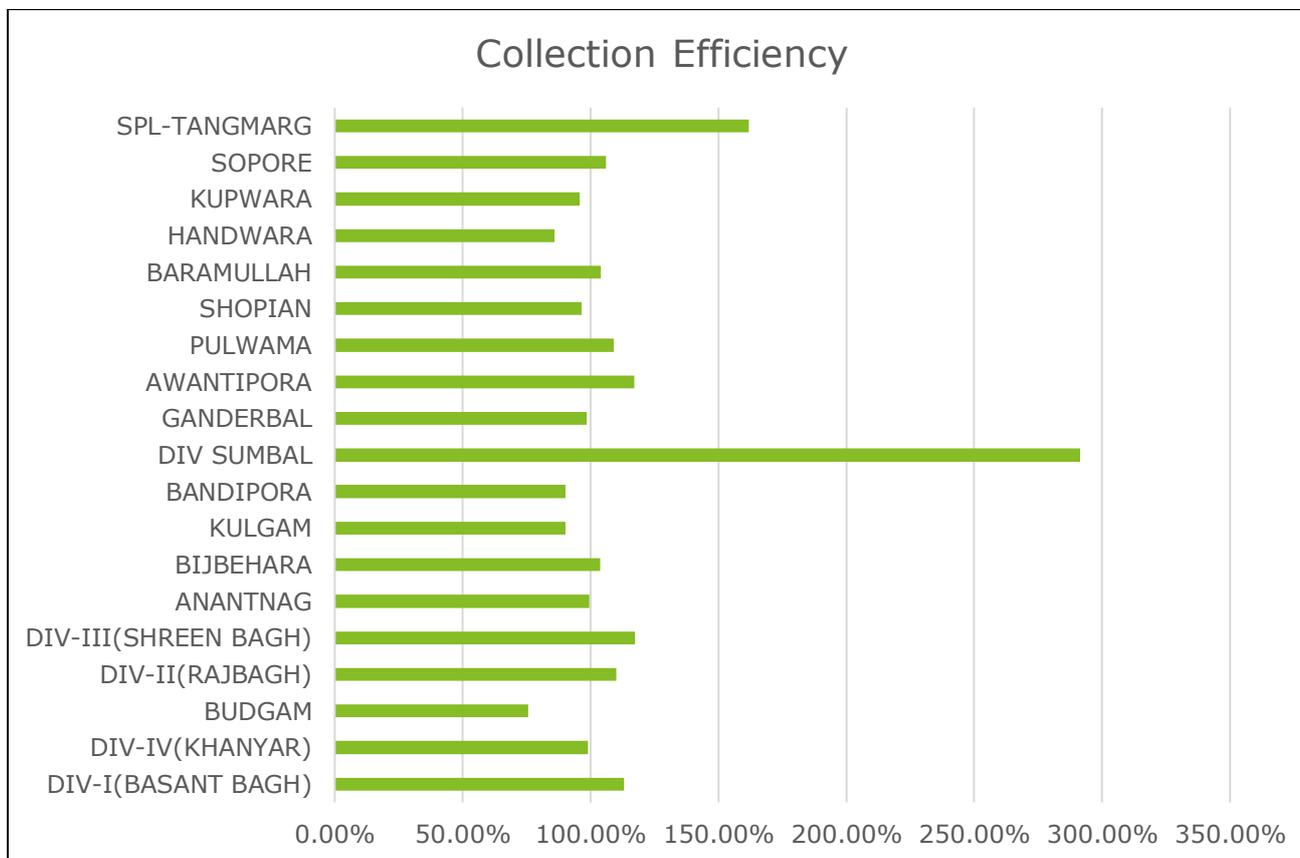
The list of top 10 Divisions with higher AT&C losses (%) & T&D losses (%) identified from the above chart are tabulated below:

Table 28: Top 10 Divisions with higher AT&C losses (%) & T&D losses (%)

| S.No. | Division | T&D loss (%) | AT&C loss (%) |
|-------|-----------------------|--------------|---------------|
| 1 | SPL-TANGMARG | 71.05% | 53% |
| 2 | GANDERBAL | 47.71% | 48% |
| 3 | BUDGAM | 46.07% | 59% |
| 4 | KULGAM | 43.77% | 49% |
| 5 | HANDWARA | 42.09% | 50% |
| 6 | DIV-III (SHREEN BAGH) | 41.90% | 32% |
| 7 | ANANTNAG | 40.82% | 41% |
| 8 | SHOPIAN | 38.70% | 41% |
| 9 | SOPORE | 37.21% | 33% |
| 10 | DIV-IV(KHANYAR) | 36.87% | 38% |

Further, it was observed that the Collection Efficiency is more than 100% across all the Divisions as shown below:

Figure 9: Division wise Collection efficiency (%)



4.5.5. Feeder wise T&D losses analysis

1. Feeder wise T&D losses

Sample attached

| Feeder Name | Received at Feeder (MU) | Feeder Consumption (MU) | T&D losses (MU) | AT&C losses (%) | T&D Loss (%) |
|-----------------------------|-------------------------|-------------------------|-----------------|-----------------|--------------|
| F1 NAI SARAK | 11.61 | 7.14 | 4.48 | 75.31% | 38.55% |
| F5 EXCHANGE | 7.03 | 5.67 | 1.35 | 53.95% | 19.26% |
| F3 MAISUMA | 5.25 | 3.26 | 1.99 | 83.14% | 37.82% |
| BRANE FD1 | 9.91 | 6.15 | 3.76 | 86.79% | 37.91% |
| BRANE 3 | 13.57 | 8.75 | 4.82 | 86.34% | 35.52% |
| BUCHWARA FD2 (DALGATE) | 17.70 | 12.73 | 4.96 | 76.95% | 28.04% |
| CENTURE FD1 Zabarwan Park | 1.36 | 1.20 | 0.16 | 17.63% | 11.79% |
| K. K. Mohalla F1 | 8.51 | 5.51 | 3.00 | 84.30% | 35.20% |
| Nawpora F3 | 18.39 | 8.81 | 9.58 | 93.10% | 52.10% |
| Bohri Kadal F4 | 5.98 | 3.44 | 2.54 | 86.75% | 42.44% |
| Bohri Kadal F4 | 6.48 | 3.44 | 3.04 | 80.80% | 46.96% |
| Theed F1 | 16.36 | 5.83 | 10.53 | 96.52% | 64.35% |
| Dara F3 | 18.28 | 7.14 | 11.13 | 95.29% | 60.92% |
| Rajouri Kadal-F2 | 3.66 | 1.88 | 1.78 | 92.88% | 48.55% |
| Rajouri Kadal-F2 | 2.87 | 1.25 | 1.62 | 94.42% | 56.33% |
| Zadibal-F3 | 11.48 | 5.17 | 6.31 | 93.86% | 54.97% |
| NARWARA, Firdous Coloney-F4 | 11.25 | 9.27 | 1.98 | 80.45% | 17.58% |
| Mughal Masjid-F5 | 1.57 | 0.70 | 0.88 | 91.06% | 55.56% |
| Mughal Masjid-F5 | 10.54 | 3.97 | 6.56 | 95.59% | 62.28% |
| Jamia Masjid, ICSC-F6 | 0.50 | 0.37 | 0.13 | 68.33% | 26.46% |
| Bsnl exchange, Nishat F1 | 9.17 | 4.79 | 4.38 | 92.06% | 47.79% |
| Nishat F2 | 6.49 | 5.12 | 1.37 | 72.63% | 21.13% |
| Foreshore Road Nishat F3 | 14.72 | 9.10 | 5.62 | 86.04% | 38.20% |
| Foreshore Road Nishat F3 | 1.64 | 1.22 | 0.42 | 80.93% | 25.37% |
| Pathan Bagh F4 | 9.11 | 6.27 | 2.84 | 85.42% | 31.15% |
| Local Shalimar, TAILBAL F2 | 19.71 | 11.68 | 8.04 | 89.12% | 40.77% |
| Arbal F3 | 17.95 | 12.09 | 5.86 | 80.30% | 32.64% |
| CM Residence F4 | 7.62 | 6.29 | 1.33 | 35.96% | 17.49% |
| Dalgate | 15.79 | 10.56 | 5.23 | 78.97% | 33.13% |
| Dalgate | 0.40 | 0.29 | 0.11 | 82.92% | 27.17% |
| Radio Kashmir | 8.02 | 5.79 | 2.23 | 25.53% | 27.79% |
| F3 AMDAKADAL | 7.86 | 4.91 | 2.96 | 89.42% | 37.61% |
| Baghwanpora, F2 | 11.67 | 7.73 | 3.94 | 82.02% | 33.77% |
| F1 BOTAKADAL | 8.58 | 6.12 | 2.45 | 85.05% | 28.59% |
| Zafran Colony F1 | 5.63 | 4.26 | 1.37 | 80.67% | 24.39% |
| Befina F2 | 3.28 | 1.46 | 1.81 | 91.66% | 55.28% |
| Befina F2 | 2.18 | 1.23 | 0.96 | 89.59% | 43.73% |
| Balhama F3 | 7.18 | 3.09 | 4.09 | 94.38% | 56.95% |
| Saida Kadal, F1 | 14.11 | 7.46 | 6.65 | 92.42% | 47.13% |

| Feeder Name | Received at Feeder (MU) | Feeder Consumption (MU) | T&D losses (MU) | AT&C losses (%) | T&D Loss (%) |
|--------------------------------|-------------------------|-------------------------|-----------------|-----------------|--------------|
| Dalkawpora, F2 | 13.50 | 8.08 | 5.42 | 88.90% | 40.16% |
| DAL LAKE F5 | 18.68 | 10.37 | 8.32 | 94.98% | 44.51% |
| F2: Zari Mohalla and Sikh Bagh | 6.13 | 5.06 | 1.07 | 76.79% | 17.43% |
| Samarbugh F1 | 6.94 | 2.43 | 4.51 | 96.38% | 65.05% |
| Batwara F2 | 3.45 | 2.66 | 0.79 | 77.22% | 22.92% |
| Pandach | 12.19 | 6.82 | 5.37 | 89.93% | 44.06% |
| F2 KHAL MULLA | 8.24 | 3.74 | 4.50 | 87.56% | 54.65% |
| Alamgari Bazar F3 | 8.27 | 6.37 | 1.90 | 78.67% | 22.97% |
| Bota Kadal, F4 | 8.88 | 6.93 | 1.95 | 78.31% | 22.00% |
| Hari Parbat Exchange F6 | 1.21 | 0.92 | 0.29 | 0.00% | 23.79% |
| Telbal, F3 | 4.23 | 1.84 | 2.40 | 94.99% | 56.56% |
| Telbal, F3 | 3.19 | 1.51 | 1.69 | 94.03% | 52.81% |
| Dhanihama F1 | 12.19 | 5.46 | 6.72 | 93.32% | 55.16% |
| Burzehama,Gassu F4 | 14.00 | 7.15 | 6.85 | 92.23% | 48.93% |
| khimber,chaterhama F2 | 15.15 | 6.95 | 8.21 | 92.93% | 54.15% |
| khimber,chaterhama F2 | 0.31 | 0.21 | 0.09 | 0.00% | 30.40% |
| Housing Colony | 4.61 | 3.72 | 0.89 | 74.19% | 19.21% |
| Umar Colony B | 13.24 | 11.01 | 2.24 | 75.31% | 16.89% |
| Rangpora | 7.28 | 5.22 | 2.07 | 84.76% | 28.37% |
| Habak | 8.78 | 6.71 | 2.07 | 81.66% | 23.59% |
| F1; University / NIT / Shrine | 7.21 | 6.11 | 1.10 | 17.13% | 15.21% |
| F2; Nigeen | 11.47 | 9.34 | 2.13 | 61.43% | 18.57% |
| Ahmad Nagar: F1 | 10.12 | 5.84 | 4.28 | 88.71% | 42.29% |
| Ahmad Nagar: F1 | 1.12 | 0.89 | 0.23 | 77.15% | 20.81% |
| Umerhair | 2.39 | 1.62 | 0.77 | 85.52% | 32.23% |
| Umar Colony B F2 | 9.23 | 7.24 | 1.99 | 79.59% | 21.54% |
| Konabal F2 | 7.61 | 4.99 | 2.62 | 86.20% | 34.39% |
| Konabal F2 | 2.15 | 1.32 | 0.83 | 90.88% | 38.66% |
| Hasnaabad F3 | 10.71 | 7.48 | 3.23 | 88.85% | 30.17% |
| Jogi Lanker F4 | 0.82 | 0.53 | 0.29 | 87.88% | 35.50% |
| Jogi Lanker F4 | 15.52 | 9.81 | 5.72 | 87.18% | 36.83% |
| Bolachipora F1 | 11.35 | 5.68 | 5.66 | 92.35% | 49.90% |
| Anchar F2 | 14.90 | 6.21 | 8.69 | 95.18% | 58.30% |
| Nowshera F4 | 7.27 | 5.06 | 2.21 | 84.47% | 30.35% |
| Bachpora, HVDS 90ft F5 | 15.09 | 8.87 | 6.22 | 88.81% | 41.20% |
| Batapora F3 | 9.31 | 4.36 | 4.95 | 93.72% | 53.21% |
| Gulabagh F4 | 12.07 | 7.49 | 4.58 | 87.27% | 37.97% |
| Zoonimar F1 | 15.69 | 9.17 | 6.52 | 90.59% | 41.56% |
| F1 KENIHAMA | 19.37 | 8.99 | 10.38 | 94.34% | 53.57% |
| F2 B.K.PORA | 10.84 | 7.77 | 3.07 | 74.06% | 28.30% |
| F3 CHATERGAM | 17.28 | 9.90 | 7.38 | 90.39% | 42.69% |
| KRALPORA, MOCHWA f1 | 17.05 | 9.10 | 7.96 | 91.97% | 46.65% |
| KRALPORA, MOCHWA f1 | 4.26 | 0.29 | 3.97 | 100.00% | 93.15% |
| BAGHI MEHTAB f2 | 9.46 | 0.03 | 9.43 | 100.00% | 99.69% |

| Feeder Name | Received at Feeder (MU) | Feeder Consumption (MU) | T&D losses (MU) | AT&C losses (%) | T&D Loss (%) |
|---|-------------------------|-------------------------|-----------------|-----------------|--------------|
| F3 KRALPORA | 14.23 | 9.25 | 4.98 | 85.36% | 34.97% |
| F1 CHONCHI FEKIR (BAKSHI PORA) | 12.70 | 6.68 | 6.01 | 71.73% | 47.36% |
| F1 FIRDOSABAD, BATAMALOO LOCAL. | 14.30 | 8.68 | 5.62 | 88.40% | 39.32% |
| F2, MAGARMALBAGH, DANDERKHAH | 8.22 | 5.02 | 3.21 | 73.99% | 38.98% |
| ARIZAL | 14.90 | 10.68 | 4.22 | 89.82% | 28.32% |
| GONDIPORA | 12.82 | 9.30 | 3.52 | 94.52% | 27.45% |
| OLD BEERWAH | 5.10 | 2.73 | 2.37 | 95.91% | 46.42% |
| ARWAH | 15.41 | 5.28 | 10.12 | 98.45% | 65.71% |
| NAJAN | 7.90 | 4.67 | 3.23 | 97.44% | 40.94% |
| CHEWDARA | 13.35 | 9.98 | 3.36 | 94.96% | 25.21% |
| BOATMAN COLONY F1 | 4.33 | 2.80 | 1.52 | 90.56% | 35.17% |
| HAJJ HOUSE F2 | 1.82 | 1.46 | 0.36 | 0.00% | 19.67% |
| USMANIA COLONY /IQBALABAD/SIRSYEABAD | 10.11 | 7.46 | 2.65 | 78.95% | 26.23% |
| F1 BOAT MAN COLONY | 11.37 | 6.05 | 5.32 | 91.87% | 46.78% |
| F4 NUND RESH COLONY | 15.62 | 6.91 | 8.71 | 83.77% | 55.74% |
| F3 BILAL COLONY; HOUSING COLONY | 11.33 | 8.01 | 3.32 | 84.09% | 29.27% |
| F4 MEDICAL HOSTEL | 3.59 | 2.95 | 0.64 | 14.19% | 17.81% |
| F1 S.K. Colony | 9.97 | 6.39 | 3.58 | 83.13% | 35.90% |
| F3 QAMARWARI; CHATABAL | 8.09 | 6.31 | 1.78 | 51.72% | 22.01% |
| F1: BAGHAT, RAWATPORA. | 13.25 | 10.07 | 3.18 | 40.84% | 24.02% |
| F3: PAMPOSH COLONY, AZAD BASTI, BUDSHAHNAGAR. | 17.24 | 13.65 | 3.58 | 78.10% | 20.79% |
| F4: NATIPORA, BEGHPORA (U.M) | 10.94 | 7.33 | 3.61 | 81.71% | 32.96% |
| F1 BRANWAR | 7.62 | 3.97 | 3.65 | 94.23% | 47.92% |
| F3 SURASYAR | 11.87 | 6.22 | 5.66 | 92.87% | 47.64% |
| ZALAPORA | 17.25 | 9.76 | 7.49 | 87.50% | 43.39% |
| NASRULLAHPORA | 12.53 | 6.68 | 5.85 | 96.00% | 46.68% |
| F5 Town | 13.45 | 11.25 | 2.20 | 75.63% | 16.35% |
| LABERTAL | 6.26 | 3.02 | 3.25 | 96.00% | 51.83% |
| BEMINA | 16.45 | 5.92 | 10.53 | 98.68% | 64.00% |
| F7 Essential | 4.85 | 2.71 | 2.13 | 49.71% | 44.02% |
| F8 JNV | 8.56 | 5.07 | 3.49 | 94.45% | 40.81% |
| F1 SOGAAM CHADURA | 10.33 | 4.84 | 5.49 | 92.96% | 53.16% |
| F2 REPORA YARIKALAN | 11.94 | 5.29 | 6.65 | 93.82% | 55.69% |
| F4 WATHORA | 19.91 | 5.91 | 14.00 | 97.35% | 70.29% |
| F5 BOGAM | 11.41 | 5.57 | 5.83 | 91.46% | 51.15% |
| KAKOYRING | 10.81 | 6.12 | 4.69 | 89.87% | 43.38% |
| YOUSMARG | 16.95 | 8.64 | 8.32 | 92.33% | 49.05% |
| YOUSMARG | 1.47 | 1.10 | 0.37 | 81.24% | 25.30% |
| RAKHIE | 1.26 | 0.58 | 0.68 | 94.16% | 53.81% |
| ICHGAM | 10.13 | 7.13 | 3.00 | 81.69% | 29.59% |
| QAZIBAGH | 6.45 | 2.81 | 3.64 | 94.46% | 56.45% |

4.5.6. Identify overloaded segments/ infrastructure

KPDC has identified Overloaded segments for substations at 33/11kV and 11/0.433kV levels and chalked out a plan for system improvement which includes new creations. Besides, the health of transmission and distribution lines is also being improved by way of augmentation of line conductor, bifurcation of feeders and laying of cables of appropriate size. Smart metering is also being undertaken specially to cover non metered areas and the step will further reduce load on the power system. The complete action plan forms part of the audit report. The works are proposed to be undertaken under Revamped Distribution Sector Scheme (RDSS) and are targeted for completion by 2025.

4.6. Subsidy computation and analysis (based on quarterly data)

The quarter wise subsidy details during FY 2024-25 are shown in the table below:

Table 29: Quarter wise – Division wise subsidy details

Annexure -1: Proforma for Quarterly Consumer Category-wise Subsidy Billed/Received/Due for period APRIL2024 to MAR2025

| Consumer Category (Separate for each subsidized consumer category) | Consumer Count | | | Billed Energy | | | Subsidized Billed Energy | | | Applicable rate of Subsidy as notified by State govt. | | Subsidy Due from State Govt. | | | Subsidy Actually Billed / claimed from State Govt. (As against col.12) | Subsidy Received from State Govt. (As against col.13) | Balance Subsidy yet to be Received from State Govt. |
|--|----------------|---------------|----------------|-------------------|-------------------|-------------------|--------------------------|----------------------------|-------------------|---|---------------------|------------------------------|-------------------|----------------|--|---|---|
| | Metered | Un-metered* | Total | Metered | Un-metered* | Total | Metered (out of col.2) | Un-metered* (out of col.3) | Total | Metered Energy** | Un-metered Energy** | Metered Energy | Un-metered Energy | Total | | | |
| | (in kWh) | | | (in kWh) | | | (in kWh) | | | (in Rs./kWh) | | (in Rs. Cr.) | | | | | |
| 1 | 2 | 3 | 4=2+3 | 5 | 6 | 7=5+6 | 8 | 9 | 10=5*8 | 11=6*9 | 12=10+11 | 13 | 14 | 15=13-14 | | | |
| Residential | 368808 | 642085 | 1010893 | 1561137101 | 3138973855 | 4698110956 | 1561137101 | 3138973855 | 4698110956 | 2.99 | 2.99 | 466.78 | 937.96 | 1404.74 | | | |
| Agricultural | 2302 | 217 | 2519 | 92116110 | 25044527 | 117160637 | 92116109.85 | 25044526.97 | 117160636.8 | 2.97 | 2.97 | 27.36 | 7.44 | 34.80 | | | |
| Commercial/Industrial-LT (Commercial) | 167677 | 22486 | 190163 | 438057564 | 187002850 | 625060414 | 438057564.2 | 187002849.6 | 625060413.8 | 2.63 | 2.63 | 115.21 | 49.18 | 164.39 | | | |
| Commercial/Industrial-LT (Industrial) | 10170 | 682 | 10852 | 104927696 | 599344 | 105527040 | 104927696.1 | 599343.9355 | 105527040.1 | 3.50 | 3.50 | 36.72 | 0.21 | 36.93 | | | |
| Commercial/Industrial-HT (HT Industry) | 329 | 0 | 329 | 348673081 | 0 | 348673081 | 348673080.7 | 0 | 348673080.7 | 3.52 | 3.52 | 122.73 | 0.00 | 122.73 | | | |
| Commercial/Industrial-HT (Power intensive) | 2 | 0 | 2 | 2210446 | 0 | 2210446 | 2210446 | 0 | 2210446 | 4.17 | 4.17 | 0.92 | 0.00 | 0.92 | | | |
| Commercial/Industrial-HT (Bulk supply) | 166 | 0 | 166 | 82572649 | 0 | 82572649 | 82572648.89 | 0 | 82572648.89 | 3.51 | 3.51 | 29.00 | 0.00 | 29.00 | | | |
| Others (State/Central) | 7583 | 956 | 8539 | 417251010 | 16031411 | 433282421 | 417251010.3 | 16031410.67 | 433282421 | 1.03 | 1.03 | 42.98 | 1.65 | 44.63 | | | |
| Others (Street Lights) | 191 | 96 | 287 | 17125492 | 5860992 | 22986484 | 17125492.02 | 5860991.621 | 22986483.64 | 0.37 | 0.37 | 0.63 | 0.22 | 0.85 | | | |
| Others (LT PHE) | 447 | 65 | 512 | 41222786 | 6039160 | 47261946 | 41222785.7 | 6039160.2 | 47261945.9 | 0.37 | 0.37 | 1.53 | 0.22 | 1.75 | | | |
| Others (HT PHE) | 348 | 27 | 375 | 78849090 | 3951236 | 82800326 | 78849090.22 | 3951236.088 | 82800326.31 | 1.09 | 1.09 | 8.60 | 0.43 | 9.03 | | | |
| Others (EV) | 1 | 0 | 1 | 8516580 | 0 | 8516580 | 8516580 | 0 | 8516580 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Others (Traction) | 4 | 0 | 4 | 7054938 | 0 | 7054938 | 7054938 | 0 | 7054938 | 3.50 | 3.50 | 2.47 | 0.00 | 2.47 | | | |
| Total | 558028 | 666614 | 1224642 | 3199714543 | 3381503374 | 6581217917 | 3199714543 | 3381503374 | 6581217917 | | | 854.93 | 997.31 | 1852.24 | | | |

Note:

- .. The Subsidy rate for sub categories of commercial/Industrial-LT , Commercial/Industrial-HT and Others are different. So mentioned separately in above proforma
- !. Subsidy rates are as per New Tariff order in vogue.
- the Account for Subsidy has been evaluated from Approved Tariff for JPDCL and KPDC FY2023-24 (Page No 8 to 13) and Full Cost Tariff (Page No 162 to Page No 167 defined in the Tariff Order 2023-24

4.7. Trend analysis and identification of key exceptions

During the past two financial years, KPDCL has shown significant improvement in operational and financial performance, particularly in reducing system losses and enhancing billing efficiency.

Input Energy and Supply

- The input energy purchase increased marginally from 11,124.05 Million kWh in FY 2023–24 to 11,271.73 Million kWh in FY 2024–25, indicating stable demand and consistent power availability.
- However, the net input energy at the DISCOM periphery slightly declined from 10,841.30 Million kWh to 10,695.20 Million kWh, likely due to reduced transmission losses and optimized energy trading.

Billing and Revenue Improvement

- A notable increase is observed in total energy billed, which rose from 5,205.55 Million kWh in FY 2023–24 to 6,581.22 Million kWh in FY 2024–25. This reflects a 26.4% improvement in billing efficiency, driven by better metering, consumer indexing, and vigilance against unauthorized usage.

Loss Reduction

- Transmission and Distribution (T&D) losses have reduced significantly from 51.98% in FY 2023–24 to 38.47% in FY 2024–25, marking a substantial improvement of over 13 percentage points. This improvement can be attributed to network strengthening, feeder metering, loss-mapping initiatives, and increased focus on accountability at the division and sub-division levels.

Collection Efficiency

- Collection efficiency has remained above 100%, though it declined from 123.61% to 107.83%. The very high collection figure in FY 2023–24 likely included arrear recoveries or advance payments, whereas FY 2024–25 represents a more normalized yet strong collection performance.

Aggregate Technical & Commercial (AT&C) Loss

- The AT&C loss improved from 40.65% in FY 2023–24 to 33.65% in FY 2024–25 — a 7-percentage point reduction. This trend highlights effective operational reforms, stronger enforcement measures, and improved consumer services.

Table 30: Summary of AT&C & T& D Trends or Last two years

| Energy Input Details | UoM | FY 2023-24 | FY 2024-25 |
|--|-------------|------------|------------|
| Input Energy Purchase (From Generation Source) | Million kWh | 11124.05 | 11271.73 |
| Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded) | Million kWh | 10841.30 | 10695.20 |
| Total Energy billed (is the Net energy billed, adjusted for energy traded) | Million kWh | 5205.55 | 6581.22 |
| Transmission and Distribution (T&D) loss Details | Million kWh | 5635.75 | 4113.98 |
| | % | 51.98% | 38.47% |
| Collection Efficiency | % | 123.61% | 107.83% |
| Aggregate Technical & Commercial Loss | % | 40.65% | 33.65% |

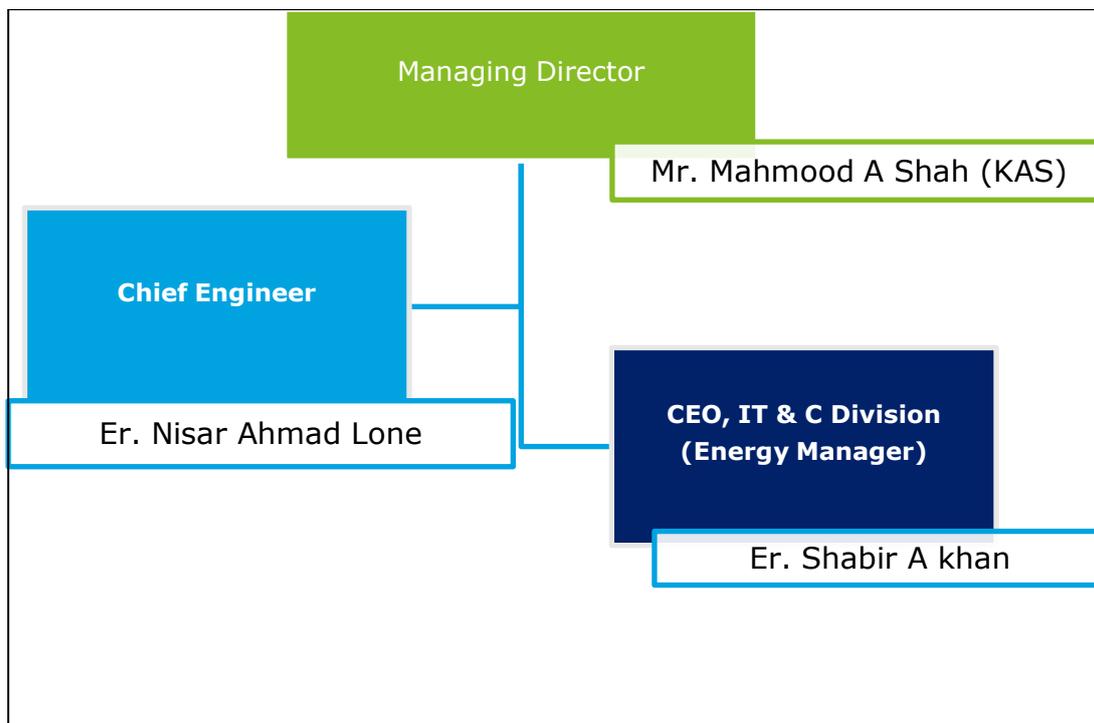
KPDCL’s performance in FY 2024–25 demonstrates positive momentum toward loss reduction, better billing, and sustained revenue collection. Continued efforts in feeder segregation, smart metering, and consumer engagement are likely to further consolidate these gains in the coming years.



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5. Energy Audit findings

5.1. Review of capacity of DISCOM’s energy accounting and audit wing



| Designation | No. of Officers |
|-------------------|--------------------------|
| Managing Director | Mr. Mahmood A Shah (KAS) |
| Chief Engineer | Er. Nisar Ahmad Lone |
| Energy Manager | Er. Shabir A Khan |

5.2. Critical Analysis

KPDCL, headquartered at Jehangir Chowk, Srinagar, functions with 06 Circles, 19 Divisions and 67 Sub-divisions. KPDCL has a unique mix of consumers i.e. on one hand it caters to industrial consumers alongside urban areas and on the other it caters to agricultural consumers, scattered tribal & forest area consumers

- The Input Energy purchase, Net Input energy at DISCOM Periphery and Energy billed for the customer is 11271.73 MU, 10695.20 MU and 6581.22 MU, the monthly consumption per customer stands at 448 KWH/Month. KPDCL caters to area spread in 6 circles, 19 Division.
- Verified transmission losses, distribution (T&D) losses, collection efficiency & aggregate technical & commercial losses of KPDCL for FY 2024-25, i.e., 1st April'2024 to 31st March'2025 is 5.11%, 38.47%, 107.83% & 33.65% respectively.

- The Purchased energy by KPDCL for the consumers is 11271.73 MU, the monthly consumption per Consumers stands at 448 KWH/Month
- KPDCL served 12.25 Lakh Consumers with connected load of 3075.39 MW in FY-2024-25. The energy sales during the Period were recorded at 6581.22 MU.
- KPDCL has 100 % metering available at 33/11 kV system. However, there is almost 46% metering at consumer end and 19% metering available at DT.
- 217 Nos. Agriculture consumers are still unmetered which need to be provided meter as per government guidelines.
- Transmission loss is 5.11% as per the divisional database 2024-25.
- The document verification and reports submitted by the KPDCL provided the insights to the energy consumption pattern. It can be seen that 71.4% of its energy is consumed by Residential then followed by Commercial/Industrial-HT Consumer.
- KPDCL has provided the Feeder wise input energy, Feeder wise billed energy furnished after completion of mapping at each feeder.
- KPDCL has provided details of received source data for FY 2024-25 with the monthly breakup.
- At the time of field visit it was found that at maximum substation the average power factor is above >0.95, which is satisfactory.
- Capacitor banks are installed in only some substations.

5.2.1. Status and progress in compliance to pre-requisites to energy accounting

This Energy Audit report is being issued within the time line stipulated in Regulations and hence the Energy Auditor has no further comments to offer with regards to this aspect.

DISCOM needs to submit the Quarterly accounts within the timeframe stipulated in the Regulations. Further, the compliance with regards to Regulations and Pre-requisites are tabulated in the table below:

Table 31: Compliance status w.r.t Timelines and Pre-requisites

| Clause | Details | Sub-Clause | Criteria | Compliance Status |
|--------|--|------------|---|-------------------|
| 3 | Intervals of time for conduct of annual energy audit | a | Conducted an annual energy audit for every financial year and submitted the annual energy audit report to the Bureau and respective State. Designated Agency and also made available on the website of the electricity distribution company within a period of four months from the expiry of the relevant financial year | Yes |
| 4 | Intervals of time for conduct of periodic energy accounting. | a | All feeder wise, circle wise and division wise periodic energy accounting is conducted by the energy manager of the electricity distribution company for each | Yes |

| Clause | Details | Sub-Clause | Criteria | Compliance Status |
|--------|---|------------|---|--|
| | | | quarter of the financial year. | |
| | | b | All feeder wise, circle wise and division wise periodic energy accounting is conducted by the energy manager of the electricity distribution company for each quarter of the financial year. | Yes |
| | | c | Electricity distribution company conducted its first periodic energy accounting, for the last quarter of the financial year immediately preceding the date of such commencement (i.e., 6th October 2021) | Yes |
| | | d | Electricity distribution company conducted its subsequent periodic energy accounting for each quarter of the financial year for a period of two financial years from the date of such commencement and submit the periodic energy accounting report within sixty days from the date of periodic energy accounting. | Yes |
| 5 | Pre-requisites for annual energy audit and periodic energy accounting | a | Pre-requisites for annual energy audit and periodic energy accounting | Yes |
| | | b | Identification and mapping of high tension and low-tension consumers | Yes |
| | | c | Development and implementation of information technology enabled energy accounting and audit system, including associated software | |
| | | d | Electricity distribution company ensures the installation of functional meters for all consumers, transformers and feeders. Meter installation is done in a phased manner within a period of three financial years from the date of the commencement of these regulations in accordance with the trajectory set out in the First Schedule d.1. 100% Communicable Feeder Metering integrated with AMI, by 31st December 2022 along with replacement of existing non-communicable feeder meters. | Covered under RDSS. More than 2.5 lakh smart meters (consumer meters) have already been installed. Smart feeder meters and DT Meters to be installed in FY 2024-25 |
| | | | d.2. All Distribution Transformers (other than HVDS DT up to 25kVA and other DTs below 25 kVA) shall be metered with communicable meters. Communicable DT Metering for the following areas/ consumers to be completed by December 2023 and in balance areas by December 2025: | YES. Covered under RDSS. The work to commence from FY 2024-25 |
| | | | d.2.1. All Electricity Divisions of 500 AMRUT cities, with AT&C Losses > 15% | |
| | | | d.2.2. All Union Territories (for areas with technical difficulty, non-communicable meters may be installed) | Will be acted upon if required once metering is taken up in far flung areas |
| | | | d.2.3. All Industrial and Commercial consumers | Yes |
| | | | d.2.4. All Government offices at Block level and above | Yes |

| Clause | Details | Sub-Clause | Criteria | Compliance Status |
|--------|---------|------------|---|--|
| | | | d.2.5. Other high loss areas i.e., rural areas with losses more than 25% and urban areas with losses more than 15% | Yes |
| | | | d.3. Prepaid Smart Consumer Metering to be completed for all directly connected meters and AMR in case of other meters, by December 2023 in the following areas: d.3.1. All Electricity Divisions of 500 AMRUT cities, with AT&C Losses > 15%; | Proposed for implementation in FY 2023-24. More than 54000 meters working in prepaid mode. |
| | | | d.3.2. All Union Territories (for areas with technical difficulty, prepaid meters to be installed); | Yes |
| | | | d.3.3. All Industrial and Commercial consumers; | Yes |
| | | | d.3.4. All Government offices at Block level and above; | Yes |
| | | | d.3.5. Other high loss areas i.e., rural areas with losses more than 25% and urban areas with losses more than 15%. | Yes |
| | | | d.4. Consumer Metering: 98% by FY 2022-23 99% by FY 2023-24 | Yes To be achieved by end of FY2025-26 |
| | | | d.5. Targets for functional meters - Meter FY 22-23 FY 23-24 FY24-25 Feeder metering 98.5% 99.5% 99.5% DT metering 90% 95% 98% Consumer metering 93% 96% 98 | Target under RDSS |
| | | e | e.1. All distribution transformers (other than high voltage distribution system up to 25kVA and other distribution system below 25 kVA) is metered with communicable meters. | Yes. LoA issued and work to commence in FY2024-25 |
| | | | e.2. And existing non communicable distribution transformer meters is replaced with communicable meters and integrated with advanced metering infrastructure. | Yes, under RDSS. LoA issued |
| | | f | Electricity distribution company has established an information technology enabled system to create energy accounting reports without any manual interference and such systems may be within a period of three years from the date of the commencement of these regulations in case of urban and priority area consumers; and within five years from the date of the commencement of these regulations in case of rural consumers | Yes |
| | | g | Electricity distribution company has a centralized energy accounting and audit cell comprising of (i) a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years; and (ii) a financial manager having professional experience of not less than five years | Chief Engineer is the Nodal Officer for Energy Accounting |

| Clause | Details | Sub-Clause | Criteria | Compliance Status |
|--------|---|------------|--|---|
| 6 | Reporting requirements for annual energy audit and periodic energy accounting | a | Electricity distribution company has a nodal officer, who is a full time employee of the electricity distribution company in the rank of the Chief Engineer or above, for the purpose of reporting of the annual energy audit and periodic energy accounting and communicate the same to the Bureau | Yes Chief Engineer (Distribution) is the Nodal Officer |
| | | b | Electricity distribution company ensures that the energy accounting data is generated from a metering system or till such time the metering system is not in place, by an agreed method of assumption as may be prescribed by the State Commission. | Yes 100% metering is in place at 33kV and 11kV feeder level. |
| | | c | Metering of distribution transformers at High Voltage Distribution System up to 25KVA is done on cluster meter installed by the electricity distribution company | Partially in place. Balance is proposed under RDSS |
| | | d | The energy accounting and audit system and software is developed to create monthly, quarterly and yearly energy accounting reports. | Yes, a system is in place. Will be further revamped under UBS / RDSS |
| | | c | Electricity distribution company has provided the details of the information technology system in place as specified in clause (f) of regulation 5 that ensures minimal manual intervention in creating the energy accounting reports and any manual intervention of any nature, in respect of the period specified therein, shall be clearly indicated in the periodic energy accounting report | Yes |

5.2.2. Data gaps

The Audit firm has raised the data gaps to the DISCOM. The summary of data gaps raised and response from DISCOM is summarized in the table below:

Table 32: Summary of Data gaps

| S. No. | Data gaps raised by Energy Auditor | Response shared by DISCOM | Status of data submission by DISCOM |
|--------|------------------------------------|------------------------------|--------------------------------------|
| | DT wise losses are not in account. | DT metering is not available | 100% DT Metering proposed under RDSS |

5.2.3. Summary of key responses of DISCOM management on Comments by Energy Auditor

The Auditor has identified the key issued with regards to Energy Accounting/Audit and DISCOM's management has responded to the same as summarized in the table below:

Table 33: Comments by Energy Auditor and responses of DISCOM management

| S. No. | Comments by Energy Auditor | Response of DISCOM's management |
|--------|--|--|
| 1 | Kindly provide the filled in format as per BEE. | Provided by KPDCL |
| 2 | Quarterly format as per BEE | Provided by KPDCL |
| 3 | Kindly provide the Feeder wise Losses | Provided by KPDCL |
| 4 | DT Wise losses not in account | DT Wise metering to be under taken under RDSS to enable energy accounting at DT level |
| 5 | Energy (Electrical) Purchase report for the year 2024-25 | Provided by KPDCL |
| 6 | Open access consumer and their details | No Open access consumers. |
| 7 | Energy sold outside the DISCOM | NA |
| 8 | Energy Conservational Schemes implemented | Being under taken by KPDCL especially installation of smart meters for flat rate consumers |
| 9 | Energy conservational Schemes to be implemented | Various Energy Conservation Measures being adopted like installation of Solar Roof Tops |
| 10 | Quarter wise report | Provided by KPDCL |
| 11 | Energy (Electrical) Purchase report for the year 2023-24 | Provided by KPDCL |
| 12 | Open access consumer and their details | No Open access consumers. |

5.3. Revised findings based on data validation and field verification

KPDCL officials responded to the data gaps and the plan for the site visit with Accredited Energy Auditor was prepared. The field visits were conducted in the month of Oct 2025 to verify the metering at KPDCL input points and in 33/11 kV substations. Details along with Photographs of site visit are annexed in the report.

1. Network diagram of the few feeders with high loss was checked and it was observed that some feeders are very lengthy and need bifurcation.
2. The condition of the conductor and the reason for the loss were discussed.
3. The input point meter serial number validation was carried out.
4. The energy accounting process validated for each circle.
5. Input energy data cross verification was carried out.
6. 11kV Feeder Meters readings were cross checked with AMR available in Data Center and found correct.
7. Check list submitted to the KPDCL and data gaps of the submitted data explained.
8. Feeder meter data validation, CT &PT working status of substations visited checked and found ok.
9. In substations it was observed that 100% feeder metering at 33kV and 11kV level is in place.
10. At the time of field visit it was found that at maximum substation the average power factor is above >0.95, which is satisfactory.

5.4. Inclusions and Exclusions

NA

6. Conclusion and Action Plan

6.1. Summary of critical analysis and way forward proposed by Energy Auditor

The primary energy-consuming areas are the domestic consumers followed by HT and LT Industrial and Commercial Installations.

6.1.1. Areas of Inefficiencies:

- **Distribution Network:** The energy consumption of the distribution network is higher than industry standards. The primary reasons for this are the aging infrastructure and lack of modern technology.
- **AT&C Loss:** It very high (33.65%) as compared to national average of 15.0%. The main reason of high AT&C losses is billing efficiency, which is around 61.53%.
- **LT/HT Ratio:** Increasing HT lines can help in reducing both line losses and voltage drops. Efforts should be made to achieve a low LT/HT ratio, which would be very beneficial for improving efficiency of power distribution in the KPDCL.

6.1.2. Recommendations:

- 100% DT Metering & Monitoring
- Creation of High Voltage Distribution System to cut down on losses at Distribution Level.
- Segregation / Bifurcation of Lengthy / Overloaded 11kV Feeders.
- Replacement of Overhead bare conductors by HT ABC and LT ABC cables to prevent illegal pilferage.
- Improvement in HT / LT Ratio by way of creation of new 33/11kV and 11/0.433 kV Substations.
- Installation of Energy Meters for all categories of consumers.
- Testing of Consumer Meters in KPDCL meter testing lab for any tampering.
- Constituting of Special Enforcement teams to check power theft.
- Procuring only Star Rated Distribution Transformers for new creations and to replace old / damaged ones.
- Encouraging Consumers to replace old conventional bulbs with energy efficient LED bulbs and to use star rated heating and cooling devices.
- Promoting use of Solar Roof Top (SRT) system at domestic, commercial and government installations.

6.1.3. Cost-Benefit Analysis:

To determine the cost-effectiveness of the recommended measures, a cost-benefit analysis should be conducted. The cost of implementing the measures should be compared to the potential energy savings to determine the return on investment. This analysis will help the company prioritize the implementation of the recommended measures.

In conclusion, the energy audit of the electricity distribution company revealed several areas of inefficiencies in energy consumption. The recommended measures, including upgrading the infrastructure, shifting to energy efficient devices, promoting employee awareness, and promoting use of solar energy will help to improve energy efficiency and reduce energy consumption. Conducting a cost-benefit analysis will help the company to prioritize the implementation of these measures. Overall, the implementation of these measures will improve the company's energy efficiency, reduce energy consumption, and lower energy costs.

6.2. Summary of key findings – energy balance and losses

The Energy balance and losses of KPDCL for FY 2024-25 are as shown in the table below:

Table 34: Energy balance and losses

| Energy Input Details | Formula | UoM | Value |
|--|---|-----|----------|
| Input Energy Purchase (From Generation Source) | A | MU | 11271.73 |
| Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded) | B | MU | 10695.20 |
| Total Energy billed (is the Net energy billed, adjusted for energy traded)) | C | MU | 6581.22 |
| Transmission and Distribution (T&D) loss Details | D | MU | 4113.98 |
| | $E = D/B \times 100$ | % | 38.47% |
| Collection Efficiency | F | % | 107.83% |
| Aggregate Technical & Commercial Loss | $G = 1 - \{(1-E) \times \text{Min}(F, 100\%)\}$ | % | 33.65% |

6.3. Recommendations and best practices

a) Energy accounting

There is Energy accounting cell to account all the annual audit data as per BEE regulation. Quarterly energy audit is done by internal energy manager and send to BEE as per guidelines, Annual audit is done by accredited energy auditor. Energy Accounting is the first step towards identifying areas that need improvement. This will involve reviewing the current processes, systems, and data management practices.

| Remedial Measures |
|--|
| <ul style="list-style-type: none"> • Maintaining Proper Feeder metering, • Uploading Meter reading data by AMR. • Ensuring correct DTs and consumer mapping • 100% Consumer metering for all categories of consumers • The old conventional meters are being replaced by Smart Meters so as to remove any human intervention and ensure correct and transparent billing. • Proper energy audit |

b) Loss reduction

Loss reduction is another important and Challenging task which KPDCL has taken up in an aggressive manner. Over the past Five years, KDCL has been able to bring down the AT&C losses from 75% to 40% with the aim of bringing them down to the National level / below 15% in coming 3 Years. The steps being taken include:

- i) 100% Consumer Metering at all levels.
- ii) Creation of High Voltage Distribution System to cut down on losses at Distribution Level.
- iii) Segregation / Bifurcation of Lengthy / Overloaded 11kV Feeders.
- i) Replacement of Overhead bare conductors by HT ABC and LT ABC cables to prevent illegal pilferage.
- iv) Improvement in HT / LT Ratio by way of creation of new 33/11kV and 11/0.433 kV Substations.

- v) Installation of Smart Energy Meters for all categories of consumers.
- vi) Testing of Consumer Meters in KPDCL meter testing lab for any tampering.
- vii) Constituting of Special Enforcement teams to check power theft.

c) Energy conservation

KPDCL is promoting Energy Conservation by way of education consumers on the subject. The various steps being taken in this regard include:

- i) Procuring only Star Rated Distribution Transformers for new creations and to replace old/damaged ones.
- ii) Encouraging Consumers to replace old conventional bulbs with energy efficient LED bulbs and to use star rated heating and cooling devices.
- iii) Promoting use of Solar Roof Top (SRT) system at domestic, commercial and government installations.

6.4. Action plan for line loss reduction

➤ Loss Reduction Works & Smart Metering

Kashmir Power Distribution Corporation Limited (KPDCL) is implementing the Revamped Distribution Sector Scheme (RDSS) a flagship program of Government of India, in the Kashmir Valley. The scheme is aimed at improving the operational efficiency and financial sustainability of the DISCOOM. It focuses on reducing technical and commercial losses, strengthening distribution infrastructure and promoting smart metering. In this Context, KPDCL prepared an Action Plan & DPR of Rs. 6701.93 Cr. in consultation with RECPDCL and submitted the same to Nodal Agency after the approval of DRC. However, the Monitoring Committee has sanctioned a total of Rs. 2826.717 Cr. for Metering & Loss Reduction Component vide Sanction Letter No.: **REC/ RDSS / Kashmir / KPDCL /2022-2023/10 Dated: 14.07.2022, REC/RDSS/Kashmir/KPDCL/2022-2023/30 Dated: 17.10.2022 & REC/RDSS/KPDCL/2022-2023/341 Dated: 26.11.2022**. The breakup is given below:

| Works | Sanctioned Date | Sanctioned Cost (In Cr.) |
|--------------------------|-----------------|--------------------------|
| Metering (Revised) | 17.10.2022 | 504.96 |
| Loss Reduction (Revised) | 17.10.2022 | 2315.52 |
| Feeder Metering | 26.11.2022 | 6.237 |
| Total | | 2826.717 |

➤ Loss Reduction Works

Loss reduction is a critical component of RDSS, targeting AT&C losses which include Technical losses and Commercial Losses. The key loss reduction initiatives comprise of:

- Strengthening Distribution Infrastructure by way of upgradation of substations, transformers and feeders, use of HVDS, replacement of old conductors with efficient alternatives.
- Feeder Segregation to improve supply quality and monitoring.
- Energy Auditing and Accounting by way of installing energy meters at feeders, DTs and consumer levels for accurate loss assessment.
- Smart Metering to improve billing efficiency and revenue collection.

- Prepaid metering for better cash flow management and improve demand side management by providing real time consumption data to consumers.

Execution of works is being done by respective Turnkey Contractor in all packages. The overall progress is given below:

Status of Progress

| RDSS KPDCCL | | | | | | | | | | | |
|------------------|-------------------|---|-----------------|---------------------|-----------------------|--------------------|---------------------------------|-----------------------------------|------------------------------|---|------------------------------|
| Table of Content | | | | | | | | | | | |
| S. No. | Components | Packages/Division | Sanctioned Cost | Award Cost | | | Physical Progress | | | Supplied Material | |
| | | | | Awarded Supply Cost | Awarded Erection Cost | Total Awarded Cost | Supply Cost of material Erected | Erection Cost of material Erected | Physical Progress Percentage | Value of Material Received at TKC Store | Supplied Material Percentage |
| 0 | Table of Content | KPDCCL | | | | | | | | | |
| 1 | Physical Progress | ED-1st Srinagar (LR Works) | 129.72 | 114.12 | 21.45 | 135.57 | 10.34 | 1.58 | 8.8% | 23.88 | 20.9% |
| 2 | Physical Progress | ED-2nd Srinagar (LR Works) | 237.62 | 164.48 | 70.31 | 234.79 | 11.69 | 7.42 | 8.1% | 23.97 | 14.6% |
| 3 | Physical Progress | ED-3rd Srinagar (LR Works) | 71.02 | 49.25 | 20.42 | 69.67 | 6.75 | 4.26 | 15.8% | 9.40 | 19.1% |
| 4 | Physical Progress | Budgam (LR Works) | 144.88 | 140.74 | 4.13 | 144.87 | 9.92 | 0.68 | 7.3% | 28.74 | 20.4% |
| 5 | Physical Progress | Baramulla (LR Works) | 233.45 | 208.73 | 23.16 | 231.89 | 28.17 | 4.63 | 14.1% | 56.00 | 26.8% |
| 6 | Physical Progress | DISCOM (LR Works) (KPDCCL-All 5 Packages) | 816.69 | 677.32 | 139.47 | 816.79 | 66.87 | 18.57 | 10.5% | 141.99 | 21.0% |

| Physical Progress in Loss Reduction Works under RDSS | | | | | | | | |
|--|--------------------------------------|-------------|--------------|--------------|--------------|--------------|---------------|-------------------|
| S No | Components | Unit | ED1 | ED2 | ED3 | Budgam | Baramulla | Cumulative KPDCCL |
| A | Poles | | | | | | | |
| 1 | 8 Mtr STP | Nos. | 1851 | 2360 | 1530 | 2996 | 4641 | 13378 |
| 2 | 9 Mtr STP | Nos. | 653 | 1750 | 861 | 385 | 2499 | 6148 |
| 3 | 11 Mtr STP | Nos. | 0 | 9 | 11 | 17 | 21 | 58 |
| | Total Poles | Nos. | 2504 | 4119 | 2402 | 3398 | 7161 | 19584 |
| B | AB Cable | | | | | | | |
| 1 | 35Sqmm | Kms | 21.63 | 6.72 | 15.48 | 26.61 | 129.81 | 200.25 |
| 2 | 50Sqmm | Kms | 2.72 | 13.39 | 2.54 | 10.78 | 12.35 | 41.78 |
| 3 | 70Sqmm | Kms | 13.21 | 26.42 | 26.7 | 46.54 | 81.66 | 194.53 |
| 4 | 120Sqmm (LT) | Kms | 19.89 | 17.5 | 15.84 | 15.96 | 33.07 | 102.26 |
| 5 | 120Sqmm (HT) | Kms | 1.26 | 0.63 | 0.6 | 0 | 0.2 | 2.69 |
| | Total AB Cable | Kms | 58.71 | 64.66 | 61.16 | 99.89 | 257.09 | 541.51 |
| C | ACSR Conductor | | | | | | | |
| 1 | 50Sqmm Rabbit | Ckms | 0 | 8.94 | 2.34 | 0.08 | 6.47 | 17.828 |
| 2 | 100Sqmm Dog | Ckms | 0.44 | 1.13 | 0.05 | 4.02 | 8.6 | 14.24 |
| | Total Conductors | Ckms | 0.44 | 10.07 | 2.39 | 4.10 | 15.07 | 32.068 |
| D | DTRs | | | | | | | |
| 1 | 63KVA | Nos. | 10 | 0 | 0 | 1 | 25 | 36 |
| 2 | 100KVA | Nos. | 32 | 63 | 31 | 0 | 10 | 136 |
| 3 | 200KVA | Nos. | 30 | 53 | 0 | 2 | 47 | 132 |
| | Total DTR | Nos. | 72 | 116 | 31 | 3 | 82 | 304 |
| F | Consumers Shifted on AB Cable | Nos. | 1055 | 160 | 600 | 0 | 2242 | 4057 |

➤ Smart Metering Works

The Smart metering works have been have already commenced and the work is targeted for completion in August 2026. The progress as on 31.03.2024 is given below

| Progress of Smart Meter Installation ending March 2024 | | | | | | |
|--|----------------------|-----------------------|----------------------|---------------------------|------------------------|-------------------------|
| S No | Component | PIA wise Amount (Cr.) | LoA Cost (Rs in Cr.) | Sanctioned Quantity (Nos) | Awarded Quantity (Nos) | Progress Quantity (Nos) |
| 1 | 1-Ph Consumer Meter | 511.19 | 818.85 | 664292 | 664293 | 249420 |
| 2 | 3-Ph Consumer Meter | | | 18513 | 18513 | 3715 |
| 3 | LT CT Consumer Meter | | | 2894 | 2894 | 1601 |
| 4 | DT Meter | | | 40670 | 40670 | 0 |
| 5 | Feeder Meter | | | 1485 | 1485 | 0 |

The Loss reduction work coupled with the smart metering are aimed to bring in improvement in power reliability and boost billing and collection efficiency of the utility. This in turn will reduce the revenue gap of the DISCOM. The results in this regards have already begun to show in the form of decreasing T&D and AT&C Loss figures. Once the works are completed, the aim of proper energy accounting and consumer satisfaction will be achieved.

➤ Electrification of UN Electrified Households of Kupwara & Bandipora

Kashmir Power Distribution Corporation Limited (KPDCL) is in the process of securing Electrification of Un-electrified HHs of Kupwara, Banadipora and On-Grid Connectivity for Gurez, Bandipora. In this regard, KPDCL has formulated a Detailed Project Report (DPR) with an estimated cost of Rs. 66.38 Cr for aforementioned works. The matter has been taken up with the Ministry of Power, Government of India for its sanction and funding. The abstract of the DPR is provided below:

| Abstract of DPR Cost | | |
|----------------------|---|-----------------------|
| Sl. No. | Name of Work | DPR Cost (Rs. In Cr.) |
| 1 | Electrification of Un-Electrified Households (UE) of Kupwara District under Revamped Distribution Sector Scheme (RDSS) (1936 Households) | 14.84 |
| 2 | Construction of New 33/11 KV, 1x6.3 MVA Substation in Tulail along with 33 KV & 11 KV Line under Revamped Distribution Sector Scheme (RDSS) | 30.80 |
| 3 | Electrification of Un-Electrified Households (UE) for Tulail & Kalzalwan of Bandipora District under Revamped Distribution Sector Scheme (RDSS) (2619 Households) | 20.74 |
| Grand Total: | | 66.38 |

➤ IT/OT Works

1. Unified Billing System

Unified Billing System is being implemented in KPDCL wherein the billing of sub divisions in island mode is being discontinued and all SDOs are being brought on a single billing platform. This will ensure more transparency and accountability in the billing system. The work has been awarded on 23.03.2023 the rollout of the billing solution is scheduled for FY2024-25

2. Enterprise Resource Planning (ERP)

KPDCL has undertaken implementation of ERP under RDSS. It focuses on integrating various business functions such as finance, human resources, asset management, and customer services into a unified system. The process for engaging the Project Implementing Agency has been initiated and the roll out of the same has been targeted for FY 2024-25. The expected benefits include:

- Improved operational efficiency
- Enhanced customer satisfaction
- Cost Savings

6.5. Action plan for monitoring and reporting

KPDCL is taking special steps to put in place a robust monitoring and reporting system. At present, through Meter Data Acquisition System Data AMR facility for 315 11kV outgoing feeder meters is available. Besides, through SCADA and RT-DAS status of 400 Feeders is available at SCADA and RTDAS Control Centers. The data is used for Energy Accounting and other MIS Reports which help in identifying areas that need improvement.

Under RDSS the following works are proposed to be undertaken to strengthen the monitoring and reporting system:

- i) Implementing full SCADA in Anantnag Town which will cover 10 substations / 36 Feeders.
- ii) Implementing Partial SCADA in Sopore, Baramulla and Ganderbal Towns covering 16 Substations / 61 Feeders
- iii) Implementing Real Time Data Acquisition System (RT-DAS) in 55 substations Covering 255 Feeders.
- iv) Replacement of all 11kV Feeder Meters with Smart Meters for on boarding them on National Feeder Monitoring System (NFMS).
- v) Installation of more than 7 lakh communicable meters at consumer, DT and Feeder level.

Once rolled out, the system will be continuously monitored to identify any issues and improve the system's performance.

6.6. Action plan for automated energy accounting

Automated energy accounting is a critical component of modern electricity distribution systems. It allows for accurate and efficient tracking of energy usage, which helps identify energy waste, reduce energy consumption, and improve billing accuracy.

Presently AMR facility is available for 315 11kV Feeder Meters where in Meter Data is being captured and relayed to Data Center at Bemina. On the consumer level more than 250000 smart meters are sending data through HES to MDM for analysis and billing.

Under RDSS, the action plan for Automated Energy Accounting Includes:

- i) Replacement of all 11kV Feeder Meters with Smart Meters and relaying the data to Master Control Room / National Feeder Monitoring Scheme (NFMS) System.
- ii) Providing of Smart Meters on all Distribution Transformers and relaying data to Master Control Room.
- iii) Replacement of all Consumer Meters with Smart meters and relaying the data to Master Control Room without any manual intervention.

While the Feeder metering and DT metering is scheduled to be completed by March 2025, the consumer metering works is targeted for completion August 2026 and the entire process will be on AMI platform. Once implemented, it will improve billing accuracy, reduce energy loss and enhance data management capabilities. The action plan outlined above provides a framework for implementing an automated energy accounting system in KPDCL. By following this plan, the company will be successfully achieving its goals of energy accounting and consumer satisfaction.

Automated energy accounting is a critical component of modern electricity distribution systems. It allows for accurate and efficient tracking of energy usage, which helps identify energy waste, reduce energy consumption, and improve billing accuracy. In this report, we will outline an action plan for implementing automated energy accounting in an electricity distribution company.

Step 1: Evaluate Current Energy Accounting System

The first step is to evaluate the current energy accounting system to identify areas that need improvement. This will involve reviewing the current processes, systems, and data management practices. The evaluation should consider the following factors:

- Accuracy of metering and billing
- Timelines of bill generation
- Data management practices
- Energy usage tracking capabilities
- Customer feedback and complaints

Step 2: Identify Automated Energy Accounting System Requirements

After evaluating the current energy accounting system, the next step is to identify the requirements for an automated energy accounting system. This will involve considering the following factors:

- Energy usage tracking capabilities
- Billing accuracy and timeliness
- Integration with existing systems
- Data management capabilities
- Scalability and flexibility

Step 3: Research and Select an Automated Energy Accounting System

Once the requirements are identified, the next step is to research and select an automated energy accounting system. This will involve reviewing available options and selecting a system that meets the identified requirements.

The selected system should have the following features:

- Real-time energy usage tracking
- Automated billing and metering

- Data management and analysis capabilities
- Integration with existing systems
- User-friendly interface

Step 4: Develop Implementation Plan

After selecting an automated energy accounting system, the next step is to develop an implementation plan. This will involve determining the following:

- Timeline for implementation
- Resource requirements
- Roles and responsibilities
- Training requirements
- Data migration plan

Step 5: Implementation and Testing

Once the implementation plan is developed, the next step is to implement and test the automated energy accounting system. This will involve the following:

- Installation and configuration of the system
- Data migration from the old system to the new system
- User training
- System testing

Step 6: Rollout and Monitoring

After successful testing, the next step is to rollout the automated energy accounting system to all customers. This will involve communicating the changes to customers and ensuring a smooth transition. Once rolled out, the system should be continuously monitored to identify any issues and improve the system's performance.

In conclusion, implementing an automated energy accounting system can help the KPDCL improve billing accuracy, reduce energy waste, and enhance data management capabilities. The action plan outlined above provides a framework for implementing an automated energy accounting system in an electricity distribution company and the same is being actively worked upon for its implementation in KPDCL in order to achieve the energy accounting goals.

Annexures

Annexure I - Introduction of Verification Firm

A-Z Energy Engineers Pvt. Ltd. is an Accredited Energy Auditor from BEE and an ISO 9001:2015 certified company that aims to assist all stakeholders in implementing energy efficiency and creating awareness about the merits of energy efficiency and safety practices. They are empaneled by BEE for PAT M & V Audits and Mandatory Energy Audit Projects and have completed more than 2000 projects, including 300 PAT projects. The founder director, Shri. P.P Mittal, has received several awards and recognitions for his services in the field of energy. We have a pool of experienced BEE Accredited & Certified Energy Auditors, Electrical Engineers, Mechanical Engineers and Technicians having experience of more than 30 years. The Energy Audits is being carried out with sophisticated instruments namely Power-Analyzer, Flue Gas Analyzer, Ultra-sonic flow meter, Techo-meter, Anemometer, Hygro-Meter, Digital Thermometer, Thermography Camera, Lux Meter, Leak detectors. Laser gun etc.

Objective

- To carry out and take ahead the business of Energy Efficiency and climate change including promotion and dissemination of energy efficient product and services.
- To disseminate the culture of safe manufacturing and Services through safety audits and trainings.
- To facilitate implementation of energy efficiency projects for Demand Side Measures including optimization of energy mix for industries, railways, building sector, lighting, HVAC etc.
- To facilitate implementation of schemes, programs and policies of central and state governments or its agencies applicable for enhancing energy efficiency.
- To provide consultancy services in the field of Clean Development Mechanism and Renewable Energy Certificate projects, Carbon Markets, Demand Side Management, Energy Efficiency, Climate change and other related areas.
- To identify and impart training to build the capacity of stakeholders in the field of Energy Efficiency and safe practices in Industry.
- To act as a resource center in the field of Energy Efficiency and take up the activities of Capacity Building Training and other related activities.

Vision

- To make use of energy sustainable.
- To create and sustain markets for energy efficiency in India
- To facilitate energy efficiency improvement through private sector investments in energy efficiency.

Mission

- To assist all stakeholders in implementing energy efficiency and realizing savings.
- To create awareness regarding merits of improvement of energy efficiency and safety practices in private and public sector.

We are Accredited Energy Auditor from BEE, also empaneled by BEE for PAT M & V Audits and Mandatory Energy Audit Projects. A-Z Energy Engineers Pvt. Ltd. has been short listed by Bureau of Energy Efficiency as an Energy Service Company (ESCO), it is an ISO 9001:2015 certified company. We have completed more than 1800 nos. projects, including 80 PAT projects.

Dr. P.P. Mittal the Founder Director of A-Z Energy Engineers Pvt. Ltd. was awarded by Govt. of India in National Energy Conservation Award 2013, 2015 & 2016. MSME Ministry Govt. of India awarded "Best Services Providing Company" it was awarded by Hon'ble Prime Minister of India.

a) Name of the Firm

| Name of Accredited Firm | Accredited Energy Auditor |
|--------------------------------------|---------------------------|
| A-Z energy Engineers Private Limited | Dr P.P Mittal (AEA 011) |

b) Composition of Team

| Sr.No. | Name | Qualification | Registration No | Experience (InYears)/Sector |
|--------|-----------------------|---------------|-----------------|-----------------------------|
| 1 | Dr. P.P Mittal | Ph.D, MBA | AEA | +45 Years |
| 2 | Mr. Vipon Chanda | DISCOM Sector | | 30 |
| 3 | Mr. V.P Sharma | B. Tech | EA | 32 Years |
| 4 | Mr. Alok Kumar Tiwari | B. Tech | EA | 9 Years |
| 5 | Mr. Pankaj Chauhan | Team Member | | 12 Years |

c) Registration No.

EmAEA 0024.

d) Undertaking

We A-Z Energy Engineers Pvt. Ltd. hereby confirm that our AEA and any of the audit team member mentioned in this report has conduct mandatory annual energy audit (Accounting) for KPDCL, Jammu & Kashmir (hereafter called as DC).

We also confirm that none of our team member was in the employment of the DC within the previous four years, and was not involved in undertaking energy audit of the DC within the previous four years.

Authorized Signatory

Dr. P.P Mittal

Annexure II - Minutes of Meeting with the DISCOM team

Minutes of Meeting with Kashmir Power Distribution Corporation Limited (KPDCL), Srinagar & A-Z Energy Engineers Pvt. Ltd, New Delhi

AZ Energy Engineers audit team visited the site on 13th to 15th October 2025 and conduct the energy audit accounting with reference to the BEE and notification from the Bureau of Energy Efficiency dated 6th October 2021 for Conduct of Energy Audit (Accounting) in Electricity Distribution Companies).

Following are the key observations during audit.

- Annual Energy Audit Proforma for FY 2024-25 was filled in coordination with Energy Accounting department.
- KPDCL has provided the following documents for Purchase Energy, input/Billed energy. i.e. Internal Department sheet, Billing Data.
- KPDCL has provided details for action plan to reduce losses
- Verified T&D losses, AT&C losses & Collection Efficiency is 38.47%, 33.65% & 107.83% respectively based on the filled in proforma and verified source documents.

| S. No. | Data Required for Annual Energy Audit | Status |
|--------|---|---|
| 1 | Complete filled in Proforma for the year 2024-2025 (Annually) | Provided |
| 2 | Supporting Data with Month wise breakup | Provided Month wise breakup (Consumer, Units) |
| A | Purchase Energy | |
| B | Net Input in Discom | |
| C | Billed Energy | |
| D | Revenue Demand | |
| E | Revenue Collected | |
| 3 | Transmission loss calculation Methodology | Provided |

 May



| S. No. | Data Required for Annual Energy Audit | Status |
|--------|--|--------------------|
| | Quarter report | Provided |
| 4 | Feeder wise input, Billed Energy, T&D & AT&C losses | Provided |
| 5 | Action plan to reduce the T&D and AT&C losses | RDSS Plan Provided |
| 6 | Assets details | Provided |
| 7 | Subsidy category Wise (BEE Guideline proforma) | Provided |
| 8 | High Loss area T&D & AT&C action plan to reduce losses | Provided |
| 9 | DT Wise Losses | Under Progress |
| 10 | Feeder wise Losses | Provided |
| 11 | Connected Load | Provided |
| 12 | Energy Audit Cell Member | Provided |
| 13 | Number of connection | Provided |
| 14 | Verified documents for infrastructure details FY 2024-25 | Provided |

Kashmir Power Distribution Corporation Ltd.
(KPDCL)



AZ Energy Engineers Pvt. Ltd.

Annexure III - Check List prepared by auditing Firm

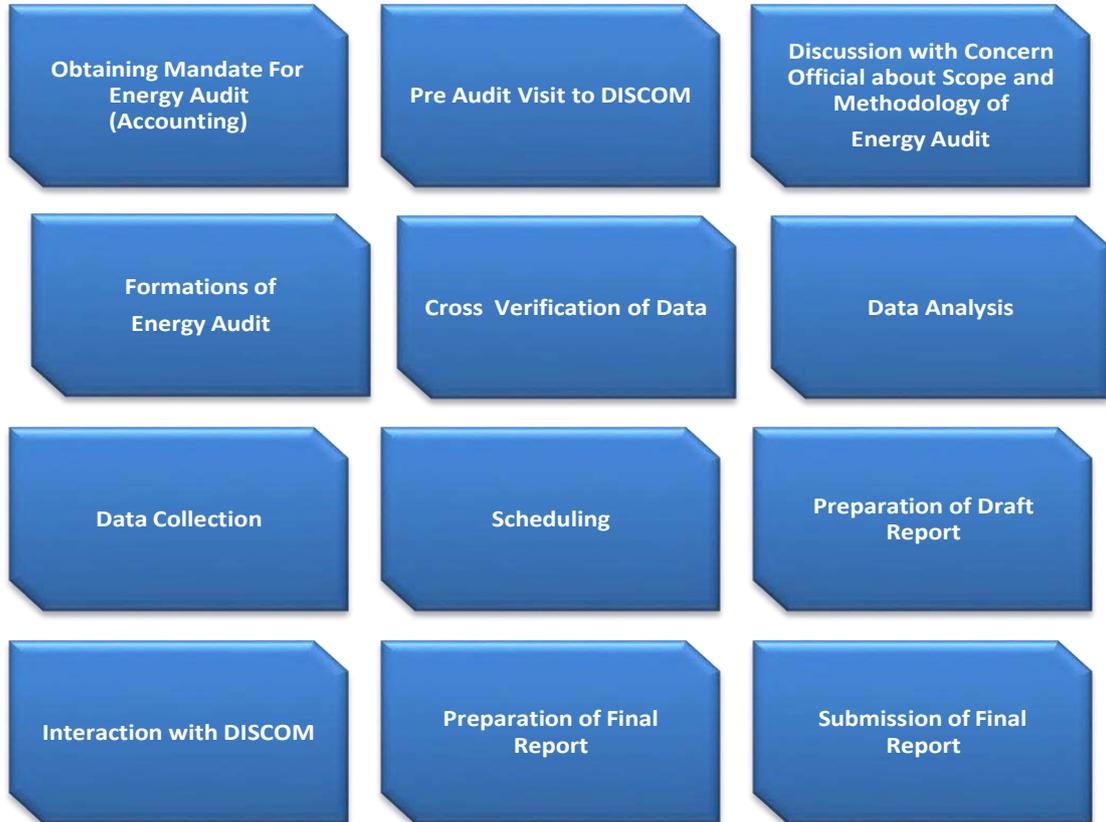
Check list evidence for T & D and AT&C and supporting documents energy input data, sale data, feeder wise loss data, collection efficiency etc.

List of documents required:

- Data details in BEE format for Quarter 1,2,3,4 and Total separately
- Quarter wise Filled Proforma
- Month wise Purchase energy
- Month wise input and billed energy.
- T&D losses computation approach.
- Un-metered energy consumption approach.
- Internal field audit report of input and billed energy.
- Performance of discom on distribution losses.
- Outcome of internal filed audit.
- Measures taken to reduce losses and improve losses.
- Zone/circle/Division/Sub-division wise loss computation.
- Reduction achieved, measures adopted for energy conservation and quantity of energy saved.
- Report on distribution losses.
- List of measuring equipment's and calibration certificates and frequency of calibration.
- Write up on energy scenario.
- Net Input Energy Computation Details.
- Category wise consumer's details.
- Category wise consumers connected load and % load
- Bifurcation of Billed Energy (metered billed energy and unmetered billed energy).
- Disconnected consumers details
- Loss Analysis report
- Write up on procedure followed technical loss analysis.

Annexure IV - Brief Approach, Scope & Methodology for audit

Scope of annual energy accounting is as per guidelines and notification from Bureau of Energy Efficiency, New Delhi dated 6th October, 2021



Annexure V - Infrastructure Details

The infrastructure details of the DISCOM are as shown in the table below:

Table 35: Infrastructure details

| Parameters | Total | Covered during in audit | Verified by Auditor in Sample Check | Remarks (Source of data) |
|-------------------------|---------|-------------------------|-------------------------------------|--------------------------|
| Number of circles | 6 | 6 | Sample verify | |
| Number of divisions | 19 | 19 | Sample verify | |
| Number of sub-divisions | 67 | 67 | Sample verify | |
| Number of feeders | 1441 | 1441 | Sample verify | |
| Number of DTs | 45493 | 45493 | Sample verify | |
| Number of consumers | 1224642 | 1224642 | Sample verify | |

Table 36: Metering details

| Parameters | 66kV and above | 33kV | 11/22kV | LT |
|--|----------------|--------|---------|---------|
| Number of conventional metered consumers | 0 | 393 | 21292 | 159224 |
| Number of consumers with 'smart' meters | 0 | 0 | 0 | 69400 |
| Number of consumers with 'smart prepaid' meters | 0 | 0 | 0 | 307719 |
| Number of consumers with 'AMR' meters | | 0 | 0 | 0 |
| Number of consumers with 'non-smart prepaid' Meters | 0 | 0 | 0 | 0 |
| Number of unmetered consumers | 0 | 0 | 0 | 666614 |
| Number of total consumers | 0 | 393 | 21292 | 1202957 |
| Number of conventionally metered Distribution Transformers | 0 | 0 | 0 | 0 |
| Number of DTs with communicable meters | 0 | 0 | 7718 | 0 |
| Number of unmetered DTs | | 0 | 37775 | 0 |
| Number of total Transformers | 0 | 0 | 45493 | 0 |
| Number of metered feeders | 0 | 185 | 0 | |
| Number of feeders with communicable meters | 0 | 0 | 1256 | 0 |
| Number of unmetered feeders | 0 | 0 | 0 | 0 |
| Number of total feeders | 0 | 185 | 1256 | 0 |
| Line length (ctkm) | 0 | 2411.1 | 19176.4 | 50591.8 |
| Length of Aerial Bunched Cables | 2510 | | | |
| Length of Underground Cables | 137.25 | | | |

Annexure VI - Power Purchase Details**a) Input Purchase Power for FY 2024-25**

Source wise/generating station wise power purchase, contracted capacity, RPO obligation met by the DISCOM, etc.

| S.No. | Name of Generation Station | Generation Capacity (In MW) | Type of Station Generation | Type of Contract | Type of Grid | Voltage Level (At input) |
|-------|----------------------------|-----------------------------|----------------------------|---|--------------|--------------------------|
| 1 | SINGRAULI | 2000 | Coal | shall remain operative as per policy of Gol | ISGS | |
| 2 | RIHAND-1 | 1000 | Coal | 25 years | ISGS | 132 |
| 3 | RIHAND-2 | 1000 | Coal | 25 years | ISGS | 132 |
| 4 | RIHAND-3 | 1000 | Coal | 25 years | ISGS | 132 |
| 5 | UNCHAR-I | 420 | Coal | 25 years | ISGS | |
| 6 | UNCHAR-II | 420 | Coal | 25 years | ISGS | |
| 7 | UNCHAR-III | 210 | Coal | 25 years | ISGS | |
| 8 | UNCHAR-IV | 500 | Coal | 25 years | ISGS | |
| 9 | ANTA (G) | 419 | Gas | 15 years | ISGS | |
| 10 | AURIYA (G) | 663 | Gas | 15 years | ISGS | |
| 11 | DADRI (G) | 830 | Gas | 35734 | ISGS | |
| 12 | JHAJJAR | 1500 | Coal | shall remain operative as per policy of Gol | ISGS | |
| 13 | DADRI STAGE-II | 980 | Coal | shall remain operative as per policy of Gol | ISGS | |
| 14 | KOLDAM | 800 | Hydro | 35 years | ISGS | |
| 15 | SINGRAULI SHP | 8 | Hydro | shall remain operative as per policy of Gol | ISGS | |
| 16 | TandaTPS | 1320 | Coal | 25 years | ISGS | |
| 17 | MEJA | 1320 | Coal | 25 years | ISGS | |
| 18 | SALAL | 690 | Hydro | Extended for 35 yrs from COD (01-04-1995) | ISGS | 220 |
| 19 | T.PUR | 94 | Hydro | Extended for 35 yrs from COD (01-04-1993) | ISGS | |
| 20 | CHEMERA 1 | 540 | Hydro | Extended for 35 yrs from COD (01-05-1994) | ISGS | |
| 21 | CHEMERA 2 | 300 | Hydro | Extended for 35 yrs from COD (31-03-2004) | ISGS | |
| 22 | CHEMERA 3 | 231 | Hydro | Extended upto 5 yrs from COD (03-07-2012) upto 03-07-2017 | ISGS | |
| 23 | URI 1 | 480 | Hydro | Extended for 35 yrs from COD (01-06-1997) | State | |
| 24 | URI2 | 240 | Hydro | Extended for 5 yrs up to 29-02-2024 | State | |
| 25 | DHAULIGANGA | 280 | Hydro | 35 years | ISGS | |
| 26 | DUL HASTI | 390 | Hydro | Extended for 35 yrs from COD (07-04-2007) | State | |
| 27 | SEWA-2 | 120 | Hydro | Extended for 35 yrs from COD (24-07-2010) | State | |
| 28 | PARBATI-III | 520 | Hydro | Extended upto 5 yrs from COD (05-06-2014) upto 05-06-2019 | ISGS | |

| S.No. | Name of Generation Station | Generation Capacity (In MW) | Type of Station Generation | Type of Contract | Type of Grid | Voltage Level (At input) |
|-------|----------------------------|-----------------------------|----------------------------|--|--------------|--------------------------|
| 29 | KISHANGANGA | 330 | Hydro | 5 years | ISGS | |
| 30 | Nimmo Bazgo | 45 | Hydro | 35 years | State | |
| 31 | Chutak | 44 | Hydro | 35 years | State | |
| 32 | NAPS | 440 | Nuclear | 15 years | ISGS | |
| 33 | RAPS-B | 440 | Nuclear | 15 years | ISGS | |
| 34 | RAPS-C # 5&6 | 440 | Nuclear | 15 years | ISGs | |
| 35 | N-JHAKHARI | 1500 | Hydro | first signed on 27.11.2010 (came into force w.e.f 18.05.2009, Extended on 16.11.2013 (came into force 18.05.2014 again got extended on 17.05.2019 (came into force on 18.05.2019) 17/05/2024 | ISGS | |
| 36 | RAMPUR | 412.02 | Hydro | 35 years | ISGS | |
| 37 | FRKKA | 1600 | Coal | 01 year | ISGS | |
| 38 | KHLGN-1 | 840 | Coal | 25 years | ISGS | |
| 39 | KHLGN-2 | 1500 | Coal | 25 years | ISGS | |
| 40 | TLCHR | 1000 | Coal | 01 year | ISGS | |
| 41 | MEJIA-6 | 250 | Coal | | ISGS | |
| 42 | TEHRI | 1000 | Hydro | 35 years | ISGS | |
| 43 | KOTESHWAR | 400 | Hydro | 35 years | ISGS | |
| 44 | TALA | 1020 | Hydro | | ISGS | |
| 45 | Baghliar HEP-I | 450 | Hydro | 20 years | State | 220 |
| 46 | Baghliar HEP-II | 450 | Hydro | 35 years | State | 220 |
| 47 | LJHP | 105 | Hydro | 15 years | State | 132 |
| 48 | USHP-I | 22.5 | Hydro | 15 years | State | 132 |
| 49 | USHP-II | 105 | Hydro | 15 years | State | 132 |

Jammu and Kashmir power corporation limited (JKPCL) is authorised to procure power purchase from long term, short term and other alternative sources of erstwhile JKPDD to meet day to day energy required of KPDCCL and Jammu power distribution limited (JPDCL). The month wise purchase units are shown in below table:

Table 37: Month wise power purchase

| Sr. No. | Months | Energy (in Mus) |
|---------|--------|-----------------|
| 1 | Apr-24 | 1072.76 |
| 2 | May-24 | 922.84 |
| 3 | Jun-24 | 840.04 |
| 4 | Jul-24 | 745.41 |
| 5 | Aug-24 | 676.17 |

| Sr. No. | Months | Energy (in Mus) |
|---------|--------|-----------------|
| 6 | Sep-24 | 568.89 |
| 7 | Oct-24 | 728.47 |
| 8 | Nov-24 | 886.58 |
| 9 | Dec-24 | 1032 |
| 10 | Jan-25 | 1231.62 |
| 11 | Feb-25 | 1362.61 |
| 12 | Mar-25 | 1104.34 |
| | Total | 11271.73 |

b) Circle wise monthly Input Energy for FY 2024-25

The Month wise break up of input energy (MUs) parameter for all the circle is given below:

Table 38: Circle wise monthly input & Billed energy (MU)

| Circle Name | Circle-1st | Circle-2nd | Circle-Bijbehara | Circle-Ganderbal | Circle-Pulwama | Circle-Sopore | Total (MU) |
|--------------|-----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|
| Apr-24 | 146.047 | 249.832 | 170.517 | 90.411 | 162.637 | 201.558 | 1021.001 |
| May-24 | 127.264 | 210.370 | 153.336 | 81.839 | 139.923 | 185.140 | 897.872 |
| Jun-24 | 111.675 | 190.066 | 141.127 | 77.349 | 132.774 | 171.188 | 824.180 |
| Jul-24 | 100.952 | 161.387 | 135.320 | 66.185 | 125.413 | 146.247 | 735.504 |
| Aug-24 | 95.657 | 154.596 | 121.038 | 59.441 | 115.509 | 128.297 | 674.538 |
| Sep-24 | 92.852 | 151.911 | 115.062 | 58.643 | 113.398 | 127.833 | 659.699 |
| Oct-24 | 91.848 | 158.162 | 122.672 | 62.920 | 114.826 | 139.487 | 689.914 |
| Nov-24 | 106.182 | 188.905 | 147.912 | 76.277 | 136.836 | 166.213 | 822.326 |
| Dec-24 | 129.423 | 232.478 | 169.298 | 94.454 | 154.540 | 202.022 | 982.215 |
| Jan-25 | 149.297 | 274.001 | 195.132 | 109.171 | 172.307 | 231.108 | 1131.014 |
| Feb-25 | 154.369 | 296.144 | 210.112 | 124.964 | 186.591 | 244.279 | 1216.459 |
| Mar-25 | 131.590 | 246.837 | 183.922 | 106.445 | 162.400 | 209.286 | 1040.480 |
| TOTAL | 1437.157 | 2514.688 | 1865.447 | 1008.098 | 1717.153 | 2152.658 | 10695.202 |

c) Circle wise monthly Billed Energy for FY 2024-25

The Month wise break up of Billed energy (MUs) parameter for all the circle is given below:

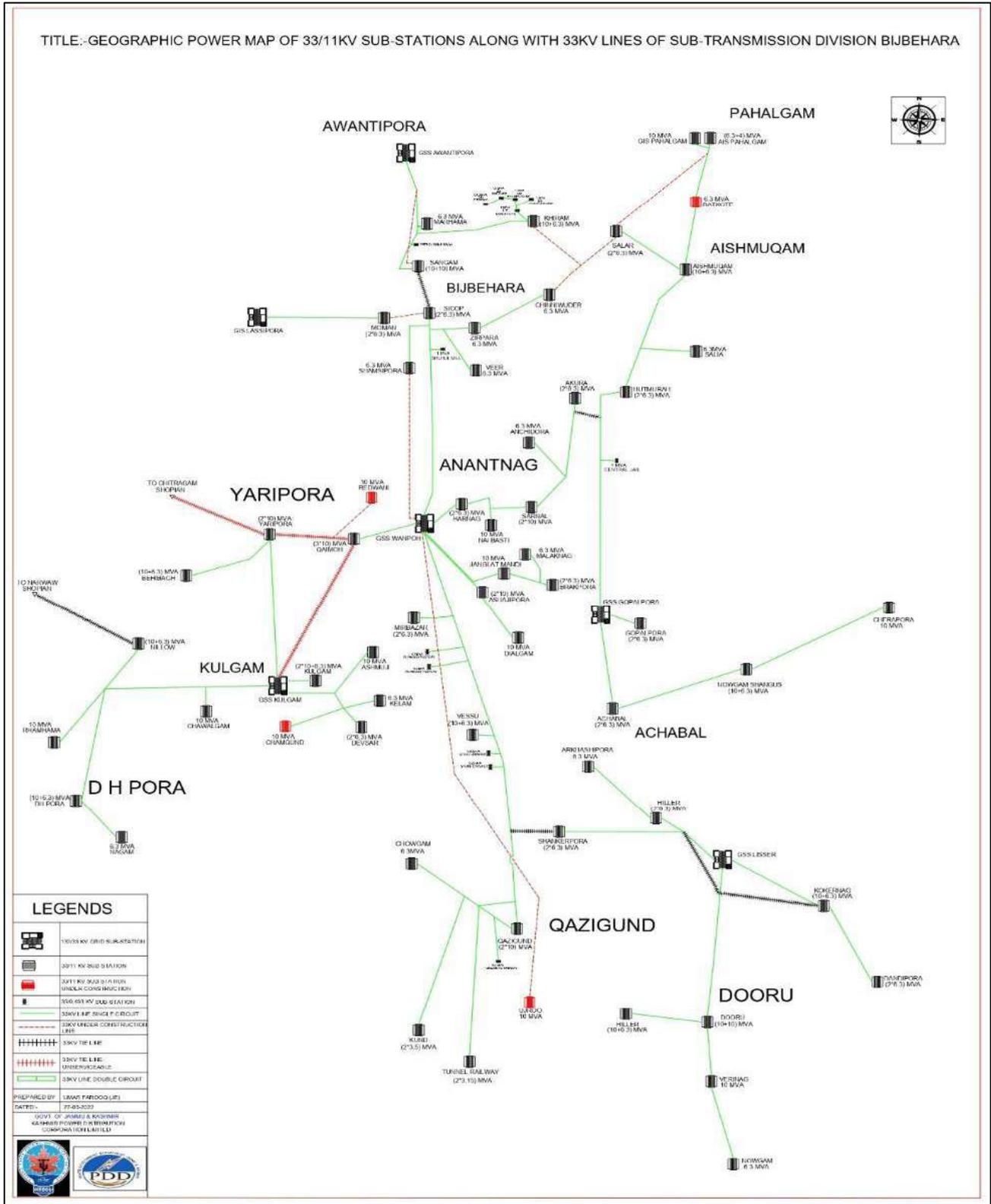
| Circle Name | Circle-1st | Circle-2nd | Circle-Bijbehara | Circle-Ganderbal | Circle-Pulwama | Circle-Sopore | Total (MU) |
|-------------|------------|------------|------------------|------------------|----------------|---------------|------------|
| Apr-24 | 79.40 | 125.93 | 90.48 | 46.68 | 93.21 | 93.86 | 529.56 |
| May-24 | 80.03 | 122.99 | 90.86 | 48.79 | 94.91 | 105.45 | 543.03 |
| Jun-24 | 76.63 | 120.72 | 89.35 | 49.82 | 99.08 | 108.79 | 544.39 |
| Jul-24 | 75.84 | 114.62 | 88.03 | 45.84 | 93.77 | 101.47 | 519.58 |
| Aug-24 | 74.82 | 116.26 | 90.73 | 45.97 | 94.58 | 102.48 | 524.83 |
| Sep-24 | 71.45 | 113.20 | 91.29 | 48.32 | 93.39 | 103.71 | 521.37 |

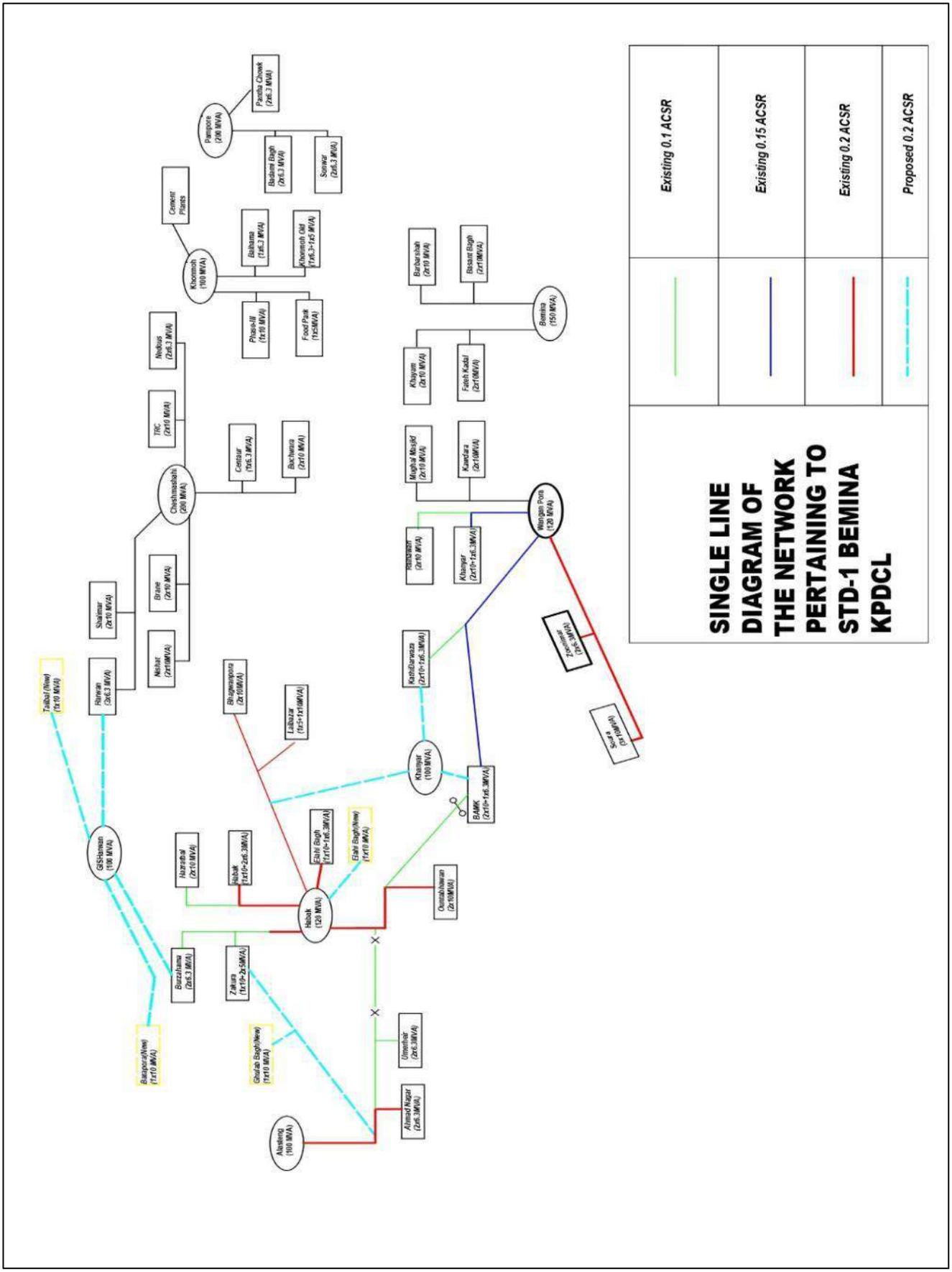
| Circle Name | Circle-1st | Circle-2nd | Circle-Bijbehara | Circle-Ganderbal | Circle-Pulwama | Circle-Sopore | Total (MU) |
|--------------|------------|------------|------------------|------------------|----------------|---------------|------------|
| Oct-24 | 71.55 | 110.11 | 90.39 | 44.54 | 88.13 | 114.83 | 519.54 |
| Nov-24 | 76.85 | 127.47 | 92.63 | 46.49 | 93.23 | 104.83 | 541.50 |
| Dec-24 | 88.79 | 134.78 | 93.68 | 48.21 | 94.55 | 107.83 | 567.82 |
| Jan-25 | 91.99 | 150.26 | 95.15 | 48.07 | 92.32 | 113.83 | 591.62 |
| Feb-25 | 99.73 | 153.31 | 99.17 | 50.54 | 93.58 | 112.19 | 608.52 |
| Mar-25 | 86.44 | 139.64 | 94.57 | 49.22 | 90.17 | 109.41 | 569.45 |
| TOTAL | 973.51 | 1529.28 | 1106.34 | 572.49 | 1120.93 | 1278.68 | 6581.22 |

Annexure VII - Single Line Diagram (SLD)

The SLD of the DISCOM is as shown below:

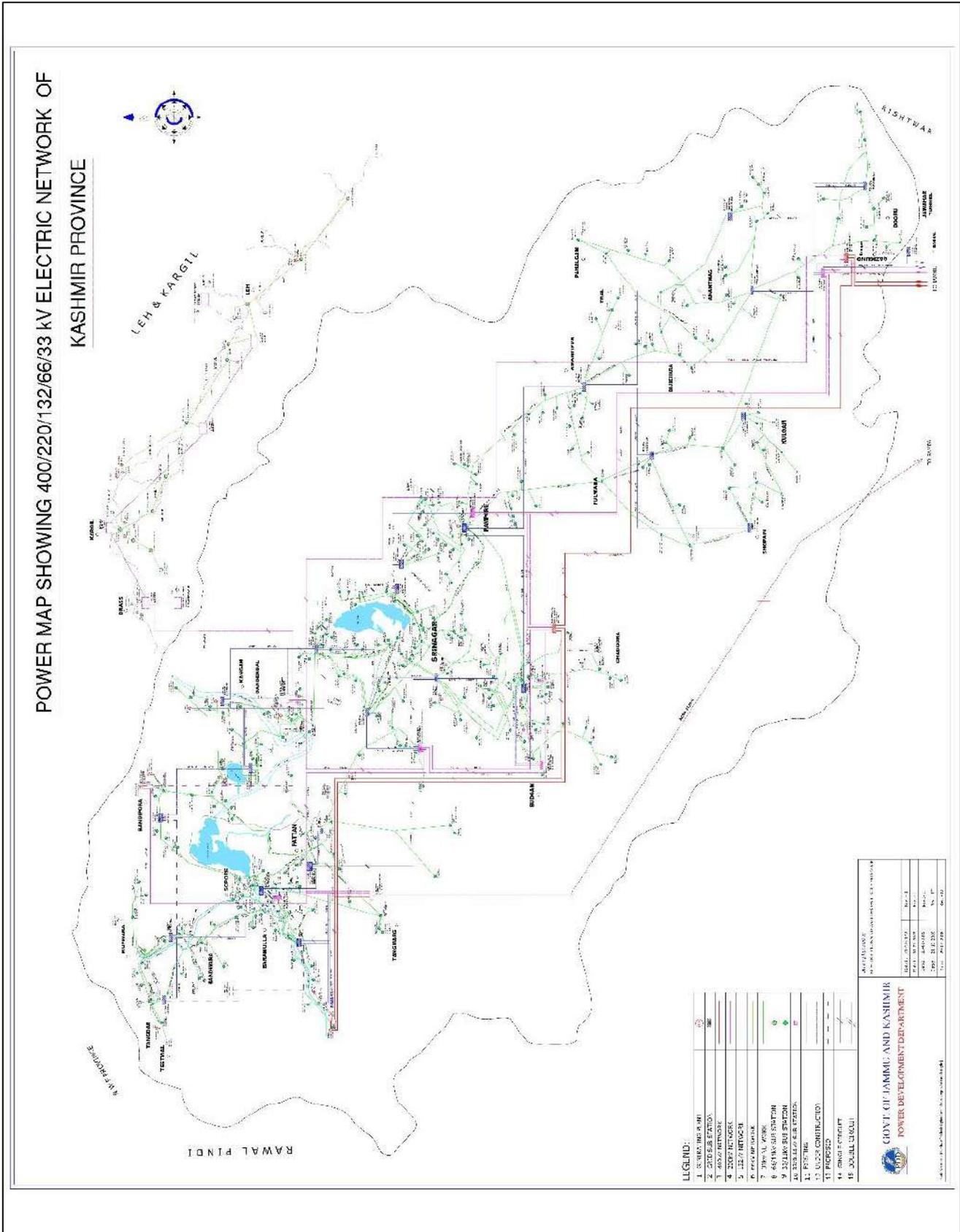
Figure 10: Single Line Diagram (SLD) of KPDC





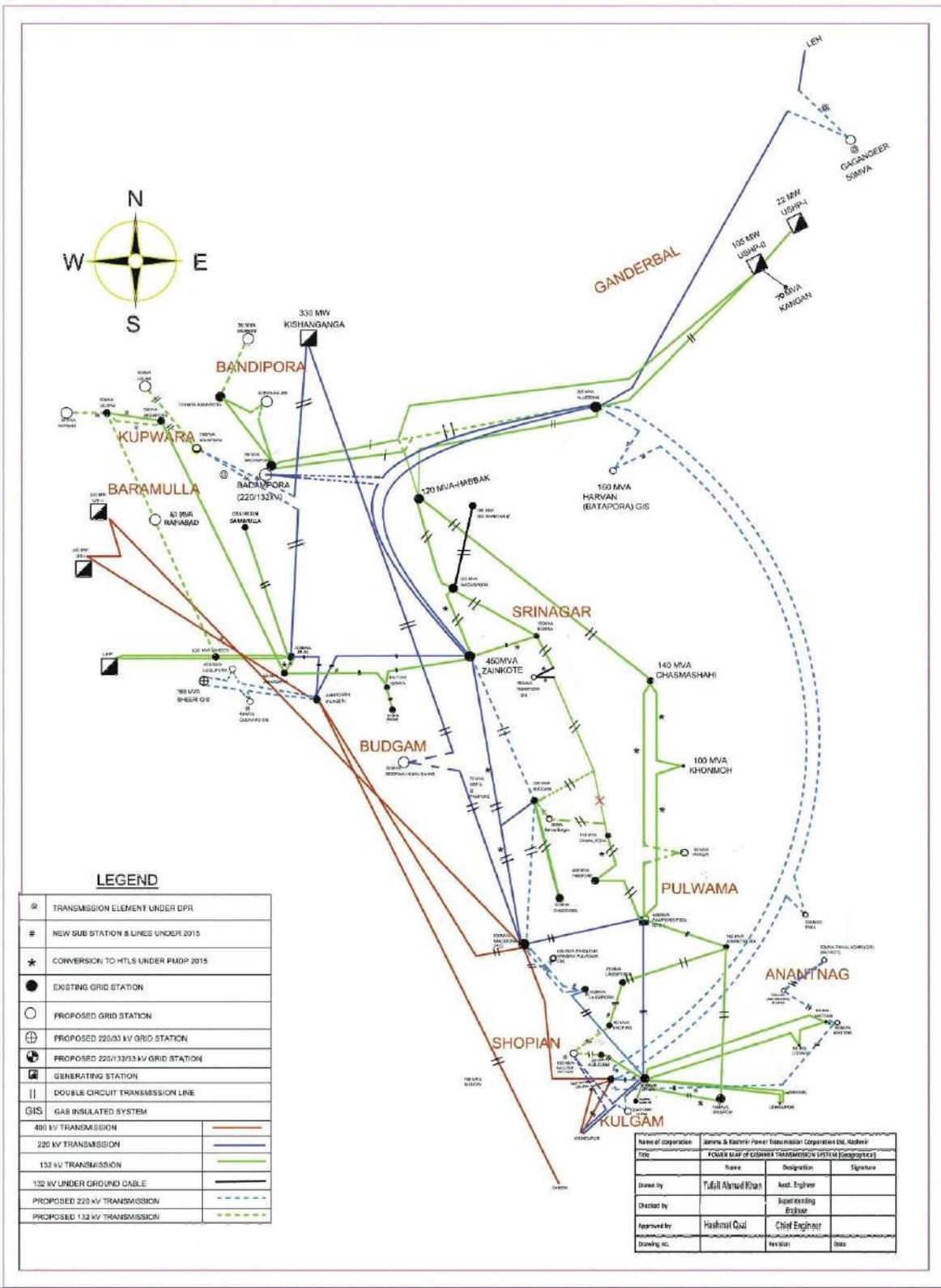
SINGLE LINE DIAGRAM OF THE NETWORK PERTAINING TO STD-1 BEMINA KPDC

| | | | |
|-------------------|--------------------|-------------------|-------------------|
| Existing 0.1 ACSR | Existing 0.15 ACSR | Existing 0.2 ACSR | Proposed 0.2 ACSR |
| — | — | — | - - - |





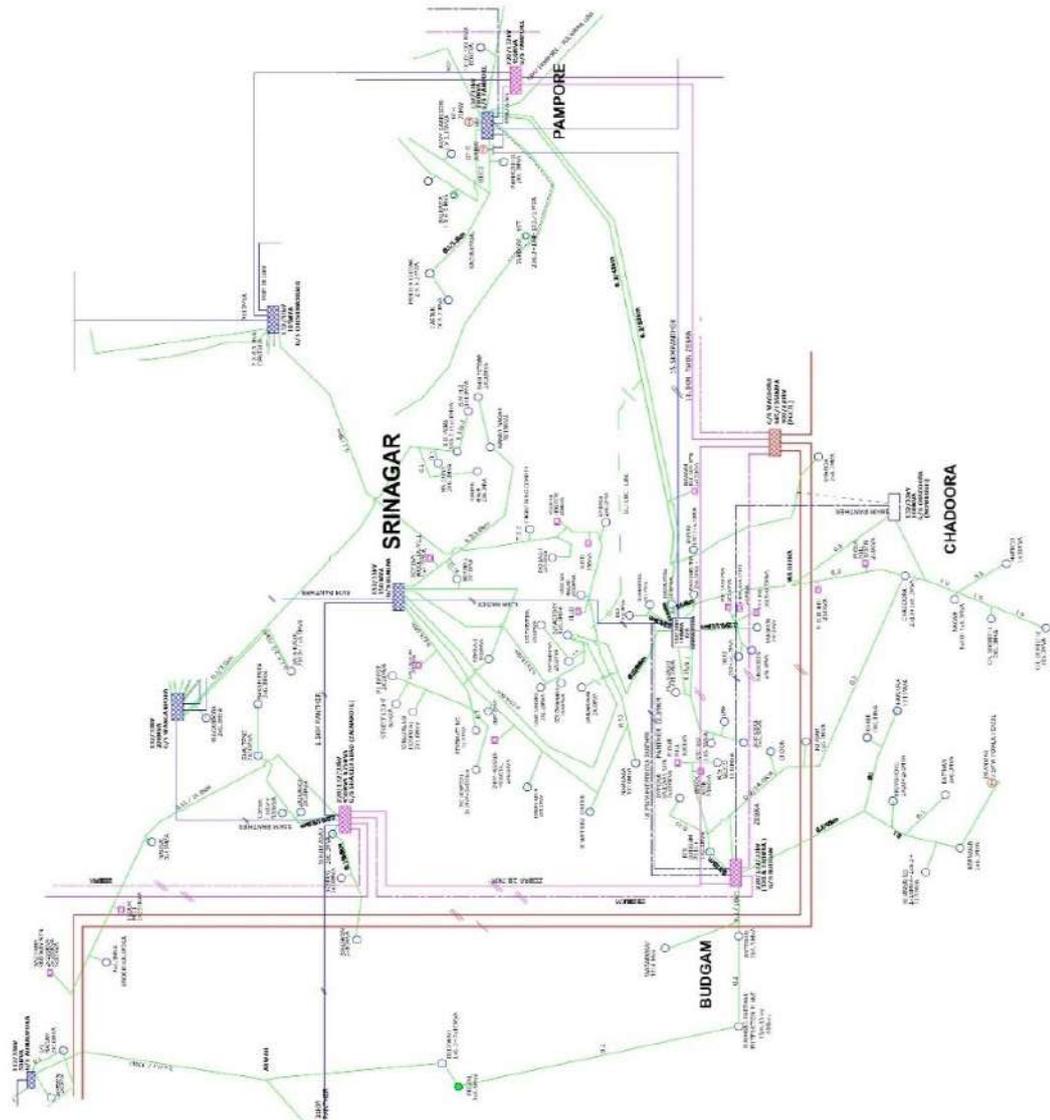
POWER MAP of KASHMIR TRANSMISSION SYSTEM (Geographical) as on



| | | | | | |
|---------------------|------------------|----------------|-------------|---|-----------|
| Name of Corporation | | | | Jammu & Kashmir Power Transmission Corporation Ltd, Kashmir | |
| Title | | | | POWER MAP of KASHMIR TRANSMISSION SYSTEM (Geographical) | |
| Drawn by | Talib Ahmad Khan | Asst. Engineer | Checked by | Superintending Engineer | Signature |
| Approved by | Hasmatul Qaid | Chief Engineer | Drawing No. | REV/01 | Date |

POWER MAP

SUB TRANSMISSION DIVISION -II SRINAGAR



LEGEND:

| | |
|----|----------------------|
| 1 | GENERATING PLANT |
| 2 | GOOD SUB STATION |
| 3 | 400KV NETWORK |
| 4 | 220KV NETWORK |
| 5 | 132KV NETWORK |
| 6 | 66KV NETWORK |
| 7 | 33KV NETWORK |
| 8 | 66/11KV SUB STATION |
| 9 | 132/11KV SUB STATION |
| 10 | 132/33KV SUB STATION |
| 11 | EXISTING |
| 12 | UNDER CONSTRUCTION |
| 13 | PROPOSED |
| 14 | SINGLE CIRCUIT |
| 15 | DOUBLE CIRCUIT |

GOVT. OF JAMMU AND KASHMIR
SUB TRANSMISSION DIVISION -II SRINAGAR

Annexure VIII - Category of service details (With Consumer and voltage-wise)

Type of consumers with different type of voltage & number of consumers are shown in below table:

Table 39: Category of service details

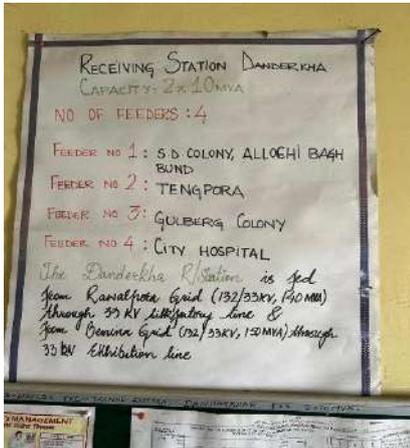
| Type of Consumers | Category of Consumers | Voltage Level | No of Consumers | Total Consumption (MU) |
|--------------------------|-----------------------|---------------|-----------------|------------------------|
| Residential | LT | LT | 1010893 | 4698.11 |
| Agricultural | LT | LT | 1504 | 6.34 |
| Agricultural | HT | 11KV | 989 | 65.48 |
| Agricultural | EHT | 33KV | 26 | 45.34 |
| Commercial/Industrial-LT | LT | LT | 186218 | 327.15 |
| Commercial/Industrial-LT | HT | 11KV | 14673 | 397.80 |
| Commercial/Industrial-LT | EHT | 33KV | 124 | 5.64 |
| Commercial/Industrial-HT | HT | 11KV | 421 | 165.60 |
| Commercial/Industrial-HT | EHT | 33KV | 76 | 267.86 |
| Others | LT | LT | 4342 | 118.17 |
| Others | HT | 11KV | 5209 | 314.44 |
| Others | EHT | 33KV | 167 | 169.29 |
| Total | | | 1224642 | 6581.22 |

Annexure IX - Field Verification data and reports

The field inspection details are shown in the below table:

Table 40: Field inspection details

Photographs taken during field verification are shown below:

| 33/11KV Danderkha Grid Substation (TR -2 x 10MVA) | | |
|--|--|---|
|  |  |  |
|  |  |  |
| <p>Meters of all the feeders are working properly.</p> <p>Incoming Loads on Both Transformer</p> <p>TR-1-$1.732 \times 29.33 \times 33.2 \times 0.960 = 1.61\text{MW}$</p> <p>TR-2-$1.732 \times 29.53 \times 33.1 \times 0.968 = 1.68\text{MW}$</p> <p>Feeder-1 (E0010441)-S. D Colony-</p> <p>Feeder-2 (E0010435)- Tangerangpara</p> <p>Feeder-3 (E0010444)-Gulberg colony</p> <p>Feeder-4 (E0010433)-City Hospital</p> <p>All feeders are under loaded.</p> <p>P.F is 0.901 to 0.968</p> <p>NFMS Metering System for all feeder monitoring</p> <p>Transformer oil level ok, silica gel ok, temperature ok</p> | | |

33/11KV Peerbagh S/S - (2 x 10MVA)



Station of R/stn. Peerbagh
 Date: 1 August 2025
 Page No.:

| Chains/Feeders | Current Readings | Previous Readings | Consumption |
|------------------|------------------|-------------------|-------------|
| 33 KV Bank - 1st | 14570.9 | 14480.1 | 90.7 |
| 33 KV Bank - 2nd | 14513.6 | 14420.9 | 90.7 |
| 11 KV Main - 1st | 870.016 | 786.529 | 78.487 |
| 11 KV Main - 2nd | 876.252 | 790.208 | 86.044 |
| F # 1 | 589.492 | 525.848 | 61.574 |
| F # 2 | 579.785 | 520.004 | 59.681 |
| F # 3 | 259.030 | 180.606 | 78.374 |
| F # 4 | 208.224 | 189.381 | 18.74 |
| Sta. Feeder | 141.63 | 137.97 | 1.62 |

Comms outage during the month of August 2025

| Feeder No. | Outage | Time | Reason |
|------------|--------|---------------------|------------------------|
| F # 1 | 26 | 42 hours 03 minutes | 3rd time of Disruption |
| F # 2 | 14 | 21 hours 03 minutes | |
| F # 3 | 20 | 25 hours 39 minutes | |
| F # 4 | 15 | 22 hours 14 minutes | |

Feeder wise Maximum Load

| Feeder No. | Max. Load | Voltage | Time | Date |
|------------|-----------|---------|---------|------------|
| F # 1 | 140 A | 9.9 KV | 7:00 Pm | 04-08-2025 |
| F # 2 | 140 A | 9.9 KV | 7:00 Pm | 04-08-2025 |
| F # 3 | 95 A | 9.9 KV | 7:00 Pm | 04-08-2025 |
| F # 4 | 40 A | 9.9 KV | 7:00 Pm | 04-08-2025 |

Feeder wise Minimum Load

| Feeder No. | Min. Load | Voltage | Time | Date |
|------------|-----------|---------|---------|------------|
| F # 1 | 30 A | 10.3 KV | 2:00 Am | 25-08-2025 |
| F # 2 | 35 A | 10.3 KV | 2:00 Am | 25-08-2025 |
| F # 3 | 25 A | 10.2 KV | 2:00 Am | 21-08-2025 |
| F # 4 | 12 A | 10.3 KV | 2:00 Am | 25-08-2025 |

33/11 KV VOLTAGE

| 33 KV | Max. Voltage | Min. Voltage |
|-------|--------------|--------------|
| 33 KV | 32.0 KV | 28.5 KV |
| 11 KV | 10.6 KV | 9.5 KV |

Time: 3:00 Pm 30-08-2025 Time: 3:00 Pm 5-08-2025

33 kv Line Interruptions (Date: 14-08-2025)

| Line No. | Time | Remarks |
|----------|---------------------|-----------------------------------|
| 6 | 17 hours 14 minutes | Substation / part off from bridge |

Peak load of R/stn. Peerbagh August 2025

| Feeder | Load | Date | Time |
|----------|-------|------------|---------|
| max load | 415 A | 9-08-2025 | 7:00 Pm |
| min load | 102 A | 25-08-2025 | 2:00 Am |

Oil level of X-mers

| Feeder No. | Permit No. | Duration | Date |
|------------|------------|--------------|------------|
| F # 1 | 41 | 0:27 minutes | 14-08-2025 |

Oil level diagrams for Bank-1st and Bank-2nd showing 30°C and 3/4 full.

Meters of all the feeders are working properly.

Meters of all the feeders are working properly.

Incoming Loads on Both Transformer

TR-1- $1.732 \times 30.57 \times 35.71 \times 0.95 = 1.796$ MW

TR-2- $1.732 \times 30.15 \times 35.56 \times .96 = 1.782$ MW

Feeder-1 (E0009900)

Feeder-2 (E0009906)

Feeder-3 (E0009897)

Feeder-4 (E0009909)

All feeders are under load.

P.F is 0.89 & 0.91

Transformer oil level ok, silica gel ok, temperature ok

Annexure X - List of documents verified with each parameter

The documents verified are listed in the below table:

Table 41: List of documents verified with each parameter

| S. No | Data Required for Annual Energy Audit as per BEE regulation | Status | Remark |
|-------|--|--|---|
| 1 | Complete filled in Proforma for the year 2024-25 (Annually) | Provided | Data Attached |
| 2 | Supporting Data with Month wise breakup | Provided Month wise breakup | Data Attached |
| A | Purchase Energy | | |
| B | Net Input in Discom | | |
| C | Billed Energy | | |
| D | Revenue Demand | | |
| E | Revenue Collected | | |
| F | Energy Export to other | | |
| G | Transmission loss calculation Methodology | NA | NA |
| 3 | Feeder wise input, Billed Energy, T&D & AT&C losses | Provided | Data Attached |
| 4 | Action plan to reduce the T&D and AT&C losses | Provided The various schemes | Action plan to reduce AT&C losses & payback of RDSS Schemes |
| 5 | Assets details matched with the proforma infrastructure sheets | Provided | Data Attached |
| 6 | Verified T&D and AT&C losses (Approved With Petition) | Petition provided | Data Attached |
| 7 | Energy Flow Diagram | Data Attached | Data Attached |
| 8 | Subsidy category Wise (BEE Guideline proforma) | Format Provided | Data Attached in BEE Guideline proforma |
| 9 | Verified T&D and AT&C losses | Provided | Data Attached |
| 10 | High Loss area T&D & AT&C action plan to reduce losses | Provided | Data Attached |
| 11 | Power Map | Provided | Data Attached |
| 12 | Current status of Metering status at Various Voltage level of Discom | Functional & Non-Functional meter details provided | 100 % metered (operational) |
| 13 | Status of default meter (non-functional meters) | Provided | Data Attached |
| 14 | Quarter Wise report | Provided | Data Attached |
| 15 | High Loss area T&D & AT&C action plan to reduce losses | Provided | Data Attached |

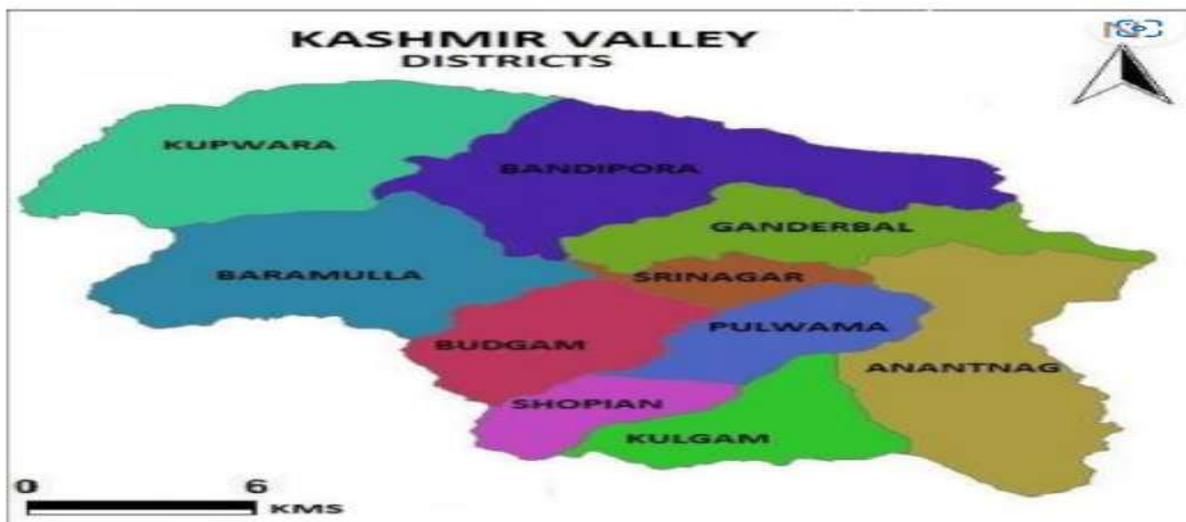
Annexure XI - Brief Description of Unit

Kashmir Power Distribution Corporation Limited (KPDCL) – a state-owned Power Distribution Utility. KPDCL has the privilege of empowering millions of people by supplying electricity in their homes as well as to places where they do all kinds of activities – agricultural (or allied), commercial, industrial & other. KPDCL has a consumer base of more than Eleven Lakh consumers spread over 10 districts of Kashmir region. The Company, headquartered at Jehangir Chowk, Srinagar, functions with 06 Circles, 19 Divisions and 67 Sub-divisions. KPDCL has a unique mix of consumers i.e. on one hand it caters to industrial consumers alongside urban areas and on the other it caters to agricultural consumers, scattered tribal & forest area consumers. Thus the expansive operational area and motley consumer mix sets KPDCL apart from private utilities which usually cater only to urban landscapes. In a bid to provide its valued consumers with quality power supply, the Company undertakes various infrastructure revamping and technical upgradation programs on continual basis like laying of underground cables and installations of RMUs, creation of new feeders and bifurcation of existing feeders, erection of new sub-stations, creation of new transformer centres, etc. The consumer centric initiatives include dedicated fault restoration centers at every sub-division, 24 x 7 centralized Customer Care Centre at Bemina, Srinagar and a range of services available online on KPDCL Website and Mobile Application. In addition, KPDCL also hears and redresses consumer grievances through public fora regularly.

The Purchase energy by KPDCL for the customer is **11124.05 MU**, the monthly consumption per customer stands at **373.64 KWH/Month**. KPDCL caters to area spread in 6 circles, 19 Division.

Pursuant to direction from Government of J&K for reorganization of the power sector in the state, J&K Power Development Department was unbundled into separate Companies with functional responsibilities for generation, transmission, distribution and trading of electricity with complete autonomous operations.

Accordingly, the Distribution undertakings and functions of the Kashmir region of the erstwhile JKPDD stand transferred to and vested in Kashmir Power Distribution Corporation Limited. The corporation was incorporated on 30th October, 2019, primarily to carry out distribution of electricity to retail and bulk consumers. The Company is engaged in distribution of electricity in 10 districts namely Srinagar, Ganderbal, Baramulla, Anantnag, Budgam, Pulwama, Shopian, Kupwara, Kulgam & Bandipora.



List of Parameters arrived through calculation or formulae with list of documents as source of data

Ideally, reduction of technical and commercial losses should be the parameter for evaluation of performance of Discom sector. However, the technical losses of the Discoms are not available and it involves a cumbersome process to calculate the technical losses, which varies based on various factors like loading pattern etc.

Now, only the T&D losses and AT&C losses are available as the performance parameter for achieving energy efficiency by DISCOMs.

It was decided that out of the two parameters, T&D loss parameter seems to be appropriate parameter which reflects energy savings to a greater extent as compared to AT&C losses

Table 42: Formulas used to derive the parameters

| Parameter | Formula | Data Source |
|-----------------------|---|-------------|
| AT&C Losses | $\{1 - (\text{Billing Efficiency} \times \text{Collection Efficiency})\} \times 100$ | |
| T& D Losses | $\{1 - (\text{Total energy Billed} / \text{Total energy Input in the system})\} \times 100$ | |
| Billing efficiency | Total unit Billed/ Total unit Inputs Collection efficiency | |
| Collection efficiency | Revenue collected / Amount Billed | |

Annexure XII - Detailed Formats

General Information

| General Information | | | |
|---------------------|---|---|-----------------------------------|
| 1 | Name of the DISCOM | KASHMIR POWER DISTRIBUTION LIMITED | |
| 2 | i) Year of Establishment | 2020 | |
| | ii) Government/Public/Private | Government | |
| 3 | DISCOM's Contact details & Address | | |
| i | City/Town/Village | Exhibition Ground Opposite High Court, Jehnagir Chowk | |
| ii | District | Srinagar | |
| iii | State | J&K | Pin 190001 |
| iv | Telephone | 0194-2479836 | Fax 0194-2452173 |
| 4 | Registered Office | | |
| i | Company's Chief Executive Name | Mr. Mahmood Ahmad Shah (KAS) | |
| ii | Designation | Managing Director | |
| iii | Address | Exhibition Ground Opposite High Court, Jehnagir Chowk | |
| iv | City/Town/Village | Srinagar | P.O. |
| v | District | Srinagar | |
| vi | State | J&K | Pin 190001 |
| vii | Telephone | 0194-2479836 | Fax 0194-2452173 |
| 5 | Nodal Officer Details* | | |
| i | Nodal Officer Name (Designated at DISCOM's) | Er. Nisar Ahmad Lone | |
| ii | Designation | Chief Engineer | |
| iii | Address | Exhibition Ground Opposite High Court, Jehnagir Chowk | |
| iv | City/Town/Village | Srinagar | P.O. |
| v | District | Srinagar | |
| vi | State | J&K | Pin 190001 |
| vii | Telephone | 0194-2452001 | Fax 0194-2453863 |
| 6 | Energy Manager Details* | | |
| i | Name | Er. Shabir Ahmad Khan | |
| ii | Designation | CEO-IT | Whether EA or EM |
| iii | EA/EM Registration No. | | |
| iv | Telephone | Fax | |
| v | Mobile | 9419424639 | E-mail ID ceo.itc.kpdcl@gmail.com |
| 7 | Period of Information | | |
| | Year of (FY) information including Date and Month (Start & End) | April 2024 - March 2025 | |

Summary Sheet

| Performance Summary of Electricity Distribution Companies | | | |
|---|--|-------------------------|----------|
| 1 | Period of Information Year of (FY) information including Date and Month (Start & End) | April 2024 - March 2025 | |
| 2 | Technical Details | | |
| (a) | Energy Input Details | | |
| (i) | Input Energy Purchase (From Generation Source) | Million kwh | 10973.46 |
| (ii) | Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded) | Million kwh | 10695.20 |
| (iii) | Total Energy billed (is the Net energy billed, adjusted for energy traded)) | Million kwh | 6581.22 |
| (b) | Transmission and Distribution (T&D) loss Details | Million kwh | 4113.98 |
| | Collection Efficiency | % | 38.47% |
| (c) | Aggregate Technical & Commercial Loss | % | 107.83% |
| | | | 33.65% |

I/We undertake that the information supplied in this Document and Pro-forma is accurate to the best of my knowledge and if any of the information supplied is found to be incorrect and such information result into loss to the Central Government or State Government or any of the authority under them or any other person affected, I/we undertake to indemnify such loss.

Authorised Signatory and Seal

Name of Authorised Signatory

Name of the Engineer

Full Address
(Distribution) KPDCL

Seal



Infrastructure Details

| Form-Details of Input Infrastructure | | | | | |
|--------------------------------------|--|----------------|-------------------------|-------------------------------------|--------------------------|
| 1 | Parameters | Total | Covered during in audit | Verified by Auditor in Sample Check | Remarks (Source of data) |
| i | Number of circles | 6 | | | |
| ii | Number of divisions | 19 | | | |
| iii | Number of sub-divisions | 67 | | | |
| iv | Number of feeders | 1256 | | | |
| v | Number of DTs | 45493 | | | |
| vi | Number of consumers | 1224642 | | | |
| 2 | Parameters | 66kV and above | 33kV | 11/22kV | |
| a. i. | Number of conventional metered consumers | 0 | 393 | 21292 | LT 159224 |
| ii | Number of consumers with 'smart' meters | 0 | 0 | 0 | 69400 |
| iii | Number of consumers with 'smart prepaid' meters | 0 | 0 | 0 | 307719 |
| iv | Number of consumers with 'AMR' meters | 0 | 0 | 0 | 0 |
| v | Number of consumers with 'non-smart prepaid' meters | 0 | 0 | 0 | 0 |
| vi | Number of unmetered consumers | 0 | 0 | 0 | 0 |
| vii | Number of total consumers | 0 | 0 | 0 | 666614 |
| b. i. | Number of conventionally metered Distribution Transformers | 0 | 393 | 21292 | 1202957 |
| ii | Number of DTs with communicable meters | 0 | 0 | 0 | 0 |
| iii | Number of unmetered DTs | 0 | 0 | 7718 | 0 |
| iv | Number of total Transformers | 0 | 0 | 37775 | 0 |
| c. i. | Number of metered feeders | 0 | 0 | 45493 | 0 |
| ii | Number of feeders with communicable meters | 0 | 185 | 0 | 0 |
| iii | Number of unmetered feeders | 0 | 0 | 1256 | 0 |
| iv | Number of total feeders | 0 | 0 | 0 | 0 |
| d. | Line length (ct km) | 0 | 185 | 1256 | 0 |
| e. | Length of Aerial Bunched Cables | | 2411.1 | 19176.4 | 50591.8 |
| f. | Length of Underground Cables | | 2510 | | |
| | | | 137.25 | | |

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| 3 | Voltage level | Particulars | MU | Reference | Remarks (Source of data) |
|------|---|--|-----------|-----------|--|
| i | 66kV and above | Long-Term Conventional | | | |
| | | Medium Conventional | | | Includes input energy for franchisees |
| | | Short-Term Conventional | | | |
| | | Banking | | | |
| | | Long-Term Renewable energy | | | |
| | | Medium and Short-Term RE | | | Includes power from bilateral/ PX/ DEEP |
| | | Captive, open access input | | | Any power wheeled for any purchase other than sale to DISCOM. Does not include input for franchisee. |
| | | Sale of surplus power | | | |
| | | Quantum of inter-state transmission loss | | | |
| | | Power procured from inter-state sources | | | As confirmed by SLDC, RLDC etc |
| ii | 33kV | Power at state transmission boundary | 0 | | Based on data from Form 5 |
| | | Long-Term Conventional | | | |
| | | Medium Conventional | | | |
| | | Short-Term Conventional | | | |
| | | Banking | | | |
| | | Long-Term Renewable energy | 10574.67 | | |
| | | Medium and Short-Term RE | | | |
| | | Captive, open access input | | | |
| | | Sale of surplus power | | | |
| | | Quantum of intra-state transmission loss | 0.00 | | |
| iii | 33 kV | Power procured from intra-state sources | 10574.67 | | |
| | | Input in DISCOM wires network | 10574.67 | | |
| iv | 11 kV | Renewable Energy Procurement | | | |
| | | Small capacity conventional/ biomass/ hydro plants Procurement | 120.54 | | |
| v | LT | Captive, open access input | | | |
| | | Renewable Energy Procurement | | | |
| vi | Energy Embedded within DISCOM wires network | Small capacity conventional/ biomass/ hydro plants Procurement | | | |
| | | Sales Migration Input | | | |
| vii | Total Energy Available/ Input | Renewable Energy Procurement | 120.54 | | |
| | | Sales Migration Input | | | |
| viii | | | 10,695.20 | | |

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| Voltage level | | Energy Sales Particulars | MU | Reference |
|---------------|-------------|---|-----------------|---|
| i | LT Level | DISCOM' consumers | 5149.77 | Include sales to consumers in franchisee areas, unmetered consumers |
| | | Demand from open access, captive | | Non DISCOM's sales |
| | | Embedded generation used at LT level | | Demand from embedded generation at LT level |
| | | Sale at LT level | 5149.77 | |
| | | Quantum of LT level losses | 4066.82 | |
| ii | 11 kv Level | Energy Input at LT level | 9216.59 | |
| | | DISCOM' consumers | 943.31 | Include sales to consumers in franchisee areas, unmetered consumers |
| | | Demand from open access, captive | | Non DISCOM's sales |
| | | Embedded generation at 11 kv level used | | Demand from embedded generation at 11kv level |
| | | Sales at 11 kv level | 943.31 | |
| iii | 33 kv Level | Quantum of Losses at 11 kv | 47.17 | |
| | | Energy Input at 11 kv level | 990.48 | |
| | | DISCOM' consumers | 488.13 | Include sales to consumers in franchisee areas, unmetered consumers |
| | | Demand from open access, captive | | Non DISCOM's sales |
| | | Embedded generation at 33 kv or below level | 120.54 | This is DISCOM and OA demand met via energy generated at same voltage level |
| iv | > 33 kv | Sales at 33 kv level | 488.13 | |
| | | Quantum of Losses at 33 kv | 0.00 | |
| | | Energy Input at 33kv Level | 488.13 | |
| | | DISCOM' consumers | | Include sales to consumers in franchisee areas, unmetered consumers |
| | | Demand from open access, captive | | Non DISCOM's sales |
| | | Cross border sale of energy | | |
| | | Sale to other DISCOMs | | |
| | | Banking | | |
| | | Energy input at > 33kv Level | | |
| | | Sales at 66kv and above (EHV) | 0.00 | |
| | | Total Energy Requirement | 10695.20 | |
| | | Total Energy Sales | 6581.22 | |

Muj *h*

| S | DISCOM | Input (in MU) | Sale (in MU) | Loss (in MU) | Loss % |
|-----|----------------------|---------------|--------------|--------------|--------|
| i | LT | 9216.59 | 5149.77 | 4066.82 | 44.12% |
| ii | 11 Kv | 990.48 | 943.31 | 47.17 | 4.76% |
| iii | 33 kv | 488.13 | 488.13 | 0.00 | 0.00% |
| iv | > 33 kv | | | | |
| G | Open Access, Captive | Input (in MU) | Sale (in MU) | Loss (in MU) | |
| i | LT | | | | |
| ii | 11 Kv | | | | |
| iii | 33 kv | | | | |
| iv | > 33 kv | | | | |

| | |
|--------------|--------|
| T&D loss | 4,114 |
| D loss | 4,114 |
| T&D loss (%) | 38.47% |
| D loss (%) | 38.47% |

Muj *h*

Division wise losses

| Details of Division Wise Losses (See note below**) | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------------|--------------|--------------------------|--------------------------|-------------------------|-------------------------|-----------------------------------|----------------------------|---------------------|---------------------|---------------------------|---------------------|-------------------|---------------|---------------------------|--------------|-------------------------|----------------|--------------|----------------|--------------|----------------|
| S.No | Name of circle | Circle code | Name of Division | Consumer category | Consumer profile | | | | | Energy parameters | | | | | Losses | | | | | | | |
| | | | | | No of connections (No.) | No of connections (No.) | Total number of connections (No.) | % of number of connections | Connected load (kW) | Connected load (MW) | Total Connected load (MW) | % of connected load | Peak energy (kWh) | Median energy | Maximum of maximum energy | Total energy | % of energy consumption | TRD loss (MWh) | TRD loss (%) | TRD loss (MWh) | TRD loss (%) | TRD loss (MWh) |
| 1 | Circle-1st | 0001 | DIV (SASANT BAGH) | Residential | 2375 | 10195 | 12570 | 88% | 57.31 | 28.18 | 75.50 | 3.8% | 118.75 | 42.42 | 292.18 | 36% | 319.05 | 28% | 64.64 | 60.85 | 86.18% | |
| | | | | Agricultural | 25 | 1 | 26 | 0% | 0.30 | 0.00 | 0.34 | 0% | 0.58 | 0.00 | 0.18 | 0% | | | 0.18 | 0.37 | 23.16% | |
| | | | | Commercial/Industrial/IT | 14619 | 738 | 15357 | 81% | 63.37 | 2.28 | 65.65 | 78% | 84.25 | 9.78 | 34.83 | 17% | | | 84.25 | 9.78 | 52.62 | 98.8% |
| | | | | Commercial/Industrial/HT | 21 | 0 | 21 | 0% | 44.59 | 0.00 | 44.59 | 23% | 154.10 | 0.00 | 154.10 | 28% | | | 76.87 | 27.17 | 106.0% | |
| | | | | Others | 459 | 31 | 490 | 1% | 41.39 | 1.13 | 42.52 | 20% | 109.21 | 5.48 | 114.69 | 21% | | | 94.16 | 27.27 | 106.0% | |
| Sub-total | | | | | 2821 | 12867 | 35714 | 100% | 208.80 | 31.44 | 240.24 | 100% | 773.75 | 492.98 | 773.75 | 100% | 219.05 | 28% | 205.82 | 100% | 113.28% | |
| 2 | Circle-1st | 0001 | DIV (ADHANVAI) | Residential | 4740 | 1275 | 6015 | 80% | 31.56 | 16.85 | 48.41 | 80% | 256.1 | 52.48 | 321.24 | 36% | 210.04 | 78% | 104.87 | 99.17 | 90.68% | |
| | | | | Agricultural | 158 | 7 | 165 | 2% | 0.77 | 0.00 | 0.77 | 0% | 0.57 | 0.00 | 0.57 | 0% | | | 0.57 | 0.60 | 25.71% | |
| | | | | Commercial/Industrial/IT | 18164 | 297 | 18461 | 93% | 82.05 | 0.82 | 82.87 | 73% | 38.90 | 3.97 | 42.27 | 10% | | | 25.05 | 23.58 | 90.1% | |
| | | | | Commercial/Industrial/HT | 8 | 0 | 8 | 0% | 1.14 | 0.00 | 1.14 | 1% | 1.14 | 0.00 | 1.14 | 1% | | | 1.14 | 1.30 | 87.1% | |
| | | | | Others | 411 | 39 | 450 | 1% | 29.58 | 0.69 | 30.27 | 2% | 60.10 | 1.48 | 61.58 | 13% | | | 58.62 | 15.74 | 111.2% | |
| Sub-total | | | | | 6124 | 2797 | 8925 | 100% | 145.33 | 17.86 | 163.19 | 100% | 463.41 | 59.14 | 463.41 | 100% | 246.58 | 53% | 216.83 | 100% | 129% | |
| 3 | Circle-2nd | 0202 | BUDGAM | Residential | 17881 | 9184 | 27065 | 84% | 48.17 | 142.92 | 191.09 | 65% | 721.8 | 12.48 | 112.24 | 10% | 180.33 | 48% | 180.33 | 115.24 | 61.81% | |
| | | | | Agricultural | 5 | 1 | 6 | 0% | 0.04 | 0.00 | 0.04 | 0% | 0.00 | 0.00 | 0.00 | 0% | | | 0.00 | 0.00 | 0.00% | |
| | | | | Commercial/Industrial/IT | 15678 | 4929 | 20607 | 74% | 57.02 | 0.48 | 57.50 | 24% | 39.28 | 12.69 | 21.62 | 15% | | | 42.78 | 36.52 | 85.1% | |
| | | | | Commercial/Industrial/HT | 89 | 0 | 89 | 0% | 1.20 | 0.00 | 1.20 | 1% | 8.38 | 0.00 | 8.38 | 1% | | | 8.38 | 6.15 | 108.0% | |
| | | | | Others | 453 | 52 | 505 | 1% | 11.90 | 1.07 | 12.97 | 1% | 77.64 | 0.78 | 78.42 | 3% | | | 14.05 | 13.95 | 176.0% | |
| Sub-total | | | | | 19086 | 9736 | 28685 | 100% | 119.43 | 155.47 | 274.58 | 100% | 1249.26 | 25.06 | 154.82 | 100% | 246.58 | 53% | 216.83 | 100% | 88% | |
| 4 | Circle-2nd | 0202 | DIV (WABHAGH) | Residential | 5935 | 1185 | 7120 | 72% | 24.11 | 2.42 | 26.53 | 100% | 120.26 | 148.88 | 139.48 | 67% | 179.72 | 48% | 179.72 | 129.24 | 71.62% | |
| | | | | Agricultural | 19 | 1 | 20 | 0% | 0.03 | 0.00 | 0.03 | 0% | 0.00 | 0.00 | 0.00 | 0% | | | 0.00 | 0.00 | 0.00% | |
| | | | | Commercial/Industrial/IT | 2930 | 0 | 2930 | 25% | 17.45 | 0.00 | 17.45 | 24% | 32.00 | 0.00 | 32.00 | 18% | | | 32.00 | 0.00 | 96.2% | |
| | | | | Commercial/Industrial/HT | 65 | 0 | 65 | 0% | 27.85 | 1.27 | 29.12 | 24% | 25.30 | 0.00 | 25.30 | 16% | | | 47.65 | 46.58 | 96.2% | |
| | | | | Others | 530 | 73 | 603 | 8% | 19.00 | 2.54 | 21.54 | 1% | 92.33 | 7.80 | 100.13 | 3% | | | 17.78 | 17.50 | 98.5% | |
| Sub-total | | | | | 7059 | 1366 | 8428 | 100% | 70.44 | 3.27 | 73.71 | 100% | 219.26 | 148.88 | 139.48 | 100% | 179.72 | 48% | 179.72 | 129.24 | 71.62% | |
| 5 | Circle-3rd | 0202 | DIV (BISHEN BAGH) | Residential | 3851 | 2016 | 5867 | 74% | 29.01 | 25.44 | 54.45 | 100% | 317.56 | 487.84 | 321.11 | 47% | 138.01 | 22% | 138.01 | 254.00 | 180.6% | |
| | | | | Agricultural | 3 | 1 | 4 | 0% | 0.08 | 0.00 | 0.08 | 0% | 1.48 | 1.48 | 2.96 | 7% | | | 1.48 | 1.48 | 100% | |
| | | | | Commercial/Industrial/IT | 1768 | 1058 | 2826 | 23% | 36.88 | 0.90 | 37.78 | 23% | 52.52 | 5.06 | 57.58 | 20% | | | 27.17 | 19.76 | 71.8% | |
| | | | | Commercial/Industrial/HT | 14 | 0 | 14 | 0% | 2.84 | 0.00 | 2.84 | 2% | 1.07 | 0.00 | 1.07 | 1% | | | 1.07 | 0.00 | 0.00% | |
| | | | | Others | 383 | 18 | 401 | 5% | 27.98 | 0.12 | 28.10 | 1% | 41.88 | 0.24 | 42.12 | 1% | | | 7.50 | 2.80 | 37.1% | |
| Sub-total | | | | | 4639 | 2153 | 6736 | 100% | 70.94 | 26.46 | 97.40 | 100% | 418.47 | 547.84 | 321.11 | 47% | 138.01 | 22% | 138.01 | 254.00 | 180.6% | |
| 6 | Circle-Biharwa | ANMETHGA | Residential | 2825 | 1342 | 4167 | 73% | 16.34 | 10.28 | 26.62 | 100% | 438.87 | 228.08 | 142.02 | 37% | 38.48 | 42% | 38.48 | 181.05 | 117.46% | | |
| | | | Agricultural | 50 | 1 | 51 | 0% | 0.57 | 0.00 | 0.57 | 0% | 0.08 | 0.00 | 0.08 | 0% | | | 0.08 | 0.00 | 0.00% | | |
| | | | Commercial/Industrial/IT | 18124 | 1245 | 19369 | 18% | 44.18 | 1.17 | 45.35 | 1% | 15.48 | 24.16 | 39.64 | 13% | | | 22.37 | 19.76 | 87.9% | | |
| | | | Commercial/Industrial/HT | 25 | 0 | 25 | 0% | 7.70 | 0.00 | 7.70 | 4% | 1.07 | 0.00 | 1.07 | 1% | | | 1.07 | 0.00 | 0.00% | | |
| | | | Others | 679 | 54 | 733 | 1% | 15.47 | 1.38 | 16.85 | 7% | 21.79 | 3.48 | 25.27 | 7% | | | 18.73 | 24.18 | 129.1% | | |
| Sub-total | | | | | 3691 | 1556 | 5256 | 100% | 44.28 | 11.69 | 55.97 | 100% | 460.31 | 254.66 | 142.02 | 37% | 38.48 | 42% | 38.48 | 181.05 | 117.46% | |
| 7 | Circle-Biharwa | BIBHARA | Residential | 16960 | 10443 | 27403 | 82% | 47.75 | 17.96 | 65.71 | 82% | 52.58 | 148.88 | 139.48 | 67% | 108.62 | 41% | 108.62 | 144.00 | 132.4% | | |
| | | | Agricultural | 32 | 1 | 33 | 0% | 0.07 | 0.00 | 0.07 | 0% | 0.00 | 0.00 | 0.00 | 0% | | | 0.00 | 0.00 | 0.00% | | |
| | | | Commercial/Industrial/IT | 8915 | 749 | 9664 | 16% | 25.71 | 1.24 | 26.95 | 2% | 7.96 | 0.56 | 8.52 | 3% | | | 61.28 | 54.82 | 89.4% | | |
| | | | Commercial/Industrial/HT | 12 | 0 | 12 | 0% | 3.07 | 0.00 | 3.07 | 2% | 26.08 | 5.99 | 32.07 | 13% | | | 19.18 | 18.95 | 98.8% | | |
| | | | Others | 417 | 79 | 496 | 1% | 4.81 | 0.43 | 5.24 | 0% | 5.24 | 0.00 | 5.24 | 2% | | | 5.24 | 3.15 | 108.0% | | |
| Sub-total | | | | | 26678 | 12242 | 38920 | 100% | 86.44 | 19.67 | 106.11 | 100% | 392.21 | 184.23 | 139.26 | 67% | 108.62 | 41% | 108.62 | 144.00 | 132.4% | |
| 8 | Circle-Biharwa | BUDGAM | Residential | 15177 | 7133 | 22310 | 74% | 38.30 | 78.25 | 116.55 | 100% | 364.88 | 284.23 | 184.23 | 100% | 139.73 | 38% | 139.73 | 105.00 | 100.0% | | |
| | | | Agricultural | 23 | 4 | 27 | 0% | 0.07 | 0.00 | 0.07 | 0% | 0.00 | 0.00 | 0.00 | 0% | | | 0.00 | 0.00 | 0.00% | | |
| | | | Commercial/Industrial/IT | 11418 | 1834 | 13252 | 24% | 12.01 | 0.18 | 12.19 | 0% | 22.20 | 20.34 | 42.54 | 15% | | | 14.87 | 28.52 | 194.7% | | |
| | | | Commercial/Industrial/HT | 24 | 0 | 24 | 0% | 4.69 | 0.00 | 4.69 | 0% | 7.87 | 0.00 | 7.87 | 2% | | | 7.87 | 0.00 | 0.00% | | |
| | | | Others | 385 | 81 | 466 | 1% | 7.77 | 0.52 | 8.29 | 0% | 3.15 | 0.54 | 3.69 | 2% | | | 4.69 | 6.01 | 128.0% | | |
| Sub-total | | | | | 16026 | 8028 | 24054 | 100% | 63.84 | 80.87 | 147.02 | 100% | 405.11 | 284.23 | 184.23 | 100% | 139.73 | 38% | 139.73 | 105.00 | 100.0% | |
| 9 | Circle-Ganderal | BANDHORA | Residential | 21120 | 10956 | 32076 | 85% | 66.65 | 5.56 | 72.21 | 81% | 173.72 | 81.38 | 78.13 | 114.87 | 100% | 59.30 | 34% | 59.30 | 104.00 | 173.4% | |
| | | | Agricultural | 4 | 1 | 5 | 0% | 0.08 | 0.00 | 0.08 | 0% | 0.14 | 0.00 | 0.14 | 0% | | | 0.14 | 0.00 | 0.00% | | |
| | | | Commercial/Industrial/IT | 8170 | 138 | 8308 | 1% | 7.89 | 0.35 | 8.24 | 9% | 4.50 | 1.30 | 5.80 | 7% | | | 4.50 | 0.88 | 74.5% | | |
| | | | Commercial/Industrial/HT | 5 | 0 | 5 | 0% | 2.93 | 0.00 | 2.93 | 3% | 1.73 | 0.01 | 1.73 | 2% | | | 1.73 | 5.49 | 317.9% | | |
| | | | Others | 340 | 67 | 407 | 1% | 5.58 | 0.18 | 5.76 | 6% | 7.24 | 0.34 | 7.58 | 7% | | | 2.67 | 3.31 | 72.4% | | |
| Sub-total | | | | | 22079 | 12268 | 34344 | 100% | 81.22 | 7.20 | 88.42 | 100% | 173.72 | 81.38 | 78.13 | 114.87 | 100% | 59.30 | 34% | 59.30 | 104.00 | 173.4% |
| 10 | Circle-Ganderal | DIV (SAMBAL) | Residential | 177 | 2410 | 2587 | 87% | 0.16 | 23.17 | 23.33 | 100% | 278.85 | 81.38 | 78.13 | 114.87 | 100% | 59.30 | 34% | 59.30 | 104.00 | 173.4% | |
| | | | Agricultural | 142 | 10 | 152 | 1% | 12.47 | 0.04 | 12.51 | 1% | 14.88 | 0.26 | 15.14 | 6% | | | 14.88 | 13.89 | 93.3% | | |
| | | | Commercial/Industrial/IT | 2050 | 1188 | 3238 | 22% | 10.77 | 0.36 | 11.13 | 1% | 7.64 | 0.00 | 7.64 | 6% | | | 10.26 | 107.20 | 1045.0% | | |
| | | | Commercial/Industrial/HT | 1 | 0 | 1 | 0% | 0.00 | 0.00 | 0.00 | 0% | 0.00 | 0.00 | 0.00 | 0% | | | 0.00 | 0.00 | 0.00% | | |
| | | | Others | 294 | 27 | 321 | 1% | 7.20 | 0.13 | 7.33 | 1% | 17.36 | 0.18 | 17.54 | 10% | | | 17.54 | 0.21 | 91.2% | | |
| Sub-total | | | | | 4968 | 2567 | 7554 | 100% | 35.66 | 30.60 | 66.26 | 100% | 278.85 | 81.38 | 78.13 | 114.87 | 100% | 59.30 | 34% | 59.30 | 104.00 | 173.4% |
| 11 | Circle-Ganderal | GANDERAL | Residential | 4626 | 3932 | 8558 | 85% | 9.03 | 44.13 | 53.16 | 100% | 778.45 | 46.71 | 110.90 | 107.52 | 100% | 133.34 | 40% | 133.34 | 204.00 | 152.9% | |
| | | | Agricultural | 43 | 7 | 50 | 0% | 2.04 | 0.13 | 2.17 | 0% | 15.55 | 205.16 | 220.71 | 77% | | | 15.55 | 4.08 | 26.2% | | |
| | | | Commercial/Industrial/IT | 5308 | 1877 | 7185 | 16% | 21.32 | 1.95 | 23.27 | 27% | 2.20 | 12.30 | 34.89 | 12% | | | 19.68 | 21.44 | 108.9% | | |

Details of Consumers

| (Details of Consumers) | | | | | | |
|--|--------------------------|---|-----------------------------------|------------------------|----------------------------------|--|
| Summary of Energy | | | | | | |
| Period From April 2024 - March 2025 | | | | | | |
| S.No | Type of Consumers | Category of Consumers (EHT/HT/LT/Others) | Voltage Level (In Voltage) | No of Consumers | Total Consumption (In MU) | Remarks (Source of data) |
| 1 | Residential | LT | LT | 1010893 | 4698.11 | |
| 2 | Agricultural | LT | LT | 1504 | 6.34 | |
| 3 | Agricultural | HT | 11KV | 989 | 65.48 | |
| 4 | Agricultural | EHT | 33KV | 26 | 45.34 | |
| 5 | Commercial/Industrial-LT | LT | LT | 186218 | 327.15 | |
| 6 | Commercial/Industrial-LT | HT | 11KV | 14673 | 397.80 | |
| 7 | Commercial/Industrial-LT | EHT | 33KV | 124 | 5.64 | |
| 8 | Commercial/Industrial-HT | HT | 11KV | 421 | 165.60 | |
| 9 | Commercial/Industrial-HT | EHT | 33KV | 76 | 267.86 | |
| 10 | Others | LT | LT | 4342 | 118.17 | |
| 11 | Others | HT | 11KV | 5209 | 314.44 | |
| 12 | Others | EHT | 33KV | 167 | 169.29 | State/Central Govt Dept, Street Lighting, LT PHE, HT PHE, Railway Traction, EV |
| | Total | | | 1224642 | 6581.22 | |

Wij

DT level Information

A. Details of Distribution Transformer (DT) Level information

a. Division-wise status of DT level metering (please add more rows as per requirement)

(Please fill the data for each division during reporting period)

| Zone name | Circle name | Division name | Feeder name | Total no of DT on Feeder | No. of unmetered DTs | No of metered DTs | | | No. of DTs with functional meters | |
|---|-------------|---------------|-------------|--------------------------|----------------------|----------------------------|----------------------------|--|--|--|
| | | | | | | AMR metered (communicable) | AMI metered (communicable) | Non-AMR / AMI metered (non-communicable) | Communicating (Total no. out of 7 and 8) | Non-Communicating (Total no. out of 7,8 and 9) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 100% DT Metering proposed under RDSS | | | | | | | | | | |

b. Details of DT-wise losses (Please add more rows as per requirement)

| Sub-station ID | Feeder ID | Feeder Name | DT Id no. | DT Capacity (kVA) | Predominant consumer type of DT (Domestic/Industrial/Agriculture/Mixed) | Type of metering (Unmetered/AMI/AMR /Others) | Status of meter (Functional/non-functional) | % of data received automatically (If AMI/AMR) | No. of connected consumers | Input Energy (MU) | Billed Energy (MU) | Loss of Energy (MU) | % Loss |
|---|-----------|-------------|-----------|-------------------|---|--|---|---|----------------------------|-------------------|--------------------|---------------------|-------------|
| | | 1 | 2 | | | | | | 3 | 4 | 5 | 6=4-5 | 7=(6/4)*100 |
| 100% DT Metering proposed under RDSS | | | | | | | | | | | | | |

Note:-DT wise losses is not in account. 100% DT Metering proposed under RDSS

Subsidy details

B. Details of Consumer Category-wise Subsidy Billed/Received/Due for period: from April 2024 to March 2025.

Annexure -1: Proforma for Quarterly Consumer Category-wise Subsidy Billed/Received/Due for period APRIL2024 to MAR2025

| Consumer Category (Separate for each subsidized consumer category) | Consumer Count | | | Billed Energy | | | Subsidized Billed Energy | | | Applicable rate of Subsidy as notified by State Govt. | | Subsidy Due from State Govt. | | | Subsidy Actually Billed / claimed from State Govt. (As against col.13) | Subsidy Received from State Govt. (As against col.13) | Balance Subsidy yet to be Received from State Govt. |
|--|----------------|---------------|----------------|-------------------|-------------------|-------------------|--------------------------|----------------------------|-------------------|---|---------------------|------------------------------|-------------------|----------------|--|---|---|
| | Metered | Un-metered* | Total | Metered | Un-metered* | Total | Metered (out of col.2) | Un-metered* (out of col.3) | Total | Metered Energy** | Un-metered Energy** | Metered Energy | Un-metered Energy | Total | | | |
| | (in kWh) | | | (in kWh) | | | (in kWh) | | | (in Rs./kWh) | | (in Rs. Cr.) | | | | | |
| 1 | 2 | 3 | 4=2+3 | 5 | 6 | 7=5+6 | 8 | 9 | 10=8*9 | 11=6*9 | 12=10+11 | 13 | 14 | 15=13-14 | | | |
| Residential | 368808 | 642085 | 1010893 | 1561137101 | 3136973855 | 4698110556 | 1561137101 | 3136973855 | 4698110556 | 2.99 | 2.99 | 466.78 | 937.96 | 1494.74 | | | |
| Agricultural | 2302 | 217 | 2519 | 92136110 | 25044527 | 117160637 | 92136110 | 25044527 | 117160637 | 2.97 | 2.97 | 27.36 | 7.44 | 34.80 | | | |
| Commercial/Industrial-LT (commercial) | 167677 | 22486 | 190163 | 438037564 | 187002850 | 625060414 | 438037564 | 187002850 | 625060414 | 2.63 | 2.63 | 115.21 | 49.18 | 164.39 | | | |
| Commercial/Industrial-LT (Industrial) | 10170 | 682 | 10852 | 104927696 | 599344 | 105527040 | 104927696 | 599344 | 105527040 | 3.50 | 3.50 | 36.72 | 0.21 | 36.93 | | | |
| Commercial/Industrial-HT (HT Industrial) | 329 | 0 | 329 | 348673081 | 0 | 348673081 | 348673081 | 0 | 348673081 | 3.52 | 3.52 | 122.73 | 0.00 | 122.73 | | | |
| Commercial/Industrial-HT (Power Intensive) | 2 | 0 | 2 | 2210446 | 0 | 2210446 | 2210446 | 0 | 2210446 | 4.17 | 4.17 | 0.92 | 0.00 | 0.92 | | | |
| Commercial/Industrial-HT (Bulk Supply) | 166 | 0 | 166 | 82572649 | 0 | 82572649 | 82572649 | 0 | 82572649 | 3.51 | 3.51 | 29.00 | 0.00 | 29.00 | | | |
| Others (State/Central) | 7583 | 956 | 8539 | 417251010 | 16031411 | 433282421 | 417251010 | 16031411 | 433282421 | 1.03 | 1.03 | 42.98 | 1.65 | 44.63 | | | |
| Others (Street Lights) | 191 | 96 | 287 | 17125492 | 5860992 | 22986484 | 17125492 | 5860992 | 22986484 | 0.37 | 0.37 | 0.63 | 0.22 | 0.85 | | | |
| Others (LT PHE) | 447 | 65 | 512 | 41222786 | 6039160 | 47261946 | 41222786 | 6039160 | 47261946 | 0.37 | 0.37 | 1.53 | 0.22 | 1.75 | | | |
| Others (HT PHE) | 348 | 27 | 375 | 78849090 | 3951136 | 82800226 | 78849090 | 3951136 | 82800226 | 1.09 | 1.09 | 8.60 | 0.43 | 9.03 | | | |
| Others (EV) | 1 | 0 | 1 | 8516580 | 0 | 8516580 | 8516580 | 0 | 8516580 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| Others (Traction) | 4 | 0 | 4 | 7054938 | 0 | 7054938 | 7054938 | 0 | 7054938 | 3.50 | 3.50 | 2.47 | 0.00 | 2.47 | | | |
| Total | 558028 | 666614 | 1224642 | 3199714543 | 3381503374 | 6581217917 | 3199714543 | 3381503374 | 6581217917 | | | 854.93 | 197.31 | 1052.24 | | | |

Note:

- The Subsidy rate for sub categories of commercial/Industrial-LT , Commercial/Industrial-HT and Others are different. So mentioned separately in above proforma
 - Subsidy rates are as per New Tariff order in vogue.
- The Account for Subsidy has been evaluated from Approved Tariff for JPOCL and KPDC FY2023-24 (Page No 8 to 13) and Full Cost Tariff (Page No 162 to Page No 167 defined in the Tariff Order 2023-24

RDSS details

1. REVAMPED DISTRIBUTION SECTOR SCHEME (RDSS)

1. Background

| S. No | Items/Particulars | Status |
|-------|---------------------------------|--|
| 1 | Introduction/ Background | <p>Ministry of Power, Government of India (GoI) has launched Revamped Distribution Sector Scheme (RDSS) - a Reforms-based and Results-linked Scheme for a period of five years from FY 2021-22 to FY 2025-26 with the objective to improve the quality, reliability and affordability of power supply to consumers through a financially sustainable and operationally efficient distribution sector.</p> <p>The scheme aims to reduce the AT&C losses to pan-India levels of 12-15% and ACS-ARR gap to zero by 2024-25 by improving the operational efficiencies and financial sustainability of all DISCOMs/ Power Departments excluding Private Sector DISCOMs.</p> <p>The scheme would be optional to DISCOMs and will be implemented in urban and rural areas of all States/UTs except private DISCOMs.</p> |
| 2 | Date of Launch | The operational guidelines of RDSS scheme have been issued by Ministry of Power (MoP), Government of India on 27th July, 2021. |
| 3 | Purpose/ Objective | <p>i. Reduction in AT&C Losses and</p> <p>ii. Reduce ACS-ARR gap targets set by the DISCOMs (JPDCL and KPDCL)</p> |
| 4 | Funding pattern | 90(GBS) : 10 (UT Share) |
| 6 | Components of the scheme | Loss reduction Works approved by GoI under Revamped Reforms-Based and Results-Linked Distribution Sector Scheme (RDSS) viz AB cabling, HVDS, Re-conductoring of 11kV line and Bifurcation of 11kV Feeders and Smart Metering works. |

| 7 | Coverage | The scheme aims to reduce the AT&C losses and ACS-ARR gap to zero by 2024-25 by improving the operational efficiencies and financial sustainability of all DISCOMs/ Power Departments excluding Private Sector DISCOMs. | | | | | | | | | | | | | | |
|----------------|-----------------------------|---|------|----------------|-------|-----------|----------|-----------|----------------|-----------|----------------|---------|-----|-----------|-------------|-----------------|
| 8 | Target | <table border="1"> <thead> <tr> <th>Item</th> <th>Revised Target</th> </tr> </thead> <tbody> <tr> <td>Poles</td> <td>2.92 lakh</td> </tr> <tr> <td>AB Cable</td> <td>13169 KMs</td> </tr> <tr> <td>ACSR Conductor</td> <td>3697 CKMs</td> </tr> <tr> <td>11 KV AB Cable</td> <td>350 KMS</td> </tr> <tr> <td>DTR</td> <td>12213 Nos</td> </tr> <tr> <td>AT&C Losses</td> <td>From 69% to 34%</td> </tr> </tbody> </table> | Item | Revised Target | Poles | 2.92 lakh | AB Cable | 13169 KMs | ACSR Conductor | 3697 CKMs | 11 KV AB Cable | 350 KMS | DTR | 12213 Nos | AT&C Losses | From 69% to 34% |
| Item | Revised Target | | | | | | | | | | | | | | | |
| Poles | 2.92 lakh | | | | | | | | | | | | | | | |
| AB Cable | 13169 KMs | | | | | | | | | | | | | | | |
| ACSR Conductor | 3697 CKMs | | | | | | | | | | | | | | | |
| 11 KV AB Cable | 350 KMS | | | | | | | | | | | | | | | |
| DTR | 12213 Nos | | | | | | | | | | | | | | | |
| AT&C Losses | From 69% to 34% | | | | | | | | | | | | | | | |
| 9 | Status | On-Going | | | | | | | | | | | | | | |
| 10 | Closure/ Sunset date | 31 st March, 2028 | | | | | | | | | | | | | | |

2. Financial Progress:

(Loss Reduction and IT/OT including Smart Metering Works and PMA Charges)

| S. No | Corporation | Sanctioned Cost (₹ in Cr) | Revised Sanctioned Cost (₹ in Cr) | Cumulative Release (₹ in Cr) | | | Cumulative Expenditure as on 31.08.2025 (₹ in Cr) | | | %age expenditure |
|-------|-------------|------------------------------|--------------------------------------|---------------------------------|----------|--------|---|----------|--------|------------------|
| | | | | Central Share | UT Share | Total | Central Share | UT Share | Total | |
| | | | | | | | | | | |
| 1 | KPDCL | 2864.33 | 2882.60 | 884.98 | 66.27 | 951.25 | 884.98 | 60.31 | 945.29 | 99.37% |

3. Physical Progress:

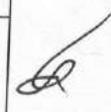
| Item | Unit | KPDCL | | | |
|----------------|------|---------|---------------------------|----------------------------|------|
| | | Target | Achievement ending Aug 25 | Achievement ending Sept 25 | %age |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Poles | Nos | 292473 | 160455 | 164404 | 56% |
| AB Cable | Kms | 13168.7 | 5663 | 5889 | 45% |
| ACSR Conductor | CKms | 3696.83 | 965 | 1039 | 28% |
| 11KV AB Cable | Kms | 349.79 | 45 | 49 | 14% |
| DTR | Nos | 12213 | 3884 | 4087 | 33% |

5. Progress of Smart metering works under RDSS:

Target under RDSS : 7.27 lakh
 Achievements : 1.42 lakh installed (as on 13-10-2025)
 Completion date : September, 2026

Consolidated YEAR WISE Achievements (Excl RDSS)

| Item | Unit | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | TOTAL | MVA |
|--|--------|---------|---------|---------|---------|---------|---------|---------|-------|
| 33/11 KV Receiving-Station New | No/MVA | 0 | 6 | 14 | 30 | 11.00 | 9.00 | 70 | 612.3 |
| 33/11 KV Receiving Station Augmentations | No/MVA | 36 | 12 | 22 | 13 | 14.00 | 14.00 | 111 | 616.3 |
| 11/0.433 kV Distribution Transformer | No/MVA | 2072 | 1588 | 2097 | 1030 | 1273.00 | 605 | 8665 | 760.8 |
| (33 kV Line New | ckm | 0 | 16 | 115 | 92.663 | 26.54 | | 250.383 | |
| 11 kV Line New | ckm | 243.892 | 140 | 302 | 220.788 | 202.46 | | 1109.02 | |
| 11kV Ab Cable | ckm | 9.23 | 7 | 33 | 33.878 | 7.50 | | 90.72 | |
| 33 kV Augmentation | ckm | 0 | 8 | 7 | 53.01 | 20.74 | | 89.22 | |
| 11 kV Augmentation | ckm | 49.24 | 46 | 98 | 60.83 | 42.66 | | 296.7 | |
| Low Tension Line (Bare) | ckm | 244.6 | 243 | 479 | 347.35 | 429.71 | | 1744.46 | |
| LT Ariel Bunched Cables (ABC) | kms | 262.757 | 531 | 612 | 555.346 | 633.04 | | 2594.03 | |



 Chief Engineer