PUNJAB STATE POWER CORPORATION LIMITED (PSPCL)

REGISTERED OFFICE ADDRESS
THE MALL, PATIALA, DISTRICT PATIALA, PUNJAB – 147001, INDIA

"Report on Monitoring and Verification (M&V) Audit under PAT Cycle-VII"

Prepared By :
NAMDHARI ECO ENERGIES PVT. LTD.

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AY: 2024-25

Monitoring and Verification (M&V) Report for Punjab State Power Corporation Limited Punjab prepared under the provisions of the Bureau of Energy Efficiency

(Manner and Intervals for Conduct of M & V Audit in Electricity Distribution Companies) **Regulations, 2010 as applicable for Perform, Achieve and Trade (PAT) Cycle – VII**

PSPCL

Punjab State Power Corporation Ltd.

M&V Audit Report For PSPCL: FY 2024-25 Under PAT- Cycle - VII

(PSPCL-DIS0014PB) PSPCL,

The Mall, Patiala-147001 Punjab

Prepared for:

BUREAU OF ENERGY EFFICIENCY

Government of India, Ministry of Power

Prepared By:

NAMDHARI ECO ENERGIES PVT LTD

ENERGY FOR BETTER FUTURE

BEE ACCREDITED ENERGY AUDIT FIRM & ESCO

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Disclaimer

a) This Monitoring and Verification (M&V) Audit Report for Punjab State Power Corporation Limited **(PSPCL)** has been prepared by Namdhari Eco Energies Pvt. Ltd., in accordance with the Bureau of Energy Efficiency (Manner and Interval of Time for Conduct of M&V Audit in Electricity Distribution Companies) Regulations under **PAT Cycle-VII.** The contents of this report, including any associated data, analysis, and findings, are confidential and intended solely for internal use by PSPCL and relevant authorities.

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c) This report has been prepared exclusively for **PSPCL** for the purpose of compliance under the provisions of the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Monitoring & Verification Audit in Electricity Distribution Companies) Regulations, 2010. It is not intended for general circulation, publication, or use by any third party.

d) The findings and conclusions in this report are based on data, records, and information provided by **PSPCL** during the audit. While every effort has been made to ensure accuracy, **Namdhari Eco Energies Pvt. Ltd.** has relied on the data provided by the client without independent verification of every input.

e) The preparation of this report has involved detailed consultations with PSPCL personnel, review of project-specific records, and reference to publicly available data sources. While the information is believed to be reliable, **Namdhari Eco Energies Pvt. Ltd.** does not guarantee the accuracy or completeness of such information.

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Audited By:

Namdhari Eco Energies Pvt. Ltd.
Accredited Energy Auditor – BEE

Acknowledgement

We would like to express our sincere gratitude to **Punjab State Power Corporation Limited (PSPCL)** for granting us the opportunity to contribute to their ongoing mission of promoting **Energy Conservation** and operational excellence in line with the Government of India's policies.

This Monitoring & Verification (M&V) Audit has been undertaken in compliance with the **Gazette Notification of the Ministry of Power, Government of India,** which mandates that:

"Each Designated Consumer shall provide an arrangement for monitoring and verification for Distribution Loss verification by Accredited Energy Auditors. The Designated Consumer, in consultation with the Empanelled Accredited Energy Auditor (EmAEA), shall establish a transparent, independent and credible monitoring and verification arrangement for determining Transmission & Distribution Losses, in accordance with the Bureau of Energy Efficiency (Manner and Interval of Time for Conduct of Energy Audit) Regulations, 2010, for compliance with energy consumption norms and standards (percentage of Transmission & Distribution losses for the DISCOM sector)."

We are particularly thankful to the senior management, officers, and employees of **Punjab State Power Corporation Limited, Punjab**, Patiala for their excellent cooperation and proactive support extended to our team during the data collection, verification, and field assessment phases of this audit. Their openness, enthusiasm, and active engagement have significantly contributed to the smooth and successful execution of this assignment.

PUNJAB STATE POWER CORPORATION LIMITED, Team
1. Er. Rakesh Chand Kokria Chief Engineer/Energy Audit & Enforcement
2. Er. Saleem Mohammad Dy CE/DSM
3. Er. Harpreet Raj Singh Sandhu ASE/DSM
4. Er. Ravi Verma ASE/Distribution Projects(D-1) cum Energy Auditor EA-7969
5. Er. Bhupinder Singh AEE/DSM

We also wish to record our deep appreciation to all technical staff whose willingness to collaborate in this exercise reflects their strong commitment to improving system efficiencies and exploring energy-saving opportunities across the network.

Bali Singh
Accredited Energy Auditor (AEA-206)
Bureau of Energy Efficiency
Ministry of Power, Govt. of India

Namdhari Eco Energies Pvt. Ltd.

Audit Team

The M&V Audit was expertly conducted by a team of Energy professionals from Namdhari Eco Energies Pvt Ltd. The contract for this project was awarded by **Punjab State Power Corporation Limited** under LOA No: 001/DSM dated 07.04.2025. Each team member played a pivotal role in ensuring the project's successful execution. The audit commenced on 27th May 2025 and was completed on 28th May 2025. The following individuals represented Namdhari Eco Energies Pvt Ltd. in this project:

S. No.	Name	Designation
1	Mr. Bali Singh	Accredited Energy Auditor (AEA-206)
2	Mr. Neeraj Gaur	Certified Energy Auditor & Sector Expert-Discom
3	Mr. Murtaza Ahmad Ganie	Energy Consultant

Each team member leveraged their expertise and skills to conduct a thorough and precise energy audit, which was critical to the verification study's success.

We extend our heartfelt thanks to the entire team for their unwavering dedication, professionalism, and commitment to delivering high-quality results. Their collaborative efforts with **Punjab State Power Corporation Limited** were pivotal in meeting the project objectives and achieving the desired outcomes. Their contributions were instrumental in the successful completion of the Monitoring and Verification Audit.

Bali Singh
Accredited Energy Auditor (AEA-206)
Bureau of Energy Efficiency
Ministry of Power, Govt. of India

Namdhari Eco Energies Pvt Ltd
(Mr. Bali Singh)
Accredited Energy Auditor

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List of Abbreviations

Sl. NO.	Abbreviation	Description
1	BY	Baseline year
2	AY	Assessment year
3	MU	Million Units
4	ESCerts	Energy saving certificates
5	PAT	Perform, Achieve and Trade
6	PSPCL	Punjab State Power Corporation Limited
7	BEE	Bureau of Energy Efficiency
8	HT	High Tension
9	LT	Low Tension
10	DC	Designated Consumers
11	X'mers	Transformers
12	**SEC**	**Specific energy consumption**
13	M&V	Monitoring and Verification
14	**DT**	**Distribution Transformers**
15	RPO	Renewable Purchase Obligations
16	**T&D**	**Transmission & Distribution**
17	**GATP**	Guru Amardas Thermal Power Plant
18	**BBMB**:	Bhakra Beas Management Board
19	**RSD**	Ranjit Sagar Dam

Executive Summary

Summary Of Energy Input & Losses of Baseline Year & Assessment Year

The data of 2018-19 and 2024-25 have been considered for comparison between baseline year and assessment year. In baseline years PSPCL achieved 12.94% Distribution losses whereas during assessment year 2024-25 PSPCL has reduced to 12.31% against target of 12.40%. PSPCL, achieved 0.09% against target set under PAT –VII.

Table 1: Distribution loss details for BY and AY

Punjab State Power Corporation Limited				
	Technical Details	**Unit**	**BY - 2018-19**	**AY - 2024-25**
(i)	Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	54037.64	74639.7132
(ii)	Total Energy billed (is the Net energy billed, adjusted for energy traded))	Million kwh	47043.42	65449.41
(iii)	Distribution loss Details	Million kwh	6994.213	9190.30
(iv)	Distribution loss Details	%	12.94	12.31

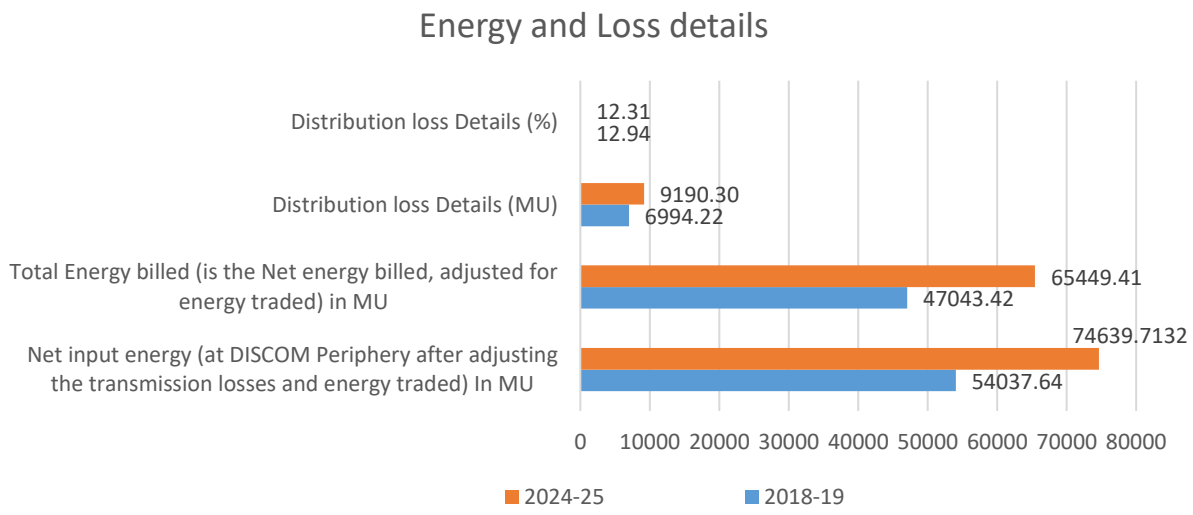


Figure 1:Energy Details for (BY vs AY)

1.1 Assessment of ESCerts

ESCerts Calculation Summary for PSPCL

As per the Monitoring & Verification (M&V) Audit conducted under **PAT Cycle-VII**, the following performance parameters were observed for **Punjab State Power Corporation Limited (PSPCL)**:

Table 2:PSPCL ESCerts Calculation

PSPCL ESCertsCalculation			
S No.	Particulars	Unit	Value
i.	Net Input Energy during baseline year 2018-19 (MU)	MU	54037.64
ii.	Baseline T&D losses (%)	%	12.94%
iii.	Target T&D losses (%) for assessment year FY 2024-25 as per revised gazette	%	12.40%
iv.	T&D losses (%) achieved in assessment year FY 2024-25	%	12.31%
v.	Target achieved	%	0.09%
vi	ESCerts	Nos.	4,182.51

Energy Saving Certificates (ESCerts) calculations:

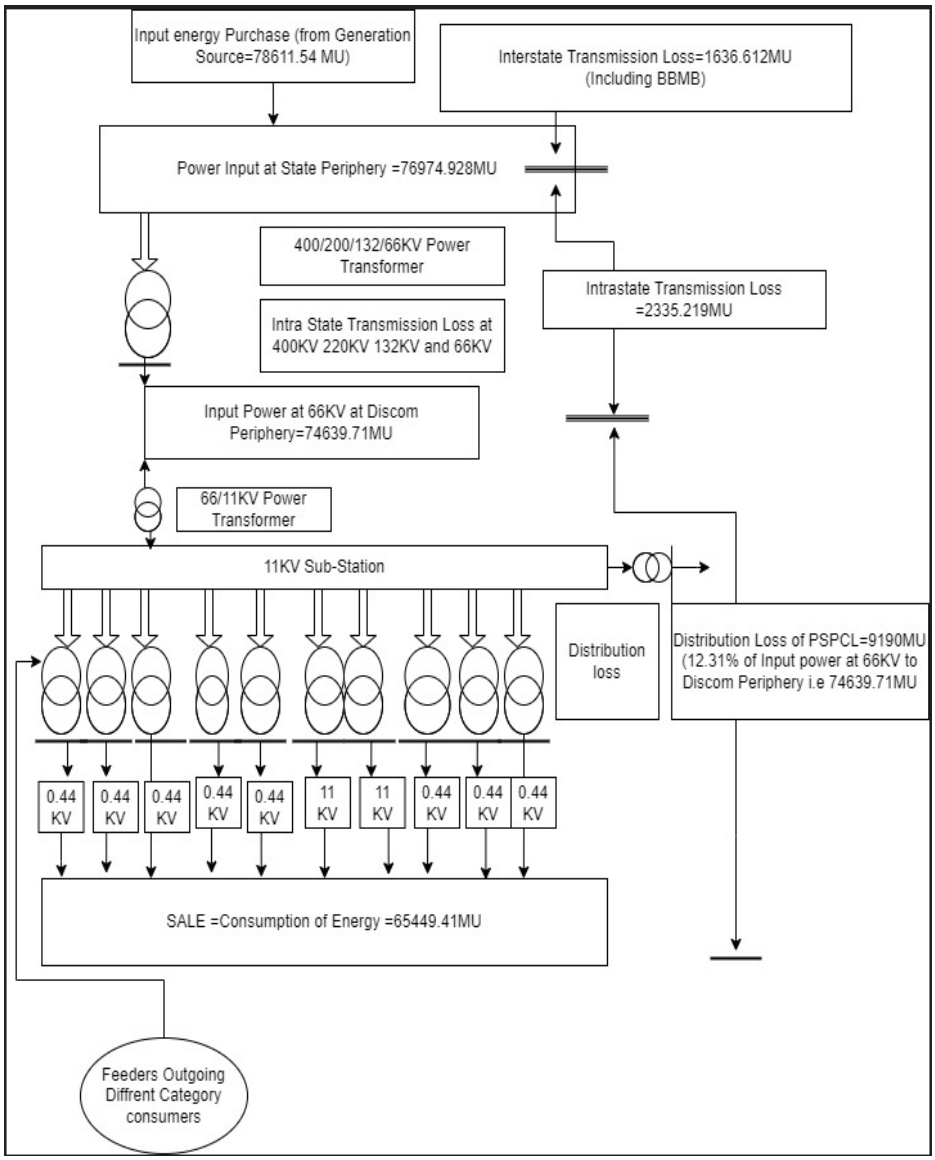
- Baseline (FY: 2018-19) T&D Losses: 12.94 %
- Baseline Net Energy Input: 54,037.64 MU
- Notified Target T&D Losses (Assessment Year): 12.40 %
- Achieved T&D Losses (Assessment Year-2024-25): 12.31 %

Based on the above data, the calculation of **eligible ESCerts** is as follows

- (12.40-12.31) * 54037 * 860/1000 = **4183 (rounded off)**

Conclusion:
Based on the results of the M&V Audit as per FY 2024-25, **PSPCL** is eligible for issuance of **4183 ESCerts** under **PAT Cycle-VII** for the verified performance period.

1.2 SLD of PSPCL for AY 2024-25



Single Line Concept (SLC) of PSPCL

The SLC shows energy flow from purchase (78,611.54 MU) through interstate and intra-state losses, resulting in 74,639.71 MU input at the DISCOM periphery. Power is stepped down via 66/11kV transformers to 11kV substations, where distribution losses of 9,190 MU (12.31%) occur. The net energy sold to consumers is 65,449.41 MU, delivered through 11kV and 0.44kV feeders to various categories of consumers.

Critical comments by EmAEA

During the Monitoring & Verification process, it was observed that **PSPCL** has undertaken several initiatives and systematic measures aimed at reducing **distribution losses** over the assessment period. As a result, the T&D losses have shown a consistent downward trend over the years.

For **PAT Cycle VII**, the revised target for T&D losses for the assessment year **2024-25** was notified as **12.40%**, while PSPCL achieved an actual T&D loss of **12.31%**, exceeding the target by **0.09%**. This performance reflects PSPCL's effective implementation of various network improvement and loss reduction programs.

Based on this achievement, PSPCL has been eligible for the issuance of **4,183 ESCerts** under PAT Cycle VII. The verified calculation shows that PSPCL met its notified target under the PAT Scheme, demonstrating sustained efforts toward enhancing energy efficiency in its distribution operations.

Critical Comments and Observations by EmAEA

During the Monitoring & Verification process for **PSPCL PAT Cycle VII**, the following key observations and critical comments were made based on field verification, data review, and discussions with PSPCL officials:

1. As per SOP issued by Government of India and Ministry of Power dated 03.07.2023, Point no. 2.2 (vi) that "For mixed feeders till such time the feeders are segregated, total energy shall be measured at feeder level and energy consumed by non-agriculture consumers shall be deducted to arrive at energy consumption of agriculture consumers. The consumption shall be adjusted at normative T&D losses as determined by SERC/JERC for determination of subsidy.
2. Previously the Agriculture consumption for Mixed Load feeders was worked out by taking 30% to AP and the rest 70% booked to non-AP consumption, out of total consumption on Mixed load feeder.
3. AP subsidy bill for FY 2024-25 is being prepared as per new SOP issued by GOI and MOP, the Total Agriculture Energy Pumped for FY 2024-25 is 16546.93 MUs and if the same is calculated as per the old methodology the Total Agriculture Energy Pumped for FY 2024-25 is 16077.58 Mus.
4. All input energy data for FY 2024–25 was thoroughly downloaded and cross-verified through the PSPCL online portal. The figures were found to be accurate and consistent with the data reported in the Pro-forma.
5. A site visit to PSPCL's purchase department confirmed that energy procurement from various sources was correctly recorded. Monthly bills were examined, and the data was well-maintained and consistent with the internal energy schedule.

6. Since 2021, PSPCL has revised its billing methodology for unmetered AP Kandi mixed feeders. The segregation of exclusive Agricultural Pumping (AP) feeders from mixed feeders has led to more accurate accounting of input energy and a corresponding improvement in reported distribution losses from FY 2021-22 to FY 2024-25.

9. All energy schedules were fully verified. Related power purchase bills were collected, organized, and maintained with monthly breakups.

10. Billed energy data was cross-checked against PSPCL's online portal, with feeder-wise details confirming accuracy and alignment with submitted reports.

Introduction of Empanelled Accredited Energy Auditing Firm [EmAEA]

About Namdhari Eco Energies Pvt. Ltd

Eco Energies specializes in addressing the complex energy and efficiency challenges faced by today's demanding environments. We assist companies, Institutions, Residential Societies, etc. in enhancing their operational efficiency by modernizing processes, introducing automation, and optimizing systems and devices. With over 250 satisfied clients across various industry sectors in India, our services in energy auditing and consulting are tailored to meet diverse needs.

Founded in 2011, Eco Energies was established with a vision to provide industry-leading solutions in energy conservation and management, adhering to international standards. Our team comprises experienced management and technical professionals with extensive expertise in consultancy and training across manufacturing and service industries. Notably, some of our team members are lead auditors accredited by the Bureau of Energy Efficiency (BEE) of India and the Association of Energy Engineers (AEE) in the U.S.

We maintain strategic partnerships and affiliations with numerous national and international energy agencies and certification bodies. Among our accolades, the Energy Log – Energy Monitoring System received the 2nd Prize for the Most Innovative Energy Saving Project of the Year in 2021, awarded by the Power Minister of Haryana, along with a cash prize of Rs 50,000 for this groundbreaking initiative.

- Recognized as a Grade 2 Energy Service Company by the Bureau of Energy Efficiency (BEE).
- Certified as an accredited energy audit firm by the Bureau of Energy Efficiency (BEE).
- Officially impanelled with the Directorate of Energy, Himachal Pradesh, for energy-related projects.
- Team members hold international certifications from the Association of Energy Engineers (AEE), USA.
- Team members are accredited by the Bureau of Energy Efficiency (BEE).
- Impanelled with Power Grid Corporation of India Limited for energy efficiency projects.
- Listed with the Petroleum Conservation Research Association (PCRA) for energy efficiency projects.
- Registered with the Gujarat Energy Development Agency (GEDA) for energy-related initiatives.
- Officially empanelled with the Uttarakhand Energy Development Agency (UEDA) for energy projects.
- **Our team member, Bali Singh, has been honoured as the Best Energy Engineer of the World for 2021 by the Association of Energy Engineers (AEE), USA.**

NAMDHARI ECO ENERGIES PVT LTD

ENERGY FOR BETTER FUTURE

BEE ACCREDITED ENERGY AUDIT FIRM & ESCO

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BEE Accredited Energy Auditor (AEA-206)
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Mob: +91 9711591550 Email: bali@ecoenergies.co.in

1.3 Registration number

EmAEA-057

Introduction of Designated Consumer PSPCL

Punjab State Power Corporation Limited (PSPCL) is the state-owned utility responsible for electricity generation and distribution across Punjab. Established in **2010** following the unbundling of Punjab State Electricity Board (PSEB), PSPCL is committed to delivering reliable and efficient power to a wide consumer base and contributing to the state's socio-economic development.

PSPCL is registered as a **Designated Consumer (DC)** under the **Perform, Achieve and Trade (PAT) Scheme** administered by the **Bureau of Energy Efficiency (BEE)**, Ministry of Power, Government of India. It operates under **Registration No.: DIS0014PB**.

As part of PAT Cycle VII (2018-19 to 2024-25), PSPCL is actively working towards achieving targeted reductions in **AT&C losses** and improving overall energy efficiency through various initiatives—such as infrastructure upgrades, advanced metering deployment, grid automation, and loss reduction programs.

PSPCL operates an extensive distribution network, managed centrally from its corporate headquarters at **Patiala**, which serves as a key administrative hub.

General & Operational Details:

Parameter	Description
Name of the Unit	Punjab State Power Corporation Limited (PSPCL)
Year of Establishment	2010
BEE Registration No.	DIS0014PB
Sector / Sub-Sector	Electricity Distribution Company (DISCOM)
Number of Circles	21
Number of Divisions	104
Number of Sub-Divisions	508
Number of Feeders	13,658
Number of Distribution Transformers (DTs)	12,50,538 (including 1,450 + 3 units at 66 KV, 33 kV)
Number of Consumers	1,10,08,964
Chief Executive	Sh. Ajoy Kumar Sinha, IAS (CMD, PSPCL)
CMD Office Contact	Tel: 0175-2212005, 0175-2213199
Registered Office Address	PSPCL Head office , The Mall - Patiala, Punjab - 147001
Office Tel. / Fax	0175-2215774

Parameter	Description
Energy Auditor	Er. Ravi Verma, ASE/distribution Projects (D-1) cum (Energy Auditor)
Energy Auditor Reg. No.	EA-7969
Energy Auditor Mobile	+91 96461 18860

PSPCL remains fully committed to improving operational efficiency, optimizing energy usage, and achieving its PAT Cycle VII targets, in alignment with the national mission for enhanced energy efficiency.

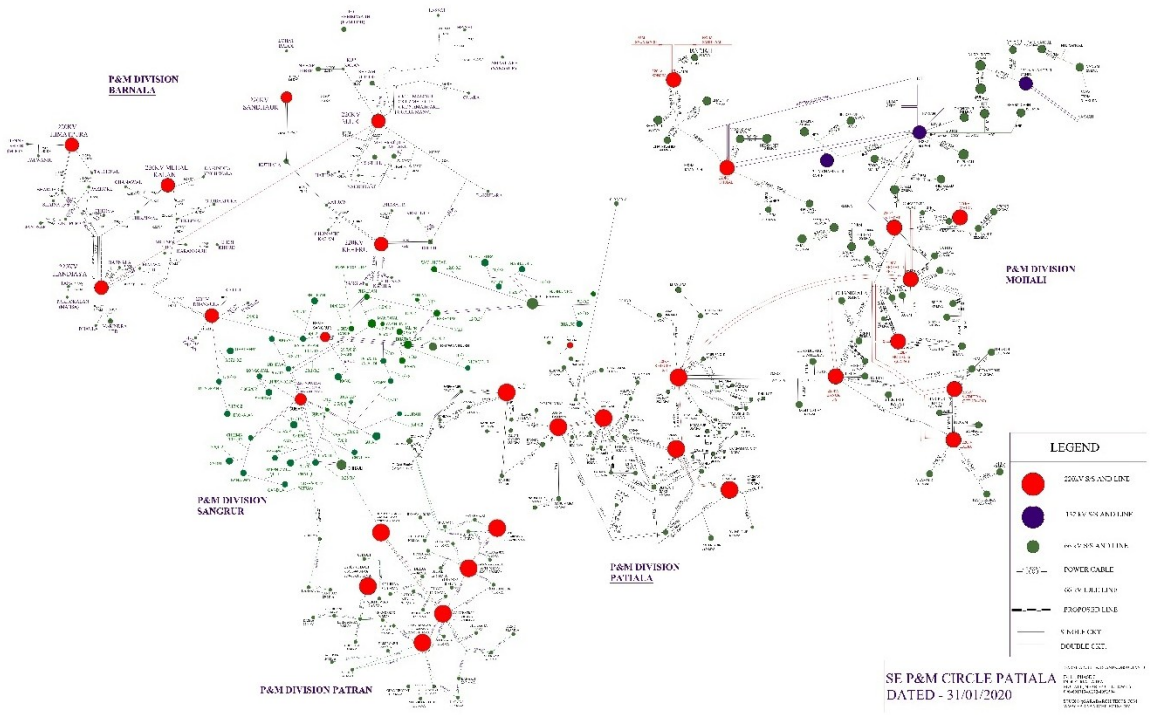


Figure 2:PSPCL-66 Transmission Power Network Under P&M Circle Patiala

1.4 Mission of PSPCL

The mission of Punjab State Power Corporation Limited (PSPCL) is to provide reliable, affordable, and quality electricity to all categories of consumers in Punjab, while ensuring operational efficiency, environmental sustainability, and customer satisfaction. PSPCL is committed to modernizing its infrastructure, minimizing transmission and distribution losses, and promoting the use of renewable energy in line with national energy policies.

The corporation strives to maintain financial viability, ensure safety and efficiency across its operations, and contribute to the socio-economic development of the state. Through continual adoption of innovative technologies and best practices, PSPCL aims to support the Government of India's mission of achieving "Power for All" and sustainable growth.

- Providing power supply to the consumers 24 Hours x 365 days Adopting best business practices
- Implementing modern technology in business
- Reducing distribution losses
- Providing reliable quality power to the consumers at affordable rates
- Providing consumer satisfaction through service excellence

Figure 3:PSPCL Sub Station Patiala

1.5 Period of verification

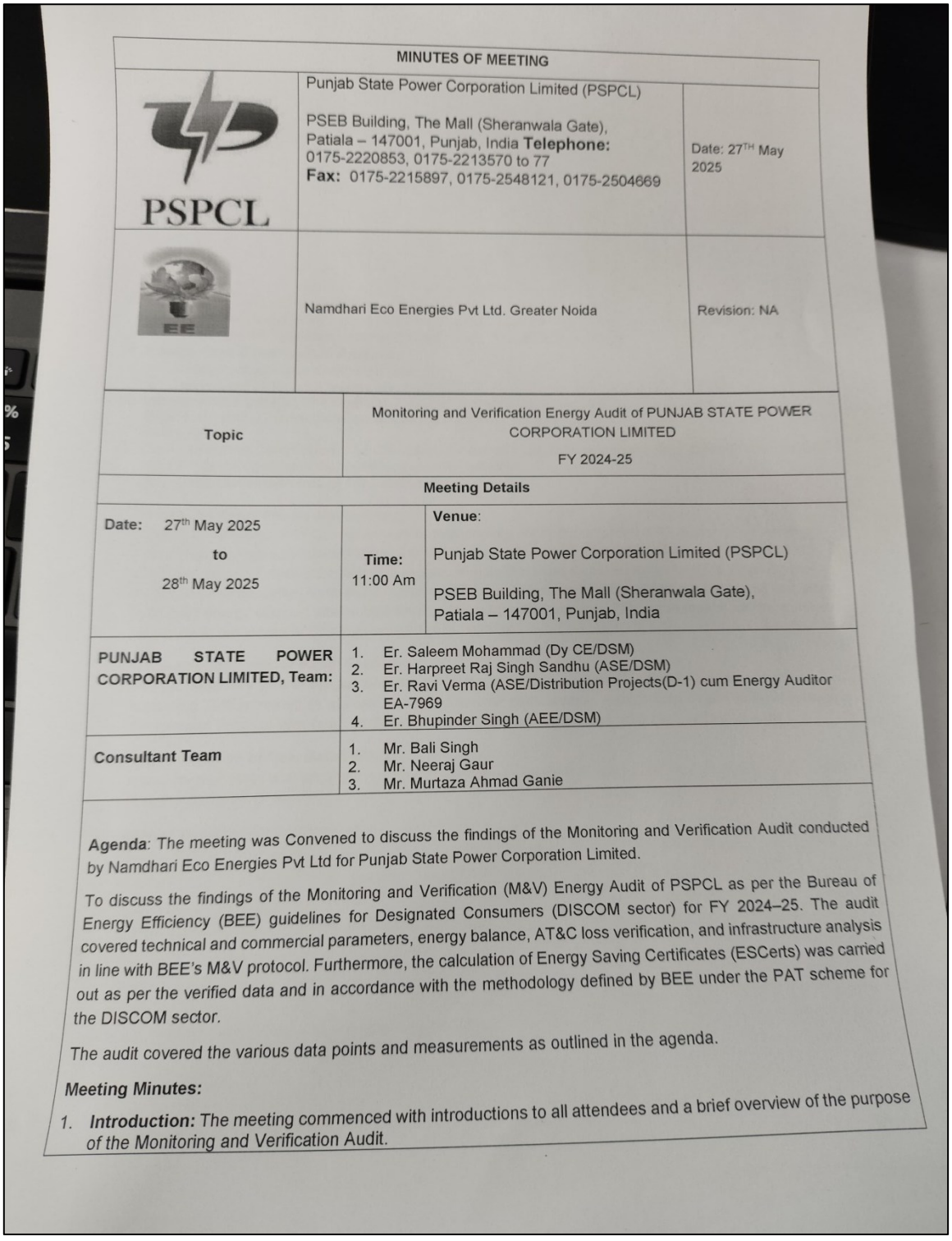
27th to 28th May 2025

1.6 Assignments to the team

Table 3:Activity chart

Date & Time	Activity	Description of Work
	Document Collection & Review Planning	PSPCL to provide key documents to Namdhari Eco Energies for initial review: • Instruction Sheet for filling Form-1 • General Information Sheet • Form-1 (auto-generated post data entry) • Form – Input Energy • Form – SJ (Consumer & Billing Data)
	Study of Submitted Data & Site Visit Preparation	At Namdhari Eco Energies Greater Noida office, review of submitted data by the team (Accredited Energy Auditor, Certified Energy Auditor, Sector Expert). PSPCL to be informed of any additional documents required for on-site verification and review. Internal planning for site visit and verification strategy.
27-May-25 (11:30 AM – 01:30 PM)	Opening Meeting & Scope Confirmation	Opening meeting at PSPCL with site engineers and officers. Discussion of audit scope, site visit plan, verification approach, required site support, and document review requirements.
27-May-25 (02:00 PM – 05:30 PM)	On-site Verification & Data Validation	Conduct verification at selected substations and feeder levels. Validate metering systems, inspect DTs and feeders, review calibration records and meter logs. Signing of Form A & Form B post-verification.
28-May-25 (10:30 PM – 1:00 PM)	Report Preparation & Internal Review	Initial analysis of verified data and observations. Drafting of Verification Report and preparation of final Sector Specific Pro-Forma, Form 1, Form 3, and other required forms.
28-May-25 (02:00 PM – 07:00 PM)	Exit Meeting with PSPCL	Conduct exit meeting with PSPCL officers. Review of initial findings and summary of verification status. Agreement on final corrections, if any, prior to submission.
Follow-up (via Email/Post Visit)	Final Report Submission	Submission of final Verified Pro-Forma, Form 1, Form 3, Form A, duly signed Form B, and full Verification Report to SDA, with copy to BEE.
Verification Team	On-site	➢ Accredited Energy Auditor ➢ Certified Energy Auditor ➢ Sector Expert ➢ Engineer

1.7 Minutes of Meeting with the Plant and verification team



MINUTES OF MEETING

PSPCL	Punjab State Power Corporation Limited (PSCL) PSEB Building, The Mall (Sheranwala Gate), Patiala – 147001, Punjab, India **Telephone:** 0175-2220853, 0175-2213570 to 77 **Fax:** 0175-2215897, 0175-2548121, 0175-2504669	Date: 27TH May 2025
EE	Namdhari Eco Energies Pvt Ltd. Greater Noida	Revision: NA

Topic	Monitoring and Verification Energy Audit of PUNJAB STATE POWER CORPORATION LIMITED FY 2024-25

Meeting Details

Date: 27th May 2025 to 28th May 2025	**Time:** 11:00 Am	**Venue:** Punjab State Power Corporation Limited (PSPCL) PSEB Building, The Mall (Sheranwala Gate), Patiala – 147001, Punjab, India
PUNJAB STATE POWER CORPORATION LIMITED, Team:	1. Er. Saleem Mohammad (Dy CE/DSM) 2. Er. Harpreet Raj Singh Sandhu (ASE/DSM) 3. Er. Ravi Verma (ASE/Distribution Projects(D-1) cum Energy Auditor EA-7969 4. Er. Bhupinder Singh (AEE/DSM)	
Consultant Team	1. Mr. Bali Singh 2. Mr. Neeraj Gaur 3. Mr. Murtaza Ahmad Ganie	

Agenda: The meeting was Convened to discuss the findings of the Monitoring and Verification Audit conducted by Namdhari Eco Energies Pvt Ltd for Punjab State Power Corporation Limited.

To discuss the findings of the Monitoring and Verification (M&V) Energy Audit of PSPCL as per the Bureau of Energy Efficiency (BEE) guidelines for Designated Consumers (DISCOM sector) for FY 2024–25. The audit covered technical and commercial parameters, energy balance, AT&C loss verification, and infrastructure analysis in line with BEE's M&V protocol. Furthermore, the calculation of Energy Saving Certificates (ESCerts) was carried out as per the verified data and in accordance with the methodology defined by BEE under the PAT scheme for the DISCOM sector.

The audit covered the various data points and measurements as outlined in the agenda.

Meeting Minutes:

1. ***Introduction:*** *The meeting commenced with introductions to all attendees and a brief overview of the purpose of the Monitoring and Verification Audit.*

2. **Data Provided by PUNJAB STATE POWER CORPORATION LIMITED:** The Consultant, Namdhari Eco Energies Pvt. Ltd. briefed the PSPCL team on the methodology adopted as per BEE's M&V Guidelines including sampling, document review, and data validation.
3. **Verification of Energy and Losses:** The Consultant verified the purchase energy, billed energy, transmission loss, billed amount, collected amount, and AT&C loss. These figures were cross-checked against the data provided by PUNJAB STATE POWER CORPORATION LIMITED.
4. We verified the sample-based input energy and Consumer Billed energy from 1st April 2024 to 31st March 2025.
5. Verified all the energy purchase records w.r.t Source Energy Bills.
6. Verified distributed energy at different levels of consumers.
7. **Source-wise Energy Purchase Verification:**
   Verified power purchase bills (Solar, Wind, Exchange-based purchases) in line with actual metering data.
8. **Loss Assessment (Technical & Commercial):**
   - Verified energy received vs energy billed, energy lost at technical and commercial levels
   - Assessed DT failure rates, unmetered connections, and revenue realization
   - Evaluated calculation logic of AT&C loss (technical loss, collection efficiency)
9. **Consumer Category Validation:**
   - Reviewed category-wise consumer database including connected load and consumption
   - Cross-verified consumer classification with billing and metering system
10. **Energy Flow & Distribution Analysis:**
    - Verified voltage-wise distribution data
    - Reviewed Feeder-wise energy accounting
11. **Infrastructure Details:** The Consultant examined the infrastructure details, including the number of 220KV, 66kV,11kV, and DT substations, as well as the number of voltage-wise feeders. This information was validated during the audit.
12. **Data Collection Completion:** The Consultant confirmed that all the necessary data, all formats as per BEE's M&V Proforma completed had been successfully collected.
13. **Recommendations/Points of Discussion:**

14. **Change in Kandi Feeder Methodology:**
    From 2021 onwards, PSPCL has revised its methodology for billing unmetered AP *Kandi mixed feeders*. These feeders, typically located along riverbanks, originally ranged from 325–350 in number in 2021. However, as of 1st April 2024, only 263 feeders remain classified as mixed Kandi feeders, following the segregation of Exclusive Agricultural Pumping (AP) supply feeders in kandi mixed are separated and billed with input energy pumped after subtracting the loses from [redacted] that year. This is the reason for the continuous reduction in the losses of DISOCM from 2021 to 2023-24

15. **Consumption Split for Kandi Feeders:**
    PSPCL considers 30% of the pumped energy for Kandi feeders as Agricultural (AP) supply, while the remaining 70% is treated as metered and billed non-AP consumption. Additionally, actual technical losses of the relevant financial year (e.g., 10.76% in FY 2023–24) were deducted from the pumped energy.

16. **Implementation of New Methodology:**
    A new methodology was introduced by the Punjab Government in August 2024, applicable retrospectively from FY 2023–24. This change significantly impacted on the reported losses and billing figures of PSPCL.

17. **Impact of Methodology Change:**
    Due to the new methodology, there is an approximate reduction of **600 MU** in billed energy. This variance was directly attributed to the revised accounting and categorization norms implemented by PSPCL.

18. **Billed Data Validation:**
    Billed energy data was cross-verified using the PSPCL online portal, where feeder-wise data was accessed and matched against submitted reports.

The calculation of Energy Saving Certificates (ESCerts) was carried out based on the verified data in accordance with the methodology and guidelines prescribed by the Bureau of Energy Efficiency (BEE) for the DISCOM sector under the Perform, Achieve and Trade (PAT) scheme.

Closing Remarks: The meeting concluded on a positive note, with both parties expressing their appreciation for each other's cooperation during the audit process. The Consultant assured PSPCL that having collected the relevant data the company assures timely completion of the Audit exercise.

Signed on behalf Punjab State power Corporation Limited (PSPCL)		**Signed on behalf of Namdhari Eco Energies Pvt Ltd**	
Name	Signature & Date	Name	Signature & Date
1. Er. Saleem Mohammad (Dy CE/DSM) 2. Er. Harpreet Singh Sandhu (ASE/DSM) 3. Er. Ravi Verma (ASE/Distribution Projects (D-1) cum Energy Manager EA-7969) 4. Er. Bhupinder Singh (AEE/DSM)		1. Mr. Bali Singh (Accredited Energy Auditor- AEA-206) 2. Mr. Neeraj Gaur (Certified Energy Auditor EA-30332 & Discom Sector Expert) 3. Murtaza Ahmad Ganie	

Dy. C.E./DSM
PSPCL, Patiala

Bali Singh
Accredited Energy Auditor (AEA-206
Bureau of Energy Efficiency
of Power Govt of India

1.8 Checklist Prepared by EmAEA

As part of the Monitoring & Verification (M&V) process for PAT Cycle VII, a comprehensive checklist was prepared by Namdhari Eco Energies Pvt. Ltd. (EmAEA) to ensure thorough and systematic verification of the data submitted by PSPCL. The checklist focuses on validating the accuracy, credibility, and completeness of both baseline and assessment year data, in line with the requirements of the Bureau of Energy Efficiency (BEE).

Key components of the verification checklist include:

- Review of Baseline Energy Audit Report as accepted by BEE.
- Examination of Form 1 (both original and normalized), submitted for Baseline Years and for Target Year 2024-25.
- Review of PAT Energy Audit Reports, if previously conducted.
- Verification of Data Sources to ensure correctness, credibility, and appropriate interpretation of reported information.
- Cross-verification of data provided in audit reports against comparable sources or background information where available.

Specific data points reviewed include:

a) Feeder-wise input energy intake data across PSPCL's network.
b) Monthly reports for monitoring trends and variations.
c) Information on new equipment installations and their impact on energy consumption patterns.
d) Energy Efficiency Projects implemented by PSPCL — including review of estimated energy savings, procurement data, commissioning reports, and project outcomes.
e) Any other relevant documents required to confirm the accuracy of reported data and compliance with BEE guidelines.

This structured checklist ensures that the M&V process is conducted with full transparency, consistency, and in alignment with regulatory expectations thereby supporting PSPCL in achieving verifiable and credible reporting under PAT Cycle VII.

Background of Monitoring & Verification Audit

1.9 PAT Cycle –VII (2018-19 to 2024-25)

The Perform, Achieve and Trade (PAT) Scheme is a key program under India's *National Mission for Enhanced Energy Efficiency (NMEEE)*, designed to promote energy efficiency improvements through a market-based mechanism. The PAT framework enables large energy consumers to enhance efficiency and, on surpassing prescribed targets, to earn Energy Saving Certificates (ESCerts) that can be traded on the energy exchange.

As per notifications issued by the Bureau of Energy Efficiency (BEE) under PAT Cycle VII, several State Electricity Distribution Companies (DISCOMs), including Punjab State Power Corporation Limited (PSPCL), have been identified as Designated Consumers (DCs) based on their energy consumption and network loss profiles.

For PAT Cycle VII (2018-19 to 2024-25), BEE in consultation with the Ministry of Power has established energy efficiency improvement targets for identified DISCOMs, typically in terms of percentage reduction in AT&C (Aggregate Technical & Commercial) losses over a defined period.

Upon achieving its notified targets, PSPCL will be eligible to claim Energy Saving Certificates (ESCerts) through its State Designated Agency (SDA). These certificates, each equivalent to 1 Metric Tonne of Oil Equivalent (MTOE) saved, can be traded or banked for future use. Conversely, in case of a shortfall against the target, PSPCL would be required to purchase ESCerts to ensure compliance.

The PAT mechanism incentivizes DISCOMs to continually improve energy efficiency through investments in loss reduction, network modernization, and demand-side management. PSPCL remains committed to pursuing such initiatives as part of its participation in PAT Cycle VII, contributing to both corporate and national energy efficiency goals.

1.10 Purpose of verification

The verification of all data being submitted to claim achievement or non-achievement of targets is to be done by Empaneled Accredited Energy Auditors (EmAEA) i.e. organizations of the Bureau of Energy Efficiency (BEE).

The verification activities involve ensuring correctness of data of baseline year and assessment year submitted through BEE's sector-specific pro-forma and Form 1, checking traceability of data to original supporting documents, ensuring rationality of formulae used for calculations and reporting, review of energy saving projects implemented post baseline years and assessing their impact on the SEC (Specific energy consumption) values and finally recommending the number of ESCerts that the DC should be issued or required to purchase to fulfill their obligation under the Energy Conservation Act.

1.11 Preparation Methodology for (M & V) – PSPCL DISCOM

1. Pre-Audit Preparation

- **Coordination Meeting:** Initial meeting with PSPCL's Energy Audit Cell, Circle Engineers, and Nodal Officers.
- Review of PSPCL's operational areas, project boundaries, and designated consumer base.
- Identification of energy efficiency measures (ECMs) already implemented under PAT or state-level DSM programs.
- Finalization of M&V boundaries, baseline year, and performance indicators (kWh saved, T&D losses reduced, load curve flattening, etc.).
- **Data Collection:** Request for past 6 Years of circle-wise and feeder-wise energy and billing data, especially for **FY- 2024-25**
- **Zone Mapping:** Identification of priority areas with high AT&C losses or abnormal consumption patterns.
- **Finalization of Sites:** Selection of sample substations, feeders, and DTRs based on consumer mix (HT/LT), load density, and geographical diversity.

2. System Review and Baseline Assessment

- Review of existing energy audit reports and AT&C loss reduction strategies.
- Cross-verification of energy input/output at key nodes (grid substation, 66/11kV substation, DTR).
- Assessment of existing metering infrastructure and data reliability.

3. Field Monitoring and Verification

- Verification of installed ECMs (capacitor banks, VFDs, smart metering, LED streetlights, etc.).
- Consumer-side sampling (where required) to validate demand-side improvements.

- Site visits to a representative set of:
  - Different kV level substations
  - Feeder metering points
  - Distribution transformers
  - HT/LT consumer premises (sampling basis)

4. Energy Balance and Loss Analysis

- Preparation of **feeder-wise energy balance sheets**.
- Technical Loss Estimation using:
  - I^2R losses for lines and transformers
  - Modelling of losses using standard BEE/CEA norms

- Commercial Loss Estimation through:
  - Consumer indexing validation
  - Meter-to-bill-to-cash trail
  - Check meter readings vs billing data
- Ranking of feeders and DTRs based on energy loss levels.

5. Identification of Energy Conservation Measures (ECMs), form-A

- Feeder bifurcation to balance load
- Capacitor bank optimization
- Metering gap identification and rectification
- Replacement of overloaded/underloaded transformers
- LT line optimization
- Smart meter/AMI implementation
- Each ECM will be supported with:
  - Energy saving potential
  - Cost-benefit analysis
  - Estimated payback

6. Report Compilation and Submission

- Final report to include:
  - Energy flow diagrams
  - AT&C loss segmentation
  - Transformer loading summary
  - ECMs with investment analysis
- Format as per **BEE (M & V) template**
- Submission to PSPCL and BEE with presentation and audit validation.

Summary of Energy input & Infrastructure of BY vs AY

Punjab State Power Corporation Limited (PSPCL) has demonstrated steady growth in its distribution infrastructure between the Baseline Year (2018-19) and the Target Year (2024-25) under PAT Cycle-VII.

The net input energy increased from 54037.64 MU to 74,639.71 MU, while transmission losses rose from 2.41% to 5.05%. The volume of energy sold outside the periphery reduced notably, and open access sales were recorded at 10.283 MU in the Target Year.

Metering coverage improved across the network, with 100% metering maintained at 66KV and 11 kV levels. Consumer-end metering improved from 85.55% to 87.43%, and DT-level metering increased from 2.87% to 4.51%.

The number of 66 kV and 11 kV feeders grew, and the line length at various voltage levels expanded significantly, reflecting the company's continuous investment in strengthening the distribution network. The HT/LT ratio improved from 1.65 to 1.69, contributing to better network efficiency.

Table 4:Summary of energy input & Infrastructure

Sector-Electricity Distribution Companies (PSPCL)				
Summary of energy input & Infrastructure				
S.No	**Parameters**	**Base line year (2018-19)**	**Target Year (2024-25)**	**Remarks (Source of data)**
A.1	Input Energy purchased (MU)	55369.88	78611.54	Historical Data
A.2	Transmission loss (%)	2.41%	5.05%	Inter State. Inc. BBMB + Intra state transmission losses
A.3	Transmission loss (MU)	1332.240	3971.832	1636.612+2335.219 (Inter State. Inc. BBMB + Intra state) =3971.832
A.4	Energy sold outside the periphery (MU)	-2569.62	-827.63	(Energy Schedule) sheet SR. NO. 13.2+14+15+16+17
A.5	Open access sale (MU)	0	10.283	Railway
A.6	EHT sale	0	0	
A.7	Net input energy (received at DISCOM periphery or at distribution point, after adjustment)-(MU)	54037.64	74639.71	DD PORTAL
A.8	Is 100% metering available at 66/33 kV (Select yes or no from list)	yes	yes	
A.9	Is 100% metering available at 11 kV (Select yes or no from list)	yes	yes	
A.10	% of metering available at DT	2.87%	4.51%	IT
A.11	% of metering available at consumer end	85.55%	87.43%	IT
A.12	No of feeders at 66kV voltage level	144	181	DD PORTAL
A.13	No of feeders at 33kV voltage level	5	4	DD PORTAL
A.14	No of feeders at 11kV voltage level	11566	13473	DD PORTAL
A.15	No of LT feeders' level	0	0	

Sector-Electricity Distribution Companies (PSPCL)				
Summary of energy input & Infrastructure				
S.No	**Parameters**	**Base line year (2018-19)**	**Target Year (2024-25)**	**Remarks (Source of data)**
A.16	Line length (ckt. km) at 66kV voltage level	10099	11765.54	Planning
A.17	Line length (ckt. km) at 33kV voltage level	87	73.7	Planning
A.18	Line length (ckt. km) at 11kV voltage level	242012	263913	Planning
A.19	Line length (km) at LT level	147083	156484	Planning
A.20	HT/LT ratio	1.65	1.69	Planning

1.12 PSPCL Energy Input & T&D Loss Overview (FY 2018-19 to FY 2024-25)

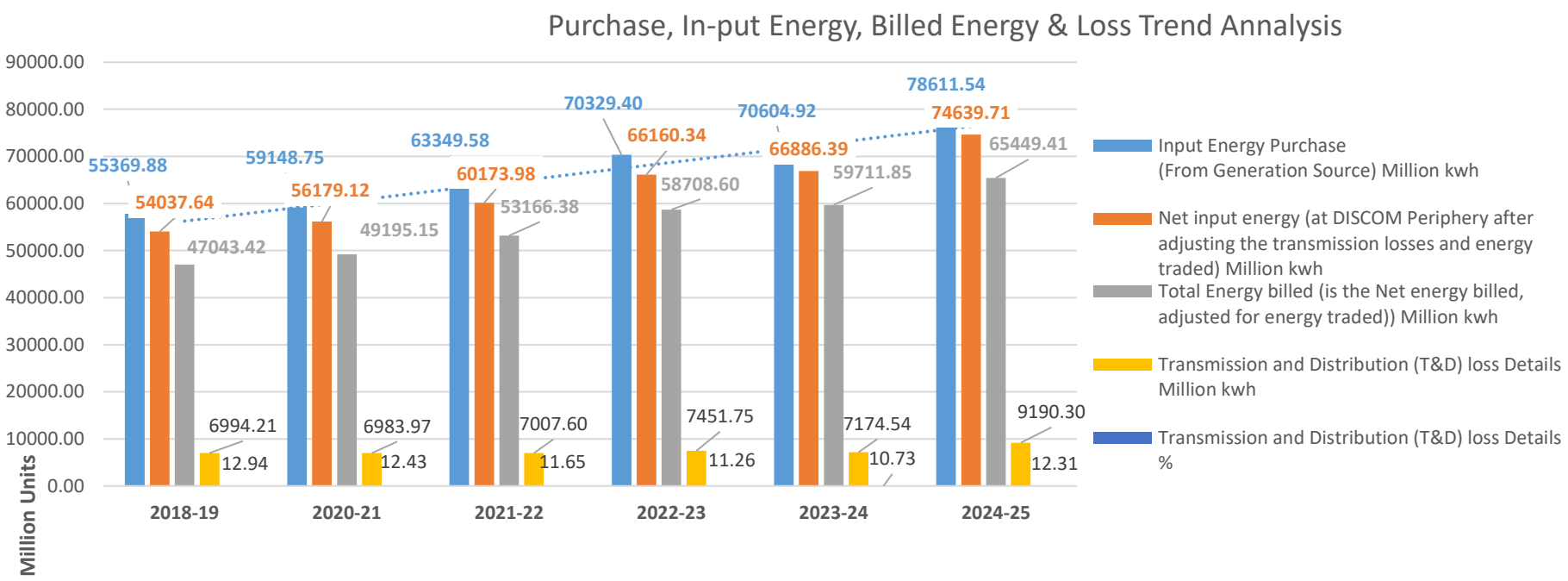
Punjab State Power Corporation Limited (PSPCL) has consistently expanded its energy procurement to meet rising consumer demand. Input energy purchase grew from 55369.88 million kWh in FY 2018-19 to 78,611.54 million kWh in FY 2024-25. Correspondingly, net input at the DISCOM periphery increased from 54,037.64 million kWh to 74,639.71 million kWh over the same period.

Energy billed to consumers rose from 47,043.42 million kWh to 65,449.41 million kWh, reflecting improved service delivery. T&D losses reduced steadily up to FY 2023-24 (from 12.94% to 10.73%) but slightly increased to 12.31% in FY 2024-25, likely due to network expansion and operational factors.

Overall, PSPCL continues to show positive growth, with ongoing efforts required to stabilize and further reduce distribution losses.

Table 5:Energy Input Details

Energy Input Details	UNIT	2018-19	2020-21	2021-22	2022-23	2023-24	2024-25
Input Energy Purchase (From Generation Source)	Million kwh	55369.88	59148.75	63349.58	70329.40	70604.92	78611.54
Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	54037.64	56179.12	60173.98	66160.34	66886.39	74639.71
Total Energy billed (is the Net energy billed, adjusted for energy traded))	Million kwh	47043.42	49195.15	53166.38	58708.60	59711.85	65449.41
Discom Distribution (T&D) loss Details	Million kwh	6994.21	6983.97	7007.60	7451.75	7174.54	9190.30
Discom Distribution (T&D) loss Details	%	12.94	12.43	11.65	11.26	10.73	12.31



Graphs 1:Energy Analysis for Last 6 years

1.13 Circle-Wise Distribution Loss Analysis and Energy Details for BY vs AY

Baseline Year (2018-19) vs Assessment Year (2024-25)

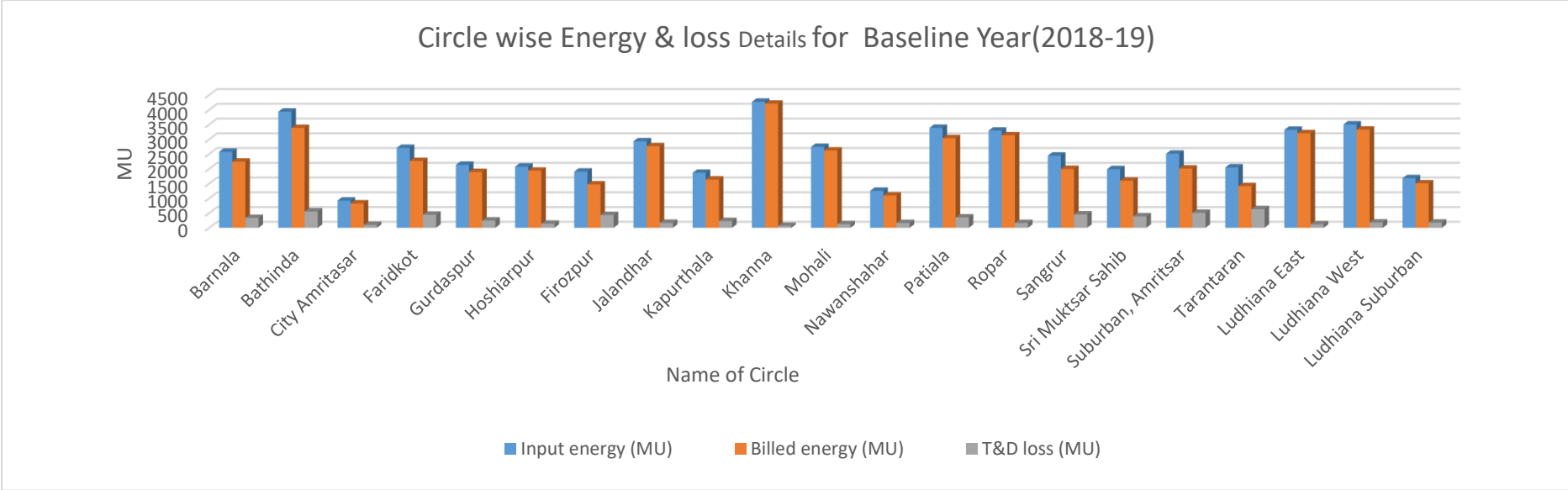
Punjab State Power Corporation Limited (PSPCL) has shown considerable improvement and operational growth across various circles from the baseline year 2018-19 to the assessment year 2024-25. A detailed analysis of input energy billed energy, and Transmission & Distribution (T&D) losses provides valuable insights into the performance and efficiency improvements of different regions.

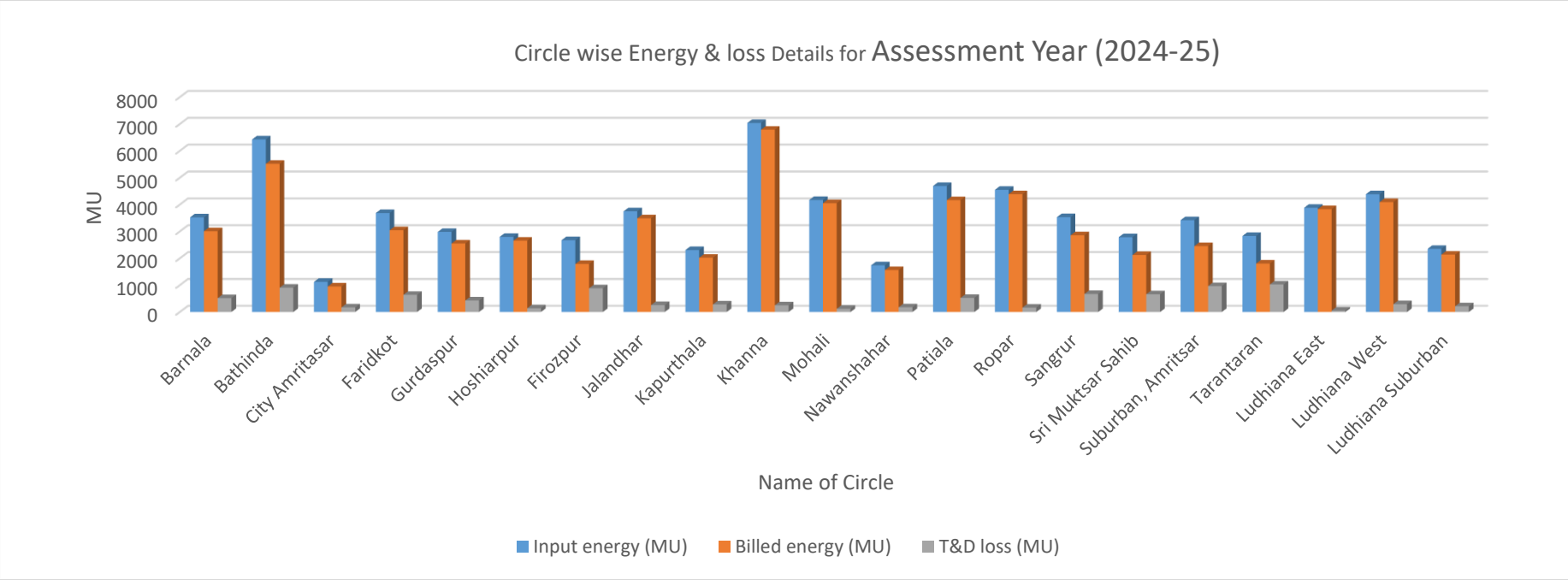
Overall, PSPCL's input energy has seen a significant rise across most circles to meet increasing consumer demand and load growth. However, the performance in terms of T&D losses has shown a mixed trend, with certain circles achieving remarkable improvements, while a few others witnessing an increase in loss percentages.

Table 6:Circle Wise Energy and Loss Details

		Circle Wise Energy and Loss Details							
S.No		Baseline Year (2018-19)				Assessment Year (2024-25)			
	Name of circle	Input energy (MU)	Billed energy (MU)	T&D loss (MU)	T&D loss (%)	Input energy (MU)	Billed energy (MU)	T&D loss (MU)	T&D loss (%)
1	Barnala	2575.732	2241.82	333.91	12.96%	3524.56719	3007.31	517.2549	14.68%
2	Bathinda	3937.649	3384.53	553.12	14.05%	6424.4495	5518.42	906.0278	14.10%
3	City Amritsar	921.208	824.25	96.96	10.53%	1123.84838	951.48	172.3734	15.34%
4	Faridkot	2707.757	2264.54	443.21	16.37%	3685.1051	3045.79	639.3107	17.35%
5	Gurdaspur	2134.105	1889.38	244.73	11.47%	2982.5755	2551.37	431.2047	14.46%
6	Hoshiarpur	2074.318	1936.95	137.37	6.62%	2797.49624	2656.92	140.5768	5.03%
7	Firozpur	1903.157	1470	433.15	22.76%	2673.70697	1789.23	884.477	33.08%
8	Jalandhar	2931.306	2764.42	166.88	5.69%	3748.85547	3488.96	259.8961	6.93%
9	Kapurthala	1864.247	1635.18	229.07	12.29%	2305.70046	2021.39	284.312	12.33%
10	Khanna	4270.903	4206.54	64.36	1.51%	7036.58442	6787.16	249.4289	3.54%
11	Mohali	2741.799	2619.48	122.31	4.46%	4170.73911	4050.92	119.8178	2.87%
12	Nawanshahar	1254.309	1092.92	161.39	12.87%	1739.43205	1562.47	176.9664	10.17%
13	Patiala	3387.6	3036.47	351.13	10.37%	4691.05385	4165.65	525.4033	11.20%
14	Ropar	3294.785	3133.63	161.15	4.89%	4551.10106	4387.25	163.8551	3.60%
15	Sangrur	2445.114	1992.42	452.7	18.51%	3530.78694	2858.74	672.047	19.03%
16	Sri Muktsar Sahib	1985.638	1597.79	387.85	19.53%	2785.22957	2124.35	660.8779	23.73%
17	Suburban, Amritsar	2512.26	2008.39	503.87	20.06%	3419.18661	2454.52	964.6672	28.21%
18	Tarantaran	2044.751	1412.31	632.44	30.93%	2830.45278	1804.6	1025.849	36.24%
19	Ludhiana East	3319.788	3202.21	117.58	3.54%	3881.85576	3830.68	51.17471	1.32%
20	Ludhiana West	3504.025	3327.73	176.29	5.03%	4386.02866	4093.07	292.9559	6.68%
21	Ludhiana Suburban	1680.294	1505.36	174.93	10.41%	2350.95758	2136.57	214.387	9.12%

Graphs 2: Circle wise Energy & loss Details for Baseline Year (2018-19) & Assessment Year (2024-25)


Circle wise Energy & loss Details for Baseline Year(2018-19)
MU
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Barnala
Bathinda
City Amritasar
Faridkot
Gurdaspur
Hoshiarpur
Firozpur
Jalandhar
Kapurthala
Khanna
Mohali
Nawanshahar
Patiala
Ropar
Sangrur
Sri Muktsar Sahib
Suburban, Amritsar
Tarantaran
Ludhiana East
Ludhiana West
Ludhiana Suburban
Name of Circle
Input energy (MU)
Billed energy (MU)
T&D loss (MU)



Graphs 3:Circle wise Energy & loss Details for Assessment Year (2024-25)

Circle-wise Energy Input and T&D Loss Analysis for PSPCL

Consistently Low Loss Circles:

- Khanna has maintained one of the lowest T&D losses, with a marginal rise from 1.51% to 3.54%, despite nearly doubling its input energy.
- Mohali demonstrated an excellent reduction from 4.46% to 2.87% T&D loss, reflecting improved network efficiency.
- Ropar and Ludhiana East continued to maintain very low losses, showcasing strong system performance and commercial discipline.

Circles with Significant Improvement:

- Hoshiarpur reduced its T&D loss from 6.62% to 5.03%, even with higher energy inflow.

- Nawan Shahar improved from 12.87% to 10.17%.
- Ludhiana Suburban also slightly reduced its loss from 10.41% to 9.12%.

Circles Needing Focus:

- Firozpur, Suburban Amritsar, and Tarantaran have shown an increasing trend in T&D losses, reaching 33.08%, 28.21%, and 36.24% respectively. These regions warrant focused technical interventions and better commercial practices to curb rising losses.
- Sri Muktsar Sahib also showed an increase from 19.53% to 23.73%, needing immediate corrective actions.

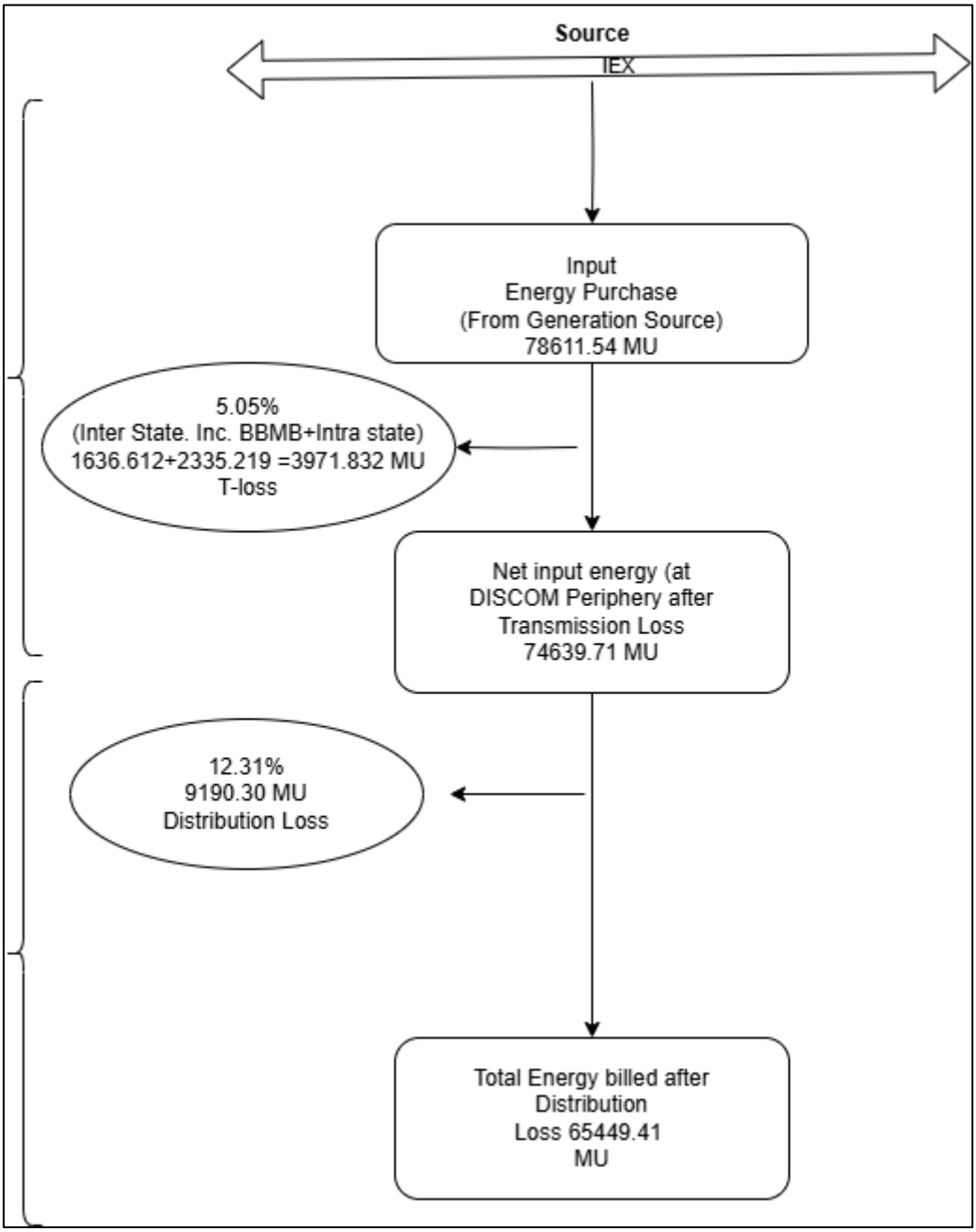
Major Urban Circles:

- City Amritsar observed an increase in loss from 10.53% to 15.34% despite rising energy sales, indicating possible commercial leakages or network constraints.
- Jalandhar and Ludhiana West continued to perform steadily with losses below 7%, despite the increased input demand.

In conclusion, PSPCL's circle-wise performance data reflects areas of operational excellence as well as regions where targeted improvements are needed. The corporation’s strategic focus on network strengthening, advanced metering infrastructure (AMI), feeder segregation, and loss reduction programs should be further enhanced in circles with high T&D losses to improve the overall energy accounting and financial performance

Gate to Gate Energy Details

Table 7: GTG Energy Data



Balanced energy break-up from the provided PSPCL data, organized clearly by voltage level, and matching the given total energy input at the DISCOM periphery (74,639.71 MU)

Voltage Level	Description	MU
66 kV & Above (Inter-State)	Power at state transmission boundary	39,260.48
66 kV & Above (Intra-State)	Power procured from intra-state sources	37,430.24

Voltage Level	Description	MU
33 kV	Renewable Energy Procurement	17.36
11 kV	Renewable Energy Procurement	266.85
LT	Renewable Energy Procurement (Rooftop Solar)	131.37
LT	Sales Migration Input	(-)131.37
Embedded within DISCOM	Embedded energy (net embedded generation)	284.22
TOTAL Energy at DISCOM Periphery	Total Energy Available / Input	**74,639.71**

Notes:

- The 33kV, 11kV, LT, and embedded generation are all part of "Energy Embedded within DISCOM network" = **284.22 MU** (as shown in table).
- The big contributors are:
  → 66kV & Above Interstate (39,260.48 MU)
  → 66kV & Above Intrastate (37,430.24 MU)

1.14 Details of Consumers with respective energy Consumption

During the period 01.04.2024 to 31.03.2025, PSPCL served 1,10,08,964 consumers across multiple categories including domestic, commercial, industrial, agricultural, and others. The total energy billed during this period was 65,449.41 million Units (MU). Major consumption came from domestic (20,124.98 MU), HT industrial (20,294.55 MU), and agricultural (14,967.02 MU) consumers. The data below summarizes consumer segmentation and corresponding energy consumption for the reporting year.

Table 8:Details of Consumers energy consumption

(Details of Consumers)						
Summary of Energy						
Period From 01.04.2024 To 31.03.2025						
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	Domestic	EHT/HT/LT	400/220/66/33/11/LT	8151272	20124.980	
2	Commercial	EHT/HT/LT	400/220/66/11/LT	1297737	5226.749	
3	Water Supply			16026		Consumption taken in Category in which it falls.
4	Public Lighting	LT	LT	6013	150.763	
5	HT Water Supply			227		Consumption taken in Category in which it falls.
6	HT Industrial	EHT/HT/LT	400/132/66/11	16377	20294.553	
7	Industrial (Small)			97993	1126.776	
8	Industrial (Medium)			30537	2577.180	
9	HT Commercial	EHT/HT/LT	400/220/66/33/11/LT			

(Details of Consumers)						
Summary of Energy						
Period From 01.04.2024 To 31.03.2025						
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)**
10	Others-1 (if any, specify in remarks)	Agricultural power	LT	1392176	14967.023	
11	Others-2 (if any, specify in remarks)	Railway Traction	400/132	8	89.361	
12	Others-3 (if any, specify in remarks)	Bulk Supply	LT/11/33	546	729.464	
13	Others-4 (if any, specify in remarks)	others (AP High Technology, Waste management & charitable hospitals)		52		Consumption taken in Category in which it falls.
14	Theft Units, Short Assessment, Unbilled Revenue (Eq.Units)				255.56	
15	Misc. Sale adjustment to match with planning (Temporary, night Supply, Non-Operation sale etc)	-	-	-	-93.00	-
	Total			**11008964**	**65449.41**	

1.15 Renewable Solar Energy Details Circle, Zone & Division Wise for AY 2024-25

Summary of Solar Energy Pumped and Open Access (01.04.2024 to 31.03.2025)

During FY 2024-25, PSPCL has successfully integrated **1313.68 LU** (131.37 MU) of solar energy pumped into the grid across various zones and divisions. The recorded **Open Access energy** stands at **102.83 LU** (10.28 MU), with major consumption seen in Ludhiana and select industrial areas. Divisions under **Mohali, Patiala, Ludhiana, and Barnala** showed leading performance in solar pumping, reflecting PSPCL's commitment towards increasing renewable energy penetration.

Key Points:

- Total Solar Pumped: **1313.68 LU (131.37 MU)**
- Open Access Consumption: **102.83 LU (10.28 MU)**
- Major contributing divisions: **Mohali (Tech-3 Sohana)**, **Patiala (Comm 1 & 2)**, **Ludhiana**
- Highest open access recorded at **TECH-III ESTATE, Ludhiana**
- Increased participation from urban & industrial consumers in solar initiatives

(01.04.2024 to 31.03.2025)							
Zone	**Circle**	**Division**	**S/D**	**Solar Energy Pumped (LU)**	**Open Access (LU)**	**Solar Energy Pumped (MU)**	**Open Access (MU)**
Border	CITY AMRITSAR	DS CITY CENTER DIVN., ASR	DS S/D GHEE MANDI TECH, ASR	2.15	0	0.215	0
Border	CITY AMRITSAR	DS CITY CENTER DIVN., ASR	DS S/D HUSSAINPURA TECH. ASR.	0.75	0	0.075	0
Border	CITY AMRITSAR	DS CITY CENTER DIVN., ASR	DS S/D MALL MANDI TECH. ASR.	9.15	0	0.915	0
Border	CITY AMRITSAR	DS CIVIL LINE DIVN., ASR	DS S/D CIVIL LINE TECH., ASR	25.01	0	2.501	0
Border	CITY AMRITSAR	DS CIVIL LINE DIVN., ASR	DS S/D ISLAMABAD TECH., ASR	1.52	0	0.152	0

(01.04.2024 to 31.03.2025)							
Zone	**Circle**	**Division**	**S/D**	**Solar Energy Pumped (LU)**	**Open Access (LU)**	**Solar Energy Pumped (MU)**	**Open Access (MU)**
Border	CITY AMRITSAR	DS CIVIL LINE DIVN., ASR	DS S/D LAWRENCE ROAD TECH., ASR	18.39	0	1.839	0
Border	CITY AMRITSAR	DS DIVN. INDUSTRIAL AREA, ASR	DS GOLDEN TEMPLE TECH., ASR	0.59	0	0.059	0
Border	CITY AMRITSAR	DS DIVN. INDUSTRIAL AREA, ASR	DS S/D CHATIWIND TECH., ASR	1.66	0	0.166	0
Border	CITY AMRITSAR	DS DIVN. INDUSTRIAL AREA, ASR	DS S/D SULTANWIND TECH., ASR	2.26	0	0.226	0
Border	GURDASPUR	DS CITY DIVN. BATALA	DS S/D City BATALA	3.66	0	0.366	0
Border	GURDASPUR	DS CITY DIVN. BATALA	DS S/D East BATALA	15.04	0	1.504	0
Border	GURDASPUR	DS CITY DIVN. BATALA	DS S/D SOUTH BATALA	3.81	0	0.381	0
Border	GURDASPUR	DS CITY DIVN. BATALA	DS S/D WEST S/D BATALA	6.75	0	0.675	0
Border	GURDASPUR	DS S/U DIVN. BATALA	DS S/D NORTH S/D BATALA	4.29	0	0.429	0
Border	GURDASPUR	DS S/U DIVN. PATHANKOT	DS S/D DHAR	0.06	0	0.006	0
Border	GURDASPUR	DS S/U DIVN. PATHANKOT	DS S/D PANDORI	0.04	0	0.004	0
Border	SUB URBAN AMRITSAR	DS EAST DIVN.	DS S/D East Commercial	6.7	0	0.67	0
Border	SUB URBAN AMRITSAR	DS EAST DIVN.	DS S/D EAST TECH(East+Verka)	3.71	0	0.371	0
Border	SUB URBAN AMRITSAR	DS EAST DIVN.	DS S/D WEST ASR	9.27	0	0.927	0
Border	SUB URBAN AMRITSAR	DS EAST DIVN.	DS SOUTH S/D Asr	26.34	0	2.634	0
Border	TARN TARAN	DS CITY DIVN. TARN TARAN	DS CITY S/D TARN TARAN	9.87	0	0.987	0
Border	TARN TARAN	DS DIVN. PATTI	DS CITY S/D PATTI	2.03	0	0.203	0
Central	CITY EAST LUDHIANA	DS F. POINT (SPL) DIVN.	TECH. -I F. POINT (SPL)	5.71	0	0.571	0

(01.04.2024 to 31.03.2025)							
Zone	**Circle**	**Division**	**S/D**	**Solar Energy Pumped (LU)**	**Open Access (LU)**	**Solar Energy Pumped (MU)**	**Open Access (MU)**
Central	CITY EAST LUDHIANA	DS F. POINT (SPL) DIVN.	TECH. -II F. POINT (SPL)	5.48	0	0.548	0
Central	CITY EAST LUDHIANA	DS S. NAGAR (SPL) DIVN.	TECH. -II S. NAGAR (SPL)	0.06	0	0.006	0
Central	CITY WEST LUDHIANA	DS ESTATE (SPL) DIVN.	TECH. -III ESTATE (SPL)	0	102.83	0	10.283
Central	CITY WEST LUDHIANA	DS MODEL TOWN (SPL) DIVN.	TECH .-II M. TOWN (SPL)	7.77	0	0.777	0
Central	CITY WEST LUDHIANA	DS MODEL TOWN (SPL) DIVN.	TECH UNIT-I M. TOWN	16.07	0	1.607	0
Central	KHANNA	DS (SPL)DIVN.M/GOBIND GARH	COMM. SPL. S/DIV M/GOBIND GARH	12	0	1.2	0
Central	KHANNA	DS DIVN. KHANNA	DS CITY-1 S/D KHANNA	25.06	0	2.506	0
Central	KHANNA	DS DIVN. KHANNA	DS CITY-2 S/D KHANNA	22.9873	0	2.29873	0
Central	KHANNA	DS DIVN. KHANNA	DS S/D BHARI	1.56	0	0.156	0
Central	SUB URBAN LUDHIANA	DS DIVN. AHMEDGARH	DS S/D MALOUD	2.18	0	0.218	0
Central	SUB URBAN LUDHIANA	DS DIVN. JAGRAON	DS CITY S/D JAGRAON	18.51	0	1.851	0
Central	SUB URBAN LUDHIANA	DS DIVN. RAIKOT	DS S/D RAIKOT	2.07	0	0.207	0
North	HOSHIARPUR	DS CITY DIVN. HSP	DS CITY S/D HSP	3.66	0	0.366	0
North	HOSHIARPUR	DS CITY DIVN. HSP	DS CIVIL LINES S/D HSP	8.84	0	0.884	0
North	HOSHIARPUR	DS CITY DIVN. HSP	DS S/D Janauri	0.32	0	0.032	0
North	HOSHIARPUR	DS DIVN. MAHILPUR	DS S/D BASSI KALAN	2.795	0	0.2795	0
North	HOSHIARPUR	DS DIVN. MAHILPUR	DS S/D MAHILPUR	2.53	0	0.253	0
North	HOSHIARPUR	DS DIVN. MAHILPUR	DS S/D PALDI	1.32	0	0.132	0
North	HOSHIARPUR	DS DIVN. MAHILPUR	DS S/D SAILA KHURD	1.29	0	0.129	0
North	HOSHIARPUR	DS S/U DIVN. HSP	DS S/D ATTOWAL	1.57	0	0.157	0
North	HOSHIARPUR	DS S/U DIVN. HSP	DS S/U S/D HSP	6.83	0	0.683	0

(01.04.2024 to 31.03.2025)							
Zone	**Circle**	**Division**	**S/D**	**Solar Energy Pumped (LU)**	**Open Access (LU)**	**Solar Energy Pumped (MU)**	**Open Access (MU)**
North	JALANDHAR	DS Divn. Cantt, Jalandhar	DS S/D Rural Adampur, Jalandhar	3.89	0	0.389	0
North	JALANDHAR	DS Divn. Cantt, Jalandhar	DS S/D Rural Cantt, Jalandhar	5.76	0	0.576	0
North	JALANDHAR	DS Divn. Cantt, Jalandhar	DS S/D Rural Jandu Singha, Jalandhar	7.4	0	0.74	0
North	JALANDHAR	DS Divn. Cantt, Jalandhar	DS S/D Tech-1 Cantt, Jalandhar	6.1	0	0.61	0
North	JALANDHAR	DS Divn. Cantt, Jalandhar	DS S/D Tech-2 Suburban Cantt, Jalandhar	18.23	0	1.823	0
North	JALANDHAR	DS Divn. East, Jalandhar	DS S/D Tech-1 Nehru Garden, Jalandhar	6.7	0	0.67	0
North	JALANDHAR	DS Divn. East, Jalandhar	DS S/D Tech-3 Industrial Area, Jalandhar	2.59	0	0.259	0
North	KAPURTHALA	DS CITY DIVN. NAKODAR	DS S/D LOHIAN	2.47	0	0.247	0
North	KAPURTHALA	DS CITY DIVN. NAKODAR	DS S/D MALSIAN	1.09	0	0.109	0
North	KAPURTHALA	DS DIVN. KARTARPUR	DS S/D BHOLATH	0.54	0	0.054	0
North	KAPURTHALA	DS DIVN. KARTARPUR	DS S/D CITY-1 KARTARPUR	3.52	0	0.352	0
North	KAPURTHALA	DS S/U DIVN. KAPURTHALA	DS S/D CITY-2 KAPURTHALA	0.11	0	0.011	0
North	KAPURTHALA	DS S/U DIVN. KAPURTHALA	DS S/D DHILWAN	1.74	0	0.174	0
North	KAPURTHALA	DS S/U DIVN. KAPURTHALA	DS S/U S/D KAPURTHALA	5.53	0	0.553	0
North	KAPURTHALA	DS S/U DIVN. NAKODAR	DS S/D NURMAHAL	1.74	0	0.174	0
North	KAPURTHALA	DS S/U DIVN. NAKODAR	DS S/U S/D NAKODAR	5.95	0	0.595	0
North	NAWANSHAHR	DS DIVN. GORAYA	DS S/D RURKA KALAN	2.22	0	0.222	0
South	BARNALA	DS CITY DIVN. BARNALA	DS CITY S/D BARNALA	30.27	0	3.027	0
South	BARNALA	DS CITY DIVN. BARNALA	DS S/D NO-1 DHANAULA	4.31	0	0.431	0
South	BARNALA	DS CITY DIVN. BARNALA	DS S/D SANGHERA	10.85	0	1.085	0
South	BARNALA	DS DIVN. MALERKOTLA	DS S/D CITY-1 MALERKOTLA	5.84	0	0.584	0
South	BARNALA	DS DIVN. MALERKOTLA	DS S/D CITY-2 MALERKOTLA	1.24	0	0.124	0
South	BARNALA	DS S/U DIVN. BARNALA	DS S/D BHADOUR	3.85	0	0.385	0
South	BARNALA	DS S/U DIVN. BARNALA	DS S/D NO-1 TAPA	12.65	0	1.265	0

(01.04.2024 to 31.03.2025)							
Zone	**Circle**	**Division**	**S/D**	**Solar Energy Pumped (LU)**	**Open Access (LU)**	**Solar Energy Pumped (MU)**	**Open Access (MU)**
South	BARNALA	DS S/U DIVN. BARNALA	DS S/U S/D BARNALA	27.11	0	2.711	0
South	MOHALI	DS SPL. DIVN. MOHALI	DS S/D Tech - 3(SOHANA)	313.19	0	31.319	0
South	MOHALI	DS SPL. DIVN. MOHALI	TECH UNIT-1 MOHALI	37.4	0	3.74	0
South	MOHALI	DS SPL. DIVN. MOHALI	TECH UNIT-2 MOHALI	54.0901	0	5.40901	0
South	PATIALA	DS Divn. Model Town, Patiala	COMM-2 S/D Model Town/Spl Divn Patiala	54.37	0	5.437	0
South	PATIALA	DS Divn. Model Town, Patiala	DS S/D Comm-1, Model Town, Patiala	75.1	0	7.51	0
South	PATIALA	DS DIVN. NABHA	DS CITY S/D NABHA	21.55	0	2.155	0
South	PATIALA	DS DIVN. RAJPURA	DS COMMERCIAL S/D RAJPURA	38.45	0	3.845	0
South	PATIALA	DS DIVN. SAMANA	DS CITY S/D SAMANA	17.65	0	1.765	0
South	ROPAR	DS DIVN. KHARAR	DS S/D CITY KHARAR	10.46	0	1.046	0
South	ROPAR	DS DIVN. ANANDPUR SAHIB	DS S/D ANANDPUR SAHIB	5.54	0	0.554	0
South	ROPAR	DS DIVN. ROPAR	DS S/D ROPAR	14.55	0	1.455	0
South	SANGRUR	DS CITY DIVN. SUNAM	DS CITY S/D SUNAM	22.74	0	2.274	0
South	SANGRUR	DS DIVN. SANGRUR	DS CITY S/D SANGRUR	26.43	0	2.643	0
South	SANGRUR	DS DIVN. SANGRUR	DS S/D BADRUKHAN	11.8	0	1.18	0
South	SANGRUR	DS DIVN. SANGRUR	DS S/D BHAWANIGARH	5	0	0.5	0
South	SANGRUR	DS DIVN. SANGRUR	DS S/U S/D SANGRUR	20.22	0	2.022	0
West	BATHINDA	DS DIVN. RAMPURA PHUL	DS S/D CITY RAMPURA PHUL	2.51	0	0.251	0
West	FARIDKOT	DS CITY DIVN. MOGA	DS S/D DHARAMKOT	3.42	0	0.342	0
West	FARIDKOT	DS CITY DIVN. MOGA	DS SOUTH S/D MOGA	6.7	0	0.67	0
West	FARIDKOT	DS DIVN. KOTKAPURA	DS CITY S/D KOTKAPURA	10.98	0	1.098	0
West	FARIDKOT	DS DIVN. KOTKAPURA	DS S/D JAITO	13.22	0	1.322	0
West	FARIDKOT	DS DIVN. KOTKAPURA	DS S/U S/D KOTKAPURA	28.1	0	2.81	0
West	FARIDKOT	DS S/U DIVN. MOGA	DS NORTH S/D MOGA	22.9	0	2.29	0

(01.04.2024 to 31.03.2025)							
Zone	**Circle**	**Division**	**S/D**	**Solar Energy Pumped (LU)**	**Open Access (LU)**	**Solar Energy Pumped (MU)**	**Open Access (MU)**
West	FARIDKOT	DS S/U DIVN. MOGA	DS S/D CHARIK	0.59	0	0.059	0
West	FEROZPUR	DS CITY DIVN. FEROZEPUR	DS CANTT. NO-2 S/D FEROZEPUR	14.35	0	1.435	0
West	MUKATSAR	DS DIVN. MALOUT	DS S/U S/D MALOUT	6.01	0	0.601	0
West	MUKATSAR	DS DIVN. MUKTSAR	DS S/D RUPANA	3	0	0.3	0
Total				**1313.682**	**102.83**	**131.3682**	**10.283**

1.16 Monthly AP billed energy based on feeder readings of Agricultural feeders for FY 2024-25 with actual Non-AP Consumption

Summary of AP Billed Energy Based on Feeder Readings (FY 2024–25): The Agricultural Pumped (AP) energy consumption for FY 2024–25 has been compiled based on actual feeder readings across agricultural feeders. The data accounts for technical losses as per notified percentages and applies differential billing rates valid during the year. The report highlights the monthly and cumulative AP consumption and corresponding billed revenue, providing an accurate representation of agricultural energy usage and financial implications for the utility.

Table 9:Agricultural feeders for FY 2024-25 with actual Non-AP Consumption

AP billed energy based on feeder readings of Agricultural feeders for FY 2024-25 with actual Non-AP Consumption							
Month	AP Pumped energy for 2024-25 (Mu)	Energy Consumption (AP Loss @10.45%) upto 15.06.2024 and from 16.06.2024 (AP Loss @10.28%)	AP metered Sale (Mu)	Total AP Consumption (Mu)	Amount (Rs in Cr.) @Rs 6.55/unit upto 15.06.2024 and from 16.06.2024 @Rs 6.70/unit	Cumulative Total Rs. Cr.	Cumulative Total AP Consumption (MU)
April	273.59	245.00	7.29	252.29	165.25	165.25	252.29
May	1283.09	1149.00	9.69	1158.69	758.95	924.20	1410.99
AP Loss and Rate As per upto 15-06-2024 (TO 2024-25)	1004.60	899.62	8.17	907.79	594.60		
AP Loss and Rate As per from 16-06-2024 (TO 2024-25)	1004.60	901.33	8.17	909.50	609.36		

AP billed energy based on feeder readings of Agricultural feeders for FY 2024-25 with actual Non-AP Consumption							
Month	AP Pumped energy for 2024-25 (Mu)	Energy Consumption (AP Loss @10.45%) upto 15.06.2024 and from 16.06.2024 (AP Loss @10.28%)	AP metered Sale (Mu)	Total AP Consumption (Mu)	Amount (Rs in Cr.) @Rs 6.55/unit upto 15.06.2024 and from 16.06.2024 @Rs 6.70/unit	Cumulative Total Rs. Cr.	Cumulative Total AP Consumption (MU)
June	2009.20	1800.95	16.34	1817.29	1203.97	2128.16	3228.28
July	3487.49	3128.97	18.10	3147.07	2108.54	4236.70	6375.35
August	2702.94	2425.08	13.03	2438.11	1633.53	5870.23	8813.46
September	2693.26	2416.39	12.19	2428.58	1627.15	7497.38	11242.04
October	1275.47	1144.35	9.69	1154.04	773.21	8270.59	12396.08
November	437.05	392.12	7.65	399.77	267.84	8538.43	12795.84
December	564.26	506.26	7.71	513.97	344.36	8882.79	13309.81
January	330.58	296.60	6.66	303.26	203.18	9085.98	13613.07
Feburary	536.24	481.11	7.88	488.99	327.63	9413.60	14102.06

AP billed energy based on feeder readings of Agricultural feeders for FY 2024-25 with actual Non-AP Consumption							
Month	AP Pumped energy for 2024-25 (Mu)	Energy Consumption (AP Loss @10.45%) upto 15.06.2024 and from 16.06.2024 (AP Loss @10.28%)	AP metered Sale (Mu)	Total AP Consumption (Mu)	Amount (Rs in Cr.) @Rs 6.55/unit upto 15.06.2024 and from 16.06.2024 @Rs 6.70/unit	Cumulative Total Rs. Cr.	Cumulative Total AP Consumption (MU)
March	953.76	855.72	9.25	864.97	579.53	9993.13	14967.03
TOTAL	16546.93	14841.55	125.48	14967.03	9993.13		

Comprehensive infrastructure details of PSPCL for AY 2024-25:

Form-Details of Input Infrastructure					
1	**Parameters**	**Total**	**Covered during M&V audit**	**Verified by Auditor in Sample Check**	**Remarks (Source of data)**
i	Number of circles	21	21	21	CE/Planning
ii	Number of divisions	104	104	104	CE/Planning
iii	Number of sub-divisions	508	508	508	CE/Planning
iv	Number of feeders	13658	13658	1450	Director/D Reports link
v	Number of DTs	1249085+(1450+3) 66kv,33kv =1250538	1250538	12610	Director/D Reports link
vi	Number of consumers	11008964	11008964	11008964	CE/Planning
2	**Parameters**	**66kV and above**	**33kV**	**11/22kV**	**LT**
a. i.	Number of conventional metered consumers	42	0	67711	8139501
ii	Number of consumers with 'smart' meters	11	0	31588	1348995
iii	Number of consumers with 'smart prepaid' meters	0	0	0	0
iv	Number of consumers with 'AMR' meters	182	3	33640	3463
v	Number of consumers with 'non-smart prepaid' meters	0	0	0	0
vi	Number of unmetered consumers	0	0	0	1383828

Form-Details of Input Infrastructure					
vii	**Number of total consumers**	235	3	132939	10875787
b.i.	Number of conventionally metered Distribution Transformers	0	0	24174	4499
ii	Number of DTs with communicable meters	1450	3	22908	3122
iii	Number of unmetered DTs	0	0	832938	361444
iv	**Number of total Transformers**	**1450**	**3**	**880020**	**369065**
c.i.	Number of metered feeders	181	4	13473	0
ii	Number of feeders with communicable meters	164	4	9438	0
iii	Number of unmetered feeders	0	0	0	0
iv	**Number of total feeders**	181	4	13473	0
d.	Line length (ct km)	11765 km	50.7 +23(Idle)=73.7	263913	156484
e.	Length of Aerial Bunched Cables	0	0	1152.964	1607.467
f.	Length of Underground Cables	37.48	0	372.794	39.270
3	**Voltage level**	**Particulars**	**MU**	**Reference**	**Remarks (Source of data)**
i	66kV and above (Inter-State)	Long-Term Conventional	27744.35	Includes input energy for franchisees	

Form-Details of Input Infrastructure					
		Medium Conventional (unscheduled interchange)	-1115.38		value of unscheduled interchange energy is entered as the provision of the same has not provided in the Performa
		Short Term Conventional	10918.27		
		Banking	671.50		
		Long-Term Renewable energy	3505.98		
		Medium and Short-Term RE	0.00	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	-827.63		
		Quantum of inter-state transmission loss	1636.61	As confirmed by SLDC, RLDC etc	
		Power procured from inter-state sources	40897.09	Based on data from Form 5	
		Power at state transmission boundary	39260.48		
ii	66kV and above (Intra-State)	Long-Term Conventional	35103.82		Power procured from intra state sources at different voltage levels

Form-Details of Input Infrastructure					
		Medium Conventional	NA		
		Short Term Conventional	NA		
		Banking	NA		
		Long-Term Renewable energy	2326.42		NRSE power procured from intra state sources at 66KV and above
		Medium and Short-Term RE			
		Captive, open access input			
		Sale of surplus power			
		Quantum of intra-state transmission loss	2335.219		
		Power procured from intra-state sources	37430.24		PSTCL
iii		**Input in DISCOM wires network**	74355.49		
iv	33 kV	Renewable Energy Procurement	17.36		
		Small capacity conventional/ biomass/ hydro plants Procurement	0.00		
		Captive, open access input	0.00		
v	11 kV	Renewable Energy Procurement	266.85		NRSE power procured from intra state sources at 11KV
		Small capacity conventional/ biomass/ hydro plants Procurement	0.00		PSTCL
		Sales Migration Input			
vi	LT	Renewable Energy Procurement	131.37		**Roof Top Solar Energy**

Form-Details of Input Infrastructure					
		Sales Migration Input	-131.37		
vii	**Energy Embedded within DISCOM wires network**	**Energy Embedded within DISCOM wires network**	284.22		
viii	**Total Energy Available/ Input**	**Total Energy Available/ Input**	74639.71		
4	**Voltage level**	**Energy Sales Particulars**	**MU**	**Reference**	
i	11KV/LT	DISCOM' consumers		Include sales to consumers in franchisee areas, unmetered consumers	
		Demand from open access, captive	0	Non DISCOM's sales	
		Embedded generation used	0.00	Demand from embedded generation at LT level	
		Sale at 11KV/LT level	0.00		Voltage wise sale not available
		Quantum of 11KV/LT level losses	0.000		
		Energy Input at11 KV/ LT level			
ii	33 kV Level	DISCOM' consumers		Include sales to consumers in franchisee areas, unmetered consumers	
		Demand from open access, captive	0	Non DISCOM's sales	

Form-Details of Input Infrastructure					
		Embedded generation at 33 kV level used		Demand from embedded generation at 11kV level	
		Sales at 33 kV level	0.00		
		Quantum of Losses at 33 kV	0.000		
		Energy input at 33 kV level			
iii	66>/66/33/11 / 0.44 KV	DISCOM' consumers	65449.41	Include sales to consumers in franchisee areas, unmetered consumers	Planning sale
		Demand from open access, captive	10.283	Non DISCOM's sales	
		Embedded generation at 66 kV or below level	415.59	This is DISCOM and OA demand met via energy generated at same voltage level	
		Sales at 66/33/11/0.44 kV level	65459.69		
		Quantum of Losses at 66 kV>	9180.02	(interstate, Inc. BBMB+Intra state+ DISCOM)	
		Energy input at 66kV Level	74639.71		
iv	> 66 kV	DISCOM' consumers		Include sales to consumers in franchisee areas, unmetered	

Form-Details of Input Infrastructure					
				consumers	
		Demand from open access, captive	0	Non DISCOM's sales	
		Cross border sale of energy	0		
		Sale at other DISCOMs	0		
		Banking	0		
		Energy input at > 66kV Level	3981.98		
		Sales at 66kV and above (EHV)	3981.98		
Total Energy Requirement			**78611.41**		
Total Energy Sales			**65449.41**		
Energy Accounting Summary					
5	**DISCOM**	**Input (in MU)**	**Sale (in MU)**	**Loss (in MU)**	**Loss %**
i	LT				
ii	11KV				
iii	33 KV				
iv	66/33/11 / 0.44 KV	74639.71	65449.41	9190.30	12.31%
6	**Open Access, Captive**	**Input (in MU)**	**Sale (in MU)**	**Loss (in MU)**	
i	LT	0	0	0	
ii	11 Kv	0	0	0	
iii	33 kv	0	0	0	
iv	> 33 kv				

Form-Details of Input Infrastructure

Loss Estimation for DISCOM		
T&D loss	13,162.00	
D loss	9,190.17	
T&D loss (%)	16.74%	
D loss (%)	12.31%	(D losses/(Total Energy Requirement-Interstate transmission losses-intra state transmission losses)

1.17 Input energy purchased by PSPCL for baseline and assessment year

For the purpose of PAT Cycle VII (2018-19 to 2024-25), the input energy data for Punjab State Power Corporation Limited (PSPCL) reflects consistent growth in energy procurement and supply capability, supporting the increasing demand across its extensive distribution network

During PAT Cycle VII, PSPCL's net energy input at the DISCOM periphery increased from 54,037.64 MU in the Baseline Year (2018-19) to 74,639.71 MU in the Assessment Year (2024-25), reflecting rising consumer demand. Total energy billed grew from 47,043.42 MU to 65,449.41 MU during the same period, while distribution losses reduced from 12.94% to 12.31%, indicating improved network efficiency and operational performance.

Table 10:PSPCL Power purchase details

Particulars		Baseline Year	Assessment Year
Energy details	**Unit**	**2018-19**	**2024-25**
Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded) In MU	Million kwh	54037.64	74639.71
Total Energy billed (is the Net energy billed, adjusted for energy traded) in MU	Million kwh	47043.42	65449.41
Distribution loss Details (MU)	Million kwh	6994.22	9190.30
Distribution loss Details (%)	%	12.94	12.31

1.18 Monthly Wise Energy scheduled for the FY 2024-25 (in MUs)

Energy scheduled for the FY 2024-25 (in MUs)															
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
1	**OWN GENERATION**		**Final REA**	**Final REA**	**Final REA**	**Prov. REA**	**Prov. REA**	**Prov. REA**	**Prov. REA**	**Prov. REA**	**Prov. REA**	**Prov. REA**	**Prov. REA**	**Prov. REA**	
1.1	**THERMAL**														
	I) GGSSTP, Ropar	Thermal	439.55	448.46	456.92	467.94	406.04	335.50	394.28	173.47	333.20	371.99	360.36	366.01	**4553.72**
	ii) GHTP, Lehra Mohhabat	Thermal	397.41	423.55	455.39	455.97	397.44	384.14	413.35	261.68	418.57	421.80	399.98	436.48	**4865.76**
	Total Thermal (Gross)		**836.96**	**872.01**	**912.31**	**923.90**	**803.48**	**719.65**	**807.63**	**435.16**	**751.77**	**793.79**	**760.34**	**802.49**	**9419.48**
1.2	**Aux.&Transformation Losses**														
	GGSSTP	Thermal	36.00	42.68	41.82	47.70	36.10	31.29	37.91	19.41	32.93	37.96	33.66	35.44	**432.89**
	GHTP	Thermal	32.94	36.47	38.43	39.11	35.08	33.74	35.37	23.75	35.65	34.73	32.46	35.61	**413.34**
	Total Thermal Losses		**68.94**	**79.15**	**80.24**	**86.81**	**71.19**	**65.03**	**73.28**	**43.16**	**68.57**	**72.69**	**66.12**	**71.05**	**846.23**
1.3	**GATP, Goindwal Sahib**														
	GATP_Sch	Thermal	232.25	297.75	274.72	326.61	241.57	245.82	227.67	223.28	222.85	199.58	121.60	144.49	**2758.19**
	GATP_UI		0.18	0.31	0.25	0.07	-0.17	0.28	-0.72	-0.83	-1.05	0.00	0.00	0.00	**-1.68**
	Total GATP (Sch - UI)		**232.07**	**297.44**	**274.46**	**326.54**	**241.74**	**245.55**	**228.39**	**224.11**	**223.91**	**199.58**	**121.60**	**144.49**	**2759.87**
1.4	**Net Thermal Generation (1.1-1.2+1.3)**		**1000.09**	**1090.29**	**1106.53**	**1163.63**	**974.04**	**900.16**	**962.75**	**616.11**	**907.10**	**920.67**	**815.82**	**875.93**	**11333.12**
1.5	**HYDEL**														
	I)Shanan	Hydro	51.38	74.36	76.59	73.58	74.48	60.59	29.64	17.11	9.49	6.46	6.57	32.42	**512.66**
	ii)UBDC	Hydro	25.86	41.36	48.25	56.19	46.87	48.26	4.28	3.21	18.21	8.99	15.96	21.52	**338.95**
	iii)Mukerian (MHP)	Hydro	14.14	105.07	119.13	128.93	128.49	147.06	145.19	135.67	136.13	133.01	62.56	71.43	**1326.81**
	iv)ASHP	Hydro	10.86	54.77	65.82	88.00	85.37	80.84	38.61	0.00	32.67	0.00	0.00	29.19	**486.14**
	v)RSD	Hydro	116.12	170.96	202.83	243.49	138.53	143.82	19.01	31.66	68.74	38.85	37.08	48.35	**1259.44**
	vi)Micro	Hydro	0.33	0.32	0.23	0.36	0.47	0.40	0.47	0.40	0.33	0.00	0.18	0.00	**3.49**
	Total Hydel (Gross)		**218.68**	**446.85**	**512.86**	**590.55**	**474.21**	**480.97**	**237.21**	**188.04**	**265.58**	**187.30**	**122.34**	**202.91**	**3927.49**
1.6	**Aux.&Transformation Losses**														
	Shanan	Hydro	0.43	0.56	0.91	1.29	1.34	0.99	0.39	0.26	0.13	0.09	0.09	0.34	**6.82**

Energy scheduled for the FY 2024-25 (in MUs)														
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
	UBDC	Hydro	0.17	0.24	0.26	0.37	0.25	0.26	0.05	0.06	0.17	0.11	0.13	0.15	**2.21**
	MHP	Hydro	0.30	1.55	1.65	1.88	1.78	2.05	1.99	2.05	2.06	1.92	0.98	1.10	**19.30**
	ASHP	Hydro	0.05	0.17	0.17	0.19	0.19	0.18	0.11	0.00	0.10	0.00	0.00	0.09	**1.24**
	RSPP	Hydro	0.39	0.57	0.68	0.81	0.46	0.48	0.06	0.11	0.26	0.58	0.58	0.64	**5.60**
	Micro	Hydro	0.02	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.01	0.00	0.01	0.00	**0.14**
	Total Hydro Losses		**1.35**	**3.11**	**3.67**	**4.54**	**4.03**	**3.98**	**2.61**	**2.49**	**2.72**	**2.70**	**1.79**	**2.32**	**35.31**
1.7	**Net Hydel Generation (1.5-1.6)**		**217.34**	**443.75**	**509.18**	**586.01**	**470.18**	**476.99**	**234.60**	**185.55**	**262.86**	**184.60**	**120.55**	**200.59**	**3892.18**
1.8	**Total Net Own Generation (Thermal+Hydel) (1.4+1.7)**		**1217.43**	**1534.04**	**1615.71**	**1749.64**	**1444.21**	**1377.15**	**1197.34**	**801.65**	**1169.96**	**1105.27**	**936.37**	**1076.52**	**15225.30**
2	**PSPCL share from BBMB**														
	I)Bhakhra	Hydro	115.97	200.17	260.40	312.83	293.44	263.18	212.94	132.20	184.27	111.48	139.65	157.52	**2384.06**
	ii)Dehar	Hydro	95.19	163.81	168.52	167.51	140.51	147.90	87.47	51.75	35.84	30.06	25.32	61.30	**1175.19**
	iii)Pong	Hydro	5.49	24.12	24.69	28.59	33.73	42.90	39.64	33.65	31.67	27.11	12.87	14.51	**318.98**
2.1	**Total (Gross)**		**216.65**	**388.10**	**453.62**	**508.93**	**467.67**	**453.98**	**340.05**	**217.60**	**251.79**	**168.66**	**177.85**	**233.34**	**3878.23**
2.2	BBMB Inter State Transmission Losses		7.63	13.03	16.50	19.65	17.15	15.16	11.70	10.01	9.79	6.96	6.87	8.80	**143.25**
2.3	**PSPCL share from BBMB (Net) (2.1 - 2.2)**		**209.02**	**375.07**	**437.12**	**489.27**	**450.53**	**438.82**	**328.35**	**207.58**	**241.99**	**161.70**	**170.97**	**224.54**	**3734.97**
3	**Total Net Generation (1.8+2.3)**		**1426.44**	**1909.11**	**2052.83**	**2238.91**	**1894.74**	**1815.97**	**1525.70**	**1009.24**	**1411.95**	**1266.97**	**1107.34**	**1301.06**	**18960.27**
4	**CENTRAL SECTOR POWER PURCHASE**														
4.1	**NHPC**														
	Bairasiul	Hydro	28.02	49.15	32.60	24.88	28.22	24.87	12.64	7.47	4.73	5.74	5.11	27.99	**251.42**
	Salal	Hydro	76.02	113.62	126.91	130.86	131.83	110.02	49.76	22.82	13.52	11.30	14.06	38.97	**839.69**
	Tanakpur	Hydro	1.21	3.92	5.71	9.88	9.76	10.54	10.63	5.63	2.65	1.78	0.98	1.47	**64.15**
	Chamera-I	Hydro	20.51	33.41	31.24	32.77	34.36	18.84	7.23	5.11	4.28	3.73	4.28	11.21	**206.97**
	Chamera-II	Hydro	11.16	19.91	25.56	32.63	32.03	21.13	7.90	3.65	3.12	2.69	2.96	5.43	**168.17**

Energy scheduled for the FY 2024-25 (in MUs)															
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
	Chamera-III	Hydro	5.63	11.59	15.50	20.10	19.69	13.59	5.06	2.40	1.87	1.68	1.55	2.58	**101.26**
	Uri	Hydro	31.08	32.09	32.07	33.46	32.10	31.10	9.50	5.87	5.60	5.39	5.24	32.81	**256.32**
	Uri-II	Hydro	12.87	12.98	17.05	19.16	17.77	15.18	3.82	2.68	2.59	2.45	2.62	12.76	**121.93**
	Dhauliganga	Hydro	3.71	12.97	16.11	26.32	28.09	26.63	10.35	4.73	2.96	2.38	1.98	2.97	**139.19**
	Dulhasti	Hydro	12.84	22.63	27.90	35.22	31.28	35.00	22.66	10.86	7.53	6.40	5.09	7.34	**224.75**
	Parbati-III	Hydro	1.42	5.55	6.81	11.87	13.75	10.27	3.18	1.57	1.05	0.81	0.74	1.41	**58.43**
	SEWA-II	Hydro	6.44	5.67	3.03	2.11	5.55	3.34	1.10	0.60	0.56	0.55	1.05	4.97	**34.97**
	Kishanganga	Hydro	0.00	0.00	4.18	10.84	7.81	4.79	0.63	0.00	0.00	0.00	0.00	0.00	**28.25**
	Total		**210.90**	**323.49**	**344.66**	**390.11**	**392.24**	**325.29**	**144.46**	**73.39**	**50.46**	**44.92**	**45.65**	**149.92**	**2495.50**
4.2.1	**Nathpa Jhakri (SJVNL)**	Hydro	**27.89**	**89.91**	**129.16**	**156.87**	**153.25**	**133.21**	**55.26**	**30.26**	**22.44**	**20.13**	**16.88**	**21.71**	**856.99**
4.2.2	**Rampur (SJVNL)**	Hydro	**4.32**	**13.68**	**20.89**	**26.54**	**26.52**	**23.24**	**8.96**	**4.62**	**3.43**	**3.04**	**2.58**	**3.32**	**141.13**
4.3	**Tehri(THDC)**	Hydro	**14.45**	**9.78**	**0.75**	**48.08**	**49.90**	**60.80**	**21.79**	**16.10**	**22.19**	**17.76**	**25.08**	**17.71**	**304.39**
4.4	**Koteshwar(THDC)**	Hydro	**5.13**	**3.74**	**0.33**	**15.63**	**15.53**	**16.86**	**5.95**	**4.50**	**6.11**	**5.19**	**7.89**	**6.24**	**93.09**
4.5.1	**DVC RTPS 1&2**	Thermal	**73.93**	**80.55**	**92.07**	**101.70**	**121.43**	**140.09**	**150.40**	**116.56**	**149.42**	**139.67**	**152.01**	**189.26**	**1507.10**
4.5.2	**DVC -Durgapur**	Thermal	**76.97**	**79.56**	**98.85**	**78.63**	**33.63**	**87.26**	**109.32**	**95.34**	**88.81**	**75.77**	**63.07**	**96.24**	**983.45**
4.5.3	**DVC -BTPS**	Thermal	**112.45**	**114.64**	**106.38**	**99.19**	**87.37**	**105.64**	**93.96**	**86.98**	**107.73**	**113.72**	**109.00**	**96.18**	**1233.24**
4.6	**NTPC**														
	Singrauli	Thermal	127.61	134.15	127.87	137.84	115.25	123.76	135.81	118.72	126.32	126.13	118.92	132.86	**1525.23**
	Rihand-I	Thermal	68.78	66.61	73.73	78.41	67.66	33.81	61.32	69.17	64.20	72.91	64.61	71.53	**792.74**
	Rihand-II	Thermal	56.90	70.37	66.74	77.40	74.79	71.44	71.46	67.88	70.73	71.53	64.41	71.01	**834.64**
	Rihand - III	Thermal	49.78	57.14	58.51	64.91	62.67	62.85	54.22	53.24	56.41	56.43	29.45	42.89	**648.50**
	Anta CR	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Anta G	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Anta R	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Anta L	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Auriya CR	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Auriya G	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Auriya R	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**

Energy scheduled for the FY 2024-25 (in MUs)														
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
	Auriya L	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Dadri CR	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Dadri G	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Dadri R	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Dadri L	Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Unchahar-I	Thermal	0.01	0.02	0.31	0.76	0.61	0.72	0.23	0.00	0.00	0.01	0.02	0.02	**2.71**
	Unchahar-II	Thermal	27.90	26.10	35.11	34.08	29.93	26.75	27.68	14.33	19.34	29.63	28.26	32.64	**331.72**
	Unchahar-III	Thermal	7.66	8.92	9.62	11.03	8.27	3.01	1.84	5.78	7.23	8.85	8.30	9.64	**90.15**
	Unchahar-IV	Thermal	0.01	0.07	1.24	3.28	3.11	3.17	0.97	0.00	0.01	0.06	0.05	0.16	**12.14**
	Jhajjar (JV)	Thermal	0.00	0.00	6.89	18.05	14.61	14.78	4.46	0.00	0.00	0.00	0.00	0.00	**58.80**
	Dadri (Th.)-II	Thermal	0.23	0.23	2.11	5.52	4.24	4.33	0.73	0.01	0.03	0.08	0.21	0.43	**18.15**
	Koldam HEP	Hydro	9.30	31.42	41.14	60.52	61.90	44.83	15.97	8.89	6.58	5.71	4.98	7.53	**298.78**
	Singrauli SHEP	Small Hydro	0.00	0.00	0.07	0.16	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.28**
	Tanda Stage-II	Thermal	0.02	0.28	2.81	6.77	5.15	5.45	2.29	0.04	0.07	0.01	0.01	0.08	**22.97**
	Meja	Thermal	26.43	31.54	33.36	36.26	37.94	44.41	37.61	21.78	22.43	28.47	28.32	15.38	**363.92**
	Total		**374.61**	**426.85**	**459.51**	**534.99**	**486.19**	**439.29**	**414.57**	**359.85**	**373.36**	**399.82**	**347.53**	**384.17**	**5000.75**
4.7	**NTPC(ER)**														
	Kahal gaon-II (ER)	Thermal	76.56	75.94	78.06	74.76	63.19	50.49	75.77	61.73	59.42	77.22	73.75	81.11	**848.01**
	Total		**76.56**	**75.94**	**78.06**	**74.76**	**63.19**	**50.49**	**75.77**	**61.73**	**59.42**	**77.22**	**73.75**	**81.11**	**848.01**
4.8	**NPC**														
	NAPP	Nuclear	32.56	32.65	35.23	44.38	44.48	43.09	37.12	33.22	35.11	35.63	30.65	21.29	**425.41**
	RAPP-B	Nuclear	29.02	31.85	29.29	33.41	61.38	34.53	54.68	52.74	32.82	66.89	47.39	61.55	**535.56**
	RAPP-C	Nuclear	22.08	31.42	38.81	52.95	53.26	51.14	35.63	30.66	32.23	29.85	22.35	15.35	**415.72**
	Total		**83.66**	**95.92**	**103.32**	**130.74**	**159.12**	**128.75**	**127.43**	**116.61**	**100.16**	**132.38**	**100.39**	**98.19**	**1376.69**
4.9	**Additional Unallocated allocation**														
	Ramagundam STPS: Stage-1 & 2	Thermal				7.55	11.54	5.79	0.00	0.00	0.00	0.00	0.00	0.00	**24.88**
	Ramagundam STPS: Stage-3	Thermal				2.43	3.64	1.68	0.00	0.00	0.00	0.00	0.00	0.00	**7.74**
	Talcher STPS: Stage-2	Thermal				3.26	7.53	3.91	0.00	0.00	0.00	0.00	0.00	0.00	**14.70**
	Simhadri :Stage-2	Thermal				1.25	3.15	1.82	0.00	0.00	0.00	0.00	0.00	0.00	**6.21**
	Kudgi STPS	Thermal				6.96	12.86	7.19	0.00	0.00	0.00	0.00	0.00	0.00	**27.02**
	Telangana STPP	Thermal			97.93	87.78	85.74	85.04	44.10	0.00	0.00	0.00	0.00	0.00	**400.59**

Energy scheduled for the FY 2024-25 (in MUs)															
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
	Vallur TPS	Thermal				4.52	6.43	3.12	0.00	0.00	0.00	0.00	0.00	0.00	**14.07**
	NLC TPS-II: Stage-1	Thermal				1.38	2.04	1.22	0.00	0.00	0.00	0.00	0.00	0.00	**4.63**
	NLC TPS-II: Stage-2	Thermal				1.98	4.15	1.47	0.00	0.00	0.00	0.00	0.00	0.00	**7.59**
	NLC TPS-I: Expansion	Thermal				2.70	4.99	2.04	0.00	0.00	0.00	0.00	0.00	0.00	**9.73**
	NLC TPS-II: Expansion	Thermal				0.87	0.90	0.65	0.00	0.00	0.00	0.00	0.00	0.00	**2.42**
	NNTPS	Thermal				0.16	0.32	0.26	0.00	0.00	0.00	0.00	0.00	0.00	**0.73**
	NTPL: Tuticorin	Thermal				4.49	7.20	3.03	0.00	0.00	0.00	0.00	0.00	0.00	**14.71**
	NPCIL MAPS Kalpakam	Nuclear				0.38	0.71	0.34	0.00	0.00	0.00	0.00	0.00	0.00	**1.43**
	NPCIL KAIGA GS: Stage-1 & 2	Nuclear				2.93	5.62	2.69	0.00	0.00	0.00	0.00	0.00	0.00	**11.24**
	NPCIL KAIGA GS: Stage-3 & 4	Nuclear				3.26	6.32	3.05	0.00	0.00	0.00	0.00	0.00	0.00	**12.62**
	NPCIL KKNNP	Nuclear				2.41	4.67	2.27	0.00	0.00	0.00	0.00	0.00	0.00	**9.34**
	Total		**0.00**	**0.00**	**97.93**	**134.28**	**167.79**	**125.57**	**44.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	569.67
4.10	**Central Sector Purchase (4.1+4.2+4.3+4.4+4.4.1+4.5+4.6+4.7+4.8+4.9)**		**1060.87**	**1314.05**	**1531.92**	**1791.55**	**1756.16**	**1636.50**	**1252.00**	**965.95**	**983.53**	**1029.62**	**943.82**	**1144.05**	**15410.01**
`															
5	**PURCHASE THROUGH TRADERS**														
5.1	**Purchase through Traders / IPPs (LONG TERM)**														
	NVVN(Bundled Power)														
	NVVN Bundled Coal power		20.20	22.15	22.19	22.04	20.24	17.81	19.03	19.32	19.24	21.23	18.49	21.68	**243.61**
	NVVN Bundled Solar Power		4.77	5.44	5.34	4.49	3.39	4.83	4.12	3.90	3.38	3.82	4.05	4.78	**52.29**
	NVVN Bundled power		**24.97**	**27.58**	**27.53**	**26.53**	**23.63**	**22.64**	**23.15**	**23.22**	**22.61**	**25.05**	**22.54**	**26.46**	**295.91**
	SECI Hybrid Power PSA (Solar)	Solar	127.91	141.87	133.22	127.25	96.48	119.87	116.31	99.54	94.22	103.93	101.95	137.70	**1400.26**
	NHPC – M/s Avaada Sunrays Energy Private Limited	Solar	66.00	69.53	65.34	65.46	53.40	63.01	64.56	56.86	53.47	58.18	55.71	70.40	**741.92**
	SECI Solar Power	Solar	5.36	5.89	5.57	5.41	4.19	4.93	4.37	4.05	4.14	4.41	4.10	5.01	**57.44**
	Total Solar Power		**199.28**	**217.29**	**204.13**	**198.12**	**154.07**	**187.81**	**185.24**	**160.45**	**151.84**	**166.52**	**161.76**	**213.11**	**2199.62**
	Wind Power														
	SECI Wind Power	Wind	79.25	111.53	105.43	96.99	105.13	72.45	34.58	38.39	84.46	66.42	53.83	64.68	**913.14**
	SECI Hybrid Power PSA (Wind)	Wind	26.09	32.18	30.92	30.92	36.33	25.92	25.98	22.69	31.14	26.99	25.36	26.42	**340.93**
	Total Wind Power		**105.33**	**143.71**	**136.35**	**127.90**	**141.45**	**98.37**	**60.56**	**61.09**	**115.60**	**93.41**	**79.19**	**91.10**	**1254.07**

Energy scheduled for the FY 2024-25 (in MUs)														
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
	PTC Tala(Hydro)	Hydro	0.00	0.00	0.87	6.29	6.64	7.00	2.98	0.00	0.00	0.00	0.00	0.00	**23.79**
	Pragati-III(Bawana)CCGT	Gas	18.80	19.40	19.42	20.32	19.13	13.29	15.26	7.98	0.99	6.44	18.68	18.16	**177.86**
	MALANA-2 (PTC)	Hydro	12.83	39.12	44.96	57.73	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**155.05**
	KARCHAM (PTC)	Hydro	27.66	106.99	142.12	159.68	157.13	118.95	52.45	30.71	23.25	20.52	17.15	21.87	**878.48**
	SASAN Ultra Mega Project	Thermal	386.69	384.68	388.47	325.72	366.42	332.41	377.84	376.92	380.38	353.32	331.03	361.53	**4365.40**
	TPCL Mundra	Thermal	219.99	239.07	236.39	246.82	197.32	4.37	220.34	227.66	268.54	271.85	245.40	234.18	**2611.93**
	Talwandi Sabo TPP (TSPL)														
	TSPL_Sch	Thermal	926.36	1072.13	1002.34	1044.07	763.39	1066.04	848.24	595.34	583.09	659.38	834.37	871.48	**10266.23**
	TSPL_UI		3.60	4.72	4.30	5.15	2.67	4.62	2.63	1.05	1.00	0.00	0.00	0.00	**29.74**
	Total TSPL (Sch - UI)		**922.76**	**1067.41**	**998.04**	**1038.92**	**760.72**	**1061.43**	**845.61**	**594.29**	**582.09**	**659.38**	**834.37**	**871.48**	**10236.49**
	RAJPURA TPP (NPL)														
	NPL_Sch	Thermal	819.61	918.81	900.20	939.48	828.64	819.29	868.65	657.84	764.36	757.35	548.01	818.32	**9640.55**
	NPL_UI		-3.57	2.45	2.47	1.35	0.62	-0.33	-2.12	-2.67	0.32	0.00	0.00	0.00	**-1.48**
	Total NPL (Sch - UI)		**823.18**	**916.36**	**897.73**	**938.13**	**828.01**	**819.62**	**870.78**	**660.51**	**764.04**	**757.35**	**548.01**	**818.32**	**9642.03**
	Total Long Term		**2741.49**	**3161.61**	**3096.01**	**3146.15**	**2654.92**	**2665.88**	**2654.21**	**2142.82**	**2309.35**	**2353.84**	**2258.13**	**2656.20**	**31840.61**
5.2	**Purchase through Traders / IPPs (SHORT TERM)**														
	NVVN		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	PTC		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Power Purchased by PSPCL through Exchange														
A	**Conventional Energy**														
	PTC		159.34	621.73	1333.71	983.76	1107.15	840.16	731.02	396.96	623.26	1026.53	979.76	1008.74	**9812.11**
B	**Green Energy**														
	PTC		8.28	83.63	259.53	442.98	230.70	23.51	30.13	17.05	7.44	1.19	0.61	1.12	**1106.16**
	Total (A+B)		**167.62**	**705.36**	**1593.24**	**1426.74**	**1337.85**	**863.67**	**761.15**	**414.01**	**630.69**	**1027.71**	**980.37**	**1009.86**	**10918.27**
	NRSE Power														

Energy scheduled for the FY 2024-25 (in MUs)														
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
	PTC		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	HPSEB		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Short Term		**167.62**	**705.36**	**1593.24**	**1426.74**	**1337.85**	**863.67**	**761.15**	**414.01**	**630.69**	**1027.71**	**980.37**	**1009.86**	**10918.27**
5.3	**Total Trading (5.1+5.2)**		**2909.11**	**3866.97**	**4689.25**	**4572.89**	**3992.78**	**3529.55**	**3415.36**	**2556.83**	**2940.04**	**3381.55**	**3238.50**	**3666.06**	**42758.89**
6	**BANKING**														
6.1	**Banking Direct from Utilities (From +ve)**														
	Andhra Pradesh (Through NAME-OTC)		0.00	14.40	43.62	93.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**151.26**
	MPPMCL		0.00	12.59	28.09	269.16	470.36	446.40	0.00	0.00	0.00	0.00	0.00	0.00	**1226.60**
	KSEBL, Kerala		0.00	98.85	12.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**111.08**
	PCKL, Karnatka		0.00	0.00	194.60	408.66	407.60	387.48	0.00	0.00	0.00	0.00	0.00	0.00	**1398.34**
	MSEDCL		0.00	0.00	0.00	0.00	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**9.60**
	Total		**0.00**	**125.84**	**278.54**	**771.05**	**887.55**	**833.89**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2896.87**
6.2	**Banking through Traders (From +ve)**														
	NVVNL		0.00	0.00	54.76	80.84	0.00	78.23	26.08	0.00	0.00	0.00	0.00	0.00	**239.90**
	IVPL		0.00	0.00	0.00	0.00	22.89	22.12	0.03	0.00	0.00	0.00	0.00	0.00	**45.05**
	Manikaran/MPL		0.00	0.00	0.00	114.17	327.81	223.87	0.00	0.00	0.00	0.00	0.00	0.00	**665.85**
	APPCPL		0.00	0.00	66.63	286.23	190.95	210.57	16.50	0.00	0.00	0.00	0.00	0.00	**770.88**
	PTC		0.00	0.00	98.17	547.80	332.61	249.84	0.00	0.00	0.00	0.00	0.00	0.00	**1228.42**
	Total		**0.00**	**0.00**	**219.56**	**1029.03**	**874.26**	**784.63**	**42.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**2950.10**
	Total Banking From (+ve) (6.1+6.2))		**0.00**	**125.84**	**498.10**	**1800.08**	**1761.81**	**1618.52**	**42.61**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5846.97**
6.3	**Banking Direct to Utilities (To -ve)**														
	Andhra Pradesh (Through NAME-OTC)		-82.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-2.31	-20.13	**-105.24**
	TANGEDCO, Tamilnadu		-146.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**-146.85**
	PCKL, Karnatka		-	-28.80	0.00	0.00	0.00	0.00	0.00	-36.00	-37.20	-	-	-	**-**

Energy scheduled for the FY 2024-25 (in MUs)															
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
			247.70									260.40	357.83	395.05	**1362.98**
	JKPCL (J&K)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-72.80	**-72.80**
	KSEBL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-62.25	**-62.25**
	CSPDCL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-144.00	**-144.00**
	TSPCC, Telangana		-42.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**-42.50**
	MSEDCL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-10.27	**-10.27**
	MPPTCL/MPSEB/MP/MPPMCL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	-134.86	-278.71	-278.69	-251.75	-0.03	**-944.03**
	Total		**-519.85**	**-28.80**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-170.86**	**-315.91**	**-539.09**	**-611.89**	**-704.52**	**-2890.93**
6.4	**Banking through Traders (To -ve)**														
	PTC		0.00	0.00	0.00	0.00	0.00	0.00	-23.70	-199.04	-329.95	-405.62	-395.57	-194.13	**-1548.01**
	NVVNL		-72.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**-72.00**
	SAPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-68.40	**-68.40**
	APPCPL		-127.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-5.28	-33.48	-36.96	-140.03	**-343.14**
	Manikarn(MPL)		-52.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-6.87	-13.73	0.00	-179.80	**-253.00**
	Total		**-251.99**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-23.70**	**-199.04**	**-342.10**	**-452.83**	**-432.53**	**-582.36**	**-2284.55**
	Total Banking To (-ve) (6.3+6.4)		**-771.84**	**-28.80**	**0.00**	**0.00**	**0.00**	**0.00**	**-23.70**	**-369.90**	**-658.01**	**-991.92**	**-1044.42**	**-1286.89**	**-5175.47**
6.5	**Total Net Banking (6.1+6.2+6.3+6.4)**		**-771.84**	**97.04**	**498.10**	**1800.08**	**1761.81**	**1618.52**	**18.91**	**-369.90**	**-658.01**	**-991.92**	**-1044.42**	**-1286.89**	**671.50**
7	**PURCHASE WITHIN PUNJAB (NRSE & PEDA)**														
	Short Term Purchase within Punjab		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	Long Term Purchase within Punjab														

Energy scheduled for the FY 2024-25 (in MUs)														
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
	At 11 KV		14.96	26.80	23.95	32.39	32.91	30.64	21.61	8.64	20.36	9.51	20.54	24.55	**266.85**
	At 33 KV		8.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18	3.19	2.25	1.30	**17.36**
	At 66 KV		231.49	165.51	140.21	147.44	136.41	132.27	150.37	102.59	153.88	168.17	179.05	203.47	**1910.86**
	At 132 KV and above		39.97	40.10	38.46	31.77	29.48	30.53	40.20	28.71	30.27	32.43	32.58	41.06	**415.56**
	Total long Term Purchase within Punjab		294.86	232.41	202.62	211.61	198.79	193.44	212.18	139.94	206.69	213.30	234.43	270.38	**2610.64**
	Total Purchase within Punjab (Long & Short)		**294.86**	**232.41**	**202.62**	**211.61**	**198.79**	**193.44**	**212.18**	**139.94**	**206.69**	**213.30**	**234.43**	**270.38**	**2610.64**
8	**Unscheduled Interchange**		**-54.15**	**-73.31**	**-108.28**	**-92.31**	**-136.67**	**-126.07**	**-81.41**	**-67.87**	**-68.73**	**-56.36**	**-105.85**	**-127.13**	**-1098.12**
9	**Open Access Intra State UI (Import) Non consumer (Railway)**		**-13.40**	**-1.58**	**-1.22**	**-2.04**	**0.93**	**0.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-17.25**
10	**GROSS POWER PURCHASE (4.10+5.3+6.5+7+8+9)**		**3425.45**	**5435.58**	**6812.39**	**8281.78**	**7573.81**	**6851.99**	**4817.05**	**3224.95**	**3403.51**	**3576.19**	**3266.48**	**3666.48**	**60335.65**
11	Interstate Transmission Losses on Purchase		67.54	99.52	159.09	220.85	203.52	149.82	93.92	90.99	89.73	112.08	98.87	107.45	1493.36
	% Inter state Transmission Losses		3.52%	3.36%	3.64%	3.86%	3.67%	3.34%	3.44%	4.60%	3.89%	4.13%	3.86%	3.77%	3.73%
12	**NET POWER PURCHASE (10-11)**		**3357.91**	**5336.07**	**6653.30**	**8060.93**	**7370.29**	**6702.17**	**4723.13**	**3133.96**	**3313.79**	**3464.11**	**3167.61**	**3559.03**	**58842.29**
13	**Sale by PSPCL**														
13.1	**Sale by PSPCL Thru Exchange**														
	PTC		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	GMR		-213.85	-128.46	-49.49	-30.37	-140.31	-91.37	-33.80	-12.32	-9.05	-0.76	-1.28	-5.74	**-716.80**
	Total		**-213.85**	**-128.46**	**-49.49**	**-30.37**	**-140.31**	**-91.37**	**-33.80**	**-12.32**	**-9.05**	**-0.76**	**-1.28**	**-5.74**	**-716.80**
13.2	**Sale by PSPCL Thru Traders/Short Term**														
	PTC		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**

Energy scheduled for the FY 2024-25 (in MUs)														
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Total Sale by PSPCL (13.1+13.2)		**-213.85**	**-128.46**	**-49.49**	**-30.37**	**-140.31**	**-91.37**	**-33.80**	**-12.32**	**-9.05**	**-0.76**	**-1.28**	**-5.74**	**-716.80**
14	**Royality/Free Share to HP/RSD share**														
	Shanan Royalty		-6.64	-6.17	-5.64	-5.67	-6.67	-5.64	-5.67	-2.64	-1.18	-1.14	-1.12	-4.68	**-52.86**
	RSD Share to HP		-3.16	-8.60	-9.51	-11.73	-5.02	-7.03	-3.33	-1.30	-3.22	-1.92	-1.78	-2.00	**-58.61**
	Total		**-9.80**	**-14.77**	**-15.15**	**-17.41**	**-11.68**	**-12.67**	**-9.00**	**-3.94**	**-4.40**	**-3.06**	**-2.90**	**-6.68**	**-111.47**
15	**Intra State UI Injection by Open Access Generators**		**0.00**	**0.18**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.21**
16	**Intra State UI Drawl by Open Access Consumers**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
17	**2% Energy injected by NRSE OA Generators in lieu of Transmission & wheeling Charges**		**0.12**	**0.06**	**0.03**	**0.03**	**0.03**	**0.03**	**0.01**	**0.00**	**0.01**	**0.00**	**0.04**	**0.06**	**0.42**
18	**NET ENERGY SCHEDULED FOR PSPCL (3+12+13+14+15+16+17)**		**4560.82**	**7102.19**	**8641.56**	**10252.10**	**9113.07**	**8414.13**	**6206.03**	**4126.94**	**4712.30**	**4727.26**	**4270.82**	**4847.73**	**76974.93**
19	**Open Access (PURCHASE) Gross**		**26.73**	**34.18**	**36.25**	**35.37**	**37.04**	**35.22**	**36.97**	**46.98**	**32.90**	**30.51**	**30.67**	**37.40**	**420.24**
	Open Access Inter State Transmission Losses		0.95	1.14	1.25	1.30	1.32	1.12	1.26	1.81	1.28	1.23	1.19	1.47	**15.32**
	Open Access (PURCHASE) Net		**25.78**	**33.04**	**35.00**	**34.06**	**35.72**	**34.10**	**35.71**	**45.18**	**31.63**	**29.29**	**29.48**	**35.93**	**404.92**
20	**Open Access (SALE)**		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
21	**Open Access Transactions within State (Wheeling)** **Open Access Injection**		**3.43**	**0.24**	**0.96**	**1.44**	**1.48**	**1.47**	**0.40**	**0.00**	**2.03**	**2.72**	**2.48**	**1.76**	**18.43**

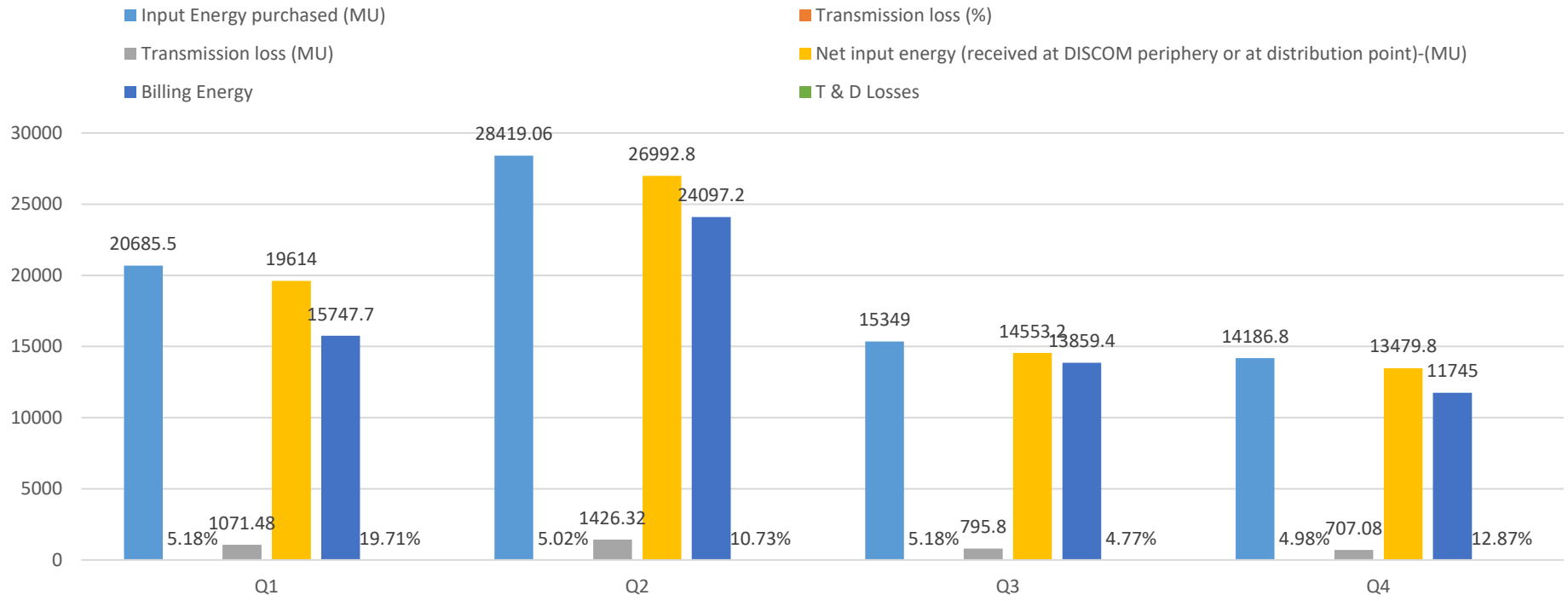
Energy scheduled for the FY 2024-25 (in MUs)															
Sr. No.	GENERATING STATION	Type of Plant	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Total
22	NET ENERGY SCHEDULED FOR PUNJAB STATE (18+19+20+21)		4590.04	7135.47	8677.51	10287.60	9150.28	8449.71	6242.14	4172.12	4745.96	4759.26	4302.78	4885.43	77398.28
23	POWER CUT IMPOSED		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	UNRESTRICTED REQUIREMENT of PSPCL (18+23)		4560.82	7102.19	8641.56	10252.10	9113.07	8414.13	6206.03	4126.94	4712.30	4727.26	4270.82	4847.73	76974.93
25	UNRESTRICTED REQUIREMENT of PUNJAB STATE (22+23)		4590.04	7135.47	8677.51	10287.60	9150.28	8449.71	6242.14	4172.12	4745.96	4759.26	4302.78	4885.43	77398.28

1.19 Quater wise Energy Analysis for AY 2024-25

During Assessment Year 2024–25, PSPCL recorded quarterly input energy purchases ranging from 14186.8 MU to 28,149.06 MU. Transmission losses remained consistent between 4.98% and 5.18% across quarters. Net input energy received at the DISCOM periphery totaled between 13,479.8 MU and 26,992.8 MU. T&D loss performance showed improvement across the quarters, with the lowest loss recorded at 4.77% in Q3 and an overall positive trend toward efficient network operations.

Table 11:Quater wise energy review for AY- 2024-25

AY 2024-25				
Particulars	**Q1**	**Q2**	**Q3**	**Q4**
Input Energy purchased (MU)	20685.5	28419.06	15349	14186.8
Transmission loss (%)	5.18%	5.02%	5.18%	4.98%
Transmission loss (MU)	1071.48	1426.32	795.8	707.08
Net input energy (received at DISCOM periphery or at distribution point)-(MU)	19614	26992.8	14553.2	13479.8
Billing Energy	15747.7	24097.2	13859.4	11745
T & D Losses	19.71%	10.73%	4.77%	12.87%



Graphs 4:Quarterly Assessment Year 2024-25 Analysis

1.20 Key Operational Parameters of PSPCL (Assessment Year 2024–25)

Punjab State Power Corporation Limited (PSPCL) operates one of the largest electricity distribution networks in the country, serving a wide and diverse consumer base. As of the **Assessment Year 2024–25**, PSPCL's distribution system spans **21 Circles**, with **104 Divisions** and **508 Sub-Divisions**, **13,658 feeders**, and **12.5 lakh Distribution Transformers (DTs)**, serving over **1.10 crore consumers** across Punjab under its management.

Table 12:Technical Details of PSPCL

AY 2024-25		
Parameters	**Total**	**Remarks (Source of data)**
Number of Circles	21	CE/Planning
Number of Divisions	104	CE/Planning
Number of Sub-Divisions	508	CE/Planning
Number of Feeders	13658	Director/D Reports link
Number of DTs	1250538	Director/D Reports link
Number of Consumers	11008964	CE/Planning

The type of consumer observed in different categories in each and every circle which one tabulated below:

Categories of Consumers	Subcategories of Consumers
A. Residential	1. Below Poverty Line (BPL) 2. Domestic
B. Agricultural	1. Agricultural 2. Agriculture allied services
C. Commercial / industrial LT	1. Nondomestic. /Commercial 2. LT (Low tension) Industrial
D. HT (Industrial/Commercial/ Others)	1. High tension (Industrial/Commercial/Residential /Others)
E. Others	1. Streetlight 2. Water Works 3. LV Info. Tech. Industries 4. Temporary Connection (different purpose)

Subsidy Details for the PSPCL

During **FY 2024–25**, PSPCL provided subsidized power to Residential, Agriculture, and Commercial/Industrial-LT categories, with total subsidy billed at **₹20,799.16 crore**. Against this, the State Government has released **₹16,892.16 crore**, leaving an outstanding balance of **₹3,907 crore** to be received.

Brief about Subsidy Details of PSPCL (FY 2024–25)

During FY 2024–25, PSPCL provided subsidized electricity to multiple consumer categories, including Residential, Agriculture, and Commercial/Industrial-LT segments. The total billed energy during the year was 65449.41 million units (kWh).

The total subsidy due from the State Government for the year amounts to ₹20,799.16 crore. Against this, ₹16,892.16 crore has been released by the Government of Punjab as of the reporting date. The balance subsidy yet to be received stands at ₹3,907 crore.

Category-wise highlights:

Residential Consumers: Subsidy of ₹8,284.57 crore billed, of which ₹6,223.70 crore has been received, leaving a balance of ₹2,060.87 crore.

Agriculture Sector: Subsidy of ₹9,977.32 crore billed, ₹8,491.47 crore received, balance ₹1,485.85 crore.

Commercial/Industrial LT: Subsidy of ₹2,537.27 crore billed, ₹2,176.99 crore received, balance ₹360.28 crore.

PSPCL continues to maintain transparency in subsidy accounting and has complied with all required reporting to the State Government and regulatory bodies for PAT Cycle VII and UDAY monitoring. The reconciliation of the outstanding balance is in progress with the Government of Punjab.

Table 13: Subsidy Details of PSPCL for FY 2024-25

Consumer Category	Metered Billed Energy (kWh)	Unmetered Billed Energy (kWh)	Total Billed Energy (kWh)	Subsidized Metered Energy (kWh)	Subsidized Unmetered Energy (kWh)	Total Subsidized Energy (kWh)	Applicable Rate of Subsidy	Unmetered Energy Rate	Subsidy Due Metered (Rs. Cr.)	Subsidy Due Unmetered (Rs. Cr.)	Total Subsidy Due (Rs. Cr.)	Subsidy Claimed (Rs. Cr.)	Subsidy Received (Rs. Cr.)	Balance Subsidy (Rs. Cr.)
Residential	20124979860.00	-	20124979860.00	16566220911	-	16566220911	Rs. 2.50 to Rs. 7.15 per KWh	-	8284.57	-	8284.57	8284.57	6223.70	2060.87
Agriculture	1254670000.00	14841556297.17	14967023297.17	125480000	14817730000	14943210000	Rs.6.55 per KW upto 15.06.2024 & from 16.06.2024 at the rate 6.70 per KW	-	83.69	9893.62	9977.31	9977.32	8491.47	1485.85
Commercial/ Industrial-LT	29225257960.00	-	29225257960.00	24643613529	-	24643613529	Rs 0.15 to 1.37 per KVA	-	2537.27	-	2537.27	2537.27	2176.99	360.28
Commercial/ Industrial-HT	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other (Specify) WW	876588882.83	-	1132148882.80	-	-	-	-	-	-	-	-	-	-	-
Total	50352293702.83	14841556297.17	65449410000.00	41335314440	14817730000	56153044440	-	-	10905.53	9893.62	20799.15	20799.16	16892.16	3907.00

Loss Reduction Schemes Implemented by PSPCL

Over the past four years (from 2021-22 to 2024-25), Punjab State Power Corporation Limited (PSPCL) has actively implemented multiple Loss Reduction and Energy Efficiency schemes across its distribution network, as part of its DSM (Demand Side Management) and PAT obligations. These initiatives have contributed to tangible improvements in reducing technical losses, enhancing metering accuracy, promoting energy-efficient appliances, and improving billing efficiency.

Key measures undertaken include:

Meter Shifting: A major initiative by PSPCL involved shifting nearly 90,000 consumer meters outside consumer premises across multiple phases (2021-22 to 2024-25). This action improved consumer awareness, reduced meter tampering, enabled better meter reading accuracy, and promoted energy-efficient behavior at the household level—leading to verified loss reduction.

Installation of Smart Meters: Under DSM initiatives, PSPCL successfully installed over 13.70 lakh Smart Meters (46657 in 2021-22, 45252 in 2022-23, 530530 in 2023-24, and 745058 in 2024-25). Smart metering contributed to improved accuracy, real-time monitoring, and significant reduction in energy theft.

Distribution of LED Bulbs: Under KLBY scheme and energy-saving drives, PSPCL distributed over 15 lakh LED bulbs to consumers, resulting in load reduction and improved power factor at the consumer end.

Replacement of Conventional Lighting with LED: Extensive replacement of high-wattage streetlights, flood lights, and industrial lighting with energy-efficient LED lighting was carried out across various PSPCL plants (GHTP Lehra Mohabbat, GGSSTP Ropar, Mukerian Hydel, ASHP, BBMB etc.), significantly reducing lighting load on the system.

Energy-Efficient Transformers: PSPCL also installed (IS-1180) ISI marked EEL-2 (amendment-4)/Star-2 (New) Level 2 energy-efficient transformers, contributing to technical loss reduction across distribution circles.

Process Improvements: Updated billing methodologies for AP Kandi mixed feeders and re-categorization of AP and non-AP loads have further improved reported system efficiency and accuracy.

These initiatives reflect PSPCL’s strong commitment toward continuous loss reduction, energy efficiency, and supporting national targets under the PAT Scheme and UDAY scheme. The verified cumulative annual energy savings from these projects run into several lakh units per year, leading to long-term operational efficiency gains for the DISCOM.

Under the Revamped Distribution Sector Scheme (RDSS), Punjab State Power Corporation Limited (PSPCL) is actively working towards infrastructure strengthening, feeder segregation, feeder bifurcation /Augmentation of HT/LT lines/Augmentation of Distribution Transformers (DTs) & installation of New DTs which results in loss reduction, and reliability improvement across the State. The approved project cost for PSPCL under RDSS is Rs. 3816.13 crore (GoI Grand No. 06282001).

As of 31st March 2025, significant physical progress has been achieved across various components.

PSPCL remain committed to timely execution of RDSS targets to enhance distribution system performance, reduce AT&C losses and improve power quality and reliability for its consumers.

Measuring Equipment and Calibration Instrument

National Accreditation Board for Testing and Calibration Laboratories

NABL

CERTIFICATE OF ACCREDITATION

M.E. LABORATORY, PSPCL

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

CHUGITTI CHOWK, PATHANKOT ROAD, JALANDHAR, PUNJAB, INDIA

in the field of

TESTING

Certificate Number: TC-6199

Issue Date: 30/08/2023 Valid Until: 29/08/2025

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.
(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: PUNJAB STATE POWER CORPORATION LIMITED

Signed for and on behalf of NABL

N. Venkateswaran
Chief Executive Officer

FORM A

(Form — A) PERFORMANCE ASSESSMENT DOCUMENT	
(To be filled by the designated consumer)	
Name of designated consumer	Punjab State Power Corporation Limited (PSPCL)
Registration number	DIS0014PB
Sector	Power (DISCOM)
Sub-sector	Electricity Distribution Company (DISCOM)
Accredited energy auditor	Namdhari Eco Energies Pvt Ltd
Name of the Empanelled Accredited Energy Auditor Firm	Mr. Bali Singh-AEA-206
Registration number of Firm	EmAEA – 57 Number in BEE list

List of documents submitted	Status	Date of submission
Baseline data (2018-19)	Submitted	27.05.2021
Form I (2021-22)	Submitted	07.02.2023
Form I (2022-23)	Submitted	16.08.2023
Form I (2023-24)	Submitted	23.8.2024
Form 2	Submitted/Not submitted	
Form 3	Submitted	30.06.2025

Specific energy consumption	Value	Unit
Baseline T&D losses (%) as notified	12.94	%age of transmission &distribution losses
Net Input Energy during (baseline) as notified	54,037.64	Million Units
Target T&D losses (%) for assessment year FY 2024-25 as per revised gazette	12.40	%age of transmission &distribution losses
Difference of Baseline T&D Loss and Target as notified	0.09	%age of transmission &distribution losses
Normalised T&D Loss (Achieved in the target year)	12.31	%age of transmission &distribution losses
Energy savings certificates to be **issued** or deficit	4182.51	Escrt= [(C24-C26) *C23] *0.86

Energy Efficiency Project implemented during (2021-22 to 2024-25)

S,No.	Implemented						
	Project	**Year of Implementation**	**Annual Energy Savings in Lakh KWH**	**Annual Energy Saving in toe***	**Annual Energy Consumption (before) in Lakh KWH**	**Investment (in Crores)**	**Remarks**
1	In FY 2021-22, 31057 meters were shifted outside consumer premises enabling enhanced monitoring and increasing consumer awareness. This strategic relocation of meters led to a reduction in electricity theft and increasing billing.	2021-22	90.7	779.880	108.84	15.53 Cr. (While considering the investment of @ Rs. 5000/- per meter for shifting outside consumer premises)	Assuming Saving of 100 Watt per household. While considering 8 hours of consumption per day, the total saving from 31057 household is 90.70 LUs.
2	As Part of DSM & Energy efficiency initiatives, PSPCL has successfully installed 46657 no.	2021-22	83.98	722.120	2799.42		Assuming Avg 6000 Kwh/year per smart meter and 3% saving from improved

S,No.	Implemented						
	of Smart meters across various consumer categories.						metering accuracy & theft detection.
3	Distribution of 1175545 No. of 9W LEDs among consumers of SC, BC, BPL categories under KLBY Scheme & further extended to General categories.	2021-22	1750.62	15052.623	2059.55	7.071 Cr	Energy consumption is calculated by considering 8 hrs per day for 365 days of working of lights.
4	In FY 2022-23, 44958 meters were shifted outside consumer premises enabling enhanced monitoring and increasing consumer awareness. This strategic relocation of meters led to a reduction in electricity theft and increasing billing.	2022-23	131.28	1128.805	157.53	22.47 Cr. (While considering the investment of @ Rs. 5000/- per meter for shifting outside consumer premises)	Assuming Saving of 100 Watt per household. While considering 8 hours of consumption per day, the total saving from 44958 household is 131.28 LUs.

S,No.	Implemented						
5	As Part of DSM & Energy efficiency initiatives, PSPCL has successfully installed 45252 no. of Smart meters across various consumer categories.	2022-23	81.45	700.375	2715.12		Assuming Avg 6000 Kwh/year per smart meter and 3% saving from improved metering accuracy & theft detection.
6	Energy Efficient (Level 2 efficiency) transformers installed.	2022-23	1.78	15.305		Rs. 2.4 Cr.	
7	Replacement of Flood Lights into LED Lights at Nakkian Power House.	2022-23	0.87	7.481		Rs. 0.03 Cr.	
8	In FY 2023-24, 8968 meters were shifted outside consumer premises enabling enhanced monitoring and increasing consumer awareness. This strategic relocation of meters led to a	2023-24	26.19	225.193	31.42	4.48 Cr. (While considering the investment of @ Rs. 5000/- per meter for shifting outside consumer premises)	Assuming Saving of 100 Watt per household. While considering 8 hours of consumption per day, the total saving from 8968 household is 26.19 LUs.

S,No.	Implemented						
	reduction in electricity theft and increasing billing.						
9	As Part of DSM & Energy efficiency initiatives, PSPCL has successfully installed 530530 no. of Smart meters across various consumer categories.	2023-24	954.95	8211.092	31831.8		Assuming Avg 6000 Kwh/year per smart meter and 3% saving from improved metering accuracy & theft detection.
10	Replacement of all types of 810 Nos tube lights below 100W with 18W high efficiency LED tube lights, 210 nos. conventional 125 W tubes with 210 nos 30 W LED Lights, 35 Nos 250 W flood light with 35 nos. flood light 50 W,	2023-24	3.241	27.868	4.19	0.121	All lights installed under Power House at RSD Sahpurkandi, ASHP PH-II,Nakkian,Shanan Power House Joginder Nagar., UBDC Hydel Project Malikpur.

S,No.	Implemented						
	40 no. (30 no 400 W & 10 no. parking light 100 W) replaced with 30 no. flood light 100 W and 10 no. parking light 20 W, 200 nos 40 W conventional tubes replaced with 20 W LED tubes, 30 nos. 70-watt sodium vapor lamps have been replaced with 30 nos. 30W LED Street lights & 18 nos. 250-watt sodium/mercury lights have been replaced with 18 no. 100W LED Flood lights.						
11	In FY 2024-25, 4059 meters were shifted outside consumer premises enabling enhanced monitoring and increasing	2024-25	11.85	101.892	14.22	2.02 Cr. (While considering the investment of @ Rs. 5000/- per meter for	Assuming Saving of 100 Watt per household. While considering 8 hours of consumption per day, the total

S,No.	Implemented						
	consumer awareness. This strategic relocation of meters led to a reduction in electricity theft and increasing billing.					shifting outside consumer premises)	saving from 4059 household is 11.85 LUs.
12	As Part of DSM & Energy efficiency initiatives, PSPCL has successfully installed 745058 no. of Smart meters across various consumer categories.	2024-25	1341.10	11531.384	44703.48		Assuming Avg 6000 Kwh/year per smart meter and 3% saving from improved metering accuracy & theft detection.
	Total	**From 2021-22 to 2024 -25**	**4478.011**	**38503.096**			

Energy Conservation Measures Recommended by Auditor

S. No.	Energy Conservation Measure	Description
1	Implementation of Advanced Distribution Management System (ADMS)	Integrating ADMS to enable real-time monitoring, fault detection, load forecasting, and automated switching operations to optimize power flow and reduce losses.
2	Time-of-Day (ToD) Based Tariff Rollout	Encouraging consumers to shift consumption to off-peak hours by introducing differential pricing, which reduces peak load stress and overall system losses.
3	Deployment of AI/ML for Loss Analytics	Using Artificial Intelligence and Machine Learning to detect energy theft, predict demand patterns, and optimize load balancing in feeder and DT-level monitoring.
4	Upgradation to Energy-Efficient Distribution Transformers (Star Rated)	Phasing out old transformers and replacing them with BIS 5-Star rated transformers to reduce core and copper losses significantly.
5	Consumer Awareness and Behavioral Energy Efficiency Programs	Conducting (**Information, Education, and Communication**) IEC campaigns, energy conservation drives, and mobile app-based consumption insights to empower end-users to adopt efficient practices.
6	SCADA Expansion to All Urban Substations	Extending SCADA systems across urban and semi-urban substations for remote monitoring and faster fault diagnosis, enhancing system reliability and reducing outage losses.
7	Integration of Rooftop Solar with Net Metering & Virtual Net Metering	Promoting decentralized renewable energy generation to reduce grid demand, especially during peak hours, and support RPO/RCO compliance.
8	Smart Metering and GIS Integration	Implementing smart metering across all HT and high-load LT consumers, integrating with GIS for real-time monitoring of energy usage, loss detection, and enhanced asset management.
9	Battery Energy Storage Systems (BESS) at Substations	Installing BESS in select substations to manage peak loads, frequency stabilization, and reactive power support for grid efficiency.
10	Dynamic Voltage Optimization (DVO) at Consumer End	Deploying voltage regulation technologies at distribution transformers to maintain optimal voltage levels, thereby reducing energy wastage at consumer premises.

Methodology for M&V

For reporting under PAT Cycle VII, PSPCL adopts a systematic approach for data submission and verification as per the guidelines of the Bureau of Energy Efficiency (BEE). The methodology ensures that consistent, accurate, and verifiable data is captured regarding infrastructure, energy input, and circle-wise distribution losses for both baseline and assessment years.

Filling of Sector-Specific Pro-Forma by DC

The Sector-Specific Pro-Forma is designed to capture all relevant infrastructure and energy data required for the computation of distribution losses at the DISCOM level. It is structured to facilitate uniform reporting and enable the calculation of *gate-to-gate* transmission and distribution (T&D) losses. The following key steps and components are involved:

1. **Regulatory** Compliance: As per *Energy Conservation Rules (2007)*, each Designated Consumer (DC) is required to submit annual energy consumption reports (Form-1) to the State Designated Agency (SDA) and BEE in both electronic and hard copy formats.

2. **Structure of the Pro-Forma:**

    - Instruction Sheet for filling Form-1
    - General Information Sheet
    - Form-1 (auto-generated post data entry)
    - Form – Input Energy
    - Form – SJ (Consumer & Billing Data)

3. **Pro-Forma Features:**

    - Formula cells are locked to ensure data integrity and security
    - Color-coded cells to guide data entry
    - Used for annual energy return submission under PAT since FY 2014-15

4. **Data Requirements:**

    - Input energy data (meter-wise) at distribution periphery
    - Open access sales, EHT sales, and transmission losses
    - Consumer numbers and connected loads (category-wise, circle-wise)
    - Circle-wise billed energy and computed distribution losses
    - Circle-wise and DISCOM-level T&D losses

5. **Reporting:**
   DCs are required to submit both baseline and assessment year data,

supported by primary and secondary documentary evidence. The data entry follows the format and instructions provided by BEE and SDA.

Verification Process

The Empaneled Accredited Energy Auditor (EmAEA) is responsible for verifying the submitted data through the following process:

1. Obtain the final Baseline Report (approved by BEE) from PSPCL.
2. Conduct site visits to review monitoring systems, interview PSPCL staff, and collect supporting evidence.
3. Review baseline reports, sector-specific pro-forma, and relevant documents in advance.
4. Cross-verify circle-wise losses, total input energy, and ensure data consistency across all reporting formats.
5. Assign verification tasks among audit team members—covering primary/secondary sources, field observations, and interviews.
6. Validate the baseline T&D losses against original approved reports and records.
7. Document and resolve any typographical or factual discrepancies through supporting evidence.
8. Report discrepancies (if any) to BEE for further rectification and pro-forma updates.
9. Evaluate the assessment year data for accuracy and evidence-based reporting.
10. Review energy saving projects (if applicable) and their impact on reported performance.
11. Verify formula applications and overall computation methodology.
12. Maintain proper documentation for all sources reviewed.

The final verified dataset—inclusive of any corrections—forms the basis for reporting PSPCL's T&D performance under PAT Cycle VII. This structured methodology ensures transparency, accuracy, and regulatory compliance throughout the reporting and verification cycle.

Verification Process

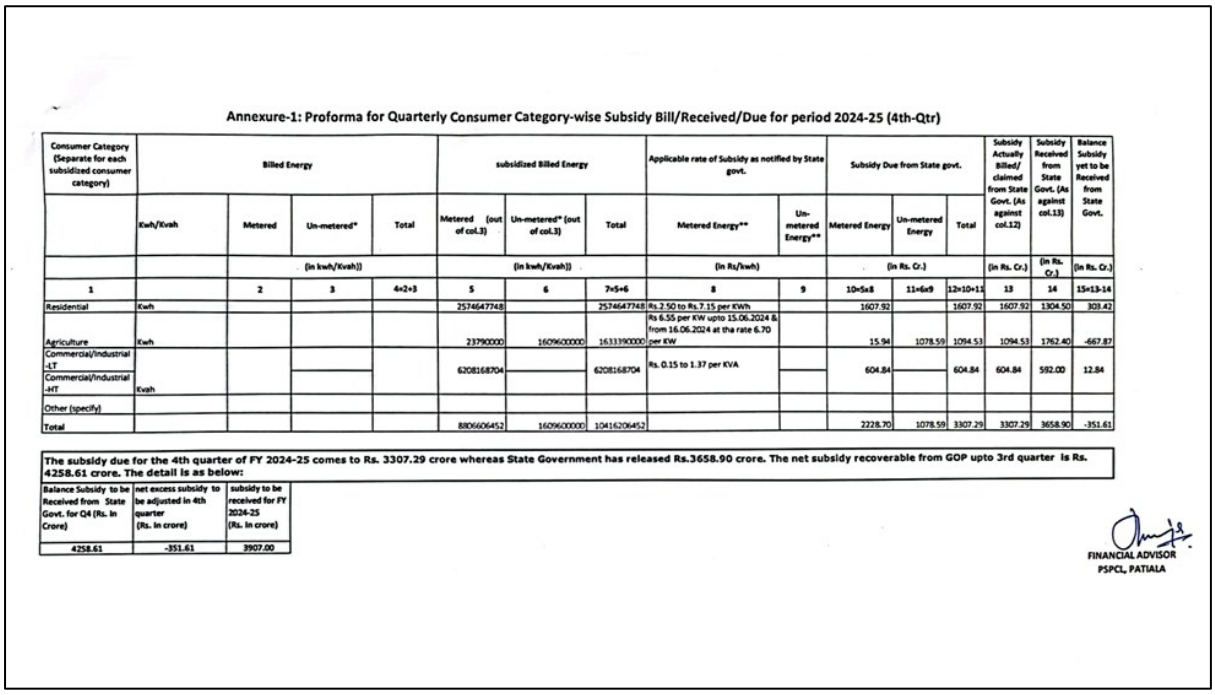
As part of the verification process under PAT Cycle VII, the Empaneled Accredited Energy Auditor (EmAEA) is required to systematically carry out the following steps to ensure accurate validation of PSPCL's reported data:

1. Upon receipt of the work order, the EmAEA shall obtain the final Baseline Report (as accepted by BEE) from the Designated Consumer (DC).
2. The EmAEA shall schedule and conduct a site visit on mutually agreed dates with PSPCL, to inspect the monitoring systems, interview key personnel, and collect all necessary supporting documentation through the Sector-Specific Pro-Forma.
3. Prior to the site visit, the EmAEA will thoroughly review the Baseline Report, Sector-Specific Pro-Forma, and Normalization Documents to ensure a complete understanding of PSPCL's reporting structure.
4. For computing Transmission & Distribution (T&D) losses, the EmAEA will validate the input energy recorded at the distribution periphery and verify that the sum of circle-wise losses matches the calculated T&D losses at the DISCOM level. Total input energy across circles must align with metered input energy records.
5. The EmAEA will assign verification tasks among team members, covering analysis of Primary and Secondary Sources, field observations, interview reports, and relevant documents.
6. The EmAEA will verify the Baseline T&D loss percentages using the approved Baseline Report.
7. Any additional baseline data provided by PSPCL will be cross verified against authentic documentary evidence.
8. The validated baseline data will be treated as the final dataset for completing the Sector-Specific Pro-Forma. Any typographical or factual errors identified during verification will be documented and corrected with proper justification, which will be included in Verification Form B along with supporting evidence.
9. The T&D loss calculation methodology prescribed in the Sector-Specific Pro-Forma will be adhered to during verification.
10. In the event of discrepancies between baseline data and previously reported data, the EmAEA will report such issues to BEE with proper justification. Once approved, BEE will issue a rectified Pro-Forma to the DC. Representatives from BEE may also visit PSPCL during the verification process.
11. The EmAEA will conduct a thorough review of assessment year data and verify its authenticity through documented sources.
12. The EmAEA will assess and validate any energy-saving projects implemented during the assessment period.
13. The EmAEA will review the accuracy and application of formulas used in data computation.
14. Verification will ensure complete review and availability of primary and secondary documentation supporting all reported data.

Annexures

1.21 Subsidy Details Proof:

Quarter 4:



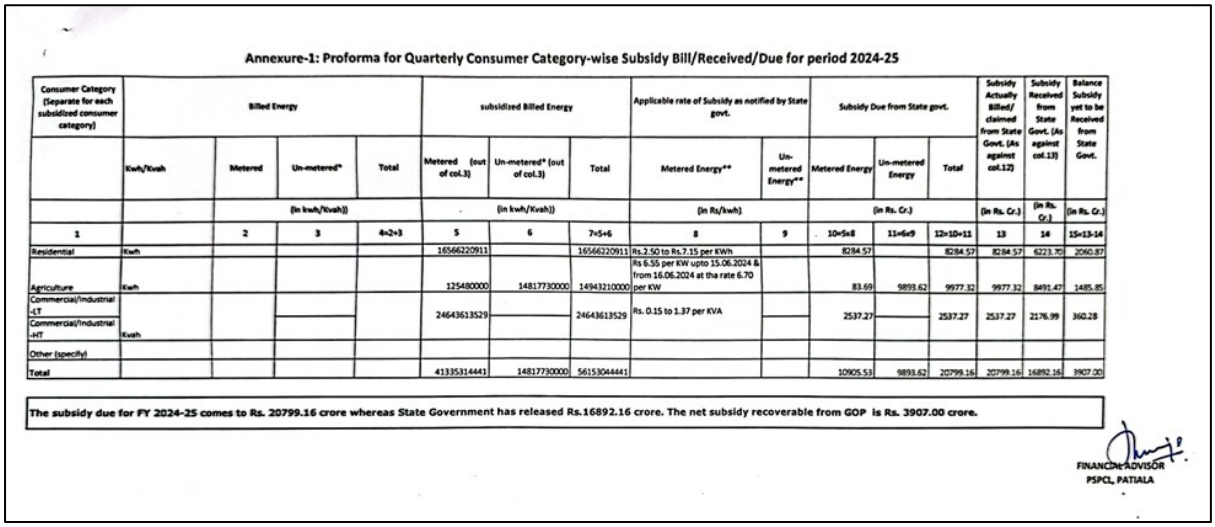
Annexure-1: Proforma for Quarterly Consumer Category-wise Subsidy Bill/Received/Due for period 2024-25 (4th-Qtr)

Consumer Category (Separate for each subsidized consumer category)	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.
	Kwh/Kvah	Metered	Un-metered*	Total	Metered (out of col.3)	Un-metered* (out of col.3)	Total	Metered Energy**	Un-metered Energy**	Metered Energy	Un-metered Energy	Total			
		(in kwh/Kvah))			(in kwh/Kvah))			(in Rs/kwh)		(in Rs. Cr.)			(in Rs. Cr.)	(in Rs. Cr.)	(in Rs. Cr.)
1		2	3	4=2+3	5	6	7=5+6	8	9	10=5x8	11=6x9	12=10+11	13	14	15=13-14
Residential	Kwh				2574647748		2574647748	Rs.2.50 to Rs.7.15 per KWh		1607.92		1607.92	1607.92	1304.50	303.42
Agriculture	Kwh				23790000	1609600000	1633390000	Rs 6.55 per KW upto 15.06.2024 & from 16.06.2024 at tha rate 6.70 per KW		15.94	1078.59	1094.53	1094.53	1762.40	-667.87
Commercial/Industrial -LT	Kvah				620816870 4		620816870 4	Rs. 0.15 to 1.37 per KVA		604.84		604.84	604.84	592.00	12.84
Commercial/Industrial -HT															
Other (specify)															
Total					8806606452	1609600000	10416206452			2228.70	1078.59	3307.29	3307.29	3658.90	-351.61

The subsidy due for the 4th quarter of FY 2024-25 comes to Rs. 3307.29 crore whereas State Government has released Rs.3658.90 crore. The net subsidy recoverable from GOP upto 3rd quarter is Rs. 4258.61 crore. The detail is as below:

Balance Subsidy to be Received from State Govt. for Q4 (Rs. In Crore)	net excess subsidy to be adjusted in 4th quarter (Rs. In crore)	subsidy to be received for FY 2024-25 (Rs. In crore)
4258.61	-351.61	3907.00

FINANCIAL ADVISOR
PSPCL, PATIALA



Annexure-1: Proforma for Quarterly Consumer Category-wise Subsidy Bill/Received/Due for period 2024-25

Consumer Category (Separate for each subsidized consumer category)	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.
	Kwh/Kvah	Metered	Un-metered*	Total	Metered (out of col.3)	Un-metered* (out of col.3)	Total	Metered Energy**	Un-metered Energy**	Metered Energy	Un-metered Energy	Total			
		(in kwh/Kvah))			(in kwh/Kvah))			(in Rs/kwh)		(in Rs. Cr.)			(in Rs. Cr.)	(in Rs. Cr.)	(in Rs. Cr.)
1		2	3	4=2+3	5	6	7=5+6	8	9	10=5x8	11=6x9	12=10+11	13	14	15=13-14
Residential	Kwh				16566220911		16566220911	Rs.2.50 to Rs.7.15 per KWh		8284.57		8284.57	8284.57	6223.70	2060.87
Agriculture	Kwh				125480000	14817730000	14943210000	Rs 6.55 per KW upto 15.06.2024 & from 16.06.2024 at tha rate 6.70 per KW		83.69	9893.62	9977.32	9977.32	8491.47	1485.85
Commercial/Industrial -LT	Kvah				24643613529		24643613529	Rs. 0.15 to 1.37 per KVA		2537.27		2537.27	2537.27	2176.99	360.28
Commercial/Industrial -HT															
Other (specify)															
Total					41335314441	14817730000	56153044441			10905.53	9893.62	20799.16	20799.16	16892.16	3907.00

The subsidy due for FY 2024-25 comes to Rs. 20799.16 crore whereas State Government has released Rs.16892.16 crore. The net subsidy recoverable from GOP is Rs. 3907.00 crore.

FINANCIAL ADVISOR
PSPCL, PATIALA

1.22 Work order copy from DC

Link: Please refer Annexure

1.23 Undertaking from EmAEA [On Mandatory Energy Audit (MEA) not carried out by the firm and team members involved in M&V]

I/we do hereby undertake that our firm **Namdhari ECO ENERGIES PVT LTD** having its corporate office at C–105 Galaxy Vega, Tech zone – 4, Greater Noida (West), U.P. India – 201318 & its Energy audit team, which is involved in Monitoring & Verification (M&V) of **Punjab State Power Corporation Limited PSPCL** has not carried out the Mandatory Energy Audit for the **"Punjab State Power Corporation Limited PSPCL"** during previous (PAT Cycle).

Bali Singh
Accredited Energy Auditor (AEA-206)
Bureau of Energy Efficiency
Ministry of Power, Govt. of India

Bali Singh
AEA-206
Namdhari Eco Energies Pvt. Ltd.

1.24 Work order for M&V Audit by PSPCL to Namdhari Eco Energies

Copy of work order:

PUNJAB STATE POWER CORPORATION LIMITED

Regd. Office: PSEB Head Office, The Mall, Patiala.147001.
Office: Dy.CE/DSM, 8-3, Shakti Vihar, Patiala
email: se-dsm@pspcl.in, Mobile no: 96461-18111

To

M/s Namdhari Eco Energies Pvt. Ltd.,
Greater Noida 201306, Uttar Pradesh.

Memo no 261 /DSM-149 Date: 26-03-2025

Sub: **Letter of award Tender Enquiry No. 001/DSM-2024-25 for appointment of BEE Empanelled Accredited Energy Auditor Firm (EmAEA) to conduct Monitoring & Verification (M&V) of PSPCL under PAT Cycle-VII of energy performance of PSPCL for assessment year 2024-25 with a baseline year taking into the consideration relevant conditions along with all reports i.e. final verification report, verified annual Form 1, DISCOM Specific Pro forma, Form-A, Form-B, Form-C, Form-D etc. with authentic supporting documents in accordance with BEE M&V Guidelines for DISCOM sector, PAT Rules, 2012 and its subsequent amendments.**

With reference to your offer dated 21-02-2025 submitted against the subject cited tender enquiry, it has been decided to place an order upon your firm to conduct Monitoring & Verification (M&V) Audit of PSPCL under PAT Cycle-VII at your own quoted rate Rs. 1,49,950/- +GST @18% i.e. total amounting to Rs. 1,76,941/- (One lakh seventy six thousand nine hundred and forty one only including GST @18%) as per scope of work in the Tender Enquiry No. 001/DSM-2024-25. Detail work order will be issued shortly.

Please convey your acceptance within five days from the date of issue of this letter failing which it will be considered that this offer is not accepted to you and further action shall be taken accordingly.

Dy.CE/DSM,
PSPCL, Patiala.

962/63
26/3/25

CC:

1. CE/EA & Enforcement, PSPCL, Patiala.
2. CE/TA&I, PSPCL, Patiala.

Accepted

1.25 Terrif Details of PSPCL for FY 2024-25

Kindly visit the PSPCL Tariff Order for further details and comprehensive information.

Link: https://docs.pspcl.in/docs/cecommercial2420240614200521031.pdf

Commercial Circular No. 11/2024

To

All Engineer-in-Chief/Chief Engineers (DS),
Under Punjab State Power Corporation Limited.

Memo No. **156/160 /T.O 2024-25** Dated: **14.06.2024**

Subject: **Tariff structure for FY 2024-25 as per Tariff order issued by Hon'ble PSERC vide its order dated 14.06.2024 applicable w.e.f. 16.06.2024.**

Hon'ble PSERC vide its order dated 14.06.2024 against Petition no. 64 of 2023 filed by PSPCL for True-Up of F.Y. 2022-23, and approval of forecast of Annual Performance Review for FY 2024-25 and determination of tariff for FY 2024-25, has issued the Tariff Order for FY 2024-25. The revised tariffs will be applicable from 16.06.2024 to 31.03.2025, except where specified otherwise in Tariff Order for FY 2024-25. For the period from 01.04.2024 and up to 15.06.2024, Tariff shall remain as per Tariff Order for FY 2023-24 as already intimated vide CC No. 16/2023 dated 16.05.2023.

The rates of power supply applicable to various categories of consumers as per Table 7.2 of Tariff Order for FY 2024-25 is enclosed herewith (**Annexure-A**). Free power/subsidized tariff shall be applicable to various categories of consumers as per GoP letter no. ENRG013/1/2023/EV2/1/852762/2024 dated 30.05.2024 and letter no. ENRG013/1/2023/EV2/1/857606/2024 dated 06.06.2024 **(Annexure-IX)**.

Meticulous compliance of this circular be ensured. This circular can be downloaded from PSPCL website www.pspcl.in.

This issues with the approval of competent authority.

DA/

i. **Annexure-A (3 pages)**
ii. **Annexure-IX (4 pages)**

14/6/24

Dy.CE/Sales-II
PSPCL, Patiala.

1.26 Form B

From B

[(See rule 6(1)]

CERTIFICATE OF VERIFICATION

M/s **Namdhari Eco Energies Pvt. Ltd.** the accredited energy auditor (Name of the Empaneled Accredited Energy Auditor Firm), have undertaken a thorough independent evaluation of the activities undertaken by M/s. **Punjab State Power Corporation Ltd.** ,a designated consumer for compliance with the energy consumption norms and standards specified under the Government of India Ministry of Power notification number S.O.4491, dated the 26.10.2021 during the target year **2024-25** compared to the baseline year **2018-19** and consequent entitlement or requirement of energy savings certificates and certify that-

(a) the verification of the data collection in relation to energy consumption and specific energy consumption per unit of production in the baseline year and in the target year in Form 1under Rules 2007 or Rules 2008, has been carried out diligently and truthfully.

(b) the verification of the identified energy efficiency measures, and the progress of their implementation given in Form 2 and Form 3 under Rules 2008 has been carried out diligently and truthfully.

(c) the verification of the compliance with energy consumption norms and standards during the target year has been carried out diligently and truthfully.

(d) the verification of the total amount of energy saved, year-wise, after the baseline year and until target year or otherwise and request made by the designated consumer, the entitlement of **4,183** (Nos) energy savings certificate (s) required to be **issued** or purchased by him have been carried out diligently and truthfully.

(e) all reasonable professional skills, care, and diligence have been taken in verifying the various verification activities, findings and conclusions, documents, reports, preparing the documents including the performance assessment document in Form 'A' and verification report and the contents thereof are a true representation of the facts.

Bali Singh
Accredited Energy Auditor (AEA-206)
Bureau of Energy Efficiency
Ministry of Power, Govt. of India

Signature:
Name of accredited energy auditor for verification
Designation:
Name of the Empaneled Accredited Energy Auditor Firm

SEAL

1.27 Form A

Form – A

[(See rule 6 (1)]

PERFORMANCE ASSESSMENT DOCUMENT

(To be filled by designated consumer)

1.	Name of designated consumer	Punjab State Power Corporation Limited (PSPCL)	
2.	Registration number	DIS0014PB	
3.	Sector	Power (DISCOM)	
4.	Sub-sector	Electricity Distribution Company (DISCOM)	
5.	Accredited energy auditor	Namdhari Eco Energies Pvt. Ltd.	
a	Name of the Empanelled Accredited Energy Auditor Firm	Mr. Bali Singh-AEA-206	
b	Registration number of Firm	EmAEA – 57 Number in BEE list	
6.	List of documents submitted (Attach a copy self-attested by Energy Manager and counter signed by Accredited Energy Auditor)		
a.	Baseline data (2018-19)	Submitted	27.05.2021
b.	Form I (2021-22)	Submitted	07.02.2023
c.	Form I (2022-23)	Submitted	16.08.2023
d.	Form I (2023-24)	Submitted	23.8.2024
e.	Form 2 of Rules, 2008	Not submitted	
f.	Form 3 of Rules, 2008	Submitted	30.06.2025

Er. Ravi Verma
EA- 7969
Energy Auditor
PSPCL, Patiala.

7.	Specific energy consumption/ Energy Performance Matrix	Value	Unit
A	Baseline T&D losses (%)as notified	12.94	%age of transmission &distribution losses
B	Net Input Energy during (baseline) as notified	54,037.64	Million Units
C	Target T&D losses (%) for assessment year FY 2024-25 as per revised gazette	12.40	%age of transmission &distribution losses
D	Difference of Baseline T&D Loss and Target as notified	0.09	%age of transmission &distribution losses
E	Normalised T&D Loss (Achieved in the target year)	12.31	%age of transmission &distribution losses
F	Energy savings certificates to be issued or deficit	4182.51	Escert= [(C-E)*B] *0.86

8. Energy Efficiency Project implemented during current cycle (2021-22 to 2024-25)

S. No	Project	Year of Implementation	Annual Energy Savings in Lakh kWh	Annual Energy Saving toe*	Annual Energy consumption (before) in toe	Investment (Rs. Crores)	Remarks
	---------- Attached as Annexure as form-3----------						

* Please indicate the weighted average Gross Calorific Value (GCV) of coal considered for calculation of toe : ..... kcal/kg.

Note 1: Form A may be filled in accordance with the following guidelines, namely: -

GUIDELINES

1. Name of designated consumer: As per notification under clause (g) of section 14.
2. Registration No: As provided by Bureau of Energy Efficiency
3. Sector: As specified in Form 1 of Rules, 2007 or Rules, 2008.
4. Sub-sector: As specified in Form 1 of Rules, 2007 or Rules, 2008.
5. Name of accredited energy auditor: As selected by designated consumer from list of accredited energy auditor empaneled by Bureau of Energy Efficiency.
6. List of documents submitted:
   (a) Baseline data: Submitted to Bureau of Energy Efficiency for Target Calculations
   (b) Form 1 of Rules, 2007 or Rules, 2008 mention the year ( ): As per filing, attach acknowledgement of submission i.e. after completion of 1st year after notification.
   (c) Form 1 of Rules, 2007 or Rules, 2008.mention the year ( ): As per filing, attach

Er. Ravi Verma
EA- 7969
Energy Auditor
PSPCL, Patiala.

acknowledgement of submission i.e. after completion of 2nd year after notification

(d) Form 1 of Rules, 2007 or Rules, 2008.mention the year ( ): As per filing, attach acknowledgement of submission i.e. after completion of target year

(e) Form 2 of Rules 2008: As per filing, attach acknowledgement of submission

(f) Form 3 of Rules 2008: As per filing, attach acknowledgement of submission

7. Specific energy consumption (SEC)
   (a) Specific energy consumption (Baseline): As notified by Government of India as aforesaid.
   (b) Production (Baseline): As notified by Government of India as aforesaid.
   (c) Target specific energy consumption as notified: notified by Government of India
   (d) Normalised specific energy consumption (Achieved): Normalised specific energy consumption (Achieved) inthe target year from Form 1 of Rules, 2007 and Rules, 2008.
   (e) Energy savings certificates: Calculate as per formulae provided in the rule 11. Enter +ve value if energy savings certificates to be issued to designated consumer or enter -ve value in case recommended for purchase of energy savings certificates

8. Project implemented during current cycle: Energy efficiency projects implemented by designated consumers during last three years. Attach photograph of energy savings projects implemented.

Undertaking

I/We undertake that the information supplied in this Performance Assessment Document 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.

I /We agree to extend necessary assistance in case of any enquiry to be made in the matter.

CE/EA & Enforcement
P.S.P.C.L., Patiala

Signature
Name: Er. Rakesh Chand Kokria
Designation: Chief Engineer/ EA & Enforcement, PSPCL

For and behalf of
Name of the Firm/Company/ Organization: Punjab State Power Corporation Ltd.
SEAL of the Firm /Company/ Organization"

Er. Ravi Verma
EA- 7969
Energy Auditor
PSPCL, Patiala.

Energy Efficiency Project implemented during (2021-22 to 2024-25)

Annexure-Form-3

S.No	Implemented Project	Year of Implement ation	Annual Energy Savings in Lakh KWH	Annual Energy Saving in toe*	Annual Energy Consumption (before) in Lakh KWH	Investment (in Crores)	Remarks
							A
1	In FY 2021-22, 31057 meters were shifted outside consumer premises enabling enhanced monitoring and increasing consumer awareness. This strategic relocation of meters led to a reduction in electricity theft and increasing billing.	2021-22	90.7	779.880	108.84	15.53 Cr. (While considering the investment of @ Rs. 5000/- per meter for shifting outside consumer premises)	Assuming Saving of 100 Watt per household. While considering 8 hours of consumption per day, the total saving from 31057 household is 90.70 LUs.
2	As Part of DSM & Energy efficiency initiatives, PSPCL has successfully installed 46657 no. of Smart meters across various consumer categories.	2021-22	83.98	722.120	2799.42		Assuming Avg 6000 Kwh/year per smart meter and 3% saving from improved metering accuracy & theft detection.
3	Distribution of 1175845 No. of 9W LEDs among consumers of SC, BC, BPL categories under KLBY Scheme & further extended to General categories.	2021-22	1750.62	15052.623	2059.55	7.071 Cr	Energy consumption is calculated by considering 8 hrs per day for 365 days of working of lights.
4	In FY 2022-23, 44958 meters were shifted outside consumer premises enabling enhanced monitoring and increasing consumer awareness. This strategic relocation of meters led to a reduction in electricity theft and increasing billing.	2022-23	131.28	1128.805	157.53	22.47 Cr. (While considering the investment of @ Rs. 5000/- per meter for shifting outside consumer premises)	Assuming Saving of 100 Watt per household. While considering 8 hours of consumption per day, the total saving from 44958 household is 131.28 LUs.
5	As Part of DSM & Energy efficiency initiatives, PSPCL has successfully installed 45252 no. of Smart meters across various consumer categories.	2022-23	81.45	700.375	2715.12		Assuming Avg 6000 Kwh/year per smart meter and 3% saving from improved metering accuracy & theft detection.
6	Energy Efficient (Level 2 efficiency) transformers installed.	2022-23	1.78	15.305		Rs. 2.4 Cr.	
7	Replacement of Flood Lights into LED Lights at Nakkian Power House.	2022-23	0.87	7.481		Rs. 0.03 Cr.	
8	In FY 2023-24, 8968 meters were shifted outside consumer premises enabling enhanced monitoring and increasing consumer awareness. This strategic relocation of meters led to a reduction in electricity theft and increasing billing.	2023-24	26.19	225.193	31.42	4.48 Cr. (While considering the investment of @ Rs. 5000/- per meter for shifting outside consumer premises)	Assuming Saving of 100 Watt per household. While considering 8 hours of consumption per day, the total saving from 8968 household is 26.19 LUs.
9	As Part of DSM & Energy efficiency initiatives, PSPCL has successfully installed 530530 no. of Smart meters across various consumer categories.	2023-24	954.95	8211.092	31831.8		Assuming Avg 6000 Kwh/year per smart meter and 3% saving from improved metering accuracy & theft detection.

Er. Ravi Verma
EA- 7969
Energy Auditor
PSPCL, Patiala

10	Replacement of all types of 810 Nos tube lights below 100W with 18W high efficiency LED tube lights, 210 nos. conventional 125 W tubes with 210 nos 30 W LED Lights, 35 Nos 250 W flood light with 35 nos. flood light 50 W, 40 no. (30 no 400 W & 10 no. parking light 100 W) replaced with 30 no. flood light 100 W and 10 no. parking light 20 W, 200 nos 40 W conventional tubes replaced with 20 W LED tubes, 30 nos. 70-watt sodium vapor lamps have been replaced with 30 nos. 30W LED Street lights & 18 nos. 250-watt sodium/mercury lights have been replaced with 18 no. 100W LED Flood lights	2023-24	3.241	27.868	4.19	0.121	All lights installed under Power House at RSD Sahpurkandi, ASHP PH-II,Nakkian,Shanan Power House Joginder Nagar., UBDC Hydel Project Malikpur.
11	In FY 2024-25, 4059 meters were shifted outside consumer premises enabling enhanced monitoring and increasing consumer awareness. This strategic relocation of meters led to a reduction in electricity theft and increasing billing.	2024-25	11.85	101.892	14.22	2.02Cr. (While considering the investment of @ Rs. 5000/- per meter for shifting outside consumer premises)	Assuming Saving of 100 Watt per household. While considering 8 hours of consumption per day, the total saving from 4059 household is 11.85 LUs.
12	As Part of DSM & Energy efficiency initiatives, PSPCL has successfully installed 745058 no. of Smart meters across various consumer categories.	2024-25	1341.10	11531.384	44703.48		Assuming Avg 6000 Kwh/year per smart meter and 3% saving from improved metering accuracy & theft detection.
	Total	From 2021-22 to 2024 -25	4478.017	38504.017	84425.58		

Er. Ravi Verma
EA- 7969
Energy Auditor
PSPCL, Patiala

1.28 Signed Performa for 2024-25

Form- Input energy and Sj(General Information)					
Electricity Distribution Companies					
1	Name of the DISCOM	Punjab State Power Corporation Limited (PSPCL)			
2	i) Year of Establishment	2010			
	(ii) Registration No (As provided by BEE)	DISC0014PB			
3	Contact details & Address				
a	DISCOM's address	The Mall, Patiala.			
i	City/Town/Village	Patiala			
ii	District	Patiala			
iii	State	Punjab	Pin	147001	
iv	Telephone	0175-2212005	Fax	0175-2213199	
b	DISCOM's Chief Executive Name	Sh. Ajoy Kumar Sinha, IAS			
i	Designation	CMD PSPCL			
ii	Telephone with STD Code	0175-2212005	Fax	0175-2213199	
iii	Mobile		E-mail	cmd-pspcl@pspcl.in	
4	Registered Office				
i	Company's Chief Executive Name (Nodal officer)	Er. Rakesh Chand Kokria			
ii	Designation	Chief Engineer (Energy Audit & Enforcement)			
iii	Address	Shed No. B2, Shakti Vihar, Patiala			
iv	City/Town/Village	Patiala	P.O.	Patiala	
v	District	Patiala			
vi	State	Punjab	Pin	147001	
vii	Telephone	0175-2215774	Fax	0175-2215774	
5	Energy Manager Details				
i	Name	Er. Ravi Verma			
ii	Designation	ASE	Whether EA or EM	EA	
iii	EA/EM Registration No.	EA-7969			
iv	Telephone		Fax		
v	Mobile	96461 18860	E-mail ID	ravi.verma76@gmail.com	ravverma76@gmail.com

We undertake that the information supplied in the Form Input Energy ans 5) is accurate to the best of my knowledge.

Authorised Signatory and Seal

Signature:-
Name of Energy Manager:
Registration Number:

Name of Authorised Signatory:
Name of the Designated Consumer:

Full Address:-

Signature of Accredited Energy Auditor
Name
Date

Seal

P.S. to CE/EA & Enforcement P.S.P.C.L., Patiala

Dy.C.E./D.S.M. P.S.P.C.L., Patiala

Er. Ravi Verma EA-7969 Energy Auditor PSPCL, Patiala.

Form-Input energy(Details of Input energy & Infrastructure)

Sector-Electricity Distribution Companies (PSPCL)

A. Summary of energy input & Infrastructure

S.No	Parameters	Base line year (2018-19)	Target Year (2024-25)	Remarks (Source of data)
A.1	Input Energy purchased (MU)	55369.88	78611.54	Historical Data
A.2	Transmission loss (%)	2.4%	5.05%	Inter State. Inc. BBMB+Intra state transmission losses
A.3	Transmission loss (MU)	1332.24	3971.832	1636.612+2335.219 (Inter State. Inc. BBMB+Intra state)=3971.832
A.4	Energy sold outside the periphery(MU)	-2569.62	-827.63	(Energy Schdule) sheet SR. NO. 13.2+14+15+16+17
A.5	Open access sale (MU)	0	10.283	Railway
A.6	EHT sale	0	0	
A.7	Net input energy (received at DISCOM periphery or at distribution point,after adjustment)-(MU)	54037.64	74639.71	DD PORTAL
A.8	Is 100% metering available at 66/33 kV (Select yes or no from list)	yes	yes	
A.9	Is 100% metering available at 11 kV (Select yes or no from list)	yes	yes	
A.10	% of metering available at DT	2.87%	4.51%	IT
A.11	% of metering available at consumer end	85.55%	87.43%	IT
A.12	No of feeders at 66kV voltage level	144	181	DD PORTAL
A.13	No of feeders at 33kV voltage level	5	4	DD PORTAL
A.14	No of feeders at 11kV voltage level	11566	13473	DD PORTAL
A.15	No of LT feeders level	0	0	
A.16	Line length (ckt. km) at 66kV voltage level	10099	11765.54	PLLANING
A.17	Line length (ckt. km) at 33kV voltage level	87	73.7	PLLANING
A.18	Line length (ckt. km) at 11kV voltage level	242012	263913	PLLANING
A.19	Line length (km) at LT level	147083	156484	PLLANING
A.20	HT/LT ratio	1.65	1.69	

B. Meter reading of input energy injection points

S.No	Voltage level	Feeder Name	Previous year(2018-19)				Current year(2024-25)				Remarks (Source of data)
			Meter S.No	CT/PT ratio	Import (MU)	Export (MU)	Meter S.No	CT/PT ratio	Import (MU)	Export (MU)	
B.1	11KV	11Kv NEW	7042899	900-450/.57	6.1803	0	7042899	900-450/.577/1-1	5.803		Dir/D Porta
B.2	11KV	11Kv New	2046495	1200/.577/1	9.5779	0	2046495	1200/.577/1-1-1	11.823		
B.3	11KV	11Kv Navk	4221178	1200/.577/1	5.2264	0	4221178	1200/.577/1-1-1	7.534		
B.4	11KV	11Kv Chatt	2993713	1200/.577/1	5.8977	0	2993713	1200/.577/1-1-1	6.817		
B.5	11KV	11Kv Ghee	4180050	1200/.577/1	5.0738	0	4180050	1200/.577/1-1-1	5.322		
B.6	11KV	11Kv Kesri	6740734	1200/.577/1	6.0151	0	6740734	1200/.577/1-1-1	6.688		
B.7	11KV	HUSSAINPU	6489702	900-450/.57	7.1644	0	6489702	900-450/.577/1-1	8.376		
B.8	11KV	Head Wate	6675550	900-450/.57	5.8342	0	6675558	900-450/.577/1-1	8.389		
B.9	11KV	11KV NEW	198076	1200/.577/1	1.5795	0	198076	1200/.577/1-1-1	3.672		
B.10	11KV	11 KV MOT	33685	1200/.577/1	5.0912	0	33685	1200/.577/1-1-1	6.499		
B.11	11KV	11Kv saras	Not available	Not availabl	0.001	0	3067573	1200/.577/1-1-1	5.258		
B.12	11KV	11KV Huss	3067573	1200/.577/1	3.9984	0	7042833	1200/.577/1-1-1	10.867		
B.13	11KV	11KV Ram	7042833	1200/.577/1	9.4854	0	3067982	1200/.577/1-1-1	7.203		
B.14	11KV	11KV Civil I	3067982	1200/.577/1	4.697	0	9154108	1200/.577/1-1-1	1.458		
B.15	11KV	Cheel Man	9154108	1200/.577/1	0.5548	0	33714	1200/.577/1-1-1	10.022		
B.16	11KV	BHARAWA	33714	1200/.577/1	7.9062	0	73164577	1200/.577/1-1-1	1.977		
B.17	11KV	MASHI MA	36961	1200/.577/1	1.6956	0	197891	1200/.577/1-1-1	1.809		
B.18	11KV	KARION M	197948	1200/.577/1	5.266	0	197838	1200/.577/1-1-1	2.545		
B.19	11KV	TOWN HAL	34057	1200/.577/1	0.2962	0	197886	1200/.577/1-1-1	7.202		
B.20	11KV	Focipoint o	197839	1200/.577/1	3.0633	0	10282977	1200/.577/1-1-1	22.863		
B.21	11KV	Bhai Laloji	73164577	1200/.577/1	0.1554	0	11052009	1200/.577/1-1-1	14.642		
B.22	11KV	GT road	197891	1200/.577/1	1.3163	0	11052041	1200/.577/1-1-1	12.570		
B.23	11KV	Byepass	197838	1200/.577/1	0.8771	0	10288333	1200/.577/1-1-1	8.238		
B.24	11KV	New Focal	197886	1200/.577/1	4.6989	0	11081970	1200/.577/1-1-1	13.618		
B.25	11KV	New Amrit	Not available	Not availab	0.4787	0	11057979	1200/.577/1-1-1	7.632		
B.26	11KV	Gobind Na	10282977	1200/.577/1	22.5022	0	5343286	900-450/.577/1-1	11.844		
B.27	11KV	Kapoor Na	11052009	1200/.577/1	12.0417	0	9154236	1200/.577/1-1-1	8.573		
B.28	66KV	Apha G	11052041	1200/.577/1	9.3212	0	Not availab	Not available	14.882		
B.29	11KV	GTB FOCAL	10288333	1200/.577/1	3.7625	0	10282977	1200/.577/1-1-1	13.440		
B.30	11KV	BABA DEEP	11081970	1200/.577/1	14.7042	0	33849	1200/.577/1-1-1	4.138		
B.31	11KV	ATTARI SAI	11057979	1200/.577/1	13.5027	0	33845	1200/.577/1-1-1	10.632		
B.32	11KV	Bhai Ghan	5343286	900-450/.57	8.0175	0	73142114	1200/.577/1-1-1	9.763		
B.33	11KV	BABA BUD	9154236	1200/.577/1	5.5063	0	33830	1200/.577/1-1-1	12.654		
B.34	11KV	11 KV DAB	Not available	Not availab	13.746	0	33851	1200/.577/1-1-1	12.512		
B.35	11KV	11 KV SULT	10282977	1200/.577/1	15.602	0	33833	1200/.577/1-1-1	12.529		
B.36	11KV	11 KV VALL	Not available	Not availab	2.8341	0	1716	900-450/.577/1-1	14.257		
B.37	11KV	11 KV Bhai	33849	1200/.577/1	4.324	0	5475	1200/.577/1-1-1	5.725		
B.38	11KV	11kV Diam	33845	1200/.577/1	11.3216	0	2702	1200/.577/1-1-1	9.018		
B.39	11KV	11 kv Alpha	73142114	1200/.577/1	9.4432	0	6773	900-450/.577/1-1	2.503		
B.40	11KV	11kV Garth	33830	1200/.577/1	8.3538	0	10288333	1200/.577/1-1-1	10.998		
B.41	11KV	11kV Gaus	33851	1200/.577/1	8.316	0	2068299	1200/.577/1-1-1	2.299		
B.42	11KV	BASANT AV	33833	1200/.577/1	8.7694	0	2068148	1200/.577/1-1-1	5.881		
B.43	11KV	GOBIND PA	1716	900-450/.57	8.5785	0	5295597	1200/.577/1-1-1	8.747		
B.44	11KV	GREEN AVI	2068148	1200/.577/1	12.1292	0	6676498	1200/.577/1-1-1	9.514		
B.45	11KV	CANTT RO/	5295597	1200/.577/1	8.4466	0	6676500	1200/.577/1-1-1	4.427		
B.46	11KV	RANI KA BA	6676498	1200/.577/1	10.1831	0	6676502	1200/.577/1-1-1	5.793		
B.47	11KV	MOHAN HI	6676500	1200/.577/1	3.8347	0	6675727	1200/.577/1-1-1	6.588		
B.48	11KV	ANAND AV	6676502	1200/.577/1	5.2445	0	2066552	1200/.577/1-1-1	5.636		
B.49	11KV	DISTRICT C	6675727	1200/.577/1	6.571	0	195606	1200/.577/1-1-1	2.098		
B.50	11KV	DMT	2066552	1200/.577/1	4.8545	0	6675129	1200/.577/1-1-1	1.399		
B.51	11KV	MODEL TO	195606	1200/.577/1	1.3409	0	6675729	1200/.577/1-1-1	7.988		
B.52	11KV	COURT RO/	6675129	1200/.577/1	1.2252	0	151	1200/.577/1-1-1	2.925		
B.53	11KV	MAHINDER	6675729	1200/.577/1	7.5816	0	583763	1200/.577/1-1-1	4.647		
B.54	11KV	KENNEDY A	151	1200/.577/1	3.0028	0	15196139	1200/.577/1-1-1	7.046		
B.55	11KV	BEAUTY AV	583763	1200/.577/1	4.1588	0	536425	1200/.577/1-1-1	6.938		
B.56	11KV	66 KV Kach	15196139	1200/.577/1	6.5494	0	15196204	1200/.577/1-1-1	0.023		
B.57	11KV	CANAL OFF	Not available	Not availab	0.9304	0	7463625	1200-600/5	4.351		
B.58	11KV	RLY WORK	7463625	1200-600/5	14.4478	0	7042956	1200-600/5	1.205		
B.59	11KV	swadeshi n	7042956	1200-600/5	1.2494	0	2047185	1200-600/5	10.662		
B.60	11KV	RAILWAY S	2047185	1200-600/5	9.0136	0	15174817	1200/.577/1-1-1	3.146		

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B.13646	11KV	RDRAANWALI (UPS)			0.00		2068216	1200-600/5	10.258		
B.13647	11KV	Kharanj			0.00		915147	1200-600/5	1.600		
B.13648	11KV	Gandhar			0.00		10282779	900-450/5	1.017		
B.13649	11KV	GANDHAR UPS			0.00		2067742	900-450/5	2.734		
B.13650	11KV	MAHABADHAR AP			0.00		777264	900-450/.577/1-	1.107		
B.13651	11KV	JHEENDWALA AP			0.00		2066402	900-450/.577/1-	1.312		
B.13652	11KV *	BHAGSAR AP			0.00		777497	900-450/.577/1-	1.000		
B.13653	11KV	BHAGSAR CAT-1			0.00		23316	900-450/.577/1-	8.395		
B.13654	11KV	TELUPURA			0.00		23626	900-450/.577/1-	1.345		
B.13655	11KV	NANDGARH AP			0.00		33977	1200-600/5	1.836		
B.13656	11KV	ROHIWALA			0.00		15193842	1200-600/5	1.558		
B.13657	11KV	Ratta Ther New			0.00		15194788	900-450/.577/1-	2.804		
B.13658	11KV	Samewali			0.00		4814	1200-600/5	0.940		
	Roof Top Solar				0.00				131.37		
	Open Access				0.00					10.283	
Difference in input Energy due to injection of renewable energy at 11/66 kv level in the system					546.89						
	Total (MU)				54037.64	0.00	Total (MU)		74650.00	10.28	
	Net input energy at DISCOM periphery (MU)				54037.64		Net input energy at DISCOM periphery (MU)		74639.71		

Color code	Parameter
	Please enter voltage level or leave blank
	Please enter feeder id and name or leave
	Enter meter no or leave blank
	Enter CT/PT ratio or leave blank
0	Please enter numeric value or 0
	Please select yes or no from list
	Formula protected

I/we undertake that the information supplied in the Form Input Energy is accurate to the best of my knowledge

Authorised Signatory and Seal
Signature:-
Name of Energy Manager:
Registration Number:

Signature of Accredited Energy Auditor
Name
Date

(Signature of Chief Executive)
Organisation seal

Er. Ravi Verma
EA- 7969
Energy Auditor
PSPCL, Patiala.

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CE/EA & Enforcement
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Form-5j(Details of circle wise losses)

Sector-Electricity Distribution Companies

C. Circle wise losses

Target year(2018-19)

S.No	Name of circle	Consumer profile: Consumer category	No of connection (Nos)	No of connection Un-metered (Nos)	Total Number of connections (Nos)	% of number of connections	Connected Load (MW)	Connected load Un-metered (MW)	Total Connected Load (MW)	% of connected load	Energy parameters: Input energy (MU)	Billed energy (MU): Metered energy	Unmetered/Assessment energy	Total energy	% of energy consumption	Losses: T&D loss (MU)	T&D loss (%)
1	Barnala	Residential	271327		271327	68%	424.81	0.00	424.81	23.12%	2575.73	510.96		510.96	22.79%	333.91	12.96%
		Agricultural	104	81264	81368	20%	0.82	842.04	842.86	45.85%		1.17	951.51	952.68	42.57%		
		Commercial/Industrial-LT	43534		43534	11%	201.32	0.00	201.32	10.95%		191.67		191.67	8.55%		
		Commercial/Industrial-HT	778		778	0%	365.53	0.00	365.53	19.89%		573.92		573.92	25.60%		
		Others	100	-	100	0%	3.48	0.00	3.48	0.19%		12.57		12.57	0.56%	-	
	Sub-total		315843	81264	397107	100%	995.76	842.04	1837.80	100.00%	2575.732	1290.311266	951.51	2241.82	100.00%	333.91	12.96%
2	Bathinda	Residential	472007		472007	72%	696.22	0.00	696.22	28.74%	3937.65	975.94		975.94	28.84%	553.12	14.05%
		Agricultural	703	116091	116794	18%	8.14	935.84	943.98	38.97%		21.08	1203.85	1224.93	36.19%		
		Commercial/Industrial-LT	68672		68672	10%	322.82	0.00	322.82	13.33%		347.03		347.03	10.25%		
		Commercial/Industrial-HT	910		910	0%	410.05	0.00	410.05	16.93%		742.82		742.82	21.95%		
		Others	378		378	0%	51.16	0.00	51.16	2.11%		93.83		93.83	2.77%		
	Sub-total		542670	116091	658761	100%	1446.39	935.84	2422.23	100.00%	3937.649	2180.6614435	1203.85	3384.53	100.00%	553.12	14.05%
3	City Amritsar	Residential	150795		150795	70%	405.41	0.00	405.41	50.60%	921.21	410.91		410.91	49.85%	96.96	10.53%
		Agricultural	355	0	355	0%	1.86	0.00	1.86	0.23%		3.41	0.00	3.41	0.41%		
		Commercial/Industrial-LT	62967		62967	29%	355.14	0.00	355.14	44.32%		375.02		375.02	45.50%		
		Commercial/Industrial-HT	116		116	0%	32.36	0.00	32.36	4.04%		18.20		18.20	2.21%		
		Others	171		171	0%	6.48	0.00	6.48	0.81%		16.70		16.70	2.03%		
	Sub-total		214504	0	214504	100%	801.25	0.00	801.25	100.00%	921.208	824.249435	0.00	824.25	100.00%	96.96	10.53%
4	Faridkot	Residential	358388		358388	68%	558.28	0.00	558.28	29.96%	2707.76	721.39		721.39	33.86%	443.21	16.37%
		Agricultural	420	113851	114271	22%	2.41	891.07	893.48	47.95%		2.91	1033.26	1036.16	45.54%		
		Commercial/Industrial-LT	53403		53403	10%	231.34	0.00	231.34	12.41%		258.52		259.52	11.46%		
		Commercial/Industrial-HT	644		644	0%	167.51	0.00	167.51	8.99%		226.82		226.82	10.02%		
		Others	126		126	0%	12.91	0.00	12.91	0.69%		25.65		25.65	1.13%		
	Sub-total		412981	113431	526412	100%	972.44	891.07	1863.51	100.00%	2707.757	1241.236905	1033.26	2254.54	100.00%	443.21	16.37%
5	Gurdaspur	Residential	541823		541823	74%	682.64	0.00	682.64	45.31%	2154.11	870.65		870.65	46.08%	344.73	11.47%
		Agricultural	1245	102749	103994	14%	6.73	383.59	390.32	25.91%		17.81	483.21	501.02	26.52%		
		Commercial/Industrial-LT	86325		86325	12%	276.06	0.00	276.06	18.33%		257.16		257.16	13.61%		
		Commercial/Industrial-HT	352		352	0%	103.50	0.00	103.50	6.87%		132.05		132.05	6.99%		
		Others	220		220	0%	53.91	0.00	53.91	3.58%		128.50		128.50	6.80%		
	Sub-total		629965	102749	732714	100%	1122.86	383.59	1506.44	100.00%	2134.105	1406.169011	481.21	1889.38	100.00%	344.73	11.47%
6	Hoshiarpur	Residential	438817		438817	78%	653.72	0.00	653.72	44.21%	2074.32	657.82		657.82	33.96%	137.37	6.62%
		Agricultural	652	59599	60251	10%	3.28	360.47	363.75	24.60%		1.77	462.07	463.84	23.95%		
		Commercial/Industrial-LT	76614		76614	13%	226.43	0.00	226.43	15.31%		234.67		234.67	12.12%		
		Commercial/Industrial-HT	264		264	0%	222.10	0.00	222.10	15.02%		549.69		549.69	28.38%		
		Others	172		172	0%	12.66	0.00	12.66	0.86%		30.92		30.92	1.60%		
	Sub-total		514519	59599	574118	100%	1118.19	360.47	1478.65	100.00%	2074.318	1474.871	462.07	1936.95	100.00%	137.37	6.62%
7	Firozpur	Residential	248276		248276	65%	315.36	0.00	315.36	27.72%	1903.16	455.01		455.01	30.95%	433.15	22.76%
		Agricultural	83	97051	97134	26%	0.40	582.71	583.12	51.26%		1.66	638.01	639.67	43.53%		
		Commercial/Industrial-LT	33705		33705	9%	127.86	0.00	127.86	11.24%		129.19		129.19	8.79%		
		Commercial/Industrial-HT	300		300	0%	88.37	0.00	88.37	7.77%		188.16		188.16	12.80%		
		Others	130		130	0%	22.97	0.00	22.97	2.02%		57.78		57.78	3.93%		
	Sub-total		282494	97051	379545	100%	554.95	582.71	1137.66	100.00%	1903.157	831.937469	638.01	1470.00	100.00%	433.15	22.76%
8	Jalandhar	Residential	429455		429455	75%	1061.70	0.00	1061.70	42.22%	2931.31	951.74		951.74	34.48%	166.88	5.69%
		Agricultural	527	25441	25968	5%	2.46	180.49	182.96	7.27%		4.49	217.06	221.55	8.01%		
		Commercial/Industrial-LT	113541		113541	20%	730.91	0.00	730.91	29.06%		716.61		716.61	25.92%		
		Commercial/Industrial-HT	956		956	0%	463.56	0.00	463.56	18.39%		713.05		713.05	25.79%		
		Others	814		814	0%	76.77	0.00	76.77	3.05%		161.46		161.46	3.84%		
	Sub-total		545293	25441	570734	100%	2334.40	180.49	2514.89	100.00%	2931.306	2547.36048	217.06	2764.42	100.00%	166.88	5.69%
9	Kapurthala	Residential	321393		321393	69%	547.03	0.00	547.03	37.55%	1864.25	590.08		590.08	36.09%	229.07	12.29%
		Agricultural	191	91032	91423	20%	2.31	585.08	587.38	40.32%		9.76	661.06	670.83	41.02%		
		Commercial/Industrial-LT	50617		50617	11%	165.91	0.00	165.91	11.39%		150.32		150.32	9.19%		
		Commercial/Industrial-HT	380		380	0%	149.91	0.00	149.91	9.84%		200.02		200.02	12.23%		
		Others	79		79	0%	13.71	0.00	13.71	0.94%		24.03		24.03	1.47%		

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	Sub-total		371200	91032	464132	100%	871.67	585.08	1456.75	100.00%	1864.247	974.114043	661.06	1635.18	100.00%	229.07	12.29%
10	Khanna	Residential	251409		251409	71%	435.47	0.00	435.47	21.09%	4270.90	540.22		540.22	12.84%	64.36	1.51%
		Agricultural	17	57567	57584	16%	0.10	443.29	443.40	21.47%		0.00	463.72	463.74	11.03%		
		Commercial/Industrial-LT	42593		42593	12%	235.10	0.00	235.10	11.38%		1420.90		1420.90	33.78%		
		Commercial/Industrial-HT	926		926	0%	948.02	0.00	948.02	45.90%		1768.69		1768.69	42.05%		
		Others	116		116	0%	3.24	0.00	3.24	0.16%		13.00		13.00	0.31%		
	Sub-total		295061	57567	352628	100%	1621.92	443.29	2065.21	100.00%	4270.903	3742.824418	463.72	4206.54	100.00%	64.36	1.51%
11	Mohali	Residential	272010		272010	84%	942.54	0.00	942.54	43.35%	2743.80	682.96		682.96	26.07%	122.31	4.46%
		Agricultural	18	13149	13167	4%	0.17	123.90	124.07	5.71%		3.49	175.76	179.92	6.72%		
		Commercial/Industrial-LT	36637		36637	11%	496.16	0.00	496.16	22.82%		676.36		676.36	25.82%		
		Commercial/Industrial-HT	633		633	0%	565.14	0.00	565.14	25.99%		1012.08		1012.08	38.64%		
		Others	414		414	0%	46.30	0.00	46.30	2.13%		72.17		72.17	2.76%		
	Sub-total		309712	13149	322861	100%	2050.31	123.90	2174.21	100.00%	2741.799	2443.727253	175.76	2619.48	100.00%	122.31	4.46%
12	Nawanshahr	Residential	290795		290795	78%	461.71	0.00	461.71	46.69%	1258.31	425.12		425.12	38.90%	161.39	12.87%
		Agricultural	385	46378	46763	12%	1.82	289.74	291.56	29.49%		3.04	386.14	389.18	35.61%		
		Commercial/Industrial-LT	42641		42641	11%	155.13	0.00	155.13	15.69%		140.52		140.52	12.86%		
		Commercial/Industrial-HT	162		162	0%	77.49	0.00	77.49	7.84%		132.56		132.56	12.13%		
		Others	25		25	0%	2.91	0.00	2.91	0.29%		5.54		5.54	0.51%		
	Sub-total		334008	46378	380386	100%	699.05	289.74	988.78	100.00%	1254.309	706.778454	386.14	1092.92	100.00%	161.39	12.87%
13	Patiala	Residential	430246		430246	74%	842.50	0.00	843.50	34.26%	3387.60	925.26		925.26	30.47%	351.13	10.37%
		Agricultural	443	75226	75669	13%	2.99	791.11	794.11	32.29%		8.43	777.26	785.69	25.88%		
		Commercial/Industrial-LT	75814		75814	13%	391.01	0.00	391.01	15.90%		385.60		385.60	12.70%		
		Commercial/Industrial-HT	786		786	0%	386.54	0.00	386.54	15.72%		835.51		835.51	27.52%		
		Others	344		344	0%	44.95	0.00	44.95	1.83%		104.41		104.41	3.44%		
	Sub-total		507633	75226	582859	100%	1668.00	791.11	2459.11	100.00%	3387.6	2259.205203	777.26	3036.47	100.00%	351.13	10.37%
14	Ropar	Residential	348428		348428	77%	636.52	0.00	636.52	34.83%	3254.79	581.82		581.82	18.57%	161.15	4.89%
		Agricultural	1947	50224	52171	12%	14.00	282.14	296.14	16.21%		1.49	429.93	431.41	13.77%		
		Commercial/Industrial-LT	50761		50761	11%	236.99	0.00	236.99	12.97%		252.13		252.13	8.05%		
		Commercial/Industrial-HT	560		560	0%	636.27	0.00	636.27	34.81%		1823.90		1823.90	58.23%		
		Others	236		236	0%	21.51	0.00	21.51	1.18%		44.34		44.34	1.42%		
	Sub-total		399932	50224	450156	100%	1545.31	282.14	1827.44	100.00%	3254.785	2703.705623	429.93	3133.63	100.00%	161.15	4.89%
15	Sangrur	Residential	262907		262907	68%	365.78	0.00	365.78	23.46%	2445.31	480.15		480.15	24.10%	452.70	18.51%
		Agricultural	194	85932	86126	22%	1.54	1015.41	1016.96	59.66%		9.36	1021.73	1031.09	51.75%		
		Commercial/Industrial-LT	38663		38663	10%	158.27	0.00	158.27	9.22%		167.34		167.34	8.40%		
		Commercial/Industrial-HT	754		754	0%	160.18	0.00	160.18	9.40%		304.93		304.93	15.30%		
		Others	37		37	0%	3.44	0.00	3.44	0.20%		8.89		8.89	0.45%		
	Sub-total		302555	85932	388487	100%	689.22	1015.41	1704.63	100.00%	2445.114	970.683713	1021.73	1993.42	100.00%	452.70	18.51%
16	Sri Muktsar Sahib	Residential	384994		384994	71%	498.34	0.00	498.34	38.12%	1985.64	761.13		761.13	47.64%	387.85	19.53%
		Agricultural	83	108007	108089	20%	0.50	440.54	441.04	34.63%		0.96	408.45	409.39	25.62%		
		Commercial/Industrial-LT	53522		51522	9%	206.42	0.00	206.42	16.21%		200.86		200.86	12.57%		
		Commercial/Industrial-HT	370		370	0%	121.09	0.00	121.09	9.51%		205.41		205.41	12.86%		
		Others	54		54	0%	6.77	0.00	6.77	0.53%		21.00		21.00	1.31%		
	Sub-total		437022	108007	545029	100%	833.01	440.54	1273.55	100.00%	1985.638	1189.390638	408.40	1597.79	100.00%	387.85	19.53%
17	Suburban, Amritsar	Residential	368269		368269	74%	610.55	0.00	610.55	41.02%	2512.26	745.97		745.97	37.34%	503.87	20.06%
		Agricultural	3309	75966	77275	16%	6.12	407.23	413.35	27.77%		49.92	452.34	502.26	25.01%		
		Commercial/Industrial-LT	48684		48684	10%	276.36	0.00	276.36	18.57%		314.48		314.48	15.66%		
		Commercial/Industrial-HT	417		417	0%	153.38	0.00	153.38	10.30%		371.34		371.34	18.49%		
		Others	285		285	0%	34.94	0.00	34.94	2.35%		74.35		74.35	3.70%		
	Sub-total		418964	75966	494930	100%	1081.36	407.23	1488.59	100.00%	2512.26	1556.055766	452.34	2008.39	100.00%	503.87	20.06%
18	Tarantaran	Residential	280431		280431	69%	372.75	0.00	372.75	31.77%	2044.75	471.37		471.37	33.38%	632.44	30.93%
		Agricultural	207	93896	94003	23%	0.77	602.10	602.87	51.38%		5.49	703.87	713.36	50.51%		
		Commercial/Industrial-LT	32905		32905	8%	111.74	0.00	111.74	9.52%		120.32		120.32	8.52%		
		Commercial/Industrial-HT	144		144	0%	65.47	0.00	65.47	5.58%		69.31		69.31	4.91%		
		Others	80		80	0%	20.47	0.00	20.47	1.74%		37.96		37.96	2.69%		
	Sub-total		313667	93896	407563	100%	571.19	602.10	1173.29	100.00%	2044.753	708.443744	703.87	1412.31	100.00%	632.44	30.93%
19	Ludhiana East	Residential	200328		200328	69%	463.67	0.00	463.67	20.96%	3319.79	481.94		481.94	15.05%	117.58	3.54%
		Agricultural	393	3265	3658	1%	1.42	20.16	21.59	0.98%		1.42	16.09	17.52	0.55%		
		Commercial/Industrial-LT	83664		83664	29%	831.51	0.00	831.51	37.59%		852.90		852.90	26.63%		
		Commercial/Industrial-HT	3156		3156	0%	880.34	0.00	880.34	39.80%		1808.48		1808.48	56.48%		
		Others	541		541	0%	14.82	0.00	14.82	0.67%		41.47		41.47	1.30%		
	Sub-total		286071	3265	289337	100%	2191.77	20.16	2211.93	100.00%	3319.788	3186.11301	16.09	3202.23	100.00%	117.58	3.54%
20	Ludhiana West	Residential	298613		298613	76%	1057.01	0.00	1057.01	38.85%	3504.03	902.90		902.90	27.13%	176.29	5.03%
		Agricultural	454	4572	5026	1%	2.31	34.73	37.04	0.09%		1.33	23.73	24.96	0.75%		
		Commercial/Industrial-LT	88019		88019	22%	960.42	0.00	960.42	35.30%		888.13		888.13	26.69%		

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		Commercial/Industrial-HT	770		770	0%	638.52	0.00	638.52	23.47%			1405.01		1405.01	42.22%		
		Others	537		517	0%		37.45	0.00	37.45	1.38%			106.73		106.73	3.21%		
	Sub-total		388373	4172	392945	100%	2695.72	24.78	2720.45	100.00%	3504.035		1303.99983	23.73	3327.73	100.00%	174.39	5.03%
21	Ludhiana Suburban	Residential	246841		246841	70%		432.55	0.00	432.55	33.07%		479.10		479.10	31.86%		
		Agricultural	95	68117	68213	19%		0.58	517.01	517.59	39.57%		8.67	570.11	570.78	37.97%		
		Commercial/Industrial-LT	37380		37380	11%		177.84	0.00	177.84	13.59%	1680.29	148.99		148.99	9.90%	174.93	10.41%
		Commercial/Industrial-HT	547		547	0%		175.52	0.00	175.52	13.40%		289.34		289.34	19.23%		
		Others	59		59	0%		6.27	0.00	6.27	0.48%		16.65		16.65	1.11%		
	Sub-total		284923	68117	353040	100%	792.75	517.01	1309.76	100.00%	1680.294		935.253734	570.11	1505.36	100.00%	174.93	10.41%
	Theft Units, Short Assesment Unbilled revenue(eg units)	Residential	0	0	0	#DIV/0!	0.00	0.00	0.00	#DIV/0!					0.00	0.00%		
		Agricultural	0	0	0	#DIV/0!	0.00	0.00	0.00	#DIV/0!					0.00	0.00%		
22		Commercial/Industrial-LT	0	0	0	#DIV/0!	0.00	0.00	0.00	#DIV/0!	546.89				0.00	0.00%	1049.80	191.96%
		Commercial/Industrial-HT	0	0	0	#DIV/0!	0.00	0.00	0.00	#DIV/0!					0.00	0.00%		
		Others	0	0	0	#DIV/0!	0.00	0.00	0.00	#DIV/0!			-268.97	-232.94	-502.91	100.00%		
	Sub-total		0	0	0	100%	0.00	0.00	0.00	100.00%	546.89		-268.97	-232.94	-502.91	100.00%	1049.80	191.96%
	Misc. Adjustment to match with sale as taken by Planning Organisation due to Temporary Supply,	Residential	0	0	0	#DIV/0!	0.00	0.00	0.00	#DIV/0!			0	0.00	0.00	#DIV/0!		
		Agricultural	0	0	0	#DIV/0!	0.00	0.00	0.00	#DIV/0!			0	0.00	0.00	#DIV/0!		
23		Commercial/Industrial-LT	0	0	0	#DIV/0!	0.00	0.00	0.00	#DIV/0!			0	0.00	0.00	#DIV/0!	0.00	#DIV/0!
		Commercial/Industrial-HT	0	0	0	#DIV/0!	0.00	0.00	0.00	#DIV/0!			0	0.00	0.00	#DIV/0!		
		Others	0	0	0	#DIV/0!	0.00	0.00	0.00	#DIV/0!			0	0.00	0.00	#DIV/0!		
	Sub-total		0	0	0	100%	0.00	0.00	0.00	100.00%	0	0	0	0.00	0.00	100.00%	0.00	#DIV/0!
76	Total	Residential	6833542	0	6861543	72%	13464.45	0.00	13464.45	34.23%			13622.85949	0.00	13622.86	28.96%		
		Agricultural	9925	1168957	1178882	15%	58.56	9718.64	0.00	9777.19	24.85%		155.46	11069.10	11224.56	23.86%		
		Commercial/Industrial-LT	1218901	0	1218901	13%	6874.14	0.00	0.00	6874.14	18.88%	54037.635	8229.615337	0.00	8229.62	17.49%	6994.21	12.94%
		Commercial/Industrial-HT	11925	0	11925	0%	6803.23	0.00	0.00	6803.23	18.68%		13371.31137	0.00	13371.31	28.42%		
		Others	4998	0	4998	0%	497.13	0.00	0.00	497.13	1.37%		828.015281	-232.94	595.08	1.26%		
77	At company level		8109291	1368957	9478248	100%	26697.50	9718.64	0.00	36416.13	100.00%	54037.64	36207.26	10836.16	47043.42	100.00%	6994.213	12.94%

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I/we undertake that the information supplied in the Form Sj is accurate to the best of my knowledge.

Authorised Signatory and Signature of Energy Manager

Name

Date:

Name of Authorised Signatory of the Designated Consumer

Signature of Accredited Energy Auditor

Name

Date:

Full Address:-

Seal

Er. Ravi Verma
EA- 7969
Energy Auditor
PSPCL, Patiala.

Dy.C.E./D.S.M.
P.S.P.C.L., Patiala

(Signature of Chief Executive)

Organisation seal

CE/EA & Enforcement
P.S.P.C.L., Patiala

2024-25

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Form-Sj(Details of circle wise losses)

Sector-Electricity Distribution Companies

				Baseline Year (2024-25)															C. Circle wise L	
				Consumer profile							Energy parameters						Losses			
S.No	Name of circle	Circle code	Consumer category	No of connection metered (Nos)	No of connection Un-metered (Nos)	Total Number of connections (Nos)	% of number of connections	Connected Load metered (MW)	Connected Load Un-metered (MW)	Total Connected Load (MW)	% of connected load	Input energy (MU)	Billed energy (MU)			% of energy consumption	T&D loss (MU)	T&D loss (%)		
													Metered energy	Unmetered/Assessment energy	Total energy					
1	Barnala		Residential	314397		314397	70%	588.51		588.505	25%		766.86		766.86	25.50%				
			Agricultural	89	81424	81513	18%	0.64	1006.52	1018.168	43%		1.19	1372.39	1373.58	45.67%				
			Commercial/Industrial-LT	55324		55324	12%	313.17		313.174	13%	3524.58719	289.19		289.19	9.62%	517.2549	14.68%		
			Commercial/Industrial-HT	556		556	0%	398.74		398.738	17%		528.02		528.02	17.56%				
			Others	109		109	0%	32.94		32.936	1%		49.67		49.67	1.65%				
	Sub-total			370475	81424	451899	100%	1334.107	1006.524	2340.631	100%	3524.58719	1634.92456	1372.39	3007.31	100.00%	517.2549	14.68%		
2	Bathinda		Residential	551448		551448	72%	1031.34		1031.342907	32%		1479.09		1479.09	26.82%				
			Agricultural	675	117077	117752	16%	5.86	1381.65	1387.50203	34%		74.12	1058.44	1682.55	30.49%				
			Commercial/Industrial-LT	87206		87206	12%	491.45		491.446768	14%	6434.4495	456.52		456.52	8.27%	906.0278	14.10%		
			Commercial/Industrial-HT	961		961	0%	690.62		690.61696	20%		1788.79		1788.79	32.41%				
			Others	418		418	0%	50.70		50.704	1%		111.47		111.47	2.02%				
	Sub-total			640708	117077	757785	100%	2269.9676	1388.64503	3491.612656	100%	6434.4495	3845.58604	1668.44	5518.42	100.00%	906.0278	14.10%		
3	City Amritsar		Residential	370126		370126	77%	459.53		459.517	52%		512.48		512.48	53.86%				
			Agricultural	348	0	348	0%	1.83	0.00	1.83	0%		0.59	8.00	8.59	0.70%				
			Commercial/Industrial-LT	64092		64092	37%	389.09		389.089	44%	1123.84838	374.62		374.62	39.39%	172.3734	15.34%		
			Commercial/Industrial-HT	67		67	0%	27.81		27.811	3%		42.58		42.58	4.48%				
			Others	492		492	0%	7.13		7.133	1%		14.90		14.90	1.57%				
	Sub-total			435125	0	435125	100%	885.38	0	885.38	100%	1123.84838	951.475	0.00	951.48	100.00%	172.3734	15.34%		
4	Faridkot		Residential	403347		403347	69%	775.79		775.792	32%		1054.45		1054.45	34.61%				
			Agricultural	412	114207	114619	20%	1.25	1083.50	1084.749	45%		8.78	1384.35	1393.13	45.74%				
			Commercial/Industrial-LT	62879		62879	11%	309.63		309.629	13%	3685.1051	240.02		240.02	9.19%	639.3107	27.35%		
			Commercial/Industrial-HT	653		653	0%	213.34		213.338	9%		234.59		234.59	9.67%				
			Others	137		137	0%	17.39		17.391	1%		23.65		23.65	0.78%				
	Sub-total			468428	114207	582635	100%	1316.459	1083.5	2401.999	100%	3685.1051	1661.44447	1384.35	3045.79	100.00%	639.3107	17.35%		
5	Gurdaspur		Residential	643551		643551	75%	1081.55		1081.554	52%		1325.06		1325.06	51.94%				
			Agricultural	1174	103249	104423	12%	5.84	411.30	417.134	21%		11.38	603.71	615.09	24.11%				
			Commercial/Industrial-LT	107935		107935	13%	374.22		374.215	18%	2982.5755	344.59		344.59	13.51%	431.2047	14.46%		
			Commercial/Industrial-HT	312		312	0%	137.25		137.245	7%		151.48		151.48	5.94%				
			Others	275		275	0%	46.13		46.134	2%		115.14		115.14	4.51%				
	Sub-total			753247	103249	856496	100%	1644.983	411.303	2056.286	100%	2982.5755	1947.65482	603.71	2551.37	100.00%	431.2047	14.46%		
6	Fazilka		Residential	508938		508938	77%	961.73		961.709	48%		960.68		960.68	36.37%				
			Agricultural	590	60313	60903	9%	1.44	434.21	436.65	22%		0.78	699.63	700.42	26.30%				
			Commercial/Industrial-LT	93286		93286	14%	303.51		303.513	15%	2797.496	305.83		305.83	11.51%	140.5768	5.03%		
			Commercial/Industrial-HT	238		238	0%	309.96		309.958	15%		680.79		680.79	25.67%				
			Others	200		200	0%	1.34		1.337	0%		9.00		9.00	0.34%				
	Sub-total			603252	60313	663565	100%	1582.958	434.208	2017.167	100%	2797.49624	1957.2882	699.63	2654.52	100.00%	140.5768	5.03%		
7	Firozpur		Residential	285010		285010	67%	421.79		421.789	29%		636.62		636.62	35.58%				
			Agricultural	83	99894	99977	24%	0.40	727.01	727.415	50%		1.04	767.29	768.33	42.94%				
			Commercial/Industrial-LT	39126		39126	9%	177.61		177.611	12%	2673.70697	168.89		168.89	9.22%	884.477	33.08%		
			Commercial/Industrial-HT	323		323	0%	113.42		113.419	8%		163.31		163.31	9.13%				
			Others	165		165	0%	22.89		22.89	2%		56.08		56.08	3.13%				
	Sub-total			324707	99894	424601	100%	735.113	727.012	1458.126	100%	2673.70697	1025.84047	767.29	1793.13	100.00%	884.477	33.08%		
8	Jalandhar		Residential	482613		482613	77%	1293.51		1293.507	43%		1343.00		1343.00	38.49%				
			Agricultural	521	26477	26998	4%	3.39	227.95	230.337	8%		1.20	302.41	303.61	8.70%				
			Commercial/Industrial-LT	114484		114484	18%	766.95		766.953	27%	3748.85547	782.23		782.23	22.42%	359.8961	9.93%		
			Commercial/Industrial-HT	1021		1021	0%	563.58		563.58	20%		928.37		928.37	26.61%				
			Others	793		793	0%	65.30		65.303	2%		131.78		131.75	3.78%				
	Sub-total			599432	26477	625909	100%	2693.135	227.945	2885.08	100%	3748.85547	3186.546	302.41	3488.96	100.00%	359.8961	9.93%		
9	Kapurthala		Residential	373894		373894	71%	745.62		745.615	41%		833.87		833.87	43.25%				
			Agricultural	306	91781	92087	18%	1.92	682.44	684.365	38%		12.62	771.80	784.42	38.81%				
			Commercial/Industrial-LT	58679		58679	11%	221.97		221.967	12%	2305.70646	203.14		203.14	10.05%	284.312	12.33%		
			Commercial/Industrial-HT	368		368	0%	144.69		144.69	8%		178.43		178.43	8.83%				
			Others	131		131	0%	15.01		15.006	1%		21.54		21.54	1.07%				
	Sub-total			433378	91781	525159	100%	1129.202	682.443	1811.643	100%	2305.70646	1249.79969	771.80	2021.38	100.00%	284.312	12.33%		

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10	Khanna	Residential	295741		295741	73%	587.25		587.253	19%	7036.58442	734.60		734.60	10.82%	249.4289	3.54%
		Agricultural	10	57649	57659	14%	0.07	501.66	501.736	16%		2.74	581.01	583.76	8.60%		
		Commercial/Industrial-LT	52821		52821	13%	323.95		323.9525	10%		283.34		283.34	4.17%		
		Commercial/Industrial-HT	961		961	0%	1684.75		1684.748	54%		5160.86		5160.86	76.04%		
		Others	190		190	0%	22.32		22.324	1%		24.60		24.60	0.36%		
	Sub-total		349723	57649	407372	100%	2618.3505	501.663	3122.0135	100%	7036.58442	6206.14284	581.01	6787.16	100.00%	249.4289	3.54%
11	Mohali	Residential	400641		400641	85%	1507.98		1507.982	46%	4170.73911	1283.08		1283.08	31.67%	119.8178	2.87%
		Agricultural	10	13345	13355	3%	0.11	138.04	138.147	4%		0.12	229.51	229.63	5.67%		
		Commercial/Industrial-LT	54481		54481	12%	792.49		792.48564	24%		925.35		925.35	22.84%		
		Commercial/Industrial-HT	819		819	0%	760.65		760.652	23%		1536.24		1536.24	37.92%		
		Others	674		674	0%	46.68		46.67814	1%		76.62		76.62	1.89%		
	Sub-total		456625	13345	469970	100%	3107.9058	138.039	3245.94478	100%	4170.73911	3821.41399	229.51	4050.92	100.00%	119.8178	2.87%
12	Nawanshahar	Residential	330409		330409	77%	628.91		628.91	49%	1739.432	618.84		618.84	39.61%	176.9664	10.17%
		Agricultural	369	46451	46820	11%	2.01	344.00	346.007	27%		4.28	614.71	618.99	39.62%		
		Commercial/Industrial-LT	50557		50557	12%	192.54		192.539	15%		181.98		181.98	11.65%		
		Commercial/Industrial-HT	179		179	0%	105.83		105.826	8%		137.92		137.92	8.83%		
		Others	40		40	0%	3.00		3.002	0%		4.74		4.74	0.30%		
	Sub-total		381554	46451	428005	100%	932.287	343.997	1276.284	100%	1739.43208	947.7565	614.71	1562.47	100.00%	176.9664	10.17%
13	Patiala	Residential	511543		511543	75%	1109.92		1109.917	36%	4691.05385	1307.75		1307.75	31.39%	525.4033	11.20%
		Agricultural	451	75894	76345	11%	3.37	895.47	898.842	29%		5.25	1058.09	1063.35	25.53%		
		Commercial/Industrial-LT	90231		90231	13%	526.74		526.741	17%		493.62		493.62	11.85%		
		Commercial/Industrial-HT	566		566	0%	505.71		505.714	16%		1203.29		1203.29	28.89%		
		Others	387		387	0%	33.25		33.251	1%		97.65		97.65	2.34%		
	Sub-total		603178	75894	679072	100%	2178.992	895.473	3074.465	100%	4691.05385	3107.55646	1058.09	4165.65	100.00%	525.4033	11.20%
14	Ropar	Residential	445761		445761	79%	1038.25		1038.248	40%	4551.10106	1018.43		1018.43	23.21%	163.8551	3.60%
		Agricultural	592	51784	52376	9%	3.82	326.49	330.314	13%		1.36	590.32	591.67	13.49%		
		Commercial/Industrial-LT	64520		64520	11%	374.70		374.7	14%		374.18		374.18	8.53%		
		Commercial/Industrial-HT	682		682	0%	871.27		871.274	13%		2375.58		2375.55	54.15%		
		Others	297		297	0%	12.26		12.257	0%		27.41		27.41	0.62%		
	Sub-total		511852	51784	563636	100%	2300.302	326.491	2626.793	100%	4551.10106	3796.92843	590.32	4387.25	100.00%	163.8551	3.60%
15	Sangrur	Residential	301474		301474	69%	538.55		538.55	25%	3530.78694	746.29		746.29	26.11%	672.047	19.03%
		Agricultural	197	86278	86475	20%	1.50	1160.90	1162.407	54%		6.62	1441.53	1448.16	50.66%		
		Commercial/Industrial-LT	49230		49230	11%	262.83		262.834	12%		252.09		252.09	8.82%		
		Commercial/Industrial-HT	501		501	0%	197.89		197.893	9%		404.84		404.84	14.16%		
		Others	43		43	0%	3.67		3.67	0%		7.37		7.37	0.26%		
	Sub-total		351445	86278	437723	100%	1004.45	1160.904	2165.354	100%	3530.78694	1417.2085	1441.53	2858.74	100.00%	672.047	19.03%
16	Sri Muktsar Sahib	Residential	444947	0	444947	72%	699.05	0.00	699.048	43%	2785.22957	1113.20	0.00	1113.20	52.40%	660.8779	23.73%
		Agricultural	189	111028	111217	18%	0.96	487.56	488.513	30%		0.11	546.34	546.44	25.72%		
		Commercial/Industrial-LT	63164	0	63164	10%	285.97	0.00	285.973	18%		278.87	0.00	278.87	13.13%		
		Commercial/Industrial-HT	416	0	416	0%	138.81	0.00	138.807	9%		165.67	0.00	165.67	7.80%		
		Others	55	0	55	0%	6.52	0.00	6.52	0%		20.17		20.17	0.95%		
	Sub-total		508771	111028	619799	100%	1131.302	487.557	1618.859	100%	2785.22957	1578.01489	546.34	2124.35	100.00%	660.8779	23.73%
17	Suburban, Amritsar	Residential	441688		441688	76%	824.91		824.91339	44%	3419.19	1025.37		1025.37	41.77%	964.6672	28.21%
		Agricultural	1279	76609	77888	13%	6.12	440.79	446.906545	24%		36.71	518.60	555.31	22.62%		
		Commercial/Industrial-LT	57231		57231	10%	381.34		381.33998	21%		454.29		454.29	18.51%		
		Commercial/Industrial-HT	279		279	0%	168.86		168.856	9%		350.20		350.20	14.27%		
		Others	409		409	0%	35.86		35.863	2%		69.35		69.35	2.83%		
	Sub-total		500886	76609	577495	100%	1417.0904	440.788545	1857.878915	100%	3419.18661	1935.935	518.60	2454.52	100.00%	964.6672	28.21%
18	Tarantaran	Residential	329747		329747	71%	557.85		557.854	37%	2830.45278	697.16		697.16	38.63%	1025.849	36.24%
		Agricultural	147	94205	94352	20%	1.16	711.92	713.076	47%		6.49	851.08	857.57	47.52%		
		Commercial/Industrial-LT	38827		38827	8%	148.73		148.728	10%		143.12		143.12	7.93%		
		Commercial/Industrial-HT	114		114	0%	85.34		85.335	6%		86.41		86.41	4.79%		
		Others	88		88	0%	15.09		15.093	1%		20.35		20.35	1.13%		
	Sub-total		368923	94205	463128	100%	808.171	711.915	1522.086	100%	2830.45278	953.5194	851.08	1804.60	100.00%	1025.849	36.24%
19	Ludhiana East	Residential	245008		245008	71%	552.45		552.45	23%	3881.85576	657.01		657.01	17.15%	51.17471	1.32%
		Agricultural	393	3264	3657	1%	1.43	21.30	22.733	1%		0.21	20.40	20.61	0.54%		
		Commercial/Industrial-LT	93209		93209	27%	945.06		945.064	39%		1015.29		1015.29	26.50%		
		Commercial/Industrial-HT	1334		1334	0%	879.09		879.093	36%		2117.53		2117.53	55.28%		
		Others	701		701	0%	11.58		11.582	0%		20.24		20.24	0.53%		
	Sub-total		340645	3264	343909	100%	2389.621	21.301	2410.922	100%	3881.85576	3810.278	20.40	3830.68	100.00%	51.17471	1.32%
20	Ludhiana West	Residential	374654		374654	77%	1279.67		1279.668	38%	4386.02866	1261.68		1261.68	30.82%	292.9559	6.68%
		Agricultural	456	4555	5011	1%	2.31	25.87	28.191	1%		2.00	29.27	31.27	0.76%		
		Commercial/Industrial-LT	103348		103348	21%	1151.33		1151.334	35%		1102.07		1102.07	26.91%		
		Commercial/Industrial-HT	1044		1044	0%	848.68		848.677	25%		1646.52		1646.52	40.21%		
		Others	926		926	0%	24.34		24.342	1%		51.54		51.54	1.26%		
	Sub-total		480428	4555	484983	100%	3306.349	25.865	3332.214	100%	4386.02866	4063.799	29.27	4093.07	100.00%	292.9559	6.68%
21	Ludhiana Suburban	Residential	294340		294340	72%	629.38		629.381	36%	2350.95758	749.32		749.32	35.07%	214.387	9.12%
		Agricultural	93	68344	68437	17%	0.62	625.87	626.49	36%		1.58	790.87	792.46	37.09%		
		Commercial/Industrial-LT	46275		46275	11%	255.28		255.284	15%		225.27		225.27	10.54%		
		Commercial/Industrial-HT	598		598	0%	226.90		226.899	13%		353.19		353.19	16.53%		
		Others	48		48	0%	7.82		7.818	0%		16.34		16.34	0.76%		
	Sub-total		341354	68344	409698	100%	1120	625.872	1745.872	100%	2350.95758	1345.7036	790.87	2136.57	100.00%	214.387	9.12%

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22	Theft Units, Short Assesment Unbilled revenue(eq units)	Residential	0	0	0	#DIV/0!	0	0	0	#DIV/0!	0	0	0.00	0.00	0.00%	-255.56	#DIV/0!
		Agricultural	0	0	0	#DIV/0!	0	0	0	#DIV/0!		0	0.00	0.00	0.00%		
		Commercial/Industrial-LT	0	0	0	#DIV/0!	0	0	0	#DIV/0!		0	0.00	0.00	0.00%		
		Commercial/Industrial-HT	0	0	0	#DIV/0!	0	0	0	#DIV/0!		0	0.00	0.00	0.00%		
		Others	0	0	0	#DIV/0!	0	0	0	#DIV/0!		0	255.56	255.56	100.00%		
	Sub-total		0	0	0	100%	0	0	0	100%	0	0	255.56	255.56	100.00%	-255.56	#DIV/0!
23	Misc. Adjustment to match with sale as taken by Planning Organisation due to Temporary Supply,	Residential	0	0	0	#DIV/0!	0	0	0	#DIV/0!	0	0	0.00	0.00	0.00%	92.99916	#DIV/0!
		Agricultural	0	0	0	#DIV/0!	0	0	0	#DIV/0!		0	0.00	0.00	0.00%		
		Commercial/Industrial-LT	0	0	0	#DIV/0!	0	0	0	#DIV/0!		0	0.00	0.00	0.00%		
		Commercial/Industrial-HT	0	0	0	#DIV/0!	0	0	0	#DIV/0!		0	0.00	0.00	0.00%		
		Others	0	0	0	#DIV/0!	0	0	0	#DIV/0!		-92.9991572	0.00	-93.00	100.00%		
	Sub-total		0	0	0	100%	0	0	0	100%	0	-92.9991572	0.00	-93.00	100.00%	92.99916	#DIV/0!
76	Total	Residential	8151277	0	8151277	74%	17259.503	0	17259.5033	36%	74639.7132	20124.97986	0.00	20124.98	30.75%	9190.303	12.31%
		Agricultural	8384	1383828	1392212	13%	47.175	11461.44357	11508.61857	24%		525.467	14841.56	14967.02	22.87%		
		Commercial/Industrial-LT	1446905	0	1446905	13%	9003.1729	0	9003.172889	19%		8930.70539	0.00	8930.71	13.65%		
		Commercial/Industrial-HT	11992	0	11992	0%	9073.17	0	9073.16996	19%		20294.55257	0.00	20294.55	31.01%		
		Others	6578	0	6578	0%	465.23414	0	465.23414	1%		876.5888126	255.56	1132.15	1.73%		
77	At company level		9625136	1383828	11008964	100%	35848.255	11461.44357	47309.69885	100%	74639.71	50352.29	15097.12	65449.41	100.00%	9190.303	12.31%

Colour code	Parameter
	Please enter name of circle
	Please enter circle code
0	Please enter numeric value or 0
	Formula protected

I/we undertake that the information supplied in the Form Sj is accurate to the best of my knowledge.

Authorised Signatory and Seal

Signature:-
Name of Energy Manager:
Registration Number:

Er. Ravi Verma
EA- 7969
Energy Auditor
PSPCL, Patiala

Name of Authorised Signatory:
Name of the Designated Consumer:
Full Address:-

Seal

Dy. C.E. / D.S.M.
P.S.P.C.L., Patiala

CE/EA & Enforcement
P.S.P.C.L., Patiala

1.29 Signed Form 1:

Form 1
[See rule 3]

Details of information regarding Total Energy Consumed and Specific Energy Consumption Per unit of Production

Section-A (General Information Details)

Sr No.	General Details	Description	
1	Name of the Unit	Punjab State Power Corporation Limited (PSPCL)	
2	(i) Year of Establishment	2010	
	(ii) Registration No (As provided by BEE)	DIS0014PB	
3	Sector and Sub-Sector in which the Designated Consumer falls	Sector	Sub-Sector
		Electricity Distribution Companies	-
4 (i)	Complete address of DCs Unit location (Including Chief Executive's name & designation) with mobile, telephone, fax nos & e-mail.	Sh. Ajoy Kumar Sinha, IAS,CMD PSPCL,0175-2212005,0175-2213199,,	
(ii)	Registered Office address with telephone, fax nos. & e-mail	Er. Rakesh Chand Kokria ,Chief Engineer (Energy Audit & Enforcement),Shed No. B2, Shakti Vihar, Patiala,Patiala,Patiala,Patiala,Punjab,147001,0175-2215774,0175-2215774	
(iii)	Energy Manager's Name, designation, Registration No., Address, Mobile, Telephone, Fax nos. & e-mail	Er. Ravi Verma ,ASE,EA,EA-7969,,,96461 18860,	

Section - B (Production and Energy Consumption Details)

5.1 Aluminium, Cement, Chlor Alkali, Iron & Steel, Fertilizer, Pulp & Paper, Toxtile, and Petro-Chemical sectors

(a) Production details

	Name of Products	Unit	Base Year (2018-19)	Current Year (2024-25)
		(1)	(2)	(3)
(i)	Product 1	Tonne	N/A	N/A
(ii)	Product 2	Tonne	N/A	N/A
(iii)	Product 3	Tonne	N/A	N/A
(iv)	Product (Please add extra rows in case of additional products)	Tonne	N/A	N/A
(v)	Total Equivalent Product	Tonne	N/A	N/A
(b)	Energy Consumption Details			
(i)	Total Electricity Purchased from Grid/Other Source	Million kwh	N/A	N/A
(ii)	Total Electricity Generated	Million kwh	N/A	N/A
(iii)	Total Electricity Exported	Million kwh	N/A	N/A
(iv)	Total Electrical Energy Consumption	Million kwh	N/A	N/A
(v)	Total Solid Fuel Consumption	Million kCal	N/A	N/A
(vi)	Total Liquid Fuel Consumption	Million kCal	N/A	N/A
(vii)	Total Gaseous Fuel Consumption	Million kCal	N/A	N/A
(viii)	Total Thermal Energy Consumption	Million kCal	N/A	N/A
(ix)	Total Energy Consumption (Thermal + Electrical)	TOE	N/A	N/A
(x)	Total Normalized Energy Consumption (Thermal + Electrical)	TOE	N/A	N/A
(c)	Specific Energy Consumption Details			
(i)	Specific Energy Consumption(Without Normalization)	TOE/Tonne	N/A	N/A
(ii)	Specific Energy Consumption (Normalized)	TOE/Tonne	N/A	N/A
5.2	Thermal Power Stations (Coal/Oil/Gas/others) notified as Designated Consumer			
(i)	Total Capacity	MW	N/A	N/A
(ii)	Unit Configuration	No. of units with their capacity	N/A	N/A
(iii)	Annual Gross Generation	Million kWh	N/A	N/A
(iv)	Annual Plant Load Factor (PLF)	%	N/A	N/A
(v)	Station Gross Design Heat Rate	kcal/kWh	N/A	N/A
(vi)	Station Gross Operative Heat Rate	kcal/kWh	N/A	N/A
(vii)	Auxiliary Power Consumption	%	N/A	N/A
(viii)	Operative Net Heat Rate	kcal/kWh	N/A	N/A
(ix)	Operative Net Heat Rate (Normalized)	kcal/kWh	N/A	N/A
5.3	Petroleum Refinery notified as Designated Consumer			
(a)	Crude Oil Processed Details			
(i)	Throughput (Total Crude Oil Processed)	Thousand Barrels (Mbbls)	N/A,	N/A
(ii)	NRGF (Without Normalization)		N/A	N/A
(iii)	NRGF(Normalized)		N/A	N/A
(b)	Energy Consumption Details			
(i)	Total Electricity Purchased from Grid/Other Source	Million kwh	N/A	N/A
(ii)	Total Electricity Generated	Million kwh	N/A	N/A
(iii)	Total Electricity Exported	Million kwh	N/A	N/A
(iv)	Total Electricity Consumed in the Plant	Million kwh	N/A	N/A
(v)	Total Electrical Energy Consumption	SRFT	N/A	N/A
(vi)	Total Solid Fuel Consumption	SRFT	N/A	N/A
(vii)	Total Liquid Fuel Consumption	SRFT	N/A	N/A
(viii)	Total Gaseous Fuel Consumption	SRFT	N/A	N/A
(ix)	Total Thermal Energy Consumption	SRFT	N/A	N/A
(x)	Total Steam Exported/Consumed for Non-refinery opeartions	MMBTU	N/A	N/A
(xi)	Total Energy Consumption (Thermal + Electrical)	MMBTU	N/A	N/A
(xii)	Total Normalized Energy Consumption (Thermal + Electrical)			
(c)	Specific Energy Consumption Details			

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EA- 7969
Energy Auditor
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(i)	Specific Energy Consumption(Without Normalization)	MMBTU/Mbbls /NRGF (MBN)	N/A	N/A
(ii)	Specific Energy Consumption (Normalized)	MMBTU/Mbbls /NRGF (MBN)	N/A	N/A
5.4	Electricity Distribution Companies notified as Designated Consumer			
(a)	Energy Input Details			
(i)	Input energy purchase	Million kwh	55369.88	78611.54
(ii)	Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	54037.64	74639.71
(iii)	Total Energy billed (is the Net energy billed, adjusted for energy traded))	Million kwh	47043.42	65449.41
(b)	Transmission and Distribution (T&D) loss Details	Million kwh	8326.46	13162.13
	Inter state Transmission losses (Incld BBMB) =1630.61 MU Intra state transmission losses (PSTCL+DISCOM Sub transmission losses) =2335.22 MU PSPCL Distribution Losses (2018-19) = (54037.64-47043.42)/54037.64 =6994.22 MU (12.94%) PSPCL Distribution Losses (2024-25) = (74639.71-65449.41)/74639.71 =9190.30 (12.31%)	%	15.04	16.74
5.5	Railways units notified as Designated Consumer			
5.5.1	Zonal Units Notified as Designated Consumers			
(a)	Gross Tonne Kilometrage			
(i)	Gross Tonne Kilometrage (For Diesel-Passenger)	GTKm	N/A	N/A
(ii)	Gross Tonne Kilometrage (For Diesel-Goods)	GTKm	N/A	N/A
(iii)	Gross Tonne Kilometrage (For Electrical-Passenger)	GTKm	N/A	N/A
(iv)	Gross Tonne Kilometrage (For Electrical-Goods)	GTKm	N/A	N/A
(b)	Energy Consumption Details			
(i)	Diesel Consumption for Gross Tonne Kilometrage (for Passenger)	KL	N/A	N/A
(ii)	Diesel Consumption for Gross Tonne Kilometrage (for Goods)	KL	N/A	N/A
(iii)	Electricity Consumption for Gross Tonne Kilometrage (for Passenger)	Million kWh	N/A	N/A
(iv)	Electricity Consumption for Gross Tonne Kilometrage (for Goods)	Million kWh	N/A	N/A
(c)	Specific Energy Consumption Details			
(i)	Specific Energy Consumption of Diesel for Passenger (Without Normalization)	L/1000GTKm	N/A	N/A
(ii)	Specific Energy Consumption of Diesel for Goods (Without Normalization)	L/1000GTKm	N/A	N/A
(iii)	Specific Energy Consumption of Electrical for Passenger(Without Normalization)	kWh/1000GTKm	N/A	N/A
(iv)	Specific Energy Consumption of Electrical for Goods (Without Normalization)	kWh/1000GTKm	N/A	N/A
(v)	Specific Energy Consumption of Diesel for Passenger (With Normalization)	L/1000GTKm	N/A	N/A
(vi)	Specific Energy Consumption of Diesel for Goods (With Normalization)	L/1000GTKm	N/A	N/A
(vii)	Specific Energy Consumption of Electrical for Passenger(With Normalization)	kWh/1000GTKm	N/A	N/A
(viii)	Specific Energy Consumption of Electrical for Goods (With Normalization)	kWh/1000GTKm	N/A	N/A
5.5.2	Railway Production Units Notified as Designated Consumer			
(a)	Production Details			
(i)	Total Major Production	No of units	N/A	N/A
(ii)	Total Minor Production	No of units	N/A	N/A
(iii)	Total Other Product-1	No of units	N/A	N/A
(iv)	Total Other Product-2	No of units	N/A	N/A
(v)	Total Other Product-3	No of units	N/A	N/A
(vi)	Product (Please add extra rows in case of additional products)	No of units	N/A	N/A
(vii)	Total Equivalent Product	No of Equated Units	N/A	N/A
(b)	Energy Consumption Details			
(i)	Total Electricity Purchased from Grid/Other Source	Million kwh	N/A	N/A
(ii)	Total Electricity Generated	Million kwh	N/A	N/A
(iii)	Total Electricity Exported	Million kwh	N/A	N/A
(iv)	Total Electrical Energy Consumption	Million kwh	N/A	N/A
(v)	Total Solid Fuel Consumption	Million kCal	N/A	N/A
(vi)	Total Liquid Fuel Consumption	Million kCal	N/A	N/A
(vii)	Total Gaseous Fuel Consumption	Million kCal	N/A	N/A
(viii)	Total Thermal Energy Consumption	Million kCal	N/A	N/A

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PSPCL, Patiala.

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P.S.P.C.L., Patiala

(ix)	Total Energy Consumption (Thermal + Electrical)	TOE	N/A	N/A
(x)	Total Normalized Energy Consumption (Thermal + Electrical)	TOE	N/A	N/A
(c)	**Specific Energy Consumption Details**			
(i)	Specific Energy Consumption(Without Normalization)	Kgoe/ Eq Unit	N/A	N/A
(ii)	Specific Energy Consumption (Normalized)	Kgoe/ Eq Unit	N/A	N/A
5.6	**Commercial Building or establishments - Hotels notified as Designated Consumer**			
(a)	**Building Area**			
(i)	Total Built up area	m2	N/A	N/A
(ii)	Air-conditioned area	m2	N/A	N/A
(iii)	Non-Airconditioned area	m2	N/A	N/A
(iv)	Gross Floor area	m2	N/A	N/A
(v)	Public area	m2	N/A	N/A
(vi)	Service area	m2	N/A	N/A
(vii)	Covered Parking Area	m2	N/A	N/A
(b)	**Energy Consumption Details**			
(i)	Total Electricity Purchased from Grid/Other Source	kwh	N/A	N/A
(ii)	Total Electricity Generated	kwh	N/A	N/A
(iii)	Total Electrical Energy Consumption	kwh	N/A	N/A
(iv)	Total Solid Fuel Consumption	Million kCal	N/A	N/A
(v)	Total Liquid Fuel Consumption	Million kCal	N/A	N/A
(vi)	Total Gaseous Fuel Consumption	Million kCal	N/A	N/A
(vii)	Total Thermal Energy Consumption	Million kCal	N/A	N/A
(viii)	Total Normalized Energy Consumption (Thermal + Electrical)	TOE	N/A	N/A
(c)	**Specific Energy Consumption Details**			
(i)	Specific Energy Consumption (Without Normalization)	TOE/1000 m2/year	N/A	N/A
(ii)	Specific Energy Consumption (Normalized)	TOE/1000 m2/year	N/A	N/A

	Section - C (Sector-wise as well as sub-sector wise pro-forma details)		
6	**Name of the Sector**	**Sub-Sector**	**Pro-forma in which the details to**
(i)	Aluminium	Refinery/Smelter	Sa_1
		Cold Rolling Sheet	Sa_2
(ii)	Cement	Cement	Sb
(iii)	Chlor-Alkali	Chlor-Alkali	Sc
(iv)	Fertilizer	Fertilizer	Sd
(v)	Iron and Steel	Integrated Steel	Se_1
		Sponge Iron	Se_2
(vi)	Pulp and Paper	Pulp and Paper	Sf
(vii)	Textile	Composite	Sg_1
		Fiber	Sg_2
		Spinning	Sg_3
		Processing	Sg_4
(viii)	Thermal Power Plant	Thermal Power Plant (Coal/Oil/Gas)	Sh
(ix)	Petroleum Refinery	Petroleum Refinery	Si
(x)	Electricity Distribution Companies	Discoms	Sj
(xi)	Railways	Zonal Railways	Sk_1
		Production	Sk_2
(xii)	Commercial Building	Hotels	Sl
(xiii)	Petrochemicals	Petrochemicals	Sm

I/we undertake that the information supplied in the Form 1 and pro- forma is accurate to the best of my knowledge and the data furnished in Form 1 has been adhered to the data given in the concerned pro forma.

Authorised Signatory and Seal

Name of Authorised Signatory:
Name of the Designated Consumer:
Full Address:

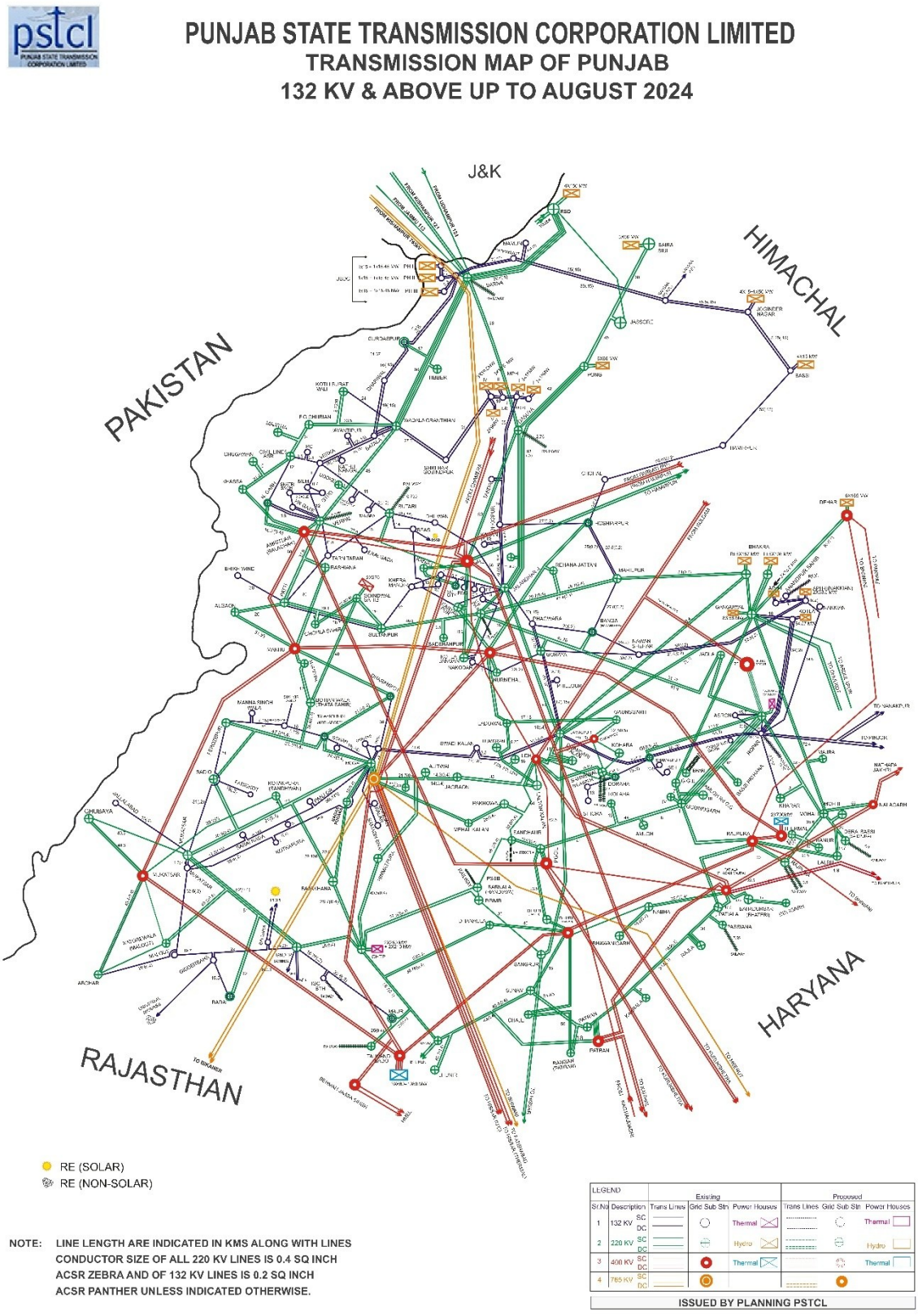
CE/EA & Enforcement
P.S.P.C.L., Patiala

Dy.C.E./ D.S.M.
P.S.P.C.L., Patiala

Signature:
Name of Energy Manager: Er. Ravi Verma
Registration Number: EA-7859
Energy Auditor
PSPCL, Patiala.

Seal

1.30 PSPCL Transmission map 132KV & Above



1.31 North Zone PSPCL Power Network

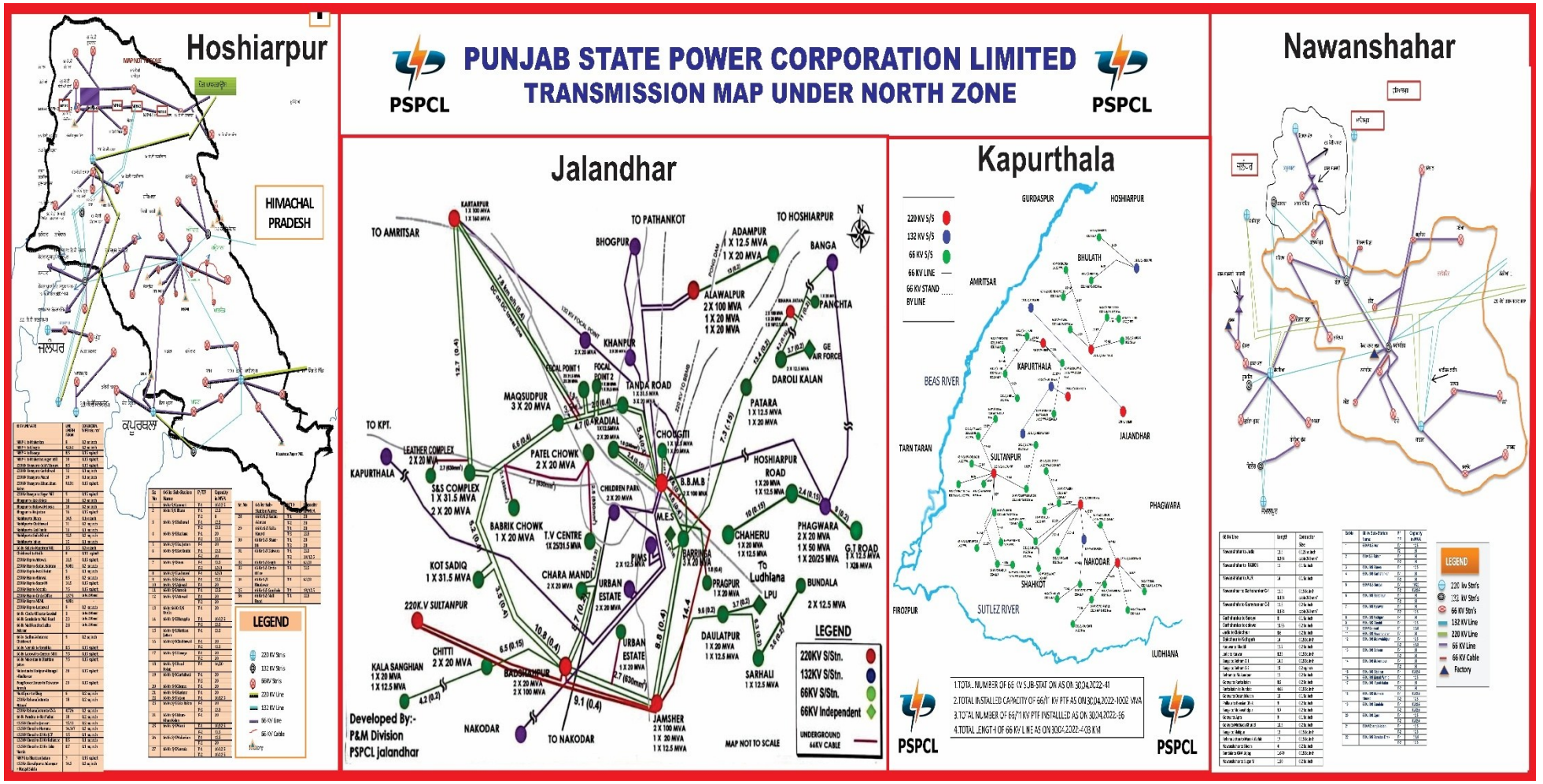


Figure 4:North Zone PSPCL Power Network

1.32 South Zone PSPCL Power Network

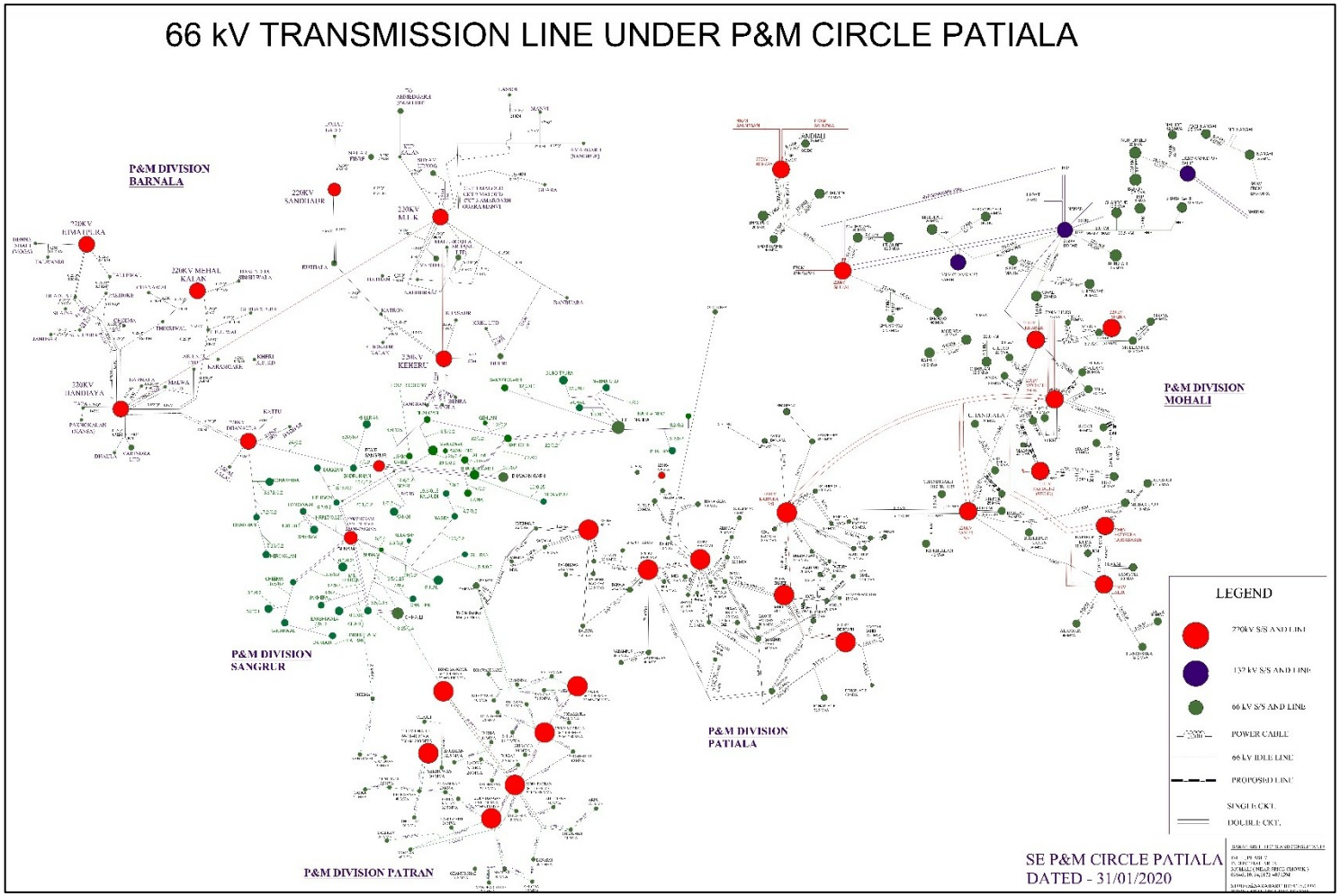


Figure 5:South Zone PSPCL Power Network

1.33 Border Zone PSPCL Power Network

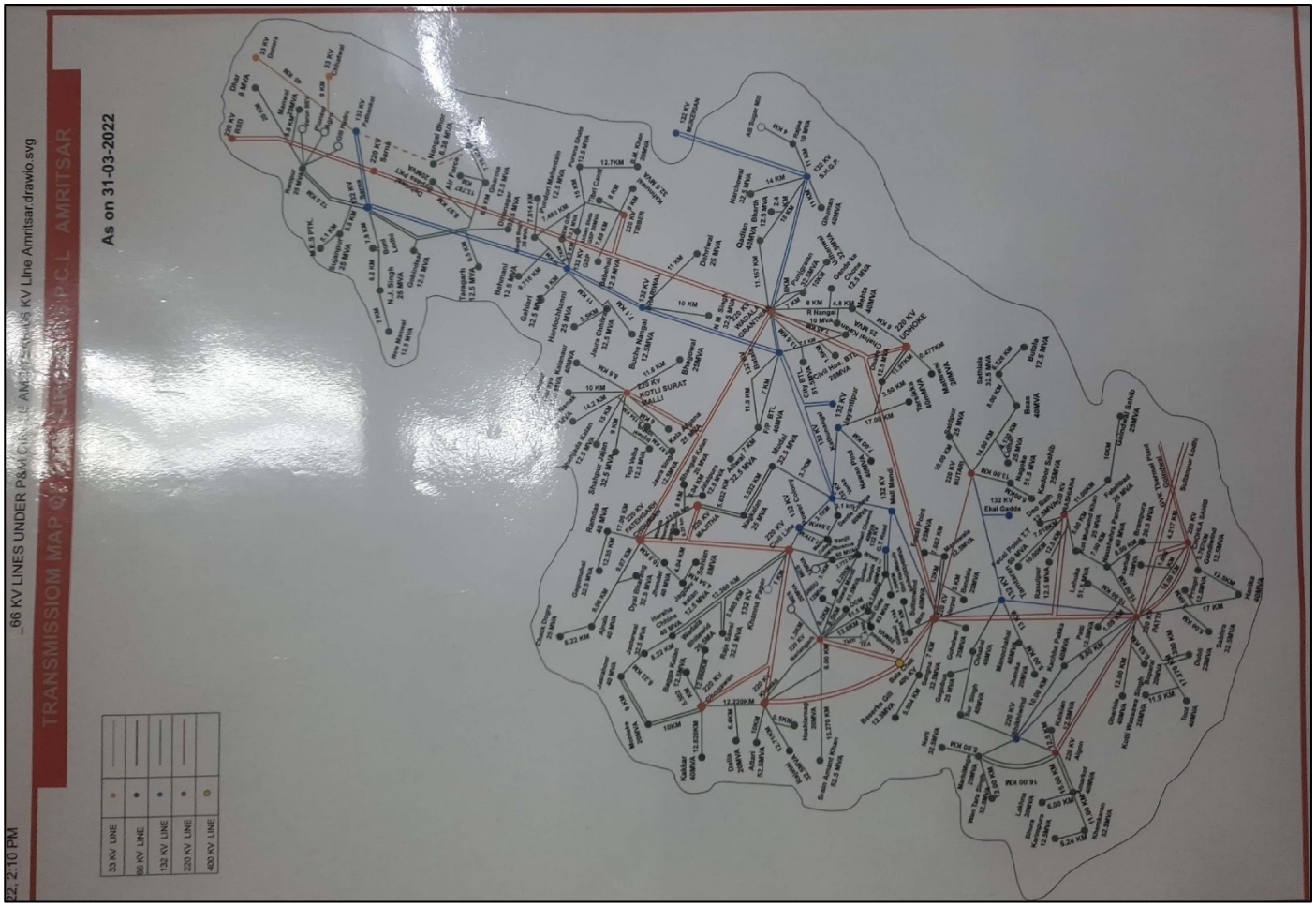


Figure 6:Border Zone PSPCL Power Network

Punjab State Power Corporation Limited

PSPCL

A Comprehensive Monitoring and Verification (M&V) Audit under PAT Cycle-VII Audit Report

PSPCL

Punjab State Power Corporation Ltd.

(PSPCL-DIS0014PB) PSPCL,
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