

**PUNJAB STATE POWER CORPORATION LTD**

# **ENERGY AUDIT REPORT FY 2023-24**



**Prepared by:  
Namdhari Eco Energies  
Pvt Ltd  
Greater Noida UP**

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Annual Energy Audit for Punjab State Power Corporation  
Ltd as per Bureau of Energy Efficiency (Manner and  
Intervals for Conduct of Energy Audit in electricity  
distribution companies) Regulations, 2021 Notified on  
06.10.2021



**Punjab State Power Corporation Ltd**  
PSEB Head Office, The Mall, Baradari, Patiala, Punjab 147001

Prepared for



**Bureau of  
Energy Efficiency**  
Ministry of Power, Government of India

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**NAMDHARI ECO ENERGIES PVT LTD**

**ENERGY FOR BETTER FUTURE**

**BEE ACCREDITED ENERGY AUDIT FIRM & ESCO**

## Table of Contents

Executive Summary.....	8
1 Background .....	13
Regulations of BEE for DISCOMs.....	14
Purpose of Audit and Accounting Report.....	15
Period of Annual Energy Auditing and Accounting .....	16
2 Introduction.....	17
2.1 General Details.....	18
2.2 Name and Details of Energy Manager and Authorized Signatory of DISCOM .....	19
2.3 About Punjab State Power Corporation Limited (PSPCL) .....	19
2.4 Summary Profile of DISCOM.....	20
3 Energy Flows.....	21
3.1 Energy Accounts for Previous Years.....	22
3.2 Energy Accounts and Performance in The Current Year .....	22
3.2.1 Summary of Electrical Distribution System .....	22
3.2.2 Source of Input Energy .....	24
3.2.3 Power Flow chart of PSPCL Network.....	31
3.2.4 Summary of Input Energy .....	32
4 Segregation of Discom Energy.....	34
4.1.1 Details of Circle, Division, Feeders, DTs and Consumers .....	35
4.1.2 Quarterly Performa review submitted to BEE .....	35
4.1.3 Division Wise Losses for Different Category.....	37
5 Summary of Electrical Power Distribution Infrastructure.....	42
6 Consumer category, Subsidy, RPO and other compliance details .....	50
6.1 Detailed Energy Consumption Analysis by Consumer Category .....	51
6.2 Provision of Subsidy .....	52
6.3 Policy of calibration of meters.....	53
6.4 Renewable Purchase obligation .....	54
6.5 Energy Conservation Measures Accomplished.....	55
6.6 Energy Conservation Measures Recommended.....	56
6.7 Critical Analysis by the Energy Auditor.....	56
7 Sampling-Based Field Measurement Study.....	58
7.1 ABLOWAL 11 KV FEEDER .....	59
7.2 PREM NAGAR 11 KV FEEDER .....	62
8 Annexures .....	65
Annexure- I Introduction of Verification Firm/Team .....	66
Annexure-II Minutes of Meeting with the DISCOM Team .....	67



Annexure-III Check List Prepared by Auditing Firm.....	69
Annexure- IV Brief Approach, Scope & Methodology for Audit .....	70
Annexure- V Infrastructure Details .....	74
Annexure- VI Electrical Distribution System.....	75
Annexure- VII Category Wise Service Details.....	76
Annexure- X List of Documents Verified with Each Parameter .....	78
Annexure- XI List of Parameters Arrived Through Calculation or Formula with List of Documents as Source of Data.....	79
Power Purchase FY 2023-24 .....	80
Govt. Tariff Subsidy.....	81
Energy Schedule of PSPCL for FY 2023-24 .....	89
Annual Accounting Report PSPCL FY 2023-24 .....	99



## List of Tables

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Table 1: PSPCL Summary Table of FY 2023-24 .....	12
Table 2: Period of Energy Audit and Activity .....	16
Table 3: General Details of PSPCL .....	18
Table 4: Name and Details of Authorized Persons of DISCOM .....	19
Table 5: Summary Profile of PSPCLDISCOM.....	20
Table 6: Previous Years Energy Accounts .....	22
Table 7: Summary of Electrical Distribution System.....	22
Table 8: Source of Input Energy from Different Generation Station .....	24
Table 9: Summary of Input Energy and It's Parameters .....	32
Table 10: Details of Circle, Division, Feeders, DTs, and Consumers .....	35
Table 11: Variance in Quarterly and Annual Performa.....	35
Table 12: Division Wise Losses.....	37
Table 13: PSPCL Infrastructure Details .....	43



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Audit Team

Namdhari Eco Energies Pvt Ltd



(Mr. Bali Singh)

Accredited Energy Auditor



## Acknowledgement

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We extend our heartfelt gratitude to **Punjab State Power Corporation Limited** for their invaluable support in facilitating the verification study. The energy audit field visits and data verification process have been accomplished within the designated timeframe. We sincerely appreciate their cooperation throughout the verification process and their willingness to provide the necessary data for this study.

Special thanks are due to the following officers, whose contributions were instrumental in the success of this undertaking:

Er. Inderpal Singh CE/EA & Enforcement, PSPCL, Patiala  
Er. Saleem Mohammad - (Dy. CE- DSM)  
Er. Harpreet Raj Singh Sandhu-(ASE-DSM)  
Er. Ravi Verma - (ASE & Energy Manager)  
Er. Bhupinder Singh (AEE)  
Er. Bikram Sharma (AE)

We are also thankful to all the supporting staff members who extended their full cooperation and support. Their keen interest and valuable inputs during the study greatly enriched the outcome.

Once again, we express our profound appreciation to Punjab State Power Corporation Limited and its dedicated team for their collaborative efforts, which significantly contributed to the success of this intricate verification study.



## Audit Team

The annual energy audit project was successfully undertaken by a team of dedicated professionals from Namdhari Eco Energies Pvt Ltd. Services Ltd., who were awarded the contract for this work by Punjab State Power Corporation Limited vide Work Order: 001/DSM dated 22<sup>nd</sup> April 2024. The team members involved in this project played vital roles in ensuring its successful execution. The Audit was started on 6<sup>th</sup> June 2024 and was completed on 15<sup>th</sup> June 2024. The team members representing Namdhari Eco Energies Pvt Ltd. Services Ltd. were as follows:

Team Member	Designation
BALI SINGH	ACCREDITED ENERGY AUDITOR – AEA-206
NEERAJ GAUR	CERTIFIED ENERGY AUDITOR (EA 28449) & DISOCM SECTOR EXPERT-
ASHISH KUMAR GUPTA	ENERGY CONSULTANT
BUNTY PHUTELA	ENREGY ENGINEER

Each member of the team contributed their expertise and skills to conduct a comprehensive and meticulous energy audit, which proved essential in the verification study.

We are sincerely thankful to the entire team for their dedication, professionalism, and commitment to delivering high-quality results, meeting the objectives of the project, and working collaboratively with Punjab State Power Corporation Limited to achieve the desired outcomes. Their efforts were instrumental in the successful completion of the annual energy audit.

Audit Team

Namdhari Eco Energies Pvt Ltd



(Mr. Bali Singh)

Accredited Energy Auditor





## Abbreviations

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



## Executive Summary

Punjab State Power Corporation limited (PSPCL), Headquartered at The Mall, Patiala after unbundling of PSEB, came into existence in 2010. It bears the responsibility of generation and distribution of power to various categories of consumers. The coordinating agency, BEE, has framed regulation in exercise of power conferred upon under clause (g) and (n) of section 14 of the energy conservation act 2001 (Amended in 2010) for the designated consumers.

PSPCL has awarded the work of Annual Energy Accounting Audit for FY 2023-24 vide work order number 001/DSM Dated 22.04.2024 to M/S Namdhari Eco Energies Private Limited.

The objective of Annual Energy Accounting is to conduct energy audit to know

- a) Losses of power in distribution network of various voltages
- b) Assess the metering status (Functional, Non-functional and Unmetered)
- c) Types of meters connected
- d) Monitoring mechanism of system 66 KV to 0.415 KV network and consumers connected at different voltages of various categories
- e) Calculation of billing efficiency and collection efficiency

The connected load of all categories is 44814.44 MW, which consumes annual input energy (At DISCOM Periphery) 66886.39 MU. The actual sold power stands to be 59711.85 MU to the consumers. The billing efficiency stands to be 100%. The T & D losses are 10.73 %. The category-wise load calculation & percentage and energy consumption along with percentage are mentioned below.

Consumer category	Total Number of connections (Nos)	% of number of connections	Total Connected Load (MW)	% of connected load	Total energy (MU)	% of energy consumption
Residential	7928684	73.81%	15855.99	35.38%	17905.91	29.99%
Agricultural	1391233	12.95%	11233.35	25.07%	12797.33	21.43%
Commercial/Industrial-LT	1404094	13.07%	8616.33	19.23%	8179.36	13.70%
Commercial/Industrial-HT	11522	0.11%	8648.94	19.30%	19151.00	32.07%
Others	6369	0.06%	459.83	1.03%	1678.26	2.81%
Total	10741902	100.00%	44814.44	100.00%	59711.85	100.00%

Note: -418.69 MU includes Theft Units, Short Assessment Unbilled revenue (eq units) and 776.005 MU of sale from Temporary Supply, Night Supply and Non operation Sale.



**Energy Supply Overview:**

The energy supplied by PSPCL can be categorized into subsidized and non-subsidized energy. Agricultural energy is 100% subsidized, and the realization of subsidy bills from the government is also 100%. Subsidized energy accounts for 43.25% of the total energy billed, while non-subsidized energy constitutes 56.75%.

**Collection Efficiency:**

PSPCL boasts of a collection efficiency of 100%, despite the actual collection efficiency being higher, which is restricted to 100% as per PFC guidelines. The AT&C losses are calculated to be 10.73%.

**Metering and Network Issues:**

- About 99.38% of agricultural consumers are not metered due to application of flat rate billing. Currently upto 8 hours of supply is provided to AP consumers.

**Theft and Loss Assessment:**

The Border Zone has been identified as the most theft-prone area, requiring special attention to manage the energy pilferage.

**Regulatory Commission Approvals for FY 2023-24:**

- **Energy Purchase:** Approved cost is Rs 4.83 per unit (Tariff order: FY: 2023-24, Page-164), while the sale price is Rs 7.04 per unit (Tariff order: FY: 2023-24, Page-257).
- **Energy Sales:** Approved quantity is 59211 MU and while actual sale is 60677.41609 MU (Tariff order: FY: 2023-24, Page-143) .
- **T&D Losses:** T&D loss is 10.73%, whereas A T & C loss are also 10.73%.
- **Power Purchase Cost:** Approved at Rs 27,446 crore (Including RE power & RECs but excluding intrastate transmission and SLDC charges).

**Consumer Categories and 11 KV Feeders:**

Consumers are broadly categorized as Residential, Agriculture, Commercial/Industrial LT, Commercial HT, and Others (Mixed Load). Connections, metering, load, losses, and collections are assessed at the Division level.

**Solar Power and Net Metering:**

Encouraging the use of solar power among agricultural consumers, who receive 8 hours of power supply daily, is necessary.

**Data Collection and Monitoring:**

- SAP functions at the apex level, collecting data from various consumer categories through AMR/SMART meters, communicable meters, non-communicable meters, and unmetered consumer assessments.
- The mixed mode of billing assessment and verification is challenging without 100% online monitoring and data acquisition through communicable meters at each system element's input and output.



### Goals and Achievements:

- PSPCL aims to achieve 100% online monitoring of all parameters prescribed by BEE, positioning itself as a frontrunner among DISCOMs.
- The target for T&D loss in the PAT scheme for FY 2024-25 is 12.40%. In the base year 2018-19, T&D loss was 12.94%, with input energy at 54,037.64 MU.
- The source generation is 70,604.92 MU. Transmission loss at various KV lines is  $1434.51+2284.023=3,718.529$  MU (5.27%). Net input power at the 66 KV bus is 66,886.39 MU.
- The loss of power in the distribution network is 7,174.54 MU (10.73% of input energy at the 66 KV bus).
- Actual loss of EHT inter-state transmission lines is 1,434.51 MU (2.031%). Intra-state transmission loss under PSTCL & PSPCL jurisdiction is 2284.023 MU (3.23%). NOTE: D Losses 10.73% are calculated by Net input energy (At DISCOM Periphery after adjusting the transmission losses and energy traded) i.e  $70604.92-1434.51-2284.023=66886.39$  MU basis.

### Critical Comments

Based on physical inspection of datasheets and invoice history, no variation in the input energy billed vs reported in proforma and output energy sold vs reported in proforma was found.

After conducting a thorough analysis of the data sheets and invoice history, the auditor has provided the following recommendations for improving energy accounting and monitoring:

Sr. no	Comments by Auditor	Responses of PSPCL Management
1	Communicable Meters are available at 33kV as well as 11 kV, but the data of consumed units is manually fed to the system. There are good chance so manual errors. This data shall be automatically fetched from the software	Nearly 10 Lac 1- $\Phi$ smart meters, 1 Lac 3- $\Phi$ smart meters & 5000 LT CT smart meters have already been installed & further installation is under process. Under RDSS Scheme, purchase of HT smart meters to be installed on 12563 No. 11KV feeders and 184044 No. meters for DTs above 25 KVA on urban feeders is in process.
2	Installation of meters in un-metered agricultural connections. There are chances of power wastage due to un-metered connections.	As the supply to AP consumer is provided free of cost so installation of meters on AP connections is strongly opposed by various Kissan Unions.
3	Energy input, export and sale details not available at each voltage level	In PSPCL some of the sub division are under SAP and others are under Non-SAP. For resolution of this type of problem and overall automation tender for GIS mapping of consumers, feeders. DTs are under consideration. For all new assets GIS tagging can be made mandatory. Smart meters can be installed on Sub stations/feeders/DTs which is expected to be done under RDSS scheme. Agency has been hired to implement Single Billing Solution with estimated completion time by March, 2025.

Sr. no	Comments by Auditor	Responses of PSPCL Management
4	Installation of communicable meter outside the end user consumers premises (100% metering).	Now smart meters are being installed by PSPCL for electric connections given to new consumers and steps are also being taken for replacing old simple static meters with smart meters.
5	Assessed energy (in MU) has not been reported in accounting sheet for consumers having defective meters. Even no such data of defective consumers are presented in the accounting sheet	Already provided & Details has been sent to your vide this office email dated 24-06-2024.
6	Ensure Communicable Meters (AMR/SMART) at the input of DT (Receiving end of 11 KV Feeders).	Under RDSS Scheme 184044 No. meters for DTs above 25 KVA on urban feeders is in process.
7	Energy recording of meter should be time synchronized. This could be possible only with communicable meters, in which energy recording is time stamped by GPS clock inbuilt system. So manual recording and non-communicable meters may not be useful to prepare loss account of various feeders (66 KV, 33 KV & 11 KV) and DTs.	Smart meters can be installed on sub stations/feeders/DTs which is expected to be done under RDSS scheme.
8	Absence of communicable DT meters preventing PSPCL to identify the network where leakages, wastage is happening	Under RDSS Scheme 184044 No. meters for DTs above 25 KVA on urban feeders is in process.
9	10) In order to match the total consumption by end user consumers with DT, there must be tagging of consumers with feeding DTs. Again, DTs must be tagged with 11 KV feeders. 11 KV Feeders must be tagged with Power Transformers. Power Transformers must be tagged with 66KV sub Transmission lines. Each 66 KV lines must be tagged with Grid Sub Station. Such arrangements are required to comply the BEE norms of Network monitoring at various voltage levels and Feeder-wise.	Steps are being taken by PSPCL for tagging of all consumers. Tender for GIS mapping of consumers, feeders. DTs are under consideration. For all new assets GIS tagging can be made mandatory. Smart meters can be installed on Sub stations/feeders/DTs which is expected to be done under RDSS scheme. Agency has been hired to implement Single Billing Solution with estimated completion time by March, 2025.

Table 1: PSPCL Summary Table of FY 2023-24

Total Energy Requirement (in MU)	70604.92
Inter State transmission Losses (Inc. BBMB)	1434.51
Net Availability for PSPCL	69170.410
Intra state losses State Losses	2284.023
Input Pumped	66886.39
Embedded (Roof top Solar)	98.475
Input Energy As per CCR (Inc. Embedded)	66886.39
SALE	59711.85
T&D loss	10893.07
D loss	7174.54
T&D loss (%)	15.43%
D loss (%)	10.73%
AT & C Losses as per Division wise losses/summary Sheet	
Total Energy Requirement	70604.92
Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	66886.39
Total Energy billed (is the Net energy billed, adjusted for energy traded))	59711.85
D losses	7174.54
D loss (%)	10.73%
Billed Amount in Rs. Crore	41118.70
Collected Amount in Rs. Crore	41119.53
Collection Efficiency	100.00%
AT & C loss (%)	10.73%

The total energy requirement is 70,604.92 MU, with net availability for PSPCL at 69,170.41 MU. The T&D loss stands at 15.43%, while D loss is 10.73%. The AT&C loss is 10.73%, matching the division-wise summary. Collection efficiency is reported at 100%, with negligible discrepancies in collected and billed amounts.



# 1 Background





## Regulations of BEE for DISCOMs

In 2008, Government of India announced 'National Action Plan on Climate Change (NAPCC)', identifying eight missions to promote inclusive growth in the country. The National Mission for Enhanced Energy Efficiency (NMEEE) is one of the eight identified missions under.

The Bureau of Energy Efficiency (BEE) has issued the regulations namely (Manner and Intervals for Conduct of Energy Audit (Accounting) in Electricity Distribution Companies) published vide notification No.18/1/BEE/DISCOM/2021, dated the 6<sup>th</sup> of October 2021 in the Gazette of India, Extraordinary, Part III, Section 4). These regulations apply to all electricity distribution companies specified as designated consumer and subsequent amendment thereof. The extant regulations specify the following key aspects related to energy accounting and audit for electricity distribution companies.

- i. Intervals of time for conduct of periodic energy accounting and annual energy audit and report submission thereof.
- ii. Pre-requisites for annual energy audit and periodic energy accounting
- iii. Reporting requirements for annual energy audit and periodic energy accounting,
- iv. Manner of annual energy audit and periodic energy accounting
- v. Prioritization and preparation of action plan and
- vi. Structure of annual energy audit report

These regulations have been issued under the ambit of Energy Conservation Act, 2001, with an overall objective to reduce inefficiencies and losses in distribution sector thereby ensuring financial and economic viability of DISCOMs.

Under the above-mentioned regulation, every electricity distribution company shall conduct an annual energy audit for every financial year and submit the annual energy audit report to the Bureau and respective State Designated Agency and also made available on the website of the electricity distribution company.





## Purpose of Audit and Accounting Report

The development of a comprehensive energy accounting system serves several important purposes in quantifying and determining actual losses in the power distribution system, which are segregated into technical and commercial losses. The key objectives of such a system are as follows:

1. **Identifying Losses:** The energy accounting system helps in identifying and quantifying losses occurring in the distribution system, distinguishing between technical losses (due to energy dissipation during transmission and distribution) and commercial losses (resulting from inefficient billing, theft, pilferage, etc.).
2. **Address Inefficiencies:** By identifying areas of leakage, theft, wastage, or inefficient use of electricity, the system provides insights for tackling the challenges of high Transmission and Distribution (T&D) losses and Aggregate Technical & Commercial (AT&C) losses. This enables utilities to take corrective actions and improve overall efficiency.
3. **Independent Energy Audit:** The system facilitates an independent 3rd party energy audit of the distribution network, providing an unbiased assessment of T&D losses and AT&C losses. This ensures a transparent and accurate representation of the distribution system's performance.
4. **Targeted Efficiency Improvements:** With a clear understanding of the losses in different areas or customer segments, distribution utilities can undertake targeted efficiency improvement activities. This allows them to focus their efforts and resources on priority areas to reduce losses effectively.
5. **Informed Capital Investments:** The data obtained from the energy accounting system provides a basis for prioritizing energy capital investments. Utilities can use this information to allocate their budgets more accurately, maximizing the impact of investments in reducing losses and enhancing overall performance.
6. **Capacity Planning:** The system aids in identifying overloaded segments of the distribution network, enabling utilities to make necessary capacity additions strategically. This helps ensure the network operates optimally and can handle future load demands efficiently.

Overall, a comprehensive energy accounting system plays a crucial role in improving the distribution system's efficiency, reducing losses, and optimizing investments, ultimately contributing to a more reliable and cost-effective power distribution network.



## Period of Annual Energy Auditing and Accounting

The period of Annual Energy Audit in this report covers FY 2023-24, starting from 1st April 2023 until 31st March 2024. The comprehensive energy audit site inspection and data verification took place from 6<sup>th</sup> June 2024 to 8<sup>th</sup> June 2024. A detailed account of day-to-day activities during this period is provided in the table below.

Table 2: Period of Energy Audit and Activity

Date & Time (IST)	Activity	Description of Work
6-June-24 (10:00 AM – 12:00 PM)	Opening Meeting	The team met with site engineers and officers to discuss the audit's scope, timetable, and verification approach, seeking necessary site support.
6-June-24 (13:00 PM – 15:00 PM)	Site Inspection Planning	Team composition and responsibilities were defined for site inspection. Discussions included internal coordination, obtaining approvals, permits from DISCOM, and initiating necessary actions.
6-June-24 (15:00 PM – 17:30 PM)	Data Verification at PSPCL Head office	Data verification was carried out at PSPCL Head Office.
07-June-24 (10:00 AM - 12:00 PM)	Data Verification at Division Billing Section	Data verification was carried out at Division Billing Section
07-June-24 (13:00 PM - 15:00 PM)	Feedback by AEA and Sector Expert	The draft report was reviewed, and necessary revisions were made for finalization.
07-June-24 (15:00 PM - 17:30 PM)	Closing Meeting and Plan for Site visit	The audit team conducted an exit meeting with PSPCL officials. The PSPCL and AEA team randomly selected the Substation for physical data verification.
8-June-24 (10:00 AM - 13:30 PM)	Substation visit and metering cross verification	A visit to the 66/11 KV substation Thapar was conducted, synchronizing clocks to measure power for a specific time to determine transmission loss and meter accuracy.
8-June-24 (14:00 PM - 16:30 PM)	Site inspection and observation	Visits to various level feeders were made to observe recording and monitoring practices. Specific site documents such as calibration records, meter replacement records, etc., were assessed.
8-June-24 (16:30 PM - 17:30 PM)	Data analysis and preliminary report preparation	The team analysed the data collected and prepared a preliminary report.



## 2 Introduction

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**PUNJAB STATE POWER  
CORPORATION LIMITED**

## 2.1 General Details

Table 3: General Details of PSPCL

General Information of PSPCL				
1	Name of the DISCOM	Punjab State Power Corporation Limited (PSPCL)		
2	i) Year of Establishment	2010		
	ii) Government/Public/Private	Government		
3	DISCOM's Contact details & Address			
i	City/Town/Village	Patiala		
ii	District	Patiala		
iii	State	Punjab	Pin	147001
iv	Telephone	0175-2212005	Fax	0175-2213199
4	Registered Office			
i	Company's Chief Executive Name	Er. Baldev Singh Sran		
ii	Designation	CMD PSPCL		
iii	Address	The Mall, Patiala		
iv	City/Town/Village	Patiala	P.O.	Patiala
v	District	Patiala		
vi	State	Punjab	Pin	147001
vii	Telephone	0175-2212005	Fax	0175-2213199
5	Nodal Officer Details*			
i	Nodal Officer Name (Designated at DISCOM's)	Er. Inderpal Singh		
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
6	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	ivarverma76@gmail.com
7	Period of Information			
	Year of (FY) information including Date and Month (Start & End)	1 April 2023 - 31 March 2024		



## 2.2 Name and Details of Energy Manager and Authorized Signatory of DISCOM

Table 4: Name and Details of Authorized Persons of DISCOM

Sr.no.	Member of ECA	Name	Designation
1.	Nodal Officer	Er. Saleem Mohammad	(Dy.CE/DSM)
2.	Energy Manager	Er.Ravi Verma	(ASE & Energy Manager)
3.	ASE	Er. Harpreet Raj Singh Sandhu	ASE/DSM
4.	AEE	Er. Bhupinder Singh	(AEE)
5.	AE	Er. Bikarm Sharma	(AE)

## 2.3 About Punjab State Power Corporation Limited (PSPCL)

### Overview:

Punjab State Power Corporation Limited (PSPCL) is the premier power generation and distribution company in the state of Punjab, India. Established in 2010, PSPCL was formed after the unbundling of the erstwhile Punjab State Electricity Board (PSEB) to ensure better management and efficient power supply across the state. PSPCL is a state-owned enterprise that plays a pivotal role in the economic and social development of Punjab by providing reliable and affordable electricity to millions of consumers.

### Vision and Mission:

- **Vision:** To be a frontrunner in the power sector by delivering sustainable, reliable, and efficient energy solutions that contribute to the overall progress of Punjab.
- **Mission:** To generate, transmit, and distribute electricity with the highest standards of quality, efficiency, and environmental responsibility. PSPCL is committed to customer satisfaction, continuous improvement, and innovation in all its operations.

### Key Functions:

- **Power Generation:** PSPCL operates a diverse mix of power plants, including thermal, hydro, and renewable energy sources. The corporation is continually expanding its capacity to meet the growing energy demands of the state.
- **Power Distribution:** Responsible for the distribution of electricity to residential, commercial, and industrial consumers across Punjab. PSPCL ensures equitable distribution and aims to minimize power outages and losses.
- **Customer Service:** PSPCL prioritizes consumer satisfaction by offering a range of services such as online bill payment, new connections, and efficient grievance redressal mechanisms.



### Achievements:

- **Infrastructure Development:** PSPCL has significantly improved the power infrastructure in Punjab, ensuring widespread electrification and enhancing the quality of power supply.
- **Renewable Energy Initiatives:** The corporation has made substantial investments in renewable energy projects, including solar and biomass, to promote sustainable energy practices.
- **Operational Efficiency:** Through the adoption of advanced technologies and smart grid systems, PSPCL has improved operational efficiency, reduced transmission and distribution losses, and ensured better load management.

**Corporate Social Responsibility (CSR):** PSPCL is dedicated to contributing to the community and the environment through various CSR initiatives. These include rural electrification projects, energy conservation programs, and support for educational and health facilities in underserved areas.

**Leadership and Workforce:** PSPCL is guided by a visionary leadership team and supported by a skilled and dedicated workforce. The corporation values the continuous development of its employees through training and professional growth opportunities.

**Future Plans:** PSPCL is focused on future-ready strategies to cope with the increasing demand for electricity and the challenges posed by climate change. Plans include expanding the renewable energy portfolio, modernizing the grid infrastructure, and enhancing customer service through digital transformation.

## 2.4 Summary Profile of DISCOM

Table 5: Summary Profile of PSPCLDISCOM

Performance Summary of Electricity Distribution			
1	Period of Information Year of (FY) information including Date and Month (Start & End)	1 <sup>st</sup> April 2023 to 31 <sup>st</sup> March 2024	
2	<b>Technical Details</b>		
(a)	<b>Energy Input Details</b>	<b>Unit</b>	<b>Value</b>
i.	Input Energy Purchase (From Generation Source)	Million kwh	70604.92
ii.	At Punjab State periphery	Million kwh	69170.410
iii.	Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	66886.39
iv.	Total Energy billed (is the Net energy billed, adjusted for energy traded))	Million kwh	59711.85
(b)	Transmission and Distribution (T&D) loss Details	Million kwh	7174.54
		%	10.73%
	Collection Efficiency	%	100.00%
(c)	Aggregate Technical & Commercial Loss	%	10.73%



### 3 Energy Flows

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### 3.1 Energy Accounts for Previous Years

In FY 2021-22, PSPCL (Punjab State Power Corporation Limited) has already submitted its Energy Audit report in compliance with the regulations set forth by the Bureau of Energy Efficiency (BEE). These regulations, titled "Manner and Intervals for Conduct of Energy Audit in electricity distribution companies," were officially notified on 6th October 2021.

The Energy Audit report is a comprehensive assessment of PSPCL's energy consumption, usage patterns, and overall energy efficiency measures. By adhering to the BEE regulations, PSPCL aims to enhance its energy conservation efforts, identify areas for improvement, and implement strategies to optimize energy usage and reduce wastage.

Submitting the Energy Audit report indicates PSPCL's commitment to sustainable practices and aligning with national energy efficiency standards. This report likely includes detailed information about energy consumption patterns, energy-saving initiatives undertaken, and recommendations for further improvements to promote a greener and more efficient operation.

PSPCL regularly submitted the Quarterly period energy accounting report to BEE for the period of FY 22-23 as per as per Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021 Notified on 06.10.2021 and subsequent amendments.

Table 6: Previous Years Energy Accounts

S.No	Observation	FY 2022-23	FY 2023-24
1.	The consumer growth from FY 22 to FY 23	10513750	10741902
2.	DTs	1200300	1284607
3.	Overall Line length including 66kv and above, 33kv, 11kV and LT(ct km)	420098	420389
4.	T&D Loss	11.26 %	10.73 %

### 3.2 Energy Accounts and Performance in The Current Year

#### 3.2.1 Summary of Electrical Distribution System

Table 7: Summary of Electrical Distribution System

Performance Summary of Electricity Distribution of PSPCL			
1	Period of Information Year of (FY) information including Date and Month (Start & End)	1st April 2023 to 31st March 2024	
2	<b>Technical Details</b>		
(a)	<b>Energy Input Details</b>		
(i)	Input Energy Purchase (From Generation Source)	Million kwh	70604.92
(ii)	At Punjab State periphery	Million kwh	69170.410
(iii)	Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	66886.39





Performance Summary of Electricity Distribution of PSPCL			
(iv)	Total Energy billed (is the Net energy billed, adjusted for energy traded)	Million kwh	59711.85
(b)	Transmission and Distribution (T&D) loss Details (iii)-(iv) & for %age ((iii)-(iv))/(iii)	`	7174.54
		%	10.73%
	Collection Efficiency	%	100.00%
(c)	Aggregate Technical & Commercial Loss	%	10.73%



### 3.2.2 Source of Input Energy

Punjab State Power Corporation Limited own generation from GGSSTP, Ropar OF 840 MW, GHTP, Lehra Mohabbat and Hydro power plants of combined capacity of 2157 MW. The details of power generated from different power stations & purchased by PSPCL is shown below

Table 8: Source of Input Energy from Different Generation Station

S.No.	Name of Generation Station	Generation Capacity (In MW)	Type of Station Generation (Based-Solid (Coal, Lignite)/Liquid/Gas/Renewable (biomass-bagasse)/Others)	Type of Contract		Type of Grid (intra-state/Inter-state)	Point of Connection (POC) Loss MU	Voltage Level (at Input)	Remarks (Source of data)	Net Energy Supplied (Mus)
				Date of signing of PPA	PPA Duration/Expiry Date (in years/months/days)					
1	GGSSTP, Ropar	840	Coal	Own Generation		Intra-state		220 KV	From Concerned	3573.62
2	GHTP, Lehra Mohabbat	920	Coal			Intra-state		220 KV		4258.48
3	Shanan	110	Hydro			Intra-state		132 kV		486.2
4	UBDC	91	Hydro			Intra-state		132 kV		368.74
5	MHP	225	Hydro			Intra-state		132 kV		1241.19
6	ASHP	134	Hydro			Intra-state		132 kV		473.17
7	RSPP	452	Hydro			Intra-state		220 KV		1836.59
8	Mini/Micro Hydel	3	Hydro			Intra-state		11 KV		1.67
9	GATP, Goindwal Sahib	540	Coal	26.5.2009	Intra-state	Intra-state		220 KV	2216.8	
10	Talwandi Sabo TPP	1980	Coal	01.09.2008	Intra-state	Intra-state		400 KV	10281.64	
11	Rajpura TPP	1400	Coal	18.01.2010	Intra-state	Intra-state		400 KV	9867.64	
12	Bhakra Share	647	Hydro	Own Generation		Interstate	98.73	220 KV	2590.99	



S.No.	Name of Generation Station	Generation Capacity (In MW)	Type of Station Generation (Based-Solid (Coal, Lignite)/Liquid/Gas/Renewable (biomass-bagasse)/Others)	Type of Contract		Type of Grid (intra-state/Inter-state)	Point of Connection (POC) Loss MU	Voltage Level (at Input)	Remarks (Source of data)	Net Energy Supplied (Mus)
				Date of signing of PPA	PPA Duration/Expiry Date (in years/months/days)					
13	Dehar Share	410	Hydro			Interstate	41.16	400 KV, 220 KV		1101.73
14	Pong Share	85	Hydro			Interstate	13.99	220 KV		362.98
15	Bairasiul	84	Hydro	22.03.2022	30.08.2046	Interstate	8.64	Injected through ISTS		231.92
16	Salal	184	Hydro	23.10.2012	31.03.2030	Interstate	31.26		843.71	
17	Tanakpur	17	Hydro	23.10.2012	31.03.2028	Interstate	2.32		61.1	
18	Chamera-I	55	Hydro	23.10.2012	30.04.2029	Interstate	7.59		206.07	
19	Chamera-II	30	Hydro	6.12.2011	30.03.2039	Interstate	5.23		141.46	
20	Chamera-III	18	Hydro	22.03.2022	03.07.2047	Interstate	3.01		82.45	
21	Uri	66	Hydro	23.10.2012	30.05.2032	Interstate	11.45		307.19	
22	Uri-II	20	Hydro	22.03.2022	28.02.2049	Interstate	4.68		125.58	
23	Dhauliganga	28	Hydro	6.12.2011	31.10.2040	Interstate	4.17		113.21	
24	Dulhasti	32	Hydro	9.03.2006	06.04.2042	Interstate	7.4		197.6	



S.No.	Name of Generation Station	Generation Capacity (In MW)	Type of Station Generation (Based-Solid (Coal, Lignite)/Liquid/Gas/Renewable (biomass-bagasse)/Others)	Type of Contract		Type of Grid (intra-state/Inter-state)	Point of Connection (POC) Loss MU	Voltage Level (at Input)	Remarks (Source of data)	Net Energy Supplied (Mus)
				Date of signing of PPA	PPA Duration/Expiry Date (in years/months/days)					
25	Parbati-III	41	Hydro	22.03.2022	06.06.2049	Interstate	0.99			26.68
26	SEWA-II	10	Hydro	22.03.2022	23.07.2045	Interstate	1.91			51.48
27	Kishanganga	0	Hydro	unallocated share	unallocated share	Interstate	0.94			26.1
28	NathpaJhakri (SJVNL)	152	Hydro	24.10.2002	18.5.2039	Interstate	25.79			695.42
29	Rampur	23	Hydro	14.05.2014	6.11.2049	Interstate	4.27			115.29
30	Tehri (THDC)	77	Hydro	31.07.2003	08.07.2042	Interstate	10.32			271.78
31	Koteshwar (THDC)	25	Hydro	16.02.2008	31.03.2047	Interstate	3.15			83.2
32	DVC RTPS 1&2	300	Coal	07.11.2006	30.03.2041	Interstate	57.69			1501.98
33	DVC - Durgapur	200	Coal	07.11.2006	04.03.2038	Interstate	40.65			1063.63
34	DVC -BTPS	200	Coal	07.11.2006	22.02.2042	Interstate	50.47			1305.74
35	Singrauli	200	Coal	31.01.1994	31.10.1997 (In case	Interstate	53.44			1395.63



S.No.	Name of Generation Station	Generation Capacity (In MW)	Type of Station Generation (Based-Solid (Coal, Lignite)/Liquid/Gas/Renewable (biomass-bagasse)/Others)	Type of Contract		Type of Grid (intra-state/Inter-state)	Point of Connection (POC) Loss MU	Voltage Level (at Input)	Remarks (Source of data)	Net Energy Supplied (Mus)
				Date of signing of PPA	PPA Duration/Expiry Date (in years/months/days)					
36	Rihand-I	110	Coal	31.01.1994	PSPCL continue to receive power, terms and conditions of agreement will continue to operate)	Interstate	31.04		805.83	
37	Rihand-II	102	Coal	17.09.1998 with amendment signed on 29.09.1998	31.03.2031	Interstate	26.42		692.36	
38	Rihand - III	83	Coal	23.10.2008	26.03.2039	Interstate	23.43		609.61	
39	Anta GPS	0	Gas	31.01.1994	PSPCL has relinquished its share from Anta, Auraiya and Dadri gas stations in view of PSERC order dated 05.08.2021 in petition no. 28 of 2021.	Interstate	0		0.05	
40	Auraiya GPS	0	Gas	31.01.1994		Interstate	0		0.01	
41	Dadri NCGPS	0	Gas	31.01.1994		Interstate	0		0.01	

S.No.	Name of Generation Station	Generation Capacity (In MW)	Type of Station Generation (Based-Solid (Coal, Lignite)/Liquid/Gas/Renewable (biomass-bagasse)/Others)	Type of Contract		Type of Grid (intra-state/Inter-state)	Point of Connection (POC) Loss MU	Voltage Level (at Input)	Remarks (Source of data)	Net Energy Supplied (Mus)
				Date of signing of PPA	PPA Duration/Expiry Date (in years/months/days)					
42	Unchahar-I	0	Coal	31.01.1994	Unallocated Power and shall remain operative till allocation of power by Gol.	Interstate	0.53			13.56
43	Unchahar-II	60	Coal	29.09.1998	28.02.2025	Interstate	10.78			286.33
44	Unchahar-III	17	Coal	02.11.2002	31.12.2031	Interstate	2.85			75.12
45	Unchahar-IV	0	Coal	16.12.2011	Unallocated Power and shall remain operative till allocation of power by Gol.	Interstate	0.95			25.77
46	Jhajjar (JV)	0	Coal	06.05.2013	Unallocated Power and shall remain operative till allocation of power by Gol.	Interstate	2.52			70.29
47	Dadri (Th.)-II	0	Coal	02.11.2002	30.07.2035	Interstate	0.96			25.82



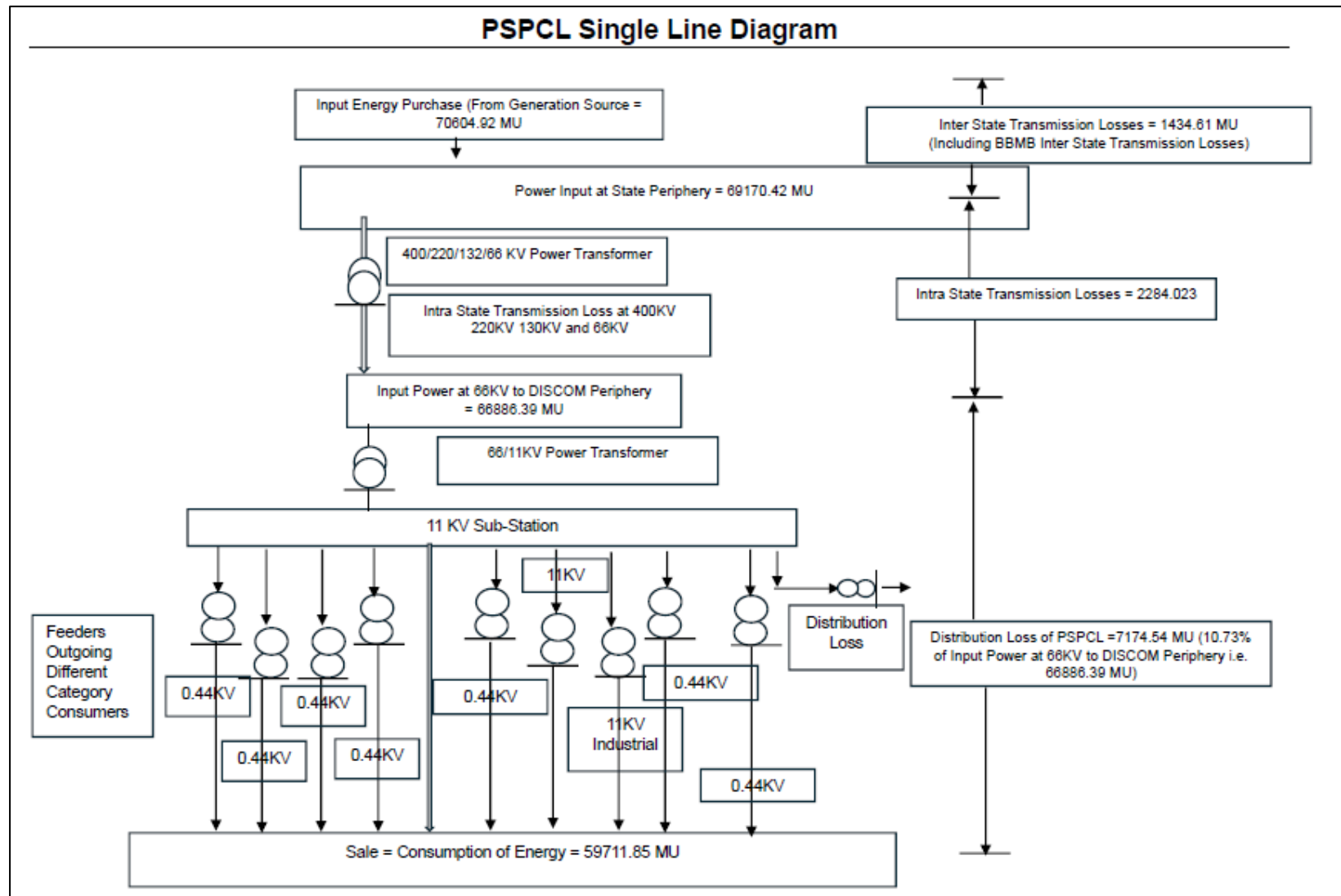
S.No.	Name of Generation Station	Generation Capacity (In MW)	Type of Station Generation (Based-Solid (Coal, Lignite)/Liquid/Gas/Renewable (biomass-bagasse)/Others)	Type of Contract		Type of Grid (intra-state/Inter-state)	Point of Connection (POC) Loss MU	Voltage Level (at Input)	Remarks (Source of data)	Net Energy Supplied (Mus)
				Date of signing of PPA	PPA Duration/Expiry Date (in years/months/days)					
48	Koldam HEP	62	Hydro	01.05.2002	17.07.2050	Interstate	9.42		255.05	
49	Singrauli SHEP	0	Small Hydro	unallocated share	unallocated share	Interstate	0.02		0.48	
50	Tanda Stage-II	0	Coal	unallocated share	unallocated share	Interstate	2.14		57.55	
51	Meja	48	Coal	29.12.2010	29.04.2044	Interstate	12.45		328.03	
52	Kahalgaon-II (ER)	120	Coal	02.11.2002 (supplementary agreement for capacity enhancement signed on 07.10.2003)	19.03.2035	Interstate	31.22		810.14	
53	NAPP	51	Nuclear	29.08.2023	27.08.2038	Interstate	12.11		324.11	
54	RAPP-B	100	Nuclear	29.08.2023	27.08.2038	Interstate	12.32		320.39	
55	RAPP-C	46	Nuclear	25.08.2023	24.08.2038	Interstate	15.39		405.91	
56	PTC Tala	30	Hydro	26-09-2006	31-07-2041	Interstate	1.27		35.05	



S.No.	Name of Generation Station	Generation Capacity (In MW)	Type of Station Generation (Based-Solid (Coal, Lignite)/Liquid/Gas/Renewable (biomass-bagasse)/Others)	Type of Contract		Type of Grid (intra-state/Inter-state)	Point of Connection (POC) Loss MU	Voltage Level (at Input)	Remarks (Source of data)	Net Energy Supplied (Mus)
				Date of signing of PPA	PPA Duration/Expiry Date (in years/months/days)					
57	Pragati-III(Bawana)CGT	137	Gas	24.09.2008	26.03.2029	Interstate	7.45		191.1	
58	MALANA-2 (PTC)	88	Hydro	23-03-2006	12-07-2052	Interstate	4.31		115.91	
59	KARCHAM (PTC)	200	Hydro	01.09.2006	13.09.2046	Interstate	26.22		706.71	
60	SASAN Ultra Mega Project	594	Coal	07.08.2007	27.03.2040	Interstate	164.53		4263.85	
61	MUNDRA_U MPP	519	Coal	22.04.2007	22.03.2038	Interstate	87.47		2259.34	
<b>Total</b>										<b>60187.02</b>



### 3.2.3 Power Flow chart of PSPCL Network



### 3.2.4 Summary of Input Energy

Table 9: Summary of Input Energy and It's Parameters

A. Summary of Energy Input & Infrastructure			
S.No.	Parameters	Period From 01/04/2023 to 31/03/2024	Remarks (Source of data)
A.1	Input Energy purchased (MU)	70604.92	Energy Schedule reports
A.2	Transmission loss (%)	5.27%	Inter State. Inc. BBMB+Intra state transmission losses
A.3	Transmission loss (MU)	3718.529	1434.506+2284.023 (Inter State. Inc. BBMB+Intra state)=3718.529
A.4	Energy sold outside the periphery (MU)	1424.44	(Energy Schedule) sheet SR. NO. 13.2+14+15+16+17
A.5	Open access sale (MU)	9.88	Railway
A.6	EHT sale		
A.7	Net input energy (received at DISCOM periphery or at distribution point)-(MU)	66886.39	Input Energy Feeders reports
A.8	Is 100% metering available at 66/33 kV (Select yes or no from list)	Yes	
A.9	Is 100% metering available at 11 kV (Select yes or no from list)	Yes	
A.10	% of metering available at DT	4.31%	Completion of the HVDS/Pillar Box installation in the AP/DS consumers may obviate the need for "Separate" DT meter installation due to virtually LT-less LD system
A.11	% of metering available at consumer end	87.13%	Planning
A.12	No of feeders at 66kV voltage level	187	Director/D
A.13	No of feeders at 33kV voltage level	5	Director/D
A.14	No of feeders at 11kV voltage level	13249	Director/D
A.15	No of LT feeders' level		
A.16	Line length (ckt. km) at 66kV voltage level	11707	P&M
A.17	Line length (ckt. km) at 33kV voltage level	73.7	P&M
A.18	Line length (ckt. km) at 11kV voltage level	252286	Planning
A.19	Line length (km) at LT level	156323	Planning
A.20	Length of Aerial Bunched Cables	2802.39	Zones
A.21	Length of Underground Cables	450.64	Zones
A.22	HT/LT Ratio	1.61	



The transmission losses in a combination of Interstate and intrastate transmission losses. Both Interstate and intrastate transmission losses are metered. The methodology used by National Load Despatch Centre to calculate the Inter state transmission losses is shown below

It is to inform that Hon'ble CERC has notified CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 on 04th May,2020; w.e.f. 1st November,2020. As per clause (10) of these regulations, transmission losses for ISTS shall be calculated on all India average basis for each week, from Monday to Sunday.

All India transmission loss would be based upon the average loss computed from the SEM data of previous week. All India transmission loss for the period from 03-06-2024 to 09-06-2024 would be as follows: All India transmission Loss (in %) 3.42

Illustration:

- a. Sum of injection into the ISTS at regional nodes for previous week = 17435.78 MU
- b. Sum of drawl into the ISTS at regional nodes for previous week = 16881.88 MU
- c. Sum of injection into the ISTS at regional nodes by projects covered under Clause (1) of Regulation 13 for previous week = 1224.03 MU
- d. Then, average all-India transmission loss for ISTS shall be  $[(17435.78-16881.88)/(17435.78-1224.03)] \times 100 = 3.42 \%$
- e. All figures are rounded off up to 2 decimal places.



## 4 Segregation of Discom Energy

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#### 4.1.1 Details of Circle, Division, Feeders, DTs and Consumers

Table 10: Details of Circle, Division, Feeders, DTs, and Consumers

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	13441	Director/D Reports link
Number of DTs	1284607	Director/D Reports link
Number of Consumers	10741902	CE/Planning

#### 4.1.2 Quarterly Performa review submitted to BEE

Table 11: Variance in Quarterly and Annual Performa

Variance in Quarterly and Annual Performa								
	Q1	Q2	Q3	Q4	Annual via sum	Annual Performa	Variance	Remarks
<b>Input Energy purchased (MU)</b>	1659 3.03	2620 7.92	1357 9.90	1423 2.08	70612.93	70604.92	8.01	Minor Variation
<b>Transmission loss (%)</b>	5.30 %	5.35 %	5.41 %	4.94 %	5.27%	5.27%	0.00	
<b>Transmission loss (MU)</b>	878.6 3	1402. 23	734.6 2	702.5 77	3718.06	3718.529	-0.46	Minor Variation
<b>Net input energy (received at DISCOM periphery or at distribution point)-(MU)</b>	1571 4	2480 5.68	1284 5.28	1352 9.5	66895	66886.39	8.61	Minor Variation
<b>Billing Energy</b>	1322 4.93	2247 4.98	1247 1.62	1240 5.15	60577	59711.85	866.	There is major difference in Billed energy
<b>T &amp; D Losses</b>	15.84 %	9.40 %	2.91 %	8.31 %	9.44%	10.73%	- 1.29 %	
<b>Billed Amount</b>	8506. 40	1478 4.13	9348. 13	8480. 036	41118.70	41118.70	0.00	
<b>Collected Amount</b>	8506. 40	1267 1.96	1068 8.07	8246. 514	40112.95	41119.53	1006. 58	Minor Variation
<b>Collection Efficiency</b>	111.8 3%	85.71 %	114.3 3%	97.25 %	97.55%	100.00	- 2.45 %	



Variance in Quarterly and Annual Performa								
	Q1	Q2	Q3	Q4	Annual via sum	Annual Performa	Varia nce	Remarks
<b>A T &amp; C Losses</b>	5.88 %	22.34 %	11.01 %	10.84 %	9.21%	10.73%	- 0.54 %	

The performance variation analysis shows minor discrepancies in most metrics, such as input energy and transmission loss, with variances less than 10 MU. Collection efficiency and collected amounts also show minor variation. But there is major variation in the billed energy which is 866 MU.

### 4.1.3 Division Wise Losses for Different Category

Table 12: Division Wise Losses

S.No	Name of circle	Name of Division	Total Number of connections (Nos)	Input energy (MU)	Billed Energy (MU)	T&D loss (%)	Collection Efficiency	AT & C loss (%)
1	CITY AMRITSAR	DS CITY CENTER DIVN., ASR	61997	322.00	278.039	13.65%	102.57%	11%
2	CITY AMRITSAR	DS CIVIL LINES TECH. DIVN.	42210	282.60	255.471	9.60%	102.57%	7%
3	CITY AMRITSAR	DS DIVN. HAKIMA GATE, ASR	65359	178.86	149.479	16.43%	102.57%	14%
4	CITY AMRITSAR	DS INDL. AREA TECH. DIVN.	63198	245.72	203.761	17.08%	102.57%	15%
5	GURDASPUR	DS CITY DIVN. BATALA	89815	351.07	291.785	16.89%	102.00%	15%
6	GURDASPUR	DS CITY DIVN. BATALA	145246	485.57	466.681	3.89%	100.48%	3%
7	GURDASPUR	DS DIVN. QADIAN	83749	349.29	282.371	19.16%	102.86%	17%
8	GURDASPUR	DS DIVN. DHARIWAL GURDASPUR	65490	252.82	202.334	19.97%	98.55%	21%
9	GURDASPUR	DS DIVN. GURDASPUR	128857	391.14	331.539	15.24%	101.76%	14%
10	GURDASPUR	DS S/U DIVN. BATALA	108761	470.54	348.219	26.00%	99.58%	26%
11	GURDASPUR	DS S/U DIVN. PATHANKOT	113926	345.22	321.532	6.86%	101.58%	5%
12	SUB URBAN AMRITSAR	DS DIVN. JANDIALA GURU	81116	502.62	404.356	19.55%	98.69%	21%
13	SUB URBAN AMRITSAR	DS EAST DIVN.AMRITSAR	191223	1053.11	909.078	13.68%	100.55%	13%
14	SUB URBAN AMRITSAR	DS S/U DIVN. AMRITSAR	87353	623.34	436.539	29.97%	96.86%	32%
15	SUB URBAN AMRITSAR	DS WEST DIVN. ASR	60059	482.16	279.312	42.07%	100.94%	42%
16	SUB URBAN AMRITSAR	DS. DIVN. AJNALA	68601	418.63	247.347	40.91%	98.01%	42%

Energy Audit Report: PSPCL FY 2023-24



S.No	Name of circle	Name of Division	Total Number of connections (Nos)	Input energy (MU)	Billed Energy (MU)	T&D loss (%)	Collection Efficiency	AT & C loss (%)
17	TARN TARAN	DS CITY DIVN. TARN TARAN	80969	506.96	344.419	32.06%	99.59%	32%
18	TARN TARAN	DS DIVN. BHIKHIWIND	50752	486.42	248.401	48.93%	98.39%	50%
19	TARN TARAN	DS DIVN. PATTI	70721	606.60	344.648	43.18%	99.84%	43%
20	TARN TARAN	DS DIVN. RAYYA AT BEAS	94914	433.27	344.658	20.45%	100.05%	20%
21	TARN TARAN	DS S/U DIVN. TARN TARAN	63498	408.77	304.600	25.48%	97.42%	27%
22	CITY EAST LUDHIANA	DS CITY CEN. (SPL) DIVN.LDH	63400	258.65	252.724	2.29%	101.66%	1%
23	CITY EAST LUDHIANA	DS CMC (SPL) DIVN.LDH	54355	403.95	396.606	1.82%	95.76%	6%
24	CITY EAST LUDHIANA	DS F. POINT (SPL) DIVN.LDH	114341	2297.55	2298.604	-0.05%	101.42%	-1%
25	CITY EAST LUDHIANA	SUNDER NAGAR LDH	91307	703.54	665.420	5.42%	98.90%	6%
26	CITY WEST LUDHIANA	DS AGAR. NGR. (SPL) DIVN.	117908	639.04	598.749	6.30%	96.34%	10%
27	CITY WEST LUDHIANA	WEST LUDHIANA	73758	624.95	602.603	3.58%	96.33%	7%
28	CITY WEST LUDHIANA	DS ESTATE (SPL) DIVN.LDH	83379	1862.73	1772.845	4.83%	99.37%	5%
29	CITY WEST LUDHIANA	JANTA NAGAR SPL LDH	93482	412.34	380.063	7.83%	98.88%	9%
30	CITY WEST LUDHIANA	DS MODEL TOWN (SPL) DIVN.LDH	90481	440.03	395.805	10.05%	99.83%	10%
31	KHANNA	DS (SPL)DIVN.M/GOBIND GARH	39973	3174.06	3049.861	3.91%	95.41%	8%
32	KHANNA	DS DIVN. AMLOH	53820	912.19	869.665	4.66%	98.71%	6%
33	KHANNA	DS DIVN. DORAHA	51835	732.96	692.948	5.46%	99.03%	6%
34	KHANNA	DS DIVN. KHANNA	105185	899.71	834.845	7.21%	99.76%	7%
35	KHANNA	DS DIVN. SIRHIND	89970	753.10	699.987	7.05%	102.14%	5%
36	SUB URBAN LUDHIANA	DS DIVN. ADDA DAKHA	67411	448.74	422.415	5.87%	100.73%	5%





Energy Audit Report: PSPCL FY 2023-24



S.No	Name of circle	Name of Division	Total Number of connections (Nos)	Input energy (MU)	Billed Energy (MU)	T&D loss (%)	Collection Efficiency	AT & C loss (%)
37	SUB URBAN LUDHIANA	DS DIVN. AHMEDGARH	50953	326.53	297.045	9.03%	102.03%	7%
38	SUB URBAN LUDHIANA	DS DIVN. JAGRAON	70532	433.05	382.870	11.59%	102.20%	10%
39	SUB URBAN LUDHIANA	DS DIVN. RAIKOT	66807	478.71	416.359	13.03%	102.62%	11%
40	SUB URBAN LUDHIANA	DS S/U DIVN. LALTON KALAN	75158	476.69	443.436	6.98%	97.74%	9%
41	HOSHIARPUR	DS CITY DIVN. HSP	119531	512.13	479.573	6.36%	101.85%	5%
42	HOSHIARPUR	DS DIVN. BHOGPUR	88704	330.89	301.689	8.82%	102.07%	7%
43	HOSHIARPUR	DS DIVN. DASUYA	91392	262.84	247.712	5.76%	102.41%	3%
44	HOSHIARPUR	DS DIVN. MAHILPUR	85232	338.74	288.667	14.78%	103.29%	12%
45	HOSHIARPUR	DS DIVN. MUKERIAN	119238	283.53	283.149	0.14%	101.38%	-1%
46	HOSHIARPUR	DS S/U DIVN. HSP	84868	659.18	646.035	1.99%	100.18%	2%
47	JALANDHAR	DS Divn. Cantt, Jalandhar	128183	553.11	501.848	9.27%	99.94%	9%
48	JALANDHAR	DS Divn. East, Jalandhar	92918	995.14	957.364	3.80%	98.13%	6%
49	JALANDHAR	DS Divn. Model Town, Jalandhar	144893	781.45	706.785	9.55%	99.56%	10%
50	JALANDHAR	DS DIVN. PHAGWARA	107108	487.89	471.416	3.38%	101.32%	2%
51	JALANDHAR	DS Divn. West, Jalandhar	109705	563.65	517.711	8.15%	98.51%	10%
52	KAPURTHALA	DS CITY DIVN. KAPURTHALA	84935	452.58	397.286	12.22%	99.30%	13%
53	KAPURTHALA	DS CITY DIVN. NAKODAR	87512	423.47	351.907	16.90%	100.90%	16%
54	KAPURTHALA	DS DIVN. KARTARPUR	68581	298.57	275.190	7.83%	101.96%	6%
55	KAPURTHALA	DS S/U DIVN. KAPURTHALA	82342	387.25	349.768	9.68%	101.90%	8%
56	KAPURTHALA	DS S/U DIVN. NAKODAR	102435	475.42	421.365	11.37%	101.97%	10%
57	NAWANSHAHR	DS DIVN. BANGA	79615	287.80	254.246	11.66%	103.15%	9%
58	NAWANSHAHR	DS DIVN. GARHSHANKAR	115505	448.00	358.988	19.87%	102.56%	18%



Energy Audit Report: PSPCL FY 2023-24



S.No	Name of circle	Name of Division	Total Number of connections (Nos)	Input energy (MU)	Billed Energy (MU)	T&D loss (%)	Collection Efficiency	AT & C loss (%)
59	NAWANSHAHR	DS DIVN. GORAYA	90046	471.26	423.482	10.14%	102.45%	8%
60	NAWANSHAHR	DS DIVN. NAWANSHAHR	88327	310.63	281.885	9.25%	101.63%	8%
61	BARNALA	DS CITY DIVN. BARNALA	92551	801.26	657.587	17.93%	101.61%	17%
62	BARNALA	DS DIVN. DHURI	80677	694.02	599.451	13.63%	101.08%	13%
63	BARNALA	DS DIVN. MALERKOTLA	109658	942.27	861.779	8.54%	100.29%	8%
64	BARNALA	DS S/U DIVN. BARNALA	79537	786.64	624.587	20.60%	101.84%	19%
65	MOHALI	DS DIVN. LALRU	94226	1479.24	1467.120	0.82%	98.63%	2%
66	MOHALI	DS DIVN. ZIRAKPUR	156484	743.97	691.912	7.00%	100.18%	7%
67	MOHALI	DS SPL. DIVN. MOHALI	176393	1441.93	1365.106	5.33%	100.81%	5%
68	PATIALA	DS Divn. Model Town, Patiala	70200	333.15	294.062	11.73%	101.92%	10%
69	PATIALA	DS DIVN. NABHA	84803	553.51	492.698	10.99%	101.71%	9%
70	PATIALA	DS DIVN. RAJPURA	106970	855.65	795.553	7.02%	98.04%	9%
71	PATIALA	DS DIVN. SAMANA	63273	816.07	700.265	14.19%	100.87%	13%
72	PATIALA	DS EAST DIVN PATIALA	82253	661.95	576.760	12.87%	101.44%	12%
73	PATIALA	DS S/U DIVN PATIALA	93743	598.42	520.575	13.01%	101.77%	11%
74	PATIALA	DS WEST DIVN PATIALA	85362	353.62	318.910	9.82%	99.18%	11%
75	ROPAR	DS DIVN. KHARAR	178533	933.97	861.264	7.78%	99.51%	8%
76	ROPAR	DS DIVN. ANANDPUR SAHIB	116802	629.20	632.938	-0.59%	99.72%	0%
77	ROPAR	DS DIVN. ROPAR	92523	699.16	658.970	5.75%	100.96%	5%
78	ROPAR	DS DIVN. SAMRALA	103544	1805.56	1716.190	4.95%	100.46%	5%
79	SANGRUR	DS CITY DIVN. SUNAM	80324	728.54	601.235	17.47%	102.69%	15%
80	SANGRUR	DS DIVN. DIRBA	49653	476.89	415.978	12.77%	103.91%	9%
81	SANGRUR	DS DIVN. PATRAN	65516	674.92	491.206	27.22%	102.86%	25%
82	SANGRUR	DS DIVN. SANGRUR	83958	741.42	660.951	10.85%	101.66%	9%
83	SANGRUR	DS S/U DIVN. SUNAM (Lehragaga)	64159	643.40	497.288	22.71%	102.42%	21%



S.No	Name of circle	Name of Division	Total Number of connections (Nos)	Input energy (MU)	Billed Energy (MU)	T&D loss (%)	Collection Efficiency	AT & C loss (%)
84	BATHINDA	DS CITY DIVN. BATHINDA	176777	1312.84	1193.777	9.07%	99.34%	10%
85	BATHINDA	DS DIVN. BHAGTA BHAI KA	52601	562.16	404.457	28.05%	102.14%	27%
86	BATHINDA	DS DIVN. BUDHLADA	88641	675.65	582.716	13.76%	102.97%	11%
87	BATHINDA	DS DIVN. MANSA	126650	754.24	640.709	15.05%	103.44%	12%
88	BATHINDA	DS DIVN. MAUR	111493	1766.38	1655.546	6.27%	100.26%	6%
89	BATHINDA	DS DIVN. RAMPURA PHUL	69171	656.27	484.822	26.12%	103.18%	24%
90	FARIDKOT	DS CITY DIVN. MOGA	108507	734.01	599.106	18.38%	100.18%	18%
91	FARIDKOT	DS DIVN. BAGHAPURANA	81768	756.10	547.301	27.62%	98.52%	29%
92	FARIDKOT	DS DIVN. FARIDKOT	83142	421.16	341.842	18.83%	100.88%	18%
93	FARIDKOT	DS DIVN. KOTKAPURA	109803	647.48	571.569	11.72%	102.41%	10%
94	FARIDKOT	DS S/U DIVN. MOGA	78238	631.58	569.146	9.89%	102.04%	8%
95	FEROZPUR	DS CITY DIVN. FERROZPUR	77313	479.70	360.197	24.91%	98.68%	26%
96	FEROZPUR	DS DIVN. JALALABAD	101232	676.07	455.215	32.67%	99.27%	33%
97	FEROZPUR	DS DIVN. ZIRA	79167	721.29	457.922	36.51%	99.64%	37%
98	FEROZPUR	DS S/U DIVN. FERROZPUR	62824	399.99	268.544	32.86%	96.43%	35%
99	MUKATSAR	DS DIVN. ABOHAR	117058	463.67	334.888	27.78%	98.43%	29%
100	MUKATSAR	DS DIVN. BADAL	37450	261.10	199.106	23.74%	96.74%	26%
101	MUKATSAR	DS DIVN. FAZILKA	92190	426.75	354.817	16.86%	100.72%	16%
102	MUKATSAR	DS DIVN. GIDDARBAHA	58719	333.04	248.732	25.32%	98.39%	27%
103	MUKATSAR	DS DIVN. MALOUT	86089	479.77	315.643	34.21%	98.14%	35%
104	MUKATSAR	DS DIVN. MUKTSAR	135506	533.65077	350.8348	16.57%	92.76%	23%

Maximum loss in Tarn Taran circle of Border Zone in division Bhikhiwindi and Patti have been observed as 48.93% and 43.18% respectively. Further maximum number of divisions of Border zone are showing more losses in 17 Divisions out of 32 Divisions identified from all the Zones falling under range of losses from (15-20), (20-30), (30-40), (40-50) percent.



## 5 Summary of Electrical Power Distribution Infrastructure



Table 13: PSPCL Infrastructure Details

Form-Details of Input Infrastructure					
1	Parameters	Total	Covered during in audit	Verified by Auditor in Sample Check	Remarks (Source of data)
i	Number of circles	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	13441	13441	13441	Director/D Reports link
v	Number of DTs	1284607	1284607	1284607	Director/D Reports link
vi	Number of consumers	10741902	10741902	10741902	CE/Planning
2	Parameters	66kV and above	33kV	11/22kV	LT
a. i.	Number of conventional metered consumers	45	0	68701	8497948
ii	Number of consumers with 'smart' meters	11	0	19639	734569
iii	Number of consumers with 'smart prepaid' meters	0	0	0	0
iv	Number of consumers with 'AMR' meters	181	53	34034	4016
v	Number of consumers with 'non-smart prepaid' meters	0	0	0	0
vi	Number of unmetered consumers	0	0	0	1382705
vii	<b>Number of total consumers</b>	237	53	122374	10619238

b.i.	Number of conventionally metered Distribution Transformers	0	0	22377	6542
ii	Number of DTs with communicable meters	185	4	23170	3127
iii	Number of unmetered DTs	0	0	1229202	0
iv	<b>Number of total Transformers</b>	<b>185</b>	<b>4</b>	<b>1274749</b>	<b>9669</b>
c.i.	Number of metered feeders	187	5	13249	0
ii	Number of feeders with communicable meters	187	5	13249	0
iii	Number of unmetered feeders	0	0	0	0
iv	<b>Number of total feeders</b>	<b>187</b>	<b>5</b>	<b>13249</b>	<b>0</b>
d.	Line length (ct km)	11707 km	50.7 +23(Idle)=73.7	252286	156323
e.	Length of Aerial Bunched Cables	0	0	1134.628	1667.765
f.	Length of Underground Cables	37.477	0	371.894	41.270
<b>3</b>	<b>Voltage level</b>	<b>Particulars</b>	<b>MU</b>	<b>Reference</b>	<b>Remarks (Source of data)</b>
i	66kV and above (Inter-State)	Long-Term Conventional	26788.68	Includes input energy for franchisees	
		Medium Conventional (unscheduled interchange)	-741.37		value of unscheduled interchange energy is entered as the provision of the same has not provided in the performa
		Short Term Conventional	6272.19		
		Banking	-823.65		
		Long-Term Renewable energy	3665.25		



		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	-1424.44		
		Quantum of inter-state transmission loss	1434.51	As confirmed by SLDC, RLDC etc	
		<b>Power procured from inter-state sources</b>	33736.66	Based on data from Form 5	
		<b>Power at state transmission boundary</b>	32302.15		
ii	66kV and above (Intra-State)	Long-Term Conventional	34605.74		Power procured from intra state sources at different voltage levels
		Medium Conventional	NA		
		Short Term Conventional	NA		
		Banking	NA		
		Long-Term Renewable energy	2028.10		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	2284.023		



		<b>Power procured from intra-state sources</b>	36633.84		PSTCL
iii		<b>Input in DISCOM wires network</b>	66652		
iv	33 kV	Renewable Energy Procurement	0.00		
		Small capacity conventional/ biomass/ hydro plants Procurement	0.00		
		Captive, open access input	0.00		
v	11 kV	Renewable Energy Procurement	234.42		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	98.48		<b>Roof Top Solar Energy</b>
		Sales Migration Input	-98.48		
vii	<b>Energy Embedded within DISCOM wires network</b>	<b>Energy Embedded within DISCOM wires network</b>	234.42		
viii	<b>Total Energy Available/ Input</b>	<b>Total Energy Available/ Input</b>	66886.39		
<b>4</b>	<b>Voltage level</b>	<b>Energy Sales Particulars</b>	<b>MU</b>	<b>Reference</b>	
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		Demand from embedded generation at LT level	
		Sale at 11KV/LT level	0.00		Voltagewise energy requirement input not available instead available sourcewise.
		Quantum of 11KV/LT level losses	0.000		
		Energy Input at 11 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	
		Embedded generation at 33 kV level used		Demand from embedded generation at 11kV level	
		<b>Sales at 33 kV level</b>	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	59711.85	Include sales to consumers in franchisee areas, unmetered consumers	
		Demand from open access, captive	9.88	Non DISCOM's sales	



		Embedded generation at 66 kV or below level		This is DISCOM and OA demand met via energy generated at same voltage level	
		<b>Sales at 66 kV level</b>	59711.85		
		Quantum of Losses at 66 kV>	10893.07	(inter state, Inc. BBMB+Intra state+ DISCOM)	
		Energy input at 66kV Level	70604.92		
iv	> 66 kV	DISCOM' consumers		Include sales to consumers in franchisee areas, unmetered 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			
		<b>Sales at 66kV and above (EHV)</b>			
<b>Total Energy Requirement</b>			<b>70604.92</b>		
<b>Total Energy Sales</b>			<b>59711.85</b>		
<b>Energy Accounting Summary</b>					
<b>5</b>	<b>DISCOM</b>	<b>Input (in MU)</b>	<b>Sale (in MU)</b>	<b>Loss (in MU)</b>	<b>Loss %</b>
i	LT				





## 6 Consumer category, Subsidy, RPO and other compliance details

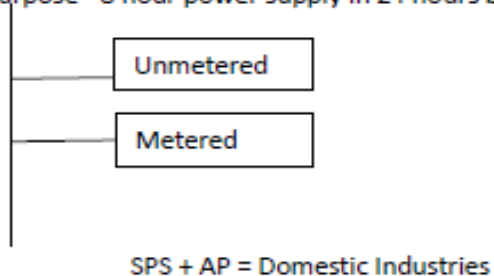
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## 6.1 Detailed Energy Consumption Analysis by Consumer Category

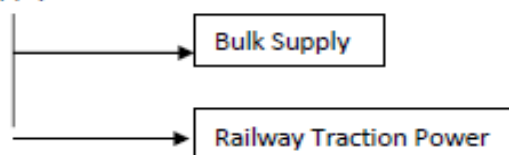
Following category of consumers are being fed power with different priority according to nature of the job, subsidy allowed, production nature and general purpose of lighting consideration.

- i) Domestic Supply - DS
- ii) Commercial Supply - CS
- iii) Small Power Supply - less than 20 KW load (SPS)
- iv) Medium Power Supply - More than 20 KW and less than 100 KW load (MPS)
- v) Large Power Supply - more than 100 KW load (LPS)
- vi) Agriculture Purpose - 8 hour power supply in 24 hours because 100% subsidized.



- vii) Bulk Supply - Power given to different society (Group of consumers)

- viii) Railway Supply



- ix) Public Lighting - PL (Street Lighting)

The equivalent categories as mentioned in the BEE Performa.

## 6.2 Provision of Subsidy

Government of Punjab has notified subsidy for agriculture sector and other deprived section of the society and poor people of general category in the following manner. (Reference from Annexure – 14 (Notification of Government for subsidy))

Sr No.	Category	Provision of subsidy/Payment
1	Agriculture Sector	100%
2	Schedule Cast (SC), Non –SC BPL, 300units monthly Backward Class(BC)and freedom fighter domestic consumers	
2.a.	Excessover300Limit/Months by them	Liabie to pay for extra unit consumed over 300 Limit/Month as per applicable slab of tariff with full fixed charge and meter rental.
2.b.	Subsidy payment conditions	Up to 300unit/month for all kind of use.
3	General Category (other domestic consumers)	300unit/month
3.a.	Subsidy Condition	For residential use only with full fixed charge and meter rent.
3.b.	In excess over300unit/month per	Liabie to pay for entire consumption as per Applicable slab of tariff along with fixed charges, Meter Rentals and Government Levies.
4	All domestic consumers having Sanctioned Load upto 7 KW	Rs3/Unit(including taxes)
5	All industrial manufacturing and LT&ITES annual industries and industrial parks amusement parks/Adventure parks developed in minimum area of acres dully registered with Department of Tourism.	Subsidized Tariff Rs 5.50 per Kwh with 3% and escalation.
6	Small scale industries	Charged at subsidized rate of Rs 5.5/Kwh with 3% annual increment and full waiver of fixed charges.
7	Medium scale industries with 3% annual escalation and 50 % waiver IN fixed charges.	Charged as subsidized rate of Rs 5.5/kWh
8	Large supply industrial consumption with 3% annual escalation.	Charged as subsidized rate of Rs 5.5/Kwh
9	Central/State/PSUs/PSPCL/PSTCL/BBMB	No subsidy allowed.
	Offices and Government water supply connections under industrial category(SP/MS/LS)	

### 6.3 Policy of calibration of meters

Central Electricity authority vide notification no 502/70/CEA/DP & D, in exercise of powers conferred by sub section (1) of section 55 and clause (e) of section 73 read with sub section 177 of Electricity Act, 2003 made regulation known as the Central Electricity Authority (Installation and operation of meter is cited below for ready reference)

➤ 18.b. All interface meters shall be tested at least once in five years. These meters shall also be tested whenever the energy and other quantities recorded by the meter are abnormal or inconsistent with electrically adjacent meters. Whenever there is unreasonable difference between the quantity recorded by interface meter and the corresponding value monitored at the billing centre via communication network, the communication system and terminal equipment shall be tested and rectified. The meters may be tested using NABL accredited mobile laboratory or at any accredited laboratory and recalibrated if required at manufacturer's works.

➤ 18.c Testing and calibration of interface meters may be carried out in the presence of the representatives of the supplier and buyer. The owner of the meter shall send advance notice to the other party regarding the date of testing.

➤ 18. (2) Consumer meters: The testing of consumer meters shall be done at site at least once in five years. The licensee may instead of testing the meter at site can remove the meter and replace the same by a tested meter duly tested in an accredited test laboratory. In addition, meters installed in the circuit shall be tested if study of consumption pattern changes drastically from the similar months or season of the previous years or if there is consumer's complaint pertaining to a meter. The standard reference meter of better accuracy class than the meter under test shall be used for site testing of consumer meters up to 650 volts. The testing for consumers meters above 650 volts should cover the entire metering system including CTs, VTs. Testing may be carried out through NABL accredited mobile laboratory using secondary injection kit, measuring unit and phantom loading or at any accredited test laboratory and recalibrated if required at manufacturer's works.

➤ 18.(3) Energy accounting and audit meters: Energy accounting and audit meters shall be tested at site at least once in five years or whenever the accuracy is suspected or whenever the readings are inconsistent with the readings of other meters, e.g., check meters, standby meters. The testing must be carried out without removing the CTs and VTs connection. Testing may be carried out through NABL accredited mobile laboratory using secondary injection kit, measuring unit and phantom loading or at any accredited test laboratory and recalibrated if required at manufacturer's works.

#### **Comment:**

But there is general practice to change the meter in case erratic reading is observed. Manpower needed for testing of LT meter, DTs meter, and Feeder meter through NABL across the country is not adequate to take up the work regularly at 5 years on call of DISCOM. But in place of such non

feasible provisions DISCOM's meter readers reads the energy consumption/download consumption and observe the functioning of meters. They report about the meters to the department looking after metering. Meter are tested and calibrated before installation but thereafter there is system of regular calibration by NABL at every 5 Years interval. Each zone has ME (Meter Equipment) labs for testing and calibrating the meter before installation of new meter or replacement of defective meters.



## 6.4 Renewable Purchase obligation

The verdict of Punjab state electricity regulatory commission in petition number 30 of 2022 Dt. 06-01-2023 has allowed PSPCL to carry forward the deficit target of RPO of FY 2021-22 and 2022-23 to FY 2023-24.

As per present target and provisions for RPO PSPCL is hoping to be surplus in respect of RPO. The new provisions for RPO consideration are in favour of PSPCL.

### ➤ Provisions for RPO

1) The energy from the Large Hydropower Projects (LHPs) including Pump Storage Project (PSPs) having capacity more than 25 MW and commissioned after 8th March 2019 will be considered as RPO, notified nomenclature as HPO.

2) From FY 2022-23 onwards the energy from all Hydropower Projects (HPPs) will be considered as part of RPO. All other HPPs will be considered as part of RPO under category of 'Other RPO'

RPO Trajectory for the period 2021–22 to 2029–30

Year	Wind RPO in %	HPO in%	Other RPO in%	Total RPO in%
2022-23	0.81	0.35	23.44	24.61
2023-24	1.60	0.66	24.81	27.08
2024-25	2.46	1.08	26.37	29.91
2025-26	3.36	1.48	28.17	33.01
2026-27	4.29	1.80	29.86	35.95
2027-28	5.23	2.15	31.43	38.81
2028-29	6.16	2.51	32.69	41.36
2029-30	6.94	2.82	33.57	43.39

PSPCL after the inclusion of all the existing hydro energy from state share of Bhakhra Nangal project as category 'Other RPO' will exceed its RPO target.



## 6.5 Energy Conservation Measures Accomplished

### ACTION ALREADY TAKEN/ IN PROCESS FOR IMPROVEMENT IN ENERGY EFFICIENCY:

- Augmentation of Major part of old 66-KV lines along with 66 KV transformation capacities.
- Replacement of existing old and de-rated 66 KV network throughout the State.
- Improvement of Reliability, Voltage Profile & Future Load Management by replacement of old existing conductor (where mechanical strength have been deteriorated) by providing HTLS conductor.
- Replacing obsolete/old, aged switch gears and unreliable electromechanical protection relays by numerical relays.
- Installation of Distance Protection Relays.
- New Capacity addition and augmentation of transformation capacity adequately to meet up present and future load growth.
- Weakest areas in the system and strengthening by improving them so as to draw the maximum benefits.
- To facilitate increased availability of power to the consumers, improve service delivery, and reduce system losses.
- Installation of LT Shunt Capacitors on Agricultural Pumps.
- Nearly 10 Lac 1- $\Phi$  smart meters, 1 Lac 3- $\Phi$  smart meters & 5000 LT CT smart meters have already been installed & further installation is under process.
- Under RDSS Scheme, purchase of HT smart meters to be installed on 12563 No. 11KV feeders and 184044 No. meters for DTs above 25 KVA on urban feeders is in process.

#### Under RDSS Scheme:

- The Revamped Distribution Sector Scheme (RDSS) is an ambitious flagship scheme aimed at improving the operational efficiencies and financial sustainability of the DISCOMs through a robust and sustainable distribution network.
- The scheme has been sanctioned for Rs. 9,563 Cr. to Augment/improves the Distribution Infrastructure such as 66kV lines & 66kV Power Transformers, 11kV feeders, 11kV DTRs and Smart Metering etc.
- Smart Metering Tenders worth Rs. 5747 Cr. for installation of Consumer meters, DT meters and Feeder meters are under progress.
- Tenders worth Rs. 3816 Cr. For HT/LT works and 66 KV works are under progress.
- Ministry of Power, Government of India accorded approval for consideration of already departmentally executed works by PSPCL under RDSS worth Rs. 302 Cr. (HT/LT works ~ Rs. 156 Cr. & 66 KV works ~ Rs. 146 Cr.).
- Grant worth Rs. 114 Cr. against RDSS works has already been received from Nodal Agency and has been fully utilized.
- Further, Draft Proposal for Modernization works amounting to around Rs. 10,789 Cr. has been submitted to Govt. of India for approval.



## 6.6 Energy Conservation Measures Recommended

- 1 **Replacement of LT Bare Line by AB Cable:** This measure involves upgrading the distribution network by replacing Low-Tension (LT) bare lines with Aerial Bundled (AB) Cables. AB Cables reduce energy losses and improve system efficiency by minimizing leakage and electrical losses during transmission.
- 2 **Feeder Bifurcation:** Feeder bifurcation refers to dividing a single large feeder into smaller segments. This helps in optimizing load distribution and reducing transmission losses. Each smaller feeder can be better managed, leading to improved energy efficiency.
- 3 **Consumers Smart Prepaid Metering:** Implementing smart prepaid meters for consumers enables better energy consumption management. Consumers can monitor their usage, make informed decisions, and control their energy consumption, which contributes to energy conservation.
- 4 **DTs Metering:** Distribution Transformers (DTs) metering involves installing meters at distribution transformers to monitor the energy flow at these points. This allows for better identification of losses and inefficiencies in the distribution system, leading to targeted energy-saving strategies.
- 5 **Feeders Metering:** Metering at various feeders in the distribution network helps in tracking energy flow and identifying areas with high losses. It aids in planning and implementing measures to optimize energy distribution and minimize wastage.
- 6 **Renovation of 66/11 KV Sub-station:** Upgrading or renovating sub-stations enhances their efficiency and reduces energy losses during voltage transformation. Improved sub-stations contribute to a more reliable and energy-efficient distribution network.
- 7 **Underground Cabling:** This measure involves replacing overhead power lines with underground cables. Underground cabling reduces transmission losses and energy theft while improving the aesthetics of the area. It also decreases susceptibility to weather-related disruptions.

These energy conservation measures collectively aim to enhance the efficiency, reliability, and sustainability of the energy distribution system, resulting in reduced energy losses and improved overall energy conservation.

## 6.7 Critical Analysis by the Energy Auditor

- The Quantum of inter-state transmission losses are 1434.51 ( $1434.51/70604 = 2.03\%$ ).
- Quantum of intra-state transmission losses are 2277.592 (i.e.  $2284.023/70604 = 3.2349\%$ )
- Inter State losses Incl (BBMB+Intra state transmission losses) are  $(1434.506+2284.023 = 3718.529)$  5.27 %. Which is on higher side. and it has been observed that there might be a lack of comprehensive metering at various voltage levels. Enhanced metering infrastructure could provide a more precise assessment of these losses.
- The Sub Urban and Tarn Taran Circles experience the highest losses due to a large number of unmetered connections. More efforts are needed in these circles to ensure all connections are metered.
- Communicable Meters are available at 33kV as well as 11 kV, but the data of consumed units is manually fed to the system. There are good chance so manual errors. This data shall be automatically fetched from the software



- Installation of meters in un-metered agricultural connections. There are chances of power wastage due to un-metered connections.
- Energy input, export and sale details not available at each voltage level
- Installation of communicable meter outside the end user consumers premises (100% metering).
- Assessed energy (in MU) has not been reported in accounting sheet for consumers having defective meters. Even no such data of defective consumers are presented in the accounting sheet
- Ensure Communicable Meters (AMR/SMART) at the input of DT (Receiving end of 11 KV Feeders).
- Energy recording of meter should be time synchronized. This could be possible only with communicable meters, in which energy recording is time stamped by GPS clock inbuilt system. So manual recording and non-communicable meters may not be useful to prepare loss account of various feeders (66 KV, 33 KV & 11 KV) and DTs. Absence of communicable DT meters preventing PSPCL to identify the network where leakages, wastage is happening
- In order to match the total consumption by end user consumers with DT, there must be tagging of consumers with feeding DTs. Again, DTs must be tagged with 11 KV feeders. 11 KV Feeders must be tagged with Power Transformers. Power Transformers must be tagged with 66KV sub-Transmission lines. Each 66 KV line must be tagged with Grid Sub Station. Such arrangements are required to comply with the BEE norms of Network monitoring at various voltage levels and Feeder-wise.
- It is recommended to monitor the energy on the LT side of the transformer. This will help identify losses on the LT side and compare meter billing to detect theft or other losses. Currently, meters are installed at the transformer and billing site, but there is no process in place for collecting and analysing this data.
- Replace old distribution transformers (DTs) with new compact DTs.
- It is recommended to allow the installation of boundary meters at the 11 kV receiving point within the perimeter to accurately calculate the feeder wise losses.



## 7 Sampling-Based Field Measurement Study

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### Sample-Based Field Measurement Study:

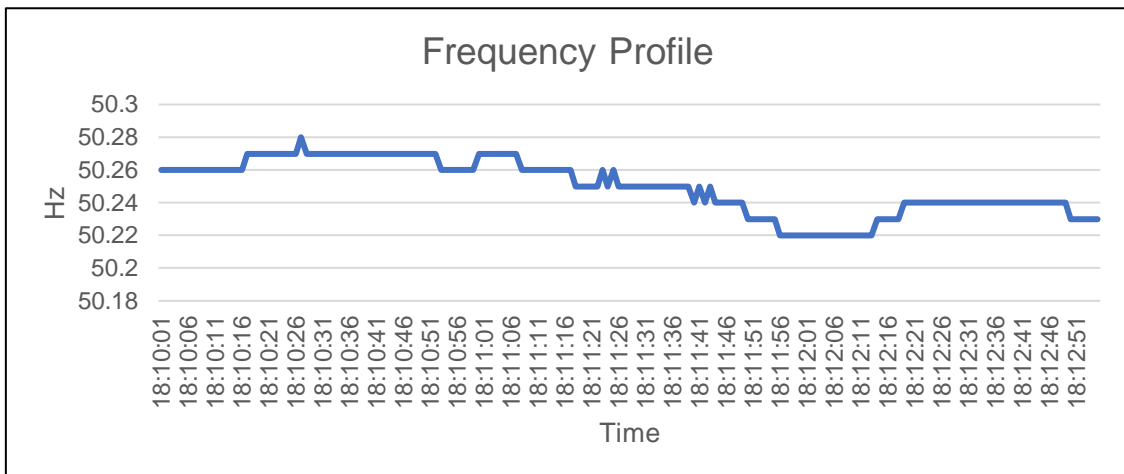
#### PSPCL Input Energy Meter Validation and Power Quality Assessment

Throughout the energy audit process, the team of Energy Auditors conducted a study involving field measurements at PSPCL. Within this study, the team undertook a sample-based approach. They specifically focused on assessing the accuracy of the Input Energy Meter by measuring the incomer feeder. Furthermore, a comprehensive analysis of the overall substation load and power quality was conducted.

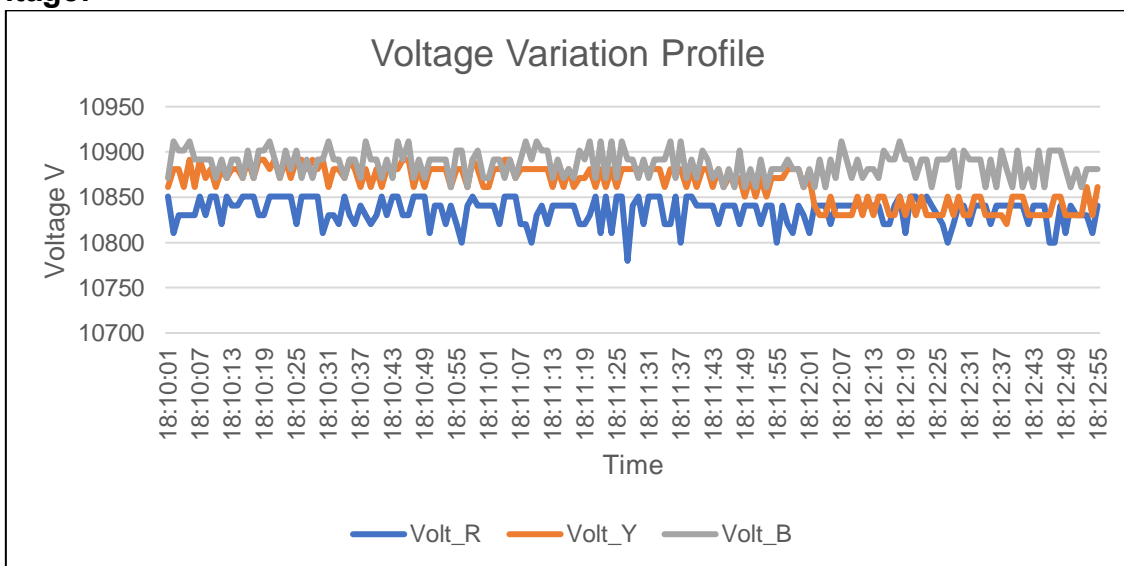
Using a three-phase power analyzer, the Energy Auditor team recorded critical electrical parameters and power quality indicators. These included measurements of frequency, voltage, current, kW, power factor, and the percentage of Total Harmonic Distortion (%THD) in both voltage and current. Notably, the data collected through this sample-based methodology has been organized in the subsequent table and graph. These visual representations pertain to the Ablowal 11KV Feeder.

### 7.1 ABLOWAL 11 KV FEEDER

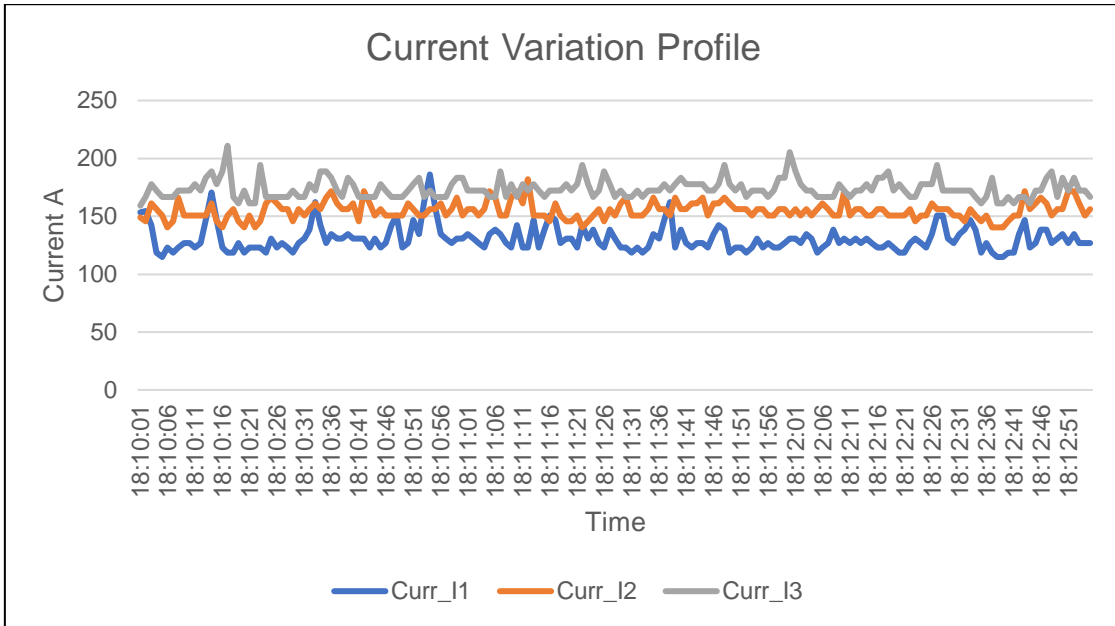
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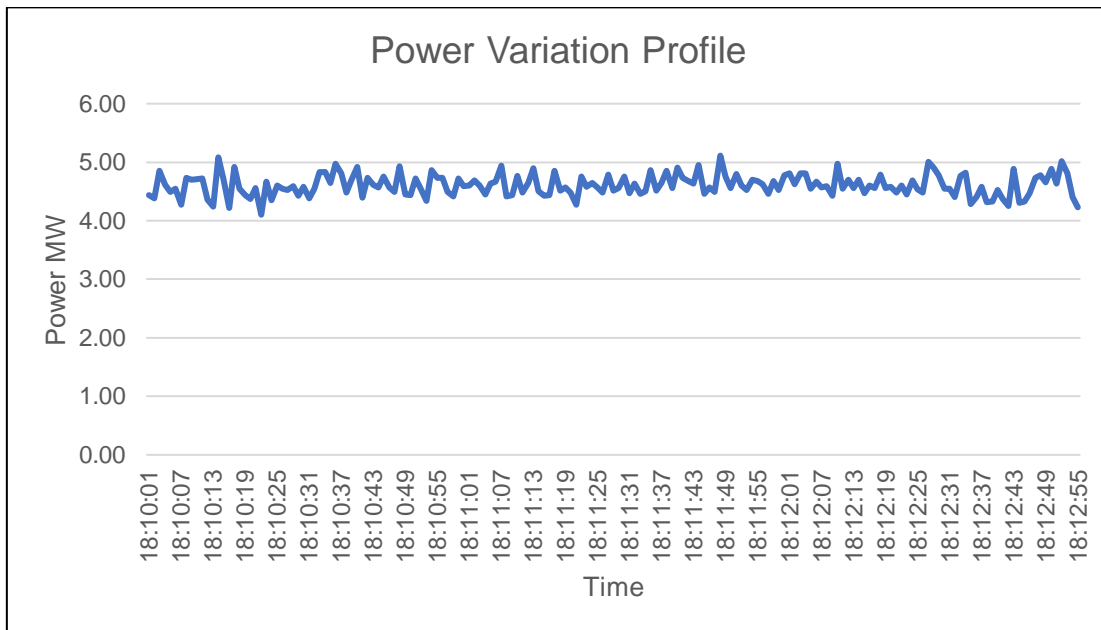
#### Voltage:



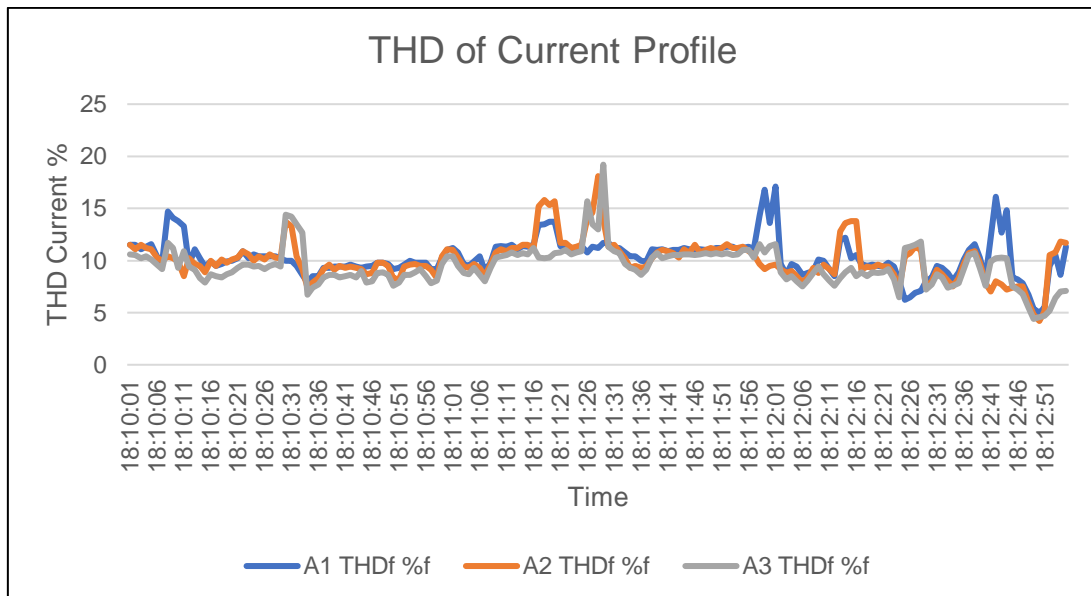
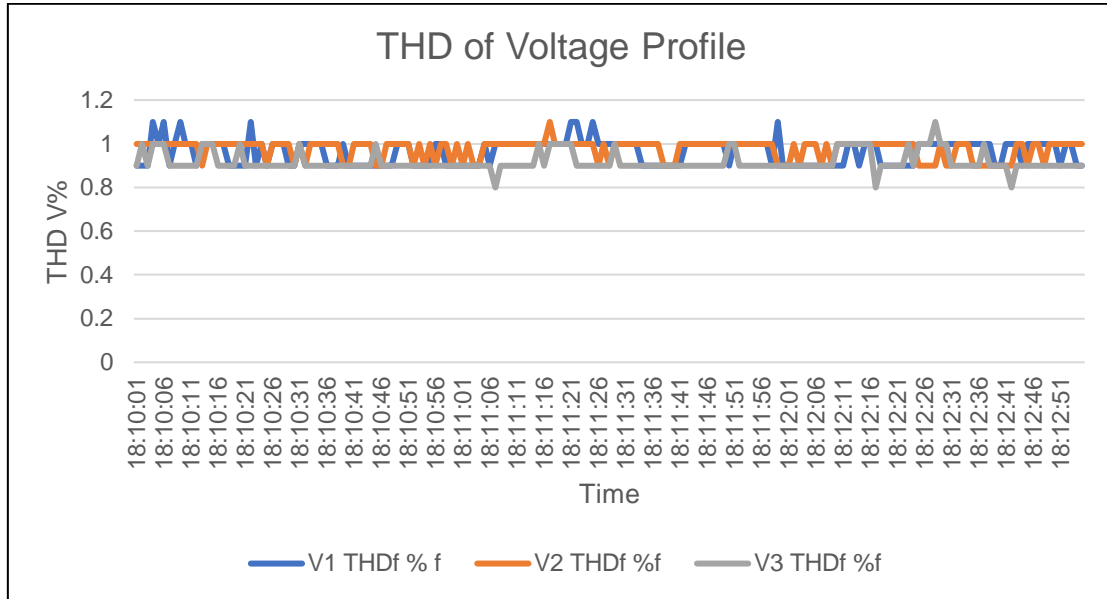
**Current:**



**Power:**

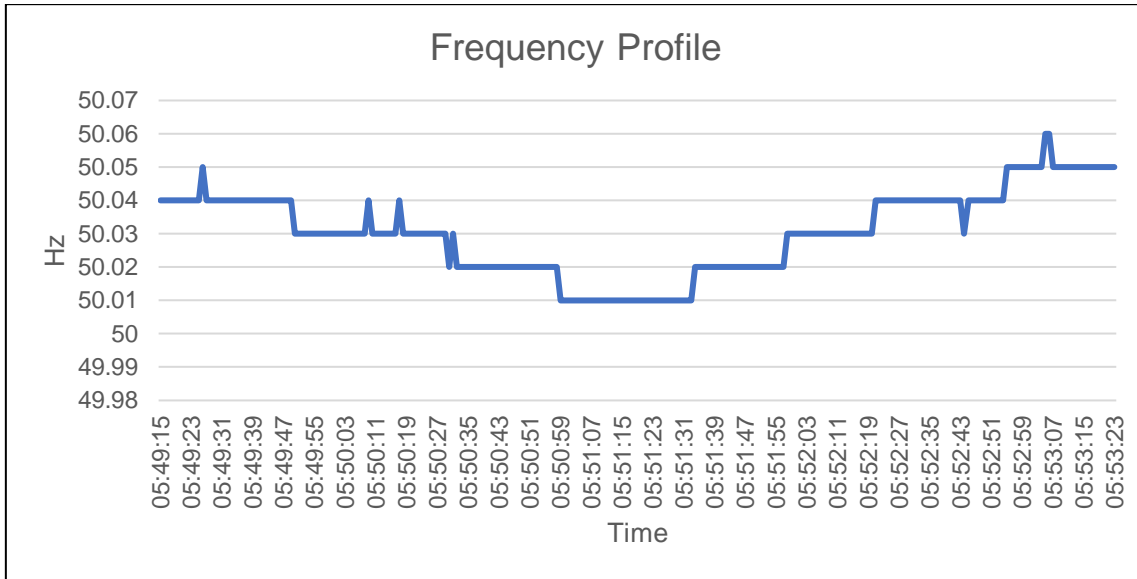


**THD:**

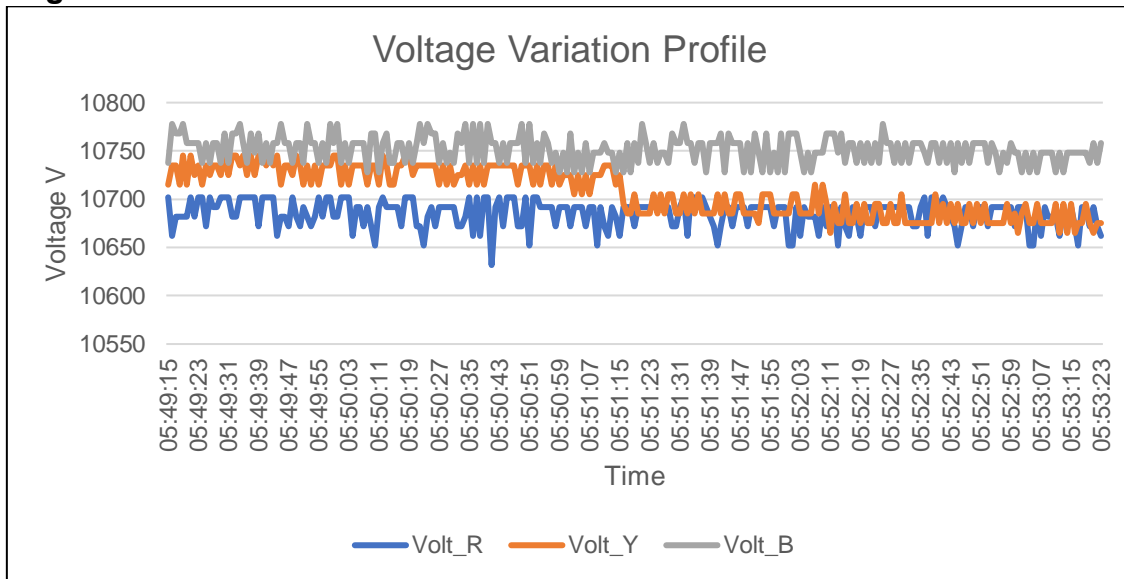


## 7.2 PREM NAGAR 11 KV FEEDER

### Frequency:

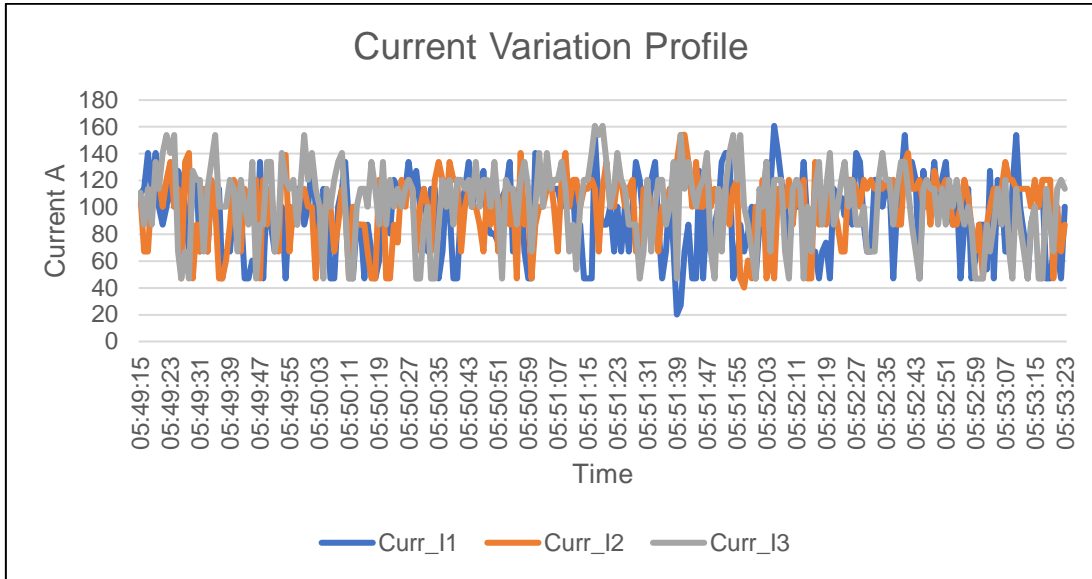


### Voltage:

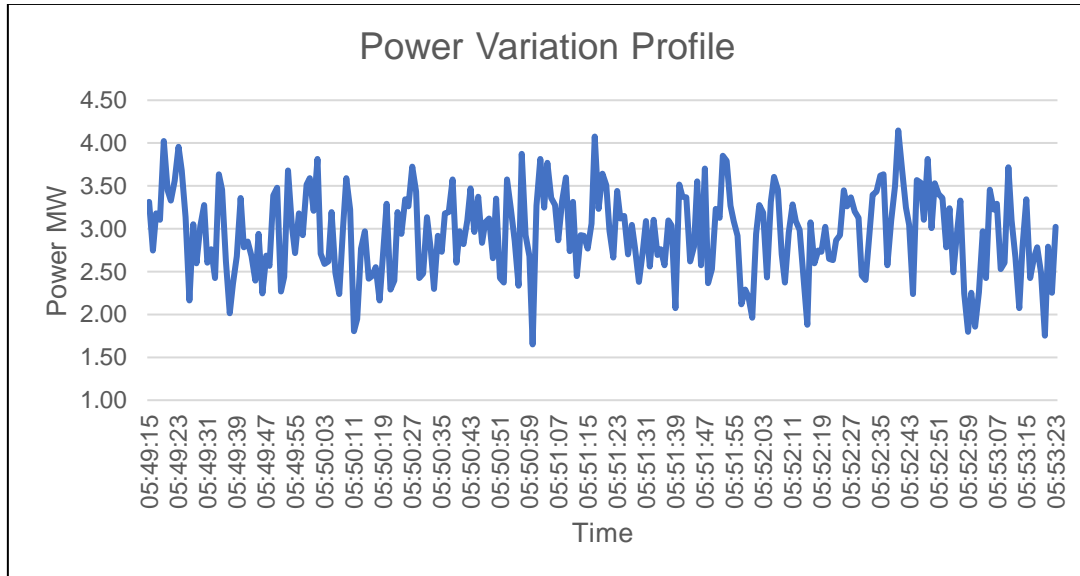




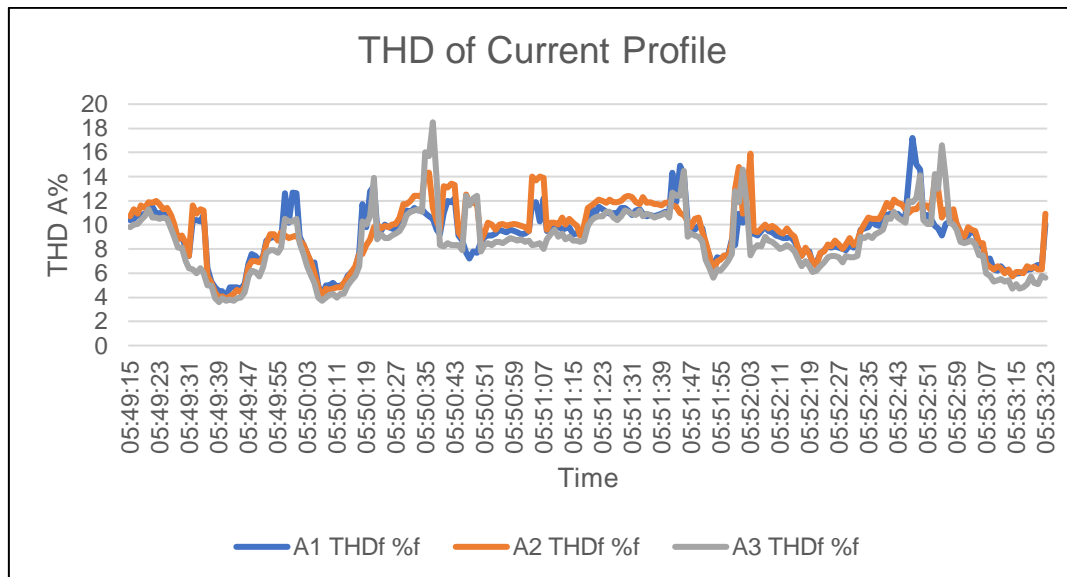
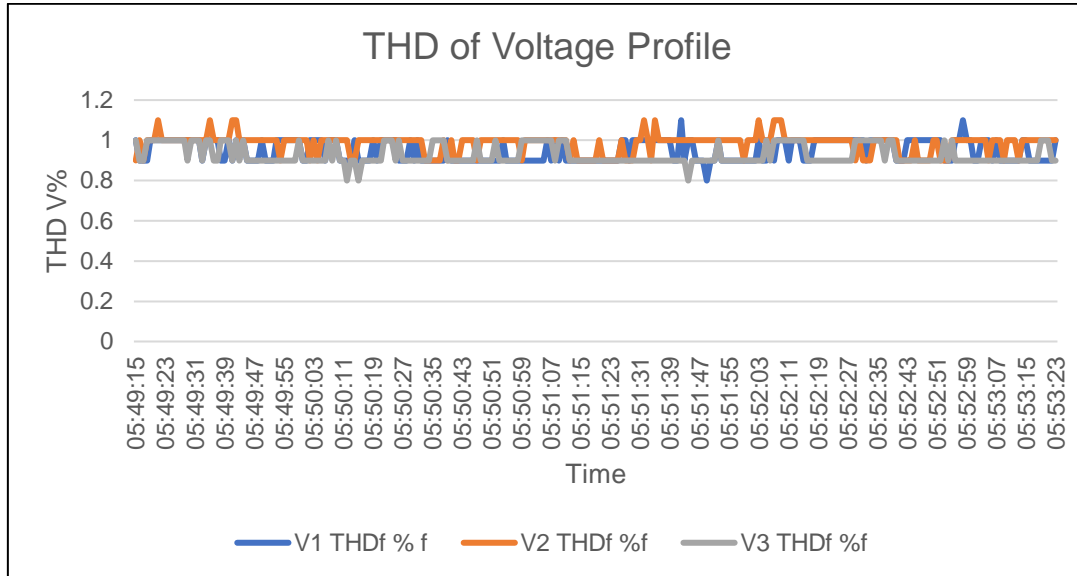
**Current:**



**Power:**



**THD:**



## 8 Annexures

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## Annexure- I Introduction of Verification Firm/Team

Eco Energies is a leading solutions provider dedicated to addressing energy and efficiency challenges in today's dynamic and resource-intensive environments. Established in 2011, we specialize in optimizing processes, embracing automation, and enhancing energy management systems. With a commitment to sustainability, we have successfully assisted over 100+ satisfied clients across diverse industry sectors in India, offering tailored energy auditing and consulting services.

### Team and Expertise:

Eco Energies boasts a dedicated team of management and technical professionals with diverse industrial experience. Our team includes lead auditors certified by the Bureau of Energy Efficiency (B.E.E.), Government of India, and the Association of Energy Engineers (A.E.E.), U.S.A. This blend of expertise allows us to deliver unparalleled consultancy and training services in both manufacturing and service industries.

### Our Accreditations: -

Energy Log – Energy Monitoring System 2nd Prize in category as Most Innovative Energy Saving project of the year for 2021. The Power Minister of Haryana personally awarded the Cash Prize of INR 50,000 for this innovative Project.

- Bureau of Energy Efficiency empanelled Grade 2 Energy Service Company
- Accredited Energy Audit Firm of Bureau of Energy Efficiency
- Empanelled with Directorate of Energy Himachal Pradesh
- Team members have International Certification from Association of Energy Engineers, USA
- Team members are Accredited from Bureau of Energy Efficiency
- Empanelled with Power grid for Energy Efficiency Projects
- Empanelled with PCRA for Energy Efficiency Projects
- Empanelled with Gujarat Energy development Agency.
- Empanelled with Uttarakhand Energy Development Agency



Our Team member – Bali Singh has been awarded as Best Energy Engineer of the World for 2021 by AEE, USA

### Audit Team:

Company	Team Member	Designation
Namdhari Eco Energies Pvt Ltd	BALI SINGH	ACCREDITED ENERGY AUDITOR AEA-206
	NEERAJ GAUR	CERTIFIED ENERGY AUDITOR (EA 28449) & DISOCM SECTOR EXPERT
	ASHISH KUMAR GUPTA	ENERGY CONSULTANT
	BUNTY PHUTELA	ENREGY ENGINEER

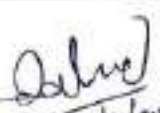
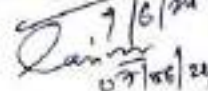
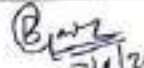
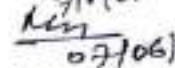
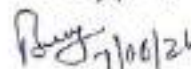


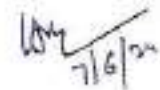


## Annexure-II Minutes of Meeting with the DISCOM Team

MINUTES OF MEETING		
 <b>PSPCL</b> <small>Punjab State Power Corporation Limited</small>	Punjab State Power Corporation Limited (PSPCL) Shed No B3, DSM, Shakti Vihar, Patiala, Punjab 147001	Date: 07 <sup>th</sup> June 2024
	Namdhari Eco Energies Pvt Ltd, Greater Noida	Revision: NA

Topic					
Annual Energy Audit of PSPCL for FY 2023-24					
Meeting Details					
Date	7 <sup>th</sup> June 2024	Time	05 PM	Venue	Punjab State Power Corporation Limited (PSPCL) Shed No B3, DSM, Shakti Vihar, Patiala
Punjab State Power Corporation Limited (PSPCL)	1. Er. Saleem Mohammad (SE- DSM) 2. Er. Harpreet Singh Sandhu (ASE-DSM) 3. Er. Ravi Verma (ASE/JA (D) cum Energy Manager)			4. Er. Bhupinder Singh (ASE) 5. Er. Bikram Sharma (AE)	
Consultant Team	1. Mr. Bali Singh (Accredited Energy Auditor) 2. Mr. Neeraj Gaur (Certified Energy Auditor & Discom Sector Expert) 3. Mr. Bunty Phutela (Energy Engineer)				
Agenda: The meeting was convened to discuss the findings of the Annual Energy Audit conducted by Namdhari Eco Energies Pvt Ltd for PSPCL Noida. The audit covered the various data points and measurements as outlined in the agenda.					
Meeting Minutes:					
<ol style="list-style-type: none"> <li>Introduction: The meeting commenced with introductions to all attendees and a brief overview of the purpose of the Annual Energy Audit.</li> <li>Data Provided by PSPCL: The Consultant, Namdhari Eco Energies Pvt Ltd, confirmed that PSPCL had provided the necessary data in the Annual Energy Accounting Form for the audit.</li> <li>Verification of Energy and Losses: The Consultant verified the purchased energy, billed energy, transmission losses, billed amount, collected amount, and AT&amp;C loss. These figures were cross-checked against the data provided by PSPCL.</li> <li>Verification of Consumer Data: The Consultant verified the category-wise number of consumers, connected load, and billed energy. The data was reviewed for accuracy and consistency.</li> <li>Infrastructure Details: The Consultant examined the infrastructure details, including the number of grid substations, power substations, and DT substations, as well as the number of voltage-wise feeders. This information was validated during the audit.</li> <li>Field Measurements at Incoming Feeders (86kV Level): Sample field measurements were conducted from 6<sup>th</sup> June to 7<sup>th</sup> June. It was conducted on incoming feeders for both sending and receiving sides to assess the accuracy of meters, energy readings, and losses.</li> <li>Field Measurements at Outgoing Feeders (11kV Level): Sample field measurements were conducted from 6<sup>th</sup> June to 7<sup>th</sup> June.</li> <li>Physical Meter Verification: Physical meter verification was performed to confirm the precision of the meters used in the energy accounting process.</li> <li>Data Collection Completion: The Consultant confirmed that all the necessary data, as required in the Annual Energy Accounting Form, had been successfully collected. Additionally, sample measurements and verifications were completed during the audit.</li> </ol>					

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 (PSPCL)		Signed on behalf of Namdhari Eco Energies Pvt Ltd	
Name	Signature & Date	Name	Signature & Date
Er. Saleem Mohamud SE/DSM Er. Ravivarma	 7/6/24  07/06/24	Bali Singh Neeraj Gaur Bunty Phute	 7/6/24  07/06/24  7/6/24
Er. Bhupinder Singh AEE	 07/06/24		
Er. Sibiham Shekhar AE	 7/6/24		
Er. Harpreet Raj Singh Samal	 7/6/24		

### Annexure-III Check List Prepared by Auditing Firm

Sr. No.	Particulars	Data Provided by PSPCL	Remarks
1.	Annual Performance review data for the FY 2022-24 (April 2023 to March 2024)	Detailed Energy accounting FY2023-24	Internal data Base & Calculation Sheet
2.	Details of purchased energy	Power purchase bills documents, energy accounts, Audit statement, tariff petition	Bills to PSPCL
3.	Transmission loss %	Calculation of transmission loss viz difference in total energy purchased and total energy drawl at distribution periphery.	Based on Generator bills and Implementation Schedule
4.	Transmission loss in (MU) Energy sold outside the periphery, Open access sale, EHT Sale	Energy accounting statements	Statement and as per formula mentioned in the BEE forma
5.	Net input energy (received at DISCOM periphery, after adjustment) in MU	Internal data base	A per Internal data base
6.	Energy input details meter wise, with other mentioned details	Statements, MIS Database	As per Internal data base
7.	Summary of Circle wise Loss Number of metered consumers and connected load, category wise of each circle Number of un-metered consumers and connected load, category wise of each circle	Statements, MIS Database	As per Internal data base
8.	Circle wise input Energy for billed meter energy and billed unmetered energy	Meter logs through which input energy of circle was computed.	As per Internal data base



## **Annexure- IV Brief Approach, Scope & Methodology for Audit**

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The Scope of Work for the detailed energy audit is as per following:

1. Visit to DISCOM office and discussion with DISCOM officials and management on Energy Audit (Accounting), Energy Efficiency and Energy Management.
2. Verification of details of category wise nos. of consumer and their annual energy consumption (Domestic, Industrial, Commercial, Agricultural and Municipalities)
3. Verification of details of category wise nos. of consumer and their annual energy consumption (LT, HT, EHT, Unmetered connections)
4. Verification of details of nos. of connections, nos. of disconnections, connected load and % of total connected load, energy billed, Net Input energy, Power Factor, Total Supply Hour, Scheduled outage, scheduled supply hours, Unscheduled Outage, Available Supply Hours.
5. Verification of details of Feeders by consumer class of categories (Domestic, Industrial, Commercial, Agricultural and Municipalities)
6. Verification of Metered Energy Sales
7. Verification of Unmetered Energy Sales
8. Estimation of unaccounted energy / theft
9. Verification of Total Energy Billed, Amount billed, Gross Amount Collected, Arrears Collected, subsidy received from state and central government.
10. Verification of Average Billing Rate (ABR)
11. Total revenue billed categories wise & Consumption wise
12. Categories wise & Consumption wise ABR with tariff subsidy
13. Categories wise & Consumption wise ABR without tariff subsidy
14. Verification of T & D Loss
15. Verification of collection Efficiency (Categories Wise)
16. Verification of Billing Efficiency (Categories Wise)
17. Verification of Transmission and Distribution Losses
18. Verification of AT & C Losses
19. Analysis of T & D Losses, AT & C Losses





20. Review of the energy losses data (AT & C & T&D) of last 3 years with the authenticated documents.
21. Verification of detailed calculation methodology adopted by DISCOMs for calculating AT & C and T &D loss.
22. Study of Loss Reduction measures undertaken by DISCOM.
23. Study of Demand Side Management undertaken by DISCOM
24. Identification of a power sub-station at 66kV/33kV level having input energy injection points and 11kV/440V transformers for verification of the status of energy metering along with their healthiness of incoming / outgoing feeders at 66kV, 33 kV and 11 kV and DTRs at field for sample study.
25. Carrying out field study to ascertain the status of consumer metering, type and healthiness for various categories of consumers, meter calibration frequency bands the time taken for replacement of faulty meters.
26. Verification of energy sales (metered and unmetered) in the distribution network area of identified power sub-station.
27. Computation of losses:
  - a) Above 11 kV level:
    - ✓ Computation of grid losses by using grid balancing approach.
    - ✓ Verification of the healthiness and life of Power transformer.
    - ✓ Computation of energy handled and power transformer losses at each voltage level (like 66/33, 33/11, 66/11).
  - b) At 11 kV level:
    - ✓ Computation feeder wise losses of all 11kV feeders emanating from identified power substation.
  - c. Below 11 kV level:
    - ✓ Calculation of DT transformation losses.
    - ✓ Verification the healthiness and life of distribution transformer.
    - ✓ Computation LT losses (DT wise) under the distribution network of identified power substation.
28. Evaluation of existing Energy Management policy, Energy Management systems.
29. Providing recommendation to reduce T&D loss, AT & C Losses, furnishing details of energy saving measures, investment to be made and cost benefit analysis of each recommended energy savings measures.
30. Identification of cost-effective energy saving opportunities in short, medium & long term.
31. Development of an action plan for time bound implementation activities.
32. Based on the above study the draft detailed energy audit report is prepared and submitted for review of the management. After receipt of necessary observation, the draft report shall be modified, and final report shall be submitted to the management.



33. The Detailed Energy Audit and report preparation has been carried out in accordance with provision of “The Bureau of Energy Efficiency (Manner and Intervals of Time for conduct of Energy Audit) Regulations, 2010” and its amendment from time to time and based on revised scope of work as prescribed by BEE.

### **Methodology:**

The following step by step methodology and approach were adopted to carry out the detailed energy audit of PSPCL Utility:

#### **A. Informing Management:**

- The energy audit team informed the management of PSPCL about the planned visit for conducting the energy audit.

#### **B. Pre-Audit Meeting:**

- A meeting was held with concerned PSPCL officials to explain the significance of the energy audit for Designated Consumers (DCs) and to outline the procedure for the audit work.

#### **C. System Familiarization:**

- A representative from PSPCL accompanied the energy audit team to different sections, including MIS (Management Information System), MRT (Meter Reading & Testing), ABT (Availability Based Tariff) cell, and Energy Audit section. This allowed the team to familiarize themselves with the systems and collect technical and financial information Data Collection:

- The energy audit team collected data through discussions with Technical and Commercial in-charges of PSPCL and from past Management Information System (MIS) records.

#### **D. Utility Infrastructure Details:**

- The details of divisions, sub-divisions, sections, assets list, and network configurations (e.g., 220/132/33 KV and 11 KV networks) were collected.

#### **E. Consumer and Energy Consumption Details:**

- Information related to the number of consumers in various categories (Domestic, Industrial, Commercial, Agricultural, and Municipalities) with their annual energy consumption (Low Tension (LT), High Tension (HT), Extra High Tension (EHT), Unmetered connections) was gathered.

#### **F. Supply and Billing Data:**

- Various supply-related data, billing information, net input energy, power factor, supply hours, outage details, and metered/unmetered energy sales were collected.

#### **G. Metering and Power Loss Analysis:**

- Measurement was carried out at sample basis to analyze power loss and unaccounted energy at 33 KV and 11 KV meter points.

#### **H. Billing Efficiency and Collection Efficiency Calculation:**

- Category-wise billing efficiency and collection efficiency were calculated based on the data from the last three financial years.

#### **I. Loss Analysis:**

- T&D (Transmission and Distribution) losses and AT&C (Aggregate Technical and Commercial) losses for the last three financial years were calculated.

#### **J. Demand Side Management and Loss Reduction Measures:**

- The energy audit team studied the demand-side management and loss reduction measures undertaken by PSPCL Utility.

#### **K. Energy Management Policy and Conservation Options:**



- The existing Energy Management policy and systems were evaluated, and energy conservation options to reduce T&D and AT&C losses were identified and prioritized.
- L. Draft Energy Audit Report:
- A draft soft copy of the energy audit report, containing observations, recommendations, financial justifications, and vendor support data, was prepared and submitted to PSPCL for acceptance.
- M. Final Report Submission:
- After PSPCL accepts the draft energy audit report, the final energy audit report will be submitted to the management of PSPCL.

The energy audit is crucial in identifying areas for improvement, optimizing energy consumption, reducing losses, and enhancing overall energy efficiency for PSPCL.



## Annexure- V Infrastructure Details

Sr. No.	Parameters	Total	Remarks (Source of data)
i	Number of circles	21	CE/Planning
ii	Number of divisions	104	CE/Planning
iii	Number of sub-divisions	508	CE/Planning
iv	Number of feeders	13441	Director/D Reports link
v	Number of DTs	1284607	Director/D Reports link
vi	Number of consumers	10741902	CE/Planning

Performance of Electricity Distribution of PSPCL			
1	Period of Information Year of (FY) information including Date and Month (Start & End)	1st April 2023 to 31st March 2024	
2	<b>Technical Details</b>		
(a)	<b>Energy Input Details</b>		
(i)	Input Energy Purchase (From Generation Source)	Million kwh	70604.92
(ii)	Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	66886.39
(iii)	Total Energy billed (is the Net energy billed, adjusted for energy traded))	Million kwh	59711.85
(b)	Transmission and Distribution (T&D) loss Details	Million kwh	7174.54
		%	10.73%
	Collection Efficiency	%	100.00%
(c)	Aggregate Technical & Commercial Loss	%	10.73%

} DISCOM Distribution Losses





## Annexure- VII Category Wise Service Details

Period From Apr'23 To Mar'24						
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	7928679	17905.91	
2.	Commercial	EHT/HT/LT	400/220/66/11/LT	1257777	4681.72	
3.	IP Sets					
4.	Hor. & Nur. & Coffee/Tea & Rubber (Metered)	NA	NA			
5.	Hor. & Nur. & Coffee/Tea & Rubber (Flat)	NA	NA			
6.	Heating and Motive Power	NA	NA			
7.	Water Supply			15906		Consumption taken in Category in which it falls.
8.	Public Lighting	LT	LT	5808	59.711	
9.	HT Water Supply			220		Consumption taken in Category in which it falls.
10.	HT Industrial	EHT/HT/LT	400/132/66/11	15772	18732.31	
11.	Industrial (Small)			96506	1136.18	
12.	Industrial (Medium)			29435	2361.46	
13.	HT Commercial	EHT/HT/LT	400/220/66/33/11/LT			
14.	Applicable to Government Hospitals & Hospitals					
15.	Lift Irrigation Schemes/Lift Irrigation Societies					
16.	HT Res. Apartments Applicable to all areas					



Period From Apr'23 To Mar'24						
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)
17.	Mixed Load					
18.	Government offices and department					
19.	Others-1 (if any , specify in remarks)	Agricultural power	LT	1391193	12797.33	
20.	Others-2 (if any , specify in remarks)	Railway Traction	400/132	6	137.49	
21.	Others-3 (if any , specify in remarks)	Bulk Supply	LT/11/33	544	705.05	
22.	Others-4 (if any , specify in remarks)	others (AP High Technology, Waste management & charitable hospitals)		56		Consumption taken in Category in which it falls.
23.	"Theft Units, Short Assesment, Unbilled Revenue (Eq.Units)				418.69	
24.	Misc. Adustment to match with sale as taken by Planning Organisation due to Temporary Supply, Night Supply ,Non operation Sale etc.				776.005	
<b>Total</b>				<b>10741902</b>	<b>59711.85</b>	



## Annexure- X List of Documents Verified with Each Parameter

Sr. No.	Particulars	Verified (YES/No)
1.	Annual Performance review data for FY 2023-24	Yes
2.	Sector-specific Pro-forma submitted to BEE & baseline values	Yes
3.	Quarterly Energy Accounting Reports FY 2023-24	Yes
4.	Mandatory Energy Audit report	Yes
5.	Energy Purchased Documents for April 2023 to March 2024	Yes
6.	Metered energy	Yes
7.	Open access document wherever applicable	Yes
8.	Division wise assets List/Fact sheet of whole DISCOM	Yes
9.	Circle wise Connected Load	Yes
10.	Division wise consumer list of whole DISCOM	Yes
11.	Category wise Metered connection	Yes
12.	Feeder wise Electricity import (MU)	Yes
13.	Details of various schemes and energy-saving projects	Yes
14.	Energy Policy	Yes
15.	Description of Energy Management / Monitoring system adopted	Yes
16.	Overall energy management committee structure	Yes
17.	Team details: roles and responsibilities	Yes
18.	Frequency of meeting / minutes of meeting	Yes
19.	Major challenges faced by the DC in reducing T & D Loss	Yes





## Annexure- XI List of Parameters Arrived Through Calculation or Formula with List of Documents as Source of Data


S.No.	Data	Unit	Sources of Data
1.	Input Energy Purchased	MUs	Power Purchase bills of PSPCL
2.	Transmission Loss	%	Based on Generator bills and Implementation Schedule
3.	Energy sold outside the periphery	MUs	Internal Database and Calculated
4.	Open access sale	MUs	Internal Database and Calculated
5.	EHT sale	MUs	Internal Database and Calculated
6.	Power Transmission Details	MUs	Internal Database
7.	% of metering available at DT	%	Internal Database
8.	% of metering available at consumer end	%	Internal Database
9.	No of feeders at 66kV voltage level	Nos.	Internal Database
10.	No of feeders at 33kV voltage level	Nos.	Internal Database
11.	No of feeders at 11kV voltage level	Nos.	Internal Database
12.	No of LT feeders' level	Nos.	Internal Database
13.	Line length (ckt. km) at 66kV voltage level	Km	Internal Database
14.	Line length (ckt. km) at 33kV voltage level	Km	Internal Database
15.	Line length (ckt. km) at 11kV voltage level	Km	Internal Database
16.	Line length (km) at LT level	Km	Internal Database
17.	HT/LT ratio		Internal Database
18.	Feeder wise Import & Export Energy	MUs	Internal Database
19.	Nos. of Consumers	Nos.	Internal Database
20.	Connected Load of Consumers	MW	Internal Database
21.	Input Energy	MUs	Internal Database
22.	Consumer wise Billed Energy		Internal Database
23.	T&D Loss	MUs	Internal Database and Calculated
24.	T&D Loss %	%	Internal Database and Calculated
25.	Feeder meters accuracy and error		Document based Calibration reports



## Power Purchase FY 2023-24

FY 2023-24 Power Purchased		Energy Schedule Sr.No.
Long-Term Conventional	26788.68	2.1+4.9+5.1-NPL-TSPL-GVK-Bundled Solar of NTPC,SECI,NVVN
Medium Conventional (unscheduled intercha	-741.37	Unscheduled interchange(8+9)
Short Term Conventional	6272.19	Total Short Term(5.2)-NRSE Power
Banking	-823.65	(. 6.5)
Long-Term Renewable energy	3665.25	Bundled Solar of NTPC,SECI,NVVN
Medium and Short-Term RE	0.00	NRSE Power
Captive, open access input		
Sale of surplus power	-1424.44	(. 13,2+14+15+16+17)
Quantum of inter-state transmission loss	1434.51	(2.2+11)
Power procured from inter-state sources	33736.66	TOTAL
Power at state transmission boundary	32302.15	TOTAL-Inter state Loss
Long-Term Conventional	34605.74	Own Generation(1.7)+NPL+TSPL+GVK
Medium Conventional	NA	
Short Term Conventional	NA	
Banking	NA	
Long-Term Renewable energy	2028.10	NRSE+PEDA(7)- (33 KV,11KV)
Medium and Short-Term RE		
Captive, open access input		
Sale of surplus power		
Quantum of Intra-state transmission loss	2284.02	Power at PSPCL-Input Inergy (PSTCL losses+Sub transmission Losses)
Power procured from intra-state sources	36633.84	Total
Input in DISCOM wires network	66651.97	Grand Total- Intra state losses
Renewable Energy Procurement	0.00	33 KV 9Sr.No.7)
Small capacity conventional/ biomass/ hydro	0.00	
Captive, open access input	0.00	
Renewable Energy Procurement	234.42	11 KV (Sr.No.7)
Small capacity conventional/ biomass/ hydro	0.00	
Sales Migration Input		
Renewable Energy Procurement		
Sales Migration Input		
Energy Embedded within DISCOM wires netw	234.42	
Total Energy Available/ Input	66886.39	

## Govt. Tariff Subsidy


**PUNJAB STATE POWER CORPORATION LTD.**  
 (Regd. Office: PSEB Head Office, The Mall, Patiala)  
**OFFICE OF CHIEF ENGINEER /COMMERCIAL (SE/SALES-II)**  
 Tel. No. 0175-2214495, Fax: 0175-2210320, e-mail: [sesalesrwo@gmail.com](mailto:sesalesrwo@gmail.com),  
 Website: [www.pspcl.in](http://www.pspcl.in), CIN: U40109PB2018SGC033813, Registration Number: 33813

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**Commercial Circular No. 16 /2023**

To

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

Memo No.277-281/T.O 2023-24 Dated: 16.05.2023

**Subject: Tariff structure for FY 2023-24 as per Tariff order issued by Hon'ble PSERC vide its order dated 15.05.2023 applicable w.e.f. 16.05.2023.**


Hon'ble PSERC vide its order dated 15.05.2023 against Petition no. 74 of 2022 filed by PSPCL for True-Up of F.Y. 2021-22, Annual Performance Review for FY 2022-23, Approval of Revised ARR and determination of Tariff for F.Y. 2023-24, has issued the Tariff Order for FY 2023-24. The revised tariffs will be applicable from 16.05.2023 to 31.03.2024, except where specified otherwise in Tariff Order for FY 2023-24. For the period from 01.04.2023 and up to 15.05.2023, Tariff shall remain as per Tariff Order for FY 2022-23 as already intimated vide CC No. 11/2023 dated 31.03.2023.

The rates of power supply applicable to various categories of consumers as per Table 7.2 of Tariff Order for FY 2023-24 is enclosed herewith (**Annexure-A**). Free power/subsidized tariff shall be applicable to various categories of consumers as per GoP letter no. 13/01/2023-PE2/1947 dated 31.03.2023.

Meticulous compliance of this circular be ensured. This circular can be downloaded from PSPCL website [www.pspcl.in](http://www.pspcl.in).

This issues with the approval of competent authority.

DA/As Above

  
**Dy.CE/Sales-II**  
**PSPCL, Patiala.**


Page 1 of 6

ਪਿਠ ਥੀਕਣ ਨੰ: 282-324/T.O 2023-24

ਮਿਤੀ: 16.05.2023

ਉਪਰੋਕਤ ਦਾ ਉਤਾਰਾ ਹੇਠ ਲਿਖਿਆ ਨੂੰ ਸੂਚਨਾ ਦੇ ਲੋੜੀਂਦੀ ਕਾਰਵਾਈ ਲਈ ਭੇਜਿਆ ਜਾਂਦਾ ਹੈ:

1. ਮਾਨਯੋਗ ਬਿਜਲੀ ਮੰਤਰੀ, ਕਮਰਾ ਨੰ24 , 7<sup>ਥ</sup> ਅੰਜਲ, ਪੰਜਾਬ ਸਿਵਲ ਸਕੱਤਰੇਤ-1, ਚੰਡੀਗੜ੍ਹ ।
2. ਚੇਅਰਮੈਨ-ਕਮ-ਮਨੇਜਿੰਗ ਡਾਇਰੈਕਟਰ, ਪੰ: ਰਾ: ਪਾ: ਕਾ: ਲਿਮ., ਪਟਿਆਲਾ।
3. ਸਾਰੀ ਨਿਰਦੇਸ਼ਕ, ਪੰ: ਰਾ: ਪਾ: ਕਾ: ਲਿਮ., ਪਟਿਆਲਾ।
4. ਵਿੱਤ ਕਮਿਸ਼ਨਰ/ਫਾਇਨੈਂਸ ਟੂ ਗ੍ਰੈਂਟਿੰਗ ਪੰਜਾਬ ਐਕਸ-ਆਫਿਸ ਮੈਂਬਰ, ਪੰ: ਰਾ: ਪਾ: ਕਾ: ਲਿਮ., ਪਟਿਆਲਾ।
5. ਸਕੱਤਰ /ਬਿਜਲੀ ਵਿਭਾਗ, ਪੰਜਾਬ ਸਰਕਾਰ, ਚੰਡੀਗੜ੍ਹ।
6. ਸਕੱਤਰ/ਪੰਜਾਬ ਸਰਕਾਰ/ਇੰਫ: ਅਤੇ ਕਾਮਰਸ ਵਿਭਾਗ, ਪੰਜਾਬ ਸਰਕਾਰ, ਚੰਡੀਗੜ੍ਹ।
7. ਸਕੱਤਰ/ਪੰਜਾਬ ਰਾਜ ਬਿਜਲੀ ਰੈਗੂਲੇਟਰੀ ਕਮਿਸ਼ਨ, ਸਾਇਟ ਨੰ: 03, ਸੈਕਟਰ-18 ਏ, ਮੱਧ ਮਾਰਗ ਚੰਡੀਗੜ੍ਹ।
8. ਪ੍ਰੋਜੈਕਟ, ਸਟੇਟ ਡਿਸਟ੍ਰਿਬਿਊਟਿਡ ਰਿਡਰੈਸਲ ਕਮਿਸ਼ਨ (ਪੰਜਾਬ) ਐਸ.ਸੀ.ਓ ਨੰ: 3009-10, ਸੈਕਟਰ-22, ਚੰਡੀਗੜ੍ਹ।
9. ਮੁੱਖ ਇੰਜੀਨੀਅਰ/ਚੇਅਰਮੈਨ (ਫੋਰਮ), 220 ਕੀ.ਵੀ, ਸਬ-ਸਟੇਸ਼ਨ, ਫਿਰੋਜ਼ਪੁਰ ਰੋਡ, ਜਾਹਲਣ ਵੇਰਕਾ ਮਿਲਕ ਪਲਾਂਟ ਲੁਧਿਆਣਾ , ।
10. Ombudsman, Electricity Punjab 66 KV Grid Sub Station, Plot No. A-2, Industrial Area, Phase 1, SAS Nagar (Mohali) -160055.
11. ਨਿੱਜੀ ਸਕੱਤਰ ਟੂ ਬਿਜਲੀ ਮੰਤਰੀ, ਪੰਜਾਬ ਸਿਵਲ ਸਕੱਤਰੇਤ, ਪੰਜਾਬ, ਸਰਕਾਰ, ਚੰਡੀਗੜ੍ਹ।
12. ਚੀਫ-ਕੋ-ਆਰਡੀਨੇਟਰ, ਉਦਯੋਗ ਸਹਾਇਕ ਡਾਇਰੈਕਟਰ ਆਫ ਇੰਡੀਸਟਰੀਜ਼ ਪੰਜਾਬ ਸੈਕਟਰ-17, ਚੰਡੀਗੜ੍ਹ।
13. ਮੁੱਖ ਬਿਜਲੀ ਇੰਸਪੈਕਟਰ, ਪੰਜਾਬ ਸਰਕਾਰ, ਪਟਿਆਲਾ।
14. Finance Advisor, PSPCL, Patiala.
15. Chief Auditor, PSPCL, Patiala.
16. CEIARR &TR, PSPCL, Patiala.
17. CEPP&R, PSPCL, Patiala.
18. CEIT, PSPCL, Patiala: For ensuring the strict compliance of the instructions.
19. Dy.CE, Billing, PSPCL, Patiala: For ensuring the strict compliance of the instructions.
20. ਉੱਪ ਮੁੱਖ ਇੰਜ: /ਸੇਲਜ਼-1, ਨਿਗਰਾਨ ਇੰਜ: /ਸੇਲਜ਼-2, ਉੱਪ ਮੁੱਖ ਇੰਜ: /ਰੈਗੂਲੇਟਰ ਪੰ: ਰਾ: ਪਾ: ਕਾ: ਲਿਮ., ਪਟਿਆਲਾ।
21. All Addl. SEs/Sr. Xens/AEEs/Sales under PSPCL / Commercial Organization.
22. CAO/TR (Finance), PSPCL, Patiala.



Sr. Xen/Sales-III  
PSPCL, Patiala.

Page 2 of 6





**ANNEXURE-A**

Revised Tariff for FY 2023-24 applicable from 16.05.2023 to 31.03.2024

(Rs)

Sl. No.	Category		Existing Tariff for FY 2022-23 (01.04.2022 to 31.03.2023) continued from 01.04.2021 to 15.05.2022		New Tariff w.e.f. 16.05.2023 to 31.03.2024			
			*Fixed Charges per Month	**Energy Charges	*Fixed Charges per Month	**Energy Charges		
I	II		III	IV	V	VI		
<b>A PERMANENT SUPPLY</b>								
1	Domestic Supply	Upto 2 kW	0-100 kWh	35kW	3.91kWh	51kWh	4.78kWh	
			101-300 kWh		5.84kWh		6.64kWh	
			Above 300 kWh		7.30kWh		7.75kWh	
		Above 2 kW & upto 7 kW	0-100 kWh	49kW	3.74kWh	75kW	4.33kWh	8.64kWh
			101-300 kWh		5.66kWh		6.64kWh	
			Above 300 kWh		7.20kWh		7.75kWh	
		Above 7 kW & upto 50 kW	0-100 kWh	95kW	4.64kWh	104kW	5.24kWh	11.14kWh
			101-300 kWh		6.56kWh		7.11kWh	
			Above 300 kWh		7.30kWh		7.75kWh	
		Above 50 kW/kVA & upto 100 kVA	All Units	115kVA	6.42kVAh	120kVA	6.78kVAh	
		Above 100 kVA	All Units	125kVA	6.63kVAh	140kVA	6.98kVAh	
		No Harmandir Sahib & Sri Durgiana Mandir	Free 2000 kWh		Free		Free	
Above 2000 kWh	NA		8.11kWh	NA	8.41kWh			
2	Non-Residential Supply	Upto 7 kW	0-100 kWh	45kW	6.91kWh	50kW	6.91kWh	
			101-500 kWh		7.17kWh		7.17kWh	
			Above 500 kWh		7.29kWh		7.35kWh	
		Up to 100 kWh	0-100 kWh	70kW	6.91kWh	100kW	4.91kWh	7.17kWh
			101-500 kWh		7.17kWh		7.17kWh	
			Above 500 kWh		7.29kWh		7.35kWh	
		Above 20 kW/kVA & upto 100 kVA	All Units	100kVA	6.35kVAh	110kVA	6.78kVAh	
		Above 100 kVA	All Units	110kVA	6.55kVAh	140kVA	6.98kVAh	
		Electric Vehicle Charging Stations	All Units	NA	4.08kVAh	NA	0.28kVAh	
		<b>3. Industrial Power Supply</b>						
a	Small Power	Upto 20 kVA	All Units	80kVA	1.37kVAh	105kVA	3.03kVAh	
b	Medium Supply	Above 20 kVA & upto 100 kVA	All Units	120kVA	2.80kVAh	140kVA	6.04kVAh	
<b>c. Large Supply</b>								
	General Industry	Above 100kVA & upto 1000 kVA	All Units	185kVA	6.05kVAh	215kVA	6.45kVAh	
		Above 1000 kVA & upto 2500 kVA	All Units	245kVA	6.15kVAh	275kVA	6.35kVAh	
		Above 2500 kVA	All Units	285kVA	6.27kVAh	315kVA	6.67kVAh	
PII Industry	Above 100 kVA & upto 1000 kVA	All Units	190kVA	6.09kVAh	220kVA	6.49kVAh		
	Above 1000 kVA & upto 2500 kVA	All Units	275kVA	6.40kVAh	305kVA	6.80kVAh		
	Above 2500 kVA	All Units	315kVA	6.49kVAh	345kVA	6.89kVAh		
d	For use of electricity exclusively during				4.86kVAh		3.21kVAh	



Sl. No.	Category		Existing Tariff for FY 2023-24 (01.04.2022 to 31.03.2023) continued from 01.04.2022 to 31.03.2023		New Tariff w.e.f. 16.05.2023 to 31.03.2024		
			*Fixed Charges per Month	**Energy Charges	*Fixed Charges per Month	**Energy Charges	
4	II		III	IV	V	VI	
	night hours applicable for industrial consumers - (Large Supply/Small Power)	10 PM to 06 AM (next day)	50% of Fixed Charges specified under relevant category	Normal Energy charges (throughout the year)	50% of Fixed Charges specified under relevant category	Normal Energy charges (throughout the year)	
		06 AM to 10 AM					
4.	Bulk Supply	LT	All Units	215kVA	6.66kVAh	260kVA	7.01kVAh
		HT	All Units	300kVA	6.78kVAh	340kVA	6.79kVAh
5.	Railway Traction		All Units	340kVA	6.97kVAh	360kVA	7.17kVAh
6.	Public Lighting		All Units	225kW	7.43kWh	130kW	7.33kWh
7.	Agricultural Pumps (API)		All Units	3.66kWh or 4795kWh/month	3.25kWh or 485.00kWh/month		
8.	AP High Technology/ High Density Farming		All Units	NA	3.66kWh	NA	6.25kWh
9.	Compost/ Solid Waste Management Plants for Municipalities of Urban Local Bodies & Water Supply Schemes		All Units	60kVA	3.25kVAh	65kVA	3.28kVAh
10.	Charitable Hospitals set-up under PoD Act		All Units	70kVA	3.40kVAh	100kVA	6.00kVAh
11.	Start-up Power for Generators and CPPs		All Units	NA	7.55kVAh	NA	7.61kVAh
<b>B. SEASONAL INDUSTRY (as per Condition 18 of General Conditions of Tariff)</b>							
<b>a) During Season</b>							
	Small Power	All Units	165kVA	Same as applicable to corresponding General Industry	210kVA	Same as applicable to corresponding General Industry	
	Medium Supply	All Units	240kVA		280kVA		
	Large Supply	101-1000 kVA	370kVA		430kVA		
		1001-2500 kVA	490kVA		555kVA		
		> 2500 kVA	570kVA		630kVA		
	b) During Off Season (NP/MSELS)		All Units	Nil	Nil		
<b>C. ICE FACTORIES &amp; CANDIES AND COLD STORAGES</b>							
<b>a) During April to July</b>							
	Small Power	All Units	160 kVA	Same as applicable to corresponding General Industry	210 kVA	Same as applicable to corresponding General Industry	
	Medium Supply	All Units	240kVA		280kVA		
	Large Supply	All Units	370kVA		430kVA		
	b) During August to March		All Units	40kVA	53kVA		
	Small Power	All Units	60kVA	76kVA			
	Medium Supply	All Units	93kVA	108kVA			
	Large Supply	All Units					
D	<b>TEMPORARY SUPPLY (All Categories)</b>		All Units	1.25 times the charges (highest slab in case of slab rates) specified under the relevant schedule for permanent supply corresponding to the sanctioned load/contract demand	1.25 times the charges (highest slab in case of slab rates) specified under the relevant schedule for permanent supply corresponding to the sanctioned load/contract demand		

\*Fixed Charge (unless otherwise specified in Schedule of Tariff) shall be levied on 80% of the sanctioned load or contract demand (actual demand recorded, if higher) as may be applicable.

\*\*In addition to energy charges, FCA, Voltage Surcharge/Rebate and ToD Tariff shall be applicable in accordance with conditions 8, 13 and 15 respectively of General Conditions of Tariff (Annexure-I of the Tariff Order for FY 2023-24.)

**Notes:**

- (i) The Schedules of Tariff with tariff rates and other details for various categories of consumers as approved by the Commission are as per Annexure II of the Tariff Order for FY 2023-24. These Schedules shall be read with the updated provisions of General Conditions of Tariff approved by the Commission as per Annexure I of the Tariff Order for FY 2023-24.
- (ii) Free power/subsidized tariff shall be applicable to various categories of consumers as per GoP Memo No. 13/01/2023-PE2/1947 dated 31.03.2023 (Annexure-IX of the Tariff Order for 2023-24).
- (iii) Cooperative Group Housing Societies/ Employers availing single point supply under PSERC



(Single Point Supply to Co-operative Group Housing Societies/Employers) Regulations will be levied fixed charges as applicable to Domestic Supply consumers with load exceeding 100 kVA. A rebate of 12% (Twelve percent) will be admissible on electricity charges, comprising of fixed and energy charges, in addition to any other rebate as may be applicable.

(v) A Franchisee appointed by licensee for a particular area in its area of supply as per <sup>7th</sup> proviso to Section 14 of the Electricity Act read with Regulations 6.6.2 of the Supply Code 2014, shall be eligible for rebate on electricity charges as per the franchisee agreement between the parties read with Orders of the Commission, if any.

(vi) In case of mixed industrial load having total load more than 100 kVA but its installed/connected kVA rating of PIU load is up to 100kVA, LS general category tariff shall be charged.

For industries where the load is of mixed nature, i.e. in addition to General Industrial loads, Arc/Power Intensive loads having installed/connected kVA rating more than 100 kVA are also running, Fixed and Energy Charges shall be determined by computing the Maximum Demand and energy consumption for the billing month on pro-rata basis in proportion to such demands sanctioned by the distribution licensee and applicable tariff (Fixed Charge and Energy Charge) shall be as specified against the corresponding demand slab (without clubbing of Arc/Power Intensive and general load) under the relevant schedule of tariff. Provided that the total charges payable by such Mixed Industry consumer shall not be less than the charges payable, in case his total load (General and PIU) is considered as the general load.

In such cases, Power Intensive loads shall comprise of loads as mentioned in para 5I.3.2, including auxiliary loads, loads of pollution control machinery, gas plants & corresponding lighting loads, and general industrial loads in such cases shall comprise loads of rolling mills and its allied loads, related workshop, general engineering machinery and corresponding lighting load, for the purpose of levy of Fixed Charges. Provided that PIU load having total installed/connected kVA rating upto 100 kVA shall not be considered as PIU load. Where rating in kVA is not available, rated load in kW shall be converted into kVA considering unity power factor.

#### Example:-

In case a consumer having sanctioned load/demand of 1800 kVA for General load and 900 kVA for Power Intensive load, has maximum recorded Demand of 2400 kVA and energy consumption of 6 LU (kVAh) during a billing month, his billing shall be carried out separately for General and Arc/PIU loads as under:

	Existing Methodology approved by PSERC		If total load is considered as General Load
	General load	Arc/PIU Load	Contract Demand (CD)
	1800 kVA	900 kVA	CD= 2700 KVA
	$2400 * \{1800 / (1800 + 900)\}$	$2400 * \{900 / (1800 + 900)\}$	
Demand (in kVA)	1800	900	2400
Fixed Charges Rate (Rs./kVA)	275 (rate of Above 1000 kVA & upto 2500 kVA slab of General Industry)	220 (rate of Above 100 kVA & upto 1000 kVA slab of PIU Industry)	315 (rate of Above 2500 kVA slab of General Industry)
Fixed Charges (Rs.)	440000	176000	756000
Consumption of Energy	$6 * (1800 / (1800 + 900)) = 4LU$	$6 * (900 / (1800 + 900)) = 2LU$	6LU
Units	400000	200000	600000
Energy Charges	6.55	6.49	6.67



Rate (Rs./kVAh)	(rate of Above 1000 KVA & upto 2500 kVA slab of General Industry)	(rate of Above 100 kVA upto 1000 kVA slab of PIU Industry)	(rate of Above 2500 kVA slab of General Industry)
Energy Charges (Rs.)	2620000	1298000	4002000
Sub-Total (F.C+L.C)	3060000	1474000	4758000
Total (In Rs.)	4534000		4758000

*In above case as the total charges (Rs.45,34,000) payable by Mixed Industry consumer comes out to be less than the charges(Rs.47,58,000) payable in case his total load (General and PIU) is considered as the general load, so the total charges payable in this case shall be Rs 47,58,000.*



**Revised Annexure-1: Proforma for Quarterly Consumer Category-wise Subsidy Bill/Received/Due for period 2023-24 (Revised)**

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.	
	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)			(in kwh)			(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	16,34,90,77,099		16,34,90,77,099	16,34,90,77,099		16,34,90,77,099	Rs.2.50 to Rs.7.15 per kWh		7233.82		7233.82	7233.82	6818.28	415.54
Agriculture	12,60,10,000	12,67,13,50,000	12,79,73,60,000	12,60,10,000	12,67,13,50,000	12,79,73,60,000	Rs. 6.55 per KW		81.54	8252.47	8334.01	8334.01	8881.83	-547.82
Commercial/Industrial -LT	22,85,05,42,670		22,85,05,42,670	22,85,05,42,670		22,85,05,42,670	Rs. 0.17 to 1.39 per KVA		2175.95		2175.95	2175.95	2576.63	-400.68
Commercial/Industrial -HT														
Other (specify)														
<b>Total</b>	<b>39,32,56,29,769</b>	<b>12,67,13,50,000</b>	<b>51,99,69,79,769</b>	<b>39,32,56,29,769</b>	<b>12,67,13,50,000</b>	<b>51,99,69,79,769</b>			<b>9491.31</b>	<b>8252.47</b>	<b>17743.78</b>	<b>17743.78</b>	<b>18276.74</b>	<b>-532.96</b>

Note:- Excess amount received of Rs. 532.96 crore will be adjusted towards carrying cost and clearance of liquidation dues.

  
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**Revised Annexure-1: Proforma for Quarterly Consumer Category-wise Subsidy Bill/Received/Due for period 2023-24 (4th-Q) (REVISED)**

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.	
	Metered	Un-metered*	Metered (out of col.3)	Un-metered* (out of col.3)	Metered Energy**	Un-metered Energy**	Metered Energy	Un-metered Energy	Total					
		Total		Total		(in Rs./kwh)				(in Rs. Cr.)				(in Rs. Cr.)
1	2	3	4=2+3	5	6	7=5+6	8	9	10=5*8	11=6*9	12=10+11	13	14	15=13-14
Residential	2,90,56,21,711		2,90,56,21,711	2,90,56,21,711		2,90,56,21,711	Rs. 2.50 to Rs. 7.15 per kWh		1459.10		1459.10	1459.10	1310.54	148.56
Agriculture	2,25,90,000	1,62,84,41,000	1,65,10,31,000	2,15,90,000	1,62,84,41,000	1,65,10,31,000	Rs. 6.55 per KW		14.80	1025.05	1079.83	1079.83	603.00	472.83
Commercial/Industrial -LT	6,02,53,07,364		6,02,53,07,364	6,02,53,07,364		6,02,53,07,364	Rs. 0.17 to 1.89 per kWh		517.80		517.80	517.80	542.83	-25.03
Commercial/Industrial -HT														
Other (specify)									1891.70	1065.03	3056.73	3056.73	2455.37	601.36
<b>Total</b>	<b>8,95,35,15,075</b>	<b>1,62,84,41,000</b>	<b>10,58,19,60,075</b>	<b>8,95,35,15,075</b>	<b>1,62,84,41,000</b>	<b>10,58,19,60,075</b>								

The subsidy due for the 4th quarter of FY 2023-24 comes to Rs. 3056.73 crore whereas State Government has released Rs. 2455.37 crore. The net excess subsidy received from GOP upto 3rd quarter is Rs. 1297.02 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)	net excess subsidy received during FY 2023-24 (Rs. in crore)
601.36	-1297.02	-695.66

*(Signature)*  
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## Energy Schedule of PSPCL for FY 2023-24

Sr. No.	GENERATING STATION	Type of Plant	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
<b>1</b>	<b>OWN GENERATION</b>		<b>FINAL REA</b>	<b>FINAL REA</b>	<b>FINAL REA</b>	<b>Prov. REA</b>	<b>Prov. REA</b>	<b>Prov. REA</b>	<b>Prov. REA</b>	<b>Prov. REA</b>	<b>Prov. REA</b>	<b>Prov. REA</b>	<b>Prov. REA</b>	<b>Prov. REA</b>	
<b>1.1</b>	<b>THERMAL</b>														
	i) GGSSTP, Ropar	Thermal	322.24	208.70	328.37	310.53	466.76	289.10	379.65	235.30	348.16	393.45	358.78	311.98	<b>3953.00</b>
	ii) GHTP, Lehra Mohhabat	Thermal	330.85	243.49	381.36	387.88	465.33	382.94	449.27	259.84	459.09	472.23	433.66	373.98	<b>4639.93</b>
	iii) GATP, Goindwal Sahib	Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	166.56	195.68	<b>362.24</b>
	<b>Total Thermal (Gross)</b>		<b>653.09</b>	<b>452.19</b>	<b>709.73</b>	<b>698.41</b>	<b>932.09</b>	<b>672.04</b>	<b>828.92</b>	<b>495.14</b>	<b>807.26</b>	<b>865.67</b>	<b>959.00</b>	<b>881.63</b>	<b>8955.17</b>
<b>1.2</b>	<b>Aux.&amp;Transformation Losses</b>														
	GGSSTP	Thermal	26.36	20.79	28.90	32.32	46.66	34.76	35.89	22.59	31.24	36.84	33.40	29.63	<b>379.38</b>
	GHTP	Thermal	27.87	21.92	31.89	32.68	38.27	32.41	37.11	22.58	35.46	36.52	33.97	30.75	<b>381.45</b>
	GATP	Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.89	19.56	<b>36.45</b>
	<b>Total Thermal Losses</b>		<b>54.23</b>	<b>42.71</b>	<b>60.79</b>	<b>65.01</b>	<b>84.93</b>	<b>67.17</b>	<b>73.00</b>	<b>45.18</b>	<b>66.70</b>	<b>73.36</b>	<b>84.26</b>	<b>79.94</b>	<b>797.27</b>
<b>1.3</b>	<b>Net Thermal Generation (1.1-1.2)</b>		<b>598.86</b>	<b>409.48</b>	<b>648.94</b>	<b>633.40</b>	<b>847.16</b>	<b>604.87</b>	<b>755.92</b>	<b>449.96</b>	<b>740.56</b>	<b>792.31</b>	<b>874.74</b>	<b>801.69</b>	<b>8157.89</b>
<b>1.4</b>	<b>HYDEL</b>														
	i)Shanan	Hydro	40.41	65.99	78.69	74.33	76.82	47.48	26.79	17.56	13.47	10.22	11.35	29.19	<b>492.30</b>
	ii)UBDC	Hydro	25.55	39.91	49.32	32.97	55.10	51.91	26.53	16.44	39.62	9.97	1.65	21.70	<b>370.68</b>
	iii)Mukerian (MHP)	Hydro	13.08	17.02	108.35	123.76	127.02	142.52	147.68	106.00	117.85	134.39	136.33	86.53	<b>1260.54</b>
	iv)ASHP	Hydro	12.88	27.17	36.58	80.56	86.35	83.16	52.94	13.82	33.04	10.66	18.21	19.10	<b>474.46</b>
	v)RSD	Hydro	98.30	167.69	215.32	387.37	332.20	222.11	89.21	62.78	165.37	31.43	9.05	62.45	<b>1843.30</b>
	vi)Micro	Hydro	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.13	0.00	0.39	0.44	<b>1.74</b>
	<b>Total Hydel (Gross)</b>		<b>190.56</b>	<b>317.77</b>	<b>488.26</b>	<b>699.00</b>	<b>677.50</b>	<b>547.17</b>	<b>343.14</b>	<b>217.05</b>	<b>369.48</b>	<b>196.67</b>	<b>176.98</b>	<b>219.42</b>	<b>4443.01</b>
<b>1.5</b>	<b>Aux.&amp;Transformation Losses</b>														
	Shanan	Hydro	0.52	0.94	0.82	0.53	1.22	1.04	0.22	0.14	0.13	0.08	0.12	0.35	<b>6.10</b>
	UBDC	Hydro	0.13	0.19	0.24	0.18	0.27	0.22	0.11	0.11	0.27	0.09	0.04	0.11	<b>1.94</b>
	MHP	Hydro	0.31	0.39	1.80	2.06	1.96	2.20	2.19	1.67	1.82	1.87	1.86	1.23	<b>19.35</b>
	ASHP	Hydro	0.04	0.09	0.09	0.19	0.19	0.18	0.15	0.04	0.11	0.06	0.08	0.08	<b>1.29</b>
	RSPP	Hydro	0.59	0.56	0.71	1.28	1.09	0.73	0.30	0.25	0.82	0.10	0.03	0.25	<b>6.71</b>
	Micro	Hydro	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.02	0.02	<b>0.07</b>
	<b>Total Hydro Losses</b>		<b>1.60</b>	<b>2.16</b>	<b>3.65</b>	<b>4.23</b>	<b>4.73</b>	<b>4.37</b>	<b>2.96</b>	<b>2.23</b>	<b>3.15</b>	<b>2.20</b>	<b>2.15</b>	<b>2.02</b>	<b>35.45</b>
<b>1.6</b>	<b>Net Hydel Generation (1.4-1.5)</b>		<b>188.95</b>	<b>315.61</b>	<b>484.61</b>	<b>694.77</b>	<b>672.77</b>	<b>542.80</b>	<b>340.18</b>	<b>214.83</b>	<b>366.33</b>	<b>194.47</b>	<b>174.83</b>	<b>217.40</b>	<b>4407.56</b>
<b>1.7</b>	<b>Total Net Own Generation (Thermal+Hydel) (1.3+1.6)</b>		<b>787.81</b>	<b>725.09</b>	<b>1133.55</b>	<b>1328.17</b>	<b>1519.93</b>	<b>1147.67</b>	<b>1096.10</b>	<b>664.79</b>	<b>1106.89</b>	<b>986.79</b>	<b>1049.57</b>	<b>1019.09</b>	<b>12565.45</b>



Energy Audit Report: PSPCL FY 2023-24



Sr. No.	GENERATING STATION	Type of Plant	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
<b>2</b>	<b>PSPCL share from BBMB</b>														
	i)Bhakhra	Hydro	133.37	162.12	164.98	333.80	482.18	315.91	244.15	187.19	176.60	170.63	162.13	156.66	<b>2689.72</b>
	ii)Dehar	Hydro	86.28	144.10	169.61	159.67	124.11	158.19	81.05	49.55	37.88	29.28	33.48	69.69	<b>1142.89</b>
	iii)Pong	Hydro	4.44	5.99	25.81	44.36	56.91	45.84	39.60	26.29	30.65	35.63	39.58	21.86	<b>376.96</b>
<b>2.1</b>	<b>Total (Gross)</b>		<b>224.10</b>	<b>312.21</b>	<b>360.40</b>	<b>537.82</b>	<b>663.20</b>	<b>519.93</b>	<b>364.80</b>	<b>263.03</b>	<b>245.12</b>	<b>235.54</b>	<b>235.19</b>	<b>248.22</b>	<b>4209.57</b>
2.2	BBMB Inter State Transmission Losses		8.56	10.93	11.22	21.03	21.76	16.67	14.47	10.93	10.55	9.00	8.97	8.90	<b>152.98</b>
<b>2.3</b>	<b>PSPCL share from BBMB (Net) (2.1 - 2.2)</b>		<b>215.54</b>	<b>301.28</b>	<b>349.18</b>	<b>516.79</b>	<b>641.44</b>	<b>503.27</b>	<b>350.33</b>	<b>252.09</b>	<b>234.57</b>	<b>226.54</b>	<b>226.23</b>	<b>239.32</b>	<b>4056.59</b>
<b>3</b>	<b>Total Net Generation (1.7+2.3)</b>		<b>1003.35</b>	<b>1026.37</b>	<b>1482.73</b>	<b>1844.96</b>	<b>2161.37</b>	<b>1650.94</b>	<b>1446.44</b>	<b>916.88</b>	<b>1341.46</b>	<b>1213.33</b>	<b>1275.80</b>	<b>1258.41</b>	<b>16622.03</b>
<b>4</b>	<b>CENTRAL SECTOR POWER PURCHASE</b>														
<b>4.1</b>	<b>NHPC</b>														
	Bairasiul	Hydro	33.02	39.75	35.86	16.81	28.16	18.42	12.13	7.49	6.32	5.93	8.51	28.17	<b>240.56</b>
	Salal	Hydro	64.82	107.58	125.90	131.23	141.05	118.88	51.04	26.78	18.52	14.26	22.83	52.06	<b>874.97</b>
	Tanakpur	Hydro	1.02	2.45	6.56	10.85	11.63	11.16	9.57	5.05	2.27	1.18	0.56	1.12	<b>63.42</b>
	Chamera-I	Hydro	15.72	28.89	34.40	40.94	36.34	17.78	8.19	5.16	3.56	3.38	4.14	15.14	<b>213.66</b>
	Chamera-II	Hydro	9.11	20.08	26.05	11.30	30.39	22.58	7.35	4.41	3.41	2.66	2.65	6.70	<b>146.68</b>
	Chamera-III	Hydro	4.91	11.62	15.68	14.87	17.99	11.15	2.02	0.84	1.99	0.50	0.70	3.19	<b>85.46</b>
	Uri	Hydro	42.04	46.59	41.51	44.22	37.26	17.49	16.19	11.76	8.44	5.30	14.99	32.82	<b>318.64</b>
	Uri-II	Hydro	12.67	15.67	18.55	20.70	17.88	8.95	6.12	4.79	3.45	2.41	5.72	13.33	<b>130.26</b>
	Dhauliganga	Hydro	3.21	7.42	18.17	26.79	27.95	15.00	6.39	3.36	2.57	2.14	1.85	2.55	<b>117.38</b>
	Dulhasti	Hydro	11.88	24.64	29.91	20.79	31.72	32.57	17.65	9.89	7.43	5.90	5.12	7.49	<b>205.00</b>
	Parbati-III	Hydro	1.42	4.09	9.61	5.87	1.27	0.71	2.10	1.34	0.98	0.27	0.00	0.01	<b>27.67</b>
	SEWA-II	Hydro	7.11	8.29	8.21	8.92	5.13	2.04	2.17	1.11	0.79	0.51	2.35	6.77	<b>53.39</b>
	Parbati-II	Hydro	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	Kishanganga	Hydro	0.00	1.89	5.27	8.86	7.43	3.58	0.00	0.00	0.00	0.00	0.00	0.00	<b>27.04</b>
	Tapovan Vishnugad	Hydro	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	<b>Total</b>		<b>206.95</b>	<b>318.96</b>	<b>375.67</b>	<b>362.16</b>	<b>394.22</b>	<b>280.30</b>	<b>140.90</b>	<b>82.00</b>	<b>59.74</b>	<b>44.45</b>	<b>69.42</b>	<b>169.36</b>	<b>2504.13</b>
<b>4.2.1</b>	<b>Nathpa Jhakri (SJVNL)</b>	Hydro	<b>24.91</b>	<b>44.99</b>	<b>103.91</b>	<b>133.27</b>	<b>150.33</b>	<b>115.52</b>	<b>41.82</b>	<b>27.55</b>	<b>21.65</b>	<b>18.59</b>	<b>16.89</b>	<b>21.78</b>	<b>721.21</b>
<b>4.2.2</b>	<b>Rampur (SJVNL)</b>	Hydro	<b>3.84</b>	<b>7.26</b>	<b>17.27</b>	<b>22.81</b>	<b>25.69</b>	<b>19.83</b>	<b>6.41</b>	<b>4.26</b>	<b>3.34</b>	<b>2.87</b>	<b>2.60</b>	<b>3.36</b>	<b>119.55</b>
<b>4.3</b>	<b>Tehri(THDC)</b>	Hydro	<b>14.06</b>	<b>14.41</b>	<b>15.70</b>	<b>33.93</b>	<b>66.66</b>	<b>26.51</b>	<b>19.72</b>	<b>18.71</b>	<b>19.63</b>	<b>19.53</b>	<b>16.77</b>	<b>16.46</b>	<b>282.10</b>
<b>4.4</b>	<b>Koteshwar(THDC)</b>	Hydro	<b>4.55</b>	<b>5.42</b>	<b>6.27</b>	<b>10.16</b>	<b>20.06</b>	<b>7.66</b>	<b>5.39</b>	<b>5.14</b>	<b>5.46</b>	<b>5.81</b>	<b>5.11</b>	<b>5.31</b>	<b>86.34</b>



Energy Audit Report: PSPCL FY 2023-24



Sr. No.	GENERATING STATION	Type of Plant	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
4.4.1	Vishnugad Pipalkoti HEP (THDC)	Hydro	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
4.5.1	DVC RTPS 1&2	Thermal	159.04	114.14	116.40	116.67	147.67	137.99	112.61	114.94	141.78	163.02	150.03	85.37	1559.67
4.5.2	DVC -Durgapur	Thermal	115.44	102.16	96.00	82.17	110.59	93.79	76.28	75.81	87.07	79.26	76.51	109.20	1104.28
4.5.3	DVC -BTPS	Thermal	130.77	121.52	92.50	39.46	136.56	101.21	98.77	115.85	137.08	140.24	128.36	113.87	1356.20
4.6	<b>NTPC</b>														
	Singrauli	Thermal	118.87	127.11	130.00	120.30	145.09	112.25	88.07	108.48	119.92	130.97	115.72	132.30	1449.07
	Rihand-I	Thermal	64.37	68.43	68.72	65.64	71.03	68.45	65.85	66.17	76.32	81.04	66.90	73.94	836.88
	Rihand-II	Thermal	67.67	64.80	66.47	64.34	74.12	57.78	26.19	63.78	58.08	44.94	64.56	66.03	718.78
	Rihand - III	Thermal	54.94	56.17	55.90	54.48	62.40	54.94	52.51	53.51	58.71	47.40	27.06	55.03	633.04
	Anta CR	Gas	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	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	0.00	0.14	3.09	2.58	1.62	0.86	0.44	1.04	3.93	0.36	0.00	0.00	14.08
	Unchahar-II	Thermal	33.67	22.90	27.02	27.59	46.37	24.20	14.72	7.16	18.25	27.68	24.81	22.73	297.12
	Unchahar-III	Thermal	6.96	6.03	6.61	6.58	10.39	7.88	4.50	1.44	7.63	7.60	6.83	5.52	77.97
	Unchahar-IV	Thermal	0.00	0.37	5.56	5.19	8.68	2.67	0.45	0.92	2.39	0.48	0.00	0.00	26.72
	Jhajjar (JV)	Thermal	0.00	1.41	6.60	37.34	16.26	11.20	0.00	0.00	0.00	0.00	0.00	0.00	72.81
	Dadri (Th.)-II	Thermal	0.07	0.35	1.23	3.26	9.69	6.84	1.61	0.42	2.89	0.42	0.01	0.01	26.78
	Koldam HEP	Hydro	8.88	14.95	37.85	59.11	59.67	36.26	13.57	8.77	6.88	5.77	5.53	7.24	264.48
	Singrauli SHEP	Small Hydro	0.00	0.04	0.08	0.13	0.11	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.50
	Kudgi STPS	Thermal	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
	Khargone	Thermal	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
	Tanda Stage-II	Thermal	0.31	1.37	12.73	10.08	19.50	4.36	0.47	0.11	7.93	2.35	0.41	0.08	59.68
	Meja	Thermal	28.99	28.06	23.83	33.15	34.43	39.65	12.65	14.92	28.67	32.79	30.99	32.35	340.48
	<b>Total</b>		<b>384.74</b>	<b>392.16</b>	<b>445.71</b>	<b>489.77</b>	<b>559.37</b>	<b>427.53</b>	<b>281.03</b>	<b>326.73</b>	<b>391.60</b>	<b>381.78</b>	<b>342.81</b>	<b>395.23</b>	<b>4818.47</b>



Energy Audit Report: PSPCL FY 2023-24



Sr. No.	GENERATING STATION	Type of Plant	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
<b>4.7</b>	<b>NTPC(ER)</b>														
	Farakha (ER)	Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	Kahal gaon (ER)	Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	Kahal gaon-II (ER)	Thermal	58.68	56.41	70.38	60.28	89.61	60.65	55.64	57.64	90.68	83.68	76.04	81.66	<b>841.36</b>
	<b>Total</b>		<b>58.68</b>	<b>56.41</b>	<b>70.38</b>	<b>60.28</b>	<b>89.61</b>	<b>60.65</b>	<b>55.64</b>	<b>57.64</b>	<b>90.68</b>	<b>83.68</b>	<b>76.04</b>	<b>81.66</b>	<b>841.36</b>
<b>4.8</b>	<b>NPC</b>														
	NAPP	Nuclear	31.53	32.42	36.95	40.83	37.34	39.90	27.98	2.88	-0.13	18.93	32.86	34.71	<b>336.21</b>
	RAPP-B	Nuclear	27.79	28.06	26.67	27.50	27.87	27.84	22.69	27.83	30.52	24.15	31.89	29.91	<b>332.72</b>
	RAPP-C	Nuclear	30.83	37.19	42.46	48.56	48.77	43.43	16.41	28.26	33.15	30.19	30.89	31.16	<b>421.30</b>
	<b>Total</b>		<b>90.15</b>	<b>97.66</b>	<b>106.09</b>	<b>116.90</b>	<b>113.98</b>	<b>111.17</b>	<b>67.08</b>	<b>58.96</b>	<b>63.54</b>	<b>73.27</b>	<b>95.64</b>	<b>95.79</b>	<b>1090.24</b>
<b>4.9</b>	<b>Central Sector Purchase (4.1+4.2+4.3+4.4+4.4.1+4.5+4.6+4.7+4.8)</b>														
			<b>1193.13</b>	<b>1275.09</b>	<b>1445.91</b>	<b>1467.58</b>	<b>1814.75</b>	<b>1382.17</b>	<b>905.67</b>	<b>887.59</b>	<b>1021.58</b>	<b>1012.50</b>	<b>980.18</b>	<b>1097.41</b>	<b>14483.55</b>
<b>5</b>	<b>PURCHASE THROUGH TRADERS</b>														
<b>5.1</b>	<b>Purchase through Traders / IPPs (LONG TERM)</b>														
	<b>NVVN( Bundled Power)</b>														
	NVVN Bundled Coal power		19.63	19.79	20.36	21.06	21.97	21.09	18.29	16.47	17.29	18.41	17.28	20.69	<b>232.35</b>
	NVVN Bundled Solar Power		4.75	4.56	4.46	4.13	3.90	4.30	4.35	3.29	2.95	2.95	3.41	4.98	<b>48.05</b>
	<b>NVVN Bundled power</b>		<b>24.38</b>	<b>24.35</b>	<b>24.82</b>	<b>25.19</b>	<b>25.88</b>	<b>25.39</b>	<b>22.65</b>	<b>19.76</b>	<b>20.24</b>	<b>21.37</b>	<b>20.70</b>	<b>25.68</b>	<b>280.41</b>
	SECI Hybrid Power PSA (Solar)	Solar	128.96	135.54	126.88	121.57	119.85	120.88	119.80	87.63	93.67	94.60	104.87	133.43	<b>1387.69</b>
	NHPC – M/s Avaada Sunrays Energy Private Limited	Solar	70.71	74.74	65.82	61.56	67.79	64.15	65.57	50.71	57.33	54.89	59.04	68.92	<b>761.23</b>
	SECI Solar Power	Solar	5.37	5.54	5.40	4.84	4.78	5.02	4.84	3.77	3.80	3.97	4.47	5.60	<b>57.41</b>
	<b>Total Solar Power</b>		<b>205.04</b>	<b>215.83</b>	<b>198.10</b>	<b>187.98</b>	<b>192.42</b>	<b>190.05</b>	<b>190.22</b>	<b>142.11</b>	<b>154.80</b>	<b>153.46</b>	<b>168.38</b>	<b>207.95</b>	<b>2206.34</b>
	<b>Wind Power</b>														
	SECI Wind Power	Wind	78.27	94.35	107.63	94.37	165.40	86.56	47.83	53.69	74.39	59.67	68.81	75.12	<b>1006.09</b>
	SECI Hybrid Power PSA (Wind)	Wind	32.47	38.50	42.36	34.92	50.91	29.49	33.29	26.81	29.29	25.08	31.24	30.42	<b>404.77</b>
	<b>Total Wind Power</b>		<b>110.73</b>	<b>132.85</b>	<b>149.99</b>	<b>129.29</b>	<b>216.30</b>	<b>116.05</b>	<b>81.12</b>	<b>80.50</b>	<b>103.68</b>	<b>84.75</b>	<b>100.04</b>	<b>105.54</b>	<b>1410.86</b>
	PTC Tala(Hydro)	Hydro	0.01	0.00	2.30	12.72	11.68	7.71	1.91	0.00	0.00	0.00	0.00	0.00	<b>36.32</b>
	Pragati-III(Bawana)CCGT	Gas	10.19	11.17	9.28	7.73	20.99	19.89	19.43	19.40	20.81	21.19	18.83	19.65	<b>198.55</b>
	MALANA-2 (PTC)	Hydro	9.78	18.99	42.46	19.15	0.00	6.22	9.41	4.52	2.42	0.57	0.00	6.69	<b>120.21</b>
	KARCHAM (PTC)	Hydro	24.29	41.02	104.97	145.15	158.60	106.82	43.97	28.77	22.11	18.58	16.83	21.84	<b>732.93</b>
	SASAN Ultra Mega Project	Thermal	305.09	341.61	376.52	349.15	404.85	338.70	351.82	391.62	399.29	396.94	378.83	393.97	<b>4428.38</b>
	MUNDRA_UMPP	Thermal	65.23	211.63	154.36	184.14	243.77	214.34	218.82	219.51	206.91	215.67	200.03	212.42	<b>2346.81</b>
	Udupi (UPCL)	Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>



Energy Audit Report: PSPCL FY 2023-24



Sr. No.	GENERATING STATION	Type of Plant	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
	<b>Goindwal Sahib TPP (GVK)</b>														
	GVK_Sch	Thermal	174.12	181.88	205.68	194.97	196.44	164.20	124.75	169.78	215.98	221.30	42.79	0.00	<b>1891.90</b>
	GVK_UI		0.12	0.15	0.04	0.34	-0.23	0.22	0.13	0.08	0.05	0.00	0.00	0.00	<b>0.89</b>
	<b>Total GVK (Sch - UI)</b>		<b>174.00</b>	<b>181.74</b>	<b>205.64</b>	<b>194.64</b>	<b>196.67</b>	<b>163.98</b>	<b>124.62</b>	<b>169.70</b>	<b>215.93</b>	<b>221.30</b>	<b>42.79</b>	<b>0.00</b>	<b>1891.01</b>
	<b>Talwandi Sabo TPP (TSPL)</b>														
	TSPL_Sch	Thermal	985.29	945.06	909.87	796.11	1122.02	892.45	911.56	800.36	758.75	788.22	708.86	696.78	<b>10315.34</b>
	TSPL_UI		3.07	3.23	4.92	5.94	5.93	3.58	1.25	2.34	1.08	2.35	0.00	0.00	<b>33.70</b>
	<b>Total TSPL (Sch - UI)</b>		<b>982.23</b>	<b>941.83</b>	<b>904.95</b>	<b>790.17</b>	<b>1116.09</b>	<b>888.86</b>	<b>910.31</b>	<b>798.02</b>	<b>757.67</b>	<b>785.86</b>	<b>708.86</b>	<b>696.78</b>	<b>10281.64</b>
	<b>RAJPURA TPP (NPL)</b>														
	NPL_Sch	Thermal	881.98	877.73	837.87	785.86	969.03	857.48	846.17	688.29	690.06	917.66	630.93	882.30	<b>9865.32</b>
	NPL_UI		-0.18	0.16	1.91	1.29	2.24	0.36	-1.62	-1.86	-2.16	-2.45	0.00	0.00	<b>-2.32</b>
	<b>Total NPL (Sch - UI)</b>		<b>882.16</b>	<b>877.56</b>	<b>835.96</b>	<b>784.57</b>	<b>966.79</b>	<b>857.11</b>	<b>847.79</b>	<b>690.15</b>	<b>692.22</b>	<b>920.11</b>	<b>630.93</b>	<b>882.30</b>	<b>9867.64</b>
	<b>Total Long Term</b>		<b>2793.12</b>	<b>2998.56</b>	<b>3009.34</b>	<b>2829.87</b>	<b>3554.03</b>	<b>2935.13</b>	<b>2822.06</b>	<b>2564.06</b>	<b>2596.08</b>	<b>2839.80</b>	<b>2286.22</b>	<b>2572.82</b>	<b>33801.10</b>
<b>5.2</b>	<b>Purchase through Traders / IPPs (SHORT TERM)</b>														
	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	<b>0.00</b>
	MITTAL/MPPL/KEIPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	Manikaran/MPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	DBPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	JSW/JSWPTCL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	LEUL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	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	<b>0.00</b>
	AEL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	APL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	Sterlite		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	JPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	TATA/TPTCL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	NHPC		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	SCL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	NETS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	GMRETL/GMR		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	INSTINCT		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	UPPCL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	APPCPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>





Energy Audit Report: PSPCL FY 2023-24



Sr. No.	GENERATING STATION	Type of Plant	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
	<b>Power Purchased by PSPCL through Exchange</b>														
<b>A</b>	<b>Conventional Energy</b>														
	PTC		610.08	240.65	546.76	281.00	109.23	512.46	231.70	160.08	534.31	1090.23	1054.32	782.69	<b>6153.50</b>
<b>B</b>	<b>Green Energy</b>														
	PTC		1.42	3.55	7.33	5.08	1.29	7.95	8.90	1.07	0.69	10.63	29.29	41.48	<b>118.68</b>
	<b>Total (A+B)</b>		<b>611.49</b>	<b>244.20</b>	<b>554.09</b>	<b>286.09</b>	<b>110.53</b>	<b>520.41</b>	<b>240.60</b>	<b>161.15</b>	<b>534.99</b>	<b>1100.85</b>	<b>1083.61</b>	<b>824.16</b>	<b>6272.19</b>
	<b>NRSE Power</b>														
	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	<b>0.00</b>
	MITTAL/MPPL/KEIPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	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	<b>0.00</b>
	APPCPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	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	<b>0.00</b>
	<b>Total</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	<b>Total Short Term</b>		<b>611.49</b>	<b>244.20</b>	<b>554.09</b>	<b>286.09</b>	<b>110.53</b>	<b>520.41</b>	<b>240.60</b>	<b>161.15</b>	<b>534.99</b>	<b>1100.85</b>	<b>1083.61</b>	<b>824.16</b>	<b>6272.19</b>
<b>5.3</b>	<b>Total Trading (5.1+5.2)</b>		<b>3404.62</b>	<b>3242.76</b>	<b>3563.43</b>	<b>3115.96</b>	<b>3664.56</b>	<b>3455.53</b>	<b>3062.67</b>	<b>2725.21</b>	<b>3131.07</b>	<b>3940.65</b>	<b>3369.84</b>	<b>3396.98</b>	<b>40073.28</b>
<b>6</b>	<b>BANKING</b>														
<b>6.1</b>	<b>Banking Direct from Utilities (From +ve)</b>														
	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	<b>0.00</b>
	Rajasthan		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	TANGEDCO		0.00	0.00	34.20	55.80	55.80	54.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>199.80</b>
	PCKL		0.00	0.00	48.00	641.50	545.90	566.80	0.00	0.00	0.00	0.00	0.00	0.00	<b>1802.20</b>
	TELANGANA		0.00	0.00	105.60	60.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>165.60</b>
	MSEDCL		0.00	0.00	35.28	111.60	111.60	53.15	0.00	0.00	0.00	0.00	0.00	0.00	<b>311.63</b>
	MPPTCL/MPSEB/MP/MPPMCL		0.00	9.60	115.80	392.38	527.93	456.16	0.00	0.00	0.00	0.00	0.00	0.00	<b>1501.87</b>
	<b>Total</b>		<b>0.00</b>	<b>9.60</b>	<b>338.88</b>	<b>1261.28</b>	<b>1241.23</b>	<b>1130.11</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3981.09</b>
<b>6.2</b>	<b>Banking through Traders (From +ve)</b>														
	NVVNL		0.00	0.00	78.23	40.30	63.76	54.76	0.00	0.00	0.00	0.00	0.00	0.00	<b>237.05</b>
	JSW/JSWPTCL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	REFEX		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	MITTAL/MPPL/KEIPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
	SAPL		0.00	0.00	0.00	27.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>27.34</b>





Energy Audit Report: PSPCL FY 2023-24



Sr. No.	GENERATING STATION	Type of Plant	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
	IIPL		0.00	0.00	103.59	107.05	107.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	317.69
	TATA/TPTCL		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/GMRETL		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
	PROVEST		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
	Manikaran/MPL		0.00	0.00	0.00	14.40	55.80	54.00	0.00	0.00	0.00	0.00	0.00	0.00	124.20
	INSTICT		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
	APPCPL		0.00	11.23	270.82	595.68	708.17	432.91	117.80	0.00	0.00	0.00	0.00	0.00	2136.61
	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
	<b>Total</b>		<b>0.00</b>	<b>11.23</b>	<b>452.64</b>	<b>784.77</b>	<b>934.78</b>	<b>541.67</b>	<b>117.80</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2842.89</b>
	<b>Total Banking From (+ve) (6.1+6.2))</b>		<b>0.00</b>	<b>20.83</b>	<b>791.52</b>	<b>2046.05</b>	<b>2176.00</b>	<b>1671.78</b>	<b>117.80</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6823.98</b>
<b>6.3</b>	<b>Banking Direct to Utilities (To -ve)</b>														
	Andhra		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-7.20	-7.20
	TANGEDCO, Tamilnadu		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-62.94	-62.94
	PCKL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	-194.93	-148.80	-148.80	-369.14	-373.54	-1235.21
	Karnatka		-624.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-624.24
	TSPCC, Telangana		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-42.84	-88.54	-131.38
	MSEDCL		-144.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-144.00
	MPPTCL/MPSEB/MP/MPPMCL		0.00	0.00	0.00	0.00	0.00	0.00	-15.25	-187.20	-628.55	-655.67	-401.00	0.00	-1887.68
	<b>Total</b>		<b>-768.24</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-15.25</b>	<b>-382.13</b>	<b>-777.35</b>	<b>-804.47</b>	<b>-812.99</b>	<b>-532.21</b>	<b>-4092.64</b>
<b>6.4</b>	<b>Banking through Traders (To -ve)</b>														
	PTC		-186.83	-193.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-379.89
	NVVNL		-144.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-148.80	-292.80
	IIPL		-144.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-144.00
	Tata		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
	MITTAL/MPPL/KEIPL		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
	SAPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-9.67	-9.05	-9.99	-28.71
	GMR		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
	APPCPL		-287.18	-96.00	0.00	0.00	0.00	0.00	-70.98	-244.29	-372.64	-475.63	-417.07	-386.54	-2350.33
	Refex		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
	Manikarn(MPL)		0.00	0.00	0.00	0.00	0.00	0.00	-38.55	-105.15	-64.01	0.00	0.00	-108.65	-316.37
	IVPL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-2.60	-40.30	-42.90
	<b>Total</b>		<b>-762.01</b>	<b>-289.06</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-109.54</b>	<b>-349.43</b>	<b>-436.66</b>	<b>-485.30</b>	<b>-428.72</b>	<b>-694.28</b>	<b>-3555.00</b>
	<b>Total Banking To (-ve) (6.3+6.4)</b>		<b>-1530.25</b>	<b>-289.06</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-124.79</b>	<b>-731.56</b>	<b>1214.00</b>	<b>-1289.78</b>	<b>1241.70</b>	<b>1226.50</b>	<b>-7647.64</b>



Energy Audit Report: PSPCL FY 2023-24



Sr. No.	GENERATING STATION	Type of Plant	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
6.5	Total Net Banking (6.1+6.2+6.3+6.4)		-1530.25	-268.23	791.52	2046.05	2176.00	1671.78	-6.98	-731.56	1214.00	-1289.78	1241.70	1226.50	-823.65
7	<b>PURCHASE WITHIN PUNJAB (NRSE &amp; PED)</b>														
	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														
	At 11 KV		13.93	19.46	18.38	19.97	30.77	29.84	19.26	7.13	14.61	18.82	20.73	21.53	234.42
	At 33 KV		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
	At 66 KV		165.06	152.63	137.73	117.98	132.78	121.27	122.76	96.11	136.04	108.30	151.31	186.11	1628.08
	At 132 KV and above		39.41	40.26	37.03	25.41	37.34	30.73	33.92	31.41	28.59	24.64	33.65	37.63	400.02
	Total long Term Purchase within Punjab		218.40	212.34	193.14	163.35	200.90	181.84	175.94	134.64	179.24	151.75	205.69	245.28	2262.53
	Total Purchase within Punjab (Long & Short)		218.40	212.34	193.14	163.35	200.90	181.84	175.94	134.64	179.24	151.75	205.69	245.28	2262.53
8	Unscheduled Interchange		-34.39	-72.63	-76.87	-87.16	-68.07	-80.21	-42.11	-34.08	-49.67	-56.82	-40.21	-38.32	-680.54
9	Open Access Intra State UI (Import) Non consumer (Railway)		-7.44	-8.54	-11.17	-8.76	-9.08	-7.21	-6.64	-4.08	1.53	0.56	0.00	0.00	-60.83
10	GROSS POWER PURCHASE (4.9+5.3+6.5+7+8+9)		3244.07	4380.80	5905.97	6697.03	7779.06	6603.90	4088.54	2977.73	3069.74	3758.87	3273.78	3474.86	55254.34
11	Interstate Transmission Losses on Purchase		85.58	76.30	110.26	166.50	163.91	140.90	74.12	70.94	93.44	106.80	99.72	93.04	1281.52
	% Inter state Transmission Losses		3.82%	3.50%	3.11%	3.91%	3.28%	3.21%	3.97%	4.16%	4.31%	3.82%	3.81%	3.58%	3.66%
12	NET POWER PURCHASE (10-11)		3158.48	4304.50	5795.70	6530.52	7615.15	6463.00	4014.42	2906.79	2976.30	3652.07	3174.07	3381.82	53972.82
13	<b>Sale by PSPCL</b>														
13.1	<b>Sale by PSPCL Thru Exchange</b>														
	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
	TATA		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		-2.96	-136.63	-302.82	-180.11	-200.50	-145.80	-232.81	-50.33	-7.34	-19.97	-5.47	-13.30	-1298.05
	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
	Total		-2.96	-136.63	-302.82	-180.11	-200.50	-145.80	-232.81	-50.33	-7.34	-19.97	-5.47	-13.30	-1298.05
13.2	<b>Sale by PSPCL Thru Traders/Short Term</b>														



Energy Audit Report: PSPCL FY 2023-24



Sr. No.	GENERATING STATION	Type of Plant	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	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
	TATA		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
	MANIKARAN (MPL)		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
	INSTINCT		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
	<b>Total</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	<b>Total Sale by PSPCL (13.1+13.2)</b>		<b>-2.96</b>	<b>-136.63</b>	<b>-302.82</b>	<b>-180.11</b>	<b>-200.50</b>	<b>-145.80</b>	<b>-232.81</b>	<b>-50.33</b>	<b>-7.34</b>	<b>-19.97</b>	<b>-5.47</b>	<b>-13.30</b>	<b>-1298.05</b>
<b>14</b>	<b>Royalty/Free Share to HP/RSD share</b>														
	Shanan Royalty		-6.66	-6.19	-5.64	-5.67	-6.67	-5.64	-5.67	-2.64	-1.14	-1.18	-1.16	-4.68	-52.93
	RSD Share to HP		-4.68	-8.02	-10.25	-15.44	-15.00	-12.03	-1.78	-0.94	-1.57	-1.88	-0.32	-1.99	-73.90
	RSD Share to J&K		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
	<b>Total</b>		<b>-11.34</b>	<b>-14.21</b>	<b>-15.89</b>	<b>-21.11</b>	<b>-21.67</b>	<b>-17.67</b>	<b>-7.45</b>	<b>-3.58</b>	<b>-2.70</b>	<b>-3.06</b>	<b>-1.48</b>	<b>-6.67</b>	<b>-126.83</b>
<b>15</b>	<b>Open Access Intra State UI (Sale)</b>		<b>0.04</b>	<b>0.04</b>	<b>0.02</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.06</b>	<b>0.00</b>	<b>0.17</b>
<b>16</b>	<b>Open Access Intra State UI (Import)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>
<b>17</b>	<b>2% Energy injected by NRSE OA Generators in lieu of Transmission &amp; wheeling Charges</b>		<b>0.00</b>	<b>0.03</b>	<b>0.02</b>	<b>0.02</b>	<b>0.04</b>	<b>0.04</b>	<b>0.03</b>	<b>0.02</b>	<b>0.01</b>	<b>0.00</b>	<b>0.06</b>	<b>0.01</b>	<b>0.27</b>
<b>18</b>	<b>NET AVAILABILITY for PSPCL (3+12+13+14+15+16+17)</b>		<b>4147.58</b>	<b>5180.11</b>	<b>6959.76</b>	<b>8174.28</b>	<b>9554.38</b>	<b>7950.50</b>	<b>5220.63</b>	<b>3769.78</b>	<b>4307.73</b>	<b>4842.36</b>	<b>4443.03</b>	<b>4620.26</b>	<b>69170.41</b>
<b>19</b>	<b>Open Access (PURCHASE) Gross</b>		<b>24.17</b>	<b>23.69</b>	<b>21.54</b>	<b>21.70</b>	<b>24.81</b>	<b>24.79</b>	<b>25.51</b>	<b>26.09</b>	<b>31.44</b>	<b>30.34</b>	<b>28.07</b>	<b>25.20</b>	<b>307.35</b>
	Open Access Inter State Transmission Losses		0.92	0.83	0.69	0.74	0.82	0.84	0.84	0.91	1.23	1.18	1.03	0.89	10.94
	<b>Open Access (PURCHASE) Net</b>		<b>23.25</b>	<b>22.86</b>	<b>20.85</b>	<b>20.96</b>	<b>23.98</b>	<b>23.94</b>	<b>24.67</b>	<b>25.18</b>	<b>30.21</b>	<b>29.16</b>	<b>27.04</b>	<b>24.31</b>	<b>296.42</b>
<b>20</b>	<b>Open Access (SALE)</b>		<b>-0.90</b>	<b>-1.02</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-1.92</b>
<b>21</b>	<b>Open Access Transactions within State (Wheeling) Open Access Injection</b>		<b>0.19</b>	<b>0.23</b>	<b>0.83</b>	<b>0.84</b>	<b>1.66</b>	<b>1.64</b>	<b>1.21</b>	<b>0.73</b>	<b>2.67</b>	<b>2.89</b>	<b>3.25</b>	<b>2.54</b>	<b>18.67</b>



Energy Audit Report: PSPCL FY 2023-24



Sr. No.	GENERATING STATION	Type of Plant	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Total
22	NET AVAILABILITY FOR PUNJAB STATE (18+19+20+21)		4170.12	5202.18	6981.44	8196.08	9580.03	7976.08	5246.51	3795.69	4340.61	4874.41	4473.31	4647.12	69483.58
23	POWER CUT IMPOSED		5.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.32
24	UNRESTRICTED REQUIREMENT of PSPCL (18+23)		4152.90	5180.11	6959.76	8174.28	9554.38	7950.50	5220.63	3769.78	4307.73	4842.36	4443.03	4620.26	69175.73
25	UNRESTRICTED REQUIREMENT of PUNJAB STATE (22+23)		4175.44	5202.18	6981.44	8196.08	9580.03	7976.08	5246.51	3795.69	4340.61	4874.41	4473.31	4647.12	69488.90

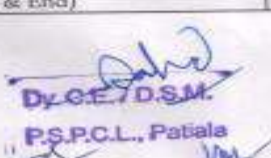
**Note:** The Guru Amardas Thermal Power Plant ,Goindwal Sahib (erstwhile GVK ) has been taken over by PSPCL w.e.f 07.02.2024 and included in Own Thermal Generation.




## Annual Accounting Report PSPCL FY 2023-24

63  
1-40

General Information				
1	Name of the DISCOM	Punjab State Power Corporation Limited (PSPCL)		
2	i) Year of Establishment	2010		
	ii) Government/Public/Private	Government		
3	DISCOM's Contact details & Address			
i	City/Town/Village	Patiala		
ii	District	Patiala		
iii	State	Punjab	Pin	147001
iv	Telephone	0175-2212005	Fax	0175-2213199
4	Registered Office			
i	Company's Chief Executive Name	Er. Baldev Singh Sran		
ii	Designation	CMD PSPCL		
iii	Address	The Mall, Patiala		
iv	City/Town/Village	Patiala	P.O.	Patiala
v	District	Patiala		
vi	State	Punjab	Pin	147001
vii	Telephone	0175-2212005	Fax	0175-2213199
5	Nodal Officer Details*			
i	Nodal Officer Name (Designated at DISCOM's)	Er. Inderpal Singh		
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
6	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	ivarverma76@gmail.com
7	Period of Information			
	Year of (FY) information including Date and Month (Start & End)	1 April 2023 - 31 March 2024		


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


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



63  
2

Performance Summary of Electricity Distribution Companies			
1	Period of Information Year of (FY) information including Date and Month (Start & End)	1 April 2023 - 31 March 2024	
2	Technical Details		
(a)	Energy Input Details		
(i)	Input Energy Purchase (From Generation Source)	Million kwh	70604.92
(ii)	Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	66886.39
(iii)	Total Energy billed (is the Net energy billed, adjusted for energy traded)	Million kwh	59711.85
(b)	Transmission and Distribution (T&D) loss Details*	Million kwh	7174.54
		%	10.73%
	Collection Efficiency	%	100.00%
(c)	Aggregate Technical & Commercial Loss	%	10.73%

DISCOM  
Distribution Losses

NOTE (\*): Point 2(b) T&D Losses are calculated only for PSPCL i.e. DISCOM. Inter state & Intra state Transmission losses of PSTCL not included.

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

**CE/TA & I**  
**PSPCL Patiala**

Name of Authorised Signatory  
Name of the DISCOM:  
Full Address:-

Signature:-  
Name of Energy Manager  
Registration Number

*Ravi Verma*  
**Er. Ravi Verma**  
**7969**  
**Energy Auditor**  
**PSPCL, Patiala.**

Seal

*[Signature]*  
**D.O.E./D.S.M.**  
**P.S.P.C.L., Patiala**

Form-Details of Input Infrastructure

S	Parameters	Total	Covered during in 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	13441	13441	13441	Director/D Reports, Insk
V	Number of DTs	1284607	1284607	1284607	Director/D Reports, Insk
VI	Number of consumers	10741902	10741902	10741902	CE/Planning
2	<b>Parameters</b>	<b>44V and above</b>	<b>304V</b>	<b>11021A</b>	<b>LI</b>
a.I	Number of conventional metered consumers	45	0	68701	8457848
a	Number of consumers with 'smart' meters	11	0	19039	794569
II	Number of consumers with 'smart prepaid' meters	0	0	0	0
IV	Number of consumers with 'non-smart prepaid' meters	181	53	84034	4028
V	Number of un-metered consumers	0	0	0	0
VI	Number of un-metered consumers	0	0	0	1882703
aII	Number of conventionally metered Distribution Transformers	237	53	122374	10619246
b.I	Number of DTs with communicable meters	0	0	22177	6542
II	Number of DTs with communicable meters	185	4	24170	8127
III	Number of un-metered DTs	0	0	1219003	0
M	Number of 1000 Transformers	185	4	1274788	8668
a.I	Number of metered feeders	187	5	13269	0
a	Number of feeders with communicable meters	187	5	13248	0
II	Number of un-metered feeders	0	0	0	0
IV	Number of total feeders	187	5	13249	0
d	Line length (in km)	11707 km	30.7 + 231816/73.7	252206	156523
e	Length of Aerial Bunched Cables	0	0	1134628	3687795
f	Length of Underground Cables	87437	0	371804	41270

Dr. C.S. D.S.M.  
P.S.P.C.L., Patiala



3	Voltage level	Particulars	MU	Reference	Remarks (Source of data)
		Long-Term Conventional	26798.68	Includes input energy for franchisees	
		Medium Conventional (excluded interchange)	-741.37		Value of unrecouped interchange energy is entered as the provision of the same has not provided in the performance
		Short-Term Conventional	6272.19		
		Banking	-823.65		
		Long-Term Renewable energy	3665.25	Includes power from bilateral/ PPA/ DSEEP	
		Medium and Short-Term RE	0.00	Any power wheeled for any purchase other than sale to DISCOM. Does not include input for franchisees	
		Captive, open access input			
	66kV and above (Inter-State)	Sale of surplus power	-1424.44		
		Quantum of inter-state transmission loss	2434.51	As confirmed by SDC, RDC etc	
		Power procured from inter-state sources	93734.66	Based on data from Form 5	
		Power at state transmission boundary	32302.13		Power procured from intra state sources at different voltage levels
		Long-Term Conventional	34605.76		
		Medium Conventional	NA		
		Short-Term Conventional	NA		
		Banking	NA		
		Long-Term Renewable energy	2008.10		
		Medium and Short-Term RE			
		Captive, open access input			
		Sale of surplus power			
		Quantum of intra-state transmission loss	2284.023		
		Power procured from intra-state sources	26531.84		PSTCL
ii		Input to DISCOM wires network	66652		
iv	33 kV	Renewable Energy Procurement	0.00		
		Small capacity conventional/biomass/hydro plants Procurement	0.00		
		Captive, open access input	0.00		
v	11 kV	Renewable Energy Procurement	234.42		MSSE power procured from intra state sources at 11kV
		Small capacity conventional/biomass/hydro plants Procurement	0.00		PSTCL
vi	LT	Sales Migration Input	59.48		
		Renewable Energy Procurement	-95.48		
		Sales Migration Input	334.42		Roof Top Solar Energy
vii	Energy Embedded within DISCOM wires network	Energy Embedded within DISCOM wires network			
viii	Total Energy Available/ Input	Total Energy Available/ Input	66886.59		

*(Signature)*  
**Dy. C.E./D.S.M.**  
**P.S.P.G.L., Patiala**



43

4	Voltage level	Energy Sales Particulars	MU	Reference
I	11KV/1T	DISCOM's consumers		Include sales to consumers in franchise areas, unmetered consumers
		Demand from open access, captive Embedded generation used	0	Non DISCOM's sales Demand from embedded generation at LT level
		Sale at 11KV/1T level	0.00	
		Quantum of losses at 11KV/1T level Energy input at 11 KV/1T level	0.000	
II	33 KV Level	DISCOM's consumers		Include sales to consumers in franchise areas, unmetered consumers
		Demand from open access, captive Embedded generation at 33 KV level used	0	Non DISCOM's sales Demand from embedded generation at 33KV level
		Sales at 33 KV level	0.00	
		Quantum of losses at 33 KV Energy input at 33 KV level	0.000	
III	66-88KV/1T / 0.44 KV	DISCOM's consumers	29711.85	Include sales to consumers in franchise areas, unmetered consumers
		Demand from open access, captive Embedded generation at 66 KV or below level	9.88	Non DISCOM's sales This is DISCOM and O&M demand met via energy generated at same voltage level
		Sales at 66 KV level	59711.65	
		Quantum of losses at 66 KV Energy input at 66KV Level	10893.07 70604.92	
IV	> 66 KV	DISCOM's consumers		Include sales to consumers in franchise areas, unmetered consumers
		Demand from open access, captive Cross border sale of energy	0	Non DISCOM's sales
		Sale at other DISCOMs	0	
		Energy input at > 66KV Level Sales at 66KV and above (11KV)	0 70004.32	
Total Energy Requirement			70004.32	
Total Energy Sales			59711.85	

  
 Dr. C.E./D.S.M.  
 R.S.P.C.L., Patiala

Energy Accounting Summary				
S	DISCOM	Input (in MU)	Loss (in MU)	Loss %
i	LT			
ii	11KV			
iii	33 KV			
iv	95/33/11/0.44 KV	66896.36	39733.85	10.73%
k	Open Access, Captive	Input (in MU)	Loss (in MU)	
i	LT	0	0	
ii	11 KV	0	0	
iii	33 KV	0	0	
iv	> 33 kv	0	0	

Loss Estimates for DISCOM	
T&D loss	10,891.07
O loss	7,274.34
T&D loss (%)	15.43%
O loss (%)	10.73%

(i) Input (Total Energy requirement includes transmission loss+extra extra transmission losses)

NOTE: D losses 10.73% are calculated by Net input energy (At DISCOM Periphery after adjusting the transmission losses and energy traded)  
 70604.32-3434.55-2284.023= 66896.30MU basis.

*[Signature]*  
**CE/TA & I**  
 PSPCL, Patiala

*[Signature]*  
**Dy. C.E./D&M.**  
 P.S.P.C.L., Patiala

*[Signature]*  
**Er. Ravi Verma**  
**EA-7969**  
**Energy Auditor**  
**PSPCL, Patiala**



63

Details of Expenses: Water Loans (See also below\*)  
Division Wise (Rupees)

Sl. No.	Name of Division	Creek code	Name of Division	Commsy category	Consumer profile				Energy parameters				Loans		Commercial Parameters	
					No. of connections	No. of disconnections	Total number of connections	% of number of connections	Connected load (kW)	% of connected load	Input energy (kWh)	Losses (kWh)	TRD loss (kWh)	TRD loss (%)	Water Account to Rs.	Collection Efficiency
1	CITY AMRITSAR	8	TO CITY GENRA 10% A/R	Residential	45278	0	45278	7.2%	80.81	0.1%	335.83	117.803	1.2%	294.41	313.51	102.17%
				Agricultural	303	0	303	0%	1.41	4.812	0.000	0.000	0.000	0.00%		
				Commercial/Industrial/IT	13148	0	13148	20%	131.48	4.812	0.000	0.000	0.000	0.00%		
Sub-total				Commercial/Industrial/IT	40	0	40	0%	14.40	0%	14.40	0%	14.40	0%	0.00%	
				Others	100	0	100	0%	5.320	0%	5.320	0%	5.320	0%	0.00%	
				Commercial/Industrial/IT	40999	0	40999	100%	302.909	100%	294.518	0.000	294.518	100%	102.17%	
2	CITY AMRITSAR	8	TO CIVIL SUPPLY TECH DIV.	Residential	11644	0	11644	31%	41.41	0%	143.412	1.8248	0.000	141.587	143.51	102.76%
				Agricultural	7	0	7	0%	0.48	0.000	0.000	0.000	0.000	0.00%		
				Commercial/Industrial/IT	10185	0	10185	17%	127.52	44%	111.921	0.000	111.921	42%	102.76%	
Sub-total				Commercial/Industrial/IT	4	0	4	0%	4.08	0%	4.081	0.000	4.081	0%	0.00%	
				Others	55	0	55	0%	3.52	0%	3.62	0%	3.62	0%	0.00%	
				Commercial/Industrial/IT	42128	0	42128	100%	271.278	100%	268.01	0.000	268.01	100%	102.76%	
3	CITY AMRITSAR	8	TO HWY. HIKEMA GATE, A/R	Residential	42118	0	42118	66%	81.33	18%	271.215	255.879	100%	205.41	205.41	101.94%
				Agricultural	12	0	12	0%	0.29	0.000	0.000	0.000	0.000	0.00%		
				Commercial/Industrial/IT	20504	0	20504	17%	72.22	25%	222.22	0.000	222.22	100%	102.76%	
Sub-total				Commercial/Industrial/IT	7	0	7	0%	5.17	0%	3.188	0%	3.188	0%	0.00%	
				Others	114	0	114	0%	1.07	0%	1.087	0%	1.087	0%	0.00%	
				Commercial/Industrial/IT	40605	0	40605	100%	161.872	100%	160.078	0.000	160.078	100%	102.76%	
4	CITY AMRITSAR	8	TO A/C, AREA TECH DIV.	Residential	65188	0	65188	100%	104.742	0%	107.617	286.81	0.000	305.41	305.41	102.57%
				Agricultural	44	0	44	0%	0.271	0%	0.271	0%	0.271	0%	0.00%	
				Commercial/Industrial/IT	13150	0	13150	20%	73.81	10%	73.801	0.000	73.801	100%	102.57%	
Sub-total				Commercial/Industrial/IT	6	0	6	0%	3.48	0%	2.711	0%	2.711	0%	0.00%	
				Others	18	0	18	0%	0.25	0%	0.31	0%	0.31	0%	0.00%	
				Commercial/Industrial/IT	83188	0	83188	100%	184.742	100%	184.742	0.000	184.742	100%	102.57%	
5	BANGSAR	8	TO CITY GENRA, BATAVA	Residential	70210	0	70210	17%	140.42	8%	140.609	157.203	100%	140.42	140.42	100.00%
				Agricultural	308	0	308	0%	0.81	0%	0.81	0%	0.81	0%	0.00%	
				Commercial/Industrial/IT	14189	0	14189	22%	88.12	26%	88.121	0.000	88.121	100%	100.00%	
Sub-total				Commercial/Industrial/IT	18	0	18	0%	8.322	0%	8.322	0%	8.322	0%	0.00%	
				Others	46	0	46	0%	0.32	0%	0.32	0%	0.32	0%	0.00%	
				Commercial/Industrial/IT	69112	0	69112	100%	211.855	100%	211.855	0.000	211.855	100%	100.00%	
6	BANGSAR	8	TO CIVIL SUPPLY TECH DIV.	Residential	118242	0	118242	70%	170.92	70%	170.921	303.023	100%	170.92	170.92	100.00%
				Agricultural	12	0	12	0%	0.44	0%	0.44	0%	0.44	0%	0.00%	
				Commercial/Industrial/IT	34881	0	34881	4%	84.80	1%	84.80	0.000	84.80	0%	0.00%	
Sub-total				Commercial/Industrial/IT	208	0	208	0%	35.568	0%	35.568	0%	35.568	0%	0.00%	
				Others	47	0	47	0%	0.50	0%	0.50	0%	0.50	0%	0.00%	
				Commercial/Industrial/IT	143098	0	143098	100%	301.822	100%	301.822	0.000	301.822	100%	100.00%	
7	BANGSAR	8	TO CIVIL SUPPLY TECH DIV.	Residential	244108	0	244108	100%	175.561	100%	175.561	308.22	100%	175.561	175.561	100.00%
				Agricultural	30	0	30	0%	0.38	0%	0.38	0%	0.38	0%	0.00%	
				Commercial/Industrial/IT	8524	0	8524	3%	87.12	4%	87.12	0.000	87.12	0%	0.00%	
Sub-total				Commercial/Industrial/IT	15	0	15	0%	2.818	0%	2.818	0%	2.818	0%	0.00%	
				Others	6	0	6	0%	0.31	0%	0.31	0%	0.31	0%	0.00%	
				Commercial/Industrial/IT	244148	0	244148	100%	175.561	100%	175.561	0.000	175.561	100%	100.00%	
8	BANGSAR	8	TO HWY. HIKEMA GATE, A/R	Residential	57920	0	57920	55%	85.86	35%	85.861	131.101	100%	85.86	85.86	100.00%
				Agricultural	181	0	181	0%	0.38	0%	0.38	0%	0.38	0%	0.00%	
				Commercial/Industrial/IT	7887	0	7887	12%	2.66	0%	2.66	0%	2.66	0%	0.00%	
Sub-total				Commercial/Industrial/IT	26	0	26	0%	0.43	0%	0.43	0%	0.43	0%	0.00%	
				Others	64400	0	64400	100%	105.288	100%	105.288	0.000	105.288	100%	100.00%	
				Commercial/Industrial/IT	111737	0	111737	100%	175.561	100%	175.561	0.000	175.561	100%	100.00%	
9	BANGSAR	8	TO HWY. HIKEMA GATE, A/R	Residential	18027	0	18027	73%	284.20	35%	284.201	378.203	100%	284.20	284.20	100.00%
				Agricultural	67	0	67	0%	0.73	0%	0.73	0%	0.73	0%	0.00%	
				Commercial/Industrial/IT	14878	0	14878	2%	82.88	0%	82.88	0.000	82.88	0%	0.00%	
Sub-total				Commercial/Industrial/IT	15	0	15	0%	6.55	0%	6.55	0%	6.55	0%	0.00%	
				Others	40	0	40	0%	1.44	0%	1.44	0%	1.44	0%	0.00%	
				Commercial/Industrial/IT	148653	0	148653	100%	284.201	100%	284.201	0.000	284.201	100%	100.00%	
10	BANGSAR	8	TO HWY. HIKEMA GATE, A/R	Residential	93177	0	93177	56%	131.818	54%	131.818	178.118	100%	131.818	131.818	100.00%
				Agricultural	243	0	243	0%	0.28	0%	0.28	0%	0.28	0%	0.00%	
				Commercial/Industrial/IT	13409	0	13409	4%	108.80	0%	108.80	0.000	108.80	0%	0.00%	
Sub-total				Commercial/Industrial/IT	31	0	31	0%	12.78	0%	12.78	0%	12.78	0%	0.00%	
				Others	43	0	43	0%	2.20	0%	2.20	0%	2.20	0%	0.00%	
				Commercial/Industrial/IT	20714	0	20714	100%	131.818	100%	131.818	0.000	131.818	100%	100.00%	

Dr. G. S. D. S. M.  
P. S. S. I.





































6/15

Sl. No.	Sub-Category	Residential		Commercial/Industrial		Agricultural		Others		Total	Subsidy (%)	Subsidy (₹)	Subsidy (₹/KW)	Subsidy (₹/KW)	Subsidy (₹/KW)	Subsidy (₹/KW)	Subsidy (₹/KW)	Subsidy (₹/KW)
		0	0	0	0	0	0	0	0									
26	Residential	0	0	0	0	0	0	0	0	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	Commercial/Industrial	0	0	0	0	0	0	0	0	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	Agricultural	0	0	0	0	0	0	0	0	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	Others	0	0	0	0	0	0	0	0	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	Total	0	0	0	0	0	0	0	0	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	Subsidy level	0	0	0	0	0	0	0	0	0	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note - It shall be mandatory to record the energy supplied separately for each category of consumers which is being provided a separate rate of subsidy in the tariff, by the state government, so that the subsidy due for the electricity distribution company is quantified as per the category of consumers by the applicable rate of subsidy notified by the state government.

Sl. No.	State name of DISCOM
Sl. No.	Please enter circle code
Sl. No.	Please enter numeric value for D
Sl. No.	Form is provided

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

Signature and Seal

Name of Authorized Signatory  
 Name of the DISCOM  
 Full Address

Seal

Signature  
 Name of Energy Manager  
 Registration Number

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

Dy. C.E. S.M.  
 PSPCL, Patiala

CEITA &  
 PSPCL, Patiala













Details of Input Energy Sources										
Period from 01.04.2021 To 31.03.2024										
A. Generation at Transmission Reaches (Details)										
S. No.	Name of Generation Station	Generation Capacity (In MW)	Type of Station Generation (Solid/Fossil/ Liquid/Gas/Coal/ Renewable/Other)	Type of Contract		Type of Grid (Intra- state/Inter- state)	Point of Connection (POC) Line MW	Voltage Level (at input)	Remarks (Source of data)	Net Energy Supplied (Mwt)
				Date of signing of PPA	PPA Duration/Tenure (in years/ months/ days)					
1	GOSSTP, Ropar	860	Coal			Intrastate		220 KV		3573.62
2	GHTP, Lehra Mohabbat	920	Coal			Intrastate		220 KV		4358.48
3	Sharnan	110	Hydro			Intrastate		132 KV		486.20
4	UBOC	91	Hydro			Intrastate		132 KV		368.74
5	MHP	225	Hydro			Intrastate		132 KV		1241.19
6	ASHP	134	Hydro			Intrastate		132 KV		473.17
7	BSPP	452	Hydro			Intrastate		220 KV		1836.59
8	Mini/Micro Hydel	3	Hydro			Intrastate		11 KV		1.67
9	GAIP, Gurdial Sahib	540	Coal		16.04.2041	Intrastate		220 KV		2716.80
10	Talwandi Sabu TPP	1980	Coal		24.08.2041	Intrastate		800 KV		10281.64
11	Rajpura TPP	1400	Coal		09.07.2039	Intrastate		600 KV		9857.64
12	Bhakra Share	647	Hydro			Interstate	98.73	220 KV		2590.99
13	Dehar Share	410	Hydro			Interstate	41.16	400 KV, 220 KV		1101.73
14	Jhang Share	85	Hydro			Interstate	13.99	220 KV		362.98
15	Bairasail	84	Hydro			Interstate	8.64			251.92
16	Sellal	184	Hydro			Interstate	31.26			843.71
17	Tanakpur	17	Hydro		30.08.2045	Interstate				61.10
18	Chamera-I	55	Hydro		31.03.2028	Interstate	2.32			206.07
19	Chamera-II	30	Hydro		30.04.2029	Interstate	7.59			141.46
20	Chamera-III	18	Hydro		5.12.2011	Interstate	5.23			82.45
21	Uri	66	Hydro		03.07.2047	Interstate	3.01			307.19
22	Uri-II	20	Hydro		30.05.2032	Interstate	11.45			175.58
23	Dhauliganga	28	Hydro		28.02.2049	Interstate	4.68			113.21
24	Dulhaati	32	Hydro		31.10.2040	Interstate	4.17			197.90
25	Parbati-III	41	Hydro		06.04.2042	Interstate	7.40			26.68
26	SEWA-II	10	Hydro		06.06.2049	Interstate	0.99			51.48
27	Kishanganga	0	Hydro		23.07.2045	Interstate	1.91			26.10
28	Natunga Jhark/SVNL	152	Hydro		unallocated share	Interstate	0.94			695.42
29	Ranapur	23	Hydro		24.10.2002	Interstate	25.79			115.29
30	Tehri (THDC)	77	Hydro		14.05.2014	Interstate	4.27			271.78
31	Koteshwar (THDC)	25	Hydro		31.07.2003	Interstate	30.32			83.20
32	DVC RTPS 1&2	300	Coal		08.07.2042	Interstate	3.15			1501.98
33	DVC-Durgapur	200	Coal		30.03.2041	Interstate	57.69			1063.63
34	DVC-BTPS	200	Coal		04.03.2038	Interstate	40.65			1305.74
35	Singrauli	200	Coal		07.11.2006	Interstate	50.47			1305.63
36	Rihand-I	110	Coal		22.02.2042	Interstate	53.44			805.83
			Coal		31.01.1994	Interstate	31.04			
			Coal		17.09.1998 with amendment signed on 29.09.1998	Interstate	26.42			692.36
37	Rihand-II	102	Coal		31.03.2031	Interstate				
38	Rihand-III	83	Coal		26.03.2039	Interstate	23.43			609.61
39	Anta GPS	0	Gas		PSPCL has relinquished its	Interstate	0.00		From	605
40	Auraya GPS	0	Gas		31.01.1994	Interstate	0.00		Concession	0.01
			Gas		31.01.1994	Interstate	0.00			

Dy. CEO, P.S.M.  
P.S.P.C.L. Patiala

63/22

41	Dadri NCGPS	0	Gas	31.01.1994	share from Ants, Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	0.00
42	Unchahar-I	0	Coal	31.01.1994	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	13.56
43	Unchahar-II	60	Coal	29.09.1998	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	266.93
44	Unchahar-III	17	Coal	02.11.2002	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	75.12
45	Unchahar-IV	0	Coal	16.12.2011	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	25.77
46	Jhajjar (IV)	0	Coal	06.05.2013	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	70.29
47	Dadri (Th. II)	0	Coal	02.11.2002	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	25.82
48	Koldam HEP	62	Hydro	01.05.2002	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	255.05
49	Sugrauli SHEP	0	Small Hydro	unallocated share	unallocated share	Interstate	0.48
50	Tanda Stage-II	0	Coal	unallocated share	unallocated share	Interstate	57.55
51	Mega	48	Coal	29.12.2010	unallocated share	Interstate	328.03
52	Kahalgoon-II (ERO)	120	Coal	02.11.2002 (supplementary agreement for capacity enhancement signed on 07.10.2003)	unallocated share	Interstate	810.14
53	NAPP	51	Nuclear	29.08.2023	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	324.11
54	RAPP-B	100	Nuclear	29.08.2023	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	320.39
55	RAPP-C	46	Nuclear	25.08.2023	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	405.91
56	PTC Talia	30	Hydro	26-09-2006	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	35.05
57	Pragati-BB-Bawana(CGT)	137	Gas	24.09.2008	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	191.10
58	MALAMA-2 (PTC)	88	Hydro	23-03-2006	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	115.91
59	KARCHAM (PTC)	200	Hydro	01.09.2006	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	706.71
60	SASAN Ultra Mega Project	594	Coal	07.08.2007	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	4263.85
61	MUMDERA UMPP	519	Coal	22.04.2007	Unallocated Power and shall remain operative till allocation of power by Gov.	Interstate	2259.34

Injected through 673

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63  
23

RREI POWER		Net Energy Supplied (in MU's)					Total FY 2023-24
Sl. No.	Name of Project Source	Inst. Cap. (MW)	Debooked Capacity (MW)	Evacuation Voltage Levels (kV)	Grid Attached	Short Term/ Long Term	
<b>A</b>							
<b>0 Solar (Retrospective)</b>							
1	Abundant Energy Pvt. Ltd. Raichur	2	2.00	11	66 KV 5/5m. Narla	Long Term	2.5853
2	Abundant Energy Pvt. Ltd. Raichur	7	7.00	11	66 KV 5/5m. Narla	Long Term	1.1871
2	Adna Solar Rooftop system Pvt. Ltd. Jhansi	15	15.00	66	66KV 5/5m. Danewala	Long Term	21.1860
4	Adna Solar Rooftop system Pvt. Ltd. Nangla Talwandi Bahk	15	15.00	66	66 KV 5/5m. Nangla	Long Term	21.5010
5	Achya Massives Ltd. Lajpur, Hoshangpur	4	4.00	66	66 KV Jaisuri	Long Term	5.4056
6	Ailerts EcoPower Pvt. Ltd., Bopara Kahan, Ludhiana	2	2.00	11	66 KV 5/5m. Aika	Long Term	2.6399
7	Ajda Solar Power Pvt. Ltd., Jhansi, Mansa	1	1.00	11	220 KV 5/5m. Jhansi	Long Term	1.4000
8	Ajda Powers Pvt. Ltd. Lakhwala, Mukabar	2	2.00	11	66 KV 5/5 Lakhwala	Long Term	1.6682
9	Azura Power Maharashtra Pvt. Ltd. Bhittwala	4	4.00	66	66 KV 5/5m. Bhittwala	Long Term	5.5696
10	Azura Power Maharashtra Pvt. Ltd. Kilarawati	26	24.00	66	66 KV 5/5m. Kilarawati	Long Term	35.3720
11	Azura Power Plus Pvt. Ltd. Bahadurganj Jambh-1	25	25.00	66	66 KV Pauri	Long Term	34.0661
12	Azura Power Plus Pvt. Ltd. Bahadurganj Jambh-2	26	25.00	66	66 KV Tharajwala	Long Term	34.5900
13	Azura Power Plus Pvt. Ltd. Kilarawati	25	25.00	66	66 KV Ratwala Hanuwanta	Long Term	35.0295
14	Azura Power Plus Pvt. Ltd. Badel	15	15.00	66	132 KV Badel	Long Term	21.7388
15	Azura Power Plus Pvt. Ltd. Bahadurganj	25	25.00	66	66 KV Malookpura	Long Term	35.4300
16	Azura Power Plus Pvt. Ltd. Bhittwala	10	10.00	66	66 KV Bhittwala	Long Term	14.2426
17	Azura Power Plus Pvt. Ltd. Vahwala	25	25.00	66	66 KV Vahwala Anuka	Long Term	35.7547
18	Azura Renewable Energy Pvt. Ltd. PSAMB, Mansa	0.60	0.60	11	66 KV Anaj Mandi Mansa	Long Term	0.6646
19	Azura Renewable Energy Pvt. Ltd. Bhagwan Singh & Kuldner Indr. Killa Faisal	0.55	0.55	11	66 KV Attowal	Long Term	0.0000
20	Azura Renewable Energy Pvt. Ltd. Aro Singh Warehouses, Mukabar	0.801	0.801	11	66 KV Attowal	Long Term	0.0000
21	Azura Renewable Energy Pvt. Ltd. Vikas Singh Warehouses, Jobpur Ramana, Bahinda	0.803	0.803	11	66 KV Badal/ Ala Singh	Long Term	0.0000
22	Azura Renewable Energy Pvt. Ltd. Boss Computers Ltd. Zhalpur	1.34	1.35	11	66 KV Bhubat	Long Term	0.9613
23	Azura Renewable Energy Pvt. Ltd. Chhaghihara	0.999	0.999	11	66 KV Gharsuri	Long Term	0.5783
24	Azura Renewable Energy Pvt. Ltd. Chander	1.60	1.60	11	66 KV Hargana	Long Term	1.5020
25	Azura Renewable Energy Pvt. Ltd. Fawala	0.76	0.76	11	66 KV Nurawal	Long Term	0.6296
26	Azura Renewable Energy Pvt. Ltd. PSAMB, Mohal	2.05	2.05	11	66 KV Ph. 5, Indl. Area, Dist. SAS Nagar	Long Term	1.9678
27	Azura Renewable Energy Pvt. Ltd. Skyross sangur	1.26	1.26	11	66 KV Nadampur	Long Term	1.9560
28	Azura Renewable Energy Pvt. Ltd. (Kishor Jaisan)	15	15.00	66	66 KV Arhiwala	Long Term	18.1776
29	Azura Ltpa Pvt. Ltd. 15 MW (Bhittwala / Purwa)	15	15.00	66	66 KV Mohawala	Long Term	19.4858
30	BEH Energy Pvt. Ltd. Karam Jambhwal Marghera, Bahinda	4	4.00	66	66 KV Bhittwala	Long Term	5.5097
31	Bharuenergy Industrial Development Ltd. (BIDL)	15	15.00	66	66 KV Aika	Long Term	21.1320
32	Bharuenergy Infrastructure Pvt. Ltd. (BPL)	15	15.00	66	66 KV Aika	Long Term	21.3380
33	Caral Solar Energy Pvt. Ltd.	7.3	7.50	66	66KV Arhiwal	Long Term	7.7340
34	Carti Energy Pvt. Ltd., Bhagpur, Mukabar	1.5	1.50	11	66 KV 5/5 Bhagpur	Long Term	1.9052
35	Confidential Engineering & Power Pvt. Ltd.	1	1.00	11	66 KV Kot Jhansi	Long Term	1.4723
36	Earth Solar Pvt. Ltd., Bahadpur, Nabha	4	4.00	66	66 KV 5/5m. Bhadon	Long Term	1.7440
37	Enterprise Business Solutions Pvt. Ltd., Sahba - Bhadna, SSS Nagar	1.6	1.60	11	66KV 5/5m. Karwar	Long Term	0.7744
38	EcoEnergy Inc., Bopara Kahan, Ludhiana	1	1.00	11	66KV 5/5m. Jadhur	Long Term	0.9404
39	Focal Energy Solar India Pvt. Ltd., Nangla, Bahinda	4	4.00	66	66 KV 5/5m. Nangla	Long Term	5.9810
40	G S Atwal & Co (Engineering) Pvt. Ltd., Bhittwala, Mukabar	1.5	1.5	11	66KV 5/5m. Bhittwala	Long Term	1.4020
41	G Energy Pvt. Ltd. Jalkan Kahan, Jalandhar	1	1	11	66 KV Chini	Long Term	1.1940
42	International Switchgear Pvt. Ltd. Pvt. Randas, Amritsar	1	1	11	66 KV 5/5m. Randas	Long Term	0.8704
43	International Switchgear Pvt. Ltd. Pvt. Randas, Amritsar	1	1	11	66 KV 5/5m. Randas	Long Term	1.0311
44	JSSR Energy Pvt. Ltd.	1	1.00	11	66 KV 5/5m. Bhagpur	Long Term	1.4114
45	Madhav Solar Pvt. Ltd-1, Bahi, Mansa	2	2.00	11	66 KV 5/5m. Bahi	Long Term	2.7200
46	Madhav Solar Pvt. Ltd-2, Bahi, Mansa	2	2.00	11	66 KV 5/5m. Bahi	Long Term	2.4750
47	Magma Business Pvt. Ltd-1, Shikharwala	25	25.00	66	66 KV Bahi	Long Term	31.2150
48	Magma Business Pvt. Ltd-2, Toderpur	25	25.00	66	66 KV Bahi	Long Term	32.9520
49	Mightyford Power Pvt. Ltd.	1	1.00	11	220 KV 5/5, Jhansi	Long Term	1.3570
50	Mix Solar Power Pvt. Ltd., Jhandwagan	24	24.00	66	66 KV Santalgari	Long Term	36.1140
51	Mix Solar Power Pvt. Ltd., Khata Khulad	25	25.00	66	66 KV 5/5m. Santalgari	Long Term	47.6010
52	Mix Solar Power Pvt. Ltd., Makhlana	25	25	66	66 KV 5/5m. Sangha	Long Term	34.0250
53	Mohamman Energy Pvt. Ltd., Bopara Kahan, Ludhiana	1	1	66	66 KV 5/5m. Bahi	Long Term	5.6340
54	Myrah Aachya Power Pvt. Ltd. Bahi	25	25	66	66 KV 5/5m. Bahi	Long Term	41.4950
55	Myrah Aachya Power Pvt. Ltd. Bahi	25	25	66	66 KV Bahawala	Long Term	40.3830
56	Narayan Solar Power Pvt. Ltd., Jhansi, Mansa	1	1	11	220KV Jhansi	Long Term	1.4520
57	Narayan Solar Power Pvt. Ltd., Jhandwagan, Mansa	1	1	11	66KV Bahi	Long Term	2.4725

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65	Northstar Solar Power Pvt. Ltd., Patnala, Bahrata	4	4	66	66KV Patnala	Long Term	1.463
66	Clear Green Pvt. Ltd.	3	3	66	66 KV 5/5tn. Bareilly	Long Term	4.2870
68	Omiga Infraengress Pvt. Ltd	1	1	11	66 KV 5/5tn. Charwala	Long Term	1.1488
61	Omiga solar project no. 001, Dargapur	18	10.00	66	66KV Ganduan	Long Term	16.1193
62	POL Khatkar Kalan SPV	0.2	0.20	11	132 KV 5/5tn	Long Term	0.5152
63	Punjab PEDA SPV	1	1.00	11	66KV Karna Mandi	Long Term	0.9626
64	Phosin Surbeem Pvt. Ltd -I	16	16.00	66	66 KV 5/5tn. Ramchand	Long Term	20.1718
64	Phosin Surbeem Pvt. Ltd -II	26	26.00	66	132 KV 5/5tn. Talawadi Sebo	Long Term	33.1249
66	PN Clean Energy Ltd. Lakshmiwala, Mansa	20	20.00	66	66 KV 5/5tn. Kot. Dharmu	Long Term	28.1520
67	PN Renewable Energy Ltd. Bara, Mansa	10	10.00	66	66 KV 5/5tn. Tahayan, Boha	Long Term	16.8240
68	Praytra Developers Pvt. Ltd -I, Sendarpath	90	90.00	132	132 KV 5/5tn. Baluana	Long Term	78.7637
69	Praytra Developers Pvt. Ltd -II Chughkalan	90	90.00	132	132 KV 5/5tn. Baluana	Long Term	79.1928
70	Punjab Industries Ltd. -VI, Bajak, Bahinda	3	3.00	66	66 KV 5/5tn. Nandgarh	Long Term	4.2185
71	Radiant Solar Energy Pvt. Ltd.	3	3.00	66	66 KV 5/5tn. Patnala	Long Term	4.3873
72	Road construction project in Mansa district, Mansa	12	12.00	132	132KV 5/5tn. Basi	Long Term	15.2021
73	Road construction project in Mansa district, Mansa	1.82	1.82	132	132KV Basi	Long Term	8.5330
74	SAM SOLAR Pvt. Ltd. Doraha, Canal ko	2.8	2.80	11	66 KV 5/5tn. Debuti	Long Term	2.8818
76	SAM SOLAR Pvt. Ltd. Nandanpur, Sangru	2.8	2.80	11	66 KV 5/5tn. Nidampur	Long Term	2.2099
76	Saareknot Projects India Pvt. Ltd. Changanwala, Fazilka	30	30.00	66	66 KV 5/5tn. Akra Tibbi	Long Term	30.0106
77	Solaris Power Pvt. Ltd. Umanikhera	34	24.00	66	66 KV 5/5tn. Kaler Khara	Long Term	35.2527
78	Solaris Uja Pvt Ltd.	36	25.00	66	66 KV 5/5tn. Khulan Sarwar	Long Term	36.0957
79	Soma Enterprises Ltd., Khara Kalnoid	1	1.00	11	66KV Nangal	Long Term	0.8152
80	Sovak Rahawates Pvt. Ltd. Mahandpur	1	1.00	11	66KV 5/5tn. Kathgarh, Tendil Balachaur	Long Term	0.6402
81	T R Energy & Agro Pvt. Ltd. Jandwala Misraingh, Fazilka	2	2.00	11	66 KV Bhawal Dhab	Long Term	2.8793
82	T R Energy & Agro Pvt. Ltd. -VI, Patnala, Fazilka II	1	1.00	11	66 KV Patnala	Long Term	1.5317
83	Vector Green Sunshine Pvt. Ltd., Ganiwala Boha	30	20.00	66	66 KV 5/5tn. Ganiwala, Boha	Long Term	31.4880
84	Vector Green Surya Uja Pvt. Ltd. Ganiwala, Boha, Mansa	30	20.00	66	66 KV 5/5tn. Ganiwala, Boha	Long Term	30.5100
86	Vijay Printing Press Pvt. Ltd. (Ghaggar branch canal project)	7.3	7.30	66	66KV Bhawal	Long Term	3.1468
88	Vivian Solar Pvt. Ltd., Bajak Bahinda	2	2.00	11	66 KV 5/5tn. Nandgarh	Long Term	1.3043
87	Wahnan Solar Punjab Ltd -I, Tarna pujanan.	20	20.00	66	66 KV 5/5tn. Jagi Ram Tirath	Long Term	27.4480
88	Wahnan Solar Punjab Ltd -II, Jageran tirath.	10	10.00	66	66 KV 5/5tn. Jagi Ram Tirath	Long Term	13.0055
89	Wahnan Solar Punjab Ltd -III, Jageran Tirath	2	2.00	11	66 KV 5/5tn. Jagi Ram Tirath	Long Term	2.6696
89	Wahnan Solar Punjab Ltd -IV, Tarna pujanan.	4	4.00	66	66 KV 5/5tn. Jagi Ram Tirath	Long Term	5.3790
<b>(I) Total Solar (Intra-state)</b>		<b>884.22</b>	<b>884.22</b>				<b>1361.3796</b>
<b>(II) Solar (Interstate)</b>							
1	Bundled NRVNL (solar only)	37	37.00		Outside Punjab	Long Term	48.0546
2	SECI Solar	30	30.00		Outside Punjab	Long Term	57.4130
<b>Total II)</b>		<b>67.00</b>	<b>67.00</b>				<b>105.4686</b>
<b>Total Solar (I+ II)</b>		<b>951.22</b>	<b>951.22</b>				<b>1466.8481</b>
<b>B Co Generation</b>							
<b>a Bagasse (Co-gen)</b>							
1	A.B. Sugars Ltd	25	20.00	66	66 KV Sethala	Long Term	63.8946
2	Chandra Sugars & Int. Ltd.	33	20.00	66	66 KV SS, Roza	Long Term	58.1262
3	Indian Bagasse Ltd	40	30.00	66	132 KV Uchi Basi	Long Term	1.7818
4	Nawanshahr Power Pvt. Ltd.	16	13.50	66	132 KV Nawanshahr	Long Term	17.6520
5	Itans Sugars Ltd (34MW)	34	20.00	66	66 KV Sethala	Long Term	26.6717
6	Wahid Sancher Sugars Ltd	12	7.00	33	66 KV SS Phagwara	Long Term	0.0000
7	The Bhogpur Co-oc Sugar Mills Ltd	18	8.54	66	66 KV SS, Vill Soora	Long Term	26.0626
<b>Total co-gen Bagasse</b>		<b>183</b>	<b>119.54</b>				<b>197.9919</b>
<b>b Distress (Co-gen)</b>							
1	A.B. Green Baria Pvt. Ltd	6.5	3.00	66	66 KV Roza	Long Term	5.6373
2	Chandigarh Distillers & Bottlers Ltd. (8.25 MW)	8.25	5.00	66	66 KV Bahur	Long Term	3.0554
3	Chandigarh Distillers & Bottlers Ltd. (3.9 MW)	3.9	2.00	66	66 KV Bahur	Long Term	4.0580
4	Indian Acrylics Pvt. Ltd	0	11.00	66	66 KV Bhawanagar	PHS	0.0000
5	N.V. Distillers & Breweries Pvt. Ltd.	00	6.00	66	66 KV Chandigarh	Long Term	27.8816

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63/25

6	Shree Ganesh Estates Pvt. Ltd. (New PPA)	18	4.00	66	66KV Badinpur	Long Term	4.8461
7	M/s. CN Sons Marketing Pvt. Ltd.	9	3.00	11	66 KV Saagar Kanan	Long Term	3.8451
	<b>Total Co-Gen Biomass</b>	<b>27.68</b>	<b>23.46</b>				<b>48.2014</b>
	<b>Total Co-gen Biomass+Biomass</b>	<b>213.68</b>	<b>143.04</b>				<b>247.0833</b>
<b>C Biomass/IPP</b>							
1	Dee Development Engineers Pvt. Ltd.	8	8	66	66 KV Lubantawal, Mahabud	Long Term	55.9587
2	Green Planet Energy Pvt. Ltd. Bapat	6	6	66	66 KV SS Mehatpur	Long Term	23.8637
3	Green Planet Energy Pvt. Ltd. Bapat (Rankine cycle)	6	6	66	33/ 66 KV Faisl (Kot Faisl)	Long Term	13.5313
4	Maha Power Pvt. Ltd.	8	8	66	66 KV Lubantawal, Sri Mukteswar Sahib	Long Term	8.6823
5	Green Planet Energy Pvt. Ltd. Marusa	6	6	66	66KV S/S Samadh Bhai	Long Term	50.9712
6	Sukhtar Agro Energy Ltd. (Perodapur)	18	18	132	132 KV Perodapur	Long Term	134.7934
7	Sukhtar Agro Energy Ltd. (Jahm)	18	18	66	220 KV Bajakhana	Long Term	122.7459
8	Universal Biomass Energy Pvt. Ltd.	14.3	14.3	132	132 KV Gidderbaha	Long Term	83.4440
9	Vision Energy Pvt. Ltd.	10	10	66	66 KV Marusa	Long Term	57.8075
	<b>Total Biomass/IPP</b>	<b>92.64</b>	<b>92.60</b>				<b>562.9277</b>
<b>D Waste to energy</b>							
1	Hallowal Biomethanation LDH	1	1.00	11	66 KV Kishanagar, Luthiana	Long Term	-1.2023
	<b>Total Waste to energy</b>	<b>1.00</b>	<b>1.00</b>				<b>-1.2023</b>
<b>E Biogas</b>							
1	Green Planet Energy Pvt. Ltd. Bapat (Rankine cycle)	4	4.00	66	66 KV SS Mehatpur	Long Term	1.2816
2	Sartajzar Agri Ventures Ltd.	1	0.70	11	66 KV Faisl	Long Term	0.1457
	<b>Total Biogas</b>	<b>5</b>	<b>4.70</b>				<b>1.4273</b>
<b>F Mini Hydel</b>							
<b>Aqua Power Plant Ltd.</b>							
1	Chakhta MHP	2	2.00	11	66 KV S/Str. Mehul Killa	Long Term	8.8347
2	Lalgarh	2	2.00	11	66 KV S/Str. Kurbu	Long Term	7.3514
3	Sohna	1.2	1.20	11	66 KV Phul	Long Term	5.4340
	<b>Aqua Power Plant Ltd. Total</b>	<b>5.2</b>	<b>5.20</b>				<b>21.6201</b>
<b>Absher Power Generation Pvt. Ltd.</b>							
1	Ghola MHP	0.8	0.80	11	132 KV S/Str. Ghola Kalar	Long Term	3.1724
2	Channuag MHP	0.9	0.90	11	66 KV S/Str. Mani Mustafa	Long Term	3.0553
3	Ashara MHP	1.1	1.10	11	66 KV S/Str. Agwar Jaggon	Long Term	4.2341
4	Rhanpur	1.1	1.10	11	132 KV S/Str. Bhanpur	Long Term	4.5826
5	Sudhar	1.4	1.40	11	66 KV S/Str. Sudhar	Long Term	4.9226
	<b>Absher Power Generation TOTAL</b>	<b>5.38</b>	<b>5.30</b>				<b>20.0672</b>
<b>G Kotla Hydro Ltd</b>							
1	Botanpur MHP	1.25	1.25	11	66 KV Dhul	Long Term	4.6206
2	Kila	1.75	1.75	11	66 KV Ranglan	Long Term	6.7408
3	Sohna	1.2	1.20	11	66 KV Ashpal Kalan	Long Term	5.8112
	<b>Kotla Hydro Ltd. Total</b>	<b>4.2</b>	<b>4.20</b>				<b>19.1526</b>
<b>H Punjab Hydro Ltd.</b>							
1	Dolowal MHP	1.4	1.40	11	66 KV S/Str. Lassi	Interim Arrangement	4.6340
2	Sear MHP	1.5	1.50	11	66 KV S/Str. Amargon	Interim Arrangement	4.8768
3	Bharuaha MHP	1.3	1.30	11	66 KV S/Str. Bharuaha	Interim Arrangement	5.1453
	<b>Punjab Hydro Ltd. Total</b>	<b>4.2</b>	<b>4.20</b>				<b>14.6561</b>
<b>I Individual Hydel Plant</b>							
1	Alamco Power Pvt. Ltd. (Phool)	0.60	0.60	11	66 KV Nathana	Long Term	2.3056
2	Alamco Power Pvt. Ltd. (Nakkam)	0.30	0.30	11	132 KV Nakkam	Long Term	1.0425
3	Alamco Power Pvt. Ltd. (Tarkana)	0.66	0.66	11	66 KV Bhurmyaan	Long Term	2.0083
4	Alamco Power Pvt. Ltd. (Tarkana) PSPCL Free energy share	3.00	3.00	11		Long Term	0.8507
5	GE Aqua Hydro Power Generation Co. Pvt. Ltd. - MCL II	8.80	8.80	66	66 KV S/Str. Ranipur	Long Term	20.8251
6	GE Aqua Hydro Power Generation Co. Pvt. Ltd. - MCL II	3.80	3.80	66	66 KV S/Str. Ranipur	Long Term	4.7660
7	GE Power Generation Co. (P) Ltd.	2.70	2.70	11	220 KV S/Str. Tibbar	Long Term	7.6278
8	Himalayan Renewable Energy Pvt. Ltd.	0.60	0.60	11	66 KV S/Str. Talawal	Long Term	3.3934
9	Kotla Renewables Pvt. Ltd. Daudhar	1.50	1.50	11	132 KV S/Str. Badhan Kalan	Long Term	4.5461
10	Kotla Renewables Pvt. Ltd. Nidampur	0.80	0.80	11	66 KV S/Str. Nidampur	Long Term	1.4728
11	Kotla Renewables Pvt. Ltd. Thul	0.80	0.80	11	66 KV S/Str. Bhari	Long Term	2.4480

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12	Maple Canal Hydro Project Pvt Ltd Udhawal	0.66	0.66	11	66 KV 1/5th Udhawal	Long Term	0.8378
13	P & R Gunthwa Hydro Power Pvt. Ltd	2.00	2.00	11	66 KV Malanwala	Long Term	5.7209
14	Preets Power Pvt. Ltd. (Tugalew)	0.66	0.66	11	66 KV Harchowal	Long Term	1.7321
15	San Inda Hydro Power Pvt Ltd	1.28	1.28	11	132 KV 1/5th, Bilaspur	Long Term	3.3437
16	Sidhant Hydro Power Pvt. Ltd	0.70	0.70	11	66 KV Madhawa, Dist Ludhiana	Long Term	2.2438
17	SKH Hydro Power Generators Pvt Ltd	0.48	0.48	11	66 KV 1/5th, MES, Bathinda	Long Term	0.9081
18	USDC Hydro Company	2.00	2.00	11	66 KV 1/5th, Rai Khara, Bhagawal	Long Term	6.5505
19	Preets Power Pvt. Ltd. (Kastab)	0.66	0.66	11	0	Long Term	1.5182
20	Hydro Energy & Infrastructure	0.25	0.25	11	66KV 1/5TH, Chadrak	Long Term	0.8061
21	Sansar Hydro Enrg Pvt. Ltd	1.50	1.50	11	Lofgah Thakran	Long Term	6.6419
	<b>Individual Hydel Total</b>	<b>24.90</b>	<b>24.90</b>				<b>76.2803</b>
<b>F</b>	<b>Punjab Genco Ltd</b>						
1	Narangwal MHP	1.50	1.50	11	66 KV Narangwal	Long Term	5.0991
2	Daha MHP	1.00	1.00	11	66 KV Rumi	Long Term	3.6732
3	Tugel MHP	1.20	1.20	11	66 KV Sudhar	Long Term	4.9374
4	Chupki MHP	1.50	1.50	11	66 KV Alamgir	Long Term	5.4291
5	Khatra MHP	1.00	1.00	11	66 KV Sar	Long Term	4.5514
6	Kangra MHP	1.30	1.30	11	66 KV Sandhar	Long Term	5.4369
7	Buahan MHP	1.00	1.00	11	132 KV Bilaspur	Long Term	3.5549
8	Jogera MHP	1.00	1.00	11	66 KV Ahmadgarh	Long Term	4.7510
	<b>Total PGL</b>	<b>8.80</b>	<b>8.80</b>				<b>37.3736</b>
	<b>Total Mini Hydel</b>	<b>33.80</b>	<b>33.80</b>				<b>113.6539</b>
<b>G</b>	<b>Wind Power</b>						
1	SECI Wind Power (180 MW)	180	180.00		Outside Punjab	Long Term	897.2540
2	SECI Wind Power (200 MW)	200	200.00		Outside Punjab	Long Term	908.3774
	<b>Total Wind Power</b>	<b>380</b>	<b>380.00</b>				<b>1805.6314</b>
<b>H</b>	<b>SECI Hybrid Power</b>						
1	SECI 600 MW Hybrid Power PSA (Solar)	400	400.00		Outside Punjab	Long Term	1387.6892
2	SECI 600 MW Hybrid Power PSA (Wind)	180	180.00		Outside Punjab	Long Term	404.7738
3	NHPC 300 MW Solar	300	300.00		Outside Punjab	Long Term	761.2340
<b>I</b>	<b>2% Energy Injection by OA Consumers in lieu of Transmission &amp; Wheeling</b>						
1	Winsome Yarns Non Solar						0.1977
2	Nahar Industrial Enterprises Ltd. Non Solar						0.0708
	<b>Total 2% Energy Injection by OA Consumers</b>						<b>0.2685</b>
<b>J</b>	<b>Own Hydel</b>						
1	Micro Hydel						
10	Rohi	0.8	0.8	11			0.0000
11	Ropar	1.7	1.7	11			1.6678
	<b>Total Micro Hydel</b>	<b>2.5</b>	<b>2.5</b>				<b>1.6678</b>
2	USDC Stage III	91.35	91.35	132			388.7400
3	Mukerian MHP-3	18	18	132			77.1560
	<b>Total Own Hydel</b>	<b>111.85</b>	<b>111.85</b>				<b>467.5634</b>
<b>K</b>	<b>SOLAR</b>						
1	Solar Intra state	884.22	884.22				1263.1795
2	Bundled (Solar)	37	37.00				48.0540
3	SECI Solar	30	30.00				57.4250
4	SECI Hybrid Solar	400	400.00				1387.6892
5	NHPC Solar	300	300.00				761.2340
	<b>Total Solar</b>	<b>1651.22</b>	<b>1651.22</b>				<b>2517.5728</b>
<b>L</b>	<b>NON SOLAR</b>						
1	NON SOLAR (HYDEL)	548.66	548.66				636.6932
2	NON SOLAR (WIND)	380.00	380.00				1036.3435
3	NON SOLAR (OTHERS)	312.16	312.16				810.2130
	<b>Non Solar (2% Injection in lieu of Transmission Charges)</b>						<b>0.2685</b>
4	SECI Hybrids Wind	180.00	180.00				404.7738
	<b>Total Non Solar</b>	<b>1420.82</b>	<b>1420.82</b>				<b>2858.0945</b>
	<b>Total for Long Term and Short Term RE Power</b>	<b>2582.60</b>	<b>2582.60</b>				<b>6375.6688</b>
	<b>Bundled NVRN, Coal</b>	<b>37.00</b>	<b>37.00</b>				
	<b>Total Bundled NVRN (Coal+Solar)</b>	<b>74.00</b>	<b>74.00</b>		Outside Punjab	Long Term	<b>232.3120</b>
							<b>280.4871</b>

Dr. G.C. D.S.M.

AS.P.C.L., Patiala

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



























### "A" (Details of Distribution Transformers(DT) Level Information)

Period From 1-04-2023 To 31.03.2024

Circle	Division	Subdivision	Feeder Category	Feeder Voltage	Capacity	TF Count
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	10KVA 1P	1
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	10KVA 3P	1
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	16KVA	4
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	25KVA	5
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	63KVA	9
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	100KVA	302
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	200KVA	259
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	300KVA	38
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	500KVA	22
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	1000KVA	1
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	400KVA	1
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	2000 KVA	2
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	630 KVA	3
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	250KVA	7
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	315KVA	13
PATIALA	DS WEST DIVN PATIAL	DS WEST TECH S/D PTA	Cat-1	11KV	1250KVA	1
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	10KVA 1P	4
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	10KVA 3P	3
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	16KVA	4
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	25KVA	26
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	63KVA	39
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	100KVA	440
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	200KVA	173
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	300KVA	18
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	500KVA	5
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	1000KVA	1
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	400KVA	1
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	250KVA	1
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	315KVA	2
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-1	11KV	10KVA 1P	2
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-2	11KV	25KVA	19
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-2	11KV	63KVA	83
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-2	11KV	100KVA	204
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-2	11KV	200KVA	41
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-2	11KV	300KVA	9
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-2	11KV	500KVA	7
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-2	11KV	1000KVA	2
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-2	11KV	400KVA	2
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-2	11KV	630 KVA	1
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-2	11KV	315KVA	2
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-4	11KV	400KVA	1
PATIALA	DS WEST DIVN PATIAL	DS NORTH TECH S/D PTA	Cat-4	66KV	6.3 MVA	2
PATIALA	DS EAST DIVN PATIALA	DS CANTT. S/D PATIALA	Cat-1	11KV	6.3KVA	1
PATIALA	DS EAST DIVN PATIALA	DS CANTT. S/D PATIALA	Cat-1	11KV	10KVA 1P	33
PATIALA	DS EAST DIVN PATIALA	DS CANTT. S/D PATIALA	Cat-1	11KV	10KVA 3P	21

*Dr. G. S. M.*

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



BARNALA	DS DIVN. MALERKOTLA	DS S/D SHERWANIKOT	A3P3W	11KV	10KVA 1P	9
BARNALA	DS DIVN. MALERKOTLA	DS S/D SHERWANIKOT	A3P3W	11KV	10KVA 3P	231
BARNALA	DS DIVN. MALERKOTLA	DS S/D SHERWANIKOT	A3P3W	11KV	16KVA	1097
BARNALA	DS DIVN. MALERKOTLA	DS S/D SHERWANIKOT	A3P3W	11KV	25KVA	1787
BARNALA	DS DIVN. MALERKOTLA	DS S/D SHERWANIKOT	A3P3W	11KV	63KVA	87
BARNALA	DS DIVN. MALERKOTLA	DS S/D SHERWANIKOT	SS TF	11KV	100KVA	55
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-1	11KV	10KVA 1P	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-1	11KV	10KVA 3P	3
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-1	11KV	16KVA	3
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-1	11KV	25KVA	3
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-1	11KV	63KVA	20
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-2	11KV	100KVA	14
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-2	11KV	2000 KVA	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-2	11KV	315KVA	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-5/UPS	11KV	10KVA 1P	37
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-5/UPS	11KV	10KVA 3P	20
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-5/UPS	11KV	16KVA	23
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-5/UPS	11KV	25KVA	38
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-5/UPS	11KV	63KVA	40
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-5/UPS	11KV	100KVA	84
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	Cat-5/UPS	11KV	200KVA	13
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	A3P3W	11KV	6.3KVA	46
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	A3P3W	11KV	10KVA 1P	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	A3P3W	11KV	10KVA 3P	667
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	A3P3W	11KV	16KVA	898
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	A3P3W	11KV	25KVA	848
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	A3P3W	11KV	63KVA	157
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	A3P3W	11KV	100KVA	90
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	SS TF	11KV	100KVA	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D LASSOI	SS TF	11KV	50KVA	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-1	11KV	6.3KVA	2
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-1	11KV	10KVA 1P	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-1	11KV	10KVA 3P	14
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-1	11KV	16KVA	13
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-1	11KV	25KVA	22
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-1	11KV	63KVA	12
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-1	11KV	100KVA	15
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-2	11KV	16KVA	2
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-2	11KV	25KVA	6
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-2	11KV	63KVA	3
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-2	11KV	100KVA	4
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-2	11KV	200KVA	3
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-4	11KV	100KVA	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-4	11KV	500KVA	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-4	11KV	3000KVA	2
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-4	11KV	1600 KVA	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-4	66KV	6.3 MVA	1
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-5/UPS	11KV	10KVA 1P	19
BARNALA	DS DIVN. MALERKOTLA	DS S/D KUP-KALAN	Cat-5/UPS	11KV	10KVA 3P	5

BY: CE / D.S.M.

R.S.P.C.L., Palitana



BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	Cat-5/UPS	11KV	16KVA	27
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	Cat-5/UPS	11KV	25KVA	27
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	Cat-5/UPS	11KV	63KVA	23
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	Cat-5/UPS	11KV	100KVA	45
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	Cat-5/UPS	11KV	25KVA S/P	2
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P3W	11KV	6.3KVA	30
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P3W	11KV	10KVA 1P	4
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P3W	11KV	10KVA 3P	389
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P3W	11KV	16KVA	747
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P3W	11KV	25KVA	725
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P3W	11KV	63KVA	79
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P3W	11KV	100KVA	52
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P3W	11KV	200KVA	1
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P4W	11KV	300KVA	1
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P4W	11KV	10KVA 3P	1
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P4W	11KV	16KVA	1
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P4W	11KV	16KVA	5
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	A3P4W	11KV	25KVA	8
BARNALA	DS DIVN. MALEKOTLU	DS S/D KUP-KALAN	SS TF	11KV	100KVA	1
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-1	11KV	10KVA 1P	4
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-1	11KV	10KVA 3P	1
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-1	11KV	16KVA	1
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-1	11KV	25KVA	1
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-1	11KV	63KVA	10
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-1	11KV	100KVA	9
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-5/UPS	11KV	6.3KVA	4
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-5/UPS	11KV	10KVA 1P	81
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-5/UPS	11KV	10KVA 3P	26
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-5/UPS	11KV	16KVA	28
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-5/UPS	11KV	25KVA	73
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-5/UPS	11KV	63KVA	70
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-5/UPS	11KV	100KVA	109
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-5/UPS	11KV	200KVA	5
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-5/UPS	11KV	300KVA	2
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	Cat-5/UPS	11KV	400KVA	1
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	A3P3W	11KV	6.3KVA	14
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	A3P3W	11KV	10KVA 1P	11
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	A3P3W	11KV	10KVA 3P	675
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	A3P3W	11KV	16KVA	1847
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	A3P3W	11KV	25KVA	1904
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	A3P3W	11KV	63KVA	130
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	A3P3W	11KV	100KVA	37
BARNALA	DS DIVN. MALEKOTLU	DS S/D SANDOUR	SS TF	11KV	100KVA	1
TOTAL						1284607

\*g" Details of DT-wise losses (please add more rows as per requirement)

Zone Name	Circle name	Division name	Name of the Sub-division	Name of the Sub-station	Substation Code	Name of the 11 kv Feeder
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Note : DT wise losses are not available Presently.

*D. Johny*  
D.S.M.  
*P.S.P. CL. Pathe*

6/5/23



(Details of Feeder-wise losses)

Period From 01.04.2023 To 31.03.2024

63  
28

Sr No.	Zone	Circle	Received at Circle (In MU)	Division	Received at Division (In MU)	Subdivision	Received at Sub division (In MU)	Name of the Station	Feeder Code	Feeder Name	Type of Feeder (Urban/Mixed/Industrial/Agricultural/Rural)	Type of Feeder Major (AMR/AMR/Other)	Received at Feeder (Final In MU)
1	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D GHEE MANDI TECH, ASR	64.6063	Rd ASR S/U Sub	C751FL03	11kv NEW GOLDEN AVENUE	Category 1	AMR	5.182
2	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D GHEE MANDI TECH, ASR		Rd ASR S/U Sub	C751FL08	11kv New flaxi Dasa Road	Category 1	AMR	10.882
3	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D GHEE MANDI TECH, ASR		66KV Golden T	D754FL03	11kv Nawdeep Theatre	Category 1	AMR	6.333
4	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D GHEE MANDI TECH, ASR		66KV Golden T	D754FL04	11kv Chittwind	Category 1	AMR	6.161
5	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D GHEE MANDI TECH, ASR		66KV Golden T	D754FL02	11kv Ghee Mandi 2	Category 1	AMR	5.172
6	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D GHEE MANDI TECH, ASR		66KV Golden T	D754FL01	11kv Keri Bagh	Category 1	AMR	6.359
7	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D GHEE MANDI TECH, ASR		132 KV GT Rd	C754FL01	HUSSAINPURA	Category 1	AMR	7.417
8	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D GHEE MANDI TECH, ASR		132 KV GT Rd	C751FL02	Head Water Works Road	Category 1	AMR	7.956
9	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D GHEE MANDI TECH, ASR		66KV Golden T	C754FL13	11KV NEW KESRI BAGH	Category 1	AMR	3.145
10	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D GHEE MANDI TECH, ASR		66KV Golden T	D754FL09	11 KV M JTI BAZAR	Category 1	AMR	5.999
11	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR	45.8902	Half Gate - D75	D751FL07	11kv sarjwati	Category 1	AMR	4.391
12	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		Dental - D752	D752FL10	11KV HussainPura	Category 1	AMR	10.189
13	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		Half Gate - D75	D751FL02	11KV Ren Bagh	Category 1	AMR	6.570
14	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		Half Gate - D75	D751FL14	11KV Civil Hospital Independent	Category 2	AMR	1.178
15	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		66KV Golden T	D754FL05	Cheer Mandi	Category 1	AMR	8.985
16	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		66KV Golden T	D754FL13	11 KV TCWN HALL	Category 1	AMR	0.680
17	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		66KV Golden T	D754FL15	11 KV MASHE MANDI	Category 1	AMR	0.001
18	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		Half Gate - D75	D751FL22	BHARAWA DA DHABHA	Category 1	AMR	1.756
19	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		Half Gate - D75	D751FL23	MASHI MANDI	Category 1	AMR	1.649
20	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		Half Gate - D75	D751FL24	KARON MARKET	Category 1	NON AMR	1.517
21	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		Half Gate - D75	D751FL21	TOWN HALL	Category 1	AMR	6.886
22	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D HUSSAINPURA TECH, ASR		-NA-	D751FL25	SUBASH PARK	Category 1	Not avail	2.089
23	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR	325.4107	DS S/D MALL MANDI TECH, ASR		132 KV Mal M	C801FL02	Footpoint old	Category 2	AMR	23.193
24	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		132 KV Mal M	C801FL04	Bhai Lalokh Nagar	Category 1	AMR	13.429
25	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		132 KV Mal M	C801FL06	GT road	Category 1	AMR	12.047
26	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		132 KV Mal M	C801FL08	Bypass	Category 1	AMR	0.921
27	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		132 KV Mal M	C801FL10	New Focal point	Category 2	AMR	14.109
28	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		132 KV Mal M	C801FL11	New Amritsar	Category 1	AMR	11.372
29	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		132 KV GT Rd	C751FL13	Gobind Nagar	Category 1	AMR	10.740
30	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		132 KV GT Rd	C751FL14	Kapoor Nagar	Category 1	AMR	7.370
31	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		-NA-	C751DL01	Apha G	Category 1	Not avail	14.617
32	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		132 KV Mal M	C801FL13	GTB FOC-L POINT	Category 2	AMR	13.156
33	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		-NA-	C801FL2	KHARKOT	Category 1	Not avail	6.805
34	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR	214.9142	66 KV Sultanw	D9455L01	BABA DEEP SINGH	Category 1	AMR	2.769
35	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		66 KV Sultanw	D9455L02	ATTAR SAHIB	Category 1	AMR	11.024
36	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		66 KV Sultanw	D945FL04	Bhai Ghaniya Ji	Category 1	AMR	8.735
37	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		66 KV Sultanw	D9455L05	BABA BUSHIJI	Category 1	AMR	11.117
38	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		66 KV Sultanw	945FL07	11 KV DASURJI	Category 1	NON AMR	15.079
39	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		66 KV Sultanw	945FL08	11 KV SUP TANWIND-1	Category 1	NON AMR	11.454
40	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		Focal Point - D	D832FL10	11 KV VALAH	Category 1	AMR	12.874
41	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		132 KV GT Rd	C751DL11	11 KV Bhai Gurdas Ji Nagar	Category 1	NON AMR	6.143
42	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		66 KV Sultanw	D945FL11	11KV Diamond Estate	Category 1	AMR	6.340
43	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		Manawala - D8	D821FL19	11 kv Alpa City	Category 1	AMR	0.200
44	Border	CITY AMRITSAR		DS CITY CENTER DIVN., ASR		DS S/D MALL MANDI TECH, ASR		132 KV Mal M	C801FL14	11KV Garden Enclave	Category 1	NON AMR	0.936

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13407	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	-NA-	B501FL08	DIPOSAI BY-PASS	Category 2	Not avail	0.003
13408	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	220 KV Mukts	B501FL05	FOCAL POINT	Category 2	AMR	8.923
13409	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	132 KV Mukts	CS01FL02	INDUSTRIAL	Category 1	AMR	13.032
13410	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	132 KV Mukts	CS01FL04	TIBBI SAHIB	Category 1	AMR	4.276
13411	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	132 KV Mukts	CS01FL07	THANDEWALA	Category 1	AMR	9.376
13412	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	132 KV Mukts	CS01FL01	THANDEWALA ap	AP 3Phase 3Wire	AMR	1.997
13413	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	132 KV Mukts	CS01FL09	SANGU DHAUN	AP 3Phase 3Wire	AMR	0.964
13414	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	66 KV Bhuttw	DS25FL01	Kotla Dal Singh(Thandewala)	AP 3Phase 3Wire	AMR	1.490
13415	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	220 KV Mukts	B501FL10	JALALABAD ROAD	Category 1	AMR	6.289
13416	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	66 KV Tibbi Sa	DS69FL01	13KV Goushafia Road	Category 1	NON AMR	6.284
13417	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	66 KV Tibbi Sa	DS69FL02	13KV Old-Grain Market	Category 1	NON AMR	8.121
13418	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	66 KV Tibbi Sa	DS69FL03	13KV New Jalalabad Road	Category 1	NON AMR	9.301
13419	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	66 KV Tibbi Sa	DS69FL04	13KV Fattanwala Road	Category 1	NON AMR	5.857
13420	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	66 KV Tibbi Sa	DS69FL05	13KV Disposal	Category 1	NON AMR	0.201
13421	West	MUKATSAR	DS DIVN. MUKTSAR	DS S/U S/D MUKTSAR	66 KV Tibbi Sa	DS69FL06	13KV Muktsar AP	AP 3Phase 3Wire	AMR	1.928
13422	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 Kv Lakhew	DS27FL01	Lakhewali(Urban)	Category 1	AMR	5.792
13423	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 Kv Lakhew	DS27FL02	Madrasa Lkw(AP)	AP 3Phase 3Wire	AMR	1.923
13424	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 Kv Lakhew	ES01FL03	Roranwali(AP)	AP 3Phase 3Wire	AMR	2.437
13425	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 Kv Lakhew	DS27FL04	Nand Garh	Category 5-UPS	AMR	5.170
13426	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 KV Khuran	DS28FL05	BATTA THER UPS	Category 5-UPS	AMR	3.246
13427	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 KV Khuran	DS28FL01	Karianwali AP	AP 3Phase 3Wire	AMR	1.112
13428	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 KV Khuran	DS28FL02	HALIMWALA (AP)	AP 3Phase 3Wire	AMR	1.278
13429	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 KV Khuran	DS28FL04	RORANWALI (UPS)	Category 5-UPS	AMR	8.891
13430	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 KV Khuran	DS28FL03	Khuranj	Category 1	AMR	1.383
13431	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 Kv Chak she	DS32FL03	Gardhar	AP 3Phase 3Wire	AMR	1.014
13432	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 Kv Chak she	DS32FL05	GARDHAR UPS	Category 5-UPS	AMR	2.392
13433	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 KV Bhagsar	DS50FL01	MAHABADHAR AP	AP 3Phase 3Wire	AMR	0.862
13434	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 KV Bhagsar	DS50FL02	JHEENDWALA AP	AP 3Phase 3Wire	AMR	1.097
13435	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 KV Bhagsar	DS50FL03	BHAGSAR AP	AP 3Phase 3Wire	AMR	0.957
13436	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 KV Bhagsar	DS50FL04	BHAGSAR CAT-1	Category 1	AMR	7.584
13437	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 kv Chak Jan	DS49FL03	TELPURA	AP 3Phase 3Wire	AMR	1.154
13438	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 kv Lakhew	DS27FL05	NANDGARH AP	AP 3Phase 3Wire	AMR	1.856
13439	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 KV Khuran	ES28FL06	ROHWALA	AP 3Phase 3Wire	AMR	1.505
13440	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 kv Chak Jan	DS49FL05	Ranja Ther New	Category 5-UPS	AMR	1.777
13441	West	MUKATSAR	DS DIVN. MUKTSAR	Sub Office Lakhewali	66 Kv Lakhew	DS27FL06	Sarnewali	AP 3Phase 3Wire	AMR	0.860
		Rooftop solar	98.48	98.48						98.48
		Railway open access	9.88	9.88						9.88
			66886.39	66886.39						66886.39

*(Signature)*  
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P.S.P.C.L., Patiala

*(Signature)*  
Er. Ravi Verma  
EA- 7969  
Energy Auditor  
PSPCL, Patiala.

## Annexure - 1 : Proforma for Quarterly Consumer Category-wise Subsidy Billed/Received/Due for period 2023-24 R

FY 2023-24

Consumer Category (Separate for each subsidized consumer category)	Billed Energy			Subsidized Billed Energy			Applicable rate of Subsidy		Subsidy Due from State			Subsidy Actually Billed/claimed from State	Subsidy Received from State Govt. (As)	Balance Subsidy yet to be Received from State Govt.
	Metered	Un-metered*	Total	Metered (out of col.2)	Un-metered* (Out of col.3)	Total	Metered Energy**	Un-metered Energy**	Metered Energy	Un-metered Energy	Total			
	(In kWh)			(In kWh)			(In Rs./kwh)		(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	16,34,90,77,099		16,34,90,77,099	16,34,90,77,099		16,34,90,77,099	Rs. 2.50 to 7.15 per kWh		7233.82		7233.82	7233.82	6818.28	415.54
Agriculture	12,60,10,000	12,67,13,50,000	12,79,73,90,000	12,60,10,000	12,67,13,50,000	12,79,73,90,000	Rs. 6.55 per KW		81.54	8252.47	8334.01	8334.01	8881.83	-547.82
Commercial/Industrial-I-T							Rs. 0.17 to 1.39 per KVA							
Commercial/Industrial-II-T	22,85,05,42,670		22,85,05,42,670	22,85,05,42,670		22,85,05,42,670			2175.95		2175.95	2175.95	2576.63	-400.68
Other (Specify) WW														
<b>Total</b>	<b>89,32,56,29,769</b>	<b>12,67,13,50,000</b>	<b>51,99,69,79,769</b>	<b>39,32,56,29,769</b>	<b>12,67,13,50,000</b>	<b>51,99,69,79,769</b>			<b>9491.31</b>	<b>8252.47</b>	<b>17743.78</b>	<b>17743.78</b>	<b>19276.74</b>	<b>-532.96</b>

Note: The Excess amount received of Rs. 532.96 crore will be adjusted towards carrying cost and clearance of liquidation dues.

sd/  
Finance Advisor  
PSPCL, Patiala

*[Signature]*  
Dy. C.E./D.S.M.

RSPCL, Patiala

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**PSPCL**  
PUNJAB STATE POWER  
CORPORATION LTD.

