

# Annual Energy Audit Report (FY 2023-24)

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## Designated Consumer (DIS0009KR)

**M/s Bangalore Electricity Supply Company Limited (BESCOM)**

BESCOM, Corporate Office, K.R. Circle  
Bangalore– 560001

**Conducted By**



**M/s EAST COAST SUSTAINABLE (P) LTD**

6-80/1, PRIYA GARDENS, P.O.-SIMHACHALAM, VISAKHAPATNAM  
ANDHRA PRADESH – 530028  
CIN: U74999AP2018PTC108807  
[www.eastcoast.net.in](http://www.eastcoast.net.in)

**July 2024**

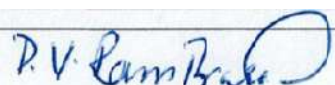
Bureau of Energy Efficiency  
Ministry of Power, Govt. of India  
4th Floor, Sewa Bhawan  
R. K. Puram,  
New Delhi - 110066

Subject: Energy Audit Report of Bangalore Electricity Supply Company Ltd (Designated Consumer Number: DIS0009KR)

Dear Sir

Please find herewith the Energy Audit Report of Bangalore Electricity Supply Company Ltd (Designated Consumer Number: DIS0009KR) prepared as per the Bureau of Energy Efficiency regulations for Manner and Intervals for Conduct of Energy Audit in electricity distribution companies (vide Bureau of Energy Efficiency notification dated 6<sup>th</sup> October 2021).

The Energy Audit Report is for the financial year 2023-2024.



**P V Ramprasad, CEng(UK)**  
**Accredited Energy Auditor (BEE)**  
**CEA-1573, AEA-0330**

Pulavarty Veera Ramprasad,  
Accredited Energy Auditor (A0330)  
East-Coast Sustainable Pvt Ltd,  
6-80/1, Priya Gardens,  
P.O. Simhachallam,  
Visakhapatnam,  
Andhra Pradesh  
530 028



Chief General Manager (Operations)  
BESCOM Corporate Office,  
Chief General Manager (Operations),  
Bangalore Electricity Supply Co, Ltd,  
BESCOM Corporate office,  
K R Circle,  
Bangalore,  
Karnataka  
560 001

To,  
General Manager (Meters and Commercial)  
Bangalore Electricity Supply Company Limited  
Corporate office, K R Circle, Bangalore  
Bangalore - 560001

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The Energy Audit Report is for the financial year 2023-2024.

The Energy Audit Report has been prepared based on your work award number 99/2024-25 dated 16-04-2024. The Energy Audit Report has been submitted to Bangalore Electricity Supply Company Ltd on the 10<sup>th</sup> of July 24.



**P V Ramprasad, CEng(UK)**  
**Accredited Energy Auditor (BEE)**  
**CEA-1573, AEA-0330**

Mr. Pulavarty Veera Ramprasad,  
Accredited Energy Auditor (A0330)  
East-Coast Sustainable Pvt Ltd,  
6-80/1, Priya Gardens,  
P.O. Simhachallam,  
Visakhapatnam.  
Andhra Pradesh  
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## ACKNOWLEDGEMENT

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**East Coast Sustainable Pvt Limited (ECSPL)** places on records its deep gratitude to the progressive management of **Bangalore Electricity Supply Company Limited (BESCOM), Bangalore** for entrusting the work of Annual Energy Audit for FY 2023-2024 as per BEE regulations.

ECSPL wishes to thank the following officials for their kind support extended during Annual Energy Audit.

1. Mr. C Basavanna, CGM (Operations)
2. Mr. Yogesh B.K., General Manager (El) (M&C)
3. Mr. H.B. Basavaraju, DGM, Energy Audit (Energy Auditor)
4. Mrs. Liji Joy, AGM, Energy Audit
5. Ms. Anupama, AGM, Energy Audit (IT Manager)

ECSPL also wishes to thank all other executives and staff of BESCOM for their excellent cooperation and support for successful completion of Energy Audit.

**ENERGY AUDIT TEAM  
EAST COAST SUSTAINABLE PRIVATE LIMITED  
VISA KHAPATNAM**



## Annual Energy Audit Report of BESCOM, Bangalore

### STUDY TEAM

#### Team 1 (Energy Cell, BESCOM)

Sr. No	Name	Designation	Department	Email ID	Contact Number
<b>Head of Energy Cell</b>					
1	Mr. C. Basavanna	C.G.M	Operations		080-223522487
2	Mr. Yogesh B.K.	General Manager (El) (M&C)	Meters and Commercial	eabescom17@gmail.com	8277893903
<b>Energy Manager</b>					
3	Mr. H.B. Basavaraju	DGM, CEA-6827	Energy Audit	eabescom17@gmail.com, gmmcom123@gmail.com	9449844860
<b>Other Member of Energy Cell</b>					
4	Ms Anupama	AGM(IT Manager)	Energy Audit		
5	Mrs. Liji Joy	AGM	Energy Audit		

#### Team 2 (EmAEA Firm)

Sr. No	Name	Qualification	EmAEA/AEA/E A/EM Registration No.	Experience in years	Sector
<b>Team Leader</b>					
1	Mr. P.V. Ramprasad	MBA, PG Diploma in Energy Management, B.E., (Mechanical Engineering)	AEA-0330	25+	DISCOM+ Other Sectors
<b>Team Head / Sector Expert</b>					
2	Mr. R V Ramana Rao	BE (Elect), BL, FIE. DIS. Chartered Engineer (IEI) Supervisory License Holder by Govt., of AP	EA-1600	34	DISCOM
<b>Certified Energy Auditor</b>					
3	Mr. V Sri Rama Chandra Murthy	MBA, PG Diploma in Energy Management, B.Tech (Electrical & Electronics Engineering)	CEA-8619	30+	DISCOM
<b>Team Members</b>					
4	Mr. S. Basheer Ahmmad	B. Tech (Electrical & Electronics Engineering)	-	2	All
5	Mr. C. Srinivasa Raju	B. Tech (Electrical & Electronics Engineering)	-	1	All



## 1. EXECUTIVE SUMMARY

### 1.1 BACKGROUND

East Coast Sustainable Private Limited was entrusted the job of carrying out an annual energy audit for the financial year 2023-2024 and preparation of the annual energy audit report of **Bangalore Electricity Supply Company Limited (BESCOM)**. BESCOM subsequently submits the annual energy audit report to the Bureau of Energy Efficiency and respective State Designated Agency as per the provisions and mandate of Gazette on Energy Accounting and Audit of Distribution Company of Bureau of Energy Efficiency (BEE), Ministry of Power, Government of India.

The approach adopted for energy audit is summarised as follows:

- Desk review of the Proforma and other supporting documents;
- Visit to the DC, review of the evidence presented by the DC on the Proforma, preparation of the minutes of meeting by interacting with various executives of the DC so as to understand and document the process followed by the DC in filling the Proforma, field visit to the DC's various departments, divisions, substations, feeders, transformers, etc to check on the ground level procedures and processes, etc.
- Post visit review of the data collected and preparation of the energy audit report.

The period of the energy audit is summarised as follows:

- Data collection between 30<sup>th</sup> April to 25<sup>th</sup> June 2024;
- Interactions with BESCOM executives and verification of the data was carried on 26<sup>th</sup> June 2024;
- Field visit was carried on 27<sup>th</sup> June 2024;
- Review and report preparation between 28<sup>th</sup> June – 10<sup>th</sup> July 2024.
- The Energy Audit Report has been submitted on 10<sup>th</sup> July 2024.

BESCOM is responsible for power distribution in eight districts of Karnataka (Bangalore Urban, Bangalore Rural, Chikkaballapura, Kolar, Davanagere, Tumkur, Chitradurga and Ramanagara). BESCOM covers an area of 41,092 Sq. Kms. with a population of over 207 lakhs. The company has 4 operating Zones – Bangalore Metropolitan Area Zone (North), Bangalore Metropolitan Area Zone (South), Bangalore Rural Area Zone and Chitradurga Zone covering 9 Circles, 32 Divisions, 147 Sub-divisions and 534 Section Offices. In the year 1999, Karnataka embarked on a major reform of the power sector. As a first step, Karnataka Electricity Board (KEB) was dissolved and in its place, the Karnataka Power Transmission Corporation Limited (KPTCL) was incorporated. This was followed by the constitution of Karnataka Electricity Regulatory Commission (KERC) in November 1999. In the next phase of the reform process, the transmission and distribution business managed by KPTCL were unbundled in June 2002. Five new distribution companies were formed to distribute power in Karnataka and BESCOM has taken over the responsibility from KPTCL for the distribution of electricity in 8 districts and commenced its operations from 1st June 2002.

**1.2 ENERGY ACCOUNTS AND PERFORMANCE OF FY 2023-24****1.2.1 DISCOM WIDE ENERGY ACCOUNTING**

<b>Form-Input energy (Details of Input Energy &amp; Infrastructure)</b>		
<b>Sl. No.</b>	<b>Parameters</b>	<b>Value</b>
A.1	Input Energy purchased (Million Units (MU))	42,586.86
A.2	Transmission loss (%)	6.5%
A.3	Transmission loss (MU)	2,765.859
A.4	Energy sold outside the periphery (MU)	18.43
A.5	Open access sale (MU)	16.65
A.6	EHT sale (MU)	3,477.31
A.7	Net input energy (received at DISCOM periphery or at distribution point, after adjustment) (MU)	39,821.00

The technical losses and aggregate technical & commercial (AT&C) losses for FY 2023-24 are estimated and presented in the following table.

Losses	<b>T&amp;D Losses</b>		<b>AT&amp;C loss (%)</b>
	<b>T&amp;D loss (MU)</b>	<b>T&amp;D loss (%)</b>	
	3,636	9.13%	14%

The total sales (metered and assessed) for various consumer categories are presented in the following table:

<b>Sl No</b>	<b>Type of Consumers</b>	<b>Category of Consumers (EHT/HT/LT/Others)</b>	<b>Voltage Level (In Voltage)</b>	<b>No of Consumers</b>	<b>Total Consumption (In MU)</b>
1	Domestic	LT	230-400V	10532928	9410.61
2	Commercial	LT	230-400V	1338008	2846.92
3	IP Sets	LT	400V	1031591	10222.64
4	Hor. & Nur. & Coffee/Tea & Rubber (Metered)	LT	230-400V	2216	7.51
5	Hor. & Nur. & Coffee/Tea & Rubber (Flat)				
6	Heating and Motive Power				
7	Water Supply	LT	400V	94705	1569.08
8	Public Lighting	LT	230V	87769	658.59
9	HT Water Supply	HT	11KV	318	884.64
10	HT Industrial	HT	11KV	8618	5437.88
11	Industrial (Small)	LT	400V	249081	1452.04
12	Industrial (Medium)				
13	HT Commercial	HT	11KV	9198	2646.26
14	Applicable to Government Hospitals & Hospitals	HT	11KV	1118	429.56

## Annual Energy Audit Report of BESCOM, Bangalore

Sl No	Type of Consumers	Category of Consumers (EHT/HT/LT/Others)	Voltage Level (In Voltage)	No of Consumers	Total Consumption (In MU)
15	Lift Irrigation Schemes/Lift Irrigation Societies	HT	11KV	86	90.39
16	HT Res. Apartments Applicable to all areas	HT	11KV	560	103.83
17	Mixed Load				
18	Government offices and department				
19	Others-1 (if any, specify in remarks)	HT	11KV	2324	177.56
20	Others-2 (if any, specify in remarks)	LT	230-400V	1075141	225.77
21	Stn Aux- It is not included in DCB				21.81
	<b>Grand Total</b>			<b>14433661</b>	<b>36185.07</b>

### **1.3 STATUS OF METERING INFRASTRUCTURE FOR ENERGY ACCOUNTING AND AUDITING**

<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Subclause Details</b>	<b>Present Status</b>
5	Pre-requisites for annual energy audit and periodic energy accounting	a	Identification and mapping of all of the electrical network assets	Under RAPDRP Areas GIS Mapping of 25 towns has been completed. Under IPDS (Integrated Power Distribution Scheme) survey has been completed.
		b	Identification and mapping of high tension and low-tension consumers	All the HT and LT consumers have been mapped. .(RAPDRP)
		c	Development and implementation of information technology enabled energy accounting and audit system, including associated software	DC has energy accounting and audit system including associated software. DC uses MS Infinite computer solutions (for RAPDRP) and Nsoft Software (For Non RAPDRP).
		d	Electricity distribution company ensures the installation of functional meters for all consumers, transformers and feeders. Meter installation is done in a phased manner within a period of three financial years from the date of the commencement of these regulations in accordance with the trajectory set out in the First Schedule	All feeders up to 11kV have been metered.  All consumers have been metered except consumers under agriculture category.  As of 31st March 2024 of the total 4,97,991 distribution transformers, 119,632 (Plus 13,360 nos. of the IP feeding DTCs are metered prior to directions from Energy Department) distribution transformers have been metered. Out of 3,64,999 nos. of unmetered DTs, 87,067 nos. of DTs are to be metered. The balance DTs are on the exclusive IP feeder / IP Sets, which are exempted from metering.

## Annual Energy Audit Report of BESCOM, Bangalore

Clause No	Clause Details	Sub Clause Number	Subclause Details	Present Status
			d.1. 100% Communicable Feeder Metering integrated with AMI, by 31st December 2022 along with replacement of existing non-communicable feeder meters.	d.1. 100% of the feeders are having DLMS (Device Language Message Specification - Communicable Meters).
			<p>d.2. All Distribution Transformers (other than HVDS DT up to 25kVA and other DTs below 25 kVA) shall be metered with communicable meters. Communicable DT Metering for the following areas/ consumers to be completed by December 2023 and in balance areas by December 2025:</p> <p>d.2.1. All Electricity Divisions of 500 AMRUT cities, with AT&amp;C Losses &gt; 15%</p> <p>d.2.2. All Union Territories (for areas with technical difficulty, non-communicable meters may be installed)</p> <p>d.2.3. All Industrial and Commercial consumers</p> <p>d.2.4. All Government offices at Block level and above</p> <p>d.2.5. Other high loss areas i.e. rural areas with losses more than 25% and urban areas with losses more than 15%</p>	<p>d.2.1. Obtaining approval from Regulatory commission is under process for Advanced Metering Infrastructure (AMI) of DTC's in BESCOM Area.</p> <p>d.2.2. Not Relevant for DC.</p> <p>d.2.3. AMR works taken up under RAPDRP, IPDS and DDUGJY schemes for industrial HT-17193 nos. &amp; LT industrial &amp; commercial (above 40HP installations) for 12180 nos.</p> <p>Further, action is in progress for replacement of existing non-DLMS meters by DLMS meters of HT &amp; LT Industrial and Commercial installations.</p> <p>2.4 Proposal for AMI implementation to All Government offices at Block level and above is under process and yet to be taken up.</p> <p>d.2.5. DC intends to install communicable meters with AMI for <b>other high loss areas</b> i.e. rural areas with losses more than 14% and urban areas with losses more than 10% under Revamped Distribution Sector Scheme (RDSS) of REC.</p> <p>BESCOM has enabled AMR for 95872 nos. of DTC meters under various projects, however no meters are enabled with AMI. The contract period of AMR agencies expired in RAPDRP &amp; Non-RAPDRP area in March-2019. Due to the expiry of the existing contracts,</p>

**Annual Energy Audit Report of BESCOM, Bangalore**

<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Subclause Details</b>	<b>Present Status</b>
				to maintain the existing metering system works carried out before 2013 and to ensure proper operation of meters, metering system and modems, it was proposed to float tender under OPEX model. Due to the introduction of MoP-RDSS scheme wherein one of the major component is metering which includes DTCs, as per the direction of Management the OPEX proposal is shelved.
			<b>d.3. Prepaid Smart Consumer Metering</b> to be completed for all directly connected meters and AMR in case of other meters, by December 2023 in the following areas: d.3.1. All Electricity Divisions of 500 AMRUT cities, with AT&C Losses > 15%; d.3.2. All Union Territories (for areas with technical difficulty, prepaid meters to be installed); d.3.3. All Industrial and Commercial consumers; d.3.4. All Government offices at Block level and above; d.3.5. Other high loss areas i.e. rural areas with losses more than 25% and urban areas with losses more than 15%.	d.3.1. Installation of the smart meters has not yet commenced as the tender work is under process. As per KERC guidelines, all new consumers after 01-04-2024 have to be issued smart meters. However, because of Lok Sabha elections, BESCOM has requested for an extension up to 31-10-2024. d.3.2. Not Relevant for DC. d.3.3. AMR works taken up under RAPDRP, IPDS and DDUGJY schemes for industrial HT-17193 nos. & LT industrial & commercial (above 40HP installations) for 12180 nos. Further, action is in progress for replacement of existing non-DLMS meters by DLMS meters of HT & LT Industrial and Commercial installations. d.3.4. Proposal for AMI implementation to All Government offices at Block level and above is under process and yet to be taken up. d.3.5. DC does not have such magnitude of losses in rural (25%) and urban (15%).

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<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Subclause Details</b>	<b>Present Status</b>
			d.4. Consumer Metering: 98% by FY 2022-23 99% by FY 2023-24	92.86% Consumer metering (Total Installations-14433661, Metered-13402579) has been completed as on 31st March 2024. All installations are metered except IP set installations below 10HP.
			d.5. Targets for functional meters— Meter FY 22-23 FY 23-24 FY24-25 Feeder metering 98.5% 99.5% 99.5% DT metering 90% 95% 98% Consumer metering 93% 96% 98%	Non-functional meters are being replaced on an ongoing basis. During the year FY 24, 66,954 meters were replaced and the closing balance of non-functional meters was 6,823 as of 31st March 2024 Vs 10,975 as of 31st March 2023.  Feeder Metering- 100% Monitored by KPTCL. DT Metering - 26.71% Consumer Metering - 92.86%
		e	e.1. All distribution transformers (other than high voltage distribution system up to 25kVA and other distribution system below 25 kVA) is metered with communicable meters. e.2. And existing non communicable distribution transformer meters is replaced with communicable meters and integrated with advanced metering infrastructure.	Obtaining approval from Regulatory commission is under process for AMI of DTC's in BESCOM Area.



**Annual Energy Audit Report of BESCOM, Bangalore**

<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Subclause Details</b>	<b>Present Status</b>
6	Reporting requirements for annual energy audit and periodic energy accounting	f	Electricity distribution company has established an information technology enabled system to create energy accounting reports without any manual interference and such systems may be within a period of three years from the date of the commencement of these regulations in case of urban and priority area consumers; and within five years from the date of the commencement of these regulations in case of rural consumers	DC has energy accounting and audit system including associated software. DC uses MS Infinite computer solutions (for RAPDRP) and Nsoft Software (For Non RAPDRP).
		g	Electricity distribution company has a centralized energy accounting and audit cell comprising of— (i) a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years; and (ii) a financial manager having professional experience of not less than five years	The DC has energy audit department with the following staff 1. A nodal officer- CGM-Operations 2. Designated energy manager who is a qualified energy auditor- DGM/EA 3. A qualified information technology manager- AGM/IT 4. A qualified financial manager- AO Finance
		a	Electricity distribution company has a nodal officer, who is a full time employee of the electricity distribution company in the rank of the Chief Engineer or above, for the purpose of reporting of the annual energy audit and periodic energy accounting and communicate the same to the Bureau.	The DC is complying with this requirement

## Annual Energy Audit Report of BESCOM, Bangalore

Clause No	Clause Details	Sub Clause Number	Subclause Details	Present Status
		b	Electricity distribution company ensures that the energy accounting data is generated from a metering system or till such time the metering system is not in place, by an agreed method of assumption as may be prescribed by the State Commission	DC has energy accounting and audit system including associated software. DC uses MS Infinite computer solutions(for RAPDRP) and Nsoft Software (For Non RAPDRP). The agricultural unmetered energy is accounted based on KERC guidelines.
		c	Metering of distribution transformers at High Voltage Distribution System up to 25KVA is done on cluster meter installed by the electricity distribution company	All HVDS installations are dedicated EIP feeders and meter is provided at Sub-station level.
		d	The energy accounting and audit system and software is developed to create monthly, quarterly and yearly energy accounting reports.	The DC has software's for energy accounting and audit and the software's are having the capability to create monthly, quarterly and yearly energy accounting reports.
		e	Electricity distribution company has provided the details of the information technology system in place as specified in clause (f) of regulation 5 that ensures minimal manual intervention in creating the energy accounting reports and any manual intervention of any nature, in respect of the period specified therein, shall be clearly indicated in the periodic energy accounting report.	The DC has software's for energy accounting and audit and the software's are having the capability to create monthly, quarterly and yearly energy accounting reports.

#### 1.4 DETAILS OF ENERGY CONSERVATION MEASURES TAKEN BY BESCOM DURING 2023-24

##### Implementation of Solar Rooftop PV (SRTPV) system in BESCOM:

- The Government of Karnataka has announced the Renewable Energy Policy 2022 to 2027 for grid connected solar rooftop system under net-metering basis with target of 1,000MW to be achieved by 2027.
- KERC is issuing the tariff order and other operational clarification from time to time, related to SRTPV on multiple SRTPV installations/ Government buildings etc.
- Under IPDS scheme for installation of SRTPV plants on rooftop of BESCOM owned buildings, 51 nos. of installations with capacity of 673.8kWp has been commissioned.
- Under the Government of India funds of 13<sup>th</sup> Finance Commission, solar rooftop plants have been commissioned on 134 Government Buildings for a cumulative capacity of 7.825 MW as on 31.03.2024.
- The commissioned SRTPV installations from 07.11.2014 to 31.03.2024 is 9207 nos. with capacity of 293.03 MW.

Period	Commissioned nos.	Commissioned Capacity in MW
2023-24	3138	63.30

##### Implementation of MNRE Phase-II Rooftop Solar Program:

- The MNRE issued guidelines for installation of solar rooftop plants under the simplified procedure of the scheme on 10.06.2022 and accordingly, BESCOM is implementing MNRE Phase-II Rooftop Solar Program under simplified procedure.
- The MNRE has also developed web portal for facilitating application by Consumers under simplified procedure at <https://solarrooftop.gov.in/> and the BESCOM has integrated its online portal <https://srtpv.bescom.org/SRTPV/home.jsp> with MNRE portal for facilitating processing of applications through BESCOM portal.
- Further, on 13.02.2024, the simplified procedure was re-launched as “PM SuryaGhar” Scheme and subsidy structure was also revised. The following table shows the details of subsidy revision done by MNRE under simplified procedure.

## Annual Energy Audit Report of BESCOM, Bangalore

Sl. No.	Type of household	Subsidy Applicable as per OM dated 27.01.2023	Subsidy Applicable as per OM dated 05.01.2024	Subsidy Applicable as per OM dated 07.03.2024 (Present subsidy available)
1	Individual Household	<ul style="list-style-type: none"> <li>Rs. 14,588/- per kW up to 2 kW</li> <li>Rs. 7,294/- per kW for additional capacity up to 3 kW</li> <li>Total Subsidy for systems larger than 3 kW capped at Rs. 78,000</li> </ul>	<ul style="list-style-type: none"> <li>Rs. 30,000/- per kW up to 2 kW</li> <li>Rs. 18,000/- per kW for additional capacity up to 3 kW</li> <li>Total Subsidy for systems larger than 3 kW capped at Rs. 78,000</li> </ul>	<ul style="list-style-type: none"> <li>Rs. 30,000/- per kW up to 2 kW</li> <li>Rs. 18,000/- per kW for additional capacity up to 3 kW</li> <li>Total Subsidy for systems larger than 3 kW capped at Rs. 78,000</li> </ul>
2	Resident Welfare Associations/ Group Housing Societies (RWA/GHS)	Rs. 7,294/kW for common facilities up to 500 kWp @ 3 kWp per house.	Rs. 18000/kW for common facilities up to 500 kWp @ 3 kWp per house.	Rs. 18000/kW for common facilities up to 500 kWp @ 3 kWp per house.

### Implementation of Mandatory use of Solar Water Heaters:

As a Demand Side Management program, BESCOM has made mandatory use of Solar Water Heaters and a total of 38,874 Solar Water Heaters were installed during 2023-24 and the estimated savings are summarized below:

Energy savings*	MUs
Annual Energy savings for 38,874 nos. of SWH	34.99
Per day Energy savings for 38,874 nos. of SWH	0.12
* By considering avg. 2kW for 1½ hrs per day per SWH system, for 300 days	

### Providing timer switches to the street light installations:

BESCOM has requested municipal bodies to install timer switches to street lights resulting in energy savings and reduces evening peak hour load on grid. The status of timer switches provided to street lights in BESCOM area is as follows:

## Annual Energy Audit Report of BESCOM, Bangalore

Sl No	Zone	No.of Str.light ckt existing as on Mar-21	No.of Timer switches fixed as on Mar-24	No.of Timer switches in working condition as on Mar-24	No.of Timer switches <u>not</u> in working condition as on Mar-24	Balance No. of Timer switches to be fixed as on Mar-24
1	BMANZ	9391	7324	5634	1690	2067
2	BMAZ	13916	9703	7242	2461	4213
3	BRAZ	22232	4831	4525	308	17401
4	CTAZ	21791	5586	4760	826	16205
Total		67330	27444	22161	5283	39886

### Energy Awareness Program:

Energy awareness programs were carried by different communication modes like:

- Advertisements in Newspapers, Magazines, Souvenir etc.
- Through stalls.
- On Hoardings.
- Jingles in Doordarshan, AIR, Big FM etc.
- Posters, pamphlets, Brouchers, etc.
- Through customer interaction Meeting by Sub Division officers/Section Officers with Grama Panchayath and Zilla Parishat offices.
- Vidhyuth Adalat on every 3rd Saturday at village level by BESCOM officers.
- Through interaction meetings at Taluk development/District development meeting.

### Earth Hour:

Earth Hour-2024 was observed on 23<sup>rd</sup> March 2024 between 8.30pm to 9.30pm by BESCOM Officers/Employees and the consumers, by switching 'OFF' unnecessary lights.

### Details of Energy Conservation measures proposed for future by BESCOM

Replacement of inefficient ceiling fans in the domestic sector with superefficient BEE 5-star rated BLDC fans.

DSM Activity	Power Consumption per fan	No's proposed for replacement	Energy Savings per annum (MU)
Replacement of inefficient ceiling fan with superefficient BLDC fan for 1 lakh domestic consumers	30-Watt(avg) for BLDC fans 70 Watt (avg) for Conventional ceiling fans	1,00,000	14.6 MU
Note: By considering average saving of 40 watts per fan, 10 hrs per day, 365 days a year and 1,00,000 no's fans.			

#### a. COMPLIANCE TO RENEWABLE PURCHASE OBLIGATIONS (RPO)

As per KERC notification vide Y/01/22/462 dated 12<sup>th</sup> July 2022, BESCOM RPO obligations for year 2023-2024 was 25.25%. KERC notification does not specify quantum of RPO

obligations to be met from solar and non-solar. For the FY2023-24, BESCOM achievement of RPO with respect to target was 21.92%.

**b. PEAK LOAD**

BESCOM peak demand of a day was observed on the 15th of March 2024 at 10:46 IST (8,232 Mega Watts) and the maximum consumption of a day was observed on the 22nd of March 2024 (165.51 million units). BESCOM have implemented the following projects to strengthen the existing network to withstand the upcoming peak load.

- a) In urban areas, OH HT Line converted to UG Cable
- b) New sub-station works are under progress.
- c) Reconductoring of age-old conductors to higher-size conductors.
- d) Bifurcation of overloaded feeders by providing new feeders.

**c. DETAILS OF TOWN-WISE T&D LOSSES**

Details of town wise losses which were covered under RAPDRP is tabulated below:

<b>Details of Town-wise T&amp;D Losses</b>							
<b>Sl. No.</b>	<b>Name of the Town</b>	<b>% T&amp;D Loss</b>					
		<b>FY-19</b>	<b>FY-20</b>	<b>FY-21</b>	<b>FY-22</b>	<b>FY-23</b>	<b>FY-24</b>
1	ANEKAL	8.3	8.12	13.02	9.33	8	6.88
2	BANGALORE	6.98	6.94	7.2	6.07	5.48	4.40
3	BANGARAPETE	11.99	13.02	6.84	8.18	6.66	6.59
4	CHALLAKERE	12.06	11.57	0.18	9.79	7.71	9.73
5	CHANNAPATNA	7.61	9.36	11.42	8.02	7.01	8.54
6	CHIKKABALLAPURA	12.33	10.31	3.67	8.33	8.21	8.39
7	CHINTHAMANI	15.06	13.37	13.04	11.07	9.26	8.31
8	CHITRADURGA	9.94	8.95	9.58	7.97	6.97	7.41
9	DAVANAGERE	10.49	9.29	6.42	7.66	7.9	8.01
10	DODDABALLAPURA	16.91	13.8	9.22	12.4	8.79	10.17
11	GOWRIBIDANUR	17.6	14.91	7.02	9.55	9.07	7.59
12	HARAPPANAHALLI	9.01	14.87	10.31	6.96	6.85	7.15
13	HARIHARA	11.31	10.19	10.69	7.93	7.81	6.98
14	HIRIYUR	10.95	12.73	11.19	10.78	8.56	8.99
15	HOSAKOTE	12.26	11.34	5.04	6.18	6.21	4.89
16	KANAKAPUR	8.5	8.35	8.59	7.44	7.79	6.43
17	KGF	12.76	12.93	8.66	9.04	6.56	6.26
18	KOLAR	11.07	11.69	11.91	8.95	7.81	7.63
19	KUNIGAL	12.52	19.09	5.45	10.42	7.05	11.42

<b>Details of Town-wise T&amp;D Losses</b>							
<b>Sl. No.</b>	<b>Name of the Town</b>	<b>% T&amp;D Loss</b>					
		<b>FY-19</b>	<b>FY-20</b>	<b>FY-21</b>	<b>FY-22</b>	<b>FY-23</b>	<b>FY-24</b>
20	MULABAGILU	12	11.23	4.71	8.18	7.28	7.21
21	RAMANAGARA	4.63	4.72	1.46	7.35	5.81	6.24
22	SHIDLAGATTA	20.97	12.38	13	9.74	9.29	6.79
23	SIRA	15.04	11.05	1.55	11.37	8.58	9.47
24	TIPTUR	11.82	10.28	6.56	9.66	8.38	7.58
25	TUMKUR	16.55	17.04	17.36	9.55	6.53	7.21



## 2. SUMMARY OF CRITICAL ANALYSIS OF ENERGY AUDITOR AND MANAGEMENT ANALYSIS

### a. Summary of Critical Analysis by Energy Auditor and Management analysis

- i. **Compliance to BEE regulations** - The DISCOM has been submitting quarterly energy accounts as per BEE regulations and the DISCOM has posted them on their website as per BEE regulations. The DISCOM also formed Energy Audit Cell as per the regulations. DISCOM needs to increase its efforts on the metering of the Distribution Transformers to facilitate energy auditing at the DTR level.

**Management Analysis:** Energy Audit for DTRs which are metered is being done on a regular basis in all subdivisions. However, energy meters installation on DTRs has been proposed under RDSS Project.

- ii. **High loss feeders** – Feeder level energy audit is carried out on a regular basis (Monthly, quarterly, Annually) and feeders are segregated into high loss, medium loss and low loss feeders. DISCOM needs to increase its efforts in identifying feeders which can be acted upon for reduction of losses.

**Management Analysis:** Energy audit cell provides feeder wise loss data to the Divisions and Sub-Divisions for action. At the Divisions and Sub-Divisions regular meetings are held to ensure effective implementation.

- iii. **Category wise subsidy** - The DISCOM receives subsidy from Government of Karnataka for energy supplied to Irrigation Pump sets (up-to 10HP) and domestic consumers. The following is the summary for the year 2023-24.

Sl. No.	Particulars	Consumption (in kWh)	Demand (Rs in Crs.)	Subsidy released for 2022-23 (Rs. In Crs.)	Remarks *Balance subsidy to be received (Rs in Crs.)
1	Residential	9514442706	2633.83	2771.59	-137.75
2	Agriculture	10320537652	5594.67	4368.18	1677.69
	<b>Total</b>	<b>19834980358</b>	<b>8228.50</b>	<b>7139.77</b>	<b>1539.93</b>

**Management Analysis:** Balance subsidy to be received is carried forward and shall be received in due course.

### iv. Analysis on T&D Losses and AT&C Losses.

- **% Losses – Aggerate-** The overall Technical Loss (T&D Loss) is 9.13% and overall AT&C Loss is 14% for FY 2023-2024. This reflects an overall collection efficiency of 94.59%.

- **% Losses – Voltage Wise-** DISCOM has distribution of 11kV/415V only and is carrying out loss assessment of all 11 kV and 415 V levels (partially where DTR's are metered). The losses of which is 9.13% and overall AT&C Loss is 14% for FY 2023-2024. DISCOM needs to carry out energy accounting at all the voltage levels.
- **Division wise % Losses summary** - The range of T&D losses, collection efficiency and AT&C losses among the divisions is presented below:

<b>T &amp; D loss (MU)</b>	3636
<b>T &amp; D loss (%)</b>	9.13%
<b>T &amp; D loss Range</b>	5% -15%
<b>Division with highest T &amp; D loss</b>	Hiriyuru
<b>Division with lowest T &amp; D loss</b>	Jayanagar
<b>Collection Efficiency</b>	94.59%
<b>Collection Efficiency Range</b>	77.81% - 98.46%
<b>AT &amp; C loss (%)</b>	14%
<b>AT &amp; C loss Range</b>	7% - 31%
<b>Division with lowest AT&amp;C loss</b>	Koramangala
<b>Division with highest AT&amp;C loss</b>	Chinthamani

- **Division wise % Losses – T&D losses:** The following divisions of the DISCOM are having T&D losses more than the average value of 9.13% and requires attention.

<b>Sl. No.</b>	<b>Division</b>	<b>T&amp;D loss (MU)</b>	<b>T&amp;D loss (%)</b>
1	NELAMANGALA	163	11%
2	HOSKOTE	213	12%
3	MAGADI	66	10%
4	KOLAR	125	12%
5	KGF	162	11%
6	CHIKKABALLAPURA	119	10%
7	CHINTHAMANI	90	11%
8	DAVANAGERE	188	11%
9	CHITRADURGA	187	14%
10	HARIHARA	117	11%
11	HIRIYURU	173	15%
12	TUMKUR	287	14%
13	TIPTUR	133	12%

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14	MADHUGIRI	232	15%
15	KUNIGAL	57	12%

- **Division wise collection efficiency:** The following divisions of the DISCOM are having collection efficiency less than the average value 95% and requires special attention.

Sl. No.	Name of Division	Commercial Parameter		Collection Efficiency
		Billed Amount in Rs. Crore	Collected Amount in Rs. Crore	
1	HOSKOTE	1494.0544	1388.0983	92.91%
2	KANAKAPUR	725.9008	693.5443	95.54%
3	KOLAR	707.3064	588.2507	81.37%
4	KGF	1073.8692	854.5861	79.58%
5	CHIKKABALLAPURA	790.8078	673.2472	85.13%
6	CHINTHAMANI	504.5538	392.6152	77.81%
7	DAVANAGERE	1053.1680	1003.1279	95.25%
8	CHITRADURGA	767.6284	726.2210	94.61%
9	HARIHARA	656.5711	590.7270	89.97%
10	HIRIYURU	688.6672	608.4396	88.35%
11	TUMKUR	1259.8107	1200.9506	95.33%
12	TIPTUR	605.4830	564.9096	93.30%
13	MADHUGIRI	889.6144	774.4276	87.05%
14	KUNIGAL	288.8256	263.1956	91.13%

- **Category wise collection efficiency:** Category wise input energy cannot be estimated on account of mixed feeders. Accordingly, T&D Losses and AT&C Losses for consumer categories could not be provided. However, collection efficiencies of various consumer categories are tabulated below. It is recommended to focus on the collection from the Category “Others”.

Sr. No.	Category	Collection Efficiency
1	Residential	98.64%
2	Agricultural	99.62%
3	Commercial/Industrial-LT	97.87%
4	Commercial/Industrial-HT	99.90%
5	Others	62.41%
	<b>Average</b>	<b>94.59%</b>

**Management Analysis:** During FY 2023-24 in all Tariff achievement of Collection Efficiency is 94.59%. Detailed reasons for decrease in collection efficiency are summarized below:

- In LT4A Irrigation Pump set, Cumulative Demand is Rs. 5594.67 Crores, whereas Deemed Collection is Rs. 5589.29 Crores, but actual Subsidy Received from GoK is Rs.4368.18 Crores, Shortfall of Subsidy is Rs. 1226.49 Crores.

- In LT6a [Water Supply] Cumulative Demand is Rs. 1673.30 Crores and the Cumulative Collection is Rs. 389.02 Crores. The Current Year Short Fall is Rs. 1284.28 Crores. Collection Efficiency is 23.25%.
- In LT6b [Street Light] Cumulative Demand is Rs. 714.38 Crores and the Cumulative Collection is Rs. 425.21 Crores. The Current Year Short Fall is Rs. 289.17 Crores. Collection Efficiency is 59.52%.

LT6a [Water Supply] & LT6b [Street Light] includes Government Department arrears such as BWSSB, BBMP, Rural Local Body, Urban Local Body. The recovery of Government dues depends upon the funds released by it, BESCOM on ongoing basis follows up with the Government for the recovery of dues.

#### **b. EXTENT REGULATIONS AND ROLE OF BEE**

Bureau of Energy Efficiency (BEE) notified the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit (Accounting) in Electricity Distribution Companies) Regulations, 2021 on 6<sup>th</sup> October 2021. As per the regulation, all Electricity Distribution Companies are mandated to conduct annual energy audit and periodic energy accounting on quarterly basis.

Owing to the impact of energy auditing on the entire distribution and retail supply business and absence of an existing framework with dedicated focus on the same, it was imperative to develop a set of comprehensive guidelines that all Distribution utilities across India can follow and adhere to.

These Regulations for Energy audit in Electricity Distribution Companies provides broad framework for conduct of Annual Energy Audit though and Quarterly Periodic Energy Accounting with necessary Pre-requisites and reporting requirements to be met.

The extant regulations relevant or reproduced as under:

**“5. Pre-requisites for annual energy audit and periodic energy accounting** — Save as otherwise provided, every electricity distribution company shall undertake all actions as may be required for the annual energy audit and periodic energy accounting before the start of the relevant financial year, including the following actions, namely: —

- (a) the identification and mapping of all of the electrical network assets;
- (b) the identification and mapping of high tension and low-tension consumers;
- (c) the development and implementation of information technology enabled energy accounting and audit system, including associated software;
- (d) the electricity distribution company shall ensure the installation of functional meters for all consumers, transformers and feeders:

Provided that meter installation may be done in a phased manner within a period of three financial years from the date of the commencement of these regulations in accordance with the trajectory set out in the First Schedule;

- (e) all distribution transformers (other than high voltage distribution system up to 25 kVA and other distribution system below 25 kVA) shall be metered with communicable meters. And existing noncommunicable distribution transformer meters shall be replaced with communicable meters and integrated with advanced metering infrastructure;
- (f) the electricity distribution company shall establish an information technology enabled system to create energy accounting reports without any manual interference:

Provided that such system may be established—

- (i) within a period of three years from the date of the commencement of these regulations in case of urban and priority area consumers; and
- (ii) within five years from the date of the commencement of these regulations in case of rural consumers;
- (g) the electricity distribution company shall create a centralized energy accounting and audit cell comprising of—
  - (i) a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years; and
  - (ii) a financial manager having professional experience of not less than five years;
- (h) any other requisite that Bureau may direct for energy audit and accounting purpose.

**6. Reporting requirements for annual energy audit and periodic energy accounting—**

- (1) Every electricity distribution company shall designate a nodal officer, who shall be a full time employee of the electricity distribution company in the rank of the Chief Engineer or above, for the purpose of reporting of the annual energy audit and periodic energy accounting and communicate the same to the Bureau.
- (2) Every electricity distribution company shall ensure that the energy accounting data is generated from a metering system or till such time the metering system is not in place, by an agreed method of assumption as may be prescribed by the State Commission.
- (3) Metering of distribution transformers at High Voltage Distribution System up to 25KVA can be done on cluster meter installed by each electricity distribution company.
- (4) The energy accounting and audit system and software shall be developed to create monthly, quarterly and yearly energy accounting reports.
- (5) Every electricity distribution company shall provide the details of the information technology system in place as specified in clause (f) of regulation 5 that ensures minimal manual intervention in creating the energy accounting reports and any manual intervention of any nature, in respect of the period specified therein, shall be clearly indicated in the periodic energy accounting report.

**7. Manner of annual energy audit and periodic energy accounting. –**

- (1) Every annual energy audit and periodic energy accounting under these regulations shall be conducted in the following manner, namely: —
  - (a) verification of existing pattern of energy distribution across periphery of electricity distribution company; and
  - (b) verification of accounted energy flow submitted by electricity distribution company at all applicable voltage levels of the distribution network,—
    - (i) energy flow between transmission and 66kV/33kV/11kV incoming distribution feeders;
    - (ii) energy flow between 66kV/33kV outgoing and 11kV/6.6kV incoming feeders;
    - (iii) energy flow between 11 kV/6.6kV feeders and distribution transformers, or high voltage distribution system;
    - (iv) energy flow between distribution transformer, or high voltage distribution system to end consumer, including ring main system;
    - (v) energy flow between Feeder to end-consumer; and
    - (vi) energy flow between 66/33/11 kV directly to consumer.
- (2) The accredited energy auditor, in consultation with the nodal officer of the electricity distribution company shall, —
  - (a) develop a scope of work for the conduct of energy audit required under these regulations;

- (b) agree on best practice procedures on accounting of energy distributed across the network; and
  - (c) collect data on energy received, and distributed, covered within the scope of energy audit.
- (3) The accredited energy auditor shall—
- (a) verify the accuracy of the data collected in consultation with the nodal officer of the electricity distribution companies as per standard practice to assess the validity of the data collected; and
  - (b) analyse and process the data with respect to—
    - (i) consistency of data monitoring compared to the collected data;
    - (ii) recommendations to facilitate energy accounting and improve energy efficiency; and
    - (iii) with respect to the purpose of energy accounting in reducing losses for the electricity distribution company.

**8. Prioritization and preparation of action plan.** - (1) The annual energy audit report submitted by accredited energy auditor in consultation with the nodal officer and periodic energy accounting report submitted by energy manager of the electricity distribution company shall include following activities, namely: —

- (I) data collection and verification of energy distribution—
- (a) monthly energy consumption data of consumers and system metering from electricity distribution company at following voltage levels —
    - (i) 33/66/132 kV levels, including 33/66/132kV feeder and Sub-station;
    - (ii) 11/22 kV levels, including 11/22 kV feeder and Distribution Sub-station;
    - (iii) 440 V level, including Distribution Transformer and low-tension consumer;
  - (b) input energy details for all metered input points;
  - (c) boundary meter details;
  - (d) source of energy supply (e.g. electricity from grid or self-generation), including generation from renewables.
  - (e) review of the current consumption practices in order to identify the energy loss in the system;
- (II) data verification, validation and correction—
- (a) a monitoring and verification protocol to quantify on annual basis the impact of each measure with respect to energy conservation and cost reduction for reporting to Bureau and the concerned State designated agency;
  - (b) verification and correction of input energy, taking into account the following—
    - (i) recorded system meter reading by metering agency;
    - (ii) all the input points of transmission system;
    - (iii) details provided by the transmission unit;
    - (iv) relevant records at each electricity test division for each month;
    - (v) recorded meter reading at all export points (where energy sent outside the State is from the distribution system); and
    - (vi) system loading and corresponding infrastructure;
  - (c) energy supplied to Open Access Consumers which is directly purchased by Open Access Consumers from any supplier other than electricity distribution company; and
  - (d) verify and validate the system metering data provided by metering agency through random field visit (particularly for data irregularity).”

**c. PURPOSE OF AUDIT AND ACCOUNTING REPORT**

Energy Accounting means accounting of all energy inflows at various voltage levels in the distribution periphery of the network, including renewable energy generation and open access consumers, and energy consumption by the end consumers. Energy accounting and a consequent annual energy audit would help to identify areas of high loss and pilferage, and thereafter focus efforts to take corrective action.

**d. PERIOD OF ENERGY AUDITING AND ACCOUNTING**

The present Annual Energy Audit and accounting is for the period FY 2023-24.



### 3. INTRODUCTION OF DISCOM

**a. NAME AND ADDRESS OF DESIGNATED CONSUMER**

**Bangalore Electricity Supply Company Limited, BESCOM**  
Corporate office, K R Circle,  
Karnataka- 560 001

**b. NAME AND DETAILS OF ENERGY MANAGER AND AUTHORISED SIGNATORY OF DC**

<b>Details of Energy Auditor</b>	<b>Details of Authorized Signatory</b>
Mr. H.B. Basavaraju, DGM, Energy Audit (Energy Auditor), BESCOM Corporate office, K R Circle, Bangalore-560 001  Phone No: 94498 44860	Mr. C. Basavanna Chief General Manager (Operations), BESCOM Corporate office, K R Circle, Bangalore-560 001  Phone No: 080-223522487

**c. SUMMARY PROFILE OF DC**

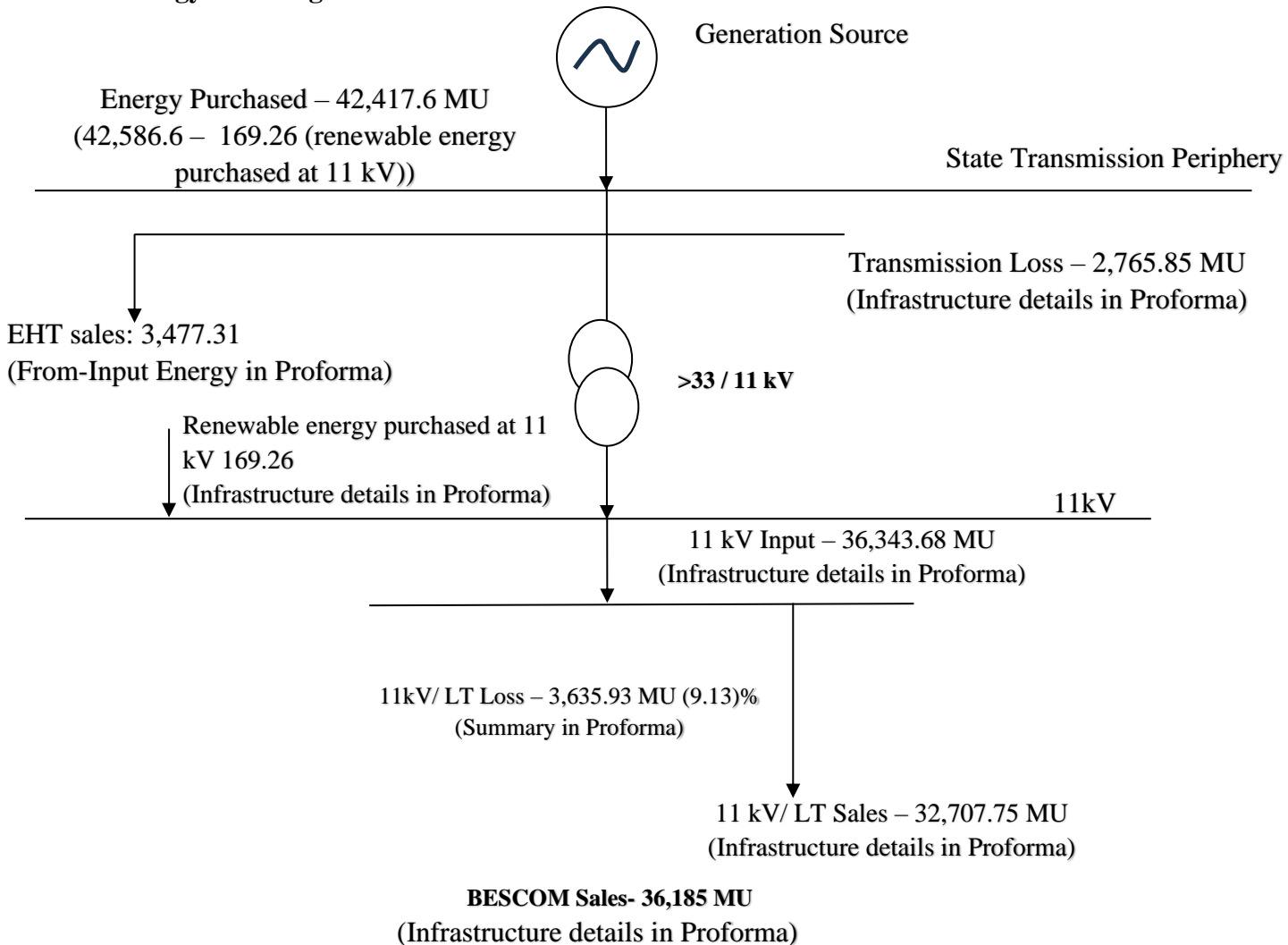
**i. ELECTRICAL INFRASTRUCTURE & ASSETS**

<b>Sl. No.</b>	<b>Particulars</b>	<b>Value in FY 2021-22</b>	<b>Value in FY 2022-23</b>	<b>Value in FY 2023-24</b>
1	No of 11 kV Substations	507	519	532
2	Length of 11 kV line (km)	1,24,784.66	1,32,279.27	1,47,459.00
3	Length of Low-tension line (km)	1,79,340.58	1,86,633.86	1,97,190.26
4	Number of Distribution Transformers	4,55,604	4,78,361	4,97,991
5	Number of circles	9	9	9
6	Number of divisions	32	32	32
7	Number of sub-divisions	147	147	147
8	Number of feeders	5918	6172	6389
9	Number of consumers	1,33,28,295	1,39,01,031	1,44,33,661

**ii. ENERGY FLOW**

Sl. No.	Energy Flow Details	Unit	2021-22	2022-23	2023-24
1	Input Energy Purchase (From Generation Source)	Million Unit	31452.35	33831.14	42586.86
2	Net input energy (received at DISCOM periphery or at distribution point, after adjustment)	Million Unit	30061.01	32334.65	39821.00
3	Total Energy billed (is the Net energy billed, adjusted for energy traded)	Million Unit	26684.73	29333.59	36185.07
4	Transmission and Distribution (T&D) loss Details	Million Unit	3376.28	3001.05	3635.93
		%	11.23%	9.28%	9.13%
5	Collection Efficiency	%	100%	95.46%	95%
6	Aggregate Technical & Commercial Loss	%	11.2%	13.4%	14%

**The Energy flow diagram is as below:**



**iii. CONSUMER BASE**

BESCOM is supplying power to **1,44,33,661** number of consumers as on 31<sup>st</sup> March 2024. The details of category wise consumers are presented in the following table:

<b>Consumer Category</b>	<b>FY 2022-23</b>	<b>FY 2023-24</b>
Residential	1,01,71,943	1,05,33,488
Agricultural	10,15,199	10,33,893
Commercial/Industrial-LT	15,15,980	15,87,089
Commercial/Industrial-HT	24,360	17,816
Others	11,73,549	12,61,375
<b>Total</b>	<b>1,39,01,031</b>	<b>1,44,33,661</b>

The metering status at different voltage levels of BESCOM consumers is presented below:

<b>Sl. No.</b>	<b>Parameters</b>	<b>66kV and above</b>	<b>33kV</b>	<b>11/22kV</b>	<b>LT</b>
1	Number of conventional metered consumers	0	0	5029	13289607
2	Number of consumers with 'smart' meters	0	0	0	70
3	Number of consumers with 'smart prepaid' meters	0	0	0	0
4	Number of consumers with 'AMR' meters	103 (EHT)	0	17090	12180
5	Number of consumers with 'non-smart prepaid' meters	0	0	0	78500
6	Number of unmetered consumers	0	0	0	1031082
	<b>Number of total consumers</b>	<b>103</b>	<b>0</b>	<b>22119</b>	<b>14411439</b>

**iv. SALIENT FEATURES**

**Power supply position:** The highlights of BESCOM for the FY 2023-24 is given below:

<b>Sr. No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Value in FY 2023-2024</b>
1	Peak demand of a day (15 <sup>th</sup> March 2024)	Mega Watts	8232
2	Maximum consumption of a day (22 <sup>nd</sup> March 2024)	Million Units	165.51
3	Annual Energy Input during the year	Million Units	42586.86
4	Metered sales during the year	Million Units	25963.5341

Sr. No.	Particulars	Unit	Value in FY 2023-2024
5	Agriculture consumption during the year (Metered -98.9974 Million Units, Unmetered-10221.5403 Million Units)	Million Units	10320.5377
6	Energy losses during the year (Incl. EHT Sales)	Million Units	3635.93
7	Percentage of Energy losses (Incl. EHT Sales)	%	9.13
8	EHT Sales	Million Units	3477.31
9	Percentage of Energy losses (Excl. EHT Sales)	%	10.00

BESCOM peak demand of a day was observed on the 15<sup>th</sup> of March 2024 at 10:46 IST (8,232 Mega Watts) and the maximum consumption of a day was observed on the 22<sup>nd</sup> of March 2024 (165.51 million units).

BESCOM have implemented the following projects to strengthen the existing network to withstand the upcoming peak load.

- a) In urban areas, OH HT Line converted to UG Cable
- b) New sub-station works are under progress.
- c) Reconductoring of age-old conductors to higher-size conductors.
- d) Bifurcation of overloaded feeders by providing new feeders.

#### **v. KEY PROJECTS**

##### **1)Feeder level Solarisation Under PM Kusum Scheme**

###### **A. Guidelines for Feeder level Solarisation:**

- a. Feeder Solarization where agriculture feeders have already been separated.
- b. The requirement of total annual power for an agriculture feeder will be assessed and a solar power plant of capacity that can cater to the requirement of annual power for that agriculture feeder can be installed either through CAPEX mode or RESCO mode.
- c. Feeder level solar power plant may be installed to cater to the requirement of power for a single feeder or for multiple agriculture feeders depending upon on factors like availability of land, technical feasibility, etc.,
- d. No cap of the capacity of solar power plant for feeder level solarisation.
- e. Under the scheme, solarisation of pumps of any capacity is allowed; however, CFA will be limited to solar capacity for 7.5 HP pumps.
- f. The developer will get CFA @ 30% of the estimated cost of installation of solar power plant i.e. Rs. 1.05 Cr/MW (30% of Rs. 3.5 Cr/MW).
- g. 2% of the CFA will be given as service charges to the implementing agency.
- h. DISCOMs shall assess the average power requirement by farmers of an area depending upon various factors. This power requirement will be treated as their benchmark consumption.

- i. CFA will be released by MNRE on successful operation & performance of the plant for two months after the commissioning, with at least one-month CUF as per minimum CUF agreed in PPA.

**B. Implementation:**

As per the GoK order dated 14.09.2021, the scheme shall be implemented through RESCO mode.

**C. Sanctioned capacity by MNRE:**

Order date	No. of IP sets
13.01.2021	25,000
17.03.2021	50,000
21.06.2021	1,00,000
07.09.2022	87,000
	2,62,000

**D. Investment:**

Sl. No.	Particulars	Unit	Values
1	No. of IP sets	Nos	2,62,331
2	Proposed Solar capacity	MW	1081
3	Total Project cost considering MNRE cost Rs.3.5 Cr/MW	Rs. Cr	3783.5
4	Investment by Developer : 70%	Rs. Cr	2648.45
5	MNRE CFA : 30%	Rs. Cr	1135.05
6	Service Charges to BESCOM @ 2%	Rs. Cr	22.7*
Note: 1. KERC determined the tariff of Rs.3.17 based on capital cost of Rs.4.44 Cr / MW. 2. Service charges subject to receipt from MNRE			

**E. Benefits of the PM-KUSUM scheme:**

- a. Farmers will get continuous day time power supply for irrigation;
- b. Increase in the income of the farmers;
- c. Reduction in Power Purchase cost to BESCOM;
- d. Reduction in escalation of GoK subsidy;
- e. Reduction in transmission and distribution loss, since generation happens locally;
- f. Transmission Constraints (station & line constraints) can be addressed immediately, resulting in savings both in time and financial resources;
- g. REC (Renewable Energy Certificate Benefit) – by selling excess Renewable Energy over and above the RPO (Renewable Purchase Obligation).

**F. Savings:**

Sl. No.	Particulars	Unit	Value
1.	Expected annual Solar Generation from 1081MW (1081MW*19% CUF*8760/1000)	MUs	1800
2.	Benchmark Tariff	Rs/Unit	3.17
3.	Power Purchase cost payable (1800MU * Rs 3.17)	Rs. Cr	360
4.	Average Power Purchase cost for FY 24	Rs/Unit	6.06
5.	Power Purchase cost at average PP Cost (1800MU * Rs 6.06)	Rs. Cr	1091
6.	Savings in power purchase cost per year (Rs 1091 Cr – Rs 360 Cr)	Rs. Cr	731
7.	Capacity charges for thermal generators backed down for 1081MW	Rs/Unit	1.50
8.	Power purchase cost with Solar & back down charges [1800 MUs*(Rs.3.17 + 1.50)]	Rs. Cr	841
9.	Reduction in Power Purchase Cost considering PP cost and back down charges (Rs 1091 Cr – Rs 841 Cr)	Rs. Cr	250

**G. Progress of the Project:**

- The total assessed solar capacity is 1081 MW by limiting the IP set capacity to 7.5HP, covering 154 sub-stations, 695 agri-feeders & 2,62,331 agricultural pump sets.
- Hon'ble KERC approved the draft PPA and draft RFP with modifications vide letter dated:08.12.2022.
- BESCOM requested GoK to propose the ceiling tariff of Rs.3.17 to Hon'ble KERC vide letter dated:11.08.2023 and the same has been approved by KERC vide letter dated:06.09.2023.
- NIT issued on 07.09.2023 and 7 Bidders qualified in the tender for 96 Sub-stations for 743.7MW solar capacity.
- BESCOM sought approval of KERC on 13.11.2023 for adoption tariff for 743.7MW capacity and KERC approved the same vide dated:16.11.2023.
- Further, as directed by KERC, draft PPA sent to KERC for its approval on 20.11.2023 & 23.11.2023 and approval is yet to be received.
- LoA issued to the successful bidders.

Sl. No.	Particulars	Bids invited	Bids Qualified (After negotiation)
1	No. of Sub-stations	154	96
2	Capacity in MW	1081	743.7
3	No. of Agri Feeders	695	456
4	No. of IP sets	2,62,331	1,74,123

Tariff received for PM-KUSUM scheme				
Sl.No.	Bidder name	Tariff Quoted	No. of projects bided	Total Capacity in MW
1	M/s. Megha Engineering & Infrastructures Ltd	3.13	1	5
		3.15	29	132.7
		3.16	58	550.9
2	M/s. Rajashree Electricals	3.15	2	20.1
3	M/s. Ampolt Electronics India Pvt Ltd	3.16	2	8.9
4	Smt. Sarojamma-Sole Proprietorship (M/s. ELSA consultancy)	3.06	1	4
5	M/s. Sanvi Power Private Ltd	3.14	1	2.5
6	M/s. Balaji Energy Private Ltd	3.15	1	6.6
7	M/s. Sangamnath Sugars	3.16	1	13
Total		-	96	743.7

#### **G. LOA issued details**

Sl. No.	Particulars	LOA
1	No. of Sub-stations	95
2	Capacity in MW	730.7

#### **• FLS KUSUM List-2 Details**

Sl. No.	Particulars	Bids invited	Bids Qualified
1	No. of Sub-stations	59	44
2	Capacity in MW	350.3	302.6

## **2) Atal Bhujal Yojana**

Atal Bhujal Yojana is a Govt. of India scheme which envisages community led sustainable groundwater management. The major objective of the scheme is to improve the management of groundwater resources in select water stressed areas in identified states.

In the state of Karnataka, 14 Districts, 41 Taluks & 1199 village panchayats were identified and approved under this Scheme. Under BESCOM jurisdiction, 7 Districts, 30 Taluks and a total of 859 Gram panchayaths were identified.

Under this scheme, the work of Segregation of Agricultural loads from Mixed feeders and creation of new Agricultural feeders is proposed in BESCOM.

Benefits:



- The Agricultural feeders segregated are metered; thereby increase in consumption of metered category.
- Better quality & reliability of power supply to non-agricultural loads.
- Increase in energy sales & revenue demand in respect of metered category installations due to reduced interruptions.
- Total consumption of IP sets can be monitored at the Sub-station Feeder meters.
- Improved load management.

The Action plan & DPR in respect of Feeders Segregation works under Atal Bhujal Yojana was submitted to the Energy Department vide letter dated: 28.11.2023. Under this scheme, 10 Nos. of New Agricultural Feeders are proposed by segregation of Agricultural loads from the existing 17 Nos. of Mixed load feeders covering 15 Gram panchayaths and 86 villages. Further, approval was accorded by the Project Director, SPMU, Atal Bhujal Yojana, Minor Irrigation and Ground water development Department vide letter No. Ataljal/SPMU/AE/I.F/Energy/386/2023-24 Dated:16.12.2023 for Agricultural Feeder Separation works for an amount of Rs.10.503Cr with 100% grants. Further, the Energy Department has also informed to take up the Feeder Segregation works vide letter dated 31.12.2023. Accordingly, tenders were invited for Agricultural load segregation under Atal Bhujal Yojana in 3 packages viz Tiptur, Tumkur and Nelamangala division Packages on 18.01.2024 under total turn key on percentage quoting basis. The provision of 11kV Switchgear is in the purview of KPTCL. The Detailed Work Award (DWA) was issued on 29.06.2024 to the L1 Bidder for Tiptur, Tumkur and Nelamangala packages for a total amount of Rs.8.27Cr.

#### 4. DISCUSSION AND ANALYSIS

##### a. ENERGY ACCOUNTS FOR PREVIOUS YEARS

T&D losses as approved by KERC and its achievement by BESCOM for the years FY2020-2021, FY2021-2022 and FY2023-2024 are presented in the following table.

Sl. No	Year	T&D losses approved by KERC	T&D losses achieved by BESCOM
1	FY 2021-2022	11.25%	11.23%
2	FY 2022-2023	10.5%	9.28%
3	FY 2023-2024	9.6%	9.13%

Sl. No	Year	Collection Efficiency	AT&C losses
1	FY 2021-2022	100%	11.2%
2	FY 2022-2023	95.46%	13.4%
3	FY 2022-2024	94.59%	14%

##### b. ENERGY ACCOUNTS AND PERFORMANCE

The net energy input to the DISCOM for FY 2023-2024 is estimated and presented in the following table.

Form-Input energy (Details of Input Energy & Infrastructure)		
Sl. No.	Parameters	Value
A.1	Input Energy purchased (Million Units (MU))	42586.86
A.2	Transmission loss (%)	6.5%
A.3	Transmission loss (MU)	2765.859
A.4	Energy sold outside the periphery (MU)	18.43
A.5	Open access sale (MU)	16.65
A.6	EHT sale (MU)	3477.31
A.7	Net input energy (received at DISCOM periphery or at distribution point, after adjustment) (MU)	39821.00

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The total sales (metered and assessed) for various consumer categories are presented in the following table.

Sl. No.	Type of Consumers	Category of Consumers (EHT/HT/LT/Others)	Voltage Level (In Voltage)	No of Consumers	Total Consumption (In MU)
1	Domestic	LT	LT	10532928	9410.61
2	Commercial	LT	LT	1338008	1338008
3	IP Sets	LT	400V	1031591	10222.64
4	Hor. & Nur. & Coffee/Tea & Rubber (Metered)	LT	230-400V	2216	7.51
5	Hor. & Nur. & Coffee/Tea & Rubber (Flat)				
6	Heating and Motive Power				
7	Water Supply	LT	400V	94705	1569.08
8	Public Lighting	LT	230V	87769	658.59
9	HT Water Supply	HT	11KV	318	884.64
10	HT Industrial	HT	11KV	8618	5437.88
11	Industrial (Small)	LT	400V	249081	1452.04
12	Industrial (Medium)				
13	HT Commercial	HT	11KV	9198	2646.26
14	Applicable to Government Hospitals & Hospitals	HT	11KV	1118	429.56
15	Lift Irrigation Schemes/Lift Irrigation Societies	HT	11KV	86	90.39
16	HT Res. Apartments Applicable to all areas	HT	11KV	560	103.83
17	Mixed Load				
18	Government offices and department				
19	Others-1 (HT5)	HT	11KV	2324	177.56
20	Others-2 (LT7)	LT	230-400V	1075141	225.77
21	Stn Aux- It is not included in DCB				21.81
	Total			<b>14433661</b>	<b>36185.07</b>

The technical losses and AT & C losses for FY 2023-2024 are estimated and presented in the following table.

Losses	T&D Losses		AT&C loss (%)
	T&D loss (MU)	T&D loss (%)	
	3636	9.13%	14%

**i. DIVISION-WISE PERFORMANCE**

Sl. No.	Name of Division	Energy parameters				Losses		Commercial Parameter			AT&C loss (%)
		Input energy (MU)	Billed energy (MU)			T&D loss (MU)	T&D loss (%)	Billed Amount in Rs. Crore	Collected Amount in Rs. Crore	Collection Efficiency	
			Metered energy	Unmetere d/ assessment energy	Total energy						
1	JAYANAGAR	1757.0385	1664.1359	0.0015	1664.1374	93	5%	1797.3117	1736.6616	96.63%	8%
2	KORAMANGALA	1854.6294	1751.5872	0.5240	1752.1113	103	6%	2131.9882	2090.5816	98.06%	7%
3	HSR LAYOUT	2313.3201	2154.1412	4.9025	2159.0436	154	7%	2365.5724	2326.6303	98.35%	8%
4	PEENNYA	1140.9746	1077.0995	0.1875	1077.2870	64	6%	1097.8303	1067.4401	97.23%	8%
5	MALLESHWARAM	552.6167	524.4590	0.0000	524.4590	28	5%	555.3120	546.7343	98.46%	7%
6	HEBBALA	1197.8994	1068.0948	46.3168	1114.4116	83	7%	1165.6822	1120.0534	96.09%	11%
7	JALAHALLI	619.8923	556.2464	31.4745	587.7209	32	5%	594.9628	567.6468	95.41%	10%
8	VIDHANA SAUDHA	539.3964	504.2693	0.0000	504.2693	35	7%	561.5695	551.4297	98.19%	8%
9	INDIRANAGAR	1072.4812	1012.6030	0.3080	1012.9109	60	6%	1109.5175	1090.9178	98.32%	7%
10	SHIVAJINAGAR	1568.1733	1462.1507	0.2864	1462.4371	106	7%	1571.9596	1520.2419	96.71%	10%
11	WHITEFIELD	1287.3989	1199.5538	3.3903	1202.9441	84	7%	1437.0119	1408.3468	98.01%	8%
12	RAJAJINAGAR	958.8714	908.1640	0.1736	908.3376	51	5%	945.9318	915.2070	96.75%	8%
13	RAJARAJESHWARINAGAR	722.1812	677.5352	0.1114	677.6466	45	6%	692.5360	676.7110	97.71%	8%
14	KENGERI	1312.7700	1193.6436	57.8723	1251.5159	61	5%	1172.2335	1107.5753	94.48%	10%
15	NELAMAGALA	1511.8706	1015.6296	333.6825	1349.3121	163	11%	1232.3563	1189.3913	96.51%	14%
16	HOSKOTE	1811.3069	1158.4497	439.8884	1598.3381	213	12%	1494.0544	1388.0983	92.91%	18%
17	RAMANAGAR	951.8518	524.3782	349.8021	874.1803	78	8%	716.6023	680.3342	94.94%	13%
18	CHANDAPURA	2110.9138	1791.2676	146.8287	1938.0963	173	8%	1908.5856	1878.2751	98.41%	10%
19	KANAKAPUR	1032.3190	646.7934	309.6101	956.4035	76	7%	725.9008	693.5443	95.54%	11%
20	MAGADI	637.8461	352.4963	219.0674	571.5637	66	10%	481.7223	461.5519	95.81%	14%

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Sl. No.	Name of Division	Energy parameters				Losses		Commercial Parameter			AT&C loss (%)
		Input energy (MU)	Billed energy (MU)			T&D loss (MU)	T&D loss (%)	Billed Amount in Rs. Crore	Collected Amount in Rs. Crore	Collection Efficiency	
			Metered energy	Unmetered/assessment energy	Total energy						
21	KOLAR	1016.3158	489.3895	401.4749	890.8644	125	12%	707.3064	588.2507	83.17%	27%
22	KGF	1500.6495	784.3540	554.5318	1338.8858	162	11%	1073.8692	854.5861	79.58%	29%
24	CHIKKABALLAPURA	1162.6952	460.7229	583.1566	1043.8795	119	10%	790.8078	673.2472	85.13%	24%
24	CHINTHAMANI	797.6862	250.1041	457.4124	707.5165	90	11%	504.5538	392.6152	77.81%	31%
25	DAVANAGERE	1672.7684	510.0480	974.7559	1484.8039	188	11%	1053.1680	1003.1279	95.25%	15%
26	CHITRADURGA	1348.8832	276.1455	885.3250	1161.4705	187	14%	767.6284	726.2210	94.61%	19%
27	HARIHARA	1052.1017	291.1409	644.3537	935.4946	117	11%	656.5711	590.7270	89.97%	20%
28	HIRIYURU	1185.8591	358.3527	654.6236	1012.9763	173	15%	688.6672	608.4396	88.35%	25%
29	TUMKURU	2000.8766	686.9779	1027.1277	1714.1056	287	14%	1259.8107	1200.9506	95.33%	18%
30	TIPTUR	1075.4614	177.3357	765.5535	942.8892	133	12%	605.4830	564.9096	93.30%	18%
31	MADHUGIRI	1587.3493	310.0803	1045.2163	1355.2966	232	15%	889.6144	774.4276	87.05%	26%
32	KUNIGAL	466.6028	126.1844	283.5809	409.7653	57	12%	288.8256	263.1956	91.13%	20%

BESCOM has identified high loss feeders of high loss divisions, the following works were proposed under capex to bring down the losses:

- a) New Lines
- b) Bifurcation of feeders by providing Link Lines
- c) Reconductoring of old conductors by higher capacity conductors
- d) Providing additional transformers

Further to bring down the losses in high loss Divisions and capacity additions of overloaded segments of the network, similar works are proposed under RDSS.

**ii. VOLTAGE WISE INPUT AND LOSSES**

DC has provided energy input and sales/ consumption for various voltages of supply and the estimated losses are presented in the following table:

**Voltage wise Input, Sale and Loss**

	<b>DISCOM</b>	<b>Input (in MU)</b>	<b>Sale (in MU)</b>	<b>Loss (in MU)</b>	<b>Loss %</b>
<b>1.</b>	11 kV and LT	36343.68433	32707.76	3635.92433	10.00428107
<b>2.</b>	> 33 kV	3477.311833	3477.311833	<b>0</b>	<b>0</b>

The Loss Excluding EHT is 10%

**c. ENERGY CONSERVATION MEASURES ALREADY TAKEN AND PROPOSED FOR FUTURE**

**Implementation of Solar Rooftop PV (SRTPV) system in BESCOM:**

- The Government of Karnataka has announced the Renewable Energy Policy 2022 to 2027 for grid connected solar rooftop system under net-metering basis with target of 1,000MW to be achieved by 2027.
- KERC is issuing the tariff order and other operational clarification from time to time, related to SRTPV on multiple SRTPV installations/ Government buildings etc.
- Under IPDS scheme for installation of SRTPV plants on rooftop of BESCOM owned buildings, 51 nos. of installations with capacity of 673.8kWp has been commissioned.
- Under the Government of India funds of 13<sup>th</sup> Finance Commission, solar rooftop plants have been commissioned on 134 Government Buildings for a cumulative capacity of 7.825 MW as on 31.03.2024.
- The commissioned SRTPV installations from 07.11.2014 to 31.03.2024 is 9207 nos. with capacity of 293.03 MW.

<b>Period</b>	<b>Commissioned nos.</b>	<b>Commissioned Capacity in MW</b>
2023-24	3138	63.30

**Implementation of MNRE Phase-II Rooftop Solar Program:**

- The MNRE issued guidelines for installation of solar rooftop plants under the simplified procedure of the scheme on 10.06.2022 and accordingly, BESCOM is implementing MNRE Phase-II Rooftop Solar Program under simplified procedure.
- The MNRE has also developed web portal for facilitating application by Consumers under simplified procedure at <https://solarrooftop.gov.in/> and the BESCOM has integrated its online portal <https://srtpv.bescom.org/SRTPV/home.jsp> with MNRE portal for facilitating processing of applications through BESCOM portal.

- Further, on 13.02.2024, the simplified procedure was re-launched as “PM SuryaGhar” Scheme and subsidy structure was also revised. The following table shows the details of subsidy revision done by MNRE under simplified procedure.

Sl. No.	Type of household	Subsidy Applicable as per OM dated 27.01.2023	Subsidy Applicable as per OM dated 05.01.2024	Subsidy Applicable as per OM dated 07.03.2024 (Present subsidy available)
1	Individual Household	<ul style="list-style-type: none"> <li>Rs. 14,588/- per kW up to 2 kW</li> <li>Rs. 7,294/- per kW for additional capacity up to 3 kW</li> <li>Total Subsidy for systems larger than 3 kW capped at Rs. 78,000</li> </ul>	<ul style="list-style-type: none"> <li>Rs. 30,000/- per kW up to 2 kW</li> <li>Rs. 18,000/- per kW for additional capacity up to 3 kW</li> <li>Total Subsidy for systems larger than 3 kW capped at Rs. 78,000</li> </ul>	<ul style="list-style-type: none"> <li>Rs. 30,000/- per kW up to 2 kW</li> <li>Rs. 18,000/- per kW for additional capacity up to 3 kW</li> <li>Total Subsidy for systems larger than 3 kW capped at Rs. 78,000</li> </ul>
2	Resident Welfare Associations/ Group Housing Societies (RWA/GHS)	Rs. 7,294/kW for common facilities up to 500 kWp @ 3 kWp per house.	Rs. 18000/kW for common facilities up to 500 kWp @ 3 kWp per house.	Rs. 18000/kW for common facilities up to 500 kWp @ 3 kWp per house.

#### **Implementation of Mandatory use of Solar Water Heaters:**

As a Demand Side Management program, BESCOM has made mandatory use of Solar Water Heaters and a total of 38,874 Solar Water Heaters were installed during 2023-24 and the estimated savings are summarized below:

<b>Energy savings*</b>	<b>MUs</b>
Annual Energy savings for 38,874 nos. of SWH	34.99
Per day Energy savings for 38,874 nos. of SWH	0.12
* By considering avg. 2kW for 1½ hrs per day per SWH system, for 300 days	

#### **Providing timer switches to the street light installations:**

BESCOM has requested municipal bodies to install timer switches to street lights resulting in energy savings and reduces evening peak hour load on grid. The status of timer switches provided to street lights in BESCOM area is as follows:

Sl No	Zone	No.of Str.light ckt existing as on Mar-21	No.of Timer switches fixed as on Mar-24	No.of Timer switches in working condition as on Mar-24	No.of Timer switches <u>not</u> in working condition as on Mar-24	Balance No. of Timer switches to be fixed as on Mar-24
1	<b>BMANZ</b>	9391	7324	5634	1690	2067
2	<b>BMASZ</b>	13916	9703	7242	2461	4213
3	<b>BRAZ</b>	22232	4831	4525	308	17401
4	<b>CTAZ</b>	21791	5586	4760	826	16205
<b>Total</b>		67330	27444	22161	5283	39886

### **Energy Awareness Program:**

Energy awareness programs were carried by different communication modes like:

- Advertisements in Newspapers, Magazines, Souvenir etc.
- Through stalls.
- On Hoardings.
- Jingles in Doordarshan, AIR, Big FM etc.
- Posters, pamphlets, Brouchers, etc.
- Through customer interaction Meeting by Sub Division officers/Section Officers with Grama Panchayath and Zilla Parishat offices.
- Vidhyuth Adalat on every 3rd Saturday at village level by BESCOM officers.
- Through interaction meetings at Taluk development/District development meeting.

### **Earth Hour:**

Earth Hour-2024 was observed on 23<sup>rd</sup> March 2024 between 8.30pm to 9.30pm by BESCOM Officers/Employees and the consumers, by switching 'OFF' unnecessary lights.

### **Perform, Achieve and Trade (PAT):**

BESCOM notified as DC in PAT cycle-II (2016 to 2019). The target set to reduce T&D loss is 14.78% (baseline year:2014-15) to 14.50% (target year:2018-19). BESCOM achieved 12.62% with Energy savings certificates (ESCerts) of +45692. BESCOM registered with Grid India (formerly known as POSOCO), for trading of these ESCerts under PAT Cycle-II and traded 19,691 Escerts during 2023-24.

Now, BESCOM is identified as DC under PAT Cycle-VII and BEE has fixed the target to reduce T&D loss from 12.62% (baseline year:2018-19) to 12.11% (target year:2024-25). M&V will be done in the target year 2024-25 and the report shall be submitted by 31st July 2025 to BEE.

### **Unnat Jyoti by Affordable LEDs for All (UJALA):**

BESCOM under UJALA scheme (renamed the program as "Hosa Belaku" in Karnataka) of GoI, has taken up an action to save electricity by promoting use of Light Emitting Diode (LED) based bulbs & tube lights among the consumers. Widespread use of these may lead towards realizing one of the load management objectives of reducing the peak demand. The program is implemented through M/s. Energy Efficiency Services Limited (EESL).



**Phase-I - LED bulbs:**

This program enables distribution of high quality LED bulbs at a cost much lower than the market price as replacement for Incandescent Lamps (ICLs) and Compact Fluorescent Lamps (CFLs) for energy savings. Consumers can purchase the LED bulbs at a cost of Rs.70/- per bulb. Total LED bulbs sold from FY-16 to FY-24 is 1,13,83,900 and annual energy savings for 2023-24 is 167.82 MUs.

**Phase-II - LED tube lights:**

BESCOM under Phase-2 of Hosa Belaku is distributing 20W LED tube lights at a unit cost of Rs.220/- on upfront basis to the consumers in BESCOM jurisdiction. 2,75,188 no. of 20W LED tube lights were sold from 2016-17 to 2023-24 and annual energy savings for 2023-24 is 6.34 MUs.

**PAVAN Scheme - BEE 5 star rated Ceiling Fan:**

BESCOM under PAVAN scheme is distributing BEE 5 star rated Ceiling Fans at a unit cost of Rs.1150/- on upfront basis to the domestic consumers in BESCOM jurisdiction. M/s Energy Efficiency Services Limited (EESL) is the implementing agency. 41,757 no. of BEE 5 star rated Ceiling Fans were sold from 2017-18 to 2023-24 and annual energy savings for 2023-24 is 1.03 MUs.

**Grama Ujala:**

Grama Ujala is carbon finance-based program implementing through M/s Convergence Efficiency Services Limited (CESL), a 100% subsidiary of M/s EESL, a PSU under Ministry of Power. The programme has been launched on 14.12.2021. Under the programme, 12W and 7W high quality LED bulbs are distributed in Rural areas on exchange of Incandescent bulbs (ICLs). BESCOM acts a facilitator without any financial commitment. Maximum 5 nos. of LED bulbs per household are distributed at a cost of Rs.10/- per bulb, which covers 3 years warranty period.

Sl No	FY	No. of Bulbs Sold	Energy Savings in MU
1	FY21-22	1,82,741	0.65
2	FY22-23	60,697	3.59
3	FY23-24	-*	3.59
<b>Total</b>		<b>2,43,438</b>	<b>7.82</b>
*The scheme has been closed on April 2022.			

**Details of Energy Conservation measures proposed for future by BESCOM**

Replacement of inefficient ceiling fans in the domestic sector with superefficient BEE 5-star rated BLDC fans.

DSM Activity	Power Consumption per fan	No's proposed for replacement	Energy Savings per annum (MU)
Replacement of inefficient ceiling fan with superefficient BLDC fan for 1 lakh domestic consumers	30-Watt (avg) for BLDC fans 70 Watt (avg) for Conventional ceiling fans	1,00,000	14.6 MU
Note: By considering average saving of 40 watts per fan, 10 hrs per day, 365 days a year, and 1,00,000 no's fans.			

**d. CRITICAL ANALYSIS BY ENERGY AUDITOR**

**5.4.1 COMPLIANCE TO BEE REGULATIONS**

The compliance status of DISCOM to various provisions of BEE Regulations 2021 is analysed and presented below:

<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Sub-clause Details</b>	<b>Present Status</b>
3	Intervals of time for conduct of annual energy audit	a	Conducted an annual energy audit for every financial year and submitted the annual energy audit report to the Bureau and respective State Designated Agency and also made available on the website of the electricity distribution company within a period of four months from the expiry of the relevant financial year	Annual energy audit for FY 2023-2024 being conducted. Report will be submitted to BEE and SDA. All audit Report has been uploaded onto BESCOM website.
4	Intervals of time for conduct of periodic energy accounting.	1(a)	All feeder wise, circle wise and division wise periodic energy accounting is conducted by the energy manager of the electricity distribution company for each quarter of the financial year.	Periodic energy accounting for FY2023-2024 has been done for all quarters
		1(b)	Submitted the periodic energy accounting report to the Bureau and respective State Designated Agency and also made available on the website of electricity distribution company within forty-five days from the date of the periodic energy accounting.	Periodic energy accounting for FY2023-2024 has been done for all quarters by the DC and submitted to BEE, SDA. DC has uploaded the energy accounting reports onto the website of DC.

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Clause No	Clause Details	Sub Clause Number	Sub-clause Details	Present Status
		2(a)	Electricity distribution company conducted its first periodic energy accounting, for the last quarter of the financial year immediately preceding the date of such commencement (i.e. 6th October 2021).	Not applicable. This was already verified in the previous audit of FY 21.
		2(b)	Electricity distribution company conducted its subsequent periodic energy accounting for each quarter of the financial year for a period of two financial years from the date of such commencement, and submit the periodic energy accounting report within sixty days from the date of periodic energy accounting.	The DC has submitted the periodic energy auditing reports as per the Energy Audit regulations for all quarters for the 3 subsequent financial years.
5	Pre-requisites for annual energy audit and periodic energy accounting	a	Identification and mapping of all of the electrical network assets	Under RAPDRP Areas GIS Mapping of 25 towns has been completed. Under IPDS (Integrated Power Distribution Scheme) survey has been completed.
		b	Identification and mapping of high tension and low-tension consumers	All the HT and LT consumers have been mapped. (RAPDRP)
		c	Development and implementation of information technology enabled energy accounting and audit system, including associated software	DC has energy accounting and audit system including associated software. DC uses MS Infinite computer solutions (for RAPDRP) and Nsoft Software (For Non RAPDRP).
		d	Electricity distribution company ensures the installation of functional meters for all consumers, transformers and feeders. Meter installation is done in a phased manner within a period of three financial years from the date of the commencement	All feeders up to 11kV have been metered.  All consumers have been metered except consumers under agriculture category.

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Clause No	Clause Details	Sub Clause Number	Sub-clause Details	Present Status
			of these regulations in accordance with the trajectory set out in the First Schedule	As of 31st March 2024 of the total 4,97,991 distribution transformers, 119,632 (Plus 13,360 nos. of the IP feeding DTCs are metered prior to directions from Energy Department) distribution transformers have been metered. Out of 3,64,999 nos. of unmetered DTs, 87,067 nos. of DTs are to be metered. The balance DTs are on the exclusive IP feeder / IP Sets, which are exempted from metering
			d.1. 100% Communicable Feeder Metering integrated with AMI, by 31st December 2022 along with replacement of existing non-communicable feeder meters.	d.1. 100% of the feeders are having DLMS (Device Language Message Specification - Communicable Meters).
			<p>d.2. <b>All Distribution Transformers</b> (other than HVDS DT up to 25kVA and other DTs below 25 kVA) shall be metered with communicable meters. Communicable DT Metering for the following areas/ consumers to be completed by December 2023 and in balance areas by December 2025:</p> <p>d.2.1. All Electricity Divisions of 500 AMRUT cities, with AT&amp;C Losses &gt; 15%</p> <p>d.2.2. All Union Territories (for areas with technical difficulty, non-communicable meters may be installed)</p> <p>d.2.3. All Industrial and Commercial consumers</p> <p>d.2.4. All Government offices at Block level and above</p>	<p>d.2.1. Obtaining approval from Regulatory commission is under process for Advanced Metering Infrastructure (AMI) of DTC's in BESCOM Area.</p> <p>d.2.2. Not Relevant for DC.</p> <p>d.2.3. AMR works taken up under RAPDRP, IPDS and DDUGJY schemes for industrial HT-17193 nos. &amp; LT industrial &amp; commercial (above 40HP installations) for 12180 nos.</p> <p>Further, action is in progress for replacement of existing non-DLMS meters by DLMS meters of HT &amp; LT Industrial and Commercial installations.</p> <p>2.4 Proposal for AMI implementation to All Government offices at Block level and above is under process and yet to be taken up.</p>

<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Sub-clause Details</b>	<b>Present Status</b>
			d.2.5. Other high loss areas i.e. rural areas with losses more than 25% and urban areas with losses more than 15%	<p>d.2.5. DC intends to install communicable meters with AMI for <b>other high loss areas</b> i.e. rural areas with losses more than 14% and urban areas with losses more than 10% under Revamped Distribution Sector Scheme (RDSS) of REC.</p> <p>BESCOM has enabled AMR for 95872 nos. of DTC meters under various projects, however no meters are enabled with AMI. The contract period of AMR agencies expired in RAPDRP &amp; Non-RAPDRP area in March-2019. Due to the expiry of the existing contracts, to maintain the existing metering system works carried out before 2013 and to ensure proper operation of meters, metering system and modems, it was proposed to float tender under OPEX model. Due to the introduction of MoP-RDSS scheme wherein one of the major component is metering which includes DTCs, as per the direction of Management the OPEX proposal is shelved.</p>

Clause No	Clause Details	Sub Clause Number	Sub-clause Details	Present Status
			<p><b>d.3. Prepaid Smart Consumer Metering</b> to be completed for all directly connected meters and AMR in case of other meters, by December 2023 in the following areas:</p> <p>d.3.1. All Electricity Divisions of 500 AMRUT cities, with AT&amp;C Losses &gt; 15%;</p> <p>d.3.2. All Union Territories (for areas with technical difficulty, prepaid meters to be installed);</p> <p>d.3.3. All Industrial and Commercial consumers;</p> <p>d.3.4. All Government offices at Block level and above;</p> <p>d.3.5. Other high loss areas i.e. rural areas with losses more than 25% and urban areas with losses more than 15%.</p>	<p>d.3.1. Installation of the smart meters has not yet commenced as the tender work is under process. As per KERC guidelines, all new consumers after 01-04-2024 have to be issued smart meters. However, because of Lok Sabha elections, BESCOM has requested for an extension up to 31-10-2024.</p> <p>d.3.2. Not Relevant for DC.</p> <p>d.3.3. AMR works taken up under RAPDRP, IPDS and DDUGJY schemes for industrial HT-17193 nos. &amp; LT industrial &amp; commercial (above 40HP installations) for 12180 nos. Further, action is in progress for replacement of existing non-DLMS meters by DLMS meters of HT &amp; LT Industrial and Commercial installations.</p> <p>d.3.4. Proposal for AMI implementation to All Government offices at Block level and above is under process and yet to be taken up.</p> <p>d.3.5. DC does not have such magnitude of losses in rural (25%) and urban (15%).</p>
			<p><b>d.4. Consumer Metering:</b> 98% by FY 2022-23 99% by FY 2023-24</p>	<p>92.86% Consumer metering has been completed as on 31st March 2024. All installations are metered except IP set installations below 10HP.</p>

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Clause No	Clause Details	Sub Clause Number	Sub-clause Details	Present Status
			d.5. Targets for functional meters— Meter FY 22-23 FY 23-24 FY24-25 Feeder metering 98.5% 99.5% 99.5% DT metering 90% 95% 98% Consumer metering 93% 96% 98%	Non functional meters are being replaced on an ongoing basis. During the year FY 24, 66,954 meters were replaced and the closing balance of non functional meters was 6,823 as of 31st March 2024 Vs 10,975 as of 31st March 2023.  Feeder Metering- 100% Monitored by KPTCL. DT Metering - 26.71% Consumer Metering - 92.86%
		e	e.1. All distribution transformers (other than high voltage distribution system up to 25kVA and other distribution system below 25 kVA) is metered with communicable meters. e.2. And existing non communicable distribution transformer meters is replaced with communicable meters and integrated with advanced metering infrastructure.	Obtaining approval from Regulatory commission is under process for AMI of DTC's in BESCOM Area.

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Clause No	Clause Details	Sub Clause Number	Sub-clause Details	Present Status
		f	Electricity distribution company has established an information technology enabled system to create energy accounting reports without any manual interference and such systems may be within a period of three years from the date of the commencement of these regulations in case of urban and priority area consumers; and within five years from the date of the commencement of these regulations in case of rural consumers	DC has energy accounting and audit system including associated software. DC uses MS Infinite computer solutions (for RAPDRP) and Nsoft Software (For Non RAPDRP).
		g	Electricity distribution company has a centralized energy accounting and audit cell comprising of— (i) a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years; and (ii) a financial manager having professional experience of not less than five years	The DC has energy audit department with the following staff 1. A nodal officer- CGM-Operations 2. Designated energy manager who is a qualified energy auditor- DGM/EA 3. A qualified information technology manager- AGM/IT 4. A qualified financial manager- AOFinance
		a	Electricity distribution company has a nodal officer, who is a full time employee of the electricity distribution company in the rank of the Chief Engineer or above, for the purpose of reporting of the annual energy audit and periodic energy accounting and communicate the same to the Bureau.	The DC is complying with this requirement
6	Reporting requirements for annual energy audit and periodic energy accounting			



<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Sub-clause Details</b>	<b>Present Status</b>
		b	Electricity distribution company ensures that the energy accounting data is generated from a metering system or till such time the metering system is not in place, by an agreed method of assumption as may be prescribed by the State Commission	DC has energy accounting and audit system including associated software. DC uses MS Infinite computer solutions(for RAPDRP) and Nsoft Software (For Non RAPDRP). The agricultural unmetered energy is accounted based on KERC guidelines.
		c	Metering of distribution transformers at High Voltage Distribution System up to 25KVA is done on cluster meter installed by the electricity distribution company	All HVDS installations are dedicated EIP feeders and meter is provided at Sub-station level.
		d	The energy accounting and audit system and software is developed to create monthly, quarterly and yearly energy accounting reports.	The DC has software's for energy accounting and audit and the software's are having the capability to create monthly, quarterly and yearly energy accounting reports.
		e	Electricity distribution company has provided the details of the information technology system in place as specified in clause (f) of regulation 5 that ensures minimal manual intervention in creating the energy accounting reports and any manual intervention of any nature, in respect of the period specified therein, shall be clearly indicated in the periodic energy accounting report	The DC has software's for energy accounting and audit and the software's are having the capability to create monthly, quarterly and yearly energy accounting reports.

#### **5.4.2 AGRICULTURAL CONSUMPTION**

The DISCOM has segregated the 11 kV feeders under Niranthara Jyothi Yojana into rural feeders and agricultural feeders and all the 11 kV feeders are metered. The rural feeders are provided power 24/7 whereas, the agricultural feeders are provided power for 7 hours per day. The un-metered agricultural consumption is estimated by the formulae (Input energy - Metered Sales - Allowable Loss (10% of the input energy)). There are a total of 10,33,893 agricultural connections of which 2,811 are metered and the rest 10,31,082 are unmetered connections. The energy consumption in metered connections is 98.9974 MUs, while that in unmetered connections is 10221.5403 MUs of unmetered/assessment energy. Thus, the overall agricultural consumption totals to 10320.5377 MUs which accounts for 29% of the total energy consumption in BESCOM.

#### **5.4.3 11KV FEEDER METERING AND ENERGY AUDIT**

The DISCOM has 100% metering for all the 11 kV feeders and has provided energy input and consumption/ sale data of all the 11 KV feeders (6389, 11 kV feeders). DC has provided back up documents for 650 numbers of 11kV feeders (minimum 10%) for which input and sales have been verified with those entered in the proforma. The process of checking the functioning and calibration of the 11 KV feeder meters is an on-going process and is monitored by KPTCL. Also, monthly, quarterly and annual energy audit is done for all the 11 kV feeders under BESCOM.

#### **5.4.4 CATEGORY WISE SUBSIDY**

Government of Karnataka provides subsidy to the following:

- For Agricultural IP sets category less than 10 HP.
- For domestic consumers whose energy consumption is less than 200 kWh/month, are eligible for subsidy payment under Government of Karnataka's Gruha Jyothi Scheme. However, the actual subsidy reimbursement to the consumer (BESCOM) is limited to the average monthly energy consumption of previous 12 month. For example, if the consumers average monthly energy consumption is 90 kWh before then that consumer is eligible for free monthly energy consumption up-to 90 kWh/month. Any energy consumption over and above 90 kWh has to be paid by consumer as per the applicable tariff of BESCOM.

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The subsidy claim is raised on a quarterly basis and the figure below summarises the subsidy demand of BESCOM vis-à-vis subsidy released by Government of Karnataka.

Quarterly Consumer Category-wise Subsidy Billed/Received/Due					
Sl. No.	Particulars	Consumption (in kWh)	Demand (Rs in Crs.)	Subsidy released (Rs. In Crs.)	Remarks Balance subsidy to be received (Rs in Crs.)
<i>Quarter 1 – Period from 01.04.2023 to 30.06.2023</i>					
1	Residential	2537100720	52.90	52.90	0.00
2	Agriculture	2830739926	1758.87	639.88	1570.19
	<b>Q1 Total</b>	<b>5367840646</b>	<b>1811.77</b>	<b>692.78</b>	<b>1570.19</b>
<i>Quarter 2 - Period from 01.07.2023 to 31.09.2023</i>					
1	Residential	2285683845	664.05	672.61	-8.56
2	Agriculture	2031138234	1192.35	1142.58	1619.95
	<b>Q2 Total</b>	<b>4316822079</b>	<b>1856.4</b>	<b>1815.19</b>	<b>1611.39</b>
<i>Quarter 3 - Period from 01.10.2023 to 31.12.2023</i>					
1	Residential	2355413763	1015.44	1080.00	-64.56
2	Agriculture	2113936674	1100.46	1147.27	1573.14
	<b>Q3 Total</b>	<b>4469350437</b>	<b>2115.90</b>	<b>2227.27</b>	<b>1508.59</b>
<i>Quarter 4 - Period from 01.01.2024 to 31.03.2024</i>					
1	Residential	2336244378	970.95	1035.59	-64.64
2	Agriculture	3344722818	1542.99	1438.45	1677.69
	<b>Q4 Total</b>	<b>5680967166</b>	<b>2513.94</b>	<b>2474.03</b>	<b>1613.05</b>

The reconciliation of subsidy demand vis-à-vis receipt is an ongoing process and Account's and Retail Section of BESCOM coordinates with Energy Department of Government of Karnataka to ensure the recovery of the subsidy demand. Also, BESCOM adjusts the electricity duty collected by it on behalf of Government of Karnataka against the subsidy demands. The subsidy receipt vis-à-vis demand of BESCOM for the FY 2023-2024 is presented below:

Sl. No.	Particulars	Consumption (in kWh)	Demand (Rs in Crs.)	Subsidy released for 2023-24 (Rs. In Crs.)	Remarks *Balance subsidy to be received (Rs in Crs.)
1	Residential	9514442706	2633.83	2771.59	-137.75
2	Agriculture	10320537652	5594.67	4368.18	1677.69
	<b>Total</b>	<b>19834980358</b>	<b>8228.50</b>	<b>7139.77</b>	<b>1539.93</b>

#### 5.4.5 ANALYSIS ON T&D LOSSES AND AT&C LOSSES

- **% Losses – Aggregate-** The overall Technical Loss (T&D Loss) is 9.13% and overall AT&C Loss is 14% for FY2023-2024. This reflects an overall collection efficiency of 95.46%.
- **% Losses – Voltage wise-** DISCOM has distribution only of 11 kV and 415V and is carrying out loss assessment only at 11 kV. The losses of which is 9.13% and overall AT&C Loss is 14% for FY2023-2024. DISCOM shall carry out energy accounting at all the voltage levels.
- **Division wise % Losses summary -** The range of T&D losses, collection efficiency and AT&C losses among the divisions is tabulated below:

<b>T &amp; D loss (MU)</b>	3635.93
<b>T &amp; D loss (%)</b>	9.13%
<b>T &amp; D loss Range</b>	5% -15%
<b>Division With highest T &amp; D loss</b>	Hiriyuru
<b>Division With lowest T &amp; D loss</b>	Jayanagar
<b>Collection Efficiency</b>	94.59%
<b>Collection Efficiency Range</b>	77.81% - 98.46%
<b>AT &amp; C loss (%)</b>	14%
<b>AT &amp; C loss Range</b>	7% - 31%
<b>Division With lowest AT&amp;C loss</b>	Koramangala
<b>Division With highest AT&amp;C loss</b>	Chinthamani

- **Division wise % Losses summary -** The following divisions of the DISCOM are having T&D losses more than the average value 9.13% and requires special attention.

Sl. No.	Division	T&D loss (MU)	T&D loss (%)
1	NELAMANGALA	163	11%
2	HOSKOTE	213	12%
3	MAGADI	66	10%
4	KOLAR	125	12%
5	KGF	162	11%
6	CHIKKABALLAPURA	119	10%
7	CHINTHAMANI	90	11%
8	DAVANAGERE	188	11%
9	CHITRADURGA	187	14%
10	HARIHARA	117	11%
11	HIRIYURU	173	15%
12	TUMKURU	287	14%
13	TIPTUR	133	12%
14	MADHUGIRI	232	15%
15	KUNIGAL	57	12%

- **Division wise collection efficiency:** The following divisions of the DISCOM are having collection efficiency less than the average value 95% and requires special attention.

Sl. No.	Name of Division	Commercial Parameter		Collection Efficiency
		Billed Amount in Rs. Crore	Collected Amount in Rs. Crore	
1	HOSKOTE	1494.0544	1388.0983	92.91%
2	KANAKAPUR	725.9008	693.5443	95.54%
3	KOLAR	707.3064	588.2507	83.17%
4	KGF	1073.8692	854.5861	79.58%
5	CHIKKABALLAPURA	790.8078	673.2472	85.13%
6	CHINTHAMANI	504.5538	392.6152	77.81%
7	DAVANAGERE	1053.1680	1003.1279	95.25%
8	CHITRADURGA	767.6284	726.2210	94.61%
9	HARIHARA	656.5711	590.7270	89.97%
10	HIRIYURU	688.6672	608.4396	88.35%
11	TUMKUR	1259.8107	1200.9506	95.33%
12	TIPTUR	605.4830	564.9096	93.30%
13	MADHUGIRI	889.6144	774.4276	87.05%
14	KUNIGAL	288.8256	263.1956	91.13%

- **Category wise collection efficiency:** Category wise input energy cannot be estimated on account of mixed feeders. Accordingly, T&D Losses and AT&C Losses for consumer categories could not be provided. However, collection efficiencies of various consumer categories are tabulated below.

Sr. No.	Category	Collection Efficiency
1	Residential	98.64%
2	Agricultural	99.62%
3	Commercial/Industrial-LT	97.87%
4	Commercial/Industrial-HT	99.90%
5	Others	62.41%
	Average	94.59%

## 5.5 INCLUSION AND EXCLUSIONS

- EHT sales and Open Access sales are included in the estimation of losses.
- Subsidy received from the government has been considered for estimation of Collection Efficiency and AT&C losses.

## 5. DATA REQUIRED DURING ENERGY AUDIT AS PER SOP ISSUED BY MINISTRY OF POWER

Data required during Energy Audit as per SOP issued by Ministry of Power				
Sl-No	Clause Details	Sub Clause Number	Sub-clause Details	Present Status
1	Validation through sample data checks and field visits	a	Validation of feeder data: Based on data available in 11 kV Feeder meter at substation for a sample size of 10% for which documentary evidence to be captured in the audit report.	Backup data for 650 feeders were provided
		b	<b>Validation of energy flow data and losses:</b> Based on field survey as per the following sample size: - Min. 10 or 1% (whichever is higher) of DISCOM's input energy metering points between Transmission and 66kV/33kV/11kV distribution feeders by checking functional and communication status of meters etc.	Based on field survey, The following data has been verified: - Functional and communication status of 70 number of input energy metering points between Transmission and 11kV distribution feeders has been provided and verified. The meter test reports provided has been verified.
		c	<b>- For all Divisions with AT&amp;C losses greater than 25% or at-least 1/3 of the total Divisions of DISCOM, verify:</b>  - Total of min. 10 or 1% of metering points (whichever is higher) between 220-132-110- 66 /33 kV outgoing and 22kV-11kV-6.6kV-3kV incoming feeders/ direct end-consumer by checking functional and communication status of meters.	BESCOM has 5 divisions with AT&C losses greater than 25% - Madhugiri, Hiriuru, Chintamani, KGF and Kolar. Functional and communication status of meters is monitored by the transmission company KPTCL.

<b>Data required during Energy Audit as per SOP issued by Ministry of Power</b>				
<b>Sl-No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Sub-clause Details</b>	<b>Present Status</b>
			<p>- In an Urban High Loss Division, check 5 or 1% of Metering points (whichever is higher) at DTs where communicable meters were already installed under other schemes such as R-APDRP and IPDS.</p> <p>- Total of min. of 10 or 1% of metering points (whichever is higher) between 11kV/6.6kV feeders and DTs by checking functional and communication status of meters, foot survey of feeder to check for thefts/ hooking etc.</p> <p>- Verify metering and connection status of min. of 10 or 2% consumers of the Division (whichever is higher) of the following category of consumers – Agriculture (Metered and Un-metered), Govt. category connection (ULB, RLB etc.), and LT Industrial</p>	<p>The functional and communication status of meters of 32 DTs of Urban Divisions were checked.</p> <p>For Metering points between 11kV feeders and DTs, functional and communication status of meters and foot survey of feeder for checking for thefts/ hooking etc has been carried out for 20 number of feeders.</p> <p>-For Metering points between 11kV feeders and DTs , functional and communication status of meters and foot survey of feeder for checking for thefts/ hooking etc has been carried out for 20 number of feeders.</p> <p>- Functional and communication status of meters of 25 consumers of Agriculture category (Metered and Un-metered) was checked and verified.</p> <p>- Functional and communication status of meters of 14 Govt. category connection (ULB, RLB etc.) was checked and verified.</p> <p>- Functional and communication status of meters of 16 consumers of LT Industrial category was checked and verified.</p>

## 6. NOTES OF THE EA/EM ALONG WITH QUERIES AND REPLIES TO DATA GAPS

Query by EA, response by EM and Notes by EA is given below:

Sl. No	Query by EA	Response by EA of DISCOM	Notes by EA												
1	Why there has been an increase in the AT&C losses?	<p>The technical losses (T&amp;D) have consistently reduced in comparison to the previous two financial years; however, the collection efficiency has been impacted because of the below mentioned reasons.</p> <table><tr><th>Year</th><th>T&amp;D losses (%)</th><th>AT&amp;C Losses (%)</th></tr><tr><td>2021-22</td><td>11.23%</td><td>11.2%</td></tr><tr><td>2022-23</td><td>9.28%</td><td>13.4%</td></tr><tr><td>2022-24</td><td>9.13%</td><td>14%</td></tr></table> <p>During FY 2023-24 in all Tariff achievement of Collection Efficiency is 94.59%. Detailed reasons for decrease in collection efficiency are summarized below:</p> <ul style="list-style-type: none"><li>In LT4A Irrigation Pump set, Cumulative Demand is Rs. 5594.67 Crores, whereas Deemed Collection is Rs. 5589.29 Crores, but actual Subsidy Received from GoK is Rs.4368.18 Crores, Shortfall of Subsidy is Rs. 1226.49 Crores.</li><li>In LT6a [Water Supply] Cumulative Demand is Rs. 1673.30 Crores and the Cumulative Collection is Rs. 389.02 Crores. The Current Year Short Fall is Rs. 1284.28 Crores. Collection Efficiency is 23.25%.</li><li>In LT6b [Street Light] Cumulative Demand is Rs. 714.38 Crores and the Cumulative Collection is Rs. 425.21 Crores. The Current Year Short Fall is Rs. 289.17 Crores. Collection Efficiency is 59.52%.</li></ul> <p>LT6a [Water Supply] &amp; LT6b [Street Light] includes Government Department arrears such as BWSSB, BBMP, Rural Local Body, Urban Local Body. The recovery of Government dues depends upon the funds released by it, BESCOM on ongoing basis follows up with the Government for the recovery of dues.</p>	Year	T&D losses (%)	AT&C Losses (%)	2021-22	11.23%	11.2%	2022-23	9.28%	13.4%	2022-24	9.13%	14%	Noted
Year	T&D losses (%)	AT&C Losses (%)													
2021-22	11.23%	11.2%													
2022-23	9.28%	13.4%													
2022-24	9.13%	14%													
2	What is the status of energy auditing at DTR level	On an ongoing basis energy audit at the DTR level is being carried for DTR which are metered. However, energy meters installations on DTR's have been proposed under RDSS Project.	Noted												



<b>Sl. No</b>	<b>Query by EA</b>	<b>Response by EA of DISCOM</b>	<b>Notes by EA</b>
3	Why energy accounting and losses at different voltage levels are not provided?	The 11kV Technical loss is computed for all 11kv feeders. No 33kV lines exist in BESCOM. LT line losses are computed for DTs for which meter is provided.	Noted
4	Comparison of decrease in energy losses as well as increase in reliability because of conversion of bare LT conductor's to aerially bundled cables could have been documented as a Best Practice for emulation.	In Bangalore City entire 11kV overhead feeders are converted to UG cable. Further in densely populated area and slums, AB Cable were used for LT Network to avoid Theft & pilferage.	Noted
5	Non meeting of RPO targets	Due to increase in demand, BESCOM has procured more energy for FY 2024 resulting in increase of procurement over and above the approved energy by KERC. KERC, vide notification dated 12.7.2022 had fixed the target of 25.25% to BESCOM for FY 24. As there is increase in energy procurement, the RPO target set by KERC couldn't be achieved. Letter has been addressed to KERC requesting to approve and set off the shortfall in RPO against the renewable energy certificates of BESCOM	Noted

## 7. ANNEXURES

### A. INTRODUCTION OF VERIFICATION FIRM.

East Coast Sustainable Pvt Limited is registered as an Empanelled Accredited Energy Auditing Firm with Bureau of Energy Efficiency (BEE) bearing Registration No. EmAEA – 067

East Coast Sustainable Private Limited (East Coast) was founded by highly qualified and experienced technocrats, who have a deep understanding of energy efficiency, renewable energy, environment conservation and climate change. The team has experience of conducting more than 700 projects in these areas for various sectors of the economy. Complete range of services being undertaken by East Coast Sustainable includes the following.

- Energy Efficiency
- Perform, Achieve and Trade (PAT) Scheme
- Renewable Energy
- Environmental Management
- Development of International Standards Organization (ISO) Management System
- Safety Audits
- Water Audit and Water Balance
- Project Management
- Demand Side Management (DSM)
- Sustainability Reporting.

## **B. MINUTES OF MEETING WITH THE DISCOM TEAM**

The energy audit team from East Coast Sustainable Private Limited, Visakhapatnam visited BESCOM, on 26<sup>th</sup> and 27<sup>th</sup> June 2024 to carry out the Annual Energy Audit. The team checked supporting documents, primary and secondary data that were used to fill up the data in the pro-forma provided by Bureau of Energy Efficiency. The Annual Energy Audit was completed on 9<sup>th</sup> June 2024 and the Audit Proceedings were signed by both parties (DISCOM and EmAEA). Signed copy of Audit Proceedings presented as Annexure- 10.

## **C. CHECK LIST PREPARED BY AUDITING FIRM**

The check list prepared for Annual Energy Audit is presented in the following table:

Sl. No.	Reference	Name	Available Monitoring System
FY 2023-24 Data Verification			
Input Energy			
1	A1 to A22	Input Energy (MU)	
2	Column A to W	No of connection metered (Nos)	
		No of connection Un-metered (Nos)	
		Connected Load Metered (MW)	
		Connected Load Un-metered (MW)	
		Input Energy (MU)	
		Metered energy (MU)	
		Unmetered energy/Assessment Energy (MU)	
		T&D Losses (MU)	
		Billed Amount	
		Collected Amount	
		AT&C Loss	
Details of Input Energy Sources			
3	A	Generation at Transmission Periphery (Details)	
	B	Embedded Generation in DISCOM Area	

<b>Details of Feeder wise Losses</b>			
4		Feeder-wise Energy Accounting	
<b>Details of Feeder wise Losses</b>			
5		Feeder-wise Energy Accounting	
<b>Details of Consumers and consumption</b>			
6		Consumers and Consumption	
<b>Details of DT Wise metering and DT losses</b>			
7	A	DT Wise Metering	
	B	DT Losses	
<b>Details of Subsidy</b>			
8	A	Subsidy to irrigation	
	B	Subsidy to domestic consumers	
<b>Additional data as requested by BEE</b>			
9		Validation through sample data checks and field visits	
	A	Validation of feeder data	
	B	Validation of energy flow data and losses	
	C	For all Divisions with AT&C losses greater than 25% or at-least 1/3 of the total Divisions of DISCOM	

Further, field visits were also carried out primarily, to physically observe the DISCOM assets and do random checks as necessary.

Apart from this, the audit team also reviewed the status of the DISCOM vis-à-vis the Clauses and Schedules of the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021.

<b>Clauses of BEE Regulations</b>			
<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Subclause Details</b>
3	Intervals of time for conduct of annual energy audit	a	Conducted an annual energy audit for every financial year and submitted the annual energy audit report to the Bureau and respective State Designated Agency and also made available on the website of the electricity distribution company within a period of four months from the expiry of the relevant financial year
4	Intervals of time for conduct of periodic energy accounting.	a	All feeder wise, circle wise and division wise periodic energy accounting is conducted by the energy manager of the electricity distribution company for each quarter of the financial year.
		b	Submitted the periodic energy accounting report to the Bureau and respective State Designated Agency and also made available on the website of electricity distribution company within forty-five days from the date of the periodic energy accounting.
		c	Electricity distribution company conducted its first periodic energy accounting, for the last quarter of the financial year immediately preceding the date of such commencement (i.e. 6th October 2021).
		d	Electricity distribution company conducted its subsequent periodic energy accounting for each quarter of the financial year for a period of two financial years from the date of such commencement, and submit the periodic energy accounting report within sixty days from the date of periodic energy accounting.
5		a	Identification and mapping of all of the electrical network assets

<b>Clauses of BEE Regulations</b>			
<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Subclause Details</b>
	Pre-requisites for annual energy audit and periodic energy accounting	b	Identification and mapping of high tension and low-tension consumers
		c	Development and implementation of information technology enabled energy accounting and audit system, including associated software
			Electricity distribution company ensures the installation of functional meters for all consumers, transformers and feeders. Meter installation is done in a phased manner within a period of three financial years from the date of the commencement of these regulations in accordance with the trajectory set out in the First Schedule
		d	<p>d.1. 100% Communicable Feeder Metering integrated with AMI, by 31st December 2022 along with replacement of existing non-communicable feeder meters.</p> <p>d.2. All <b>Distribution Transformers</b> (other than HVDS DT up to 25kVA and other DTs below 25 kVA) shall be metered with communicable meters. Communicable DT Metering for the following areas/ consumers to be completed by December 2023 and in balance areas by December 2025:</p> <p>d.2.1. All Electricity Divisions of 500 AMRUT cities, with AT&amp;C Losses &gt; 15%</p> <p>d.2.2. All Union Territories (for areas with technical difficulty, non-communicable meters may be installed)</p> <p>d.2.3. All Industrial and Commercial consumers</p> <p>d.2.4. All Government offices at Block level and above</p> <p>d.2.5. Other high loss areas i.e. rural areas with losses more than 25% and urban areas with losses more than 15%</p>

<b>Clauses of BEE Regulations</b>			
<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Subclause Details</b>
			<p>d.3. <b>Prepaid Smart Consumer Metering</b> to be completed for all directly connected meters and AMR in case of other meters, by December 2023 in the following areas:</p> <p>d.3.1. All Electricity Divisions of 500 AMRUT cities, with AT&amp;C Losses &gt; 15%;</p> <p>d.3.2. All Union Territories (for areas with technical difficulty, prepaid meters to be installed);</p> <p>d.3.3. All Industrial and Commercial consumers;</p> <p>d.3.4. All Government offices at Block level and above;</p> <p>d.3.5. Other high loss areas i.e. rural areas with losses more than 25% and urban areas with losses more than 15%.</p>
			<p>d.4. Consumer Metering:</p> <p>98% by FY 2022-23</p> <p>99% by FY 2023-24</p>
			<p>d.5. Targets for functional meters—</p> <p>Meter FY 22-23 FY 23-24 FY24-25</p> <p>Feeder metering 98.5% 99.5% 99.5%</p> <p>DT metering 90% 95% 98%</p> <p>Consumer metering 93% 96% 98%</p>
		e	<p>e.1. All distribution transformers (other than high voltage distribution system up to 25kVA and other distribution system below 25 kVA) is metered with communicable meters.</p> <p>e.2. And existing non communicable distribution transformer meters is replaced with communicable meters and integrated with advanced metering infrastructure.</p>

<b>Clauses of BEE Regulations</b>			
<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Subclause Details</b>
		f	Electricity distribution company has established an information technology enabled system to create energy accounting reports without any manual interference and such systems may be within a period of three years from the date of the commencement of these regulations in case of urban and priority area consumers; and within five years from the date of the commencement of these regulations in case of rural consumers
		g	Electricity distribution company has a centralized energy accounting and audit cell comprising of— (i) a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years; and (ii) a financial manager having professional experience of not less than five years
6	Reporting requirements for annual energy audit and periodic energy accounting	a	Electricity distribution company has a nodal officer, who is a full time employee of the electricity distribution company in the rank of the Chief Engineer or above, for the purpose of reporting of the annual energy audit and periodic energy accounting and communicate the same to the Bureau.
		b	Electricity distribution company ensures that the energy accounting data is generated from a metering system or till such time the metering system is not in place, by an agreed method of assumption as may be prescribed by the State Commission



<b>Clauses of BEE Regulations</b>			
<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Subclause Details</b>
		c	Metering of distribution transformers at High Voltage Distribution System up to 25KVA is done on cluster meter installed by the electricity distribution company
		d	The energy accounting and audit system and software is developed to create monthly, quarterly and yearly energy accounting reports.
		e	Electricity distribution company has provided the details of the information technology system in place as specified in clause (f) of regulation 5 that ensures minimal manual intervention in creating the energy accounting reports and any manual intervention of any nature, in respect of the period specified therein, shall be clearly indicated in the periodic energy accounting report
<b>Additional data required during Energy Audit as per SOP issued by Ministry of Power</b>			
1	Validation through sample data checks and field visits	a	<b>Validation of feeder data:</b> Based on data available in 11 kV Feeder meter at substation for a sample size of 10% for which documentary evidence to be captured in the audit report.
		b	<b>Validation of energy flow data and losses:</b> Based on field survey as per the following sample size: - Min. 10 or 1% (whichever is higher) of DISCOM's input energy metering points between Transmission and 66kV/33kV/11kV distribution feeders by checking functional and communication status of meters etc.

<b>Clauses of BEE Regulations</b>			
<b>Clause No</b>	<b>Clause Details</b>	<b>Sub Clause Number</b>	<b>Subclause Details</b>
		c	<p>- <b>For all Divisions with AT&amp;C losses</b> greater than 25% or at-least 1/3 of the total Divisions of DISCOM, verify:</p> <p>- Total of min. 10 or 1% of metering points (whichever is higher) between 220-132-110- 66 /33 kV outgoing and 22kV-11kV-6.6kV-3kV incoming feeders/ direct end-consumer by checking functional and communication status of meters.</p> <p>- In an Urban High Loss Division, check 5 or 1% of Metering points (whichever is higher) at DTs where communicable meters were already installed under other schemes such as R-APDRP and IPDS.</p> <p>- Total of min. of 10 or 1% of metering points (whichever is higher) between 11kV/6.6kV feeders and DTs by checking functional and communication status of meters, foot survey of feeder to check for thefts/ hooking etc.</p> <p>- Verify metering and connection status of min. of 10 or 2% consumers of the Division (whichever is higher) of the following category of consumers – Agriculture (Metered and Un-metered), Govt. category connection (ULB, RLB etc.), and LT Industrial</p>

#### **D. BRIEF APPROACH, SCOPE & METHODOLOGY FOR AUDIT**

The methodology adopted for conducting the Annual Energy Audit is as follows

- Verification of existing pattern of energy distribution across periphery of electricity distribution company
- Verification of accounted energy flow submitted by electricity distribution company at all applicable voltage levels of the distribution network
- Collection of data on energy received, and distributed, covered within the scope of energy audit
- Analyse the consistency of data monitoring compared to the collected data
- Recommendations to facilitate energy accounting and improve energy efficiency
- Analyse the data with respect to the purpose of energy accounting in reducing losses for the electricity distribution company
- Field studies and measurements on sample feeder.

## **E. INFRASTRUCTURE DETAILS**

BESCOM has a vast infrastructure facility in its operating area and the details are summarized below:

<b>Sl. No.</b>	<b>Particulars</b>	<b>Value in FY 2023 -2024</b>
1	No of 11 kV Substations (only 11kV secondary side substations have been considered)	532
2	Length of 11 KV line (KM)	147459.00
3	Length of Low-tension line (KM)	197190.26
4	Number of Distribution Transformers	497991
5	Number of circles	9
6	Number of divisions	32
7	Number of sub-divisions	147
8	Number of feeders	6389

### **Zone Wise Sub-Stations in BESCOM Jurisdiction (as on 31.03.2024)**

<b>ZONEWISE SUB-STATIONS IN BESCOM AS ON 31.03.2024</b>						
<b>VOLTAGE CLASS</b>	<b>BMNZ (Bangalore Metropolitan North Zone)</b>	<b>BMSZ (Bangalore Metropolitan South Zone)</b>	<b>BMAZ (Bangalore Metropolitan) TOTAL</b>	<b>BRAZ (Bangalore Rural Area Zone)</b>	<b>CTAZ (Chitradurga Area Zone)</b>	<b>TOTAL</b>
<b>220/66/11 kV</b>	9	13	22	19	11	52
<b>220/110/11 kV</b>	0	0	0	0	2	2
<b>220/66KV</b>	3	1	4	4	4	12
<b>110/11kV</b>	0	0	0	0	32	32
<b>66/11 kV</b>	46	53	99	178	169	446
<b>TOTAL</b>	58	67	125	201	218	544

## **F. ELECTRICAL DISTRIBUTION SYSTEM**

BESCOM is distributing power supply in 8 District of the State of Karnataka. The Karnataka Power Transmission Company Ltd is the transmission utility in the state. In BESCOM Jurisdiction it consists of the following Substations/Receiving stations at the end of March 2024.

<b>VOLTAGE CLASS</b>	<b>BMNZ (Bangalore Metropolitan North Zone)</b>	<b>BMSZ (Bangalore Metropolitan South Zone)</b>	<b>BRAZ (Bangalore Rural Area Zone)</b>	<b>CTAZ (Chitradurga Area Zone)</b>	<b>TOTAL</b>
220/66/11kV	9	13	19	11	52
220/110/11kV	0	0	0	2	2
220/66kV	3	1	4	4	12
110/11kV	0	0	0	32	32
66/11kV	46	53	178	169	446
<b>TOTAL</b>	<b>58</b>	<b>67</b>	<b>201</b>	<b>218</b>	<b>544</b>

The key features of the BESCOM's distribution are summarised below:

- In BESCOM there are neither 33kV distribution lines nor stations, power is distributed with only 11kV distribution lines in network.
- The distribution network in RAPDRP area is mapped under GIS.
- The power supply to all LT/HT consumers is provided by suitable capacity distribution transformers powered by 11kV lines.
- The EHT consumers are connected with suitable capacity EHT lines like 66kV, 110kV and 220kV class.
- There are 6389 no's of 11kV feeders feeding to different category of consumers as on March 2024.

### **BESCOM Distribution Company:**

In the year 1999, Karnataka embarked on a major reform of the power sector. As a first step, Karnataka Electricity Board was dissolved and, in its place, the Karnataka Power Transmission Corporation Limited (KPTCL) was incorporated. This was followed by the constitution of Karnataka Electricity Regulatory Commission (KERC) in November 1999. In the next phase of the reform process, the transmission and distribution businesses managed by KPTCL were unbundled in June 2002. The distribution sector was further divided into 5 companies viz. Bangalore Electricity Supply Company Limited – BESCOM is formed along with other ESCOMS in the Karnataka state.

BESCOM has taken over responsibility from KPTCL for the distribution of electricity in eight districts of Karnataka (Bangalore Urban, Bangalore Rural, Chikkaballapura, Kolar, Davanagere, Tumkur, Chitradurga and Ramanagara). BESCOM covers an area of 41,092 km<sup>2</sup> with a population of over 20.7 million.

**Vision:** The Vision of BESCOM is to become number one in customer satisfaction in South Asia in Power distribution.

**Mission:** The Mission of BESCOM is to ensure absolute consumer satisfaction and continuous profit in business.

1. By ensuring total employee satisfaction.
2. By developing infrastructure commensurate with growth, thus ensuring reliable and quality power supply.
3. By using best technology in communication and best practices in power sector.

### **Duties and Responsibilities:**

BESCOM as Company is vested with the duty of distribution of power to consumers at the rates approved by KERC Tariff Regulations. In this process, the following supplemental duties are incidental to its main function:

- Supply at specified voltage and frequency.
- Maintenance of 11 kV lines, distribution transformers, cables, and equipment to ensure reliable and quality power supply.
- Augmentation of infrastructure to meet the demand.
- Ensuring safety of human and animal life by taking suitable actions to minimize risk of accidents.
- Perspective planning of activities in relation to demand and supply of power.

### **Overview of BESCOM Operations:**

- BESCOM has four operating zones – Bangalore Metropolitan Area Zone-South (BMASZ), Bangalore Metropolitan Area Zone-North (BMANZ), Bangalore Rural Area Zone (BRAZ) and Chitradurga Area Zone (CTAZ), 9 circles, 32 divisions, 147 subdivisions and 534 section offices/operation and maintenance units.
  - ✓ Zonal office is headed by an officer of the rank of a Chief Engineer (CE).
  - ✓ Circle office is headed by an officer of the rank of a Superintending Engineer (SE). Division is headed by an officer of the rank of an Executive Engineer (EE).
  - ✓ Subdivision is headed by an officer of the rank of an Assistant Executive Engineer (AEE).
  - ✓ Section offices/operation and maintenance units are headed by an Assistant engineer/Junior engineer (AE/JE).
- BESCOM has over 1,47,459.00 circuit kilometres (ckm) of 11 kV high voltage lines and 1,97,190.2 ckm of low voltage lines. There are around 4,97,991 distribution transformers, over 544 substations, plus stores and workshops.
- In addition to operation and maintenance of its distribution network, and provision of customer connections BESCOM's power distribution services business involves various capital projects, the main ones being:

- ✓ model subdivision and system improvement works: upgradation of its distribution network.
- ✓ high voltage distribution system (HVDS): Conversion of LT line to 11kV HT overhead (OH)/aerial bundled (AB) cable and extension of new 11kV line.
- ✓ Conversion of 11kV (OH) lines into underground (UG) cable system and LT OH line into UG/AB cable system in the jurisdiction of BMAZ: conversion of HT OH lines by UG cable and providing ring main units.
- ✓ Restructured accelerated power development and reforms programme (R-APDRP): distribution strengthening projects for reduction of aggregate technical and commercial (AT&C) losses less than 15%.
- ✓ Unauthorized irrigation pump (IP) sets: providing electrical infrastructure to regularized unauthorized IP sets by extending 11kV HT lines, erection of 25KVA 4 star rated distribution transformers (DTs) and extension of LT line 3 phase 4 wire.

**Safety Manual:**

BESCOM has published its Safety Manual which is a collection of safety guidelines. These guidelines are a product of different experiences with incidents that have caused fatal injuries, service interruptions, property damage and economic loss. These guidelines are formulated to counter previous shortcomings and to accomplish the highest standards of safety. The observation of all the guidelines in the safety manual will enable and empower employees to build a safe work environment for all BESCOM employees. BESCOM Safety Manual was formulated with an aim to create safe working environment for the employees, create awareness among the public on electrical safety to avoid electrical accidents and thereby save the lives and property and make BESCOM an accident-free organization.

**Further BESCOM is having:**

- HRD wing for training of its employees,
- Technical Innovation Centre TIC for implementation of innovative ideas.
- DAS (Distribution Automation System) for implementation of Automation in Distribution.
- IT wing for development of online processes.
- DSM wing for conservation energy projects.
- Quality wing for fixing the standard in materials used.
- Customer Care Centre to address the complaints.
- Project wing to implement new projects.
- Smart grid and Electric Vehicles (SG &EV) to promote smart grid activity in BESCOM and to promote Electric vehicles by providing charging stations etc.

## Annual Energy Audit Report of BESCOM, Bangalore

### G. MONTHLY ABSTRACT OF ENERGY EXCHANGE BETWEEN TRANSCO AND DC BY SLDC

Long term conventional													
	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	TOTAL
	Actual energy after EB	Actual energy after EB	Actual energy after EB	Actual energy after EB									
CGS	1782902511	1429433843	1162645584	1126457672	1173877550	1340633374	1230548482	1235432335	1142186487	1346684429	1455302098	1437388198	<b>15863492564</b>
KPCL Hydel	188085354	202283942	154708257	93168135	170194457	319526753	134628072	151017793	62050359	75767650	86883020	104449542	<b>1742763334</b>
KPCL Thermal	1072254018	1166242237	1233609882	1183665229	996781315	784807701	900159878	999625286	915807708	1057288596	1226290132	1179437816	<b>12715969797</b>
UPCL	137255002	164584324	84341404.41	167281980.68	46533407.63	180843334.35	212095565.97	321052759.08	274899817.35	308028168.63	308281819.18	228526537.06	<b>2433724121</b>
IEX Purchase	32928893	58051053	46458316	22658941	25454248	362481710	122868646	152790071	41787704	32326531	8917552	103354655	<b>1010078321</b>
IEX sale	-21426292	-4720379	-39345107	-53002196	-94182118	-23835970	-11519459	-7848728	-10160806	-104639	-639460	-69759	<b>-266854913</b>
Banked energy		331966719		-103448725	-273183057	-203976717	-189206542		104774769	87612486	91039122	192062340	<b>42753649</b>
sec 11								70609612	231758252	259999748	241281562	190660327	<b>994309502</b>
<b>Total long term conventional</b>	<b>3191999488</b>	<b>3347841739</b>	<b>2642418336</b>	<b>2436781036</b>	<b>2045475804</b>	<b>2760480185</b>	<b>2399574644</b>	<b>2927792383</b>	<b>2763104290</b>	<b>3167602969</b>	<b>3417355845</b>	<b>3435809657</b>	<b>34536236375</b>
Long-Term Renewable energy 66 KV	675093760	570048349	662833318.7	791255544.7	857431424.1	708019057.7	693244311.9	566280854.0	519189162.7	531432741.6	531824363.9	539208200.0	<b>7499343324</b>



### Annual Energy Audit Report of BESCOM, Bangalore

Long-Term Renewable energy 33 KV	20378795	16165329	17643956	20660357	23395898	25926233	23150329	18584415	15118037	16165329	17643956	20660357	<b>235492993</b>
Long-Term Renewable energy 11KV	13363695	9371025	10200915	7731585	37526400	27653985	21329235	7380540	7403895	9371025	10200915	7731585	<b>169264800</b>
Sale of surplus power													<b>0</b>
Long-Term Renewable energy 33 KV													
NMDC 1	0	979590	669837	794336	0	1939802	2186792	118639	118639	979590	669837	794336	
NMDC 2	143164	149233	91100	145613	0	318362	345336	683398	683398	149233	91100	145613	
Windworld Krishna	511294	1792942	1231223	1155463	8697090	5689426	4859701	1666690	1762128	1792942	1231223	1155463	
Protectron	137164	417331	359418	301107	619726	366063	299344	109910	356880	417331	359418	301107	
Vishwind 6.4	137743	587054	475649	484222	2233827	1340031	1220496	453279	510662	587054	475649	484222	
Vishwind	648238	126832	475649	104197	536232	345826	291403	105578	107591	126832	475649	104197	
Deepak cables	90982	52227	64703	63275	249439	150678	129678	128678	78064	52227	64703	63275	
Venkat energy	534771	353850	388131	512160	292431	446348	389808	404443	320580	353850	388131	512160	
Smayamajyot hi	486840	373198	403101	474126	279053	410982	333850	423384	342153	373198	403101	474126	
Rayappa poojar	195015	119247	146606	168688	106261	152897	129208	147752	128715	119247	146606	168688	
Arete elena	511160	335990	384360	418620	238160	353990	293590	386190	327990	335990	384360	418620	

### Annual Energy Audit Report of BESCOM, Bangalore

Mepgen solar	337644	191736	213693	321279	164256	231506	187738	243256	200209	191736	213693	321279	
SEI Suryashakthi	5574085	3620727	428764 6	529004 3	3348441	4719880	410003 4	4640654	3417354	3620727	428764 6	5290043	
SEI BHEEM	5509177	3516247	420743 4	518088 2	3261708	4671610	414950 0	4530403	3349399	3516247	420743 4	5180882	
SEI Aditi	5561518	3549126	424540 8	524634 6	3369274	4788833	423385 2	4542161	3414275	3549126	424540 8	5246346	
	<b>20378795</b>	<b>16165329</b>	<b>176439 56</b>	<b>206603 57</b>	<b>23395898</b>	<b>25926233</b>	<b>231503 29</b>	<b>1858441 5</b>	<b>1511803 7</b>	<b>1616532 9</b>	<b>176439 56</b>	<b>20660357</b>	<b>235492993</b>
Long-Term Renewable energy 11 KV													
Sunphoto voltaic	13363695	9371025	102009 15	773158 5	37526400	27653985	213292 35	7380540	7403895	9371025	102009 15	7731585	<b>169264800</b>
												rooftop	146517764
<b>Total Energy purchased</b>	39008357 38	39434264 42	333309 6526	325642 8523	29638295 26	35220794 61	313729 8520	3520038 192	3304815 385	3724572 065	397702 5080	40034097 99	<b>425868552 56</b>

## Annual Energy Audit Report of BESCOM, Bangalore

Sample data of metering and connection status of min. of 10 or 2% consumers of the Division of the following category of consumers

A) Agriculture FY 2023-2024

<b>DiviC4:G30</b>	<b>Sub - Division</b>	<b>Feeder no/ name</b>	<b>Metering status</b>	<b>Connection status</b>
CHITRADURGA	Chitradurga Urban	F01- J N KOTE	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F01-COPPERMINES	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F01-MDKHALLI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F02-CGHALLI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F02-GOLLANAKATTE	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F02-KELAGALAHATTI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F02-KYADIGERE	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F03-BANKCLNY	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F03-J.N.KOTE	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F03-PALLAVAGERE	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F04-HOSAKALLAHALLI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F04-KASAVARATTI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F04-MUDDAPURA	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F05-BANGARAKANAHALLI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F06-GRHALLI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F06-HOSAGOLARAHATTI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F07-PALLAVAGERE	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F07-RAYANAHALLI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F08-SURENAHALLI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F08-VIDYANAGAR	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F09-SEEBARA	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F11-CGHALLI	Un-metered	Active
CHITRADURGA	Chitradurga Urban	F11-SAJJANAKERE	Un-metered	Active

# Annual Energy Audit Report of BESCOM, Bangalore

## ESCOM wise Power Purchase after considering Solar Roof Top Energy for RPO Purpose

RPO for BESCOM, MESCOM, CESC, HESCOM & GESCOM for the quarter APRIL-2023 to MARCH-2024  
Excluding procurement from hydropower during the FY-2022-23 Vide Notification No: Y/01/22/462 Dtd: 12.07.2022

### Solar and Non - Solar

Month	ESCOMS	Energy purchased in units	Energy purchased from other ESCOM (in Units)	Total energy Purchased (in Units)	KERC Target for RPO in %	RPO to be met in Units	Solar and Non Solar Energy Purchased					RPO Met Units	RPO Achived in %
							PPA	Solar Roof Top	Green Energy	GTAM	APPC		
1	2	3	4	5=3+4	6	7=5*6	8	9	10	11	12	13=8+9-10-11-12	14=13/5*100
1st Quarter	BESCOM	10484520648	-498238513	9986282135	25.25	2521536239	2185957193	0	79214892	21980495	0	2084761806.55	20.88
	GESCOM	2935814210	-419909516	2515904695	22.00	553499033	759676413	0	0	22941453	2632023	734102937.01	29.18
	HESCOM	2958487582	643849855	3602337437	24.00	864560985	1159593254	0	0	51383550	0	1108209704.37	30.76
	MESCOM	1617012515	219122604	1836135119	26.50	486575806	334197520	0	963461	4119962	0	329114097.66	17.92
	CESC	1747665951	55175570	1802841520	24.00	432681965	383600260	0	0	10029291	0	373570969.17	20.72
2nd Quarter	BESCOM	8850427807	30621210	8881049017	25.25	2242464877	2478817244	0	39326544	23595132	0	2415895568.40	27.20
	GESCOM	2644620472	-236202478	2408417994	22.00	529851959	957458586	0	0	24626677	4506165	928325743.93	38.55
	HESCOM	2783218537	343833769	3127052306	24.00	750492554	1360010889	0	0	55158066	0	1304852823.26	41.73
	MESCOM	1474624184	-244277181	1230347003	26.50	326041956	479025526	0	736347	4422605	0	473866574.30	38.51
	CESC	1532672696	106024679	1638697375	24.00	393287370	444240052	0	0	10766020	0	433474031.20	26.45
3rd Quarter	BESCOM	10821555919	-563923940	10257631979	25.25	2590052075	2238011169	0	37511910	465162	0	2200034096.81	21.45
	GESCOM	3091535779	-166353277	2925182502	22.00	643540150	732196260	0	0	485499	995366	730715394.61	24.98
	HESCOM	3340120650	621867069	3961987719	24.00	950877053	1217299397	0	0	1087405	0	1216211991.59	30.70
	MESCOM	1760615379	26970176	1787585555	26.50	473710172	390166139	0	0	87189	0	390078949.98	21.82
	CESC	2033711937	81439972	2115151908	24.00	507636458	463214717	0	0	212245	0	463002471.68	21.89
4th Quarter	BESCOM	12840699400	-484552609	12356146792	25.25	3119927065	2301569100	0	22137885	0	0	2279431215.02	18.45
	GESCOM	3664358879	-649338401	3015020478	22.00	663304505	805120296	0	0	0	1606887	803513408.77	26.65
	HESCOM	4112221394	447626561	4559847955	24.00	1094363509	1413327387	0	589620	0	15736679	1397001088.06	30.64
	MESCOM	2061531461	322865239	2384396700	26.50	631865126	374990507	0	0	0	0	374990506.97	15.73
	CESC	2375967085	363399209	2739366294	24.00	657447911	460231576	0	0	0	0	460231575.60	16.80
2023-24 (From APRIL 2023 to MARCH-2024)	BESCOM	43143723775	-1516093851	41627629924	25.25	10510976556	9204354706	146520000	178191231	46040788	0	9126642686.79	21.92
	GESCOM	12347356636	-1471803672	10875552964	22.00	2392621652	3254451554	11027296	0	48053629	9740441	3207684780.32	29.49
	HESCOM	13227247447	2057177255	15284424702	24.00	3668261928	5150230927	33199284	589620	107629021	15736679	5059474891.28	33.10
	MESCOM	6926003525	324680838	7250684364	26.50	1921431356	1578379693	12219987	1699808	8629756	0	1580270115.91	21.79
	CESC	7702419481	606039429	8308458911	24.00	1994030139	1751286604	12401814	0	21007556	0	1742680861.35	20.97

Superintending Engineer (Elec)  
TBC, KPTCL, Bengaluru

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## Annual Energy Audit Report of BESCOM, Bangalore

RPO for BESCOM, MESCOM, CESC, HESCOM & GESCOM for the quarter JANUARY-2024 to MARCH-2024  
Excluding procurement from hydro power during the FY-2022-23 Vide Notification No: Y/01/22/462 Dtd: 12.07.2022

### Solar and Non - Solar

Month	ESCOMS	Energy purchased in units	Energy purchased from other ESCOM (in Units)	Total energy Purchased (in Units)	KERC Target for RPO in %	RPO to be met in Units	Solar and Non Solar Energy Purchased				RPO Met Units	RPO Achieved in %
							PPA	Green Energy	GTAM	APPC		
1	2	3	4	5=3+4	6	7=5*6	8	9	10	11	12=8-9-10-11	13=12/5*100
January-24	BESCOM	4054060042	-163649405	3890410637	25.25	982328686	803151641	8878352	0		794273289	20.42
	GESCOM	1149996116	-164955635	985040481	22.00	216708906	263564668		0	566854	262997814	26.70
	HESCOM	1270645084	202274095	1472919180	24.00	353500603	486390444		0		486390444	33.02
	MESCOM	642719566	52556164	695275730	26.50	184248069	127736256		0		127736256	18.37
	CESC	737481014	73774780	811255794	24.00	194701391	158599906		0		158599906	19.55
February-24	BESCOM	4084435466	-185119338	3899316128	25.25	984577322	772923241	7994305	0		764928936.1	19.62
	GESCOM	1153713719	-201837121	951876598	22.00	209412852	261282420		0	614528	260667891.5	27.38
	HESCOM	1267929572	149124922	1417054493	24.00	340093078	445403631		0		445403630.7	31.43
	MESCOM	652963527	115593424	768556951	26.50	203667592	126767085		0		126767084.5	16.49
	CESC	751691998	122238113	873930111	24.00	209743227	157916765		0		157916765.3	18.07
March-24	BESCOM	4702203893	-135783866	4566420027	25.25	1153021057	725494218	5265228	0		720228990	15.77
	GESCOM	1360649044	-282545646	1078103398	22.00	237182748	280273208		0	425505	279847703.1	25.96
	HESCOM	1573646738	96227545	1669874282	24.00	400769828	481533313	589620	0		480943692.5	28.80
	MESCOM	765848368	154715651	920564019	26.50	243949465	120487167		0		120487166.7	13.09
	CESC	886794073	167386316	1054180389	24.00	253003293	143714904		0		143714904.5	13.63
JANUARY - 2024 to MARCH 2024	BESCOM	12840699400	-484552609	12356146792	25.25	3119927065	2301569100	22137885	0	0	2279431215	18.45
	GESCOM	3664358879	-649338401	3015020478	22.00	663304505	805120296	0	0	1606887	803513409	26.65
	HESCOM	4112221394	447626561	4559847955	24.00	1094363509	1413327387	589620	0	0	1412737767	30.98
	MESCOM	2061531461	322865239	2384396700	26.50	631865126	374990507	0	0	0	374990507	15.73
	CESC	2375967085	363399209	2739366294	24.00	657447911	460231576	0	0	0	460231576	16.80

Superintending Engineer (Ele)  
TBC, KPTCL, Bengaluru

## Annual Energy Audit Report of BESCOM, Bangalore

RPO for BESCOM, MESCOM, CESC, HESCOM & GESCOM for the quarter OCTOBER-2023 to DECEMBER-2023  
Excluding procurement from hydropower during the FY-2022-23 Vide Notification No: Y/01/22/462 Dtd: 12.07.2022

### Solar and Non - Solar

Month	ESCOMS	Energy purchased in units	Energy purchased from other ESCOM (in Units)	Total energy Purchased (in Units)	KERC Target for RPO in %	RPO to be met in Units	Solar and Non Solar Energy Purchased				RPO Met Units	RPO Achieved in %
							PPA	Green Energy	GTAM	APPC		
1	2	3	4	5=3+4	6	7=5*6	8	9	10	11	12=8-9-10-11	13=12/5*100
October-23	BESCOM	3550482613	-182951062	3367531551	25.25	850301717	677658414	24474489	465162		652718763	19.38
	GESCOM	1004277970	20715068	1024993037	22.00	225498468	216620275		485499	297263	215837513	21.06
	HESCOM	978417658	285100567	1263518225	24.00	303244374	293374644		1087405		292287239	23.13
	MESCOM	588720750	-52358583	536362167	26.50	142135974	132779092		87189		132691903	24.74
	CESC	671864376	-70505989	601358386	24.00	144326013	148594076		212245		148381831	24.67
November-23	BESCOM	3483995808	-242097241	3241898567	25.25	818579388	756908193	5429119	0		751479073.8	23.18
	GESCOM	994039486	-32925175	961114311	22.00	211445148	243605788		0	336535	243269252.7	25.31
	HESCOM	1118426599	228036097	1346462696	24.00	323151047	431896163		0		431896162.6	32.08
	MESCOM	565090816	19957061	585047877	26.50	155037687	128263928		0		128263928.3	21.92
	CESC	658765003	27029259	685794262	24.00	164590623	157238261		0		157238261.1	22.93
December-23	BESCOM	3787077497	-138875636	3648201861	25.25	921170970	803444562	7608302	0		795836259.8	21.81
	GESCOM	1093218324	-154143169	939075154	22.00	206596534	271970197		0	361568	271608629.4	28.92
	HESCOM	1243276393	108730405	1352006799	24.00	324481632	492028590		0		492028590.1	36.39
	MESCOM	606803813	59371698	666175511	26.50	176536510	129123119		0		129123118.6	19.38
	CESC	703082558	124916702	827999260	24.00	198719822	157382380		0		157382379.7	19.01
OCTOBER - 2023 to DECEMBER-2023	BESCOM	10821555919	-563923940	10257631979	25.25	2590052075	2238011169	37511910	465162	0	2200034097	21.45
	GESCOM	3091535779	-166353277	2925182502	22.00	643540150	732196260	0	485499	995366	730715395	24.98
	HESCOM	3340120650	621867069	3961987719	24.00	950877053	1217299397	0	1087405	0	1216211992	30.70
	MESCOM	1760615379	26970176	1787585555	26.50	473710172	390166139	0	87189	0	390078950	21.82
	CESC	2033711937	81439972	2115151908	24.00	507636458	463214717	0	212245	0	463002472	21.89

Superintending Engineer (Ele.) 29/10/24  
TBC, KPTCL, Bengaluru



## Annual Energy Audit Report of BESCOM, Bangalore

RPO for BESCOM, MESCOM, CESC, HESCOM & GESCOM for the quarter JULY-2023 to SEPTEMBER-2023  
Excluding procurement from hydropower during the FY-2022-23 Vide Notification No: Y/01/22/462 Dtd: 12.07.2022

### Solar and Non - Solar

Month	ESCOMS	Energy purchased in units	Energy purchased from other ESCOM (in Units)	Total energy Purchased (in Units)	KERC Target for RPO in %	RPO to be met in Units	Solar and Non Solar Energy Purchased				RPO Met Units	RPO Achieved in %
							PPA	Green Energy	GTAM	APPC		
1	2	3	4	5=3+4	6	7=5*6	8	9	10	11	12=8-9-10-11	13=12/5*100
July-23	BESCOM	2593540745	103564054	2697104798	25.25	681018962	871567253	22014738	13160667		836391848	31.01
	GESCOM	795467140	-149070140	646397000	22.00	142207340	356691067		13736031	2011117	340943919	52.75
	HESCOM	849066304	27816984	876883287	24.00	210451989	527695822		30765537		496930285	56.67
	MESCOM	429216151	-74351505	354864646	26.50	94039131	169754124	45451	2466798		167241875	47.13
	CESC	392189912	92040608	484230520	24.00	116215325	138383782		6004967		132378815	27.34
August-23	BESCOM	3062875921	122450012	3185325933	25.25	804294798	817939037	10091981	9020073		798826982.6	25.08
	GESCOM	929537164	-48085990	881451174	22.00	193919258	329780609		9414418	1395746	318970445.1	36.19
	HESCOM	1005514974	44392381	1049907355	24.00	251977765	453444923		21086120		432358802.6	41.18
	MESCOM	526207879	-101159622	425048257	26.50	112637788	167310634	31646	1690697		165588291.4	38.96
	CESC	572813389	-17596781	555216609	24.00	133251986	160873827		4115692		156758134.7	28.23
September-23	BESCOM	3194011141	-195392856	2998618286	25.25	757151117	789310955	7219825	1414392		780676737.5	26.03
	GESCOM	919616167	-39046347	880569820	22.00	193725360	270986910		1476228	1099302	268411379.9	30.48
	HESCOM	928637259	271624405	1200261664	24.00	288062799	378870144		3306409		375563735.3	31.29
	MESCOM	519200154	-68766054	450434101	26.50	119365037	141960768	659250	265110		141036407.5	31.31
	CESC	567669394	31580852	599250246	24.00	143820059	144982443		645361		144337081.9	24.09
JULY - 2023 to SEPTEMBER-2023	BESCOM	8850427807	30621210	8881049017	25.25	2242464877	2478817244	39326544	23595132	0	2415895568	27.20
	GESCOM	2644620472	-236202478	2408417994	22.00	529851959	957458586	0	24626677	4506165	928325744	38.55
	HESCOM	2783218537	343833769	3127052306	24.00	750492554	1360010889	0	55158066	0	1304852823	41.73
	MESCOM	1474624184	-244277181	1230347003	26.50	326041956	479025526	736347	4422605	0	473866574	38.51
	CESC	1532672696	106024679	1638697375	24.00	393287370	444240052	0	10766020	0	433474031	26.45

Superintending Engineer (Elec.)  
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## Annual Energy Audit Report of BESCOM, Bangalore

RPO for BESCOM, MESCOM, CESC, HESCOM & GESCOM for the quarter APRIL-2023 to JUNE-2023  
Excluding procurement from hydropower during the FY-2022-23 Vide Notification No: Y/01/22/462 Dtd: 12.07.2022

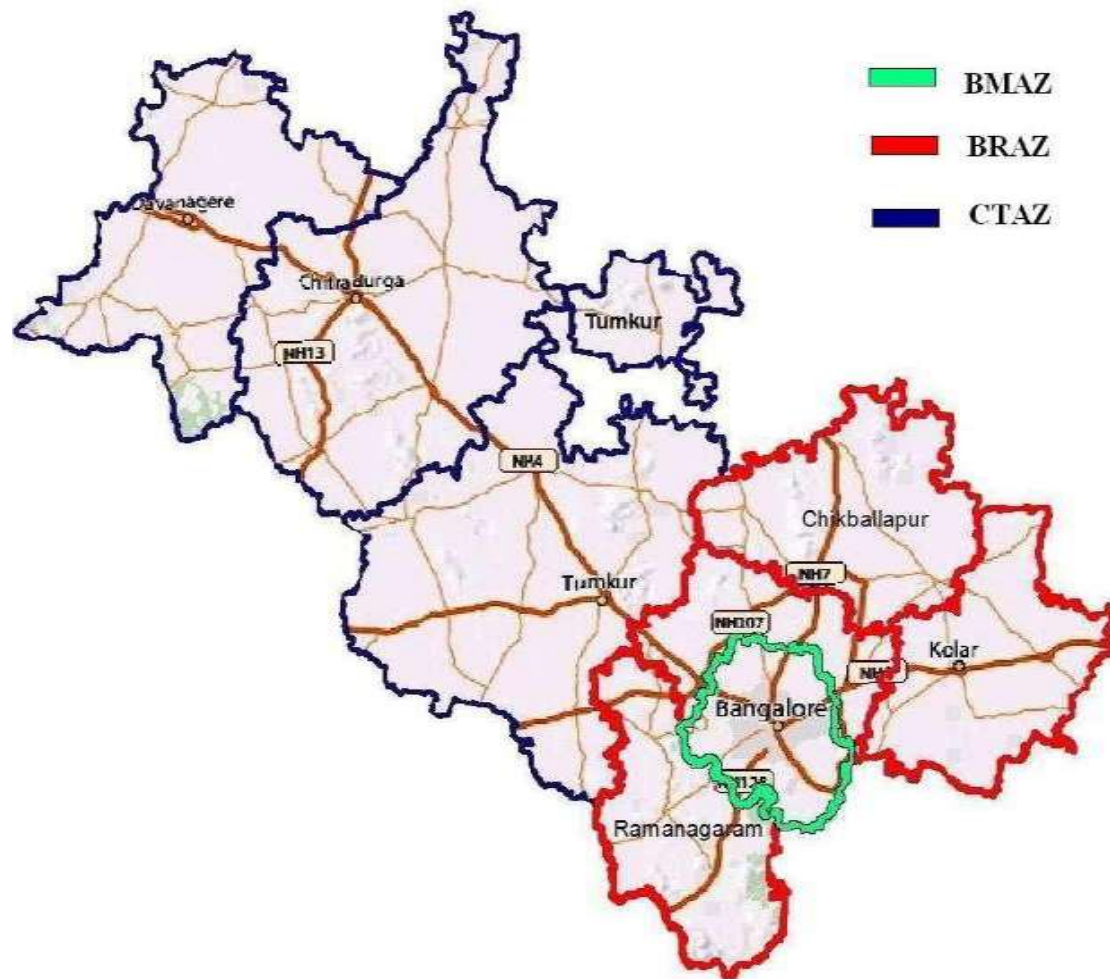
### Solar and Non - Solar

Month	ESCOMS	Energy purchased in units	Energy purchased from other ESCOM (in Units)	Total energy Purchased (in Units)	KERC Target for RPO in %	RPO to be met in Units	Solar and Non Solar Energy Purchased				RPO Met Units	RPO Achieved in %
							PPA	Green Energy	GTAM	APPC		
1	2	3	4	5=3+4	6	7=5*6	8	9	10	11	12=8-9-10-11	13=12/5*100
April-23	BESCOM	3869203017	-132423969	3736779047	25.25	943536709	652075648	67950045	0		584125603	15.63
	GESCOM	1063343368	-149873041	913470327	22.00	200963472	203450936		0	370047	203080889	22.23
	HESCOM	1132735363	137720034	1270455396	24.00	304909295	326581698		0		326581698	25.71
	MESCOM	615942424	121434709	737377133	26.50	195404940	104989914	697533	0		104292381	14.14
	CESC	693593784	23142268	716736052	24.00	172016653	122609102		0		122609102	17.11
May-23	BESCOM	3340383947	-201213072	3139170875	25.25	792640646	711985912	1584355	9293648		701107909.2	22.33
	GESCOM	907919877	-90046835	817873042	22.00	179932069	230756762		9699954	680252	220376556.2	26.95
	HESCOM	890996941	245993390	1136990330	24.00	272877679	357638915		21725654		335913260.6	29.54
	MESCOM	511789328	94076716	605866043	26.50	160554501	111674722	232430	1741975		109700316.8	18.11
	CESC	538482370	-48810198	489672172	24.00	117521321	129721550		4240519		125481031.6	25.63
June-23	BESCOM	3274933685	-164601471	3110332213	25.25	785358884	821895633	9680492	12686847		799528294.3	25.71
	GESCOM	964550965	-179989639	784561325	22.00	172603492	325468714		13241499	1581724	310645491.7	39.59
	HESCOM	934755279	260136431	1194891710	24.00	286774010	475372642		29657896		445714746	37.30
	MESCOM	489280763	3611179	492891942	26.50	130616365	117532884	33498	2377987		115121399.5	23.36
	CESC	515589796	80843500	596433296	24.00	143143991	131269607		5788772		125480835.1	21.04
APRIL - 2023 to JUNE-2023	BESCOM	10484520648	-498238513	9986282135	25.25	2521536239	2185957193	79214892	21980495	0	2084761807	20.88
	GESCOM	2935814210	-419909516	2515904695	22.00	553499033	759676413	0	22941453	2632023	734102937	29.18
	HESCOM	2958487582	643849855	3602337437	24.00	864560985	1159593254	0	51383550	0	1108209704	30.76
	MESCOM	1617012515	219122604	1836135119	26.50	486575806	334197520	963461	4119962	0	329114098	17.92
	CESC	1747665951	55175570	1802841520	24.00	432681965	383600260	0	10029291	0	373570969	20.72

Superintending Engineer (Ele.) 29/6/24  
TBC, KPTCL, Bengaluru



## 1. SINGLE LINE DIAGRAM (SLD)



BESCOM has 8 Districts further categorized into 4 zones, 9 Circles, 32 divisions and 147 Sub-divisions. The 8 Districts are shown below:



## 2. CATEGORY OF SERVICE DETAILS (WITH CONSUMER AND VOLTAGE-WISE)

BESCOM is supplying power to 14433661 number of consumers as on 31<sup>st</sup> March 2024.  
The details of category wise consumers are presented in the following table:

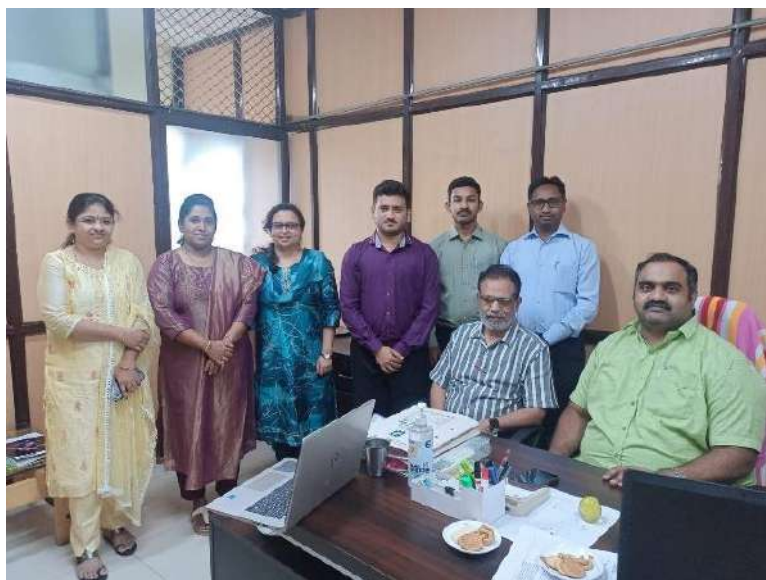
Sl. No.	Type of Consumers	Category of Consumers (EHT/HT/LT/Others)	Voltage Level (In Voltage)	No of Consumers	Total Consumption (In MU)
1	Domestic	LT	230-400V	10532928	9410.61
2	Commercial	LT	230-400V	1338008	2846.92
3	IP Sets	LT	400V	1031591	10222.64
4	Hor. & Nur. & Coffee/Tea & Rubber (Metered)	LT	230-400V	2216	7.51
5	Hor. & Nur. & Coffee/Tea & Rubber (Flat)				
6	Heating and Motive Power				
7	Water Supply	LT	400V	94705	1569.08
8	Public Lighting	LT	230V	87769	658.59
9	HT Water Supply	HT	11KV	318	884.64
10	HT Industrial	HT	11KV	8618	5437.88
11	Industrial (Small)	LT	400V	249081	1452.04
12	Industrial (Medium)				
13	HT Commercial	HT	11KV	9198	2646.26
14	Applicable to Government Hospitals & Hospitals	HT	11KV	1118	429.56
15	Lift Irrigation Schemes/Lift Irrigation Societies	HT	11KV	86	90.39
16	HT Res. Apartments Applicable to all areas	HT	11KV	560	103.83
17	Mixed Load				
18	Government offices and department				
19	Others-1 (HT5)	HT	11KV	2324	177.56
20	Others-2 (LT7)	LT	230-400V	1075141	225.77
21	Stn Aux- It is not included in DCB				21.81
	Total			<b>14433661</b>	<b>36185.07</b>

## 8. FIELD VERIFICATION DATA AND REPORTS

The energy audit team of East Coast Sustainable Private Limited, Visakhapatnam visited the following departments of BESCOM as part of energy audit which included meetings in the corporate office energy cells and different sections in the corporate office. Followed by field visit to different division and sub-divisions.

### A. ENERGY AUDIT CELL

Energy audit team of East Coast Sustainable Private Limited met with the BESCOM Officials and recorded the Energy Audit Proceeding's (Minutes of Meetings). During the energy audit process, the team conducted necessary record verification's and interacted with relevant personal of BESCOM.



**Meeting at BESCOM Energy Audit Cell**

BESCOM officials asked clarification regarding BESCOMs Quarterly Reports on which there have been similar and continuous interactions between BEE and BESCOM. Our inference of is as below for perusal of BEE. BEE can provide necessary clarifications about the process to be adopted by BESCOM, so that issue can be addressed:

- Energy sold outside the periphery (MU), not matching with Sales of surplus power mentioned in the form of Input Infrastructure:
  - Energy sold outside the periphery (MU): based on our understanding is the energy sold outside the periphery (MU) refers to the energy exchanged by BESCOM to neighbouring DISCOMs in Karnataka through its distribution network (11 kV shared feeders between BESCOM and neighbouring DISCOMs). BESCOM would reconcile energy exchanged with neighbouring DISCOMs for such energy exchange on an ongoing basis and any energy exchanged (sold or bought) outside BESCOMs periphery will be recorded.
- Sale of surplus power (MU): Sale of Surplus Energy is the surplus Energy sold at IEX which is excess energy allocated to BESCOM when compared to the actual load.



- Open access sale (MU) not matching with demand from Open access Captive mentioned in the Form of Input Infrastructure:
  - Open access sale (MU): is the spot energy purchase by consumer from IEX and SLDC will provide the information on such quantum of open access sale.
  - Open access Captive mentioned in the Form of Input Infrastructure: is the scheduled energy purchase by consumer using the pre-defined suppliers (captive and/or non-captive).

### B. ACCOUNTS AND RETAIL TARIFF SECTION

The A&RT Division of BESCOM is responsible for the evaluation of BESCOM's subsidy claims to the Government of Karnataka. The subsidy calculation methodology is summarised below:

- For Agricultural IP sets category less than 10 HP as per Tariff order 2022 (pg. 395) issued by KERC.
- For domestic consumers whose energy consumption is less than 200 kWh/month, are eligible for subsidy payment under Government of Karnataka's Gruha Jyothi Scheme. However, the actual subsidy reimbursement to the consumer (BESCOM) is limited to the average monthly energy consumption of previous 12 month. For example, if the consumers average monthly energy consumption is 90 kWh before then that consumer is eligible for free monthly energy consumption up-to 90 kWh/month. Any energy consumption over and above 90 kWh has to be paid by consumer as per the applicable tariff of BESCOM.



**Meeting at Accounts and Retail Section**

The subsidy claim is raised by the DISCOM on a quarterly basis and the figure below summarises the subsidy demand of BESCOM vis-à-vis subsidy released by Government of Karnataka.

<b>Quarterly Consumer Category-wise Subsidy Billed/Received/Due</b>
---

## Annual Energy Audit Report of BESCOM, Bangalore

Sl. No.	Particulars	Consumption (in kWh)	Demand (Rs in Crs.)	Subsidy released (Rs. In Crs.)	Remarks Balance subsidy to be received (Rs in Crs.)
<i>Quarter 1 – Period from 01.04.2023 to 30.06.2023</i>					
1	Residential	2537100720	52.90	52.90	0.00
2	Agriculture	2830739926	1758.87	639.88	1570.19
	<b>Q1 Total</b>	<b>5367840646</b>	<b>1811.77</b>	<b>692.78</b>	<b>1570.19</b>
<i>Quarter 2 - Period from 01.07.2023 to 31.09.2023</i>					
1	Residential	2285683845	664.05	672.61	-8.56
2	Agriculture	2031138234	1192.35	1142.58	1619.95
	<b>Q2 Total</b>	<b>4316822079</b>	<b>1856.4</b>	<b>1815.19</b>	<b>1611.39</b>
<i>Quarter 3 - Period from 01.10.2023 to 31.12.2023</i>					
1	Residential	2355413763	1015.44	1080.00	-64.56
2	Agriculture	2113936674	1100.46	1147.27	1573.14
	<b>Q3 Total</b>	<b>4469350437</b>	<b>2115.90</b>	<b>2227.27</b>	<b>1508.59</b>
<i>Quarter 4 - Period from 01.01.2024 to 31.03.2024</i>					
1	Residential	2336244378	970.95	1035.59	-64.64
2	Agriculture	3344722818	1542.99	1438.45	1677.69
	<b>Q4 Total</b>	<b>5680967166</b>	<b>2513.94</b>	<b>2474.03</b>	<b>1613.05</b>

The reconciliation of subsidy demand vis-à-vis is an ongoing process and Account's and Retail Section of BESCOM coordinates with Energy Department of Government of Karnataka to ensure the recovery of the subsidy demand. Also, BESCOM adjusts the electricity duty collected by it on behalf of Government of Karnataka against the subsidy demands raised by BESCOM.

### C. METERS AND COMMERCIAL SECTION

Meter Test Reports for various voltage category of meters were collected and verified. The data for checking the functional and communication status of 70 number of input energy metering points between Transmission and 11kV distribution feeders was collected and checked. The meter test reports were provided for meters of different voltage categories. The sample data for 70 feeders, meter test reports were verified and the same has been Annexed in the report.

- Functional and communication status of meters of 25 consumers of Agriculture category (Metered and Un-metered) was checked and verified.
- Functional and communication status of meters of 14 Govt. category connection (ULB, RLB etc.) was checked and verified.
- Functional and communication status of meters of 16 consumers of LT Industrial category was checked and verified.

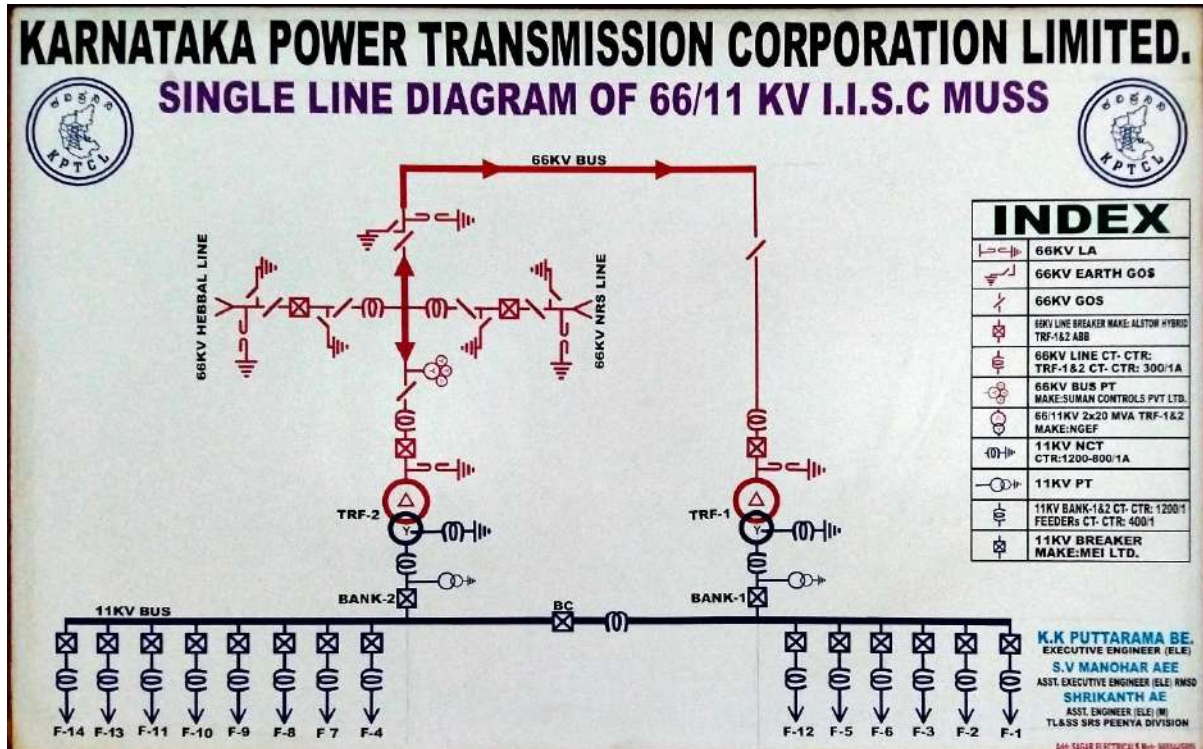


**Meeting at Metering and Commercial Section**



#### D. VISIT TO IISC MUSS SUBSTATION (C2 SUB-DIVISION)

The energy audit team visited IISC MUSS substation that belongs to Malleswaram sub division and the relevant data was verified. BESCOM team explained the single line diagram of 66 KV/ 11 KV IISC MUSS substation and the sub-station has two banks which are interconnected to each other and total 14 Feeders supplying energy from these two banks.



IISC MUSS substation Single Line Diagram

BESCOM team provided a detailed overview of the sub-division operations and explained the process of data collection with respect to energy meters from feeder input level up-to the consumer mapped to that feeder. Log book data of the sub-station was verified by the energy audit team. On a random basis one feeder (IISC\_66\_F05-GANESHATEMPLE - BLR\_IIS\_F05) was studied in depth to check on the mapped transformers and consumers.



Data collection at IISC Sub-Station  
Of Malleswaram Sub-Division



66/11 kV Transformer





SCADA Compatible Remote



Energy Meter, Control & Annunciator Panel (Feeder 1)

Energy audit also carried out a foot survey of the sub-division and verified the metering system of the distribution transformers. Foot survey was carried out for the underground distribution system and verified the local control panels. Few photographs are presented below:



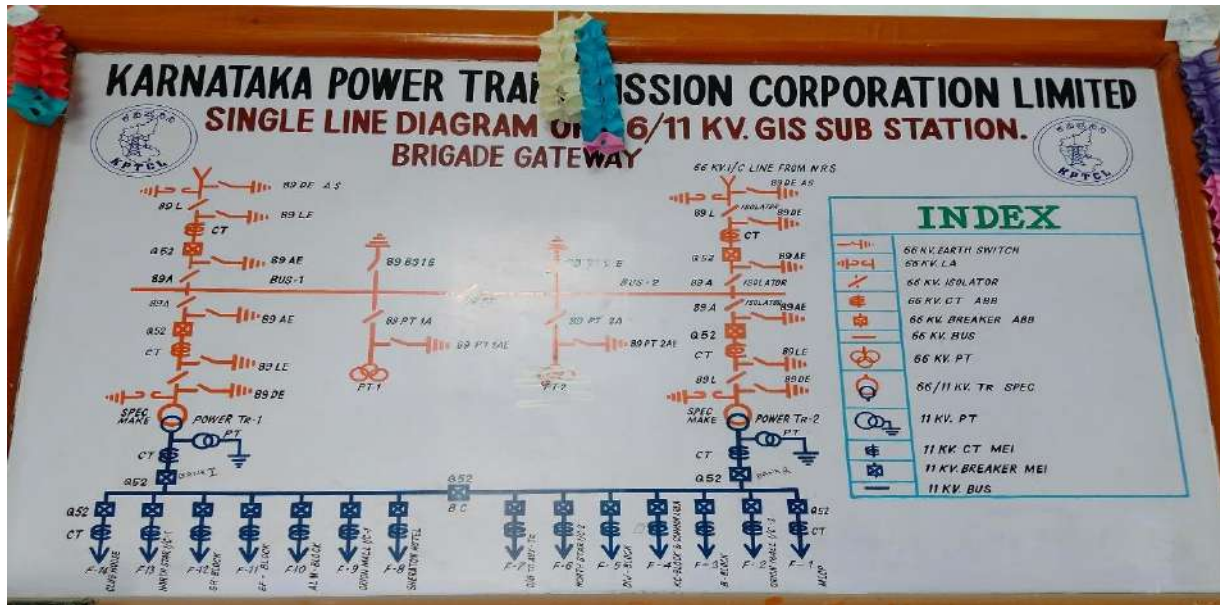
Overhead Distribution Transformer



Inside Energy Meter Box

### E. VISIT TO BRIGADE GATEWAY SUB-STATION (C1 SUB DIVISION)

The Energy Auditing team visited 66 KV/ 11 KV GIS Sub-Station Brigade Gateway and discussions were focussed on aspects related to substation operations including the energy auditing and operations. The gas-insulated substation (GIS) utilizes sulphur hexafluoride (SF<sub>6</sub>) gas to insulate its components, minimizing the size of switchgear and enhancing safety. GIS technology offers compactness, reliability, and robust performance, making it ideal for urban and densely populated areas where space is limited. Its sealed design ensures minimal maintenance and environmental impact, contributing to sustainable energy infrastructure.



Single line diagram of 66 KV/ 11 KV GIS Sub-Station Brigade Gateway



GIS Sub-Station Brigade Gateway



## F. VISIT TO UNDERGROUND SUB-STATION

The Energy Auditing team visited underground sub-station a first in India. BESCOM in association with Bruhat Bengaluru Mahanagara Palike (BBMP), has set up a distribution transformer centre under a footpath in Bengaluru's Malleswaram ward. In the underground sub-station, there is a transformer of rating 500 KVA (DTC No. 35, 15th Cross 6th Main Malleswaram).



Photos of underground sub-station

## 9. LIST OF DOCUMENTS VERIFIED WITH EACH PARAMETER

The following are the documents verified during Annual Energy Audit:

Sl. No	Name	Supporting Document
FY 2023 -24 Data Verification		
Input Energy		
1	Input Energy (MU)	The Input energy purchased and net input energy (received at DISCOM periphery or at distribution point, after adjustment) has been verified from the month-wise document from the power purchase department.
Division Losses		
2	No of connection metered (Nos)	Report produced from Demand Collection and Billing (DCB) software.  Report provided by Power Purchase Department, BESCOM
	No of connection Un-metered (Nos)	
	Connected Load Metered (MW)	
	Connected Load Un-metered (MW)	
	Input Energy (MU)	
	Metered energy (MU)	
	Unmetered energy/Assessment Energy (MU)	Report produced from DCB software and Nsoft software. Procedure of unmetered agricultural consumption of IP sets obtained from Nsoft portal.
	T&D Losses (MU)	Report produced from DCB software
	Billed Amount	Report produced from DCB software
	Collected Amount	
	AT&C Loss	
Details of Input Energy Sources		
3	Generation at Transmission Periphery (Details)	Government of Karnataka Order (File No Energy/161/PSR/2022-Bangalore dated 29-03-2022)
	Embedded Generation in DISCOM Area	Excel document - Energy balancing abstract 2023-2024
Details of Feeder wise Losses		
4	Feeder wise Energy Accounting	DC has provided the report generated from Nsoft. BESCOM's sample report for energy audit of feeders.

Sl. No	Name	Supporting Document
		BESCOM's sample report of centralised feeder management team.

**Additional data required during Energy Audit as per SOP issued by Ministry of Power**

**1(a) Validation of feeder data**

Validation of feeder data is done as per report generated from DCB software.

**1(b) Validation of energy flow data and losses, and for Divisions with AT&C losses greater than 25%**

The validation is done from the meter test reports obtained from BESCOM

**a. BRIEF DESCRIPTION OF UNIT/ DISCOM**

BESCOM is responsible for Power distribution in Eight districts of Karnataka (Bangalore Urban, Bangalore Rural, Chikkaballapura, Kolar, Davanagere, Tumkur, Chitradurga and Ramanagara). BESCOM covers an area of 41,092 Sq. Kms. with a population of over 207 lakhs. BESCOM has 4 operating Zones – Bangalore Metropolitan Area Zone (North), Bangalore Metropolitan Area Zone(South), Bangalore Rural Area Zone and Chitradurga Zone, 9 Circles, 32 Divisions, 147 Sub-divisions and 534 Section Offices.

In the year 1999, Karnataka embarked on a major Reform of the power sector. As a first step, Karnataka Electricity Board (KEB) was dissolved and in its place, the Karnataka Power Transmission Corporation Limited (KPTCL) was incorporated.

This was followed by the constitution of Karnataka Electricity Regulatory Commission (KERC) in November 1999.

In the next phase of the Reform Process, the transmission and distribution business managed by KPTCL were unbundled in June 2002. Five new distribution companies were formed to distribute power in Karnataka.

BESCOM has taken over the responsibility from KPTCL for the distribution of electricity in 8 districts and commenced its operations from 1st June 2002.

**b. LIST OF PARAMETERS ARRIVED THROUGH CALCULATION OR FORMULAE WITH LIST OF DOCUMENTS AS SOURCE OF DATA**

**Agricultural Consumption:**

The DISCOM has segregated the 11 kV feeders under Niranthara Jyothi Yojana into rural feeders and agricultural feeders and all the 11 kV feeders are metered. The rural feeders are provided power 24/7 whereas, the agricultural feeders are provided power for 7 hours per day.

**Methodology and Data Verified**

- Methodology of agricultural consumption: The un-metered agricultural consumption is estimated by the formulae (Input energy - Metered Sales - Allowable Loss (10% of the input energy)). The DISCOM methodology in this regard was verified and checked.
- The DISCOM's agricultural subsidy demand from the Government of Karnataka is based on the agricultural consumption that has been provided in the Proforma.

## 10.ANNEXURES

ANNEXURE 1:	Input Energy Data for The FY 2023-2024 Obtained from The Power Purchase Department
ANNEXURE 2:	Procedure of assessment of unmetered agricultural consumption of IP sets obtained from Nsoft portal.
ANNEXURE 3:	Statement showing the energy purchased, cost paid for FY 21 (April 23 to MAR 24)
ANNEXURE 4:	Subsidy IP GoK for FY 2023-2024
ANNEXURE 5:	Screenshot of Annual and Quarterly Energy Audit Reports uploaded in BESCOM's website.
ANNEXURE 6:	Meter Test Reports for various category of meters.
ANNEXURE 7:	Renewable Purchase Obligation (RPO) of ESCOM for the FY 2023-24.
ANNEXURE 8:	Sample DTC Energy Audit Report by Meter Reader
ANNEXURE 9:	Details of existing DTC Metering Data obtained from the centralized transformer's maintenance department and meter section
ANNEXURE 10:	Additional data required during Energy Audit as per SOP issued by Ministry of Power
ANNEXURE 11:	Signed MoM

**ANNEXURE 1:**  
**Input Energy Data for The FY 2023-2024 Obtained from The Power Purchase  
Department**



## Annual Energy Audit Report of BESCOM, Bangalore

Form-Input energy (Details of Input energy & Infrastructure)			
A. Summary of energy input & Infrastructure			
S.No	Parameters	FY23-24 (Provisional)	Remarks (Source of data)
A.1	Input Energy purchased (MU)	42586.86	(Provisional)
A.2	Transmission loss (%)	6.5%	
A.3	Transmission loss (MU)	2765.859	
A.4	Energy sold outside the periphery (MU)	18.43	PP data-It is the energy exported to neighboring ESCOM's through 11kV feeders.
A.5	Open access sale (MU)	16.65	PP data- 11kv and >66kv-It is the energy purchased by the BESCOM consumer directly from IEX through
A.6	EHT sale	3477.31	
A.7	Net input energy (received at DISCOM periphery or at distribution point, after adjustment)- (MU)	33821.00	
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	26.71	Out of 3,04,000 nos. of unmetered DTs, 81,067 nos. of DTs are to be metered, as the balance DTs are on the exclusive IP feeder (segregated Agriculture feeders under NJY project) and single installations
A.11	% of metering available at consumer end	32.86	(M&C Data)
A.12	No of feeders at 66kV voltage level	-	Monitored by KPTCL
A.13	No of feeders at 33kV voltage level	Nil	No 33kV Network
A.14	No of feeders at 11kV voltage level	6383	
A.15	No of LT feeders level	-	-
A.16	Line length (ckt. km) at 66kV voltage level	-	Monitored by KPTCL
A.17	Line length (ckt. km) at 33kV voltage level	0	No 33kV Network
A.18	Line length (ckt. km) at 11kV voltage level	147453.00rkm	38.11 rkmUG=11534.42 rkmABC=158
A.19	Line length (km) at LT level	197190.26rkm	57.79 rkmUG=30440.58 rkmABC=107
A.20	Length of Aerial Bunched Cables	HT=ABC=1586.47 rkm LT=ABC=10781.83 RKM	Operation section data
A.21	Length of Underground Cables	HT=UG=11534.42 rkm LT=UG=30440.58 rkm	Operation section data
A.22	HT/LT ratio	1:1.34	-

## Annual Energy Audit Report of BESCOM, Bangalore

1325		CTAZ	DAVANAGERE	66/11kV	CHITRADURGA	CHITRADURGARURAL	Bank-1	Vijapura	Motors/DLMS	Functional	1st of Every Month	Bank				00480326	300M	20.69	0.00		
1326		CTAZ	DAVANAGERE	66/11kV	CHITRADURGA	CHITRADURGARURAL	Bank-1	Vijapura	Motors/DLMS	Functional	1st of Every Month	Bank				19007920	300M	0.00	0.00		
1327		CTAZ	DAVANAGERE	66/11kV	HIRIVURU	CHALLAKERE	Bank-1	VISHVESWARAPURA	Motors/DLMS	Functional	1st of Every Month	Bank				19000031	400M	15.85	0.00		
1328		CTAZ	TUMKUR	66/11kV	MADHUGIRI	PAVAGADA	Bank-1	Y.N.HOSAKOTE	Motors/DLMS	Functional	1st of Every Month	Bank				00248129	300M	17.88	0.00		
1329		CTAZ	TUMKUR	66/11kV	MADHUGIRI	PAVAGADA	Bank-1	Y.N.HOSAKOTE	Motors/DLMS	Functional	1st of Every Month	Bank				00248129	300M	0.00	-1.34		
1330		CTAZ	TUMKUR	66/11kV	MADHUGIRI	PAVAGADA	Bank-2	Y.N.HOSAKOTE	Motors/DLMS	Functional	1st of Every Month	Bank				00248121	300M	16.09	0.00		
1331	B.1118	CTAZ	TUMKUR	66/11kV	MADHUGIRI	PAVAGADA	Bank-2	Y.N.HOSAKOTE	Motors/DLMS	Functional	1st of Every Month	Bank				00248121	300M	0.00	-1.43		
1332	B.1119	CTAZ	TUMKUR	66/11kV	KUNIGAL	HULIVURDURGA	Bank-1	YADAVANI	Motors/DLMS	Functional	1st of Every Month	Bank				00247639	600M	8.32	0.00		
1333	B.1120	CTAZ	TUMKUR	66/11kV	KUNIGAL	HULIVURDURGA	Bank-2	YADAVANI	Motors/DLMS	Functional	1st of Every Month	Bank				17127540	400M	11.46	0.00		
1334	B.1121	CTAZ	DAVANAGERE	66/11kV	DAVANAGERE	DAVANAGERE CSD-2	Bank-1	YARGUNTA	Motors/DLMS	Functional	1st of Every Month	Bank				00253424	300M	23.04	0.00		
1335	B.1122	CTAZ	DAVANAGERE	66/11kV	DAVANAGERE	DAVANAGERE CSD-2	Bank-2	YARGUNTA	Motors/DLMS	Functional	1st of Every Month	Bank				00253369	200M	32.05	0.00		
1336	B.1123	CTAZ	DAVANAGERE	66/11kV	DAVANAGERE	DAVANAGERE CSD-2	Bank-3	YARGUNTA	Motors/DLMS	Functional	1st of Every Month	Bank				00253301	200M	12.39	0.00		
1337	B.1124	CTAZ	DAVANAGERE	66/11kV	DAVANAGERE	DAVANAGERE CSD-2	Bank-3	YARGUNTA	Motors/DLMS	Functional	1st of Every Month	Bank				00253301	200M	0.00	0.00		
1338	B.1125	CTAZ	DAVANAGERE	66/11kV	DAVANAGERE	DAVANAGERE CSD-2	Bank-4	YARGUNTA	Motors/DLMS	Functional	1st of Every Month	Bank				00253396	300M	22.95	0.00		
1339		CTAZ	TUMKUR	66/11kV	KUNIGAL	YEDIVUR	Bank-1	YEDIVUR	Motors/DLMS	Functional	1st of Every Month	Bank				00247586	600M	12.12	0.00		
1340		CTAZ	TUMKUR	66/11kV	KUNIGAL	YEDIVUR	Bank-2	YEDIVUR	Motors/DLMS	Functional	1st of Every Month	Bank				00247648	600M	19.74	0.00		
1341																					
1342																		41479.91	-53.27		
1343	a)																	41426.64			
1344	b)	EHT Consumption																3477.31			
1345	c)	IPP at 11kV																311.87			
1346	d)	IPP import Energy from BESCOM(66kV and above)																0.83			
1347	e)	Auxiliary consumption																21.81			
1348	f)	Wheeled Energy																5525.52			
1349	g)	Open access consumption above 66 kV																9.42			
1350	h)	Open access consumption above 11 kV																7.23			
1351	i)	SRTPV																146.52			
1352		a+b+c+d-f-g-h+i																39821.00	Net input energy at DISCOM periphery (MU)		

**ANNEXURE 2:**  
**Procedure of assessment of unmetered agricultural consumption of IP sets  
obtained from Nsoft portal.**

## Procedure of IP assessment in Nsoft Portal.



- Feeder consumption is calculated by taking the initial reading and final reading multiplying with meter constant, then import or export energy are added or deducted to the feeder consumption if any.
- Further, for agriculture feeders 10%\* of the loss is deducted and also metered sales if any are also deducted and the net consumption arrived is divided by total sanctioned load of IP sets on that feeders to arrive per HP of that particular feeder.
- For non-agricultural feeders the average of all the agri feeders of particular subdivision is considered to arrive at subdivision average per HP.
- This per HP value is multiplied with total sanctioned load of IP sets on that feeder to arrive the Unmetered sales.
- \* As per the KERC directions vide letter 91, dt: 20.04.2015, the permissible technical allowable loss in Rural /agriculture feeders shall be less than 12% and in Urban feeders shall be less than 10%. Hence an average of 10% loss has been considered for agriculture feeders.
- However the IP sale depends on the rain, water table and type of crops grown etc.

### Example:



- Agriculture feeder F08-Gopasandra of Devanahally subdivision, emanating from Channarayapatna\_66 station:
  - Details – 237 Active installations out of which 230 are IP sets with sanction load of 2295 HP.
  - Input Energy at station – 359100 Units
  - Allowable loss of 10% - 35910 Units
  - Metered sales for 7 Installations(Non IP) – 3308 Units
  - Net Consumption of the feeder – Input energy – Allowable loss – Metered sales  
= 359100 – 35910 – 3308 = 319882 Units .  
Per HP Average of Agri feeder - Net consumption of the feeder / Sanction load  
= 319882 / 2295 = 139.38 Units per HP
- . - Unmetered IP Sales of the feeder= Per HP Average of Agri feeder \* sanction load of IP sets in HP= 139.38\* 2295=319877 units

**ANNEXURE 3:**  
**Statement showing the energy purchased, cost paid for FY 24**  
**(April 23 to MAR 24)**

## Annual Energy Audit Report of BESCOM, Bangalore

BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED														
Statement showing the energy purchased, cost paid for FY 23 (April 23 to MAR 24)														
Actuals (April 23 to March 24) Prov														
Sl no	Source	Capacity in MW @ 100%	BESCOM Share allocation %	Bescom Share in MW	Energy MU	Capacity Charges/annum(Rs in Crs)	Primary energy charges	Secondary energy charges	Royalty charges	TOTAL	Total Fixed charges (Crs)	Total Energy charges (Crs)	Total Amount (Crs)	Avg cost in Ps
Allocation based GOK														
<b>A</b>	<b>KPCL</b>													
1	Sharavathi Valley Project	1090	17.5799	191.62	604.85	2.02	30.24	0.00	12.18	44.44	2.02	42.42	44.44	73.47
2	Bhadra Project	39.2	25	9.80	6.21	0.54	3.14	0.00	0.12	3.80	0.54	3.26	3.80	611.95
3	Kalinadi(Nagajari)	955	25	238.75	729.68	3.83	49.19	0.81	14.59	68.42	3.83	64.59	68.42	93.76
4	Varahi Hydro Project	469	25	117.25	161.27	2.08	25.76	0.00	3.23	31.06	2.08	28.98	31.06	192.58
	Varahi 3 & 4			0.00		3.01	3.41	0.00	0.00	6.41	3.01	3.41	6.41	
5	Ghataprabha(GDPH)	32	25	8.00	10.60	0.15	2.36	0.00	0.21	2.72	0.15	2.58	2.72	257.00
6	Mallapur & Others	10.4	25	2.60						0.00	0.00	0.00	0.00	
7	Kadra Dam	150	25	37.50	67.25	3.96	11.39	0.00	1.35	16.69	3.96	12.74	16.69	248.21
8	Kodasalli Dam	120	25	30.00	67.89	2.42	8.36	0.00	1.36	12.14	2.42	9.72	12.14	178.87
9	Gerusoppa/STRP	240	25	60.00	84.70	6.09	11.55	0.00	1.69	19.33	6.09	13.25	19.33	228.26
10	Almatti	290	25	72.50	57.85	6.49	7.42	0.00	5.78	19.70	6.49	13.21	19.70	340.55
11	Genekal	0.35	25	0.09						0.00	0.00	0.00	0.00	
12	Shiva	42	25	10.50	39.57	0.87	23.63	0.00	0.80	25.30	0.87	24.43	25.30	639.31
13	Shimsa	17.2	25	4.30						0.00			0.00	#DIV/0!
14	Munirabad	28	25	7.00	10.96	0.08	7.28	0.00	0.22	7.58	0.08	7.49	7.58	691.25
15	MGHE-Jog	139.2	25	34.80	87.40	0.45	47.93	0.13	1.68	50.18	0.45	49.74	50.25	575.00
	<b>KPCL Hydel</b>	<b>3622.35</b>		<b>824.71</b>	<b>1928.24</b>	<b>31.98</b>	<b>231.66</b>	<b>0.94</b>	<b>43.21</b>	<b>307.78</b>	<b>31.98</b>	<b>275.80</b>	<b>307.84</b>	<b>159.65</b>
<b>II</b>	<b>Thermal</b>					<b>Fixed cost</b>	<b>variable cost</b>							
1	RTPS -1 to 7	1470	64.4346	947.19	3839.08	506.73	1879.72	259.95		2646.40	506.73	2139.67	2646.40	689.33
2	RTPS-VIII	250	64.4346	161.09	673.25	118.84	307.70			426.53	118.84	307.70	426.53	633.54
3	BTPS Unit I	500	64.4346	322.17	1553.95	185.54	694.48			880.01	185.54	694.48	880.01	566.31
4	BTPS Unit II	500	64.4346	322.17	1330.31	182.89	541.29			724.18	182.89	541.29	724.18	544.37
5	BTPS Unit III	700	64.4346	451.04	2032.48	405.53	786.12			1191.64	405.53	786.12	1191.64	586.30
	Deisel Generation				0.00									
6	Yearamurus TPS	1600	64.4346	1030.95	3686.95	796.55	1611.93			2408.48	796.55	1611.93	2408.48	653.24
	<b>KPCL-Thermal</b>	<b>5020</b>		<b>3234.62</b>	<b>13116.02</b>	<b>2196.07</b>	<b>5821.23</b>	<b>259.95</b>	<b>0</b>	<b>8277.24</b>	<b>1399.519</b>	<b>4469.248</b>	<b>8277.24</b>	<b>631.08</b>
	Kappathagudda													
8	Solar													
													0.00	
		<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 KPCL purchase</b>	<b>8642.35</b>		<b>4059.33</b>	<b>15044.26</b>	<b>2228.05</b>	<b>6052.88</b>	<b>260.89</b>	<b>43.21</b>	<b>8585.03</b>	<b>1431.50</b>	<b>4745.05</b>	<b>8585.09</b>	<b>570.66</b>
<b>B</b>	<b>Central Projects</b>													

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1	N.T.P.C- Ramagundam	364	46.5062	169.28	1515.54	114.09	611.68			725.77	114.09	611.68	725.77	478.89
2	NTPC-III	92.47	46.5062	43.00	424.81	32.60	160.95			193.55	32.60	160.95	193.55	455.62
3	NTPC-Talcher	343.33	46.5062	159.67	1230.87	104.79	290.82			395.62	104.79	290.82	395.62	321.41
4	NTPC-Simhadri	181.33	46.5062	84.33	695.14	95.72	291.87			387.59	95.72	291.87	387.59	557.56
	NTPC Telangana				101.00	17.30	38.11			55.42	17.30	38.11	55.41	548.62
	NTPC Farakka				448.37	40.01	164.56			204.57	40.01	164.56	204.58	456.29
5	NLC TPS2-Stage 1	106.31	46.5062	49.44	275.63	32.45	108.17			140.62	32.45	108.17	140.62	510.17
6	NLC TPS2-Stage 2	143.49	46.5062	66.73	290.18	35.45	119.12			154.57	35.45	119.12	154.57	532.67
7	NLC TPS1-Expn 1	97.08	46.5062	45.15	362.02	32.64	104.31			136.95	32.64	104.31	136.95	378.29
8	NLC TPS1-Expn 1I	97.08	46.5062	45.15	243.71	87.10	89.95			177.05	87.10	89.95	177.05	726.48
			46.5062	0.00						0.00			0.00	
9	MAPS	33.62	46.5062	15.64	56.82		12.33			12.33		12.33	12.33	216.97
10	Kaiga 1&2, 3&4	259.325	46.5062	120.60	1023.40		358.79			358.79		358.79	358.79	350.59
10	Kaiga Unit 3		46.5062							0.00			0.00	
11	NTPL	182.8	46.5062	85.01	569.66	89.03	195.63			284.66	89.03	195.63	284.66	499.70
	Simhadri 2		46.5062							0.00			0.00	
12	Vallur TPS stage 1	151.43	46.5062	70.42	377.50	66.58	142.24			208.82	66.58	142.24	208.82	553.16
	Vallur TPS stage 2		46.5062							0.00			0.00	
	Vallur TPS stage 3		46.5062							0.00			0.00	
	Tuticorn		46.5062							0.00			0.00	
13	kudankulam	419.35	46.5062	195.02	1323.88		570.90			570.90		570.90	570.90	431.23
14	PGCIL(Tran Charges)									1347.36			1347.36	
15	NTPC VVNL Coal Bundled power	70	46.6473	32.65	203.02		121.48			121.48		121.48	121.48	598.33
	Southwestern Railway				0.00		0.00			0.00		0.00	0.00	
16	DVC ktps	450	46.5062	209.28	847.53	141.02	260.60			401.62	141.02	260.60	401.62	473.87
	dvc MTPS				661.44	167.58	237.45			405.03	167.58	237.45	405.03	612.35
	Kudgi	1194	58.1006	693.72	4971.10	862.17	2546.56			3408.73	862.17	2546.56	3408.73	685.71
	NNTPS	74.27	46.5062	34.54	243.67	43.09	63.06			106.16	43.09	63.06	106.17	435.69
	<b>Total B</b>	<b>4259.885</b>		<b>2119.65</b>	<b>15865.30</b>	<b>1961.62</b>	<b>6488.58</b>	<b>0.00</b>	<b>0.00</b>	<b>9797.56</b>	<b>1961.62</b>	<b>6488.58</b>	<b>9797.58</b>	<b>617.55</b>
<b>C</b>	<b>IPPs-Major</b>													
1	UPCL	1200	50	600.00	2639.98	133.42	1371.06			1504.49		1504.49	1504.49	569.88
	UPCL Unit 2												0.00	
2	Rayalaseema				#REF!					0.00	0.00	0.00	0.00	
3	Tata Co				#REF!					#REF!	0.00	0.00		
4	GMR									#REF!				
	<b>Total C</b>	<b>1200</b>		<b>600</b>	<b>2639.98</b>	<b>133.42</b>	<b>1371.06</b>			<b>1504.49</b>	<b>0.00</b>	<b>1504.49</b>	<b>1504.49</b>	
<b>D</b>	<b>NCE Projects:-</b>												0.00	
1	<b>Co-generation (34)</b>	638.23			0.00					0.00		0.00	0.00	
2	<b>Biomass (5)</b>	59.5		59.50	30.28					16.99		16.99	16.99	561.03
3	<b>Mini Hydrel (13)</b>	181.5		181.50	357.32					103.72		103.72	103.72	290.26
4	<b>Wind mill (301)</b>	1400		1240.45	2400.54					933.94		933.94	933.94	389.05



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	KPCL Wind		100	7.25	5.91					2.72		2.72	2.72	460.28
5	KPCL Solar	3		3.00	2.83					1.70		1.70	1.70	6.00
6	solar (other than KPC) (124)	1769		2450.00	4892.09					2102.32		2102.32	2102.32	429.74
	United telecom			0.00	0.00					0.00		0.00	0.00	
7	Solar Bundled power		46.6473	347.98	650.97					364.35		364.35	364.35	559.70
8	Solar rooftop (DSM)				146.52					62.24		62.24		
9	Sec 11 NCE				0.00					0.00		0.00	0.00	
10	Short term NCE				0.00					0.00		0.00	0.00	
	Total D (NCE)	4051.23		4289.68	8486.46					3587.97		3587.97	3587.97	422.79
													0.00	
													0.00	
													0.00	
													0.00	
													0.00	
													0.00	
													0.00	
													0.00	
													0.00	
E	Jurala	14.4		6.80	20.01					19.28			19.28	963.80
	TBHE				8.12					1.46			1.46	
	Total									20.74			20.74	
F	Grand Total	18167.87		11075.45	42064.13	4323.09	13912.53	260.89	43.21	23495.78	3393.12	16326.09	23495.87	558.57
						1079.76							0.00	
	Intr bt												0.00	
G	short term purchases				0.00					0.00		0.00	0.00	
	IEX purchase											0.00	0.00	
H	UI Trading				38.76					152.96		152.96	152.96	3946.64
	banked energy PSPCL				321.32									0.00
	IEX purchase				1288.15					1081.25			1081.25	839.39
	REC SALES													
	Green energy sales													
	Sec 11				1354.99					741.26			741.26	547.06
	Sub Total				3003.21	0.00	0.00	0.00	0.00	1234.22	0.00	152.96	1975.48	657.79
I	Kptcl transmission charges				0.00					2873.68			2873.68	
	STOA Credits												-48.69	
J	SLDC charges									14.38			14.38	
K	Tangedco,posoco									0.00			2.07	
K	ENERGY Balancing (Prov)				-1767.50								-1215.91	
	Inter Escom energy charges				22.14								8.93	

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<b>M</b>	Cost of banked energy				30.02								6.59	
	PCKL Rev Exp, Tangedco												8.40	
	open access UI												0.00	
	prior period exp												25.33	
	KPCL Prior period													
	prior period income													
	Sub Total													
<b>N</b>	<b>Grand Total</b>			<b>11075.45</b>	<b>43352.01</b>	<b>4323.09</b>	<b>13912.53</b>	<b>260.89</b>	<b>43.21</b>	<b>27618.06</b>	<b>3393.12</b>	<b>16479.05</b>	<b>27146.13</b>	<b>626.18</b>
	Sub Total													<b>626.18</b>

**ANNEXURE 4:**  
**Subsidy IP GoK for FY 2023-2024**

### ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡಾವಳಿಗಳು

ವಿಷಯ: 2023-24ನೇ ಸಾಲಿಗೆ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ 200 ಯೂನಿಟ್‌ಗಳವರೆಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ಸರಬರಾಜುವಿಗಾಗಿ ಸಹಾಯಧನ ಬಿಡುಗಡೆ ಮಾಡುವ ಬಗ್ಗೆ.

#### ಓದಲಾಗಿದೆ:

1. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಎನರ್ಜಿ/164/ಪಿಎಸ್‌ಆರ್/2023, ದಿನಾಂಕ: 05.06.2023.
2. ಸಮಾಜ ಕಲ್ಯಾಣ ಇಲಾಖೆಯ ಅನಧಿಕೃತ ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ: ಸಕಇ 297 ಎಸ್‌ಎಲ್‌ಪಿ 2023, ದಿನಾಂಕ: 21.08.2023.
3. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಎನರ್ಜಿ/190/ಪಿಎಸ್‌ಆರ್/2023, ದಿನಾಂಕ: 10.08.2023, 22.08.2023, 05.09.2023
4. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಎನರ್ಜಿ/364/ಪಿಎಸ್‌ಆರ್/2023, ದಿನಾಂಕ: 05.09.2023

#### ಪ್ರಸ್ತಾವನೆ:

ಮೇಲೆ ಓದಲಾದ ಕ್ರಮ ಸಂಖ್ಯೆ (1)ರ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ರಾಜ್ಯದಲ್ಲಿನ ಪ್ರತಿ ತಿಂಗಳಿಗೆ ಗರಿಷ್ಠ 200 ಯೂನಿಟ್‌ಗಳವರೆಗಿನ ಬಳಕೆಯ ಮಿತಿಯಲ್ಲಿ ಪ್ರತಿ ಗ್ರಾಹಕರ ಮಾಸಿಕ ಸರಾಸರಿ ಬಳಕೆಯ (ಆರ್ಥಿಕ ವರ್ಷ 2022-23ರ ಬಳಕೆಯ ಆಧಾರದನ್ವಯ) ಯೂನಿಟ್‌ಗಳ ಮೇಲೆ ಶೇ.10 ರಷ್ಟು ಹೆಚ್ಚಿನ ಬಳಕೆಯ ಮಿತಿಯನ್ನು ಅನುಮತಿಸಿ, ಅದಕ್ಕನುಗುಣವಾಗಿ ವಿದ್ಯುತ್ ಬಿಲ್ಲಿನ ಮೊತ್ತವನ್ನು ಉಚಿತವಾಗಿ ಪಾವತಿಸಲು ಹಾಗೂ 200 ಯೂನಿಟ್‌ಗಳ ಬಳಕೆಯನ್ನು ಮೀರಿದ ಗ್ರಾಹಕರು ಪೂರ್ಣ ವಿದ್ಯುತ್ ಬಿಲ್ಲನ್ನು ಪಾವತಿಸಲು ಸರ್ಕಾರವು ಆಡಳಿತಾತ್ಮಕ ಅನುಮೋದನೆ ನೀಡಿದೆ.

ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳು ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಮಾಡುವುದಕ್ಕಾಗಿ 2023-24ನೇ ಸಾಲಿನ ಆಯವ್ಯಯ ಸವಿವರ ವೆಚ್ಚದ ಅಂದಾಜುಗಳು ಸಂಪುಟ-7ರಲ್ಲಿ "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-106-Subsidies ರಡಿ ರೂ.6,590.00 ಕೋಟಿಗಳು, 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-422-SCSP ರಡಿ ರೂ.1,650.00 ಕೋಟಿಗಳು ಮತ್ತು 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-423-TSP ರಡಿ ರೂ.760.00 ಕೋಟಿಗಳು ಒಟ್ಟಾರೆಯಾಗಿ ಅನುದಾನ ರೂ.9,000.00 ಕೋಟಿಗಳ ಸಹಾಯಧನವನ್ನು ಹಂಚಿಕೆ ಮಾಡಿ ಒದಗಿಸಲಾಗಿದೆ.

ಮೇಲೆ ಓದಲಾದ (2)ರ ಸಮಾಜ ಕಲ್ಯಾಣ ಇಲಾಖೆಯ ಅನಧಿಕೃತ ಟಿಪ್ಪಣಿಯಲ್ಲಿರುವಂತೆ ದಿನಾಂಕ: 31.07.2023 ರಂದು ನಡೆದ ಮಾನ್ಯ ಮುಖ್ಯಮಂತ್ರಿಗಳ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಕರ್ನಾಟಕ ರಾಜ್ಯ ಅನುಸೂಚಿತ ಜಾತಿಗಳ / ಅನುಸೂಚಿತ ಪಂಗಡಗಳ ಅಭಿವೃದ್ಧಿ ಪರಿಷತ್ ನಿರ್ಣಯದ ಆದೇಶದಂತೆ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಪಡೆಯುವ ಪರಿಶಿಷ್ಟ ಜಾತಿ / ಪರಿಶಿಷ್ಟ ಪಂಗಡ ವರ್ಗದವರ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ 200 ಯೂನಿಟ್‌ಗಳವರೆಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ಪಡೆಯುವ ಸ್ಥಾವರಗಳ ಫಲಾನುಭವಿಗಳ ಅಂಕಿ ಅಂಶಗಳ ಎಲ್ಲಾ ಮಾಹಿತಿಯ ವಿವರಗಳನ್ನು ಸರ್ಕಾರಕ್ಕೆ ಒದಗಿಸಲು ತೀರ್ಮಾನಿಸಿ ಕ್ರಿಯಾ ಯೋಜನೆಗೆ ಅನುಮೋದನೆ ನೀಡಿದರನ್ವಯ 2023-24ನೇ ಸಾಲಿನ ಆಯವ್ಯಯದಲ್ಲಿ ಒದಗಿಸಿರುವ ಲೆಕ್ಕಶೀರ್ಷಿಕೆ: 2801-80-101-1-16-422 ಪರಿಶಿಷ್ಟ ಜಾತಿ ಉಪಯೋಜನೆಯಡಿ

ಸಹಾಯಧನ ರೂ.1,650.00 ಕೋಟಿಗಳು ಮತ್ತು ಲೆಕ್ಕಶೀರ್ಷಿಕೆ: 2801-80-101-1-16-423 ಗಿರಿಜನ ಉಪಯೋಜನೆಯಡಿ ಸಹಾಯಧನ ರೂ.760.00 ಕೋಟಿಗಳ ಬಿಡುಗಡೆಯ ಕ್ರಿಯಾ ಯೋಜನೆಗೆ ಅನುಮೋದನೆಯನ್ನು ನೀಡಿದೆ.

ಮೇಲೆ ಓದಲಾದ ಕ್ರಮ ಸಂಖ್ಯೆ (3) ಮತ್ತು (4)ರ ಸರ್ಕಾರಿ ಆದೇಶದಲ್ಲಿ 2023-24ನೇ ಸಾಲಿನಲ್ಲಿ "2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-106/422/423-SCSP/TSP ರಡಿ ರೂ.1400 ಕೋಟಿಗಳಲ್ಲಿ ಈವರೆವಿಗೂ ಸರ್ಕಾರದ ಆದೇಶಗಳಲ್ಲಿ ಆರಂಭಿಕ ಶಿಲ್ಪವನ್ನು ಒಳಗೊಂಡಂತೆ ಬಿಡುಗಡೆಯಾದ ಮೊತ್ತ ಮತ್ತು ವೆಚ್ಚಗಳ ವಿವರಗಳು ಈ ಕೆಳಕಂಡಂತಿವೆ:

ರೂ. ಕೋಟಿಗಳಲ್ಲಿ

ಪಿ.ಡಿ/ಬ್ಯಾಂಕ್ ಖಾತೆಯಲ್ಲಿ 1ನೇ ಏಪ್ರಿಲ್-2023ರ ಆರಂಭಿಕ ಶಿಲ್ಪ	0
ಆರ್ಥಿಕ ವರ್ಷದಲ್ಲಿ ಹಿಂದಿನ ಕಂತುಗಳಲ್ಲಿ ಮಾಡಿದ ಬಿಡುಗಡೆಗಳು	1400
ಆರಂಭಿಕ ಶಿಲ್ಪ ಮತ್ತು ಹಿಂದಿನ ಬಿಡುಗಡೆಗಳು ಸೇರಿ ಲಭ್ಯವಿರುವ ಒಟ್ಟು ಮೊತ್ತ	1400
ಆಗಿರುವ ವೆಚ್ಚ	1400
ಲಭ್ಯವಿರುವ ಒಟ್ಟು ಮೊತ್ತಕ್ಕೆ ಆಗಿರುವ ಶೇಕಡಾವಾರು ವೆಚ್ಚ	100%

ಆರ್ಥಿಕ ಇಲಾಖೆಯು ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ: ಆಇ/251/ವೆಚ್ಚ-1/2023, ದಿನಾಂಕ: 03.10.2023 ರಲ್ಲಿ 2023-24ನೇ ಸಾಲಿಗೆ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ಸೆಪ್ಟೆಂಬರ್-2023 ರ ತಿಂಗಳಿಗೆ "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-106-Subsidies ರಡಿ ರೂ.549.00 ಕೋಟಿಗಳು, 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-422-SCSP ರಡಿ ರೂ.137.00 ಕೋಟಿಗಳು ಮತ್ತು 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-423-TSP ರಡಿ ರೂ.64.00 ಕೋಟಿಗಳು ಒಟ್ಟಾರೆಯಾಗಿ ಅನುದಾನ ರೂ.750.00 ಕೋಟಿಗಳ ಸಹಾಯಧನವನ್ನು ಬಿಡುಗಡೆ ಮಾಡಲು ಸಹಮತಿಸಿದೆ.

ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳು ಸೆಪ್ಟೆಂಬರ್-2023ರ ಮಾಹೆಯ ವಿದ್ಯುತ್ ಬಳಕೆಗೆ ಸಂಬಂಧಿಸಿದ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯ ಉಚಿತ ವಿದ್ಯುತ್ ಸರಬರಾಜುವಿನ ಸಹಾಯಧನದ ಮೊತ್ತ ರೂ.777.59 ಕೋಟಿಗಳನ್ನು ಬಿಡುಗಡೆ ಮಾಡಲು ಕೋರಿ ಪ್ರಸ್ತಾಪಿಸಿದ್ದಾರೆ. ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳು ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಗೆ ಸೆಪ್ಟೆಂಬರ್-2023ರ ಮಾಹೆಯ ಉಚಿತ ವಿದ್ಯುತ್ ಬಳಕೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕೋರಿರುವ ವಿವರ ಈ ಕೆಳಕಂಡಂತಿದೆ:

ರೂ.ಕೋಟಿಗಳಲ್ಲಿ

ವಿವರಗಳು	ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯ ಸೆಪ್ಟೆಂಬರ್-2023 ಮಾಹೆ ಬಳಕೆಯ ಸಹಾಯಧನ
ಬೇವಿಕಂ	363.12
ಮವಿಕಂ	75.90
ಹುವಿಕಂ	154.67
ಗುವಿಕಂ	94.74
ಚಾವಿಸನಿನಿ	86.29
ಹುಕ್ಕೇರಿ	2.87
ಒಟ್ಟು	777.59

ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಸಹಮತಿಯಂತೆ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ರಾಜ್ಯದಲ್ಲಿನ ಪ್ರತಿ ತಿಂಗಳಿಗೆ ಗರಿಷ್ಠ 200 ಯೂನಿಟ್‌ಗಳವರೆಗಿನ ಬಳಕೆಯ ಮಿತಿಯಲ್ಲಿ ಪ್ರತಿ ಗ್ರಾಹಕರ ಮಾಸಿಕ ಸರಾಸರಿ ಬಳಕೆಯ (ಆರ್ಥಿಕ ವರ್ಷ 2022-23ರ ಬಳಕೆಯ ಆಧಾರದನ್ವಯ) ಯೂನಿಟ್‌ಗಳ ಮೇಲೆ ಶೇ.10 ರಷ್ಟು ಹೆಚ್ಚಿನ ಬಳಕೆಯ ಮಿತಿಯನ್ನು ಅನುಮತಿಸಿ 2023-24ನೇ ಸಾಲಿನ ಸೆಪ್ಟೆಂಬರ್-2023ರ ಮಾಹೆಯ ಬಳಕೆಗೆ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಮಾಡುವುದಕ್ಕಾಗಿ "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-106-Subsidies ರಡಿ ರೂ.549 ಕೋಟಿಗಳ ಸಹಾಯಧನ, "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-422-SCSP ರಡಿ ರೂ.137 ಕೋಟಿಗಳ ಸಹಾಯಧನ ಮತ್ತು "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-423-TSP ರಡಿ ರೂ.64 ಕೋಟಿಗಳ ಸಹಾಯಧನ, ಒಟ್ಟಾರೆಯಾಗಿ ರೂ.750.00 ಕೋಟಿಗಳ ಸಹಾಯಧನವನ್ನು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳಿಗೆ ಖಜಾನೆ-2ರ ತಂತ್ರಾಂಶದಡಿಯಲ್ಲಿ ಬಿಡುಗಡೆ ಮಾಡಲು ಪ್ರಸ್ತಾಪಿಸಿ ಆದರಂತೆ ಈ ಕೆಳಕಂಡಂತೆ ಆದೇಶಿಸಿದೆ.

**ಸರ್ಕಾರಿ ಆದೇಶ ಸಂಖ್ಯೆ: ಎನರ್ಜಿ/190/ಪಿಎಸ್‌ಆರ್/2023**

**ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 09.10.2023**

ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಿರುವ ಅಂಶಗಳ ಹಿನ್ನೆಲೆಯಲ್ಲಿ, ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ರಾಜ್ಯದಲ್ಲಿನ ಪ್ರತಿ ತಿಂಗಳಿಗೆ ಗರಿಷ್ಠ 200 ಯೂನಿಟ್‌ಗಳವರೆಗಿನ ಬಳಕೆಯ ಮಿತಿಯಲ್ಲಿ ಪ್ರತಿ ಗ್ರಾಹಕರ ಮಾಸಿಕ ಸರಾಸರಿ ಬಳಕೆಯ (ಆರ್ಥಿಕ ವರ್ಷ 2022-23ರ ಬಳಕೆಯ ಆಧಾರದನ್ವಯ) ಯೂನಿಟ್‌ಗಳ ಮೇಲೆ ಶೇ.10 ರಷ್ಟು ಹೆಚ್ಚಿನ ಬಳಕೆಯ ಮಿತಿಯನ್ನು ಅನುಮತಿಸಿ 2023-24ನೇ ಸಾಲಿನ ಸೆಪ್ಟೆಂಬರ್-2023ರ ಮಾಹೆಯ ಬಳಕೆಗೆ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ನೀಡುವುದಕ್ಕಾಗಿ "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-106-Subsidies ರಡಿ ರೂ.549 ಕೋಟಿಗಳ ಸಹಾಯಧನ, "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-422-SCSP ರಡಿ ರೂ.137 ಕೋಟಿಗಳ ಸಹಾಯಧನ ಮತ್ತು "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-423-TSP ರಡಿ ರೂ.64 ಕೋಟಿಗಳ ಸಹಾಯಧನ, ಒಟ್ಟಾರೆಯಾಗಿ ರೂ.750.00 ಕೋಟಿಗಳ (ವಿಳುನೂರ ಐವತ್ತು ಕೋಟಿ ರೂಪಾಯಿಗಳು ಮಾತ್ರ) ನಗದು ಸಹಾಯಧನವನ್ನು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳಿಗೆ ಖಜಾನೆ-2ರ ತಂತ್ರಾಂಶದಡಿಯಲ್ಲಿ ಬಿಡುಗಡೆ ಮಾಡಿ ಆದೇಶಿಸಿದೆ.

ಮುಂದುವರೆದು, ಹಂಚಿಕೆ ಮಾಡಿರುವ ಮೊತ್ತವನ್ನು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳು, ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತ, ರಾಯಚೂರು ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತ ಮತ್ತು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ಪ್ರಸಾರಣ ನಿಗಮ ನಿಯಮಿತಕ್ಕೆ ಮರುಹಂಚಿಕೆ ಮಾಡಿ ಬಿಡುಗಡೆ ಮಾಡಲು ಆದೇಶಿಸಿರುವ ನಗದು ಮೊತ್ತದ ವಿವರಗಳನ್ನು ಅನುಬಂಧದಲ್ಲಿ ಒದಗಿಸಿದೆ. ಲಗತ್ತಿಸಿರುವ ಸದರಿ ಅನುಬಂಧವು ಈ ಆದೇಶದ ಭಾಗವಾಗಿರುತ್ತದೆ.

ಮುಂದುವರೆದು, ಹುಕ್ಕೇರಿ ಗ್ರಾಮೀಣ ವಿದ್ಯುತ್ ಸಹಕಾರಿ ಸಂಘಕ್ಕೆ ಸೆಪ್ಟೆಂಬರ್-2023ರ ಮಾಹೆಯ ಬಳಕೆಗೆ ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಸಹಾಯಧನ ರೂ.2 ಕೋಟಿಗಳನ್ನು ಹುಬ್ಬಳ್ಳಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಯಿಂದ

ಖರೀದಿ ಮಾಡಿರುವ ವಿದ್ಯುತ್ ವೆಚ್ಚದ ಅಸಲು ಬಾಬಿಗೆ ಹೊಂದಾಣಿಕೆ ಮೂಲಕ ಪಾವತಿ ಮಾಡಿಕೊಳ್ಳಲು ಹುಬ್ಬಳ್ಳಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗೆ ಬಿಡುಗಡೆ ಮಾಡಿದೆ.

ಸೆಪ್ಟೆಂಬರ್-2023ರ ಮಾಹೆಯ ವಿದ್ಯುತ್ ಬಳಕೆಗೆ ಬಿಡುಗಡೆ ಮಾಡಿರುವ ರೂ.750 ಕೋಟಿಗಳ (ಏಳುನೂರ ಏವತ್ತು ಕೋಟಿ ರೂಪಾಯಿಗಳು ಮಾತ್ರ) ಸಹಾಯಧನವನ್ನು ಈ ಕೆಳಕಂಡ ಲೆಕ್ಕಶೀರ್ಷಿಕೆರಡಿ ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ, ರಾಯಚೂರು ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತ, ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ಪ್ರಸರಣ ನಿಗಮ ನಿಯಮಿತ, ಮಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಹುಬ್ಬಳ್ಳಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಗುಲ್ಬರ್ಗಾ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ ಮತ್ತು ಚಾಮುಂಡೇಶ್ವರಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ನಿಗಮ ನಿಯಮಿತರವರಿಗೆ ಬಿಡುಗಡೆ ಮಾಡಿದೆ.

ರೂ.ಕೋಟಿಗಳಲ್ಲಿ

ವಿದ್ಯುತ್ ಸಂಸ್ಥೆಗಳು	ಸೆಪ್ಟೆಂಬರ್-2023ರ ಮಾಹೆ ವಿದ್ಯುತ್ ಬಳಕೆಗೆ			ಒಟ್ಟು
	2801-80-101-1-16-106 ಸಹಾಯಧನ	2801-80-101-1-16-422 ಸಹಾಯಧನ	2801-80-101-1-16-423 ಸಹಾಯಧನ	
ಕವಿನಿ	330.00	0.00	0.00	330.00
ಆರ್‌ಪಿಸಿಎಲ್	3.52	65.76	30.72	100.00
ಕವಿಪ್ರನಿ	100.00	0.00	0.00	100.00
ಮವಿಕಂ	54.18	13.50	6.32	74.00
ಹುವಿಕಂ	21.74	25.40	11.86	59.00
ಗುವಿಕಂ	27.34	16.81	7.85	52.00
ಚಾವಿಸನಿ	12.22	15.53	7.25	35.00
<b>ಒಟ್ಟು</b>	<b>549.00</b>	<b>137.00</b>	<b>64.00</b>	<b>750.00</b>

ಖಜಾನೆ-2ರ ತಂತ್ರಾಂಶದಡಿಯಲ್ಲಿ ಲಭ್ಯವಾಗಿರುವ ಹಣ ಸ್ವೀಕೃತಿ ರಸೀದಿಗಳನ್ನು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತ, ರಾಯಚೂರು ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತ, ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ಪ್ರಸರಣ ನಿಗಮ ನಿಯಮಿತ, ಮಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಹುಬ್ಬಳ್ಳಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಗುಲ್ಬರ್ಗಾ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ ಮತ್ತು ಚಾಮುಂಡೇಶ್ವರಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ನಿಗಮ ನಿಯಮಿತರವರಿಗೆ ಮೇಲಿನ ಕೋಷ್ಟಕದಲ್ಲಿ ಹಂಚಿಕೆ ಮಾಡಿರುವ ಮೊತ್ತಕ್ಕೆ ಹಣ ಸ್ವೀಕೃತಿ ರಸೀದಿಯ ಮುದ್ರಿತ ಪ್ರತಿಯ (ದ್ವಿಪ್ರತಿಗಳಲ್ಲಿ) ಮೇಲೆ ಅಧಿಕೃತ ಅಧಿಕಾರಿರವರ ಸಹಿಯೊಂದಿಗೆ ಇಂಧನ ಇಲಾಖೆ, ಸುಧಾರಣಾ ಶಾಖೆಗೆ ಕಳುಹಿಸಿ ಜಂಟಿ ನಿರ್ದೇಶಕರು (ಆರ್ಥಿಕ), ಸುಧಾರಣಾ ಶಾಖೆ, ಇಂಧನ ಇಲಾಖೆ ರವರ ಮೇಲು ರುಜು ಪಡೆದು ಹಣ ಪಡೆಯತಕ್ಕದ್ದು.

ಬೆಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಯ ಸ್ವಂತ ಸಂಪನ್ಮೂಲದಿಂದ ರೂ.50.00 ಕೋಟಿಗಳ ಅನುದಾನವನ್ನು ಹಾಗೂ ಉಳಿದ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳು ಈ ಕೆಳಗಿನಂತೆ ಗೃಹ ಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ



ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಸಹಾಯಧನದಲ್ಲಿ ಕೂಡಲೇ ಪವರ್ ಕಂಪನಿ ಆಫ್ ಕರ್ನಾಟಕ ಲಿಮಿಟೆಡ್‌ಗೆ ಭರಿಸಲು ಕ್ರಮವಹಿಸಿ ಸರ್ಕಾರಕ್ಕೆ ವರದಿಯನ್ನು ಸಲ್ಲಿಸುವುದು.

ರೂ.ಕೋಟಿಗಳು

ವಿದ್ಯುತ್ ಸಂಸ್ಥೆಗಳು	ಅನುದಾನ
ಮವಿಕಂ	10.00
ಹುಮಿಕಂ	15.00
ಗುಮಿಕಂ	15.00
ಬಾವಿಸನಿ	10.00
<b>ಒಟ್ಟು</b>	<b>50.00</b>

ಈ ಆದೇಶದ ಪ್ರಕಾರ ಹಣ ಸ್ವೀಕೃತಿ ಮಾಡುವ ಸಂಸ್ಥೆಗಳು ಅನುಸರಣಾ ವರದಿ ಮತ್ತು ಬಳಕೆಯ ಪ್ರಮಾಣ ಪತ್ರವನ್ನು (Utilization Certificate) ಈ ಪ್ರವರ್ಗದ ಫಲಾನುಭವಿಗಳ ಮಾಹಿತಿಯೊಂದಿಗೆ ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸತಕ್ಕದ್ದು.

ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳಿಗೆ ಈ ಸರ್ಕಾರಿ ಆದೇಶದಲ್ಲಿ ನೇರವಾಗಿ ನಗದು ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಸಹಾಯಧನದ ಮೊತ್ತದಲ್ಲಿ ವಿಳಂಬ ಪಾವತಿ ಕರ (LPS) ಮತ್ತು LPS ಗೆ ಸಂಬಂಧಿಸಿದ ಇತರೆ ಬಾಕಿ ಇರುವ ವಿದ್ಯುತ್ ಖರೀದಿ ವೆಚ್ಚದ ಬಿಲ್ಲುಗಳನ್ನು ಪಾವತಿಸಲು ಅಗತ್ಯ ಕ್ರಮವಹಿಸುವುದು. ತಪ್ಪಿದಲ್ಲಿ ಸಂಬಂಧಪಟ್ಟ ವಿಸಕಂಗಳ ನಿರ್ದೇಶಕರು (ಆರ್ಥಿಕ) / ಮುಖ್ಯ ಆರ್ಥಿಕ ಅಧಿಕಾರಿಗಳು ನೇರ ಹೊಣೆಗಾರರಾಗಿರುತ್ತಾರೆ.

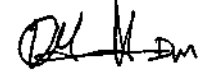
ಎಲ್ಲಾ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳು, ತಮ್ಮ ವಿದ್ಯುತ್ ಖರೀದಿ ಮತ್ತು ಪ್ರಸರಣ ವೆಚ್ಚದ ಬಾಕಿಗಳನ್ನು ಪಾವತಿಸಲು ನಿಯತಕ್ರಿಯಾ ಯೋಜನೆಯೊಂದನ್ನು ಹೊಂದಿರತಕ್ಕದ್ದು ಹಾಗೂ ವಿದ್ಯುತ್ ಖರೀದಿ ಮತ್ತು ಪ್ರಸರಣ ವೆಚ್ಚದ ಬಾಕಿಯನ್ನು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳ ಸ್ವಂತ ಸಂಪನ್ಮೂಲಗಳಿಂದ ಪಾವತಿಸುವುದು.

ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿಯ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಸಹಾಯಧನ ಬೇಡಿಕೆಗಳನ್ನು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳಿಗೆ ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಮೊತ್ತಕ್ಕೆ ಮಹಾಲೇಖಪಾಲರಿಂದ ಪರಿಶೀಲಿಸಿ / ಲೆಕ್ಕ ಪರಿಶೋಧನೆಗೆ ಒಳಪಡಿಸತಕ್ಕದ್ದು ಹಾಗೂ ಲೆಕ್ಕ ಪರಿಶೋಧನಾ ವರದಿಯನ್ನು ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸುವುದು.

ಈ ಆದೇಶವನ್ನು ಸಮಾಜ ಕಲ್ಯಾಣ ಇಲಾಖೆಯ ಅನಧಿಕೃತ ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ: ಸಕಇ 297 ಎಸ್‌ಎಲ್‌ಪಿ 2023, ದಿನಾಂಕ: 21.08.2023 ರ ಅನ್ವಯ ಹೊರಡಿಸಿದೆ.

ಈ ಆದೇಶವನ್ನು ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ: ಆಇ/251/ವೆಚ್ಚ-1/2023 ದಿನಾಂಕ 03.10.2023 ರಲ್ಲಿ ನೀಡಿರುವ ಸಹಮತಿಯನ್ವಯ ಮತ್ತು ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಎಫ್‌ಡಿ 07 ಟಿಎಫ್‌ಪಿ 2023, ದಿನಾಂಕ: 31.07.2023 ರಲ್ಲಿ ನೀಡಿರುವ ಸಹಮತಿಯನ್ವಯ ಹೊರಡಿಸಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ  
ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ.



(ವಿನೋದ್ ಕುಮಾರ್.ಡಿ.ಎಂ)

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ

ಇಂಧನ ಇಲಾಖೆ

**ಇವರಿಗೆ:**

1. ಮಹಾಲೇಖಪಾಲರು(ಎ&ಇ)/(ಲೆಕ್ಕಪರಿಶೋಧನೆ-1 & ಲೆಕ್ಕಪರಿಶೋಧನೆ-2) ಕರ್ನಾಟಕ, ಬೆಂಗಳೂರು-1.
2. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಆರ್ಥಿಕ ಇಲಾಖೆ, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು.

3. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಬೆವಿಕಂ / ಮವಿಕಂ / ಹುವಿಕಂ / ಗುವಿಕಂ / ಚಾವಿಸನಿನಿ.
4. ಕಾರ್ಯದರ್ಶಿ, ಕರ್ನಾಟಕ ವಿದ್ಯುಚ್ಛಕ್ತಿ ನಿಯಂತ್ರಣ ಆಯೋಗ, #16, ಸಿ-1, ಮಿಲ್ಲರ್ಸ್ ಬಿಡ್ ವಿರಿಯಾ, ವಸಂತನಗರ, ಬೆಂಗಳೂರು-52.
5. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಹುಕ್ಕೇರಿ ಗ್ರಾಮೀಣ ವಿದ್ಯುತ್ ಸಹಕಾರಿ ಸಂಘ ನಿಯಮಿತ, ಹುಕ್ಕೇರಿ-591309, ಬೆಳಗಾವಿ ಜಿಲ್ಲೆ.
6. ಉಪ ನಿರ್ದೇಶಕರು, ರಾಜ್ಯ ಹುಜೂರ್ ಖಜಾನೆ, ನೃಪತುಂಗ ರಸ್ತೆ, ಬೆಂಗಳೂರು.
7. ಉಪ ನಿರ್ದೇಶಕರು, ನೆಟ್ ವರ್ಕ್ ಮ್ಯಾನೇಜ್‌ಮೆಂಟ್ ಸೆಂಟರ್, ಖನಿಜಭವನ, ಬೆಂಗಳೂರು.
8. ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ, ಆರ್ಥಿಕ ಇಲಾಖೆ, (ವೆಚ್ಚ-1), ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು.
9. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ಇಂಧನ ಇಲಾಖೆ.
10. ಸರ್ಕಾರದ ಅಪರ ಕಾರ್ಯದರ್ಶಿಯವರ ಆಪ್ತ ಸಹಾಯಕರು, ಇಂಧನ ಇಲಾಖೆ.
11. ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿಯವರ ಆಪ್ತ ಸಹಾಯಕರು, ಇಂಧನ ಇಲಾಖೆ.
12. ಶಾಖೆಯ ರಕ್ಷಾ ಕಡತ / ಕೆಚೇರಿ ಪ್ರತಿ / ಹೆಚ್ಚುವರಿ ಪ್ರತಿಗಳು.

## Annual Energy Audit Report of BESCOM, Bangalore

### ಅನುಬಂಧ

ಸರ್ಕಾರವು 2023-24ನೇ ಸಾಲಿನ ಸೆಪ್ಟೆಂಬರ್-2023ರ ಮಾಹೆ ಬಳಕೆಯ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿಯ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ಸರಬರಾಜುವಿಗಾಗಿ ಖಜಾನೆ-2ರ ತಂತ್ರಾಂಶದಡಿಯಲ್ಲಿ ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಸಹಾಯಧನ ವಿವರಗಳು  
ರೂ.ಕೋಟಿಗಳಲ್ಲಿ

ವಿವರಗಳು	ಲೆಕ್ಕಶೀರ್ಷಿಕೆ 2801-80-101-1-16-106	ಲೆಕ್ಕಶೀರ್ಷಿಕೆ 2801-80-101-1-16-422	ಲೆಕ್ಕಶೀರ್ಷಿಕೆ 2801-80-101-1-16-423	ಒಟ್ಟು
1	2	3	4	5=2+3+4
ಬೆವಿಕಂ	263.52	65.76	30.72	360.00
ಮವಿಕಂ	54.18	13.50	6.32	74.00
ಹುವಿಕಂ	100.28	25.03	11.69	137.00
ಗುವಿಕಂ	67.34	16.81	7.85	92.00
ಜಾವಿಸನಿನಿ	62.22	15.53	7.25	85.00
ಹುಕ್ಕೇರಿ	1.46	0.37	0.17	2.00
ಒಟ್ಟು	549.00	137.00	64.00	750.00

ಮೇಲಿನ ಕೋಷ್ಟಕದಲ್ಲಿ ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಸಹಾಯಧನವನ್ನು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತ, ರಾಯಚೂರು ವಿದ್ಯುತ್ ನಿಗಮ ನಿಯಮಿತ, ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ಪ್ರಸಾರಣ ನಿಗಮ ನಿಯಮಿತ ಹಾಗೂ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳಿಗೆ ಮರುಹಂಚಿಕೆ ಮಾಡಿರುವ ಸಹಾಯಧನದ ವಿವರಗಳು

ರೂ.ಕೋಟಿಗಳಲ್ಲಿ

2023-24ನೇ ಸಾಲಿನ ಸೆಪ್ಟೆಂಬರ್-2023ರ ಮಾಹೆಯ ಗೃಹ ಜ್ಯೋತಿ ಯೋಜನೆಯ ಸಹಾಯಧನದ ವಿವರ											
ವಿವರಗಳು	ಸಾಮಾನ್ಯ					ಪರಿಶಿಷ್ಟ ಜಾತಿ ಉಪಯೋಜನೆಯಡಿ			ಗರಿಷ್ಠ ಉಪಯೋಜನೆಯಡಿ		
	2801-80-101-1-16-106					2801-80-101-1-16-422			2801-80-101-1-16-423		
	ಕವಿವನಿಗೆ ಹೊಂದಾಣಿಕೆ ಮೂಲಕ ಪಾವತಿ	ಆರ್.ಪಿ.ಎಲ್.ಗೆ ಹೊಂದಾಣಿಕೆ ಮೂಲಕ ಪಾವತಿ	ಕವಿವನಿಗೆ ಹೊಂದಾಣಿಕೆ ಮೂಲಕ ಪಾವತಿ	ವಿವರಗಳಿಗೆ ನೇರ ನಗದು ಬಿಡುಗಡೆ	ಒಟ್ಟು	ಆರ್.ಪಿ.ಎಲ್.ಗೆ ಹೊಂದಾಣಿಕೆ ಮೂಲಕ ಪಾವತಿ	ವಿವರಗಳಿಗೆ ನೇರ ನಗದು ಬಿಡುಗಡೆ	ಒಟ್ಟು	ಆರ್.ಪಿ.ಎಲ್.ಗೆ ಹೊಂದಾಣಿಕೆ ಮೂಲಕ ಪಾವತಿ	ವಿವರಗಳಿಗೆ ನೇರ ನಗದು ಬಿಡುಗಡೆ	ಒಟ್ಟು
1	2	3	4	5	6=2+3+4+5	7	8	9=7+8	10	11	12=10+11
ಬೆವಿಕಂ	260.00	3.52	0.00	0.00	263.52	65.76	0.00	65.76	30.72	0.00	30.72
ಮವಿಕಂ	0.00	0.00	0.00	54.18	54.18	0.00	13.50	13.50	0.00	6.32	6.32
ಹುವಿಕಂ	40.00	0.00	40.00	20.28	100.28	0.00	25.03	25.03	0.00	11.69	11.69
ಗುವಿಕಂ	0.00	0.00	40.00	27.34	67.34	0.00	16.81	16.81	0.00	7.85	7.85
ಜಾವಿಸನಿನಿ	30.00	0.00	20.00	12.22	62.22	0.00	15.53	15.53	0.00	7.25	7.25
ಹು.ಗ್ರಾ.ವಿ. ಸ.ಸಂ	0.00	0.00	0.00	1.46	1.46	0.00	0.37	0.37	0.00	0.17	0.17
ಒಟ್ಟು	330.00	3.52	100.00	115.48	549.00	65.76	71.24	137.00	30.72	33.28	64.00

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ  
ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,



(ವಿನೋದ್ ಕುಮಾರ್.ಡಿ.ಎಂ)  
ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ  
ಇಂಧನ ಇಲಾಖೆ

## ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡಾವಳಿಗಳು

ವಿಷಯ: 2023-24ನೇ ಸಾಲಿಗೆ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ 200 ಯೂನಿಟ್‌ಗಳವರೆಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ಸರಬರಾಜುವಿಗಾಗಿ ಸಹಾಯಧನ ಬಿಡುಗಡೆ ಮಾಡುವ ಬಗ್ಗೆ.

### ಓದಲಾಗಿದೆ:

1. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಎನರ್ಜಿ/164/ಪಿಎಸ್‌ಆರ್/2023, ದಿನಾಂಕ: 05.06.2023.
2. ಸಮಾಜ ಕಲ್ಯಾಣ ಇಲಾಖೆಯ ಅನಧಿಕೃತ ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ: ಸಕಇ 297 ಎಸ್‌ಎಲ್‌ಪಿ 2023, ದಿನಾಂಕ: 21.08.2023.
3. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಎನರ್ಜಿ/190/ಪಿಎಸ್‌ಆರ್/2023, ದಿನಾಂಕ: 10.08.2023, 22.08.2023, 05.09.2023 09.10.2023, 02.11.2023 ಮತ್ತು 01.12.2023
4. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಎನರ್ಜಿ/364/ಪಿಎಸ್‌ಆರ್/2023, ದಿನಾಂಕ: 05.09.2023
5. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಎನರ್ಜಿ/487/ಪಿಎಸ್‌ಆರ್/2023, ದಿನಾಂಕ: 01.12.2023

### ಪ್ರಸ್ತಾವನೆ:

ಮೇಲೆ ಓದಲಾದ ಕ್ರಮ ಸಂಖ್ಯೆ (1)ರ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ರಾಜ್ಯದಲ್ಲಿನ ಪ್ರತಿ ತಿಂಗಳಿಗೆ ಗರಿಷ್ಠ 200 ಯೂನಿಟ್‌ಗಳವರೆಗಿನ ಬಳಕೆಯ ಮಿತಿಯಲ್ಲಿ ಪ್ರತಿ ಗ್ರಾಹಕರ ಮಾಸಿಕ ಸರಾಸರಿ ಬಳಕೆಯ (ಆರ್ಥಿಕ ವರ್ಷ 2022-23ರ ಬಳಕೆಯ ಆಧಾರದನ್ವಯ) ಯೂನಿಟ್‌ಗಳ ಮೇಲೆ ಶೇ.10 ರಷ್ಟು ಹೆಚ್ಚಿನ ಬಳಕೆಯ ಮಿತಿಯನ್ನು ಅನುಮತಿಸಿ, ಅದಕ್ಕನುಗುಣವಾಗಿ ವಿದ್ಯುತ್ ಬಿಲ್ಲಿನ ಮೊತ್ತವನ್ನು ಉಚಿತವಾಗಿ ಪಾವತಿಸಲು ಹಾಗೂ 200 ಯೂನಿಟ್‌ಗಳ ಬಳಕೆಯನ್ನು ಮೀರಿದ ಗ್ರಾಹಕರು ಪೂರ್ಣ ವಿದ್ಯುತ್ ಬಿಲ್ಲಿನ್ನು ಪಾವತಿಸಲು ಸರ್ಕಾರವು ಆಡಳಿತಾತ್ಮಕ ಅನುಮೋದನೆ ನೀಡಿದೆ.

ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳು ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಮಾಡುವುದಕ್ಕಾಗಿ 2023-24ನೇ ಸಾಲಿನ ಆಯವ್ಯಯ ಸವಿವರ ವೆಚ್ಚದ ಅಂದಾಜುಗಳು ಸಂಪುಟ-7ರಲ್ಲಿ "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-106-Subsidies ರಡಿ ರೂ.6,590.00 ಕೋಟಿಗಳು, 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-422-SCSP ರಡಿ ರೂ.1,650.00 ಕೋಟಿಗಳು ಮತ್ತು 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-423-TSP ರಡಿ ರೂ.760.00 ಕೋಟಿಗಳು ಒಟ್ಟಾರೆಯಾಗಿ ಅನುದಾನ ರೂ.9,000.00 ಕೋಟಿಗಳ ಸಹಾಯಧನವನ್ನು ಹಂಚಿಕೆ ಮಾಡಿ ಒದಗಿಸಲಾಗಿದೆ.

ಮೇಲೆ ಓದಲಾದ (2)ರ ಸಮಾಜ ಕಲ್ಯಾಣ ಇಲಾಖೆಯ ಅನಧಿಕೃತ ಟಿಪ್ಪಣಿಯಲ್ಲಿರುವಂತೆ ದಿನಾಂಕ: 31.07.2023 ರಂದು ನಡೆದ ಮಾನ್ಯ ಮುಖ್ಯಮಂತ್ರಿಗಳ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಕರ್ನಾಟಕ ರಾಜ್ಯ ಅನುಸೂಚಿತ ಜಾತಿಗಳ / ಅನುಸೂಚಿತ ಪಂಗಡಗಳ ಅಭಿವೃದ್ಧಿ ಪರಿಷತ್ ನಿರ್ಣಯದ ಆದೇಶದಂತೆ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಪಡೆಯುವ ಪರಿಶಿಷ್ಟ ಜಾತಿ / ಪರಿಶಿಷ್ಟ ಪಂಗಡ ವರ್ಗದವರ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ 200 ಯೂನಿಟ್‌ವರೆಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ಪಡೆಯುವ ಸ್ಥಾವರಗಳ ಫಲಾನುಭವಿಗಳ ಅಂಕಿ ಅಂಶಗಳ ಎಲ್ಲಾ ಮಾಹಿತಿಯ ವಿವರಗಳನ್ನು ಸರ್ಕಾರಕ್ಕೆ ಒದಗಿಸಲು ತೀರ್ಮಾನಿಸಿ ಕ್ರಿಯಾ ಯೋಜನೆಗೆ ಅನುಮೋದನೆ ನೀಡಿದರನ್ವಯ 2023-24ನೇ ಸಾಲಿನ ಆಯವ್ಯಯದಲ್ಲಿ ಒದಗಿಸಿರುವ ಲೆಕ್ಕಶೀರ್ಷಿಕೆ: 2801-80-101-1-16-422 ಪರಿಶಿಷ್ಟ ಜಾತಿ ಉಪಯೋಜನೆಯಡಿ



ಸಹಾಯಧನ ರೂ.1,650.00 ಕೋಟಿಗಳು ಮತ್ತು ಲೆಕ್ಕಶೀರ್ಷಿಕೆ: 2801-80-101-1-16-423 ಗಿರಿಜನ ಉಪಯೋಜನೆಯಡಿ ಸಹಾಯಧನ ರೂ.760.00 ಕೋಟಿಗಳ ಬಿಡುಗಡೆಯ ಕ್ರಿಯಾ ಯೋಜನೆಗೆ ಅನುಮೋದನೆಯನ್ನು ನೀಡಿದೆ.

ಮೇಲೆ ಓದಲಾದ ಕ್ರಮ ಸಂಖ್ಯೆ (3),(4) ಮತ್ತು (5) ರ ಸರ್ಕಾರಿ ಆದೇಶಗಳಲ್ಲಿ 2023-24ನೇ ಸಾಲಿನಲ್ಲಿ "2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-106/422/423 ರಡಿ ರೂ.3,651.56 ಕೋಟಿಗಳಲ್ಲಿ ಈವರೆವಿಗೂ ಸರ್ಕಾರದ ಆದೇಶಗಳಲ್ಲಿ ಆರಂಭಿಕ ಶಿಲ್ಪವನ್ನು ಒಳಗೊಂಡಂತೆ ಬಿಡುಗಡೆಯಾದ ಮೊತ್ತ ಮತ್ತು ವೆಚ್ಚಗಳ ವಿವರಗಳು ಈ ಕೆಳಕಂಡಂತಿವೆ:

ರೂ. ಕೋಟಿಗಳಲ್ಲಿ

ಪಿ.ಡಿ/ಬ್ಯಾಂಕ್ ಖಾತೆಯಲ್ಲಿ 1ನೇ ಎಪ್ರಿಲ್-2023ರ ಆರಂಭಿಕ ಶಿಲ್ಪ	0
ಆರ್ಥಿಕ ವರ್ಷದಲ್ಲಿ ಹಿಂದಿನ ಕಂತುಗಳಲ್ಲಿ ಮಾಡಿದ ಬಿಡುಗಡೆಗಳು	3,651.56
ಆರಂಭಿಕ ಶಿಲ್ಪ ಮತ್ತು ಹಿಂದಿನ ಬಿಡುಗಡೆಗಳು ಸೇರಿ ಲಭ್ಯವಿರುವ ಒಟ್ಟು ಮೊತ್ತ	3,651.56
ಆಗಿರುವ ವೆಚ್ಚ	3,651.56
ಲಭ್ಯವಿರುವ ಒಟ್ಟು ಮೊತ್ತಕ್ಕೆ ಆಗಿರುವ ಶೇಕಡಾವಾರು ವೆಚ್ಚ	100%

ಆರ್ಥಿಕ ಇಲಾಖೆಯು ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ: ಆಇ/251/ವೆಚ್ಚ-1/2023, ದಿನಾಂಕ: 07.10.2023 ರಲ್ಲಿ 2023-24ನೇ ಸಾಲಿಗೆ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ಅಕ್ಟೋಬರ್-2023 ರಿಂದ ಡಿಸೆಂಬರ್-2023 ರ ತಿಂಗಳುಗಳಿಗೆ (ಪ್ರತಿ ತಿಂಗಳಿಗೆ 750.00 ಕೋಟಿಗಳಂತೆ) "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-106-Subsidies ರಡಿ ರೂ.1647.00 ಕೋಟಿಗಳು, 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-422-SCSP ರಡಿ ರೂ.413.00 ಕೋಟಿಗಳು ಮತ್ತು 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-423-TSP ರಡಿ ರೂ.190.00 ಕೋಟಿಗಳು ಒಟ್ಟಾರೆಯಾಗಿ ಅನುದಾನ ರೂ.2,250.00 ಕೋಟಿಗಳ ಸಹಾಯಧನವನ್ನು ಬಿಡುಗಡೆ ಮಾಡಲು ಸಹಮತಿಸಿದೆ.

ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳು ಡಿಸೆಂಬರ್-2023ರ ಮಾಹೆಯ ವಿದ್ಯುತ್ ಬಳಕೆಗೆ ಸಂಬಂಧಿಸಿದ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯ ಉಚಿತ ವಿದ್ಯುತ್ ಸರಬರಾಜುವಿನ ಸಹಾಯಧನದ ಮೊತ್ತ ರೂ.808.78 ಕೋಟಿಗಳನ್ನು ಬಿಡುಗಡೆ ಮಾಡಲು ಕೋರಿ ಪ್ರಸ್ತಾಪಿಸಿದ್ದಾರೆ. ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳು ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಗೆ ಡಿಸೆಂಬರ್-2023ರ ಮಾಹೆಯ ಉಚಿತ ವಿದ್ಯುತ್ ಬಳಕೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕೋರಿರುವ ವಿವರ ಈ ಕೆಳಕಂಡಂತಿದೆ:

ರೂ.ಕೋಟಿಗಳಲ್ಲಿ

ವಿಸಕಗಳು	ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯ ಡಿಸೆಂಬರ್-2023 ಮಾಹೆ ಬಳಕೆಯ ಸಹಾಯಧನ
ಬೆವಿಕಂ	375.00
ಮವಿಕಂ	84.14
ಹುವಿಕಂ	152.62
ಗುವಿಕಂ	96.23
ಬಾವಿಸನಿನಿ	97.89
ಹುಕ್ಕೇರಿ	2.90
ಒಟ್ಟು	808.78



ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಸಹಮತಿಯಂತೆ ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ರಾಜ್ಯದಲ್ಲಿನ ಪ್ರತಿ ತಿಂಗಳಿಗೆ ಗರಿಷ್ಠ 200 ಯೂನಿಟ್‌ಗಳವರೆಗಿನ ಬಳಕೆಯ ಮಿತಿಯಲ್ಲಿ ಪ್ರತಿ ಗ್ರಾಹಕರ ಮಾಸಿಕ ಸರಾಸರಿ ಬಳಕೆಯ (ಆರ್ಥಿಕ ವರ್ಷ 2022-23ರ ಬಳಕೆಯ ಆಧಾರದನ್ವಯ) ಯೂನಿಟ್‌ಗಳ ಮೇಲೆ ಶೇ.10 ರಷ್ಟು ಹೆಚ್ಚಿನ ಬಳಕೆಯ ಮಿತಿಯನ್ನು ಅನುಮತಿಸಿ 2023-24ನೇ ಸಾಲಿನ ಡಿಸೆಂಬರ್-2023ರ ಮಾಹೆಯ ಬಳಕೆಗೆ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಮಾಡುವುದಕ್ಕಾಗಿ "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-106-Subsidies ರಡಿ ರೂ.549.00 ಕೋಟಿಗಳ ಸಹಾಯಧನ, "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-422-SCSP ರಡಿ ರೂ.137 ಕೋಟಿಗಳ ಸಹಾಯಧನ ಮತ್ತು "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-423-TSP ರಡಿ ರೂ.64 ಕೋಟಿಗಳ ಸಹಾಯಧನ, ಒಟ್ಟಾರೆಯಾಗಿ ರೂ.750.00 ಕೋಟಿಗಳ ನಗದು ಸಹಾಯಧನವನ್ನು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳಿಗೆ ಖಜಾನೆ-2 ರ ತಂತ್ರಾಂಶದಡಿಯಲ್ಲಿ ಬಿಡುಗಡೆ ಮಾಡಲು ಪ್ರಸ್ತಾಪಿಸಿದೆ. ಆದ್ದರಿಂದ ಈ ಕೆಳಕಂಡ ಆದೇಶ

**ಸರ್ಕಾರಿ ಆದೇಶ ಸಂಖ್ಯೆ: ಎನರ್ಜಿ/190/ಪಿಎಸ್‌ಆರ್/2023**

**ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 03.01.2024**

ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಿರುವ ಅಂಶಗಳ ಹಿನ್ನೆಲೆಯಲ್ಲಿ, ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿ ರಾಜ್ಯದಲ್ಲಿನ ಪ್ರತಿ ತಿಂಗಳಿಗೆ ಗರಿಷ್ಠ 200 ಯೂನಿಟ್‌ಗಳವರೆಗಿನ ಬಳಕೆಯ ಮಿತಿಯಲ್ಲಿ ಪ್ರತಿ ಗ್ರಾಹಕರ ಮಾಸಿಕ ಸರಾಸರಿ ಬಳಕೆಯ (ಆರ್ಥಿಕ ವರ್ಷ 2022-23ರ ಬಳಕೆಯ ಆಧಾರದನ್ವಯ) ಯೂನಿಟ್‌ಗಳ ಮೇಲೆ ಶೇ.10 ರಷ್ಟು ಹೆಚ್ಚಿನ ಬಳಕೆಯ ಮಿತಿಯನ್ನು ಅನುಮತಿಸಿ 2023-24ನೇ ಸಾಲಿನ ಡಿಸೆಂಬರ್-2023ರ ಮಾಹೆಯ ಬಳಕೆಗೆ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ನೀಡುವುದಕ್ಕಾಗಿ "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-106-Subsidies ರಡಿ ರೂ.549.00 ಕೋಟಿಗಳ ಸಹಾಯಧನ, "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-422-SCSP ರಡಿ ರೂ.137.00 ಕೋಟಿಗಳ ಸಹಾಯಧನ ಮತ್ತು "ಲೆಕ್ಕಶೀರ್ಷಿಕೆ - 2801-80-101-1-16-ಗೃಹಜ್ಯೋತಿ-423-TSP ರಡಿ ರೂ.64.00 ಕೋಟಿಗಳ ಸಹಾಯಧನ, ಒಟ್ಟಾರೆಯಾಗಿ ರೂ.750.00 ಕೋಟಿಗಳ (ಏಳು ನೂರ ಐವತ್ತು ಕೋಟಿ ರೂಪಾಯಿಗಳು ಮಾತ್ರ) ನಗದು ಸಹಾಯಧನವನ್ನು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳಿಗೆ ಖಜಾನೆ-2ರ ತಂತ್ರಾಂಶದಡಿಯಲ್ಲಿ ಬಿಡುಗಡೆ ಮಾಡಿ ಆದೇಶಿಸಿದೆ.

ಮುಂದುವರೆದು, ಹಂಚಿಕೆ ಮಾಡಿರುವ ಮೊತ್ತವನ್ನು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ಪ್ರಸರಣ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಮಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಹುಬ್ಬಳ್ಳಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಗುಲ್ಬರ್ಗಾ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ ಮತ್ತು ಚಾಮುಂಡೇಶ್ವರಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ನಿಗಮ ನಿಯಮಿತಕ್ಕೆ ಮರುಹಂಚಿಕೆ ಮಾಡಿ ಬಿಡುಗಡೆ ಮಾಡಲು ಆದೇಶಿಸಿರುವ ನಗದು ಮೊತ್ತದ ವಿವರಗಳನ್ನು ಅನುಬಂಧದಲ್ಲಿ ಒದಗಿಸಿದೆ. ಲಗತ್ತಿಸಿರುವ ಸದರಿ ಅನುಬಂಧವು ಈ ಆದೇಶದ ಭಾಗವಾಗಿರುತ್ತದೆ.

ಮುಂದುವರೆದು, ಹುಕ್ಕೇರಿ ಗ್ರಾಮೀಣ ವಿದ್ಯುತ್ ಸಹಕಾರಿ ಸಂಘಕ್ಕೆ ಡಿಸೆಂಬರ್-2023ರ ಮಾಹೆಯ ಬಳಕೆಗೆ ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಸಹಾಯಧನ ರೂ.2.00 ಕೋಟಿಗಳನ್ನು ಹುಬ್ಬಳ್ಳಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಯಿಂದ



ಖರೀದಿ ಮಾಡಿರುವ ವಿದ್ಯುತ್ ವೆಚ್ಚದ ಅಸಲು ಬಾಬಿಗೆ ಹೊಂದಾಣಿಕೆ ಮೂಲಕ ಪಾವತಿ ಮಾಡಿಕೊಳ್ಳಲು ಹುಬ್ಬಳ್ಳಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗೆ ಬಿಡುಗಡೆ ಮಾಡಿದೆ.

ಡಿಸೆಂಬರ್-2023ರ ಮಾಹೆಯ ವಿದ್ಯುತ್ ಬಳಕೆಗೆ ಬಿಡುಗಡೆ ಮಾಡಿರುವ ರೂ.750.00 ಕೋಟಿಗಳ (ಎಳು ನೂರ ಐವತ್ತು ಕೋಟಿ ರೂಪಾಯಿಗಳು ಮಾತ್ರ) ಸಹಾಯಧನವನ್ನು ಈ ಕೆಳಕಂಡ ಲೆಕ್ಕಶೀರ್ಷಿಕೆರಡಿ ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ಪ್ರಸಾರಣ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಮಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಹುಬ್ಬಳ್ಳಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಗುಲ್ಬರ್ಗಾ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ ಮತ್ತು ಚಾಮುಂಡೇಶ್ವರಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ನಿಗಮ ನಿಯಮಿತಕ್ಕೆ ಬಿಡುಗಡೆ ಮಾಡಿದೆ.

ರೂ.ಕೋಟಿಗಳಲ್ಲಿ

ವಿದ್ಯುತ್ ಸಂಸ್ಥೆಗಳು	ಡಿಸೆಂಬರ್-2023ರ ಮಾಹೆ ವಿದ್ಯುತ್ ಬಳಕೆಗೆ			ಒಟ್ಟು
	2801-80-101-1-16-106 ಸಹಾಯಧನ	2801-80-101-1-16-422 ಸಹಾಯಧನ	2801-80-101-1-16-423 ಸಹಾಯಧನ	
ಕವಿಪ್ರಸನ್ನಿ	117.00	0.00	0.00	117.00
ಬೆವಿಕಂ	146.52	65.76	30.72	243.00
ಮವಿಕಂ	54.18	13.50	6.32	74.00
ಹುವಿಕಂ	101.74	25.40	11.86	139.00
ಗುವಿಸಕಂ	67.34	16.81	7.85	92.00
ಚಾವಿಸನ್ನಿ	62.22	15.53	7.25	85.00
ಒಟ್ಟು	549.00	137.00	64.00	750.00

ಖಜಾನೆ-2ರ ತಂತ್ರಾಂಶದಡಿಯಲ್ಲಿ ಲಭ್ಯವಾಗಲಿರುವ ಹಣ ಸ್ವೀಕೃತಿ ರಸೀದಿಗಳನ್ನು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ಪ್ರಸಾರಣ ನಿಗಮ ನಿಯಮಿತ, ಬೆಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಮಂಗಳೂರು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಹುಬ್ಬಳ್ಳಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ, ಗುಲ್ಬರ್ಗಾ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿ ಮತ್ತು ಚಾಮುಂಡೇಶ್ವರಿ ವಿದ್ಯುತ್ ಸರಬರಾಜು ನಿಗಮ ನಿಯಮಿತ ರವರುಗಳಿಗೆ, ಮೇಲಿನ ಕೋಷ್ಟಕದಲ್ಲಿ ಹಂಚಿಕೆ ಮಾಡಿರುವ ಮೊತ್ತಕ್ಕೆ ಹಣ ಸ್ವೀಕೃತಿ ರಸೀದಿಯ ಮುದ್ರಿತ ಪ್ರತಿಯ (ದ್ವಿಪ್ರತಿಗಳಲ್ಲಿ) ಮೇಲೆ ಅಧಿಕೃತ ಅಧಿಕಾರಿರವರ ಸಹಿಯೊಂದಿಗೆ ಇಂಧನ ಇಲಾಖೆ, ಸುಧಾರಣಾ ಶಾಖೆಗೆ ಕಳುಹಿಸಿ ಜಂಟಿ ನಿರ್ದೇಶಕರು (ಆರ್ಥಿಕ), ಸುಧಾರಣಾ ಶಾಖೆ, ಇಂಧನ ಇಲಾಖೆ ರವರ ಮೇಲು ರುಜು ಪಡೆದು ಹಣ ಪಡೆಯತಕ್ಕದ್ದು.

ಈ ಆದೇಶದ ಪ್ರಕಾರ ಹಣ ಸ್ವೀಕೃತಿ ಮಾಡುವ ಸಂಸ್ಥೆಗಳು ಅನುಸರಣಾ ವರದಿ ಮತ್ತು ಬಳಕೆಯ ಪ್ರಮಾಣ ಪತ್ರವನ್ನು (Utilization Certificate) ಈ ಪ್ರವರ್ಗದ ಫಲಾನುಭವಿಗಳ ಮಾಹಿತಿಯೊಂದಿಗೆ ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸತಕ್ಕದ್ದು.

ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳಿಗೆ ಈ ಸರ್ಕಾರಿ ಆದೇಶದಲ್ಲಿ ನೇರವಾಗಿ ನಗದು ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಸಹಾಯಧನದ ಮೊತ್ತದಲ್ಲಿ ಎಳಂಬ ಪಾವತಿ ಕರ (LPS) ಮತ್ತು LPS ಗೆ ಸಂಬಂಧಿಸಿದ ಇತರೆ ಬಾಕಿ ಇರುವ ವಿದ್ಯುತ್ ಖರೀದಿ ವೆಚ್ಚದ ಬಿಲ್ಲುಗಳನ್ನು ಪಾವತಿಸಲು ಅಗತ್ಯ ಕ್ರಮವಹಿಸುವುದು. ತಪ್ಪಿದಲ್ಲಿ ಸಂಬಂಧಪಟ್ಟ ವಿಸಕಂಗಳ ನಿರ್ದೇಶಕರು (ಆರ್ಥಿಕ) / ಮುಖ್ಯ ಆರ್ಥಿಕ ಅಧಿಕಾರಿಗಳು ನೇರ ಹೊಣೆಗಾರರಾಗಿರುತ್ತಾರೆ.



ಎಲ್ಲಾ ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳು, ತಮ್ಮ ವಿದ್ಯುತ್ ಖರೀದಿ ಮತ್ತು ಪ್ರಸರಣ ವೆಚ್ಚದ ಬಾಕಿಗಳನ್ನು ಪಾವತಿಸಲು ನಿಯತಕ್ರಿಯಾ ಯೋಜನೆಯೊಂದನ್ನು ಹೊಂದಿರತಕ್ಕದ್ದು ಹಾಗೂ ವಿದ್ಯುತ್ ಖರೀದಿ ಮತ್ತು ಪ್ರಸರಣ ವೆಚ್ಚದ ಬಾಕಿಯನ್ನು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳ ಸ್ವಂತ ಸಂಪನ್ಮೂಲಗಳಿಂದ ಪಾವತಿಸುವುದು.

ಗೃಹಜ್ಯೋತಿ ಯೋಜನೆಯಡಿಯ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಸಹಾಯಧನ ಬೇಡಿಕೆಗಳನ್ನು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳಿಗೆ ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಮೊತ್ತಕ್ಕೆ ಮಹಾಲೇಖಪಾಲರಿಂದ ಪರಿಶೀಲಿಸಿ / ಲೆಕ್ಕ ಪರಿಶೋಧನೆಗೆ ಒಳಪಡಿಸತಕ್ಕದ್ದು ಹಾಗೂ ಲೆಕ್ಕ ಪರಿಶೋಧನಾ ವರದಿಯನ್ನು ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸುವುದು.

ಈ ಆದೇಶವನ್ನು ಸಮಾಜ ಕಲ್ಯಾಣ ಇಲಾಖೆಯ ಅನಧಿಕೃತ ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ: ಸಕಇ 297 ಎಸ್‌ಎಲ್‌ಪಿ 2023, ದಿನಾಂಕ: 21.08.2023 ರ ಅನ್ವಯ ಹೊರಡಿಸಿದೆ.

ಈ ಆದೇಶವನ್ನು ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಟಿಪ್ಪಣಿ ಸಂಖ್ಯೆ: ಆಇ/251/ವೆಚ್ಚ-1/2023 ದಿನಾಂಕ 07.10.2023 ರಲ್ಲಿ ನೀಡಿರುವ ಸಹಮತಿಯನ್ವಯ ಮತ್ತು ಆರ್ಥಿಕ ಇಲಾಖೆಯ ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಎಫ್‌ಡಿ 14 ಟಿಎಫ್‌ಪಿ 2023, ದಿನಾಂಕ: 21.11.2023 ರಲ್ಲಿ ನೀಡಿರುವ ಸಹಮತಿಯನ್ವಯ ಹೊರಡಿಸಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ  
ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,



(ವಿನೋದ್ ಕುಮಾರ್.ಡಿ.ಎಂ)

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ

ಇಂಧನ ಇಲಾಖೆ

**ಇವರಿಗೆ:**

1. ಮಹಾಲೇಖಪಾಲರು(ಎ&ಇ)/(ಲೆಕ್ಕಪರಿಶೋಧನೆ-1 & ಲೆಕ್ಕಪರಿಶೋಧನೆ-2) ಕರ್ನಾಟಕ, ಬೆಂಗಳೂರು-1.
2. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ, ಆರ್ಥಿಕ ಇಲಾಖೆ, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು.
3. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಬೆವಿಕಂ / ಮವಿಕಂ / ಹುವಿಕಂ / ಗುವಿಕಂ / ಚಾವಿಸನಿ.
4. ಕಾರ್ಯದರ್ಶಿ, ಕರ್ನಾಟಕ ವಿದ್ಯುಚ್ಛಕ್ತಿ ನಿಯಂತ್ರಣ ಆಯೋಗ, #16, ಸಿ-1, ಮಿಲ್ಲರ್ಸ್ ಬಿಡ್ ಖರೀದಾ, ವಸಂತನಗರ, ಬೆಂಗಳೂರು-52.
5. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಹುಕ್ಕೇರಿ ಗ್ರಾಮೀಣ ವಿದ್ಯುತ್ ಸಹಕಾರಿ ಸಂಘ ನಿಯಮಿತ, ಹುಕ್ಕೇರಿ-591309, ಬೆಳಗಾವಿ ಜಿಲ್ಲೆ.
6. ಉಪ ನಿರ್ದೇಶಕರು, ರಾಜ್ಯ ಹುಜೂರ್ ಖಜಾನೆ, ನೃಪತುಂಗ ರಸ್ತೆ, ಬೆಂಗಳೂರು.
7. ಉಪ ನಿರ್ದೇಶಕರು, ನೆಟ್ ವರ್ಕ್ ಮ್ಯಾನೇಜ್‌ಮೆಂಟ್ ಸೆಂಟರ್, ಖನಿಜಭವನ, ಬೆಂಗಳೂರು.
8. ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ, ಆರ್ಥಿಕ ಇಲಾಖೆ, (ವೆಚ್ಚ-1), ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು.
9. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ಇಂಧನ ಇಲಾಖೆ.
10. ಸರ್ಕಾರದ ಅಪರ ಕಾರ್ಯದರ್ಶಿಯವರ ಆಪ್ತ ಸಹಾಯಕರು, ಇಂಧನ ಇಲಾಖೆ.
11. ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿಯವರ ಆಪ್ತ ಸಹಾಯಕರು, ಇಂಧನ ಇಲಾಖೆ.
12. ಶಾಖೆಯ ರಕ್ಷಾ ಕಡತ / ಕಚೇರಿ ಪ್ರತಿ / ಹೆಚ್ಚುವರಿ ಪ್ರತಿಗಳು.

**ಅನುಬಂಧ**


ಸರ್ಕಾರವು 2023-24ನೇ ಸಾಲಿನ ಡಿಸೆಂಬರ್-2023ರ ಮಾಹಿತಿ ಬಳಕೆಯ ಗೃಹಚ್ಛೋಷಿ ಯೋಜನೆಯಡಿಯ ಗೃಹ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳಿಗೆ ಉಚಿತ ವಿದ್ಯುತ್ ಸರಬರಾಜುವಿಗಾಗಿ ಖಜಾನೆ-2ರ ತಂತ್ರಾಂಶದಡಿಯಲ್ಲಿ ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಸಹಾಯಧನ ವಿವರಗಳು  
ರೂ.ಕೋಟಿಗಳಲ್ಲಿ

ವಿವರಗಳು	ಲೆಕ್ಕಪರಿಶೀಲಕ 2801-80-101-1-16-106	ಲೆಕ್ಕಪರಿಶೀಲಕ 2801-80-101-1-16-422	ಲೆಕ್ಕಪರಿಶೀಲಕ 2801-80-101-1-16-423	ಒಟ್ಟು
1	2	3	4	5=2+3+4
ಬೆವಿಕಂ	263.52	65.76	30.72	360.00
ಮವಿಕಂ	54.18	13.50	6.32	74.00
ಹುವಿಕಂ	100.28	25.03	11.69	137.00
ಗುವಿಕಂ	67.34	16.81	7.85	92.00
ಚಾವಿಸನಿನಿ	62.22	15.53	7.25	85.00
ಹುಕ್ಕೇರಿ	1.46	0.37	0.17	2.00
ಒಟ್ಟು	549.00	137.00	64.00	750.00

ಮೇಲಿನ ಕೋಷ್ಟಕದಲ್ಲಿ ಬಿಡುಗಡೆ ಮಾಡಿರುವ ಸಹಾಯಧನವನ್ನು ಕರ್ನಾಟಕ ವಿದ್ಯುತ್ ಪ್ರಸಾರಣ ನಿಗಮ ನಿಯಮಿತ ಮತ್ತು ವಿದ್ಯುತ್ ಸರಬರಾಜು ಕಂಪನಿಗಳಿಗೆ ಮರುಹಂಚಿಕೆ ಮಾಡಿರುವ ಸಹಾಯಧನದ ವಿವರಗಳು  
ರೂ.ಕೋಟಿಗಳಲ್ಲಿ

2023-24ನೇ ಸಾಲಿನ ಡಿಸೆಂಬರ್-2023ರ ಮಾಹಿತಿ ಗೃಹ ಚ್ಛೋಷಿ ಯೋಜನೆಯ ಸಹಾಯಧನದ ವಿವರ						
ವಿವರಗಳು	ಸಾಮಾನ್ಯ			ಪರಿಶಿಷ್ಟ ಉಪಯೋಜನೆ	ಗರಿಷ್ಠ ಉಪಯೋಜನೆ	ಒಟ್ಟು
	2801-80-101-1-16-106			2801-80-101-1-16-422	2801-80-101-1-16-423	
	ಕವಿಪ್ರಸನಿ	ವಿವರಗಳಿಗೆ	ಒಟ್ಟು	ವಿವರಗಳಿಗೆ	ವಿವರಗಳಿಗೆ	
1	2	3	4=2+3	5	6	7=4+5+6
ಬೆವಿಕಂ	117.00	146.52	263.52	65.76	30.72	360.00
ಮವಿಕಂ	0.00	54.18	54.18	13.50	6.32	74.00
ಹುವಿಕಂ	0.00	100.28	100.28	25.03	11.69	137.00
ಗುವಿಕಂ	0.00	67.34	67.34	16.81	7.85	92.00
ಚಾವಿಸನಿನಿ	0.00	62.22	62.22	15.53	7.25	85.00
ಹುಕ್ಕೇರಿ.ವಿ.ಸಂ	0.00	1.46	1.46	0.37	0.17	2.00
ಒಟ್ಟು	117.00	432.00	549.00	137.00	64.00	750.00

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ  
ಮತ್ತು ಅವರ ಹೆಸರಿನಲ್ಲಿ,

  
 (ವಿನೋದ್ ಕುಮಾರ್.ಡಿ.ಎಂ)  
 ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ  
 ಇಂಧನ ಇಲಾಖೆ

**ANNEXURE 5:**  
**Screenshot of Annual and Quarterly Energy Audit Reports uploaded in**  
**BESCOM's website.**




## Annual Energy Audit Report of BESCOM, Bangalore

Annual Energy Audit Report - B

bescom.karnataka.gov.in/new-page/Annual%20Energy%20Audit%20Report/en

Sign In ಕನ್ನಡ Official Website of GoK Corona Related Information Font Size 14

SHRI SIDDARAMAIAH  
Hon'ble Chief Minister | Gov. of Karnataka

 **Bangalore Electricity Supply Company Limited**  
Government of Karnataka

RTI ACT & KDO Customer Relations Departments of Corporate Office Contact Us Field Officers Contact Details Interruptions Recruitment AA

GESI Initiatives RTI Dashboard

Annual Energy Audit Report

Energy Audit

Year	Report
2020-21	<a href="#">Download</a>
2021-22	<a href="#">Download</a>
2022-23	<a href="#">Download</a>

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Please note that this page also provides links to the

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## Annual Energy Audit Report of BESCOM, Bangalore

WhatsApp Quarterly Energy Audit Reports

bescom.karnataka.gov.in/new-page/Quarterly%20Energy%20Audit%20Reports/en

Sign In ಕನ್ನಡ Official Website of GoK Corona Related Information Font Size 14

**SHRI SIDDARAMAIAH**  
Hon'ble Chief Minister | Govt. of Karnataka

**Bangalore Electricity Supply Company Limited**  
Government of Karnataka

RTI ACT & KDO Customer Relations Departments of Corporate Office Contact Us Field Officers Contact Details Interruptions Recruitment AA GESI Initiatives RTI Dashboard

### Quarterly Energy Audit Reports

Feederwise Energy Audit

Quarter	Report
Q1 (Apr-21 to June-21)	Download
Q2 (July-21 to Sep-21)	Download
Q3 (Oct-21 to Dec-21)	Download
Q4 (Jan-22 to Mar-22)	Download
Q1 (Apr-22 to June-22)	Download
Q2 (July-22 to Sep-22)	Download
Q3 (Oct-22 to Dec-22)	Download
Q4 (Jan-23 to Mar-23)	Download
Q1 (Apr-23 to June-23)	Download
Q2 (July-23 to Sep-23)	Download
Q3 (Oct-23 to Dec-23)	Download
Q4 (Jan-24 to Mar-24)	Download

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**ANNEXURE 6:**  
**Meter Test Reports for various category of meters.**



## Bangalore Electricity Supply Company Limited

(Wholly Owned Government of Karnataka Undertaking)  
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An ISO 9001: 2015 certified Organisation  
Tel:080 26605066 Fax:080 26605067 E-mail:eeemtdivision@rediffmail.com

### METER ACCURACY TEST REPORT

EEE/AEE/AE/LAB/20-21/

1212

10-06-2024

#### Customer Information

The President,  
Nagareshwara Arya Vaishya Sangha,  
@ Vasavi Kalyana Mantapa. Manvi

Reason for test: **Fixing for installation**

Test Duration:10-06-2024 12:50:21To 10-06-2024

#### Seal Details

Manufacturing Seal No **PAW56539**

MT Lab Seal No **BMJ82952**

#### Ref. standard details

Model PRS400.3  
SI No. # 28471  
Class 0.02S

#### Meter Data

Make: **Schneider Electric In**  
Configuration 3 phases, 4 wires  
Class 0.2  
SI No./ Year **24003707 / 2024**

Pulse Rate: 50,000 Imp./kW  
Direct/Trans.: Sec. transf. CT/  
Ibasic / Imax: 1A / 2.0A  
Voltage: 63.5V

#### Limits of Error

I1 (%of Ib)	I2(%of Ib)	I3(%of Ib)	PF1	Mode	% ERROR	RESULT
200	200	200	1.00	+ P	-0.05 %	OK
100	100	100	1.00	+ P	-0.02 %	OK
50	50	50	1.00	+ P	+0.02 %	OK
10	10	10	1.00	+ P	+0.02 %	OK
5	5	5	1.00	+ P	+0.03 %	OK
2	2	2	1.00	+ P	+0.04 %	OK
1	1	1	1.00	+ P	+0.08 %	OK
200	200	200	0.50	+ P	-0.14 %	OK
100	100	100	0.50	+ P	-0.02 %	OK
50	50	50	0.50	+ P	-0.18 %	OK
10	10	10	0.50	+ P	-0.12 %	OK
5	5	5	0.50	+ P	-0.19 %	OK
2	2	2	0.50	+ P	-0.12 %	OK
200	200	200	0.80	+ P	+0.02 %	OK
100	100	100	0.80	+ P	+0.00 %	OK

Page No:1

Total Pages:3





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50	50	50	0.80	+ P	+0.05 %	OK
10	10	10	0.80	+ P	+0.09 %	OK
5	5	5	0.80	+ P	+0.13 %	OK
2	2	2	0.80	+ P	+0.11 %	OK
100	0	0	1.00	+ P	+0.00 %	OK
200	200	200	0.00	+ Q	-0.11 %	OK
100	100	100	0.00	+ Q	-0.09 %	OK
50	50	50	0.00	+ Q	-0.07 %	OK
10	10	10	0.00	+ Q	-0.05 %	OK
5	5	5	0.00	+ Q	-0.04 %	OK
2	2	2	0.00	+ Q	-0.02 %	OK
1	1	1	0.00	+ Q	+0.03 %	OK
200	200	200	0.50	+ Q	-0.05 %	OK
100	100	100	0.50	+ Q	-0.08 %	OK
50	50	50	0.50	+ Q	-0.03 %	OK
10	10	10	0.50	+ Q	-0.01 %	OK
5	5	5	0.50	+ Q	+0.04 %	OK
2	2	2	0.50	+ Q	+0.04 %	OK
200	200	200	0.80	+ Q	-0.22 %	OK
100	100	100	0.80	+ Q	-0.11 %	OK
50	50	50	0.80	+ Q	-0.23 %	OK
10	10	10	0.80	+ Q	-0.19 %	OK
5	5	5	0.80	+ Q	-0.23 %	OK
2	2	2	0.80	+ Q	-0.18 %	OK



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Tel:080 26605066 Fax:080 26605067 E-mail:eeemtdivision@rediffmail.com

Testing Fees of Rs2832 has been collected Vide Receipt No.310617961812/7.6.24

**TEST RESULTS:** The meter bearing SI No.24003707 is tested for its accuracy and found all the errors are within the permissible limits as per IS 14697 standard.

Note: The test report confirms only the accuracy of the meter. All the necessary approvals/ field conditions are to be verified before commissioning.

Tested By:

  
Assistant Engineer (Ele.)  
MT Lab., BMAZ, Bangalore

Verified By

  
Asst. Executive Engineer (Ele.)  
MT Lab., BMAZ, Bangalore

# Annual Energy Audit Report of BESCOM, Bangalore



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### METER ACCURACY TEST REPORT

16 SS - 6 J

06-06-2024

#### Customer Information

IRO Energy Solutions  
#1491, Ground floor, 40th Cross  
4th blk East, Jayanagar

Reason for test: **Fixing for SRTPV installation**  
Test Duration:05-06-2024 12:45:11To 05-06-2024 13:32:11

#### Seal Details

Manufacturing Seal No **31833845-3846**  
MT Lab Seal No **BMJ76773**

#### Ref. standard details

Model PRS400.3  
SI No. # 28471  
Class 0.02S

Make: **SECURE**  
Configuration 3 phases, 4 wires 1  
Class of P/Q: 0.5 / 0.5  
SI No./ Year **X2344274 / 2024**

#### Meter Data

Pulse Rate: 8,000 Imp./kWh  
Direct/Trans.: Sec. transf. CT/VT II  
Ibasic / Imax: 5A / 10.0A  
Voltage: 240.0V

#### Limits of Error

<u>I1 (%of Ib)</u>	<u>I2(%of Ib)</u>	<u>I3(%of Ib)</u>	<u>PF1</u>	<u>Mode</u>	<u>% ERROR</u>	<u>RESULT</u>
200	200	200	1.00	+ P	+0.00 %	OK
100	100	100	1.00	+ P	-0.07 %	OK
50	50	50	1.00	+ P	+0.05 %	OK
10	10	10	1.00	+ P	-0.02 %	OK
5	5	5	1.00	+ P	-0.33 %	OK
2	2	2	1.00	+ P	-0.01 %	OK
1	1	1	1.00	+ P	+0.17 %	OK
200	200	200	0.50	+ P	-0.27 %	OK
100	100	100	0.50	+ P	+0.19 %	OK
50	50	50	0.50	+ P	-0.07 %	OK
10	10	10	0.50	+ P	-0.05 %	OK
5	5	5	0.50	+ P	+0.01 %	OK
5	5	5	0.50	+ P	+0.02 %	OK
200	200	200	0.80	+ P	-0.19 %	OK
100	100	100	0.80	+ P	-0.17 %	OK

Page No:1  
Total Pages:3



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50	50	50	0.80	+ P	-0.39 %	OK
10	10	10	0.80	+ P	-0.32 %	OK
5	5	5	0.80	+ P	+0.17 %	OK
2	2	2	0.80	+ P	+0.00 %	OK
200	200	200	0.00	+ Q	+0.07 %	OK
100	100	100	0.00	+ Q	-0.11 %	OK
50	50	50	0.00	+ Q	-0.04 %	OK
10	10	10	0.00	+ Q	-0.02 %	OK
5	5	5	0.00	+ Q	-0.06 %	OK
2	2	2	0.00	+ Q	-0.01 %	OK
1	1	1	0.00	+ Q	+0.27 %	OK
200	200	200	0.86	+ Q	-0.07 %	OK
100	100	100	0.86	+ Q	-0.02 %	OK
50	50	50	0.86	+ Q	-0.01 %	OK
10	10	10	0.86	+ Q	-0.07 %	OK
5	5	5	0.86	+ Q	-0.10 %	OK
2	2	2	0.86	+ Q	+0.05 %	OK
200	200	200	0.50	+ Q	+0.21 %	OK
100	100	100	0.50	+ Q	-0.23 %	OK
50	50	50	0.50	+ Q	-0.55 %	OK
10	10	10	0.50	+ Q	-0.02 %	OK
5	5	5	0.50	+ Q	-0.11 %	OK
2	2	2	0.50	+ Q	-0.17 %	OK



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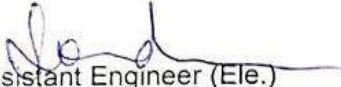
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Tel:080 26605066 Fax:080 26605067 E-mail:eeemtdivision@rediffmail.com

Testing fees of Rs. 2124/- has been collected vide receipt no 884479876600/6.6.24

**TEST RESULTS:** The meter bearing SI No. **X2344274** is tested for its accuracy and found all the errors are within the permissible limits as per IS 14697 standard.

Tested By:

  
Assistant Engineer (Ele.)  
MT Lab., BMAZ, Bangalore

Verified By

  
Asst. Executive Engineer (Ele.)  
MT Lab., BMAZ, Bangalore



# Annual Energy Audit Report of BESCOM, Bangalore



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### METER ACCURACY TEST REPORT

1681

05-06-2024

#### Customer Information

Mamatha,  
#230, LIG Yelahanka New Town  
Bangalore.

Reason for test: **Fixing for SRTPV installation**

Test Duration:05-06-2024 10:08:27 To 05-06-2024 10:44:31

#### Seal Details

Manufacturing Seal No **22513987-3988**

MT Lab Seal No **BMJ76746**

#### Ref. standard details

Model PRS400.3  
SI No. # 28471  
Class 0.02S

Make: **SECURE**  
Configuration 3 phases, 4 wires \\\nClass of P/Q: 1  
SI No./ Year **X2149146 / 2023**

#### Meter Data

Pulse Rate: 800 Imp./kWh  
Direct/Trans.: direct  
Ibasic / Imax: 10A / 60.0A  
Voltage: 240.0V

#### Limits of Error

I1 (%of Ib)	I2(%of Ib)	I3(%of Ib)	PF1	Mode	% ERROR	RESULT
5	5	5	1.00	+ P	-0.11 %	OK
10	10	10	1.00	+ P	-0.25 %	OK
10	10	10	0.50	+ P	-0.37 %	OK
10	10	10	0.80	+ P	+0.01 %	OK
20	20	20	1.00	+ P	+0.14 %	OK
20	20	20	0.50	+ P	-0.31 %	OK
20	20	20	0.80	+ P	-0.11 %	OK
20	20	20	0.80	+ P	-0.25 %	OK
50	50	50	0.50	+ P	-0.05 %	OK
50	50	50	0.80	+ P	-0.35 %	OK
100	100	100	1.00	+ P	-0.18 %	OK
100	100	100	0.50	+ P	-0.13 %	OK
100	100	100	0.80	+ P	-0.32 %	OK
200	200	200	1.00	+ P	-0.04 %	OK
200	200	200	0.50	+ P	-0.39 %	OK

Page No:1  
Total Pages:2



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200	200	200	0.80	+ P	-0.28 %	OK
300	300	300	1.00	+ P	-0.14 %	OK
300	300	300	0.50	+ P	-0.56 %	OK
300	300	300	0.80	+ P	-0.42 %	OK
400	400	400	1.00	+ P	-0.22 %	OK
400	400	400	0.50	+ P	-0.80 %	OK
400	400	400	0.80	+ P	-0.36 %	OK


Testing fees of Rs. 2124- has been collected vide receipt no. **884426509201/3.6.24**

**TEST RESULTS:** The meter bearing SI No. **X2149146** is tested for its accuracy and found all the errors within the permissible limits as per IS 13779 standard.

Tested By:

  
Assistant Engineer (Ele.)  
MT Lab., BMAZ, Bangalore

Verified By

  
Asst. Executive Engineer (Ele.)  
MT Lab., BMAZ, Bangalore





## Bangalore Electricity Supply Company Limited

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Tel:080 26605066 Fax:080 26605067 E-mail:eeemtdivision@rediffmail.com

### METER ACCURACY TEST REPORT

07-06-2024

#### Customer Information

THE PRINCIPAL CIVIL JUDGE  
JMFC MULABAGILU  
KOLAR RR.NO.MSMBP81

Reason for test: **FIXING FOR INSTALLATION**

Test Duration:07-06-2024 13:11:5 To 07-06-2024 13:43:5

#### Seal Details

Manufacturing Seal No **23677967-68**

MT Lab Seal No **BMJ82933**

#### Ref. standard details

Model PRS400.3  
SI No. # 28471  
Class 0.02S

Make: **SECURE**  
Configuration 3 phases, 4 wires \\\nClass of P/Q: 1  
SI No./ Year **X2140571 / 2024**

#### Meter Data

Pulse Rate: 800 Imp./kWh  
Direct/Trans.: direct  
Ibasic / Imax: 10A / 60.0A  
Voltage: 240.0V

#### Limits of Error

I1 (%of Ib)	I2(%of Ib)	I3(%of Ib)	PF1	Mode	% ERROR	RESULT
5	5	5	1.00	+ P	-0.03 %	OK
10	10	10	1.00	+ P	-0.04 %	OK
10	10	10	0.50	+ P	-0.43 %	OK
10	10	10	0.80	+ P	+0.10 %	OK
20	20	20	1.00	+ P	-0.01 %	OK
20	20	20	0.50	+ P	-0.30 %	OK
20	20	20	0.80	+ P	+0.27 %	OK
20	20	20	0.80	+ P	+0.04 %	OK
50	50	50	0.50	+ P	-0.11 %	OK
50	50	50	0.80	+ P	-0.08 %	OK
100	100	100	1.00	+ P	+0.09 %	OK
100	100	100	0.50	+ P	-0.20 %	OK
100	100	100	0.80	+ P	-0.11 %	OK
200	200	200	1.00	+ P	+0.15 %	OK
200	200	200	0.50	+ P	-0.65 %	OK

Page No:1  
Total Pages:2



## Bangalore Electricity Supply Company Limited


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Tel:080 26605066 Fax:080 26605067 E-mail:eeemtdivision@rediffmail.com

200	200	200	0.80	+ P	-0.02 %	OK
300	300	300	1.00	+ P	+0.10 %	OK
300	300	300	0.50	+ P	-0.41 %	OK
300	300	300	0.80	+ P	-0.31 %	OK
400	400	400	1.00	+ P	+0.07 %	OK
400	400	400	0.50	+ P	-0.68 %	OK
400	400	400	0.80	+ P	-0.17 %	OK

Testing fees of Rs. 2124- has been collected vide receipt no. **884820518935.07.6.2**

**TEST RESULTS:** The meter bearing SI No. **X2140571** is tested for its accuracy and found all the errors within the permissible limits as per IS 13779 standard.

Tested By:

  
Assistant Engineer (Ele.)  
MT Lab., BMAZ, Bangalore

Verified By

  
Asst. Executive Engineer (Ele.)  
MT Lab., BMAZ, Bangalore

# Annual Energy Audit Report of BESCOM, Bangalore



## Bangalore Electricity Supply Company Limited

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Tel:080 26605066 Fax:080 26605067 E-mail:eeemtdivision@rediffmail.com

### METER ACCURACY TEST REPORT

EEE/AEE/AE/LAB/20-21/

1671

07-06-2024

#### Customer Information

Sadashiva Reddy B N ,  
No1359/58/B 3rd Sector HSR L/o  
Bangalore.

Reason for test: **Fixing for installation**

Test Duration:06-06-2024 16:03:0.To 06-06-2024 17:01::

#### Seal Details

Manufacturing Seal No **SBO31341**

MT Lab Seal No **BMJ82916**

#### Ref. standard details

Model PRS400.3  
SI No. # 28471  
Class 0.02S

#### Meter Data

Make: **Schneider Electric In**  
Configuration 3 phases, 4 wires 1  
Class 0.2  
SI No./ Year **24000230 / 2024**

Pulse Rate: 50,000 Imp./kWh  
Direct/Trans.: Sec. transf. CT/VT II  
Ibasic / Imax: 1A / 2.0A  
Voltage: 63.5V

#### Limits of Error

<u>I1 (%of Ib)</u>	<u>I2(%of Ib)</u>	<u>I3(%of Ib)</u>	<u>PF1</u>	<u>Mode</u>	<u>% ERROR</u>	<u>RESULT</u>
200	200	200	1.00	+ P	-0.03 %	OK
100	100	100	1.00	+ P	-0.01 %	OK
50	50	50	1.00	+ P	+0.00 %	OK
10	10	10	1.00	+ P	+0.05 %	OK
5	5	5	1.00	+ P	+0.05 %	OK
2	2	2	1.00	+ P	+0.06 %	OK
1	1	1	1.00	+ P	+0.09 %	OK
200	200	200	0.50	+ P	-0.16 %	OK
100	100	100	0.50	+ P	-0.03 %	OK
50	50	50	0.50	+ P	-0.12 %	OK
10	10	10	0.50	+ P	-0.10 %	OK
5	5	5	0.50	+ P	-0.13 %	OK
2	2	2	0.50	+ P	-0.10 %	OK
200	200	200	0.80	+ P	+0.01 %	OK
100	100	100	0.80	+ P	+0.02 %	OK

Page No:1

Total Pages 3

# Annual Energy Audit Report of BESCOM, Bangalore



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50	50	50	0.80	+ P	+0.09 %	OK
10	10	10	0.80	+ P	+0.10 %	OK
5	5	5	0.80	+ P	+0.13 %	OK
2	2	2	0.80	+ P	+0.12 %	OK
100	0	0	1.00	+ P	-0.02 %	OK
200	200	200	0.00	+ Q	-0.07 %	OK
100	100	100	0.00	+ Q	-0.07 %	OK
50	50	50	0.00	+ Q	-0.05 %	OK
10	10	10	0.00	+ Q	-0.03 %	OK
5	5	5	0.00	+ Q	-0.02 %	OK
2	2	2	0.00	+ Q	+0.00 %	OK
1	1	1	0.00	+ Q	+0.04 %	OK
200	200	200	0.50	+ Q	-0.06 %	OK
100	100	100	0.50	+ Q	-0.06 %	OK
50	50	50	0.50	+ Q	-0.02 %	OK
10	10	10	0.50	+ Q	+0.02 %	OK
5	5	5	0.50	+ Q	+0.05 %	OK
2	2	2	0.50	+ Q	+0.05 %	OK
200	200	200	0.80	+ Q	-0.18 %	OK
100	100	100	0.80	+ Q	-0.09 %	OK
50	50	50	0.80	+ Q	-0.15 %	OK
10	10	10	0.80	+ Q	-0.15 %	OK
5	5	5	0.80	+ Q	-0.17 %	OK
2	2	2	0.80	+ Q	-0.14 %	OK



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Tel:080 26605066 Fax:080 26605067 E-mail:eeemtdivision@rediffmail.com

Testing Fees of Rs2832 has been collected Vide Receipt No.884621974873/7.6.24

**TEST RESULTS:** The meter bearing SI No. **24000230** is tested for its accuracy and found all the errors are within the permissible limits as per IS 14697 standard.

Note: The test report confirms only the accuracy of the meter. All the necessary approvals/ field conditions are to be verified before commissioning.

Tested By:

  
Assistant Engineer (Ele.)  
MT Lab., BMAZ, Bangalore

Verified By

  
Asst. Executive Engineer (Ele.)  
MT Lab., BMAZ, Bangalore



# Annual Energy Audit Report of BESCOM, Bangalore



## Bangalore Electricity Supply Company Limited

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Tel:080 26605066 Fax:080 26605067 E-mail:eeemtdivision@rediffmail.com

### METER ACCURACY TEST REPORT

1655 - 1663

06-06-2024

#### Customer Information

IRO Energy Solutions  
#1491, Ground floor, 40th Cross  
4th blk East, Jayanagar

Reason for test: Fixing for SRTPV installation

Test Duration:05-06-2024 12:45:11 To 05-06-2024 13:32:

#### Seal Details

Manufacturing Seal No 31833843-3844

MT Lab Seal No BMJ76772

#### Ref. standard details

Model PRS400.3  
SI No. # 28471  
Class 0.02S

Make: SECURE  
Configuration 3 phases, 4 wires  
Class of P/Q: 0.5 / 0.5  
SI No./ Year X2344273 / 2024

#### Meter Data

Pulse Rate: 8,000 Imp./kWh  
Direct/Trans.: Sec. transf. CT/VT II  
Ibasic / Imax: 5A / 10.0A  
Voltage: 240.0V

#### Limits of Error

I1 (%of Ib)	I2(%of Ib)	I3(%of Ib)	PF1	Mode	% ERROR	RESULT
200	200	200	1.00	+ P	-0.09 %	OK
100	100	100	1.00	+ P	-0.10 %	OK
50	50	50	1.00	+ P	+0.12 %	OK
10	10	10	1.00	+ P	+0.18 %	OK
5	5	5	1.00	+ P	-0.32 %	OK
2	2	2	1.00	+ P	-0.07 %	OK
1	1	1	1.00	+ P	+0.22 %	OK
200	200	200	0.50	+ P	-0.28 %	OK
100	100	100	0.50	+ P	+0.20 %	OK
50	50	50	0.50	+ P	-0.08 %	OK
10	10	10	0.50	+ P	+0.10 %	OK
5	5	5	0.50	+ P	-0.01 %	OK
5	5	5	0.50	+ P	+0.04 %	OK
200	200	200	0.80	+ P	-0.21 %	OK
100	100	100	0.80	+ P	-0.14 %	OK

Page No:1  
Total Pages 3



# Annual Energy Audit Report of BESCOM, Bangalore



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50	50	50	0.80	+ P	-0.31 %	OK
10	10	10	0.80	+ P	-0.28 %	OK
5	5	5	0.80	+ P	+0.01 %	OK
2	2	2	0.80	+ P	-0.06 %	OK
200	200	200	0.00	+ Q	+0.04 %	OK
100	100	100	0.00	+ Q	-0.11 %	OK
50	50	50	0.00	+ Q	+0.08 %	OK
10	10	10	0.00	+ Q	+0.02 %	OK
5	5	5	0.00	+ Q	-0.01 %	OK
2	2	2	0.00	+ Q	+0.01 %	OK
1	1	1	0.00	+ Q	+0.23 %	OK
200	200	200	0.86	+ Q	+0.02 %	OK
100	100	100	0.86	+ Q	+0.02 %	OK
50	50	50	0.86	+ Q	+0.05 %	OK
10	10	10	0.86	+ Q	+0.02 %	OK
5	5	5	0.86	+ Q	+0.02 %	OK
2	2	2	0.86	+ Q	+0.20 %	OK
200	200	200	0.50	+ Q	+0.04 %	OK
100	100	100	0.50	+ Q	-0.14 %	OK
50	50	50	0.50	+ Q	-0.17 %	OK
10	10	10	0.50	+ Q	+0.02 %	OK
5	5	5	0.50	+ Q	-0.08 %	OK
2	2	2	0.50	+ Q	-0.19 %	OK



**Bangalore Electricity Supply Company Limited**

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An ISO 9001: 2015 certified Organisation

Tel:080 26605066 Fax:080 26605067 E-mail:eeemtdivision@rediffmail.com

Testing fees of Rs. 2124/- has been collected vide receipt no **884479876600/6.6.24**

**TEST RESULTS:** The meter bearing SI No. **X2344273** is tested for its accuracy and found all the errors are within the permissible limits as per IS 14697 standard.

Tested By:

  
Assistant Engineer (Ele.)  
MT Lab., BMAZ, Bangalore

Verified By

  
Asst. Executive Engineer (Ele.)  
MT Lab., BMAZ, Bangalore



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## METER ACCURACY TEST REPORT

30-05-2024

EEE/AEE/AE/MT LAB/24-25/  
Enclosure: Additional test report

1586

Reason for test: FIXING FOR SRTPV Installatic  
Test duration: 29-05-2024 15:26<sup>TO</sup> 29-05-2024 16:21

### Customer Information

Durga Prakash Emani  
And Trupti Vishvanath Shanbhag  
#1J17, Kasavanahalli

### Seal Details

Manufacturing Seal No: 5509192-0048  
MT Lab Seal No.: UN

### Ref Standard details

Model: PRS 400.3  
SI No: #27456  
Class: 0.02S

### Meter Data

Make: HPL, 5-30A, 240V, :  
Connection: 1 phase, 2 wires  
Class, P/Q: 1.0  
SI No / Year: 53562743 / 2023

Meter Constant: 6,400.0imp./kWh  
Direct/Trans.: direct  
Ibasic/Imax: 5A / 30A  
Voltage: 240V

### Limits of Error

U1 (% of Vref)	I1 (% of Ib)	PF1	Mode	%Errors	Result
100 %	5 %	1.00	+ P	+0.12 %	OK
100 %	20 %	1.00	+ P	+0.14 %	OK
100 %	20 %	0.50	+ P	-0.09 %	OK
100 %	20 %	0.80	+ P	+0.24 %	OK
100 %	50 %	1.00	+ P	+0.20 %	OK
100 %	50 %	0.50	+ P	-0.09 %	OK
100 %	50 %	0.80	+ P	+0.26 %	OK
100 %	100 %	1.00	+ P	+0.31 %	OK
100 %	100 %	0.50	+ P	-0.09 %	OK
100 %	100 %	0.80	+ P	+0.22 %	OK
100 %	200 %	1.00	+ P	+0.08 %	OK
100 %	200 %	0.50	+ P	-0.11 %	OK
100 %	200 %	0.80	+ P	+0.37 %	OK
100 %	300 %	1.00	+ P	+0.12 %	OK
100 %	300 %	0.50	+ P	+0.12 %	OK
100 %	300 %	0.80	+ P	+0.12 %	OK
100 %	600 %	1.00	+ P	+0.07 %	OK
100 %	600 %	0.50	+ P	+0.41 %	OK

Page No: 1  
Total Pages: 2



# Bangalore Electricity Supply Company Limited

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An ISO 9001:2015 certified Organisation  
Tel: 26605066 Fax: 080 26605067 E-mail: eemtdivision@rediffmail.com

100 % 600 % 0.80 + P +0.18 % OK

## Counter Test

<u>U1 (%)</u>	<u>I1 (% of Ib)</u>	<u>PF1</u>	<u>Mode</u>	<u>Intial</u>	<u>Final</u>	<u>Ref. Value</u>	<u>Error(%)</u>
100 %	100 %	1.00	+ P	0001.0000 Wh	0002.0000 Wh	1.0002	-0.0200 %

Testing fee of Rs.236/- has been collected vide Rt. no 884343406124.30.5.24

**RESULT:** The meter bearing SI no. 53562743 ; tested for accuracy and errors are found to be within permissible lim  
as per IS 13779

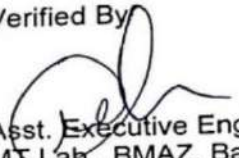
Note: The test report confirms only the accuracy of the meter. Necessary approvals / field conditions are  
to be verified by the concerned officer.



Tested By:

  
Assistant Engineer (Ele.)  
MT Lab., BMAZ, Bangalore

Verified By

  
Asst. Executive Engineer (Ele.)  
MT Lab., BMAZ, Bangalore



# Bangalore Electricity Supply Company Limited

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O/o the Executive Engineer (Elec.), MT Dvn., BMAZ, Bhawani Nagar, Bangalore.  
An ISO 9001:2015 certified Organisation  
Tel: 26605066 Fax: 080 26605067 E-mail: eemtdivision@rediffmail.com

## METER ACCURACY TEST REPORT

30-05-2024

EEE/AEE/AE/MT LAB/24-25/

Enclosure: Additional test report

### Customer Information

Shashi Kumar Diwan and  
#Puja Diwan #1465,  
BTM 2nd Stage 1st Phase RKK Nagar

Reason for test: FIXING FOR SRTPV Installatic  
Test duration: 29-05-2024 15:26 TO 29-05-2024 16:21

### Seal Details

Manufacturing Seal No: 5509296-9218  
MT Lab Seal No.: UN

### Ref Standard details

Model: PRS 400.3  
SI No: #27456  
Class: 0.02S

### Meter Data

Make: HPL, 5-30A, 240V, :  
Connection: 1 phase, 2 wires  
Class, P/Q: 1.0  
SI No / Year: 53562747 / 2023

Meter Constant: 6,400.0imp./kWh  
Direct/Trans.: direct  
Ibasic/Imax: 5A / 30A  
Voltage: 240V

### Limits of Error

U1 (% of Vref)	I1 (% of Ib)	PF1	Mode	%Errors	Result
100 %	5 %	1.00	+ P	+0.04 %	OK
100 %	20 %	1.00	+ P	+0.05 %	OK
100 %	20 %	0.50	+ P	-0.26 %	OK
100 %	20 %	0.80	+ P	+0.19 %	OK
100 %	50 %	1.00	+ P	+0.06 %	OK
100 %	50 %	0.50	+ P	-0.24 %	OK
100 %	50 %	0.80	+ P	+0.25 %	OK
100 %	100 %	1.00	+ P	+0.05 %	OK
100 %	100 %	0.50	+ P	-0.22 %	OK
100 %	100 %	0.80	+ P	+0.09 %	OK
100 %	200 %	1.00	+ P	+0.03 %	OK
100 %	200 %	0.50	+ P	-0.28 %	OK
100 %	200 %	0.80	+ P	+0.09 %	OK
100 %	300 %	1.00	+ P	+0.10 %	OK
100 %	300 %	0.50	+ P	-0.12 %	OK
100 %	300 %	0.80	+ P	+0.12 %	OK
100 %	600 %	1.00	+ P	+0.07 %	OK
100 %	600 %	0.50	+ P	-0.11 %	OK

Page No: 1

Total Pages: 2





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Tel: 26605066 Fax: 080 26605067 E-mail: eemtdivision@rediffmail.com

100 % 600 % 0.80 + P +0.10 % OK

### Counter Test

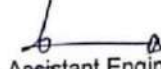
U1 (%)	I1 (% of Ib)	PF1	Mode	Initial	Final	Ref. Value	Error(%)
100 %	100 %	1.00	+ P	0001.0000 Wh	0002.0000 Wh	1.0002	-0.0200 %

Testing fee of Rs.236/- has been collected vide Rt. no 884132721139.30.5.24

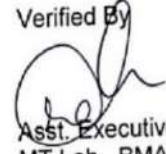
**RESULT:** The meter bearing SI no. 53562747 tested for accuracy and errors are found to be within permissible limit as per IS 13779

Note: The test report confirms only the accuracy of the meter. Necessary approvals / field conditions are to be verified by the concerned officer.

Tested By:

  
Assistant Engineer (Ele.)  
MT Lab., BMAZ, Bangalore

Verified By

  
Asst. Executive Engineer (Ele.)  
MT Lab., BMAZ, Bangalore



**ANNEXURE 7:**  
**Renewable Purchase Obligation (RPO) of**  
**ESCOM for the FY 2023-24.**

**KARNATAKA POWER TRANSMISSION CORPORATION LIMITED**

No: CEE/SLDC/SEE/TBC/EE-2/AEE-4/ 6705-07

Encl:



Office of the  
Chief Engineer Electy,  
State Load Dispatch Centre,  
Race Course Road,  
Bangalore-560009  
Date:

12 JUN 2024

To,  
The Hon'ble Secretary,  
KERC, No: 16, C-1, Millers Tank Bed Area,  
Vasanth Nagar.  
Bengaluru-560001.

Sir,


**Sub:** Fulfillment of Renewable Energy Purchase Obligation (RPO) of ESCOMs for  
the FY-2023-24 - Reg.

**Ref:** KERC Notification No S/03/1 dated 16.03.2011.

\*\*\*\*\*

The Renewable Energy Purchase Obligation of ESCOMS for the FY-2023-24  
are enclosed herewith for kind needful.

This is for your kind information.

Respectfully  
  
Chief Engineer (Electy.)  
SLDC, KPTCL.

**Co to:**

1. General Manager (Tech), PP/Commercial/ A&HRD, BESCOM, HESCOM, MESCOM, GESCOM and CESC.
2. MF/OC.

# Annual Energy Audit Report of BESCOM, Bangalore

RPO for BESCOM, MESCOM, CESC, HESCOM & GESCO for the quarter APRIL-2023 to MARCH-2024  
Excluding procurement from hydropower during the FY-2022-23 Vide Notification No: Y/01/22/462 Dtd: 12.07.2022

## Solar and Non - Solar

Month	ESCO/MS	Energy purchased in units	Energy purchased from other ESCOM (in Units)	Total energy Purchased (in Units)	KERC Target for RPO in %	RPO to be met in Units	Solar and Non Solar Energy Purchased										RPO Met Units	RPO Achieved in %
							PPA	Solar Roof Top	Green Energy	GTAM	APPC	13=8+9+10+11+12	14=13/5*100					
1	2	3	4	5=3+4	6	7=5*6	8	9	10	11	12							
1st Quarter	BESCOM	10484520648	-498238513	9986282135	25.25	2521536239	2185957193	0	79214892	21980495	0	2084761806.55	20.88					
	GESCOM	2935814210	-419909516	2515904695	22.00	553499033	759676413	0	0	22941453	2632023	734102937.01	29.18					
	HESCOM	2958487582	643849855	3602337437	24.00	864560985	1159593254	0	0	51383550	0	1108209704.37	30.76					
	MESCOM	1617012515	219122604	1836135119	26.50	486575806	334197520	0	963461	4119962	0	329114097.66	17.92					
	CESC	1747665951	55175570	1802841520	24.00	432681965	383600260	0	0	10029291	0	373570969.17	20.72					
	BESCOM	8850427807	30621210	8881049017	25.25	2242464877	2478817244	0	39326544	23595132	0	2415895568.40	27.20					
2nd Quarter	GESCOM	2644620472	-236202478	2408417994	22.00	529851959	957458586	0	0	24626677	4506165	928325743.93	38.55					
	HESCOM	2783218537	343833769	3127052306	24.00	750492554	1360010889	0	0	55158066	0	1304852823.26	41.73					
	MESCOM	1474624184	-244277181	1230347003	26.50	326041956	479025526	0	736347	4422605	0	473866574.30	38.51					
	CESC	1532672696	106024679	1638697375	24.00	393287370	444240052	0	0	10766020	0	433474031.20	26.45					
	BESCOM	1082155919	-563923940	10257631979	25.25	2590052075	2238011169	0	37511910	465162	0	2200034096.81	21.45					
	GESCOM	3091535779	-166353277	2925182502	22.00	643540150	732196260	0	0	485499	995366	730715394.61	24.98					
3rd Quarter	HESCOM	3340120650	621867069	3961987719	24.00	950877053	1217299397	0	0	1087405	0	1216211991.59	30.70					
	MESCOM	1760615379	26970176	1787585555	26.50	473710172	390166139	0	0	87189	0	390078949.98	21.82					
	CESC	2033711937	81439972	2115151908	24.00	507636458	463214717	0	0	212245	0	463002471.68	21.89					
	BESCOM	12840699400	-484552609	12356146792	25.25	3119927065	2301569100	0	22137885	0	0	2279431215.02	18.45					
4th Quarter	GESCOM	3664358879	-649338401	3015020478	22.00	663304505	805120296	0	0	0	1606887	803513408.77	26.65					
	HESCOM	4112221394	447626561	4559847985	24.00	1094363509	1413327387	0	589620	0	15736679	1397001088.06	30.64					
	MESCOM	2061531461	322865239	2384396700	26.50	631865126	374990507	0	0	0	0	374990506.97	15.73					
	CESC	2375967085	363399209	2739366294	24.00	657447911	460231576	0	0	0	0	460231575.60	16.80					
2023 - 24	BESCOM	43143723775	-1516093851	41627629924	25.25	10510976556	9204354706	146520000	178191231	46040788	0	9126642686.79	21.92					
From APRIL	GESCOM	12347356636	-1471803672	10875552964	22.00	2392621652	3254451554	11027296	0	48053629	9740441	3207684780.32	29.49					
2023 to	HESCOM	13227247447	2057177255	15284424702	24.00	3668261928	5150230927	33199284	589620	107629021	15736679	5059474891.28	33.10					
MARCH -	MESCOM	6926003525	324680838	7250684364	26.50	1921431356	1578379693	12219987	1699808	8629756	0	1580270115.91	21.79					
2024)	CESC	7702419481	606039429	8308458911	24.00	1994030139	1751286604	12401814	0	21007556	0	1742680861.35	20.97					

Superintending Engineer (Ele)  
TBC, KPTCL, Bengaluru

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# Annual Energy Audit Report of BESCOM, Bangalore

RPO for BESCOM, MESCOM, CESC, HESCOM & GESCOM for the quarter JANUARY-2024 to MARCH-2024  
Excluding procurement from hydro power during the FY-2022-23 Vide Notification No: Y/01/22/462 Dtd: 12.07.2022

## Solar and Non - Solar

Month	ESCOMS	Energy purchased in units	Energy purchased from other ESCOM (in Units)	Total energy Purchased (in Units)	KERC Target for RPO in %	RPO to be met in Units	PPA	Green Energy	GTAM	APPC	RPO Met Units	RPO Achieved in %
1	2	3	4	5=3+4	6	7=5*6	8	9	10	11	12=8-9-10-11	13=12/5*100
January-24	BESCOM	4054060042	-163649405	3890410637	25.25	982328686	803151641	8878352	0		794273289	20.42
	GESCOM	1149996116	-164955635	985040481	22.00	216708906	263564668		0	566854	262997814	26.70
	HESCOM	1270645084	202274095	1472919180	24.00	353500603	486390444		0		486390444	33.02
	MESCOM	642719566	52556164	695275730	26.50	184248069	127736256		0		127736256	18.37
February-24	CESC	737481014	73774780	811255794	24.00	194701391	158599906		0		158599906	19.55
	BESCOM	4084435466	-185119338	3899316128	25.25	984577322	772923241	7994305	0		764928936.1	19.62
	GESCOM	1153713719	-201837121	951876598	22.00	209412852	261282420		0	614528	260667891.5	27.38
	HESCOM	1267929572	149124922	1417054493	24.00	340093078	445403631		0		445403630.7	31.43
March-24	MESCOM	652963527	115593424	768556951	26.50	203667592	126767085		0		126767084.5	16.49
	CESC	751691998	122238113	873930111	24.00	209743227	157916765		0		157916765.3	18.07
	BESCOM	4702203893	-135783866	4566420027	25.25	1153021057	725494218	5265228	0		720228990	15.77
	GESCOM	1360649044	-282545646	1078103398	22.00	237182748	280273208		0	425505	279847703.1	25.96
JANUARY - 2024 to MARCH 2024	HESCOM	1573646738	96227545	1669874282	24.00	400769828	481533313	589620	0		480943692.5	28.80
	MESCOM	765848368	154715651	920564019	26.50	243949465	120487167		0		120487166.7	13.09
	CESC	886794073	167386316	1054180389	24.00	253003293	143714904		0		143714904.5	13.63
	BESCOM	12840699400	-484552609	12356146792	25.25	3119927065	2301569100	22137885	0	0	2279431215	18.45
	GESCOM	3664358879	-649338401	3015020478	22.00	663304505	805120296	0	0	1606887	803513409	26.65
	HESCOM	4112221394	447626561	4559847955	24.00	1094363509	1413327387	589620	0	0	1412737767	30.98
	MESCOM	2061531461	322865239	2384396700	26.50	631865126	374990507	0	0	0	374990507	15.73
	CESC	2375967085	363399209	2739366294	24.00	657447911	460231576	0	0	0	460231576	16.80

Superintending Engineer (Ele)  
TBC, KPTCL, Bengaluru  
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# Annual Energy Audit Report of BESCOM, Bangalore

RPO for BESCOM, MESCOM, CESC, HESCOM & GESCOM for the quarter OCTOBER-2023 to DECEMBER-2023  
Excluding procurement from hydropower during the FY-2022-23 Vide Notification No: Y/01/22/462 Dtd: 12.07.2022

## Solar and Non - Solar

Month	ESCOMS	Energy purchased in units	Energy purchased from other ESCOM (in Units)	Total energy Purchased (in Units)	KERC Target for RPO in %	RPO to be met in Units	PPA	Green Energy	GTAM	APPC	RPO Met Units	RPO Achieved in %
1	2	3	4	5=3+4	6	7=5*6	8	9	10	11	12=8-9-10-11	13=12/5*100
October-23	BESCOM	3550482613	-182951062	3367531551	25.25	850301717	677658414	24474489	465162		652718763	19.38
	GESCOM	1004277970	20715068	1024993037	22.00	225498468	216620275		485499	297263	215837513	21.06
	HESCOM	978417658	285100567	1263518225	24.00	303244374	293374644		1087405		292287239	23.13
	MESCOM	588720750	-52358583	536362167	26.50	142135974	132779092		87189		132691903	24.74
November-23	CESC	671864376	-70505989	601358386	24.00	144326013	148594076		212245		148381831	24.67
	BESCOM	3483995808	-242097241	3241898567	25.25	818579388	756908193	5429119			751479073.8	23.18
	GESCOM	994039486	-32925175	961114311	22.00	211445148	243605788		0	336535	243269252.7	25.31
	HESCOM	1118426599	228036097	1346462696	24.00	323151047	431896163		0		431896162.6	32.08
December-23	MESCOM	565090816	19957061	585047877	26.50	155037687	128263928		0		128263928.3	21.92
	CESC	658765003	27029259	685794262	24.00	164590623	157238261		0		157238261.1	22.93
	BESCOM	3787077497	-138875636	3648201861	25.25	921170970	803444562	7608302			795836259.8	21.81
	GESCOM	1093218324	-154143169	939075154	22.00	206596534	271970197		0	361568	271608629.4	28.92
OCTOBER - 2023 to DECEMBER-2023	HESCOM	1243276393	108730405	1352006799	24.00	324481632	492028590		0		492028590.1	36.39
	MESCOM	606803813	59371698	666175511	26.50	176536510	129123119		0		129123118.6	19.38
	CESC	703082558	124916702	827999260	24.00	198719822	157382380		0		157382379.7	19.01
	BESCOM	10821555919	-563923940	10257631979	25.25	2590052075	2238011169	37511910	465162	0	2200034097	21.45
	GESCOM	3091535779	-166353277	2925182502	22.00	643540150	732196260		485499	995366	730715395	24.98
	HESCOM	3340120650	621867069	3961987719	24.00	950877053	1217299397		1087405	0	1216211992	30.70
	MESCOM	1760615379	26970176	1787585555	26.50	473710172	390166139		0	0	390078950	21.82
	CESC	2033711937	81439972	2115151908	24.00	507636458	463214717		0	0	463002472	21.89

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# Annual Energy Audit Report of BESCOM, Bangalore

RPO for BESCOM, MESCOM, CESC, HESCOM & GESCOM for the quarter JULY-2023 to SEPTEMBER-2023  
Excluding procurement from hydropower during the FY-2022-23 Vide Notification No: Y/01/22/462 Dtd: 12.07.2022

## Solar and Non - Solar

Month	ESCOMS	Energy purchased in units	Energy purchased from other ESCOM (in Units)	Total energy Purchased (in Units)	KERC Target for RPO in %	RPO to be met in Units	PPA	Green Energy	GTAM	APPC	RPO Met Units	RPO Achieved in %
1	2	3	4	5=3+4	6	7=5*6	8	9	10	11	12=8-9-10-11	13=12/5*100
July-23	BESCOM	2593540745	103564054	2697104798	25.25	681018962	871567253	22014738	13160667		836391848	31.01
	GESCOM	795467140	-149070140	646397000	22.00	142207340	356691067		13736031	2011117	340943919	52.75
	HESCOM	849066304	27816984	876883287	24.00	210451989	527695822		30765537		496930285	56.67
	MESCOM	429216151	-74351505	354864646	26.50	94039131	169754124	45451	2466798		167241875	47.13
August-23	CESC	392189912	92040608	484230520	24.00	116215325	138383782		6004967		132378815	27.34
	BESCOM	3062875921	122450012	3185325933	25.25	804294798	817939037	10091981	9020073		798826982.6	25.08
	GESCOM	929537164	-48085990	881451174	22.00	193919258	329780609		9414418	1395746	318970445.1	36.19
	HESCOM	1005514974	44392381	1049907355	24.00	251977765	453444923		21086120		432358802.6	41.18
September-23	MESCOM	526207879	-101159622	425048257	26.50	112637788	167310634	31646	1690697		165588291.4	38.96
	CESC	572813389	-17596781	555216609	24.00	133251986	160873827		4115692		156758134.7	28.23
	BESCOM	319401141	-195392856	2998618286	25.25	757151117	789310955	7219825	1414392		780676737.5	26.03
	GESCOM	919616167	-39046347	880569820	22.00	193725360	270986910		1476228	1099302	268411379.9	30.48
JULY - 2023 to SEPTEMBER-2023	HESCOM	928637259	271624405	1200261664	24.00	288062799	378870144		3306409		375563735.3	31.29
	MESCOM	519200154	-68766054	450434101	26.50	119365037	141960768	659250	265110		141036407.5	31.31
	CESC	567669394	31580852	599250246	24.00	143820059	144982443		645361		144337081.9	24.09
	BESCOM	8850427807	30621210	8881049017	25.25	2242464877	2478817244	39326544	23595132	0	2415895568	27.20
	GESCOM	2644620472	-236202478	2408417994	22.00	529851959	957458586	0	24626677	4506165	928325744	38.55
	HESCOM	2783218537	343833769	3127052306	24.00	750492554	1360010889	0	55158066	0	1304852823	41.73
	MESCOM	1474624184	-244277181	1230347003	26.50	326041956	479025526	736347	4422605	0	473866574	38.51
	CESC	1532672696	106024679	1638697375	24.00	393287370	444240052	0	10766020	0	433474031	26.45

Superintending Engineer (Ele.) 29/6/24  
TBC, KPTCL, Bengaluru



# Annual Energy Audit Report of BESCOM, Bangalore

RPO for BESCOM, MESCOM, CESC, HESCOM & GESCOM for the quarter APRIL-2023 to JUNE-2023  
Excluding procurement from hydropower during the FY-2022-23 Vide Notification No: Y/01/22/462 Dtd: 12.07.2022

## Solar and Non - Solar

Month	ESCOMS	Energy purchased in units	Energy purchased from other ESCOM (in Units)	Total energy Purchased (in Units)	KERC Target for RPO in %	RPO to be met in Units	PPA	Green Energy	GTAM	APPC	RPO Met Units	RPO Achieved in %
1	2	3	4	5=3+4	6	7=5*6	8	9	10	11	12=8-9-10-11	13=12/5*100
April-23	BESCOM	3869203017	-132423969	3736779047	25.25	943536709	652075648	67950045	0		584125603	15.63
	GESCOM	1063343368	-149873041	913470327	22.00	200963472	203450936		0	370047	203080889	22.23
	HESCOM	1132735363	137720034	1270455396	24.00	304909295	326581698		0		326581698	25.71
	MESCOM	615942424	121434709	737377133	26.50	195404940	104989914	697533	0		104292381	14.14
	CESC	693593784	23142268	716736052	24.00	172016653	122609102		0		122609102	17.11
May-23	BESCOM	3340383947	-201213072	3139170875	25.25	792640646	711985912	1584355	9293648		701107909.2	22.33
	GESCOM	907919877	-90048835	817873042	22.00	179932069	230756762		9699954	680252	220376556.2	26.95
	HESCOM	890996941	245993390	1136990330	24.00	272877679	357638915		21725654		335913260.6	29.54
	MESCOM	511789328	94076716	605866043	26.50	160554501	111674722	232430	1741975		109700316.8	18.11
	CESC	538482370	-48810198	489672172	24.00	117521321	129721550		4240519		125481031.6	25.63
June-23	BESCOM	3274933685	-164601471	3110332213	25.25	785358884	821895633	9680492	12686847		799528294.3	25.71
	GESCOM	964550965	-179989639	784561325	22.00	172603492	325468714		13241499	1581724	310645491.7	39.59
	HESCOM	934755279	260136431	1194891710	24.00	286774010	475372642		29657896		445714746	37.30
	MESCOM	489280763	3611179	492891942	26.50	130616365	117532884	33498	2377987		115121399.5	23.36
	CESC	515589796	80843500	596433296	24.00	143143991	131269607		5788772		125480835.1	21.04
APRIL - 2023 to JUNE-2023	BESCOM	10484520648	-498238513	9986282135	25.25	2521536239	2185957193	79214892	21980495	0	2084761807	20.88
	GESCOM	2935814210	-419909516	2515904695	22.00	553499033	759676413	0	22941453	2632023	734102937	29.18
	HESCOM	2958487582	643849855	3602337437	24.00	864560985	1159593254	0	51383550	0	1108209704	30.76
	MESCOM	1617012515	219122604	1836135119	26.50	486575806	334197520	963461	4119962	0	329114098	17.92
	CESC	1747665951	55175570	1802841520	24.00	432681965	383600260	0	10029291	0	373570969	20.72

Superintending Engineer (Ele.)  
TBC, KPTCL, Bangalore

**ANNEXURE 8:**  
**Sample DTC Energy Audit Report by Meter Reader**

# Annual Energy Audit Report of BESCOM, Bangalore

DTC ENERGY AUDIT REPORT BY METER READER								
NAME OF DTC:-/DTC NO	C2TC126- Post Office TC 18x							
DATE OF READING:	01-5-2024							
Name of DTC Meter Reader/MR CODE	Shivakumar /mr-cod- 14003645							
NAME OF MUSS/ 11 KV FEEDER:	DSC / Fos - GANESHA TEMPLE feed-							
CAPACITY:	250kVA							
MONTH	May-2024							
DTC Readings:	F.R:	4416						
	I.R:	4103						
	DIFFERENCE	313						
	MC	80						
Total DTC INPUT:	25040							
<b>DTC SALES:</b>								
No of Installations Connected to DTC:	NO	CONSP	NO	CONSP	NO	CONSP	NO	CONSP
LT2:	51	8429						
LT3:	29	9590						
LT5:								
LT6(A):								
LT6(B):	2	590						
LT7:(Prepaid)								
LT7:(Regular)								
SRTPV:								
Metered Sales of 40HP	43	3	6300					
TOTAL			24909					
Total DTC Sales	24909							
Difference (Losses in KWh)	131							
% Loss of DTC:	0.5 %							
Observations of the Meter Reader:	Nil							
STREET LIGHT/WATER SUPPLY		LT7		40 HP				
RRNO	CONSP	RRNO	CONSP	RRNO	CONSP			
① C2MSL122	0	Nil	-	C28831	1620			
② C2MSL9	590	-	-	C24986	1350			
				C2L13942	3330			

**ANNEXURE 9:**  
**Details of existing DTC Metering Data obtained  
from the centralized transformer's maintenance  
department and meter section**

**DTC metering Status - 2023-24**

**As on 31.03.2024**

Name of Company	Total Existing DTCs			No. of DTC's which do not require metering (DTC's feeding on exclusive IP Sets (EIP) & DTC feeding Single Installations)			Actual DTC's to be metered			Total DTC's Metered			Balance DTC's to be metered			% Metering		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
BESCOM	101318	396673	497991	3058	288234	291292	98260	108439	206699	79644	39988	119632	18616	68451	87067	81.05	36.88	57.88

**Source of data:** Data furnished by O&M Circle office (as per field reports).

**Note:** The actual DTC metering in BESCOM is 80330 nos. and 52662 nos. respectively totaling to 132992 nos., the details furnished above is as per prescribed Energy Department format (revised as per decision taken during the MMR meeting held on 25.10.2018). Since some of the IP feeding DTCs are metered

**BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED**

**Status of metering of DTC as at the end of reporting month of March-2024 (Provisional)**

Sl. No	Name of the division	Total no. of DTC existing as at the end of Feb-2024	Total no. of DTC existing as at the end of March-2024	No. of DTC's which do not require metering (DTC's feeding on exclusive IP Sets (EIP) & DTC feeding Single Installations) as at the end of March-2024	Actual DTC's to be metered	Metering Progress achieved during March-2024	Cumulative progress as at the end of Feb-2024	Cumulative progress as at the end of March-2024	Balance DTC's to be metered other than DTC's feeding on exclusive IP Sets (EIP) & DTC feeding Single Installations as at the end of March-2024	% of Metering
1	Indiaranagar	3694	3708	0	3708	14	3657	3671	37	99.00
2	Whitefield	4069	4086	0	4086	17	3773	3790	296	92.76
3	Shivajinagar	6793	6814	0	6814	21	6508	6529	285	95.82
4	Vidhanasoudha	1211	1213	0	1213	2	1211	1213	0	100.00
	<b>East Circle</b>	<b>15767</b>	<b>15821</b>	<b>0</b>	<b>15821</b>	<b>54</b>	<b>15149</b>	<b>15203</b>	<b>618</b>	<b>96.09</b>
5	Peenya	2816	2819	0	2819	3	2816	2819	0	100.00
6	Malleshwaram	2125	2128	0	2128	3	2125	2128	0	100.00
7	Hebbal	5969	5995	0	5995	24	5488	5512	483	91.94
8	Jalahalli	3079	3094	0	3094	8	2823	2831	263	91.50
	<b>North Circle</b>	<b>13989</b>	<b>14036</b>	<b>0</b>	<b>14036</b>	<b>38</b>	<b>13252</b>	<b>13290</b>	<b>746</b>	<b>94.69</b>
	<b>BMAZ North</b>	<b>29756</b>	<b>29857</b>	<b>0</b>	<b>29857</b>	<b>92</b>	<b>28401</b>	<b>28493</b>	<b>1364</b>	<b>95.43</b>
9	Jayanagar	8194	8237	0	8237	43	7865	7908	329	96.01
10	Koramanagala	6038	6081	0	6081	14	5861	5875	206	96.61
11	HSR	10908	10940	0	10940	41	10154	10195	745	93.19
	<b>South Circle</b>	<b>25140</b>	<b>25258</b>	<b>0</b>	<b>25258</b>	<b>98</b>	<b>23880</b>	<b>23978</b>	<b>1280</b>	<b>94.93</b>
12	R.R.Nagar	3414	3422	0	3422	8	3378	3386	36	98.95
13	Rajajinagar	4003	4018	0	4018	11	3755	3766	252	93.73
14	Kengeri	5723	5693	415	5278	22	3992	4014	1264	76.05
	<b>West Circle</b>	<b>13140</b>	<b>13133</b>	<b>415</b>	<b>12718</b>	<b>41</b>	<b>11125</b>	<b>11166</b>	<b>1552</b>	<b>87.80</b>
	<b>BMAZ South</b>	<b>38280</b>	<b>38391</b>	<b>415</b>	<b>37976</b>	<b>139</b>	<b>35005</b>	<b>35144</b>	<b>2832</b>	<b>92.54</b>
15	Nelmangala	17674	17711	9079	8632	0	3248	3248	5384	37.63
16	Hosakote	20293	20389	6751	13638	30	4672	4702	8936	34.48
	<b>BRC Circle</b>	<b>37967</b>	<b>38100</b>	<b>15830</b>	<b>22270</b>	<b>30</b>	<b>7920</b>	<b>7950</b>	<b>14320</b>	<b>35.70</b>
17	Ramanagara	23671	23777	19239	4538	0	1124	1124	3414	24.77
18	Magadi	16739	16799	12455	4344	0	2403	2403	1941	55.32
19	Kanakpura	20240	20373	18020	2353	0	252	252	2101	10.71
20	Chandapura	12208	12253	1575	10678	0	2680	2680	7998	25.10
	<b>Ramanagara Circle</b>	<b>72858</b>	<b>73202</b>	<b>51289</b>	<b>21913</b>	<b>0</b>	<b>6459</b>	<b>6459</b>	<b>15454</b>	<b>29.48</b>
21	Kolar *	15933	15957	8763	7194	0	1049	551	6643	7.66



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22	KGF	23877	23958	16513	7445	0	3266	3266	4179	43.87
23	Chintamani	16415	16487	13973	2514	5	818	823	1691	32.74
24	C.B.Pura	26246	26330	19925	6405	0	1808	1808	4597	28.23
	<b>Kolar Circle</b>	<b>82471</b>	<b>82732</b>	<b>59174</b>	<b>23558</b>	<b>5</b>	<b>6941</b>	<b>6448</b>	<b>17110</b>	<b>27.37</b>
	<b>BRAZ</b>	<b>193296</b>	<b>194034</b>	<b>126293</b>	<b>67741</b>	<b>35</b>	<b>21320</b>	<b>20857</b>	<b>46884</b>	<b>30.79</b>
25	Tumkur	40432	40530	23903	16627	0	9712	9712	6915	58.41
26	Kunigal	16705	16756	14318	2438	0	1374	1374	1064	56.36
27	Tiptur	27958	28254	22508	5746	0	3264	3264	2482	56.80
28	Madhugiri	31861	32522	9336	23186	0	6942	6942	16244	29.94
	<b>Tumkur Circle</b>	<b>116956</b>	<b>118062</b>	<b>70065</b>	<b>47997</b>	<b>0</b>	<b>21292</b>	<b>21292</b>	<b>26705</b>	<b>44.36</b>
29	Davanagere	38195	38314	30313	8001	1	5215	5216	2785	65.19
30	Harihara	21667	21757	18287	3470	1	2934	2935	535	84.58
31	Chitradurga	33570	33664	28375	5289	0	2887	2887	2402	54.58
32	Hiriyur	23872	23912	17544	6368	0	2808	2808	3560	44.10
	<b>Davanagere Circle</b>	<b>117304</b>	<b>117647</b>	<b>94519</b>	<b>23128</b>	<b>2</b>	<b>13844</b>	<b>13846</b>	<b>9282</b>	<b>59.87</b>
	<b>CTAZ</b>	<b>234260</b>	<b>235709</b>	<b>164584</b>	<b>71125</b>	<b>2</b>	<b>35136</b>	<b>35138</b>	<b>35987</b>	<b>49.40</b>
	<b>BESCOM</b>	<b>495592</b>	<b>497991</b>	<b>291292</b>	<b>206699</b>	<b>268</b>	<b>119862</b>	<b>119632</b>	<b>87067</b>	<b>57.88</b>

**Source of data:** Data furnished by O&M Circle office (as per field reports).

**Note:** 1.\*As per field survey, DTC metering in Kolar division is reduced from 1049 to 551 (498 nos.). Hence actual DTC metering progress during the month of March-2024 is 119862+268-498=119632 nos.

2.The actual DTC metering in BESCOM is 132992 (133222+268-498) nos., the details furnished above is as per prescribed Energy Department format (revised as per decision taken during the MMR meeting held on 25.10.2018). Since some of the IP feeding DTCs are metered prior to directions from Energy Department, DTC metering nos. are reduced as the same is considered under exempted column.

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Mar-24	Existing DTCs			No. of DTC's which do not require metering (DTC's feeding on exclusive IP Sets (EIP) & DTC feeding Single Installations) as at the end of March-2024			Actual DTC's to be Metered			Total DTC's Metered			Balance DTC's to be metered other than DTC's feeding on exclusive IP Sets (EIP) & DTC feeding Single Installations as at the end of March-2024			% METERED		
	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL
Indiaranagar	3708	0	3708	0	0	0	3708	0	3708	3671	0	3671	37	0	37	99.00	0.00	99.00
Whitefield	4086	0	4086	0	0	0	4086	0	4086	3790	0	3790	296	0	296	92.76	0.00	92.76
Shivajinagar	6814	0	6814	0	0	0	6814	0	6814	6529	0	6529	285	0	285	95.82	0.00	95.82
Vidhanasoudha	1213	0	1213	0	0	0	1213	0	1213	1213	0	1213	0	0	0	100.00	0.00	100.00
<b>East Circle</b>	<b>15821</b>	<b>0</b>	<b>15821</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15821</b>	<b>0</b>	<b>15821</b>	<b>15203</b>	<b>0</b>	<b>15203</b>	<b>618</b>	<b>0</b>	<b>618</b>	<b>96.09</b>	<b>0.00</b>	<b>96.09</b>
Peenya	2819	0	2819	0	0	0	2819	0	2819	2819	0	2819	0	0	0	100.00	0.00	100.00
Malleswaram	2128	0	2128	0	0	0	2128	0	2128	2128	0	2128	0	0	0	100.00	0.00	100.00
Hebbal	5995	0	5995	0	0	0	5995	0	5995	5512	0	5512	483	0	483	91.94	0.00	91.94
Jalahalli	3094	0	3094	0	0	0	3094	0	3094	2831	0	2831	263	0	263	91.50	0.00	91.50
<b>North Circle</b>	<b>14036</b>	<b>0</b>	<b>14036</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14036</b>	<b>0</b>	<b>14036</b>	<b>13290</b>	<b>0</b>	<b>13290</b>	<b>746</b>	<b>0</b>	<b>746</b>	<b>94.69</b>	<b>0.00</b>	<b>94.69</b>
<b>BMAZ North</b>	<b>29857</b>	<b>0</b>	<b>29857</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29857</b>	<b>0</b>	<b>29857</b>	<b>28493</b>	<b>0</b>	<b>28493</b>	<b>1364</b>	<b>0</b>	<b>1364</b>	<b>95.43</b>	<b>0.00</b>	<b>95.43</b>
Jayanagar	8237	0	8237	0	0	0	8237	0	8237	7908	0	7908	329	0	329	96.01	0.00	96.01
Koramanagala	6081	0	6081	0	0	0	6081	0	6081	5875	0	5875	206	0	206	96.61	0.00	96.61
HSR	10940	0	10940	0	0	0	10940	0	10940	10195	0	10195	745	0	745	93.19	0.00	93.19
<b>South Circle</b>	<b>25258</b>	<b>0</b>	<b>25258</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25258</b>	<b>0</b>	<b>25258</b>	<b>23978</b>	<b>0</b>	<b>23978</b>	<b>1280</b>	<b>0</b>	<b>1280</b>	<b>94.93</b>	<b>0.00</b>	<b>94.93</b>
R.R.Nagar	3422	0	3422	0	0	0	3422	0	3422	3386	0	3386	36	0	36	98.95	0.00	98.95
Rajajinagar	4018	0	4018	0	0	0	4018	0	4018	3766	0	3766	252	0	252	93.73	0.00	93.73
Kengeri	5693	0	5693	415	0	415	5278	0	5278	4014	0	4014	1264	0	1264	76.05	0.00	76.05
<b>West Circle</b>	<b>13133</b>	<b>0</b>	<b>13133</b>	<b>415</b>	<b>0</b>	<b>415</b>	<b>12718</b>	<b>0</b>	<b>12718</b>	<b>11166</b>	<b>0</b>	<b>11166</b>	<b>1552</b>	<b>0</b>	<b>1552</b>	<b>87.80</b>	<b>0.00</b>	<b>87.80</b>
<b>BMAZ South</b>	<b>38391</b>	<b>0</b>	<b>38391</b>	<b>415</b>	<b>0</b>	<b>415</b>	<b>37976</b>	<b>0</b>	<b>37976</b>	<b>35144</b>	<b>0</b>	<b>35144</b>	<b>2832</b>	<b>0</b>	<b>2832</b>	<b>92.54</b>	<b>0.00</b>	<b>92.54</b>
Nelmangala	2185	15526	17711	305	8774	9079	1880	6752	8632	1000	2248	3248	880	4504	5384	53.19	33.29	37.63
Hosakote	7113	13276	20389	1369	5382	6751	5744	7894	13638	2060	2642	4702	3684	5252	8936	35.86	33.47	34.48

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<b>BRC Circle</b>	<b>9298</b>	<b>28802</b>	<b>38100</b>	<b>1674</b>	<b>14156</b>	<b>15830</b>	<b>7624</b>	<b>14646</b>	<b>22270</b>	<b>3060</b>	<b>4890</b>	<b>7950</b>	<b>4564</b>	<b>9756</b>	<b>14320</b>	<b>40.14</b>	<b>33.39</b>	<b>35.70</b>
Ramanagara	1444	22333	23777	73	19166	19239	1371	3167	4538	944	180	1124	427	2987	3414	68.85	5.68	24.77
Magadi	1697	15102	16799	272	12183	12455	1425	2919	4344	1280	1123	2403	145	1796	1941	89.82	38.47	55.32
Kanakpura	863	19510	20373	209	17811	18020	654	1699	2353	204	48	252	450	1651	2101	31.19	2.83	10.71
Chandapura	5824	6429	12253	224	1351	1575	5600	5078	10678	1682	998	2680	3918	4080	7998	30.04	19.65	25.10
<b>Ramanagara Circle</b>	<b>9828</b>	<b>63374</b>	<b>73202</b>	<b>778</b>	<b>50511</b>	<b>51289</b>	<b>9050</b>	<b>12863</b>	<b>21913</b>	<b>4110</b>	<b>2349</b>	<b>6459</b>	<b>4940</b>	<b>10514</b>	<b>15454</b>	<b>45.41</b>	<b>18.26</b>	<b>29.48</b>
Kolar	1024	14933	15957	0	8763	8763	1024	6170	7194	524	27	551	500	6143	6643	51.17	0.44	7.66
KGF	1958	22000	23958	0	16513	16513	1958	5487	7445	1148	2118	3266	810	3369	4179	58.63	38.60	43.87
Chintamani	676	15811	16487	23	13950	13973	653	1861	2514	564	259	823	89	1602	1691	86.37	13.92	32.74
C.B.Pura	726	25604	26330	24	19901	19925	702	5703	6405	568	1240	1808	134	4463	4597	80.91	21.74	28.23
<b>Kolar Circle</b>	<b>4384</b>	<b>78348</b>	<b>82732</b>	<b>47</b>	<b>59127</b>	<b>59174</b>	<b>4337</b>	<b>19221</b>	<b>23558</b>	<b>2804</b>	<b>3644</b>	<b>6448</b>	<b>1533</b>	<b>15577</b>	<b>17110</b>	<b>64.65</b>	<b>18.96</b>	<b>27.37</b>
<b>BRAZ</b>	<b>23510</b>	<b>170524</b>	<b>194034</b>	<b>2499</b>	<b>123794</b>	<b>126293</b>	<b>21011</b>	<b>46730</b>	<b>67741</b>	<b>9974</b>	<b>10883</b>	<b>20857</b>	<b>11037</b>	<b>35847</b>	<b>46884</b>	<b>47.47</b>	<b>23.29</b>	<b>30.79</b>

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Mar-24	Existing DTCs			No. of DTC's which do not require metering (DTC's feeding on exclusive IP Sets (EIP) & DTC feeding Single Installations) as at the end of March-2024			Actual DTC's to be Metered			Total DTC's Metered			Balance DTC's to be metered other than DTC's feeding on exclusive IP Sets (EIP) & DTC feeding Single Installations as at the end of March-2024			% METERED		
	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL
Tumkur	2270	38260	40530	7	23896	23903	2263	14364	16627	1424	8288	9712	839	6076	6915	62.93	57.70	58.41
Kunigal	128	16628	16756	0	14318	14318	128	2310	2438	51	1323	1374	77	987	1064	39.84	57.27	56.36
Tiptur	1071	27183	28254	0	22508	22508	1071	4675	5746	412	2852	3264	659	1823	2482	38.47	61.01	56.80
Madhugiri	804	31718	32522	0	9336	9336	804	22382	23186	318	6624	6942	486	15758	16244	39.55	29.60	29.94
<b>Tumkur Circle</b>	<b>4273</b>	<b>113789</b>	<b>118062</b>	<b>7</b>	<b>70058</b>	<b>70065</b>	<b>4266</b>	<b>43731</b>	<b>47997</b>	<b>2205</b>	<b>19087</b>	<b>21292</b>	<b>2061</b>	<b>24644</b>	<b>26705</b>	<b>51.69</b>	<b>43.65</b>	<b>44.36</b>
Davanagere	2296	36018	38314	0	30313	30313	2296	5705	8001	1970	3246	5216	326	2459	2785	85.80	56.90	65.19
Harihara	950	20807	21757	130	18157	18287	820	2650	3470	704	2231	2935	116	419	535	85.85	84.19	84.58
Chitradurga	1365	32299	33664	7	28368	28375	1358	3931	5289	694	2193	2887	664	1738	2402	51.10	55.79	54.58
Hiriyur	676	23236	23912	0	17544	17544	676	5692	6368	460	2348	2808	216	3344	3560	68.05	41.25	44.10
<b>Davanagere Circle</b>	<b>5287</b>	<b>112360</b>	<b>117647</b>	<b>137</b>	<b>94382</b>	<b>94519</b>	<b>5150</b>	<b>17978</b>	<b>23128</b>	<b>3828</b>	<b>10018</b>	<b>13846</b>	<b>1322</b>	<b>7960</b>	<b>9282</b>	<b>74.33</b>	<b>55.72</b>	<b>59.87</b>
<b>CTAZ</b>	<b>9560</b>	<b>226149</b>	<b>235709</b>	<b>144</b>	<b>164440</b>	<b>164584</b>	<b>9416</b>	<b>61709</b>	<b>71125</b>	<b>6033</b>	<b>29105</b>	<b>35138</b>	<b>3383</b>	<b>32604</b>	<b>35987</b>	<b>64.07</b>	<b>47.16</b>	<b>49.40</b>
<b>BESCOM</b>	<b>101318</b>	<b>396673</b>	<b>497991</b>	<b>3058</b>	<b>288234</b>	<b>291292</b>	<b>98260</b>	<b>108439</b>	<b>206699</b>	<b>79644</b>	<b>39988</b>	<b>119632</b>	<b>18616</b>	<b>68451</b>	<b>87067</b>	<b>81.05</b>	<b>36.88</b>	<b>57.88</b>

Source of data: Data furnished by O&M Circle office (as per field reports).

**Note:** 1.\*As per field survey, DTC metering in Kolar division is reduced from 1049 to 551 (498 nos.). Hence actual DTC metering progress during the month of March-2024 is 119862+268-498=119632 nos.

2.The actual DTC metering in BESCOM is 132992 (133222+268-498) nos., the details furnished above is as per prescribed Energy Department format (revised as per decision taken during the MMR meeting held on 25.10.2018). Since some of the IP feeding DTCs are metered prior to directions from Energy Department, DTC metering nos. are reduced as the same is considered under exempted column.

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### DETAILS OF METERING OF DTC

Month Mar-24

Data on DTC metering							
Sl.No	Name of the division	Total no. of DTC existing as at the end of March-2024	No. of DTC's which do not require metering (DTC's feeding on exclusive IP Sets (EIP) & DTC feeding Single Installations) as at the end of March-2024	No. of DTCs metered as at the beginning of the month	DTCs metered during the month	Total no. of DTCs metered	Balance DTCs to be metered
1	Indiranagar	3708	0	3657	14	3671	37
2	Whitefield	4086	0	3773	17	3790	296
3	Shivajinagar	6814	0	6508	21	6529	285
4	Vidhanasoudha	1213	0	1211	2	1213	0
	<b>East Circle</b>	<b>15821</b>	<b>0</b>	<b>15149</b>	<b>54</b>	<b>15203</b>	<b>618</b>
5	Peenya	2819	0	2816	3	2819	0
6	Malleswaram	2128	0	2125	3	2128	0
7	Hebbal	5995	0	5488	24	5512	483
8	Jalahalli	3094	0	2823	8	2831	263
	<b>North Circle</b>	<b>14036</b>	<b>0</b>	<b>13252</b>	<b>38</b>	<b>13290</b>	<b>746</b>
	<b>BMAZ North</b>	<b>29857</b>	<b>0</b>	<b>28401</b>	<b>92</b>	<b>28493</b>	<b>1364</b>
9	Jayanagar	8237	0	7865	43	7908	329
10	Koramanagala	6081	0	5861	14	5875	206
11	HSR	10940	0	10154	41	10195	745
	<b>South Circle</b>	<b>25258</b>	<b>0</b>	<b>23880</b>	<b>98</b>	<b>23978</b>	<b>1280</b>
12	R.R.Nagar	3422	0	3378	8	3386	36
13	Rajajinagar	4018	0	3755	11	3766	252
14	Kengeri	5693	415	3992	22	4014	1264
	<b>West Circle</b>	<b>13133</b>	<b>415</b>	<b>11125</b>	<b>41</b>	<b>11166</b>	<b>1552</b>
	<b>BMAZ South</b>	<b>38391</b>	<b>415</b>	<b>35005</b>	<b>139</b>	<b>35144</b>	<b>2832</b>
15	Nelmangala	17711	9079	3248	0	3248	5384
16	Hosakote	20389	6751	4672	30	4702	8936
	<b>BRC Circle</b>	<b>38100</b>	<b>15830</b>	<b>7920</b>	<b>30</b>	<b>7950</b>	<b>14320</b>
17	Ramanagara	23777	19239	1124	0	1124	3414
18	Magadi	16799	12455	2403	0	2403	1941
19	Kanakpura	20373	18020	252	0	252	2101
20	Chandapura	12253	1575	2680	0	2680	7998
	<b>Ramanagara Circle</b>	<b>73202</b>	<b>51289</b>	<b>6459</b>	<b>0</b>	<b>6459</b>	<b>15454</b>
21	Kolar *	15957	8763	1049	0	551	6643
22	KGF	23958	16513	3266	0	3266	4179
23	Chintamani	16487	13973	818	5	823	1691
24	C.B.Pura	26330	19925	1808	0	1808	4597
	<b>Kolar Circle</b>	<b>82732</b>	<b>59174</b>	<b>6941</b>	<b>5</b>	<b>6448</b>	<b>17110</b>
	<b>BRAZ</b>	<b>194034</b>	<b>126293</b>	<b>21320</b>	<b>35</b>	<b>20857</b>	<b>46884</b>
25	Tumkur	40530	23903	9712	0	9712	6915
26	Kunigal	16756	14318	1374	0	1374	1064
27	Tiptur	28254	22508	3264	0	3264	2482
28	Madhugiri	32522	9336	6942	0	6942	16244
	<b>Tumkur Circle</b>	<b>118062</b>	<b>70065</b>	<b>21292</b>	<b>0</b>	<b>21292</b>	<b>26705</b>
29	Davanagere	38314	30313	5215	1	5216	2785
30	Harihara	21757	18287	2934	1	2935	535
31	Chitradurga	33664	28375	2887	0	2887	2402
32	Hiriyur	23912	17544	2808	0	2808	3560
	<b>Davanagere Circle</b>	<b>117647</b>	<b>94519</b>	<b>13844</b>	<b>2</b>	<b>13846</b>	<b>9282</b>
	<b>CTAZ</b>	<b>235709</b>	<b>164584</b>	<b>35136</b>	<b>2</b>	<b>35138</b>	<b>35987</b>
	<b>BESCOM</b>	<b>497991</b>	<b>291292</b>	<b>119862</b>	<b>268</b>	<b>119632</b>	<b>87067</b>

Source of data: Data furnished by O&M Circle office (as per field reports).

Note: 1.\*As per field survey, DTC metering in Kolar division is reduced from 1049 to 551 (498 nos.). Hence actual DTC metering progress during the month of March-2024 is  $119862 + 268 - 498 = 119632$  nos.

2.The actual DTC metering in BESCOM is 132992 ( $133222 + 268 - 498$ ) nos., the details furnished above is as per prescribed Energy Department format (revised as per decision taken during the MMR meeting held on 25.10.2018). Since some of the IP feeding DTCs are metered prior to directions from Energy Department, DTC metering nos. are reduced as the same is considered under exempted column.



**ANNEXURE 10:**  
**Additional data required during Energy Audit as  
per SOP issued by Ministry of Power**

## Annual Energy Audit Report of BESCOM, Bangalore

1. Validation of feeder data: Sample size 10% of 11 kV feeder meters data from the substation.								
Example: Please provide the data for 60 no. of 11 kV feeder meters as per the following table								
S. No	Division	Sub-division	Sub-station	Feeder Name/ No.	Input Energy in	Sales in units	Billed amount	Collected amount
1	KANAKAPUR	HAROHALLY	KIADB_HAROHA	F04-KIADB LUMBINI SCHOOL	12530	12052.2	197837	194690
2	KANAKAPUR	HAROHALLY	KIADB_HAROHA	F06-KIADB DEVERAKAGGALAH	181500	173668	2021195	1860725
3	KANAKAPUR	HAROHALLY	KIADB_HAROHA	F07- KIADB NEW MOTHER EA	1035750	996872.66	11957677	11953985
4	KANAKAPURA	HAROHALLY	KIADB_HAROHA	F08-MOTHER EARTH KIADB	986400	950314.1	13164515.01	12992978.01
5	KANAKAPURA	HAROHALLY	KIADB_HAROHA	F11-DAY CARE KIADB	16809600	16141337.22	165381218.2	165581774.2
6	KANAKAPUR	HAROHALLY	KIADB_HAROHA	F13-NEO ANTHEM	111400	105500	4729532	4729532
7	JALAHALLI	C3	ABBIGERE_66	F03-LAKSHMIPURA	7403906.562	6894862.5	74938930.41	69892926.74
8	JALAHALLI	C3	ABBIGERE_66	F04-ABBIGERE-INDL-AREA	14053592.31	13141159.89	132228649.6	128356130.6
9	JALAHALLI	C3	ABBIGERE_66	F05-SINGAPURA	19118976.33	18419167.33	183256934.7	169961386.3
10	JALAHALLI	N9	ABBIGERE_66	F06-ICTS KALENAHALLY	2172611.037	2111125.19	21761417.5	20120426
11	JALAHALLI	C3	ABBIGERE_66	F10-KANSHIRAMANAGAR	11906699.18	11159395.1	120996748.3	111655723.9
12	JALAHALLI	C9	ABBIGERE_66	F11-VARADRAJNAGR	15920579.06	14614576.41	156136966.5	146395610.1
13	JALAHALLI	C3	ABBIGERE_66	F14-BRIGADEPARKSIDENORTH	584937.2395	566567	6469981.63	6461264.63
14	KANAKAPURA	SATHANURU	ACHALU_66	F01-THOTAHALLI	2989262	2690387	14701636.2	14717737.2
15	KANAKAPURA	SATHANURU	ACHALU_66	F02-GERAHALLI	2892186	2601901	14194115.21	14199528.21
16	KANAKAPURA	SATHANURU	ACHALU_66	F04-LAGUNA	1241600	1222983.75	13448151.69	13448151.69
17	KANAKAPURA	SATHANURU	ACHALU_66	F05-BS DODDI	4448900	4003047	21942014.55	21857553.55
18	KANAKAPURA	SATHANURU	ACHALU_66	F06-MADESHWARA	473205	427881	4137190.78	3969048.78
19	KANAKAPURA	SATHANURU	ACHALU_66	F07-KALEGOWDANADODDI	172800	155531	842643.46	845337.46

### Annual Energy Audit Report of BESCOM, Bangalore

20	KOLAR	SRINIVASAPUR A	ADDAGAL_66	F01-GOWNIPALLI	2708200	2437360	13323534.54	13326495.54
21	KOLAR	SRINIVASAPUR A	ADDAGAL_66	F02-MUDIMADAGU	195815	176176	982129.98	982630.98
22	KOLAR	SRINIVASAPUR A	ADDAGAL_66	F03-ADDAGAL	3955402	3559514	19967218.16	19977794.16
23	KOLAR	SRINIVASAPUR A	ADDAGAL_66	F05-KOORIGEPALLI	5346770	4812041	26664407.44	26679331.44
24	KOLAR	SRINIVASAPUR A	ADDAGAL_66	F06-MARASANAPALLI	548750	493889	2946231.88	2948451.88
25	KOLAR	SRINIVASAPUR A	ADDAGAL_66	F11-KADIRAMAPALLI	3182200	2863898	15854287.48	15858584.48
26	KOLAR	SRINIVASAPUR A	ADDAGAL_66	F12-SRIRAMPURA	179600	161676	975287.31	975575.31
27	KOLAR	SRINIVASAPUR A	ADDAGAL_66	F13-G.BYAPALLI	1692532	1523499	8457918.38	8464025.38
28	KOLAR	SRINIVASAPUR A	ADDAGAL_66	F15- DIGAVACHINTHAPALLI	3323790	2991392	16568426.58	16581438.58
29	KORAMANGAL A	S16	ADUGODI_66	F01-BOMMANAHALLI	16600171.06	15444786	167134558.6	158960784.1
30	JAYANAGAR	S2	ADUGODI_66	F02-NEW-MICO-ROAD	9733811.137	9253482.46	96847512.73	93628165.54

## **ANNEXURE 11: Signed MoM**

**Annual Energy Audit of FY 2023-24 Proceedings at Bangalore Electricity Supply Company Limited (BESCOM)**

(Designated Consumer: DIS0009KR)

Dates: 26th June 2024 to 27th June 2024

**TEAM FROM EAST COAST SUSTAINABLE PRIVATE LIMITED, VISAKHAPATNAM**

1. Mr. Pelavarthy Veera Ramprasad, AEA
2. Mr. R V Ramana Rao, Sector Expert
3. Mr. Vileparthy Sri Rama Chandra Murthy, CEA
4. Mr. Shaik Basheer Ahimad, Engineer
5. Mr. Chakravaram Srinivasaraju, Engineer

**TEAM FROM BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED**

1. Mr. C Basavanna, CGM (Operations)
2. Mr. Yogesh B K., General Manager (EI) (M&C)
3. Mr. H B. Basavaraju, DGM, Energy Audit (Energy Auditor)
4. Mrs. Liji Joy, AGM, Energy Audit
5. Ms. Anupama, AGM, Energy Audit (IT Manager)

The audit team has verified various measurement and monitoring systems available at Bangalore Electricity Supply Company Ltd. for relevant Annual Energy Audit for FY 2023-24. Subsequently, the audit team verified the data filled in Pro-forma for Discom Energy Accounting by the Designated Consumer (DC) with primary and secondary documents and the details are tabulated as follows:

S. No.	Reference	Name	Available Monitoring System	FY 2022-23 Data Verification	Record Verification	Supporting Document	Remarks
Input Energy							
1	A1 to A22	Input Energy (MU)	DC has a system of recording the energy input manually and information is provided by the Power Purchase Department and consolidating the same on monthly, quarterly and yearly basis. The net energy input to the DC periphery is estimated after adjusting net energy traded at the periphery.	The input energy purchased by the DISCOM in MU was 42586.86 MU. The net input energy (received at DISCOM periphery or at distribution point, after adjustment) to the DC was 39821.00 MU for FY 2023-24. The input energy purchased and the net input energy (received) has been verified from the information provided by the power purchase department. Previous Month Input and Present	Month wise sample details received from Power Purchase section	Supporting Document Received	
Division Losses							
2	Column A to W	No of connection metered (Nos)	DC has category wise connections and information is sourced through Demand Collection and Billing (DCB) Software	For one division (Ramanagar) - the parameters (no of metered connections, no of unmetered connections, connected load metered (MW), connected load unmetered (MW), Input energy (MU), metered energy (MU)) has been verified based on the report generated from Demand Collection and Billing Software. (DCB Software)	Report produced from DCB software	Supporting Document Received	
		No of connection Un-metered (Nos)					
		Connected Load Metered (MW)	DC has category wise connections and information is sourced through DCB Software				
		Connected Load Un-metered (MW)					
		Input Energy (MU)	The Input energy to the division is provided by the Power Purchase Department				
		Metered energy (MU)	DC has category wise connections and information is sourced through DCB Software				
2	Column A to W	Unmetered energy/Assessment Energy (MU)	DC has segregated the feeders under Niranthara Jyothi Yojana into rural feeders and agricultural feeders. For assessment of energy used by agricultural pump sets, the power consumption per HP of agricultural pump set is multiplied with the total installed capacity (HP) of agricultural pump sets on the feeders (Enumerated no of agricultural pump sets in the feeder x HP Capacity of the agricultural pump set x Energy consumed by agricultural pump set kW/HP x 7 hours per day power supply)	Un-metered energy sale for FY-24 was 10221.54 MU from data obtained from the DCB Software. The unmetered sales as per the subsidy demand submissions to the Govt of Karnataka is also 10221.54 MU.  DC methodology for the estimation of the energy used by agricultural pump sets has been provided for Agriculture feeder P11-HARALUR (Feeder code: 1210201902020304) of Hosakote subdivision, emanating from JADIGENAHALLI 66	Report produced from DCB software and Nsoft software. Procedure of unmetered agricultural consumption of IP sets obtained from Nsoft portal	Supporting Document Received	
		T&D Losses (MU)	Is the difference between the Input Energy and Billed Energy (Metered Energy + Unmetered/Estimated Energy)	For one division (Ramanagar) this data has been verified	Report produced from DCB software	Supporting Document Received	
		Billed Amount	DC has category wise data on sale of power and billing as part of DCB Software	For one division (Ramanagar) the data on billed amount and collected amount has been verified	Report produced from DCB software		
		Collected Amount		The demand (billed amount) has been verified from the DCB software			
Details of Input Energy Sources							
3	A	Generation at Transmission Periphery (Details)	DC has various sources of power such as intra-state generators, embedded, central share, from power exchanges, purchases from energy traders, renewable energy sources. Allocation from these sources and drawl by the DC is reflected in monthly energy accounting statement (EBSS) of State Load Dispatch Center (SLDC). Generation sources with fixed charge component have fixed contracted quantity in MW. However, allocation from other sources such as traders, power exchanges, RE sources and central share keep varying in terms of MW. Any over drawl or under-drawl by DC vis-a-vis the allocation is settled on a monthly basis through imbalance pool settlement.	1. Yearly allocation of energy from various generation sources among ESCOMS for financial year 24 (Government of Karnataka) has been provided and verified.	Government of Karnataka Order (File No: Energy/62/PSR/2024-Bangalore dated 26-02-2024)	Supporting Document Received	
	B	Embedded Generation in DISCOM Area			Excel document - Energy balancing abstract 2023-24		
Details of Feeder wise Losses							
4		Feeder wise Energy Accounting	DC computes T&D and AT&C losses for each feeder.  DC computes feeder wise energy accounting for RAPDRP Area (by MS Infinite computer solutions) and Non-RAPDRP Area (by NSoft Software). For each feeder, there are details of the feeder type, number of consumers, irrigation pump sets, feeder energy metering, imported energy meter, exported energy meters, metered sales, un-metered sales, total sales.	DC has provided Feeder wise energy accounting data for 10% of the feeders and the copy of which has been verified.  Additionally, the energy audit team of BESCOM segregates the feeders based on their losses for further action. A sample report in this regard has been verified.  BESCOM's centralised feeder management team is also maintaining the data relating to availability of feeders and metering status of the feeders. A sample report in this regard has been verified.	DC has provided the report generated from Nsoft.  BESCOM produced sample report for energy audit of feeders.	Supporting Document Received	
Details of Consumers and consumption							
5		Consumers and Consumption	Details of consumers and their respective consumption has been obtained.	The data for consumers and consumption has been verified by the data obtained from the DCB software.	Report produced from DCB software	Supporting Document Received	
Details of DT Wise metering and DT losses							
6		DT Wise Metering	DC monitors on a regular basis the functioning status of DT which have been metered. DC on an ongoing basis installs new meters as well.	The data for DT Wise metering has been verified by the data obtained from the respective Operations department and Meter section.  As of 31st March 2024 of the total 4,97,991 distribution transformers, 119,632 (Plus 13,360 nos. of the IP feeding DTCs are metered prior to directions from Energy Department) distribution transformers have been metered. Out of 3,64,999 nos. of unmetered DTs, 87,067 nos. of DTs are to be metered. The balance DTs are on the	Documents obtained from Operations and meter section	Supporting Document Received	
		DT Losses	Details of DT losses has been obtained.	The data for DT Wise losses has been verified by the data obtained from Energy audit Cell and during field inspection.	Documents obtained from EA section and field	Supporting Document Received	
Details of Subsidy							



7		Subsidy	Details of Subsidy has been obtained	As per the Government of Karnataka (GOK) Gazette notification for FY 2023-24	GOK Document	Supporting Document Received Subsidy demand Rs 7,650.06 Crores Subsidy receipt Rs 6,553.27 Crores Subsidy to be received Rs 1,613.05 Crores (inclusive of previous arrears)
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Clauses of BEE Regulations						
Clause No	Clause Details	Sub Clause Number	Subclause Details	Present Status	Documents Verified	Remarks
3	Intervals of time for conduct of annual energy audit	a	Conducted an annual energy audit for every financial year and submitted the annual energy audit report to the Bureau and respective State Designated Agency and also made available on the website of the electricity distribution company within a period of four months from the expiry of the relevant financial year	Annual energy audit for FY 2023-2024 being conducted. Report will be submitted to BEE and SDA. All Audit Report has been uploaded onto BESCOM website	Checked the BESCOM Website ( <a href="https://bescom.karnataka.gov.in/new-page/Annual%20Energy%20Audit%20Report/en">https://bescom.karnataka.gov.in/new-page/Annual%20Energy%20Audit%20Report/en</a> )	Supporting Document Received
4	Intervals of time for conduct of periodic energy accounting	1(a)	All feeder wise, circle wise and division wise periodic energy accounting is conducted by the energy manager of the electricity distribution company for each quarter of the financial year.	Periodic energy accounting reports for Q1, Q2, Q3 and Q4 for FY23-24 have been prepared by the DC and submitted to BEE, SDA and as per the BEE regulation and also uploaded onto BESCOM website.	Checked the BESCOM Website ( <a href="https://bescom.karnataka.gov.in/new-page/Quarterly%20Energy%20Audit%20Reports/en">https://bescom.karnataka.gov.in/new-page/Quarterly%20Energy%20Audit%20Reports/en</a> )	Supporting Document Received
		1(b)	Submitted the periodic energy accounting report to the Bureau and respective State Designated Agency and also made available on the website of electricity distribution company within forty-five days from the date of the periodic energy accounting.			
		2(a)	Electricity distribution company conducted its first periodic energy accounting, for the last quarter of the financial year immediately preceding the date of such commencement (i.e. 6th October 2021)	Not applicable. This was already verified in the previous audit of FY 21.		
		2(b)	Electricity distribution company conducted its subsequent periodic energy accounting for each quarter of the financial year for a period of two financial years from the date of such commencement, and submit the periodic energy accounting report within sixty days from the date of periodic energy accounting.	The DC has submitted the periodic energy auditing reports as per the Energy Audit regulations for all quarters for the 3 subsequent financial years.		
5	Pre-requisites for annual energy audit and periodic energy accounting	a	Identification and mapping of all of the electrical network assets	Under RAPDRP Areas GIS Mapping of 25 towns has been completed. Under IPDS (Integrated Power Distribution Scheme) survey has been completed		
		b	Identification and mapping of high tension and low-tension consumers	All the HT and LT consumers have been mapped. (RAPDRP)		
		c	Development and implementation of information technology enabled energy accounting and audit system, including associated software	DC has energy accounting and audit system including associated software. DC uses MS Infinite computer solutions (for RAPDRP) and Nsoft Software (For Non RAPDRP).		
		d	Electricity distribution company ensures the installation of functional meters for all consumers, transformers and feeders. Meter installation is done in a phased manner within a period of three financial years from the date of the commencement of these regulations in accordance with the trajectory set out in the First Schedule	All feeders up to 11kV have been metered.  All consumers have been metered except consumers under agriculture category.  As of 31st March 2024 of the total 4,97,991 distribution transformers, 119,632 (Plus 13,360 nos. of the IP feeding DTCs are metered prior to directions from Energy Department) distribution transformers have been metered. Out of 3,64,999 nos. of unmetered DTs, 87,067 nos. of DTs are to be metered. The balance DTs are on the exclusive IP feeder / IP Sets which are exempted from metering.	Document provided by DC has been verified data obtained from the centralised transformer's maintenance department and meter section	Supporting Document Received
			d.1. 100% Communicable Feeder Metering integrated with AMI, by 31st December 2022 along with replacement of existing non-communicable feeder meters	d.1. 100% of the feeders are having DLMS (Device Language Message Specification - Communicable Meters).	DLMS communicable meters are installed and communication is under process and it is monitored by KPTCL (Transmission Utility)	
	Pre-requisites for annual		d.2. All Distribution Transformers (other than HVDS DT up to 25kVA and other DTs below 25 kVA) shall be metered with communicable meters. Communicable DT Metering for the following areas/ consumers to be completed by December 2023 and in balance areas by December 2025 d.2.1. All Electricity Divisions of 500 AMRLUT cities, with AT&C Losses > 15% d.2.2. All Union Territories (for areas with technical difficulty, non-communicable meters may be installed) d.2.3. All Industrial and Commercial consumers d.2.4. All Government offices at Block level and above d.2.5. Other high loss areas i.e. rural areas with losses more than 25% and urban areas with losses more than 15%	d.2.1. Obtaining approval from Regulatory commission is under process for Advanced Metering Infrastructure (AMI) of DTC's in BESCOM Area. d.2.2. Not Relevant for DC. d.2.3. AMR works taken up under RAPDRP, IPDS and DDUGJY schemes for industrial HT-17193 nos. & LT industrial & commercial (above 40HP installations) for 12180 nos. Further, action is in progress for replacement of existing non-DLMS meters by DLMS meters of HT & LT Industrial and Commercial installations. 2.4 Proposal for AMI implementation to All Government offices at Block level and above is under process and yet to be taken up. d.2.5. DC intends to install communicable meters with AMI for other high loss areas i.e. rural areas with losses more than 14% and urban areas with losses more than 10% under Revamped Distribution Sector Scheme (RDSS) of REC. BESCOM has enabled AMR for 95872 nos. of DTC meters under various projects, however no meters are enabled with AMI. The contract period of AMR agencies expired in RAPDRP & Non-RAPDRP area in March-2019. Due to the expiry of the existing contracts, to maintain the existing metering system works carried out before 2013 and to ensure proper operation of meters, metering system and modems, it was proposed to float tender under OPEX model. Due to the introduction of MoP-RDSS scheme wherein one of the major component is metering which includes DTCs, as per the direction of Management the OPEX model is shelved.	d.2.3. BESCOM has provided status report.	Supporting Document Received





5	energy audit and periodic energy accounting	d	<p>d 3. Prepaid Smart Consumer Metering to be completed for all directly connected meters and AMR in case of other meters, by December 2023 in the following areas:</p> <p>d 3.1. All Electricity Divisions of 500 AMRUT cities, with AT&amp;C Losses &gt; 15%.</p> <p>d 3.2. All Union Territories (for areas with technical difficulty, prepaid meters to be installed).</p> <p>d 3.3. All Industrial and Commercial consumers.</p> <p>d 3.4. All Government offices at Block level and above.</p> <p>d 3.5. Other high loss areas i.e. rural areas with losses more than 25% and urban areas with losses more than 15%.</p> <p>d 4. Consumer Metering 98% by FY 2022-23 99% by FY 2023-24</p> <p>d 5. Targets for functional meters— Meter FY 22-23 FY 23-24 FY24-25 Feeder metering 98.5% 99.5% 99.5% DT metering 90% 95% 98% Consumer metering 93% 96% 98%</p>	<p>d 3.1. Installation of the smart meters has not yet commenced as the tender work is under process. As per KERC guidelines, all new consumers after 01-04-2024 have to be issued smart meters. However, because of Lok Sabha elections, BESCOM has requested for an extension up to 31-10-2024.</p> <p>d 3.2. Not Relevant for DC.</p> <p>d 3.3. AMR works taken up under RAPDRP, IPDS and DDUGJY schemes for industrial HT-17193 nos. &amp; LT industrial &amp; commercial (above 40HP installations) for 12180 nos.</p> <p>Further, action is in progress for replacement of existing non-DLMS meters by DLMS meters of HT &amp; LT Industrial and Commercial installations.</p> <p>d 3.4. Proposal for AMI implementation to All Government offices at Block level and above is under process and yet to be taken up.</p> <p>92.86% Consumer metering (Total Installations-14433661, Metered-13402579) has been completed as on 31st March 2024. All installations are metered except IP set installations below 10HP.</p> <p>Non functional meters are being replaced on an ongoing basis. During the year FY 24, 66,954 meters were replaced and the closing balance of non functional meters was 6,823 as of 31st March 2024 Vs 10,975 as of 31st March 2023.</p> <p>For new DTC's, meters are being provided other than agri feeder DTC's.</p> <p>Feeder Metering- 100% Monitored by KPTCL.</p> <p>DT Metering- 26.71%</p>	Details received from Meters and commercial section and Smart grid	
5	Pre-requisites for annual energy audit and periodic energy accounting	e	<p>e 1. All distribution transformers (other than high voltage distribution system up to 25kVA and other distribution system below 25 kVA) is metered with communicable meters.</p> <p>e 2. And existing non communicable distribution transformer meters is replaced with communicable meters and integrated with advanced metering infrastructure.</p>	Obtaining approval from Regulatory commission is under process for AMI of DTC's in BESCOM Area.	Details received from Smart Grid section	
		f	Electricity distribution company has established an information technology enabled system to create energy accounting reports without any manual interference and such systems may be within a period of three years from the date of the commencement of these regulations in case of urban and priority area consumers; and within five years from the date of the commencement of these regulations in case of rural consumers.	DC has energy accounting and audit system including associated software. DC uses MS Infinite computer solutions (for RAPDRP) and Nsoft Software (For Non RAPDRP).		
		g	Electricity distribution company has a centralized energy accounting and audit cell comprising of— (i) a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years; and (ii) a financial manager having professional experience of not less than five years.	<p>The DC has energy audit department with the following staff</p> <p>1. A nodal officer- CGM-Operations</p> <p>2. Designated energy manager who is a qualified energy auditor- DGM/EA</p> <p>3. A qualified information technology manager- AGM/IT</p> <p>4. A qualified financial manager- AO Finance</p>		Full fledged energy auditing department is in place and functional
6	Reporting requirements for annual energy audit and periodic energy accounting	a	Electricity distribution company has a nodal officer, who is a full time employee of the electricity distribution company in the rank of the Chief Engineer or above, for the purpose of reporting of the annual energy audit and periodic energy accounting and communicate the same to the Bureau.	The DC is complying with this requirement.		Full fledged energy auditing department is in place and functional
		b	Electricity distribution company ensures that the energy accounting data is generated from a metering system or till such time the metering system is not in place, by an agreed method of assumption as may be prescribed by the State Commission.	DC has energy accounting and audit system including associated software. DC uses MS Infinite computer solutions (for RAPDRP) and Nsoft Software (For Non RAPDRP). The agricultural unmetered energy is accounted based on KERC guidelines.		
		c	Metering of distribution transformers at High Voltage Distribution System up to 25kVA is done on cluster meter installed by the electricity distribution company.	All HVDS installations are dedicated EIP feeders and meter is provided at Sub-station level.		
		d	The energy accounting and audit system and software is developed to create monthly, quarterly and yearly energy accounting reports.	The DC has software's for energy accounting and audit and the software's are having the capability to create monthly, quarterly and yearly energy accounting reports.		
		e	Electricity distribution company has provided the details of the information technology system in place as specified in clause (f) of regulation 5 that ensures minimal manual intervention in creating the energy accounting reports and any manual intervention of any nature, in respect of the period specified therein, shall be clearly indicated in the periodic energy accounting report.	The DC has software's for energy accounting and audit and the software's are having the capability to create monthly, quarterly and yearly energy accounting reports.		
Additional data required during Energy Audit as per SOP issued by Ministry of Power						
1	Validation through sample data checks and field visits	a. Validation of feeder data:	Based on data available in 11 kV Feeder meter at substation for a sample size of 10% for which documentary evidence to be captured in the audit report.	Backup data for 650 feeders were provided.	Reports from software	Supporting Document Received
		b. Validation of energy flow data and losses:	Min. 10 or 1% (whichever is higher) of DISCOM's input energy metering points between Transmission and 66kV/33kV/11kV distribution feeders by checking functional and communication status of meters etc.	Functional and communication status of 70 number of input energy metering points between Transmission and 11kV distribution feeders has been provided and verified. The meter test reports provided has been verified.	Reports from software / field survey / interactions	Supporting Document Received
			Total of min. 10 or 1% of metering points (whichever is higher) between 220-132-110-66/33 kV outgoing and 22kV-11kV-6.6kV-3kV incoming feeders/ direct end-consumer by checking functional and communication status of meters.	BESCOM has 5 divisions with AT&C losses greater than 25% - Madhugiri, Hiriyuru, Chintamani, KGF and Kolar. Functional and communication status of meters is monitored by the transmission company KPTCL.	Reports from software / field survey / interactions	Supporting Document Received
		c. For all Divisions with AT&C losses greater than 25% or at least 1/3 of the total Divisions of DISCOM	In an Urban High Loss Division, check 5 or 1% of Metering points (whichever is higher) at DTs where communicable meters were already installed under other schemes such as R-APDRP and IPDS.	The functional and communication status of meters of 32 DTs of Urban Divisions were checked.	Reports from software / field survey / interactions	Supporting Document Received
			Total of min. 10 or 1% of metering points (whichever is higher) between 11kV/6.6kV feeders and DTs by checking functional and communication status of meters, foot survey of feeder to check for thefts/ hooking etc.	For Metering points between 11kV feeders and DTs, functional and communication status of meters and foot survey of feeder for checking for thefts/ hooking etc has been carried out for 20 number of feeders.	Reports from software / field survey / interactions	Supporting Document Received
			Verify metering and connection status of min. 10 or 2% consumers of the Division (whichever is higher) of the following category of consumers - Agriculture (Metered and Un-metered), Govt. category connection (ULB, RLB etc.), and LT Industrial.	Functional and communication status of meters of 25 consumers of Agriculture category, 14 Govt. category connection (ULB, RLB etc.) and 16 consumers of LT Industrial category were checked and verified.	Reports from software / field survey / interactions	Supporting Document Received
TEAM FROM EAST COAST SUSTAINABLE PRIVATE LIMITED, VISAKHAPATNAM			TEAM FROM BANGALORE ELECTRICITY SUPPLY COMPANY, BANGALORE			
I. Mr. Pulavarty Veeva Ramprasad, AEA			I. Mr. C Basavanna, CGM (Operations)			



2. Mr. R V Ramana Rao, Sector Expert	<i>R V Ramana Rao</i>	2. Mr. Yogesh B.K., General Manager (E) (M&C)	<i>BK</i>
3. Mr. Vilaparthi Sri Rama Chandra Murthy, CEA	<i>Vilaparthi</i>	3. Mr. H.B. Basavaraju, DGM, Energy Audit (Energy Auditor)	<i>B. Basavaraju</i>
4. Mr. Shaik Basheer Ahmad, Engineer	<i>Shaik Basheer Ahmad</i>	4. Mrs. Liji Joy, AGM, Energy Audit	<i>Liji Joy</i>
5. Mr. Chakravarani Srinivasaraju, Engineer	<i>C. Srinivasaraju</i>	5. Ms. Anupama, AGM, Energy Audit (IT Manager)	<i>Anupama</i>

