

**WEST BENGAL STATE ELECTRICITY DISTRIBUTION
COMPANY LIMITED**

VIDYUT BHAWAN, 4TH FLOOR, DJ BLOCK, SECTOR -II,
SALT LAKE, KOLKATA-700091

REPORT ON ANNUAL ENERGY ACCOUNTING AUDIT

FOR THE YEAR 2021 - 2022

REPORT DATED: 02nd AUGUST 2022

BICON CONSULTANTS PRIVATE LIMITED. ('BICON'),
S41, BANGUR COMPLEX, 5/7 BST MAIN RD.,
KOLKATA - 700038
PHONE: 033-2970-0562
e-mail: info@biconconsultants.com

ACKNOWLEDGEMENT

BICON Consultants Pvt. Ltd. expresses sincere thanks to the management of **West Bengal State Electricity Distribution Company Limited (WBSEDCL)** as DISCOM, Vidyut Bhawan (5th Floor, 'B' Block) Salt Lake City, Block - DJ, Sector - II Kolkata - 700091 for awarding BICON Consultants Pvt. Ltd. to conduct 'Annual Energy Audit' 2021-22 at their distribution Licensing Areas of vide Ref: CE (COM)/BEE/PAT/358 Dated: 06/06/2022. The study of this audit was carried out on & from 16.06.2022 and 04.07.2022.

The following officials of WBSEDCL, Kolkata have coordinated and helped the audit team during the site visits:

Shri Anil Chandra Bir (Chief Engineer, Commercial)

Shri Bibhas Tripathi (Additional Chief Engineer, Commercial)

Shri Rajeev Nandan Sinha (Additional Chief Engineer, PTP Cell)

We extend our sincere gratitude to Shri Anil Chandra Bir and all other officers for their keen interest shown in the study and the courtesy extended.

We are thankful to the management for giving us the opportunity to involve in this very interesting and challenging project of Annual Energy Audit at their distribution Licensing Areas.

We would be happy to provide any further clarifications, if required, to facilitate implementation of the recommendations.

Anjan Majumdar.

ANJAN MAJUMDAR
Certified & Accredited Energy Auditor
Bureau of Energy Efficiency
Ministry of Power, Govt. of India
Reg. No.- CEA 0167/AEA-0193



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1. Executive Summary

BICON Consultant Pvt. Ltd. was entrusted the job of carrying out an Annual Energy Audit for the Financial Year 2021-22 and submit the Annual Energy Audit Report of **West Bengal State Electricity Distribution Company Limited (WBSEDCL)** to the Bureau of Energy Efficiency and respective State Designated Agency as per the provisions and consent of Gazette on DISCOM of Bureau of Energy Efficiency (BEE), Ministry of Power, Govt. of India. Audit team has conducted Energy Audit of the Designated Consumer (DC) during 16.06.2022 and 04.07.2022.

The Government of West Bengal unbundled the erstwhile West Bengal State Electricity Board (WBSEB) into two companies viz., West Bengal State Electricity Distribution Company Limited (WBSEDCL) and West Bengal State Electricity Transmission Company Limited (WBSETCL).

The main business of WBSEDCL is distribution and hydro generation of electricity. It is also the nodal Agency of the Government of West Bengal for undertaking Rural Electrification task in the State with objective of providing access of electricity to all rural households in the state in line with the National Rural Electrification Policy.

Over the years, WBSEDCL has been continually evolving to position itself as a leading Power Utility services organization of the Country. In the changing landscape, post recent global slowdown, it is anticipated that demand for electricity will change rapidly and expectations will also increase exponentially. WBSEDCL continually strives to enhance the quality of services delivered to its customers. WBSEDCL provides quality power to a gargantuan customer base of more than 2.03 crore across West Bengal through its service network spanning 5 Zones, 21 Regional Offices, 77 Distribution Divisions and 536 Customer Care Centers.

After successful implementation of Purulia Pumped Storage Project in 10th Plan period with a capacity of 900 MW hydel power, the Company has taken up the ambitious plan of implementing Turga Pumped Storage Project in the 13th Plan period with installed capacity of 4 x 250 MW.

For solving complex customer challenges and for providing more efficient service to the consumers, a Project titled Integrated Power Development Scheme for strengthening of sub transmission and Distribution networks, metering of Distribution transformers etc. in the urban areas has been undertaken. A programme for system improvement under Sech Bandhu Scheme has also been conceived for rural areas.

1. All import energy data, sales data & AT & C loss were verified with the Annual Audited Report of WBSEDCL & as handed over data to the West Bengal Electricity Regulatory Commission (WBERC), which is a statutory body set up under the provisions of the Electricity Regulatory Commission Act, 1998.

2. Audit also addresses that management of WBSEDCL has taken some steps like Actions for Commercial Loss Management and Theft Control, conduct in-house energy auditing in all LV & MV level by installation of 100% metering at distribution transformers, replacement of old meters with high quality electronic meters etc.
3. At present WBSEDCL do not evaluate 100% feeder wise losses and hence, unable to provide the performance data to audit team. This is included in proposed RDSS scheme for the year 2022-23.
4. Due to extensive use of non-linear loads like any kind of electronic loads i.e. LED Light in residential, commercial & industrial sector, 6-pulse AC Drives (VVFD) in commercial & industrial sector, DC Drives in industrial sector, Battery Chargers in residential, commercial & industrial sector, UPS in residential, commercial & industrial sector, grid connected Inverter in Solar PV Power Generation etc., harmonics are generated, which increases line losses, DTR winding eddy current losses substantially. Hence, audit addresses that WBSERC should enforce for harmonic mitigation as per harmonic regulation & control of IEEE 519 2014 & Central Electricity Authority at consumer premises, especially for industrial & commercial consumers.
5. During audit, verification & validation process was carried out on the system metering data provided by WBSEDCL as DISCOM through random field visit at Vidyut Bhawan and Sub-Station M-III on 04.07.2022 at Kolkata.
6. Audit highlights the strengths and weakness of the WBSEDCL as DISCOM in the management of energy and energy resources in the annual energy report and recommends necessary action to improve upon method of reporting data, energy management system.

1.1. Summary of Energy Import, Export & Losses

WBSEDCL has generated power from Hydel, Diesel, PPSP & Solar generation with installed capacity of 175 MW, 0.82 MW, 900MW & 90 MW respectively & also purchase the input energy from Central Sectors, State Sectors, Short Term, Private Sectors & Others through the 400/220/132/33 kV lines in around 1501 nos. 33KV & 5304 nos. 11KV input feeder points, there is separate metering for each input point having its meter Serial number through which monthly billing and accounting of energy is done. The input energy injection is calculated by summation of all input energy from different sources to WBSEDCL input periphery.

The summary of Net Input Energy received during the FY 2021-22 has been tabulated below:

Sl. No.	Parameters	Unit	FY 2021-22
1	Input Energy purchased	MU	50272.894
2	Transmission loss*	%	4.47
3	Transmission loss*	MU	2247.516
4	Energy sold outside the periphery	MU	7740.076
5	Open access sale	MU	0.00
6	EHT sale	MU	0.25
6a	Power utilized for pumping at PPSP	MU	1655.475
6b	Input at HV (Purchase, Own Generation & Wheeling)	MU	785.180
7	Net input energy (received at DISCOM periphery or at distribution point, after adjustment) (1-3-4-5-6-6a+6b)	MU	39414.756

Note: *- (CTU & STU)

The Total losses for FY 2021-2022 are estimated and presented in the following table:

Total Losses		
T &D Loss		AT&C Loss
(in MU)	(in %)	(in %)
5953.89	15.11	16.60

The total sales for various consumer categories are presented in the following table:

Energy Sales to WBSEDCL Consumers						
Sl. No.	Type of Consumers	Category of Consumers (EHT/HT/LT/Others)	Voltage Level (In Voltage)	No of Consumers	Total Consumption (In MU)	Remarks (Source of data)
1	Domestic	LT	220 Volt	1,89,50,883	13867.441	(Non Govt LT - Domestic Consumer)
2	Commercial	LT	220 Volt	19,75,193	2932.976	(Non Govt LT - Commercial Consumer)
3	IP Sets					
4	Hor. & Nur. & Coffee/Tea & Rubber (Metered)					
5	Hor. & Nur. & Coffee/Tea & Rubber (Flat)					
6	Heating and Motive Power					
7	Water Supply	LT	220 /440 Volt	33,485	278.843	Total LT Class -W Consider
8	Public Lighting	LT	220 /440 Volt	28,006	512.288	Total LT Class -H Consider
9	HT Water Supply	HT	11 kV &above	335	340.355	
10	HT Industrial	EHT/HT	11 kV &above	3382	9067.974	
11	Industrial (Small)	LT	220 Volt	111780	1068.981	
12	Industrial (Medium)	LT	440 Volt	3044	461.894	
13	HT Commercial	EHT/HT	11 kV &above	1398	1125.733	
14	Applicable to Government Hospitals & Hospitals	LT/HT	220 /440 VOLT/11 kV	3706	36.580	

Energy Sales to WBSEDCL Consumers						
Sl. No.	Type of Consumers	Category of Consumers (EHT/HT/LT/Others)	Voltage Level (In Voltage)	No of Consumers	Total Consumption (In MU)	Remarks (Source of data)
15	Lift Irrigation Schemes/Lift Irrigation Societies	LT	220 Volt	9978	164.580	Govt Agriculture Class
16	HT Res. Apartments Applicable to all areas	HT	11 kV &above	64	32.747	Base Class -Domestic
17	Mixed Load					
18	Government offices and department	LT	220 /440Volt	38492	211.086	
19	Others-1 (if any , specify in remarks)	LT/HT	220 Volt /11 KV	3,35,789	1061.374	Non Govt Agriculture Class
20	Others-2 (if any , specify in remarks)	LT	440 Volt	141	7.353	Domestic
21	Others-3 (if any , specify in remarks)	LT	440 Volt	2791	283.613	Commercial
22	Others-4 (if any , specify in remarks)	HT	25 & 132 kVA	39	1203.184	Traction
23	Others-5 (if any , specify in remarks)	HT	11 kV &above	506	447.831	Cold Storage
24	Others-6 (if any , specify in remarks)	HT	11 kV &above	40	117.722	MES
	Total			21499052	33222.554	

Total Energy Sales to Consumers & other than Consumers			
Sl. No.	Type of Consumers	Total Consumption (in MU)	Source of data
1	Total Sale of Energy to WBSEDCL Consumers	33222.554	statement of Technical Particulars
2	Bulk Supply to License from Dist. System	26.380	
3	Unit Wheeled	138.241	
4	Additional unit allowed for wheeling	0.696	
5	Utilized in own premises of WBSEDCL	73.000	
	Total Energy Sales	33460.871	

2. Summary of Critical Analysis of Energy Auditor

2.1. Critical Analysis by Energy Auditor

The DISCOM has been submitting quarterly periodic energy accounts as per BEE regulations as well as posting the details on its website. The DISCOM also constructed Energy Audit Cell as per the regulations.

WBSEDCL has 5304 Nos & 1501 Nos of 11 kV & 33kV feeders are available respectively. WBSEDCL has 21 Regions, 77 division, 21499052 Customers with 18118.5 MW connected Load.

The concept of Aggregate Technical & Commercial losses provides a realistic picture of loss situation in the context it is measured. It is **combination of energy loss (Technical loss + Theft + inefficiency in billing) & commercial loss (Default in payment + inefficiency in collection)**.

Distribution loss consists of two parts *i.e.* Technical loss and Commercial loss.

Aggregate Technical & Commercial Losses (AT & C) = Technical loss + Commercial loss.

Verified method of WBSEDCL for calculating Distribution (D) and AT&C loss is given below:

D Loss (%)

$$= [(\text{Input MU} - \text{Billed MU}) / \text{Input MU}] \times 100 \%$$

AT&C Loss (%)

$$= [\{ \text{Input MU} - (\text{Collected Energy or Realized Energy}) \} / \text{Input MU}] \times 100 \%$$

Where,

Collected Energy = Collection Efficiency (%) x Billed Energy

Collection Efficiency (%) = (Collection Amount (INR) / Billed Amount) x 100 %

The following divisions of the DISCOM are having T&D losses more than the average value and requires special attention

Sl. No.	Average T&D Loss 15.11%	Divisions with More than Average T&D loss	Dist. Loss (in %)
1		BEHALA	15.60%
2		BARUIPUR	33.75%
3		JOYNAGAR	38.30%
4		DIAMOND HARBOUR	39.32%
5		KAKDWIP	27.77%
6		CANNING(D)DIV.	46.63%
7		BHANGAR	30.20%
8		ULUBERIA	15.26%
9		BASIRHAT	15.49%
10		BONGAON	16.92%
11		KHARAGPUR	20.28%
12		GHATAL	21.96%
13		MIDNAPUR	24.19%
14		BELDA	19.96%
15		TAMLUK	16.60%
16		CONTAI	19.46%
17		HALDIA	16.24%
18		EGRA	31.33%
19		KHATRA	29.14%
20		PURULIA	13.91%
21	15.11%	RAGHUNATHPUR	15.72%
22		BERHAMPORE	18.70%
23		RAGHUNATHGANJ	20.06%
24		KANDI	36.78%
25		DOMKAL	27.19%
26		JIAGANJ	21.22%
27		TEHATTA	17.69%
28		RANAGHAT	16.22%
29		NAKASI PARA	20.20%
30		SOUTH MALDA	18.73%
31		NORTH MALDA	25.44%
32		KURSEONG	16.85%
33		ISLAMPUR	18.57%
34		DINHATA	24.04%
35		BALURGHAT	20.27%
36		BUNIADPUR	25.50%
37		KATWA	26.63%
38		KALNA	19.72%
39		SURI	33.21%
40		RAMPURHAT	26.78%
41		BOLPUR	18.08%

The following divisions of the DISCOM are having Collection Efficiency less than the average value and requires special attention

Sl. No.	Average Collection Efficiency	Divisions with Less than Average Collection Efficiency	Collection Efficiency (in %)
1	98.24%	BEHALA	95.55%
2		JOYNAGAR	96.75%
3		DIAMOND HARBOUR	97.94%
4		BHANGAR	97.59%
5		BONGAON	96.65%
6		MIDNAPUR	98.13%
7		BELDA	96.95%
8		KHATRA	97.86%
9		PURULIA	98.20%
10		BERHAMPORE	97.54%
11		KANDI	95.44%
12		DOMKAL	98.10%
13		JIAGANJ	97.33%
14		TEHATTA	98.20%
15		RANAGHAT	96.06%
16		NAKASI PARA	96.86%
17		SOUTH MALDA	99.44%
18		NORTH MALDA	96.32%
19		ISLAMPUR	97.94%
20		DINHATA	96.64%
21		BALURGHAT	96.46%
22		BUNIADPUR	97.87%
23		KATWA	97.07%
24		KALNA	97.02%
25		SURI	97.43%
26		RAMPURHAT	97.67%

Customer Category wise Losses:

The WBSEDCL's Customer category wise collection efficiency is given below:

Sl. No.	Name of Region	Name of Division	Consumer Category	No of Consumer as on 31.03.2022	Billed Amount (in Rs.Cr)	Collected Amount (in Rs.Cr)	Collection Efficiency (in %)
1	TOTAL	WBSEDCL DISCOM	RESIDENTIAL	18952488	9182.35	8549.67	93.11%
2			AGRICULTURE	345769	597.27	546.84	91.56%
3			COM_IND_LT	2133592	4317.20	4508.75	104.44%
4			COM_IND_HT	4780	7388.15	7649.07	103.53%
5			OTHER	62423	2288.40	2099.47	91.74%
	AT COMPANY LEVEL (WBSEDCL)			21499052	23773.37	23773.37	23353.80

2.2. Energy Conservation Measures Already Taken and Proposed for Future:**Energy Conservation Measures Already Taken:**

- a. WBSEDCL has installed new DTRs and also converted LT line by AB cable for better distribution,
- b. WBSEDCL converted bare O/H conductor by LT AB cable
- c. Conversion of bare LT O/H line by LT AB cable at different places under Lakshmikantapur CCC has been carried out,
- d. Sharing of load has been done of 11kV Pathuria feeder to the existing lightly loaded 11kV Helencha town feeder to reduce the ampere loading burden from the Pathuria feeder,
- e. Conversion of bare LT O/H line by LT AB cable at Chakkalar Khal,
- f. Switchgear equipment at 33 kV and 11 kV are upgraded to SCADA enabled system up to certain level for better monitoring activities and data analysis.

Energy Conservation Measures Proposed:

- a. To replace Conventional all Old CRGO Transformers with new energy efficient amorphous core Transformers in phases for reduction of Transformer core loss & other losses.
- b. As most of LT Bulk & HT Bulk consumers use non-linear electronic loads extensively for energy saving, harmonic dumping on grid is increasing, leading to higher line losses & Transformer losses & de-rating of Transformer Capacity. Audit addresses to mitigate harmonics at consumer end by the installation of harmonic filter & inclusion of rebate/surcharge provision in tariff as per harmonic control guide line of CEA.
- c. Some cases of monthly billing power of HT Consumer are found leading in nature due to over VAR compensation & it drops sharply from unity level, resulting in higher line current & higher kVA demand. It is mainly due to wrong setting APFC controller of capacitor panel at consumer end.

Audit addresses to mention leading power factor at monthly electricity bill & inform consumer for adjustment of setting of APFC capacitor panel at their end.

LT bulk consumers may be included for power factor surcharge / rebate, as it is not applicable at present.

3. Background

3.1. Extant Regulations and role of BEE

The regulation as per notification of BEE on 6th October, 2021 is stated below-

No. 18/1/BEE/DISCOM/2021.—Whereas the draft regulations namely, the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit (Accounting) in Electricity Distribution Companies) Regulations, 2021, were published vide notification No.18/1/BEE/DISCOM/2021, dated the 15th April, 2021 in the Gazette of India, Extraordinary, Part III, Section 4, as required under sub-section (1) of section 58 of the Energy Conservation Act, 2001 (52 of 2001) inviting objections and suggestions from all persons likely to be affected thereby within forty five days from the date of publication of the Notification in the Official Gazette;

And whereas objections and suggestions received with respect to the said draft regulations within the specified period aforesaid have been duly considered;

Now, therefore, in exercise of the powers conferred by clause (g) of sub-section (2) of section 58, read with clause (q) of sub-section (2) of section 13 of the Energy Conservation Act, 2001 (52 of 2001), the Bureau of Energy Efficiency, with the previous approval of the Central Government, hereby makes the following regulations, namely: -

Short title, application and commencement-

- a) These regulations may be called the Bureau of Energy Efficiency (Manner and Intervals for Conduct of Energy Audit in electricity distribution companies) Regulations, 2021.
- b) These regulations shall apply to all electricity distribution companies specified as designated consumer.
- c) They shall come into force on the date of their publication in the Official Gazette.

Every electricity distribution company shall conduct an annual energy audit for every financial year and submit the annual energy audit report to the Bureau and respective State Designated Agency.

Every annual energy audit 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
- b) Verification of accounted energy flow submitted by electricity distribution company at all applicable voltage levels of the distribution network
- c) Verification of 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

Analysis of the data with respect to—

- a) consistency of data monitoring compared to the collected data;
- b) recommendations to facilitate energy accounting and improve energy efficiency; and
- c) with respect to the purpose of energy accounting in reducing losses for the electricity distribution company.

Role of BEE:

Role of BEE is here to monitor and ensure the followings for the listed DISCOM as DC:

- 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 25kVA and other distribution system below 25 kVA) shall be metered with communicable meters. And existing non-communicable 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—
 - 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) The electricity distribution company shall create a centralized energy accounting and audit cell comprising of—
 - a nodal officer, an energy manager and an information technology manager, having professional experience of not less than five years; and
 - 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.

3.2. Purpose of audit and accounting Report:

Basic objective or purpose of the audit and accounting report is described below:

- a) Development of a comprehensive energy accounting system to quantify and determine actual losses in the power distribution system, segregated across technical and commercial losses.
- b) Identification of areas of leakage, theft, wastage or inefficient use, thereby paving the way for tackling the present challenges of high Transmission and Distribution (T&D) losses.
- c) To enable and ensure an independent 3rd party energy audit of the distribution system to arrive at a true and fair picture of T&D losses.
- d) To enable the Distribution utilities to undertake targeted efficiency improvement activities to reduce Distribution losses in priority areas / customer segments.
- e) Providing a basis for prioritizing energy capital investments and help budget more accurately to achieve maximum results.
- f) Identification of overloaded segments of the network for necessary capacity additions.

3.3. Period of Energy Auditing and Accounting:

- a) Every electricity distribution company shall conduct an annual energy audit for every financial year and submit the annual energy audit report to the Bureau and respective State Designated Agency and also made available on the website of the electricity distribution company within a period of four months from the expiry of the relevant financial year:

Provided that on the commencement of these regulations, the first annual energy audit of every electricity distribution company shall be conducted within six months from the date of such commencement, by taking into account the energy accounting of electricity distribution company for the financial year immediately preceding the date of the commencement of these regulations.

- b) Where a new electricity distribution company is established after the commencement of these regulations, such electricity distribution company shall conduct its first annual energy audit on completion of the first financial year from the date of being notified as designated consumer.

4. Introduction of Designated Consumer (DISCOM)**4.1. Name and Address of Designated Consumer**Name of the Designated Consumer: **WBSEDCL**West Bengal State Electricity Distribution Company Limited (Reg No: **DIS0035WB**)

Address: Vidyut Bhawan, 7th Floor, A- Block, Salt Lake City, Kolkata700091 (WB)

4.2. Contact details of energy manager and Authorized signatory of DC:

	Details of Energy Manager	Details of Authorized Signatory
Name	Rajeev Nandan Sinha	Anil Chandra Bir
Designation	Addl. Chief Engineer, PTP Cell	Chief Engineer, Commercial
Mob	+91-8900793211	+91-33-23197310
Email id	rndsinha@gmail.com	commercial.chief@wbasedcl.in

4.3. Summary Profile of DC:**4.3.1.Assets:**

WBSEDCL is a wholly owned enterprise of Government of West Bengal, established in 2007 as one of the two successors of West Bengal State Electricity Board, and is responsible for providing power to 96% of West Bengal with a customer base of more than 2.0 Crore across the state.

WBSEDCL is committed to supplying safe, cost effective and reliable electricity to about 21.5 million consumers which include domestic, commercial and industrial users.

Infrastructure details of WBSEDCL:

Sl. No.	Particulars	Value in FY 2021-22
1	Number of circles	21
2	Number of divisions	77
3	Number of sub-divisions	536
4	Number of feeders	569915
5	Number of DTs	321777
6	Number of consumers	21499052
7	% of metering available at DT	22.06%
8	% of metering available at consumer end	100%
9	No of feeders at 66kV voltage level	0
10	No of feeders at 33kV voltage level	1501
11	No of feeders at 11kV voltage level	5304
12	No of LT feeders level	563110
13	Line length (ckt. km) at 66kV voltage level	0
14	Line length (ckt. km) at 33kV voltage level	17818
15	Line length (ckt. km) at 11kV voltage level	176861
16	Line length (km) at LT level	363475
17	Length of Aerial Bunched Cables	70916.78
18	Length of Underground Cables	7528.86
19	HT/LT ratio	0.5356

4.3.2. Energy Flow

WBSEDCL is responsible for own generation, purchase of power, power distribution and retail supply of electricity to its consumers. WBSEDCL is supplying power to consumers through its 33KV, 11kV and LT network. The energy flow of WBSEDCL is presented in the following table:

Sl. No.	Particulars	Unit	FY 2021-22
1	Input Energy Purchase (From Generation Source)	Million kwh	50272.894
2	Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	39414.756
3	Total Energy billed (is the Net energy billed, adjusted for energy traded))	Million kwh	33460.871
4	Transmission and Distribution (T&D) loss	Million kwh	5953.885
5	Details	%	15.11%
6	Collection Efficiency	%	98.24%
7	Aggregate Technical & Commercial Loss	%	16.60%

4.3.3. Consumer Base

WBSEDCL is supplying power to 2,14,99,052 number of consumers as on 31st March 2021. The details of category wise consumers are presented in the following table

Consumer Base of WBSEDCL Kolkata is given in the table below:

Sl. No.	Type of Consumer	No. of Consumer	% No. of Consumers
1	Residential	1,89,52,488	88.15%
2	Agricultural	3,45,769	1.61%
3	Commercial/Industrial-LT	21,33,592	9.92%
4	Commercial/Industrial-HT	4,780	0.02%
5	Others	62,423	0.29%
6	Total	2,14,99,052	100.00%

5. Discussion and Analysis

5.1. Energy accounts for previous years

The DISCOM is audited for the first time under BEE Regulations 2021. Earlier Energy Audit work was carried out as per the then prevailing practise of energy auditing.

5.2. Energy accounts & performance for Present Years

5.2.1. DISCOM wide Energy accounting

The net energy input to the DISCOM for FY 2021-2022 is estimated and presented in the following table

Sl. No.	Parameters	Unit	FY 2021-22
1	Input Energy purchased	MU	50272.894
2	Transmission loss	%	4.47
3	Transmission loss	MU	2247.516
4	Energy sold outside the periphery	MU	7740.076
5	Open access sale	MU	0.00
6	EHT sale	MU	0.25
7	Net input energy (received at DISCOM periphery or at distribution point, after adjustment)	MU	39414.756

The technical losses and AT & C losses for FY 2021-2022 are estimated and presented in the following table

Total losses		
T &D Loss		AT&C Loss
(in MU)	(in %)	(in %)
5953.89	15.11	16.60

Total Energy Sales to Consumers & other than Consumers			
Sl. No.	Type of Consumers	Total Consumption (in MU)	Source of data
1	Total Sale of Energy to WBSEDCL Consumers	33222.554	Statement of Technical Particulars
2	Bulk Supply to License from Dist. System	26.380	
3	Unit Wheeled	138.241	
4	Additional unit allowed for wheeling	0.696	
5	Utilized in own premises of WBSEDCL	73.000	
	Total Energy Sales	33460.871	

The total sales for various consumer categories are presented in the following table:

Energy Sales to WBSEDCL Consumers						
Sl. No.	Type of Consumers	Category of Consumers (EHT/HT/LT/Others)	Voltage Level (In Voltage)	No of Consumers	Total Consumption (In MU)	Remarks (Source of data)
1	Domestic	LT	220 Volt	1,89,50,883	13867.441	(Non Govt LT - Domestic Consumer)
2	Commercial	LT	220 Volt	19,75,193	2932.976	(Non Govt LT - Commercial Consumer)
3	IP Sets					
4	Hor. & Nur. & Coffee/Tea & Rubber (Metered)					
5	Hor. & Nur. & Coffee/Tea & Rubber (Flat)					
6	Heating and Motive Power					
7	Water Supply	LT	220 /440 Volt	33,485	278.843	Total LT Class -W Consider
8	Public Lighting	LT	220 /440 Volt	28,006	512.288	Total LT Class -H Consider
9	HT Water Supply	HT	11 kV & above	335	340.355	
10	HT Industrial	EHT/HT	11 kV & above	3382	9067.974	
11	Industrial (Small)	LT	220 Volt	111780	1068.981	
12	Industrial (Medium)	LT	440 Volt	3044	461.894	
13	HT Commercial	EHT/HT	11 kV & above	1398	1125.733	
14	Applicable to Government Hospitals & Hospitals	LT/HT	220 /440 VOLT/11 kV	3706	36.580	

Energy Sales to WBSEDCL Consumers						
Sl. No.	Type of Consumers	Category of Consumers (EHT/HT/LT/Others)	Voltage Level (In Voltage)	No of Consumers	Total Consumption (In MU)	Remarks (Source of data)
15	Lift Irrigation Schemes/Lift Irrigation Societies	LT	220 Volt	9978	164.580	Govt Agriculture Class
16	HT Res. Apartments Applicable to all areas	HT	11 kV & above	64	32.747	Base Class -Domestic
17	Mixed Load					
18	Government offices and department	LT	220 /440Volt	38492	211.086	
19	Others-1 (if any , specify in remarks)	LT/HT	220 Volt /11 KV	3,35,789	1061.374	Non Govt Agriculture Class
20	Others-2 (if any , specify in remarks)	LT	440 Volt	141	7.353	Domestic
21	Others-3 (if any , specify in remarks)	LT	440 Volt	2791	283.613	Commercial
22	Others-4 (if any , specify in remarks)	HT	25 & 132 kVA	39	1203.184	Traction
23	Others-5 (if any , specify in remarks)	HT	11 kV & above	506	447.831	Cold Storage
24	Others-6 (if any , specify in remarks)	HT	11 kV & above	40	117.722	MES
	Total			21499052	33222.554	

5.2.2.Division wise losses

Division wise performance is presented in the following table

Sl. No.	Name of Division	No of Consumer	Energy Parameters Billed Energy (MU)		Losses		Commercial Parameter			AT&C Loss (in %)
			Total Net Input (in MU)	Metered Billed Energy (in MU)	Dist. Loss (in MU)	Dist. Loss (in %)	Billed Amount (in Rs. Cr)	Collected Amount (in Rs. Cr)	Collection Efficiency (in %)	
1	Behala	318842	478.701	404.02	74.686	15.60%	300.20	286.83	95.55%	19.36%
2	Baruipur	233035	369.127	244.53	124.596	33.75%	158.25	156.42	98.85%	34.52%
3	Garia	324310	638.846	606.15	32.691	5.12%	453.75	445.97	98.28%	6.74%
4	Joynagar	329378	340.297	209.96	130.338	38.30%	142.49	137.85	96.75%	40.31%
5	Diamond Harbour	225221	440.716	267.44	173.272	39.32%	188.29	184.41	97.94%	40.57%
6	Kakdwip	245031	201.674	145.66	56.010	27.77%	96.00	95.23	99.20%	28.35%
7	Canning(D)Div.	290131	288.055	153.75	134.308	46.63%	93.12	91.75	98.52%	47.41%
8	Bidhannagar-I	70976	577.172	554.72	22.456	3.89%	472.34	464.01	98.24%	5.59%
9	Bidhannagar-II	268912	597.280	586.86	10.415	1.74%	460.86	452.84	98.26%	3.45%
10	Bhangar	224462	327.424	228.54	98.887	30.20%	178.40	174.10	97.59%	31.88%
11	New-Town	52926	365.455	311.92	53.537	14.65%	286.74	279.43	97.45%	16.82%
12	Howrah-I	243227	744.812	673.59	71.217	9.56%	535.34	532.00	99.38%	10.13%
13	Uluberia	455727	1392.956	1180.46	212.499	15.26%	855.34	844.60	98.74%	16.32%
14	Howrah-II	361233	891.504	846.17	45.331	5.08%	633.64	626.14	98.82%	6.21%
15	Barrackpur	274912	720.360	620.49	99.866	13.86%	466.73	462.59	99.11%	14.63%
16	Barasat	499496	873.871	816.82	57.048	6.53%	614.36	610.73	99.41%	7.08%
17	Habra	313431	363.354	356.84	6.513	1.79%	252.85	246.93	97.66%	4.09%
18	Naihati	256183	553.645	505.97	47.677	8.61%	370.66	368.70	99.47%	9.09%
19	Basirhat	533796	452.756	382.63	70.125	15.49%	261.23	258.89	99.11%	16.24%
20	Bongaon	266682	277.887	230.87	47.018	16.92%	159.26	153.92	96.65%	19.70%

Sl. No.	Name of Division	No of Consumer	Energy Parameters Billed Energy (MU)		Losses		Commercial Parameter			AT&C Loss (in %)
			Total Net Input (in MU)	Metered Billed Energy (in MU)	Dist. Loss (in MU)	Dist. Loss (in %)	Billed Amount (in Rs. Cr)	Collected Amount (in Rs. Cr)	Collection Efficiency (in %)	
21	Kharagpur	335399	1225.617	977.10	248.514	20.28%	719.81	708.84	98.48%	21.49%
22	Ghatal	327889	377.323	294.48	82.847	21.96%	197.08	195.34	99.11%	22.65%
23	Midnapur	308739	747.543	566.69	180.853	24.19%	418.25	410.43	98.13%	25.61%
24	Jhargram	205578	266.560	227.18	39.383	14.77%	162.23	158.02	97.40%	16.99%
25	Belda	272479	321.246	257.12	64.124	19.96%	163.09	158.11	96.95%	22.41%
26	Tamluk	463943	597.318	498.19	99.126	16.60%	356.24	351.42	98.65%	17.72%
27	Contai	347679	464.878	374.41	90.466	19.46%	275.40	271.65	98.64%	20.55%
28	Haldia	303211	1395.566	1168.87	226.693	16.24%	857.66	847.78	98.85%	17.21%
29	Egra	241309	280.625	192.71	87.916	31.33%	118.84	117.29	98.69%	32.23%
30	Bankura	269154	458.490	394.93	63.563	13.86%	288.83	284.60	98.54%	15.12%
31	Bishnupur	350487	470.804	400.76	70.047	14.88%	277.58	272.14	98.04%	16.54%
32	Khatra	212372	214.145	151.75	62.399	29.14%	98.25	96.15	97.86%	30.66%
33	Purulia	335089	388.735	334.68	54.059	13.91%	248.32	243.85	98.20%	15.45%
34	Raghunathpur	248693	239.390	201.76	37.633	15.72%	142.02	140.38	98.84%	16.70%
35	Berhampore	367052	506.635	411.88	94.750	18.70%	290.68	283.52	97.54%	20.71%
36	Raghunathganj	430468	700.632	560.07	140.566	20.06%	388.78	383.49	98.64%	21.15%
37	Kandi	313153	518.690	327.92	190.774	36.78%	206.61	197.19	95.44%	39.66%
38	Domkal	271784	255.517	186.05	69.466	27.19%	120.73	118.43	98.10%	28.57%
39	Jiaganj	295036	327.246	257.81	69.434	21.22%	172.23	167.62	97.33%	23.32%
40	Kalyani	289579	558.692	523.79	34.899	6.25%	392.93	382.17	97.26%	8.82%
41	Krishnanagar	311174	375.685	333.40	42.290	11.26%	232.27	229.16	98.66%	12.45%
42	Tehatta	304361	283.308	233.18	50.126	17.69%	153.73	150.96	98.20%	19.18%
43	Ranaghat	358188	458.957	384.53	74.423	16.22%	267.48	256.95	96.06%	19.51%

Sl. No.	Name of Division	No of Consumer	Energy Parameters Billed Energy (MU)		Losses		Commercial Parameter			AT&C Loss (in %)
			Total Net Input (in MU)	Metered Billed Energy (in MU)	Dist. Loss (in MU)	Dist. Loss (in %)	Billed Amount (in Rs. Cr)	Collected Amount (in Rs. Cr)	Collection Efficiency (in %)	
44	Nakasi Para	236608	250.744	200.08	50.660	20.20%	137.13	132.82	96.86%	22.71%
45	South Malda	505291	704.651	572.64	132.014	18.73%	400.79	398.53	99.44%	19.19%
46	North Malda	397231	507.436	378.36	129.073	25.44%	259.81	250.24	96.32%	28.18%
47	Siliguri	214126	600.057	558.37	41.688	6.95%	449.02	442.87	98.63%	8.22%
48	Kurseong	45295	42.603	35.42	7.180	16.85%	26.05	25.64	98.46%	18.13%
49	Darjeeling	73808	88.252	75.69	12.562	14.23%	61.80	58.85	95.23%	18.33%
50	Siliguri Sub-Urban	186663	454.988	448.38	6.613	1.45%	349.71	341.05	97.53%	3.89%
51	Kalimpong	50864	46.600	44.51	2.090	4.48%	34.89	34.16	97.91%	6.48%
52	Jalpaiguri	329892	593.015	559.43	33.581	5.66%	432.26	420.96	97.39%	8.13%
53	Mal	171153	234.433	227.98	6.452	2.75%	177.84	175.33	98.59%	4.13%
54	Raiganj	368939	474.854	403.87	70.989	14.95%	296.87	287.38	96.80%	17.67%
55	Islampur	275105	377.056	307.03	70.029	18.57%	236.96	232.08	97.94%	20.25%
56	Coochbehar	283411	305.130	291.26	13.869	4.55%	214.64	210.42	98.04%	6.42%
57	Mathabhanga	242098	178.362	154.12	24.246	13.59%	105.65	100.95	95.55%	17.44%
58	Dinhata	218545	185.252	140.71	44.538	24.04%	96.58	93.34	96.64%	26.59%
59	Alipurduar	375457	417.247	377.64	39.612	9.49%	273.91	268.88	98.16%	11.16%
60	Balurghat	206390	242.095	193.01	49.081	20.27%	135.19	130.41	96.46%	23.09%
61	Buniadpur	185834	209.153	155.82	53.332	25.50%	111.10	108.73	97.87%	27.09%
62	Burdwan (North)	265755	446.106	387.95	58.161	13.04%	269.58	263.89	97.89%	14.87%
63	Katwa	236343	334.369	245.33	89.036	26.63%	163.42	158.63	97.07%	28.78%
64	Kalna	285428	413.686	332.10	81.587	19.72%	232.30	225.38	97.02%	22.11%

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Sl. No.	Name of Division	No of Consumer	Energy Parameters Billed Energy (MU)		Losses		Commercial Parameter			AT&C Loss (in %)
			Total Net Input (in MU)	Metered Billed Energy (in MU)	Dist. Loss (in MU)	Dist. Loss (in %)	Billed Amount (in Rs. Cr)	Collected Amount (in Rs. Cr)	Collection Efficiency (in %)	
65	Memari	230229	393.106	355.17	37.937	9.65%	247.11	245.06	99.17%	10.40%
66	Burdwan (South)	270941	714.028	656.76	57.267	8.02%	497.43	489.78	98.46%	9.44%
67	Suri	222183	391.154	261.25	129.906	33.21%	192.87	187.91	97.43%	34.93%
68	Rampurhat	386502	693.089	507.45	185.639	26.78%	361.94	353.49	97.67%	28.49%
69	Bolpur	262572	455.799	373.37	82.424	18.08%	246.07	245.24	99.66%	18.36%
70	Sreerampur	184392	1121.400	957.62	163.782	14.61%	722.56	718.23	99.40%	15.12%
71	Chandannagar	192245	476.155	442.70	33.457	7.03%	331.66	326.79	98.53%	8.39%
72	Arambagh	388427	482.959	428.43	54.530	11.29%	296.78	293.59	98.92%	12.25%
73	Tarakeswar	287885	436.585	402.43	34.151	7.82%	284.93	279.22	98.00%	9.67%
74	Singur-Haripal	162499	220.665	216.91	3.757	1.70%	157.36	155.39	98.75%	2.93%
75	Mogra	228854	474.250	444.02	30.235	6.38%	326.24	322.50	98.85%	7.45%
76	Asansol	281369	875.654	810.99	64.665	7.38%	572.96	558.84	97.54%	9.67%
77	Durgapur	295991	3244.329	2927.42	316.906	9.77%	1541.11	1518.39	98.53%	11.10%
	Total	21499052.00	39414.76	33460.87	5953.885	15.11%	23773.37	23353.80	98.24%	16.60%

5.2.3.Voltage wise Energy 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

Sl. No.	Parameters	Voltage Levels	Input (in MU)	Sale (in MU)	Loss (in MU)
1	DISCOM	LT	31414.2	20888.59	4669.902
2		11 Kv		5813.706	
3		33 kv	32791	3792.093	1086.569
4		> 33 kv	38629.6	2732.162	197.415
5	Open Access, Captive	LT	0	0	0
6		11 Kv	0	0	0
7		33 kv	138.937	127.82174	11.114934
8		> 33 kv	0	0	0

5.3. Energy Conservation measures already taken and proposed for future**Energy Conservation Measures Already Taken:**

- WBSEDCL has installed new DTRs and also converted LT line by AB cable for better distribution network,
- WBSEDCL converted bare O/H conductor by LT AB cable,
- Conversion of bare LT O/H line by LT AB cable at different places under Lakshmikantapur CCC has been carried out,
- Sharing of load has been done of 11kV Pathuria feeder to the existing lightly loaded 11kV Helencha town feeder to reduce the ampere loading burden from the Pathuria feeder,
- Conversion of bare LT O/H line by LT AB cable at Chakkalar Khal,
- Switchgear equipment at 33 kV and 11 kV are upgraded to SCADA enabled system up to certain level for better monitoring activities and data analysis.

Energy Conservation Measures Proposed:

- a. To replace Conventional all Old CRGO Transformers with new energy efficient amorphous core Transformers in phases for reduction of Transformer core loss & other losses.
- b. As most of LT Bulk & HT Bulk consumers use non-linear electronic loads extensively for energy saving, harmonic dumping on grid is increasing, leading to higher line losses & Transformer losses & de-rating of Transformer Capacity. Audit addresses to mitigate harmonics at consumer end by the installation of harmonic filter & inclusion of rebate/surcharge provision in tariff as per harmonic control guide line of CEA.
- c. Some cases of monthly billing power of HT Consumer are found leading in nature due to over VAR compensation & it drops sharply from unity level, resulting in higher line current & higher kVA demand. It is mainly due to wrong setting APFC controller of capacitor panel at consumer end.
- d. Audit addresses to mention leading power factor at monthly electricity bill & inform consumer for adjustment of setting of APFC capacitor panel at their end.
- e. LT bulk consumers may be included for power factor surcharge / rebate, as it is not applicable at present.

5.4. Critical Analysis by Energy Auditor

A critical analysis is carried out by deputed Accredited Energy Auditor with several interactions with WBSEDCL's Energy Manager & others to know the facts of efficient managing of Aggregate Technical & Commercial losses.

The concept of Aggregate Technical & Commercial losses provides a realistic picture of loss situation in the context it is measured. It is **combination of energy loss (Technical loss + Theft + inefficiency in billing) & commercial loss (Default in payment + inefficiency in collection).**

Distribution loss consists of two parts *i.e.* Technical loss and Commercial loss.

Aggregate Technical & Commercial Losses (AT & C) = Technical loss + Commercial loss.

Verified method of WBSEDCL for calculating Distribution (D) and AT&C loss is given below:

D Loss (%)

$$= [(\text{Input MU} - \text{Billed MU}) / \text{Input MU}] \times 100 \%$$

AT&C Loss (%)

$$= [\{ \text{Input MU} - (\text{Collected Energy or Realized Energy}) \} / \text{Input MU}] \times 100 \%$$

Where,

Collected Energy = Collection Efficiency (%) x Billed Energy

Collection Efficiency (%) = (Collection Amount (INR) / Billed Amount) x 100 %


6. Notes of the EA/EM along with queries and replies to data gaps

No Such.

7. Approach, Scope and methodology

7.1. Work order copy from DC (Annex)

1



WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED
(A Govt. of W.B. Enterprise)
Office of the Chief Engineer
Central Commercial Department
E Mail ID : commercial.chief@gmail.com

Fax : 033-2359 8398
Telephone: 033-2359 1927
033- 23197-310

Vidyut Bhavan (4th. Floor)
DJ - Block, Sector-II,
Salt Lake, Kolkata-700091

Memo No : CE(COM) /BEE/PAT /358
Date: 06 /06/2022
ERP P.O. No. 5100760488
Dated : 07/06/2022

To,
**Bicon Consultants Private Limited,
S-41, Bangur Complex,
5/7, Buroshivtalla Main Road,
Kolkata -700038 , W.B , India**

Vendor Code : 516796

E Mail Id :
bicon59a@gmail.com

SUB : Formal order towards conducting Annual Energy Audit and submission of Energy Audit Report in BEE's prescribed format for the FY: 2021-2022 (Period from : Apr'21-Mar'22) in respect of WBSEDCL-DISCOM , Designated Consumer (DC) under PAT -II Cycle as per the provisions of Energy Conservation Act'2001 , Energy Conservation Rules,2008 and regulations of the Bureau of Energy Efficiency(BEE) and as per the terms and conditions of WBSEDCL- DC , as stipulated hereunder :

Ref: 1) Limited Tender vide Notice no : CE(COM)/BEE/PAT/NIQ/1884
DATED : 11/03/2022 .

2) Extension of Tender Notice under ref i) above vide Memo No. CE(COM)/BEE/PAT/NIQ/1937
DATED : 24/03/2022.

3) Tender Notice No. CE(COM)/BEE/PAT/NIQ/72 DATED : 18.04.2022

3) Quotation Dated: 23.04.2022 .

Dear Sir / Madam ,

In connection with the above, we are pleased to place the order to you with the following rates ,terms & conditions as a BEE empanelled Accredited Energy Auditor (AEA) , for conducting conducting Annual Energy Audit and submission of Energy Audit Report in BEE's prescribed format for the FY: 2021-2022 (Period from : Apr'21-Mar'22) in respect of WBSEDCL-DISCOM , Designated Consumer (DC) under PAT -II as mandated by the in the Gazette Notification of BEE for conduct of energy audit) as per provisionS of the Energy Conservation Act, 2001 and of the Energy Conservation Rules,2008 and as per the terms and conditions of WBSEDCL :-

Registered Office : "Vidyut Bhavan", Bidhannagar, Block - DJ, Sector - II, Kolkata - 700 091
CIN : U40109WB2007SGC113473. Website : www.wbsecl.in Telephones : 033 2359 1930 to 1940,

WBSEDCL

Sl. No.	Description of the consultancy assignment	Total Price (in Rs.)
1.	Preparation of Annual Energy Audit Report for the FY: 2021-2022 (Apr,2021-Mar,2022) as per BEE format .	88,000 /-
Total: Say; (Rupees Eighty Eight Thousand Only)		88,000 /-
Gross Total :		88,000/- plus SGST@9%+CGST@9%

Scope of Annual Energy Audit Report :-

WBSEDCL intends to carry out the Annual Energy Audit for the FY: 2021-2022 (for the period from Apr'21-Mar'22)in WBSEDCL DISCOM . In this regard, proposals are sought from leading firms/organizations having relevant sectoral experience & requisite infrastructure to undertake such assessment.

To conduct Annual Energy Audit of WBSEDCL Utility as per the Model Request for Proposal (RfP) Document prescribed by BEE (Soft copy of which is uploaded / mailed) to carry out Energy Audit in DISCOM's" under the provisions of BEE (Manner and intervals of time for conduct of Energy Audit) Regulations ..

1. The AEA will ensure that the systems and processes adopted by the WBSEDCL Utility for computation/determination of percentage of Transmission and Distribution losses , Aggregated Tech & Comml. (AT& C) Losses in baseline year is matching with target year in Sector Specific Pro- forma along and information protocol have been maintained in conformity with the various notifications and information provided by BEE/SDA from time to time.
2. AEA is required to perform technical review of computation/determination of percentage of Transmission and Distribution losses methodologies, system variabilities and their impact on loss reduction, and on issues including application of statistical methods and finally performance of verifications including integrity of data.
3. The accredited energy auditor shall independently evaluate each activity undertaken by WBSEDCL DISCOM for compliance with the energy consumption norms and standards (percentage of Transmission and Distribution losses for DISCOMs) and entitlement or requirement of energy savings certificate, to ensure that they meet with the requirements of these rules.
4. The accredited energy auditor, in order to assess the correctness of the information provided by WBSEDCL DISCOM regarding the compliance with energy consumption norms and standards (percentage of Transmission and Distribution losses for DISCOMs) shall-

Registered Office : "Vidyut Bhavan", Bidhannagar, Block – DJ, Sector – II, Kolkata – 700 091
CIN : U40109WB2007SGC113473. Website : www.wbseedcl.in Telephones : 033 2359 1930 to 1940,

WBSEDCL

- I. Apply standard auditing techniques;
- II. Follow the rules and regulation framed under the Act;
- III. Integrate all aspects of verification, and certification functions;
- IV. Make independent technical review of the opinion and decision of the verification team; also take into consideration, a situation where a particular activity may or may not form part of the activities related to the compliance with the energy consumption norms and standards (percentage of Transmission and Distribution losses for DISCOMs), and the procedure for the assessment shall include

- A. Document review, involving
 - i. review of data and its source, and information to verify the correctness, credibility and interpretation of presented information;
 - ii. cross checks between information provided in the audit report and, if comparable information is available from sources other than those used in the audit report, the information from those other sources and independent background investigation;

- B. Follow up action, involving-
 - i. Site visits, interviews with personnel responsible in the designated consumers' area of operation;
 - ii. Cross-check of information provided by interviewed personnel to ensure that no relevant information has been omitted or, over or under valued;
 - iii. Review of the application of formulae and calculations, and reporting of the findings in the verification report.

5. The AEA shall report the results of his assessment in a verification report and the said report shall contain,

- i. The summary of the verification process, results of assessment and his opinion along with the supporting documents;
- ii. Broad assessment of the activities/ projects undertaken by WBSEDCL Utility for the purpose of compliance with their energy consumption norms and standards (percentage of Transmission and Distribution losses for DISCOMs).
- iii. The details of verification activities carried out in order to arrive at the conclusion and opinion, including the details captured during the verification process and conclusion relating to compliance with energy consumption norms and standards (percentage of Transmission and Distribution losses for DISCOMs), increase or decrease in percentage of Transmission and Distribution losses in the baseline year;
- iv. The record of interaction, if any, between the accredited energy auditor, AEA and WBSEDCL DISCOM as well as any change made in his assessment because of the clarifications, if any, given by WBSEDCL DISCOM.

6. AEA to prepare a verification report as per Reporting template to be provided by BEE.

7. AEA to resolve errors, omissions or misrepresentations in the data/records/ calculations in consultation with WBSEDCL Utility prior to completing the verification report

8. AEA to resolve calculation errors in the Sector Specific Pro-forma in consultation with the BEE prior to completing the verification .

C. TERMS AND CONDITIONS :

1. The selected individual AEA firm is requested to furnish the qualifying criteria documents – & Price proposal and to ensure that each page of the document including the supporting documents are duly stamped & signed by the authorized signatory of the firm.

Registered Office : "Vidyut Bhavan", Bidhannagar, Block – DJ, Sector – II, Kolkata – 700 091
CIN : U40109WB2007SGC113473. Website : www.wbseedcl.in Telephones : 033 2359 1930 to 1940,

WBSEDCL

2. WBSEDCL Utility reserves the right to request for any additional information from the individual / Firm and also reserves the right to reject the proposal of any firm, if in the opinion of WBSEDCL Utility, the data in support of requirement is incomplete.

3. **Payment :**

No advance payment will be made for conducting such audit . 100% payment will be released within 45 days from the date of submission of the bills in triplicate along with the copy of final annual energy audit report for the FY: 2021-'22 to the CE (Com) WBSEDCL.

a) The bill should be duly certified by the CE,Com , WBSEDCL DISCOM and forwarded to D.D.O for payment .

a) The Annual Energy Audit report shall be verified by the CE,COM , WBSEDCL DISCOM .

b) The D.D.O. & the Paying authority / Officer for the subject mentioned work will be the Manager F&A , Establishment -Corporate (E-C), Finance Deptt. , WBSEDCL ,Vidyut Bhavan (6th Floor) , Salt Lake City, Kolkata-700091 (W.B.).

c) The bills should be GST compliant, if applicable.

4. Period of engagement :- The auditor shall be engaged to conduct 2021-'22 annual energy audit for WBSEDCL DISCOM for the PAT –II Cycle .

5. Completion Period : The Annual energy audit report for FY: 2021-2022 (for the period from Apr'21-Mar'22) should be completed within 45 (forty five) days of issuance of the order to be placed for the said job .

6. Submission of Audit reports :- The energy audit report shall have to be furnished in 4 copies hard copy by hand and soft copy through e-mail covering all the scope of work .

7. The individual/Firm cannot sub-contract the energy audit work and depute the regular member of the firm .

8. The decision of the WBSEDCL DISCOM will be final in selection of firms .

9. WBSEDCL DISCOM reserves the right to reject the EOI proposals without assigning any reason thereof .

The copy of the "Model Request for Proposal Document (RfP) as prescribed by the BEE to carry out the annual Energy Audit in DISCOM's" is attached herewith as soft copy sent through e-mail along with this order for ready reference concerned with the relevant job and the guidelines framed by the BEE in the same RfP shall have to be strictly adhered for successful completion and submission of the said energy audit job / report.

You are requested to kindly acknowledge the receipt of the order with acceptance .

Yours' faithfully,

Sd/-

Chief Engineer (Commercial)
WBSEDCL

Registered Office : "Vidyut Bhavan", Bidhannagar, Block – DJ, Sector – II, Kolkata – 700 091
CIN : U40109WB2007SGC113473. Website : www.wbsecl.in Telephones : 033 2359 1930 to 1940,

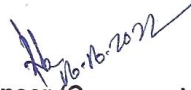
WBSEDCL

Memo No : CE(COM)/BEE/PAT/ 358/(1-8).

Date: 06/06/2022

Copy forwarded for information please to :-

1. The Director (Dist.) WBSEDCL-This has reference to his note dt. 03.06.2022.
2. The Financial Advisor, WBSEDCL,
3. The GM (F&A), Corporate Finance Deptt., WBSEDCL-
4. The CE, PIDD ,WBSEDCL & the Nodal State Designated Agency (WBSDA).
5. The Manager(F&A) , Establishment -Corporate (E-C) Deptt , WBSEDCL .
6. The Addl. CE, PTP Cell, WBSEDCL & The Energy Manager, WBSEDCL DISCOM.
7. The Addl. CE-II, CCD,WBSEDCL.
8. The P.S. to the CMD,WBSEDCL.


Chief Engineer (Commercial)
WBSEDCL

Registered Office : "Vidyut Bhavan", Bidhannagar, Block – DJ, Sector – II, Kolkata – 700 091
CIN : U40109WB2007SGC113473. Website : www.wbsecl.in Telephones : 033 2359 1930 to 1940,

WBSEDCL

7.2. Period of verification

The study of this audit was carried out on & from 16.06.2022 and 04.07.2022.

7.3. Composition of Team

Anjan Majumdar – Accredited Energy Auditor,

Sachin Trivedi – Director, Bicon Consultants Private Limited,

Rajdeep Roy – Energy Engineer,

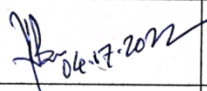
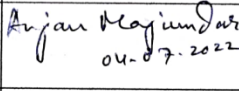
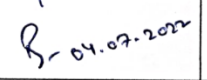

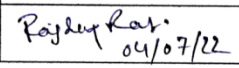
Swagatika Sahoo – Energy Engineer.

7.3.1. Minutes of Meeting with the Plant and verification team**Minutes of Meeting**Dated : 04th July 2022

Minutes of meeting held between WBSEDCL & BICON Consultants Pvt. Ltd., Kolkata on data collection and verification during the Annual Energy Audit of FY 2021-22.

The Annual Energy Audit (Distribution) of WBSEDCL for FY 2021-22 was conducted in month of July 2022. A meeting was held regarding annual energy audit, as per the Notification 18/1/BEE/DISCOM/2021 dated 6th October 2021 from BEE.

Attendee's:

Sl. No.	WBSEDCL	Signature	Sl. No.	BICON	Signature
1	Mr. Anil Chandra Bir, (Chief Engg. Commercial)		1	Anjan Majumdar (Accredited Energy Auditor)	
2	Bibhas Chandra Tripathi (Addl. Chief Engg. Commercial)		2	Swagatika Sahoo (Energy Engineer)	
			3	Rajdeep Roy (Energy Engineer)	

Following Points are discussed:

1. Discussion on data based on the Notification No. 18/1/BEE/DISCOM/2021 dated 6th October 2021 from BEE.
2. Familiarization of WBSEDCL Transmission & Distribution System, energy input and Sale figure on 400kV/220kV/132kV/33kV system.
3. WBSEDCL briefed us about their power receiving, distribution system & own generation from Hydel with 175MW capacity with PPSP with 900MW & Solar PV with 90MW for different voltage level like 400kv/220kV/132kV/33kV.
4. Distribution has been made on measures taken in previous years by WBSEDCL for line loss reduction in their existing distribution system in details.
5. Discussion on potential for further loss reduction in their distribution system in coming year.
6. Discussion was also held regarding the formula adopted by WBSEDCL to calculate AT & C loss, especially technical loss and commercial loss.
7. It was decided to visit on random basis at substation , Distribution station, Street DTRs, metering system etc. on 04th July2022 at around 12.30Hrs where energy metering system has been studied and got an idea about over all distribution system.
8. According to BEE DISCOM Proforma details of energy input, output & others data has been filled in Sector Specific Proforma. As WBSEDCL has more input energy data, available rows in the excel sheet of "Details of Division wise Losses" is found to be shortage, leading to incorrect calculation of total input energy & AT & C Loss. In that case WBSEDCL has provided the additional input energy data and loss data in separate sheet both in excel sheet



8. Annexures**Annexure – 1**

General Information				
1	Name of the DISCOM	WBSEDCL		
2	i) Year of Establishment	2007 / DIS0035WB		
	(ii) Government/Public/Private	Government		
3	Contact details & Address			
i	City/Town/Village	SALT LAKE		
ii	District	KOLKATA		
iii	State	WEST BENGAL	Pin	700091
iv	Telephone	(033)23197310	Fax	(033)23197310
b	DISCOM's Chief Executive Name	SANTANU BASU		
i	Designation	CHAIRMAN & MANAGING DIRECTOR		
ii	Telephone with STD Code	(033)23370206	Fax	
iii	Mobile		E-mail	
4	Registered Office			
i	Company's Chief Executive Name	SANTANU BASU		
ii	Designation	CHAIRMAN & MANAGING DIRECTOR		
iii	Address	VIDYUT BHAVAN		
iv	City/Town/Village	SALT LAKE	P.O.	
v	District			
vi	State	WEST BENGAL	Pin	700091
vii	Telephone	(033)23370206	Fax	(033)23197569
5	Nodal Officer Details			
i	Nodal Officer Name (Designated at DISCOM's)	ANIL CHANDRA BIR		
ii	Designation	CHIEF ENGINEER		
iii	Address	VIDYUT BHAVAN		
iv	City/Town/Village	SALT LAKE	P.O.	
v	District	KOLKATA		
vi	State	WEST BENGAL	Pin	700091
vii	Telephone	(033)23197310	Fax	(033)23197310
6	Energy Manager Details			
i	Name	RAJEEV NANDAN SINHA		
ii	Designation	ADDITIONAL CHIEF ENGINEER	Whether EA or EM	EM
iii	EA/EM Registration No.	EA-16727		
iv	Telephone	8900793211	Fax	
v	Mobile	9433186061	E-mail ID	rndsinha@gmail.com
7	Period of Information			
	Year of (FY) information including Date and Month (Start & End)	1st Apr, 2021 – 31st March, 2022		

Summary Sheet:

Performance Summary of Electricity Distribution Company			
1	Period of Information Year of (FY) information including Date and Month (Start & End)	1st Apr, 2021 – 31st March, 2022	
2	Technical Details		
(a)	Energy Input Details		
(i)	Input Energy Purchase (From Generation Source)	Million kwh	50272.894
(ii)	Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	39414.756
(iii)	Total Energy billed (is the Net energy billed, adjusted for energy traded))	Million kwh	33460.870
(b)	Transmission and Distribution (T&D) loss Details	Million kwh	5953.885
		%	15.11 %
	Collection Efficiency	%	98.24 %
(c)	Aggregate Technical & Commercial Loss	%	16.60 %
I/We undertake that the information supplied in this Document and Pro-forma is accurate to the best of my knowledge and if any of the information supplied is found to be incorrect and such information result into loss to the Central Government or State Government or any of the authority under them or any other person affected, I/we undertake to indemnify such loss.			
Authorized Signatory and Seal		Signature: -	
		Name of Energy Manager:	Rajeev Nandan Sinha
Name of Authorized Signatory	Anil Chandra Bir	Registration Number:	EA-16727
Name of the DISCOM:	WBSEDCL		
Full Address:	Vidyut Bhavan, DJ-Block, Sector-II, Salt Lake, Kolkata – 700 091		
Seal			



Anjan Majumdar.

ANJAN MAJUMDAR
 Certified & Accredited Energy Auditor
 Bureau of Energy Efficiency
 Ministry of Power, Govt. of India
 Reg. No.- CEA 0167/AEA-0193

Form-Details of Input Infrastructure

1	Parameters	Total	Covered during in audit	Verified by Auditor in Sample Check	Remarks (Source of data)
i	Number of circles	21			
ii	Number of divisions	77			
iii	Number of subdivisions	536			
iv	Number of feeders	569915			
v	Number of DTs	321777			
vi	Number of consumers	21499052			
2	Parameters	66kV and above	33kV	11/22kV	LT
a. i.	Number of conventional metered consumers				
ii	Number of consumers with 'smart' meters				
iii	Number of consumers with 'smart prepaid' meters				
iv	Number of consumers with 'AMR' meters				
v	Number of consumers with 'non-smart prepaid' meters				
vi	Number of unmetered consumers				
vii	Number of total consumers				
b.i	Number of conventionally metered Distribution Transformers				
ii	Number of DTs with communicable meters				
iii	Number of unmetered DTs				
iv	Number of total Transformers				

ANNUAL ENERGY ACCOUNTING AUDIT, 2021 - 2022, WBSEDCL

c.i	Number of metered feeders				
ii	Number of feeders with communicable meters				
iii	Number of unmetered feeders				
iv	Number of total feeders				
d.	Line length (ct km)				
e.	Length of Aerial Bunched Cables				
f.	Length of Underground Cables				
3	Voltage level	Input Energy Particulars	MU	Reference	Remarks (Source of data)
i	66 kV	Long-Term Conventional			
		Medium Conventional			
		Short Term Conventional			
		Banking			
		Long-Term Renewable energy			
		Medium and Short-Term RE			
		Captive, open access input			
		Sale of surplus power			
		Quantum of inter-state transmission loss			
		Power procured from inter-state sources			
		Power at state transmission boundary			
ii	33 kV	Long-Term Conventional			

		Medium Conventional			
		Short Term Conventional			
		Banking			
		Long-Term Renewable energy			
		Medium and Short-Term			
		Captive, open access input			
		Sale of surplus power			
		Quantum of intra-state transmission loss			
		Power procured from intra-state sources			
iii		Input in DISCOM wires network			
iv	33kV	Renewable energy			
		Small capacity conventional/ biomass/ hydro plants Procurement			
		Captive, open access input			
v	11kV	Renewable Energy Procurement			
		Small capacity conventional/ biomass/ hydro plants Procurement			
		Sales Migration Input			
vi	LT	Renewable Energy Procurement			
		Sales Migration Input			
vii		Energy Embedded within DISCOM wires network			
viii		Total Energy Available/ Input			
4	Voltage level	Energy Sales Particulars	MU	Reference	Remarks (Source of data)
i	LT Level	DISCOM' consumers			
		Demand from open access, captive			

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		Embedded generation used at LT level			
		Sale at LT Level			
		Quantum of LT level losses			
		Energy Input at LT level			
ii	11kV	DISCOM' consumers			
		Demand from open access, captive			
		Embedded generation used at 11kV level			
		Sale at 11kV Level			
		Quantum of 11kV level losses			
		Energy Input at 11kV level			
iii	33kV	DISCOM' consumers			Include sales to consumers in franchisee areas, unmetered consumers
		Demand from open access, captive	139		Non DISCOM's sales
		Embedded generation used at 33kV level	405.5395552		This is DISCOM and OA demand met via energy generated at same voltage level
		Sale at 33kV Level	139		
		Quantum of 33kV level losses	-139		
		Energy Input at 33kV level			
iv	>33kV	DISCOM' consumers			

		Demand from open access, captive			
		Cross border sale of energy			
		Sale to other DISCOMs			
		Banking			
		Sales at 66kV and above (EHV)	0		
		Total Energy Requirement	0		
		Total Energy Sales	139		

Energy Accounting Summary

5	DISCOM	Input (MU)	Sale (MU)	Loss (MU)	Loss%
i	LT	31414.201	20888.594	4669.902	
ii	11 Kv		5813.706		
iii	33 kv	32790.979	3792.093	1086.569	
iv	> 33 kv	38629.577	2732.162	197.415	
6	Open Access, Captive	Input (MU)	Sale (MU)	Loss (MU)	
i	LT				
ii	11 Kv				
iii	33 kv	138.936676	127.8217419	11.11493408	
iv	> 33 kv				

Loss Estimation for DISCOM

T&D loss (MU)	5953.885
D loss (MU)	5953.885
T&D loss (%)	15.11 %
D loss (%)	15.11 %

Form-Input energy (Details of Input energy & Infrastructure)			
A. Summary of energy input & Infrastructure			
S. No.	Parameters	Period From 1st Apr, 2021 - 31st March, 2022	Remarks (Source of data)
A.1	Input Energy purchased (MU)	50272.894	REGULATION CELL, WBSEDCL
A.2	Transmission loss (%)	4.47	REGULATION CELL, WBSEDCL
A.3	Transmission loss (MU)	2247.516	REGULATION CELL, WBSEDCL
A.4	Energy sold outside the periphery (MU)	7740.076	REGULATION CELL, WBSEDCL
A.5	Open access sale (MU)	0.00	REGULATION CELL, WBSEDCL
A.6	EHT sale	0.25	REGULATION CELL, WBSEDCL
A.7	Net input energy (received at DISCOM periphery or at distribution point, after adjustment)-(MU)	39414.756	REGULATION CELL, WBSEDCL
A.8	Is 100% metering available at 66/33 kV (Select yes or no from list)	YES	Revenue & Energy Management (R & EM Cell), WBSEDCL
A.9	Is 100% metering available at 11 kV (Select yes or no from list)	YES	R & EM Cell, WBSEDCL
A.10	% of metering available at DT	22.06%	R & EM Cell, WBSEDCL
A.11	% of metering available at consumer end	100%	R & EM Cell, WBSEDCL
A.12	No of feeders at 66kV voltage level	0	R & EM Cell, WBSEDCL
A.13	No of feeders at 33kV voltage level	1501	R & EM Cell, WBSEDCL
A.14	No of feeders at 11kV voltage level	5304	R & EM Cell, WBSEDCL
A.15	No of LT feeders level	563110	Distribution Headquarters (DH), WBSEDCL
A.16	Line length (ckt. km) at 66kV voltage level	0	DH, WBSEDCL
A.17	Line length (ckt. km) at 33kV voltage level	17818	DH, WBSEDCL
A.18	Line length (ckt. km) at 11kV voltage level	176861	DH, WBSEDCL
A.19	Line length (km) at LT level	363475	DH, WBSEDCL
A.20	Length of Aerial Bunched Cables	70916.78	DH, WBSEDCL
A.21	Length of Underground Cables	7528.86	DH, WBSEDCL
A.22	HT/LT ratio	0.5356	DH, WBSEDCL

B. Meter reading of Input energy at injection points

S.No	Zone	Circle	Voltage Level (KVA)	Division (KVA)	Sub-Division (KVA)	Feeder Name	Feeder Metering Status (Metered/ unmetered/ AMI/AMR)	Status of Meter (Functional/Non-functional)	Metering Date	Feeder Type (Agricultural/ Industrial/Mixed)
									Date of last actual meter reading/ communication	
B.1						Own power generation	Metered	Functional	NA	Domestic / Commercial / Industrial
B.2						Auxiliary power	Metered	Functional		
B.3						State sector purchase	Metered	Functional		
B.4						Central sector purchase	Metered	Functional		
B.5						Short term	Metered	Functional		
B.6						Private sector	Metered	Functional		
B.7						Energy injected to WBSEDCL s/m from pw purchase	Metered	Functional		
B.8						Power draw under UI mode	Metered	Functional		
B.9						Grid loss	Metered	Functional		
B.10						Transmission loss				
B.11						Energy outgo from WBSEDCL				
B.12						Energy received for wheeling at 33 kv				

Table Continues...

B. Meter reading of Input energy at injection points																
S.No	Zone	Circle	Voltage Level (KVA)	Division (KVA)	Sub-Division (KVA)	Feeder Name	Status of Communication			Period From 1st Apr, 2021 - 31st March, 2022				Sales	Remarks (Source of data)	
							% data received automatically if feeder AMR/AMI	Number of hours when meter was unable to communicate in period	Total Number of hours in the period	Meter S.No	CT/PT ratio	Import (MU)	Export (MU)			
B.1						Own power generation						1827.38				
B.2						Auxiliary power							25.64			
B.3						State sector purchase						13728.96				
B.4						Central sector purchase						29756.84				
B.5						Short term						836.23				
B.6						Private sector						4174.54		8978.24		
B.7						Energy injected to WBSEDCL s/m from pw purchase						521.57				
B.8						Power draw under UI mode						433.20				
B.9						Grid loss							543.53			
B.10						Transmission loss							1702.15			
B.11						Energy outgo from WBSEDCL							9731.58			
B.12						Energy received for wheeling at 33 kv						138.94				
	Total (MU)											9977.7	181.24			
	Net input energy at DISCOM periphery (MU)											9796.44				

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

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

Authorized Signatory and Seal		Signature: -	
Name of the DISCOM:	WBSEDCL	Name of Energy Manager:	Rajeev Nandan Sinha
Full Address:	Vidyut Bhavan, DJ-Block, Sector-II, Salt Lake, Kolkata – 700 091	Registration Number:	EA-16727
Seal			



Anjan Majumdar

ANJAN MAJUMDAR
Certified & Accredited Energy Auditor
Bureau of Energy Efficiency
Ministry of Power, Govt. of India
Reg. No.- CEA 0167/AEA-0193

Details of Input Energy Sources

Period From 1st Apr, 2021 - 31st March, 2022

A. Generation at Transmission Periphery (Details)

S.No.	Name of Generation Station	Generation Capacity (In MW)	Type of Station Generation (Based- Solid (Coal, Lignite)/Liquid/Gas/Renewable (biomass-bagasse)/Others)	Type of Contract (in years/months/days)	Type of Grid (Intra-state/Inter-state)	Point of Connection (POC) Loss in MU	Voltage Level (At input)	Remarks (Source of data)
1	NHPC - Teesta	510 (122*)	Hydel	35 years	Inter State		132 KV	
2	NHPC - Rangit	60 (17*)	Hydel	35 years	Inter State		132 KV	
3	NHPC - TLDP-III	132 (132*)	Hydel	5 agreement is continuing as per provision	Intra State		132 KV	
4	NHPC - Teesta Lower Dam-IV, W.B.	160 (160*)	Hydel	5 agreement is continuing as per provision	Intra State		132 KV	
5	NTPC - Farakka STPS, Stage I &II	1600 (511*)	Thermal	25 years	Inter State		400/220 KV	
6	NTPC - Talcher STPS	1000 (92*)	Thermal	25 years	Inter State		400/220 KV	
7	NTPC - Kahalgaon	840 (51*)	Thermal	25 years	Inter State		400/220 KV	
8	NTPC - Farakka STPS, Stage III	500 (188*)	Thermal	25 years	Inter State		400/220 KV	
9	NTPC - KBUNL	390 (38*)	Thermal	25 years	Inter State		400/220 KV	
10	NTPC - Darlipali	3200 (233.91*)	Thermal	25 years from COD	Inter State		400/220 KV	
11	DVC - Mejia-5	250 (50*)	Thermal	25 years	Inter State		132 / 220 KV	
12	DVC - Raghunathpur	1200 (204*)	Thermal	3 years there is a provision for extension	Inter State		220 KV	

ANNUAL ENERGY ACCOUNTING AUDIT, 2021 - 2022, WBSEDCL

13	WBPDC - DPL	5410(5410*)	Thermal	25 years	Intra State		220/132 KV	
14	TPTCL - Maithon Right Bank	1050(300*)	Thermal	30 years	Inter State		132 KV	
15	TPTCL - Dagachhu Hydro Power Corporation	126(126*)	Hydro	3 years extendable to 5 years	Inter State		132 KV	
16	PTC - APNRL	540(100*)	Thermal	25 years	Inter State		132 KV	
17	PTC - Hydro	2070(400.09*)	Hydro	15 - 35 years	Inter State		132 KV	
18	IPC(H)L	450(300*)	Thermal	25 years	Intra State		132 KV	
19	NVVN JLNSM	1340(100*)	Solar-Thermal	25 years	Inter State		220 / 132 KV	
20	SECI	300*	Solar / Wind	25 years	Inter State		132 / 220 KV	

B. Embedded Generation in DISCOM Area

S.No	Name of Generation Station	Generation Capacity (In MW)	Type of Station (Generation Based Solid/Liquid/Gas/Renewable/ Others)	Type of Contract	Type of Grid	Voltage Level (KV)	Circle Load (MW)	Received at Circle (KV)	Received at Circle (In MU)	Division Level Load (MW)	Received at Division Level (KV)	Received at Division Level (In MU)	Sub-Division Level Load (MW)	Received at Sub-Division Level (KV)	Received at Sub-Division Level (In MU)	Remarks (Source of data)
1	Rashmi Cement Ltd. (RCL)	18	Co-Gen	Long term	State Grid	33 KV										
2	Rashmi Ispat Ltd. (RIL)	12	Co-Gen	Long term	State Grid	33 KV										
3	Bengal Energy Ltd.	40	Co-Gen	Long term	State Grid	132 KV										
4	Himadri Chemicals and Industries Ltd. CPP	12	Co-Gen	Long term	State Grid	33 KV										
5	Himadri Chemicals and Industries Ltd. CPP	8	Co-Gen	Long term	State Grid	33 KV										

S.No	Name of Generation Station	Generation Capacity (In MW)	Type of Station (Generation Based Solid/Liquid/Gas/Renewable/Others)	Type of Contract	Type of Grid	Voltage Level (KV)	Circle Load (MW)	Received at Circle (KV)	Received at Circle (In MU)	Division Level Load (MW)	Received at Division Level (KV)
6	Electro steel	12	Co-Gen	Long term	State Grid	33 KV					
7	CONCAST	25	Co-Gen	Long term	State Grid	33 KV					
8	Shree Renuka Sugar Ltd.	15	Coal Based	Long term	State Grid	33 KV					
9	Nippon Power Limited	3	Small Hydro	Long term	State Grid	33 KV					
10	M/S Neora Hydro Ltd.	3	Small Hydro	Long term	State Grid	33 KV					
11	WBREDA	2	Wind	Long term	State Grid	33 KV					
12	SIPL	5	Solar	Long term	State Grid	33 KV					
13	WBSEDCL Owned Generation	900	Pumped Storage Project	OWN Generation	State Grid	400 KV					
14	WBSEDCL Owned Generation	100	Solar	OWN Generation	State Grid	33 KV					
15	WBSEDCL Owned Generation	180	Hydel	OWN Generation	State Grid	132 KV, 66 KV, 33KV					

(Details of Consumers)**Summary of energy sold****Period From 1st Apr, 2021 - 31st March, 2022**

S.No	Type of Consumers	Category of Consumers (EHT/HT/LT/Others)	Voltage Level (In Voltage)	No of Consumers	Total Consumption (In MU)	Remarks (Source of data)
1	Domestic	LT	220 Volt	1,89,50,883	13867.441	(Non Govt LT - Domestic Consumer)
2	Commercial	LT	220 Volt	19,75,193	2932.976	(Non Govt LT - Commercial Consumer)
3	IP Sets					
4	Hor. & Nur. & Coffee/Tea & Rubber (Metered)					
5	Hor. & Nur. & Coffee/Tea & Rubber (Flat)					
6	Heating and Motive Power					
7	Water Supply	LT	220 /440 Volt	33,485	278.843	Total LT Class -W Consider
8	Public Lighting	LT	220 /440 Volt	28,006	512.288	Total LT Class -H Consider
9	HT Water Supply	HT	11 KV & Above	335	340.355	
10	HT Industrial	EHT/HT	11 KV & Above	3382	9067.974	
11	Industrial (Small)	LT	220 Volt	111780	1068.981	
12	Industrial (Medium)	LT	440 Volt	3044	461.894	
13	HT Commercial	EHT/HT	11 KV & Above	1398	1125.733	
14	Applicable to Government Hospitals & Hospitals	LT/HT	220 /440 Volt/11 kV	3706	36.580	
15	Lift Irrigation Schemes/Lift Irrigation Societies	LT	220 Volt	9978	164.580	Govt Agriculture Class

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16	HT Res. Apartments Applicable to all areas	HT	11 KV & Above	64	32.747	Base Class -Domestic
17	Mixed Load					
18	Government offices and department	LT	220 /440Volt	38492	211.086	
19	Others-1 (if any , specify in remarks)	LT/HT	220 Volt /11 KV	3,35,789	1061.374	Non Govt Agriculture Class
20	Others-2 (if any , specify in remarks)	LT	440 Volt	141	7.353	Domestic
21	Others-3 (if any , specify in remarks)	LT	440 Volt	2791	283.613	Commercial
22	Others-4 (if any , specify in remarks)	HT	25 & 132 kVA	39	1203.184	Traction
23	Others-5 (if any , specify in remarks)	HT	11 KV & Above	506	447.831	Cold Storage
24	Others-6 (if any , specify in remarks)	HT	11 KV & Above	40	117.722	MES

Details of Division wise Distribution and AT&C Losses for the Period: From April,2021 to March,2022:

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_ CODE	CONSUMER CATEGORY	NO OF CONSUMERS AS ON 31.03.2022	CONNECTED LOAD in KVA (AS ON 31.03.2022)	CONNECTED LOAD in MVA (AS ON 31.03.2022)	CONNECTED LOAD in MW (AS ON 31.03.2022)	TOTAL NET INPUT (in MU)	METERED BILLED ENERGY(in MU)	DIST. LOSS(in MU)
A	B	C	D	E	F	G	H=G/1000	I=H*0.85	J	K	L=J-K
1	SOUTH 24 PGS	BEHALA	3112	RESIDENTIAL	283887	119451.22	119.45	101.53		177.15	
				AGRICULTURE	121	326.14	0.33	0.28		0.15	
				COM_IND_LT	34611	63020.75	63.02	53.57		74.63	
				COM_IND_HT	89	41773.00	41.77	35.51		122.86	
				OTHER	134	7862.43	7.86	6.68		29.22	
Sub total :					318842	232433.53	232.43	197.57	478.701	404.02	74.686
2	SOUTH 24 PGS	BARUIPUR	3113	RESIDENTIAL	207152	107057.96	107.06	91.00		163.61	
				AGRICULTURE	309	591.08	0.59	0.50		1.16	
				COM_IND_LT	25381	42512.77	42.51	36.14		52.91	
				COM_IND_HT	24	13005.00	13.01	11.05		24.59	
				OTHER	169	1169.79	1.17	0.99		2.27	
Sub total :					233035	164336.60	164.34	139.69	369.127	244.53	124.596
3	SOUTH 24 PGS	GARIA	3115	RESIDENTIAL	290808	402813.54	402.81	342.39		380.94	
				AGRICULTURE	5	45.87	0.05	0.04		1.10	
				COM_IND_LT	32730	72454.10	72.45	61.59		77.53	
				COM_IND_HT	48	15804.00	15.80	13.43		37.10	
				OTHER	719	27130.10	27.13	23.06		109.48	
Sub total :					324310	518247.61	518.25	440.51	638.846	606.15	32.691
4	SOUTH 24 PGS	JOYNAGAR	3116	RESIDENTIAL	292785	96885.17	96.89	82.35		127.47	
				AGRICULTURE	1228	5066.28	5.07	4.31		6.43	
				COM_IND_LT	34794	41678.62	41.68	35.43		39.37	
				COM_IND_HT	6	1536.00	1.54	1.31		2.12	

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SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV. CODE	COMSUMER CATEGORY	NO OF CONSUMERS AS ON 31.03.2022	CONNECTED LOAD in KVA (AS ON 31.03.2022)	CONNECTED LOAD in MVA (AS ON 31.03.2022)	CONNECTED LOAD in MW (AS ON 31.03.2022)	TOTAL NET INPUT (in MU)	METERED BILLED ENERGY(in MU)	DIST. LOSS(in MU)
				OTHER	565	12072.89	12.07	10.26		34.58	
				Sub total :	329378	157238.95	157.24	133.65	340.297	209.96	130.338
5	SOUTH 24 PGS	DIAMOND HARBOUR	3117	RESIDENTIAL	203682	74437.74	74.44	63.27		104.56	
				AGRICULTURE	190	708.25	0.71	0.60		1.04	
				COM_IND_LT	21097	37640.17	37.64	31.99		50.10	
				COM_IND_HT	79	38083.00	38.08	32.37		103.62	
				OTHER	173	5769.54	5.77	4.90		8.11	
				Sub total :	225221	156638.71	156.64	133.14	440.716	267.44	173.272
6	SOUTH 24 PGS	KAKDWIP	3118	RESIDENTIAL	218609	68126.53	68.13	57.91		95.16	
				AGRICULTURE	29	116.20	0.12	0.10		0.95	
				COM_IND_LT	26215	38631.13	38.63	32.84		42.89	
				COM_IND_HT	6	2072.00	2.07	1.76		2.90	
				OTHER	172	2093.11	2.09	1.78		3.76	
				Sub total :	245031	111038.97	111.04	94.38	201.674	145.66	56.010
7	SOUTH 24 PGS	CANNING(D)DIV.	3119	RESIDENTIAL	259903	60873.47	60.87	51.74		96.15	
				AGRICULTURE	1780	4309.62	4.31	3.66		7.04	
				COM_IND_LT	28179	28984.31	28.98	24.64		31.29	
				COM_IND_HT	3	700.00	0.70	0.60		2.86	
				OTHER	266	7680.36	7.68	6.53		16.41	
				Sub total :	290131	102547.77	102.55	87.17	288.055	153.75	134.308
8	BIDHANNAGAR	BIDHANNAGAR-I	3122	RESIDENTIAL	62033	237639.08	237.64	201.99		156.20	
				AGRICULTURE	0	0.00	0	0		0.00	
				COM_IND_LT	8556	74661.23	74.66	63.46		67.21	
				COM_IND_HT	250	145943.00	145.94	124.05		300.79	
				OTHER	137	15009.64	15.01	12.76		30.53	

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SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV. CODE	COMSUMER CATEGORY	NO OF CONSUMERS AS ON 31.03.2022	CONNECTED LOAD in KVA (AS ON 31.03.2022)	CONNECTED LOAD in MVA (AS ON 31.03.2022)	CONNECTED LOAD in MW (AS ON 31.03.2022)	TOTAL NET INPUT (in MU)	METERED BILLED ENERGY(in MU)	DIST. LOSS(in MU)
	Sub total :				70976	473252.96	473.25	402.27	577.172	554.72	22.456
9	BIDHANNAGAR	BIDHANNAGAR-II	3123	RESIDENTIAL	237671	518760.70	518.76	440.95		405.10	
				AGRICULTURE	24	85.52	0.09	0.07		0.38	
				COM_IND_LT	30794	102432.00	102.43	87.07		108.21	
				COM_IND_HT	72	25382.00	25.38	21.57		48.08	
				OTHER	351	7404.63	7.40	6.29		25.10	
	Sub total :				268912	654064.85	654.06	555.96	597.280	586.86	10.415
10	BIDHANNAGAR	BHANGAR	3124	RESIDENTIAL	190951	59357.60	59.36	50.45		95.97	
				AGRICULTURE	7880	14614.63	14.61	12.42		6.69	
				COM_IND_LT	25405	68995.55	69.00	58.65		78.04	
				COM_IND_HT	110	24965.00	24.97	21.22		40.94	
				OTHER	116	3485.67	3.49	2.96		6.90	
	Sub total :				224462	171418.45	171.42	145.71	327.424	228.54	98.887
11	BIDHANNAGAR	NEW-TOWN	3125	RESIDENTIAL	49763	338707.41	338.71	287.90		82.44	
				AGRICULTURE	0	0.00	0.00	0.00		0.00	
				COM_IND_LT	2796	43944.34	43.94	37.35		21.60	
				COM_IND_HT	114	109291.00	109.29	92.90		178.47	
				OTHER	253	22033.59	22.03	18.73		29.42	
	Sub total :				52926	513976.34	513.98	436.88	365.455	311.92	53.537
12	HOWRAH REGION	HOWRAH-I	3132	RESIDENTIAL	206406	187748.25	187.75	159.59		251.75	
				AGRICULTURE	8	104.84	0.10	0.09		0.06	
				COM_IND_LT	36285	179630.45	179.63	152.69		165.31	
				COM_IND_HT	119	55576.00	55.58	47.24		123.79	
				OTHER	409	45375.88	45.38	38.57		132.68	
	Sub total :				243227	468435.42	468.44	398.17	744.812	673.59	71.217

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SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV. CODE	COMSUMER CATEGORY	NO OF CONSUMERS AS ON 31.03.2022	CONNECTED LOAD in KVA (AS ON 31.03.2022)	CONNECTED LOAD in MVA (AS ON 31.03.2022)	CONNECTED LOAD in MW (AS ON 31.03.2022)	TOTAL NET INPUT (in MU)	METERED BILLED ENERGY(in MU)	DIST. LOSS(in MU)
13	HOWRAH	ULUBERIA	3133	RESIDENTIAL	403438	186836.73	186.84	158.81		287.93	
				AGRICULTURE	224	3584.74	3.58	3.05		2.21	
				COM_IND_LT	51112	103572.76	103.57	88.04		110.21	
				COM_IND_HT	303	195287.00	195.29	165.99		757.05	
				OTHER	650	8957.78	8.96	7.61		23.07	
Sub total :				455727	498239.00	498.24	423.50	1392.956	1180.46	212.499	
14	HOWRAH	HOWRAH-II	3135	RESIDENTIAL	310737	177256.06	177.26	150.67		250.89	
				AGRICULTURE	723	8305.06	8.31	7.06		3.87	
				COM_IND_LT	49362	138751.03	138.75	117.94		134.58	
				COM_IND_HT	208	126796.00	126.80	107.78		446.04	
				OTHER	203	4372.59	4.37	3.72		10.79	
Sub total :				361233	455480.73	455.48	387.16	891.504	846.17	45.331	
15	NORTH 24 PGS	BARRACKPUR	3152	RESIDENTIAL	240299	300075.89	300.08	255.06		347.70	
				AGRICULTURE	26	421.42	0.42	0.36		0.23	
				COM_IND_LT	32939	88656.35	88.66	75.36		113.42	
				COM_IND_HT	53	30331.00	30.33	25.78		97.31	
				OTHER	1595	25432.39	25.43	21.62		61.82	
Sub total :				274912	444917.05	444.92	378.18	720.360	620.49	99.866	
16	NORTH 24 PGS	BARASAT	3153	RESIDENTIAL	431920	337951.37	337.95	287.26		444.01	
				AGRICULTURE	3530	13824.74	13.82	11.75		9.30	
				COM_IND_LT	63561	162917.15	162.92	138.48		184.53	
				COM_IND_HT	110	43408.00	43.41	36.90		104.80	
				OTHER	375	23315.58	23.32	19.82		74.18	
Sub total :				499496	581416.84	581.42	494.20	873.871	816.82	57.048	
17	NORTH 24 PGS	HABRA	3154	RESIDENTIAL	268188	132536.61	132.54	112.66		233.01	

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				AGRICULTURE	6175	21500.70	21.50	18.28		10.16	
				COM_IND_LT	38438	65443.35	65.44	55.63		73.64	
				COM_IND_HT	20	5796.00	5.80	4.93		14.61	
				OTHER	610	9658.04	9.66	8.21		25.42	
				Sub total :	313431	234934.70	234.93	199.69	363.354	356.84	6.513
18	NORTH 24 PGS	NAIHATI	3155	RESIDENTIAL	225693	177166.08	177.17	150.59		272.89	
				AGRICULTURE	412	2499.98	2.50	2.12		3.10	
				COM_IND_LT	29630	61268.83	61.27	52.08		74.89	
				COM_IND_HT	44	32784.00	32.78	27.87		106.60	
				OTHER	404	16767.69	16.77	14.25		48.49	
Sub total :	256183	290486.58	290.49	246.91	553.645	505.97	47.677				
19	NORTH 24 PGS	BASIRHAT	3156	RESIDENTIAL	468891	169953.49	169.95	144.46		279.99	
				AGRICULTURE	3581	9836.20	9.84	8.36		4.76	
				COM_IND_LT	60286	78669.35	78.67	66.87		80.53	
				COM_IND_HT	12	4149.00	4.15	3.53		9.66	
				OTHER	1026	9097.08	9.10	7.73		7.69	
Sub total :	533796	271705.12	271.71	230.95	452.756	382.63	70.125				
20	NORTH 24 PGS	BONGAON	3157	RESIDENTIAL	234175	87549.52	87.55	74.42		157.57	
				AGRICULTURE	4449	23107.10	23.11	19.64		10.75	
				COM_IND_LT	27575	43507.88	43.51	36.98		46.65	
				COM_IND_HT	8	3925.00	3.93	3.34		12.06	
				OTHER	475	2946.18	2.95	2.50		3.83	
Sub total :	266682	161035.67	161.04	136.88	277.887	230.87	47.018				
21	PASCHIM MEDINIPUR	KHARAGPUR	3212	RESIDENTIAL	284520	172327.24	172.33	146.48		210.41	
				AGRICULTURE	16849	68673.37	68.67	58.37		60.91	

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				COM_IND_LT	31350	74347.97	74.35	63.20		66.42	
				COM_IND_HT	83	110287.00	110.29	93.74		415.93	
				OTHER	2597	67793.05	67.79	57.62		223.42	
				Sub total :	335399	493428.63	493.43	419.41	1225.617	977.10	248.514
22	PASCHIM MEDINIPUR	GHATAL	3213	RESIDENTIAL	283144	128272.82	128.27	109.03		159.04	
				AGRICULTURE	9826	48387.77	48.39	41.13		37.47	
				COM_IND_LT	32055	49753.73	49.75	42.29		42.29	
				COM_IND_HT	5	1987.00	1.99	1.69		2.49	
				OTHER	2859	20946.06	20.95	17.80		53.19	
				Sub total :	327889	249347.37	249.35	211.95	377.323	294.48	82.847
23	PASCHIM MEDINIPUR	MIDNAPUR	3214	RESIDENTIAL	264472	151342.63	151.34	128.64		202.50	
				AGRICULTURE	14956	61502.02	61.50	52.28		51.17	
				COM_IND_LT	25539	66493.03	66.49	56.52		71.69	
				COM_IND_HT	41	51682.00	51.68	43.93		140.77	
				OTHER	3731	36265.56	36.27	30.83		100.56	
				Sub total :	308739	367285.24	367.29	312.19	747.543	566.69	180.853
24	PASCHIM MEDINIPUR	JHARGRAM	3215	RESIDENTIAL	182277	74980.04	74.98	63.73		110.64	
				AGRICULTURE	6432	24075.22	24.08	20.46		19.52	
				COM_IND_LT	13717	37878.38	37.88	32.20		37.61	
				COM_IND_HT	26	15567.00	15.57	13.23		43.75	
				OTHER	3126	7293.05	7.29	6.20		15.66	
				Sub total :	205578	159793.68	159.79	135.82	266.560	227.18	39.383
25	PASCHIM MEDINIPUR	BELDA	3216	RESIDENTIAL	235773	83643.63	83.64	71.10		117.59	
				AGRICULTURE	14477	59117.02	59.12	50.25		65.69	
				COM_IND_LT	21315	38127.90	38.13	32.41		34.29	

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				COM_IND_HT	9	9095.00	9.10	7.73		36.11	
				OTHER	905	1678.37	1.68	1.43		3.44	
				Sub total :	272479	191661.92	191.66	162.91	321.246	257.12	64.124
26	PURBA MEDINIPUR	TAMLUK	3222	RESIDENTIAL	398596	217088.44	217.09	184.53		254.28	
				AGRICULTURE	4683	17076.60	17.08	14.52		11.37	
				COM_IND_LT	56855	108302.11	108.30	92.06		101.72	
				COM_IND_HT	17	18453.00	18.45	15.69		62.11	
				OTHER	3792	31412.97	31.41	26.70		68.71	
				Sub total :	463943	392333.12	392.33	333.48	597.318	498.19	99.126
27	PURBA MEDINIPUR	CONTAI	3223	RESIDENTIAL	303291	175474.09	175.47	149.15		182.81	
				AGRICULTURE	2988	13476.94	13.48	11.46		20.04	
				COM_IND_LT	40393	117880.45	117.88	100.20		120.92	
				COM_IND_HT	43	17686.00	17.69	15.03		40.97	
				OTHER	964	7219.40	7.22	6.14		9.68	
				Sub total :	347679	331736.88	331.74	281.98	464.878	374.41	90.466
28	PURBA MEDINIPUR	HALDIA	3224	RESIDENTIAL	265801	170637.15	170.64	145.04		200.77	
				AGRICULTURE	827	4010.20	4.01	3.41		4.09	
				COM_IND_LT	35659	72392.44	72.39	61.53		69.45	
				COM_IND_HT	85	205080.00	205.08	174.32		836.78	
				OTHER	839	20558.92	20.56	17.48		57.78	
				Sub total :	303211	472678.70	472.68	401.78	1395.566	1168.87	226.693
29	PURBA MEDINIPUR	EGRA	3225	RESIDENTIAL	208356	99703.04	99.70	84.75		102.19	
				AGRICULTURE	7811	39775.01	39.78	33.81		44.72	
				COM_IND_LT	22966	36616.82	36.62	31.12		33.57	
				COM_IND_HT	5	2674.00	2.67	2.27		7.26	

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				OTHER	2171	2763.37	2.76	2.35		4.96	
				Sub total :	241309	181532.24	181.53	154.30	280.625	192.71	87.916
30	BANKURA	BANKURA	3232	RESIDENTIAL	243474	142597.95	142.60	121.21		166.71	
				AGRICULTURE	1131	7418.68	7.42	6.31		5.34	
				COM_IND_LT	23751	73459.75	73.46	62.44		60.78	
				COM_IND_HT	60	30903.00	30.90	26.27		77.55	
				OTHER	738	34564.97	34.56	29.38		84.55	
				Sub total :	269154	288944.35	288.94	245.60	458.490	394.93	63.563
31	BANKURA	BISHNUPUR	3233	RESIDENTIAL	297194	122239.30	122.24	103.90		157.48	
				AGRICULTURE	16857	71692.62	71.69	60.94		65.84	
				COM_IND_LT	32355	62119.66	62.12	52.80		56.34	
				COM_IND_HT	51	17885.00	17.89	15.20		58.71	
				OTHER	4030	23235.93	23.24	19.75		62.40	
				Sub total :	350487	297172.51	297.17	252.60	470.804	400.76	70.047
32	BANKURA	KHATRA	3234	RESIDENTIAL	193377	64675.95	64.68	54.97		99.76	
				AGRICULTURE	3523	16896.00	16.90	14.36		10.94	
				COM_IND_LT	14520	32472.35	32.47	27.60		31.84	
				COM_IND_HT	4	1165.00	1.17	0.99		2.38	
				OTHER	948	3988.63	3.99	3.39		6.82	
				Sub total :	212372	119197.93	119.20	101.32	214.145	151.75	62.399
33	PURULIA	PURULIA	3242	RESIDENTIAL	309711	125520.43	125.52	106.69		149.09	
				AGRICULTURE	84	2065.08	2.07	1.76		2.06	
				COM_IND_LT	24840	63909.88	63.91	54.32		63.87	
				COM_IND_HT	43	19705.00	19.71	16.75		63.23	
				OTHER	411	22356.65	22.36	19.00		56.43	

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	Sub total :				335089	233557.04	233.56	198.52	388.735	334.68	54.059
34	PURULIA	RAGHUNATHPUR	3243	RESIDENTIAL	233085	90501.17	90.50	76.93		120.08	
				AGRICULTURE	90	2064.79	2.06	1.76		0.60	
				COM_IND_LT	15260	42978.34	42.98	36.53		41.64	
				COM_IND_HT	23	13463.00	13.46	11.44		33.16	
				OTHER	235	2647.66	2.65	2.25		6.28	
	Sub total :				248693	151654.95	151.65	128.91	239.390	201.76	37.633
35	MURSHIDABAD	BERHAMPORE	3314	RESIDENTIAL	329024	190462.26	190.46	161.89		259.80	
				AGRICULTURE	2413	15213.83	15.21	12.93		11.36	
				COM_IND_LT	35013	83312.77	83.31	70.82		83.62	
				COM_IND_HT	31	10782.00	10.78	9.16		27.82	
				OTHER	571	13355.99	13.36	11.35		29.29	
	Sub total :				367052	313126.86	313.13	266.16	506.635	411.88	94.750
36	MURSHIDABAD	RAGHUNATHGANJ	3315	RESIDENTIAL	393382	126787.29	126.79	107.77		272.63	
				AGRICULTURE	3825	16610.37	16.61	14.12		17.82	
				COM_IND_LT	32774	64580.64	64.58	54.89		76.07	
				COM_IND_HT	37	38041.00	38.04	32.33		163.22	
				OTHER	450	14041.43	14.04	11.94		30.32	
	Sub total :				430468	260060.73	260.06	221.05	700.632	560.07	140.566
37	MURSHIDABAD	KANDI	3316	RESIDENTIAL	283993	101668.82	101.67	86.42		172.24	
				AGRICULTURE	7849	39921.31	39.92	33.93		65.26	
				COM_IND_LT	21110	44000.59	44.00	37.40		44.25	
				COM_IND_HT	23	6899.00	6.90	5.86		18.91	
				OTHER	178	10500.47	10.50	8.93		27.26	
	Sub total :				313153	202990.18	202.99	172.54	518.690	327.92	190.774

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38	MURSHIDABAD	DOMKAL	3317	RESIDENTIAL	250444	68661.08	68.66	58.36		130.05	
				AGRICULTURE	2350	15986.10	15.99	13.59		9.50	
				COM_IND_LT	18792	38616.88	38.62	32.82		40.58	
				COM_IND_HT	2	1070.00	1.07	0.91		2.35	
				OTHER	196	3350.58	3.35	2.85		3.58	
Sub total :				271784	127684.64	127.68	108.53	255.517	186.05	69.466	
39	MURSHIDABAD	JIAGANJ	3318	RESIDENTIAL	266558	90270.70	90.27	76.73		160.48	
				AGRICULTURE	4135	21909.23	21.91	18.62		19.20	
				COM_IND_LT	24076	42574.49	42.57	36.19		44.18	
				COM_IND_HT	15	6866.00	6.87	5.84		25.88	
				OTHER	252	4674.79	4.67	3.97		8.08	
Sub total :				295036	166295.20	166.30	141.35	327.246	257.81	69.434	
40	NADIA	KALYANI	3332	RESIDENTIAL	250480	172253.65	172.25	146.42		234.71	
				AGRICULTURE	6093	27514.38	27.51	23.39		15.81	
				COM_IND_LT	32093	73776.24	73.78	62.71		73.38	
				COM_IND_HT	77	46519.00	46.52	39.54		119.71	
				OTHER	836	25301.80	25.30	21.51		80.19	
Sub total :				289579	345365.07	345.37	293.56	558.692	523.79	34.899	
41	NADIA	KRISHNANAGAR	3333	RESIDENTIAL	273451	159076.04	159.08	135.21		226.58	
				AGRICULTURE	3362	19822.53	19.82	16.85		14.59	
				COM_IND_LT	33943	69366.62	69.37	58.96		75.72	
				COM_IND_HT	10	3175.00	3.18	2.70		4.52	
				OTHER	408	5069.45	5.07	4.31		11.98	
Sub total :				311174	256509.63	256.51	218.03	375.685	333.40	42.290	
42	NADIA	TEHATTA	3334	RESIDENTIAL	281938	102936.58	102.94	87.50		161.68	

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				AGRICULTURE	1836	15396.23	15.40	13.09		11.94	
				COM_IND_LT	20322	48156.13	48.16	40.93		51.05	
				COM_IND_HT	4	900.00	0.90	0.77		2.80	
				OTHER	261	3803.12	3.80	3.23		5.72	
				Sub total :	304361	171192.05	171.19	145.51	283.308	233.18	50.126
43	NADIA	RANAGHAT	3335	RESIDENTIAL	303849	150252.84	150.25	127.71		246.55	
				AGRICULTURE	5530	29367.88	29.37	24.96		17.46	
				COM_IND_LT	48102	89301.92	89.30	75.91		91.07	
				COM_IND_HT	15	5175.00	5.18	4.40		17.48	
				OTHER	692	5724.87	5.72	4.87		11.98	
Sub total :	358188	279822.51	279.82	237.85	458.957	384.53	74.423				
44	NADIA	NAKASI PARA	3336	RESIDENTIAL	212396	80581.30	80.58	68.49		125.59	
				AGRICULTURE	5642	28786.14	28.79	24.47		15.78	
				COM_IND_LT	18469	41080.82	41.08	34.92		36.86	
				COM_IND_HT	4	782.00	0.78	0.66		3.49	
				OTHER	97	9682.94	9.68	8.23		18.37	
Sub total :	236608	160913.20	160.91	136.78	250.744	200.08	50.660				
45	MALDA	SOUTH MALDA	3342	RESIDENTIAL	459170	215398.03	215.40	183.09		339.37	
				AGRICULTURE	2652	16765.11	16.77	14.25		19.86	
				COM_IND_LT	41615	91843.55	91.84	78.07		103.59	
				COM_IND_HT	56	24859.00	24.86	21.13		75.77	
				OTHER	1798	13834.50	13.83	11.76		34.04	
Sub total :	505291	362700.19	362.70	308.30	704.651	572.64	132.014				
46	MALDA	NORTH MALDA	3343	RESIDENTIAL	360048	115037.15	115.04	97.78		197.98	
				AGRICULTURE	9961	49953.07	49.95	42.46		49.29	

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				COM_IND_LT	25391	54828.33	54.83	46.60		55.02	
				COM_IND_HT	32	12499.00	12.50	10.62		33.00	
				OTHER	1799	16519.31	16.52	14.04		43.07	
				Sub total :	397231	248836.86	248.84	211.51	507.436	378.36	129.073
47	DARJEELING	SILIGURI	3412	RESIDENTIAL	172330	272312.16	272.31	231.47		276.03	
				AGRICULTURE	3	7.32	0.01	0.01		0.00	
				COM_IND_LT	40263	140499.58	140.50	119.42		137.68	
				COM_IND_HT	103	41129.00	41.13	34.96		97.34	
				OTHER	1427	14749.56	14.75	12.54		47.32	
				Sub total :	214126	468697.62	468.70	398.39	600.057	558.37	41.688
48	DARJEELING	KURSEONG	3413	RESIDENTIAL	42265	24704.83	24.70	21.00		20.68	
				AGRICULTURE	0	0.00	0.00	0.00		0.00	
				COM_IND_LT	2944	8316.60	8.32	7.07		10.59	
				COM_IND_HT	5	1050.00	1.05	0.89		1.99	
				OTHER	81	526.62	0.53	0.45		2.16	
				Sub total :	45295	34598.05	34.60	29.41	42.603	35.42	7.180
49	DARJEELING	DARJEELING	3414	RESIDENTIAL	68155	37570.24	37.57	31.93		36.56	
				AGRICULTURE	0	0.00	0.00	0.00		0.00	
				COM_IND_LT	5589	21711.65	21.71	18.45		24.62	
				COM_IND_HT	14	3667.00	3.67	3.12		4.77	
				OTHER	50	6242.49	6.24	5.31		9.74	
				Sub total :	73808	69191.39	69.19	58.81	88.252	75.69	12.562
50	DARJEELING	SILIGURI SUB-URBAN	3415	RESIDENTIAL	162420	134597.50	134.60	114.41		130.70	
				AGRICULTURE	407	1633.34	1.63	1.39		0.24	
				COM_IND_LT	23504	60780.00	60.78	51.66		66.17	

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				COM_IND_HT	131	64692.00	64.69	54.99		218.70	
				OTHER	201	11958.84	11.96	10.17		32.56	
				Sub total :	186663	273661.68	273.66	232.61	454.988	448.38	6.613
51	DARJEELING	KALIMPONG	3416	RESIDENTIAL	46201	21269.75	21.27	18.08		22.57	
				AGRICULTURE	0	0	0	0		0.00	
				COM_IND_LT	4578	10229.87	10.23	8.70		12.57	
				COM_IND_HT	16	6280.00	6.28	5.34		4.50	
				OTHER	69	1631.12	1.63	1.39		4.87	
				Sub total :	50864	39410.74	39.41	33.50	46.600	44.51	2.090
52	JALPAIGURI	JALPAIGURI	3422	RESIDENTIAL	296704	124784.90	124.78	106.07		195.47	
				AGRICULTURE	1086	4806.67	4.81	4.09		1.15	
				COM_IND_LT	30980	91440.22	91.44	77.72		95.62	
				COM_IND_HT	185	78533.00	78.53	66.75		220.79	
				OTHER	937	18059.23	18.06	15.35		46.40	
				Sub total :	329892	317624.02	317.62	269.98	593.015	559.43	33.581
53	JALPAIGURI	MAL	3427	RESIDENTIAL	159619	54288.45	54.29	46.15		72.34	
				AGRICULTURE	482	2253.14	2.25	1.92		0.36	
				COM_IND_LT	10543	26746.19	26.75	22.73		30.35	
				COM_IND_HT	112	41623.00	41.62	35.38		100.41	
				OTHER	397	7984.68	7.98	6.79		24.52	
				Sub total :	171153	132895.46	132.90	112.96	234.433	227.98	6.452
54	UTTAR DINAJPUR	RAIGANJ	3432	RESIDENTIAL	331474	124592.03	124.59	105.90		197.74	
				AGRICULTURE	8950	43915.50	43.92	37.33		22.12	
				COM_IND_LT	27646	78899.90	78.90	67.06		86.39	
				COM_IND_HT	49	19161.00	19.16	16.29		48.94	

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				OTHER	820	9933.56	9.93	8.44		48.68	
				Sub total :	368939	276501.99	276.50	235.03	474.854	403.87	70.989
55	UTTAR DINAJPUR	ISLAMPUR	3434	RESIDENTIAL	250574	89027.45	89.03	75.67		126.81	
				AGRICULTURE	1213	6540.98	6.54	5.56		2.14	
				COM_IND_LT	22905	50100.59	50.10	42.59		53.39	
				COM_IND_HT	76	28926.00	28.93	24.59		78.18	
				OTHER	337	14527.19	14.53	12.35		46.50	
				Sub total :	275105	189122.21	189.12	160.75	377.056	307.03	70.029
56	COOCHBEHAR	COOCHBEHAR	3444	RESIDENTIAL	244755	92544.22	92.54	78.66		167.28	
				AGRICULTURE	14416	19496.76	19.50	16.57		9.40	
				COM_IND_LT	23618	55718.64	55.72	47.36		55.04	
				COM_IND_HT	36	12599.00	12.60	10.71		35.29	
				OTHER	586	13617.91	13.62	11.58		24.25	
				Sub total :	283411	193976.53	193.98	164.88	305.130	291.26	13.869
57	COOCHBEHAR	MATHABHANGA	3445	RESIDENTIAL	201175	50611.06	50.61	43.02		97.06	
				AGRICULTURE	24562	26755.40	26.76	22.74		9.49	
				COM_IND_LT	16049	29545.39	29.55	25.11		29.09	
				COM_IND_HT	15	4340.00	4.34	3.69		13.16	
				OTHER	297	2830.15	2.83	2.41		5.32	
				Sub total :	242098	114081.99	114.08	96.97	178.362	154.12	24.246
58	COOCHBEHAR	DINHATA	3446	RESIDENTIAL	179148	43997.75	44.00	37.40		87.45	
				AGRICULTURE	25016	24552.69	24.55	20.87		11.14	
				COM_IND_LT	14132	25113.10	25.11	21.35		28.33	
				COM_IND_HT	5	2126.00	2.13	1.81		8.40	
				OTHER	244	2353.56	2.35	2.00		5.41	

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	Sub total :				218545	98143.09	98.14	83.42	185.252	140.71	44.538
59	ALIPURDUAR	ALIPURDUAR	3453	RESIDENTIAL	337591	111882.85	111.88	95.10		201.96	
				AGRICULTURE	1906	5197.17	5.20	4.42		1.14	
				COM_IND_LT	35231	69018.53	69.02	58.67		70.83	
				COM_IND_HT	71	28353.00	28.35	24.10		76.59	
				OTHER	658	10070.89	10.07	8.56		27.11	
	Sub total :				375457	224522.44	224.52	190.84	417.247	377.64	39.612
60	DAKSHIN DINAJPUR	BALURGHAT	3461	RESIDENTIAL	183126	88314.04	88.31	75.07		108.40	
				AGRICULTURE	5119	26918.78	26.92	22.88		20.43	
				COM_IND_LT	17806	39539.31	39.54	33.61		37.95	
				COM_IND_HT	20	7706.00	7.71	6.55		19.77	
				OTHER	319	2065.81	2.07	1.76		6.47	
	Sub total :				206390	164543.94	164.54	139.86	242.095	193.01	49.081
61	DAKSHIN DINAJPUR	BUNIADPUR	3462	RESIDENTIAL	165959	62744.54	62.74	53.33		81.19	
				AGRICULTURE	4788	24566.92	24.57	20.88		13.42	
				COM_IND_LT	14671	31614.29	31.61	26.87		28.31	
				COM_IND_HT	20	10370.00	10.37	8.81		24.86	
				OTHER	396	3671.42	3.67	3.12		8.04	
	Sub total :				185834	132967.17	132.97	113.02	209.153	155.82	53.332
62	PURBA BARDHAMAN	BURDWAN (NORTH)	3512	RESIDENTIAL	235588	92186.74	92.19	78.36		139.35	
				AGRICULTURE	7741	33714.89	33.71	28.66		44.55	
				COM_IND_LT	21615	42710.12	42.71	36.30		38.64	
				COM_IND_HT	110	41528.00	41.53	35.30		137.47	
				OTHER	701	9327.87	9.33	7.93		27.94	
	Sub total :				265755	219467.62	219.47	186.55	446.106	387.95	58.161

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63	PURBA BARDHAMAN	KATWA	3515	RESIDENTIAL	208330	79717.83	79.72	67.76		126.32	
				AGRICULTURE	6905	30729.48	30.73	26.12		45.65	
				COM_IND_LT	20699	35162.39	35.16	29.89		33.05	
				COM_IND_HT	19	7184.00	7.18	6.11		19.52	
				OTHER	390	10264.69	10.26	8.72		20.79	
Sub total :					236343	163058.38	163.06	138.60	334.369	245.33	89.036
64	PURBA BARDHAMAN	KALNA	3516	RESIDENTIAL	250450	103842.27	103.84	88.27		159.76	
				AGRICULTURE	5706	31690.83	31.69	26.94		44.08	
				COM_IND_LT	28554	57523.12	57.52	48.89		60.24	
				COM_IND_HT	22	5883.00	5.88	5.00		18.11	
				OTHER	696	16409.42	16.41	13.95		49.91	
Sub total :					285428	215348.64	215.35	183.05	413.686	332.10	81.587
65	PURBA BARDHAMAN	MEMARI	3517	RESIDENTIAL	200769	87965.75	87.97	74.77		132.83	
				AGRICULTURE	5958	28996.62	29.00	24.65		30.32	
				COM_IND_LT	22801	42221.14	42.22	35.89		44.69	
				COM_IND_HT	64	30663.00	30.66	26.06		101.96	
				OTHER	637	14336.88	14.34	12.19		45.36	
Sub total :					230229	204183.40	204.18	173.56	393.106	355.17	37.937
66	PURBA BARDHAMAN	BURDWAN (SOUTH)	3518	RESIDENTIAL	232995	194261.46	194.26	165.12		235.04	
				AGRICULTURE	4244	20992.50	20.99	17.84		32.06	
				COM_IND_LT	32339	88223.42	88.22	74.99		98.46	
				COM_IND_HT	256	85356.00	85.36	72.55		259.26	
				OTHER	1107	6841.49	6.84	5.82		31.95	
Sub total :					270941	395674.86	395.67	336.32	714.028	656.76	57.267
67	BIRBHUM	SURI	3521	RESIDENTIAL	199681	89107.10	89.11	75.74		122.27	

ANNUAL ENERGY ACCOUNTING AUDIT, 2021 - 2022, WBSEDCL

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV. CODE	COMSUMER CATEGORY	NO OF CONSUMERS AS ON 31.03.2022	CONNECTED LOAD in KVA (AS ON 31.03.2022)	CONNECTED LOAD in MVA (AS ON 31.03.2022)	CONNECTED LOAD in MW (AS ON 31.03.2022)	TOTAL NET INPUT (in MU)	METERED BILLED ENERGY(in MU)	DIST. LOSS(in MU)
				AGRICULTURE	2316	11949.11	11.95	10.16		13.38	
				COM_IND_LT	19394	64031.53	64.03	54.43		59.47	
				COM_IND_HT	62	20982.00	20.98	17.83		45.78	
				OTHER	730	4145.94	4.15	3.52		20.35	
				Sub total :	222183	190215.68	190.22	161.68	391.154	261.25	129.906
68	BIRBHUM	RAMPURHAT	3522	RESIDENTIAL	342584	131086.42	131.09	111.42		205.38	
				AGRICULTURE	10764	47236.32	47.24	40.15		55.63	
				COM_IND_LT	31838	114006.04	114.01	96.91		118.50	
				COM_IND_HT	39	17208.00	17.21	14.63		55.51	
				OTHER	1277	15982.99	15.98	13.59		72.44	
Sub total :	386502	325519.77	325.52	276.69	693.089	507.45	185.639				
69	BIRBHUM	BOLPUR	3523	RESIDENTIAL	232431	126639.60	126.64	107.64		152.33	
				AGRICULTURE	8879	41643.73	41.64	35.40		72.03	
				COM_IND_LT	20476	57952.43	57.95	49.26		48.31	
				COM_IND_HT	49	16710.00	16.71	14.20		50.72	
				OTHER	737	14450.08	14.45	12.28		49.97	
Sub total :	262572	257395.84	257.40	218.79	455.799	373.37	82.424				
70	HOOGHLY	SREERAMPUR	3531	RESIDENTIAL	160820	145992.27	145.99	124.09		200.75	
				AGRICULTURE	97	905.06	0.91	0.77		0.42	
				COM_IND_LT	23145	79975.51	79.98	67.98		91.60	
				COM_IND_HT	143	160881.00	160.88	136.75		596.25	
				OTHER	187	19307.54	19.31	16.41		68.60	
Sub total :	184392	407061.38	407.06	346.00	1121.400	957.62	163.782				
71	HOOGHLY	CHANDANNAGAR	3532	RESIDENTIAL	165489	188269.73	188.27	160.03		218.46	
				AGRICULTURE	801	4820.51	4.82	4.10		4.35	

ANNUAL ENERGY ACCOUNTING AUDIT, 2021 - 2022, WBSEDCL

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV. CODE	COMSUMER CATEGORY	NO OF CONSUMERS AS ON 31.03.2022	CONNECTED LOAD in KVA (AS ON 31.03.2022)	CONNECTED LOAD in MVA (AS ON 31.03.2022)	CONNECTED LOAD in MW (AS ON 31.03.2022)	TOTAL NET INPUT (in MU)	METERED BILLED ENERGY(in MU)	DIST. LOSS(in MU)
				COM_IND_LT	24455	59313.13	59.31	50.42		64.26	
				COM_IND_HT	85	34575.00	34.58	29.39		129.08	
				OTHER	1415	8028.25	8.03	6.82		26.55	
				Sub total :	192245	295006.62	295.01	250.76	476.155	442.70	33.457
72	HOOGHLY	ARAMBAGH	3533	RESIDENTIAL	337408	137015.67	137.02	116.46		209.02	
				AGRICULTURE	8177	50454.95	50.45	42.89		39.45	
				COM_IND_LT	41912	61966.27	61.97	52.67		67.16	
				COM_IND_HT	54	17501.00	17.50	14.88		53.47	
				OTHER	876	18683.78	18.68	15.88		59.33	
				Sub total :	388427	285621.66	285.62	242.78	482.959	428.43	54.530
73	HOOGHLY	TARAKESWAR	3534	RESIDENTIAL	248559	135521.92	135.52	115.19		185.35	
				AGRICULTURE	3897	21034.25	21.03	17.88		18.92	
				COM_IND_LT	34848	54111.51	54.11	45.99		48.56	
				COM_IND_HT	53	26980.00	26.98	22.93		103.84	
				OTHER	528	12986.90	12.99	11.04		45.76	
				Sub total :	287885	250634.58	250.63	213.04	436.585	402.43	34.151
74	HOOGHLY	SINGUR-HARIPAL	3535	RESIDENTIAL	141063	131098.95	131.10	111.43		119.42	
				AGRICULTURE	1747	10800.94	10.80	9.18		7.40	
				COM_IND_LT	19491	42668.74	42.67	36.27		43.02	
				COM_IND_HT	23	13368.00	13.37	11.36		26.75	
				OTHER	175	5631.12	5.63	4.79		20.33	
				Sub total :	162499	203567.75	203.57	173.03	220.665	216.91	3.757
75	HOOGHLY	MOGRA	3536	RESIDENTIAL	198350	93130.45	93.13	79.16		171.95	
				AGRICULTURE	2693	19223.42	19.22	16.34		19.39	
				COM_IND_LT	27330	47069.89	47.07	40.01		51.63	

ANNUAL ENERGY ACCOUNTING AUDIT, 2021 - 2022, WBSEDCL

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV. CODE	COMSUMER CATEGORY	NO OF CONSUMER AS ON 31.03.2022	CONNECTED LOAD in KVA (AS ON 31.03.2022)	CONNECTED LOAD in MVA (AS ON 31.03.2022)	CONNECTED LOAD in MW (AS ON 31.03.2022)	TOTAL NET INPUT (in MU)	METERED BILLED ENERGY(in n MU)	DIST. LOSS(in MU)
				COM_IND_HT	23	17272.00	17.27	14.68		59.59	
				OTHER	458	40601.75	40.60	34.51		141.45	
				Sub total :	228854	217297.51	217.30	184.70	474.250	444.02	30.235
76	PASCHIM BARDHAMAN	ASANSOL	3541	RESIDENTIAL	244015	329014.01	329.01	279.66		294.68	
				AGRICULTURE	10	122.69	0.12	0.10		0.06	
				COM_IND_LT	35652	113416.96	113.42	96.40		90.48	
				COM_IND_HT	113	76436.50	76.44	64.97		300.34	
				OTHER	1579	17251.26	17.25	14.66		125.43	
				Sub total :	281369	536241.42	536.24	455.81	875.654	810.99	64.665
77	PASCHIM BARDHAMAN	DURGAPUR	3542	RESIDENTIAL	257665	308163.39	308.16	261.94		305.96	
				AGRICULTURE	1010	3497.56	3.50	2.97		1.74	
				COM_IND_LT	36563	102799.58	102.80	87.38		92.11	
				COM_IND_HT	328	505663.00	505.66	429.81		2476.15	
				OTHER	425	11857.06	11.86	10.08		51.47	
				Sub total :	295991	931980.58	931.98	792.18	3244.329	2927.42	316.906
Sl. Nos. (1-77)	TOTAL	WBSEDCL DISCOM		RESIDENTIAL	18952488	10939829.38	10939.83	9298.85		13972.568	
				AGRICULTURE	345769	1386983.39	1387	1179		1257.449	
				COM_IND_LT	2133592	4957969.52	4957.97	4214.27		5052.477	
				COM_IND_HT	4780	3018550.50	3018.55	2565.77		10239.884	
				OTHER	62423	1012548.81	1012.55	860.67		2938.492	
	AT COMPANY LEVEL (WBSEDCL)				21499052	21315881.592	21315.882	18118.499	39414.756	33460.871	5953.885

Table Continues...

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
A	B	C	D	M=L*100/J	N	O	P=O/N	Q=K*P	R=J-Q	S=R*100/J
1	SOUTH 24 PGS	BEHALA	3112		112.41	101.28	90.10	159.61		
					0.08	0.05	63.64	0.09		
					63.72	64.40	101.07	75.43		
					102.98	102.44	99.48	122.22		
					21.01	18.66	88.81	25.95		
SUB TOTAL :				15.60	300.20	286.83	95.55	386.02	92.678	19.36
2	SOUTH 24 PGS	BARUIPUR	3113		99.37	93.18	93.77	153.42		
					0.49	0.52	105.98	1.23		
					38.40	39.61	103.14	54.57		
					18.62	21.01	112.84	27.74		
					1.36	2.10	154.03	3.50		
SUB TOTAL :				33.75	158.25	156.42	98.85	241.71	127.420	34.52
3	SOUTH 24 PGS	GARIA	3115		270.08	260.87	96.59	367.95		
					0.05	0.06	108.54	1.19		
					66.74	73.62	110.30	85.51		
					31.19	33.46	107.29	39.81		
					85.69	77.96	90.98	99.61		
SUB TOTAL :				5.12	453.75	445.97	98.28	595.76	43.089	6.74
4	SOUTH 24 PGS	JOYNAGAR	3116		74.64	68.18	91.35	116.43		
					2.88	2.44	84.74	5.45		
					33.45	35.98	107.55	42.34		
					1.99	2.89	145.49	3.09		

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SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
					29.53	28.36	96.07	33.22		
SUB TOTAL :				38.30	142.49	137.85	96.75	203.13	137.162	40.31
5	SOUTH 24 PGS	DIAMOND HARBOUR	3117		62.75	58.36	93.00	97.25		
					0.22	0.09	42.32	0.44		
					36.97	41.28	111.66	55.95		
					81.66	79.63	97.51	101.05		
					6.69	5.05	75.49	6.12		
SUB TOTAL :				39.32	188.29	184.41	97.94	261.94	178.779	40.57
6	SOUTH 24 PGS	KAKDWIP	3118		56.39	51.50	12.76	12.14		
					0.03	0.02	0.01	0.00		
					34.77	38.98	9.49	4.07		
					2.66	3.24	0.83	0.02		
					2.14	1.48	0.03	0.00		
SUB TOTAL :				27.77	96.00	95.23	99.20	144.50	57.175	28.35
7	SOUTH 24 PGS	CANNING(D)DIV.	3119		51.08	49.38	96.67	92.94		
					2.81	2.62	93.33	6.57		
					24.13	27.70	114.78	35.92		
					1.88	2.51	133.40	3.81		
					13.22	9.54	72.15	11.84		
SUB TOTAL :				46.63	93.12	91.75	98.52	151.47	136.581	47.41
8	BIDHANNAGAR	BIDHANNAGAR-I	3122		124.01	115.72	93.31	145.76		
					0.00	0.00	0	0	0.000	0
					61.47	61.50	100.05	67.24		
					263.93	272.17	103.12	310.17		
					22.93	14.62	63.77	19.47		

ANNUAL ENERGY ACCOUNTING AUDIT, 2021 - 2022, WBSEDCL

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
	SUB TOTAL :			3.89	472.34	464.01	98.24	544.93	32.240	5.59
9	BIDHANNAGAR	BIDHANNAGAR-II	3123		301.44	289.27	95.96	388.74		
					0.03	0.02	74.61	0.28		
					94.78	95.31	100.56	108.81		
					44.76	50.12	111.96	53.83		
					19.85	18.12	91.29	22.91		
	SUB TOTAL :			1.74	460.86	452.84	98.26	576.65	20.632	3.45
10	BIDHANNAGAR	BHANGAR	3124		59.79	52.76	88.25	84.69		
					3.71	3.36	90.73	6.07		
					68.80	70.74	102.82	80.24		
					40.59	44.44	109.50	44.83		
					5.52	2.79	50.56	3.49		
	SUB TOTAL :			30.20	178.40	174.10	97.59	223.03	104.399	31.88
11	BIDHANNAGAR	NEW-TOWN	3125		73.11	64.78	88.61	73.04		
					0.00	0.00	0.00	0.00		
					22.61	23.76	105.09	22.69		
					163.30	165.30	101.23	180.65		
					27.72	25.59	92.32	27.16		
	SUB TOTAL :			14.65	286.74	279.43	97.45	303.97	61.483	16.82
12	HOWRAH REGION	HOWRAH-I	3132		172.43	155.98	90.46	227.74		
					0.03	0.00	0.00	0.00		
					141.79	161.66	114.01	188.47		
					109.16	115.76	106.05	131.28		
					111.92	98.60	88.10	116.88		
	SUB TOTAL :			9.56	535.34	532.00	99.38	669.40	75.415	10.13

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUMT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
13	HOWRAH	ULUBERIA	3133		184.80	166.08	89.87	258.76		
					1.16	0.51	44.20	0.97		
					94.50	94.98	100.51	110.77		
					558.50	560.11	100.29	759.23		
					16.37	22.91	139.91	32.28		
SUB TOTAL :				15.26	855.34	844.60	98.74	1165.63	227.328	16.32
14	HOWRAH	HOWRAH-II	3135		163.67	130.45	79.71	199.97		
					2.12	1.69	79.81	3.09		
					115.35	118.22	102.49	137.94		
					344.79	351.58	101.97	454.82		
					7.72	24.20	313.61	33.83		
SUB TOTAL :				5.08	633.64	626.14	98.82	836.16	55.343	6.21
15	NORTH 24 PGS	BARRACKPUR	3152		244.10	234.00	95.86	333.32		
					0.12	0.14	114.16	0.26		
					90.45	94.56	104.55	118.58		
					81.57	85.95	105.37	102.54		
					50.50	47.94	94.95	58.70		
SUB TOTAL :				13.86	466.73	462.59	99.11	615.00	105.363	14.63
16	NORTH 24 PGS	BARASAT	3153		302.69	284.99	94.15	418.05		
					4.51	4.15	92.10	8.57		
					159.10	165.80	104.21	192.30		
					89.45	97.74	109.27	114.51		
					58.61	58.05	99.04	73.47		
SUB TOTAL :				6.53	614.36	610.73	99.41	812.00	61.874	7.08
17	NORTH 24 PGS	HABRA	3154		153.30	142.73	93.11	216.94		

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
					5.16	5.03	97.34	9.89		
					61.95	65.97	106.49	78.42		
					12.34	15.40	124.84	18.24		
					20.10	17.80	88.56	22.52		
				SUB TOTAL :	1.79	252.85	246.93	97.66	348.48	14.870
18	NORTH 24 PGS	NAIHATI	3155		186.07	179.69	96.57	263.53		
					1.30	1.10	84.17	2.61		
					63.55	73.55	115.73	86.67		
					82.72	84.69	102.39	109.14		
					37.01	29.67	80.16	38.87		
SUB TOTAL :	8.61	370.66	368.70	99.47	503.30	50.347	9.09			
19	NORTH 24 PGS	BASIRHAT	3156		177.41	171.37	96.60	270.47		
					2.36	2.28	96.78	4.60		
					67.81	67.33	99.30	79.96		
					8.28	14.09	170.21	16.45		
					5.37	3.81	70.93	5.46		
SUB TOTAL :	15.49	261.23	258.89	99.11	379.21	73.548	16.24			
20	NORTH 24 PGS	BONGAON	3157		101.27	92.88	91.72	144.52		
					6.61	5.33	80.66	8.67		
					39.29	42.22	107.46	50.13		
					9.54	11.79	123.63	14.91		
					2.56	1.70	66.57	2.55		
SUB TOTAL :	16.92	159.26	153.92	96.65	223.13	54.755	19.70			
21	PASCHIM MEDINIPUR	KHARAGPUR	3212		140.77	134.21	95.34	200.61		
					28.43	26.93	94.72	57.69		

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
					58.36	58.71	100.60	66.82		
					312.19	327.48	104.90	436.30		
					180.06	161.51	89.70	200.41		
				20.28	719.81	708.84	98.48	962.21	263.409	21.49
22	PASCHIM MEDINIPUR	GHATAL	3213		101.06	93.87	92.88	147.72		
					19.36	19.27	99.54	37.30		
					35.69	37.85	106.06	44.85		
					2.09	2.21	105.42	2.63		
					38.87	42.13	108.39	57.65		
				21.96	197.08	195.34	99.11	291.87	85.456	22.65
23	PASCHIM MEDINIPUR	MIDNAPUR	3214		137.06	120.19	87.69	177.57		
					27.14	24.20	89.18	45.63		
					61.91	66.52	107.43	77.02		
					115.66	126.52	109.39	153.99		
					76.48	73.01	95.46	95.99		
				24.19	418.25	410.43	98.13	556.10	191.446	25.61
24	PASCHIM MEDINIPUR	JHARGRAM	3215		70.64	63.47	89.85	99.41		
					10.12	10.02	98.99	19.32		
					32.36	37.57	116.11	43.67		
					37.81	39.47	104.40	45.67		
					11.30	7.48	66.19	10.36		
				14.77	162.23	158.02	97.40	221.27	45.288	16.99
25	PASCHIM MEDINIPUR	BELDA	3216		73.24	63.65	86.91	102.19		
					32.73	30.57	93.39	61.35		
					29.44	34.87	118.45	40.62		

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
					26.05	28.12	107.95	38.98		
					1.64	0.91	55.31	1.90		
				19.96	163.09	158.11	96.95	249.27	71.977	22.41
26	PURBA MEDINIPUR	TAMLUK	3222		163.31	147.98	90.61	230.41		
					5.00	5.81	116.26	13.22		
					85.83	93.12	108.49	110.37		
					45.24	52.04	115.03	71.44		
					56.86	52.47	92.28	63.41		
				16.60	356.24	351.42	98.65	491.46	105.857	17.72
27	PURBA MEDINIPUR	CONTAI	3223		118.35	112.05	94.68	173.07		
					7.98	7.29	91.39	18.31		
					104.73	106.37	101.57	122.82		
					35.61	39.51	110.95	45.46		
					8.73	6.43	73.68	7.13		
				19.46	275.40	271.65	98.64	369.33	95.552	20.55
28	PURBA MEDINIPUR	HALDIA	3224		131.40	112.32	85.48	171.62		
					1.69	1.51	89.26	3.66		
					58.84	52.75	89.64	62.25		
					620.84	638.94	102.92	861.18		
					44.90	42.26	94.13	54.39		
				16.24	857.66	847.78	98.85	1155.41	240.160	17.21
29	PURBA MEDINIPUR	EGRA	3225		64.26	58.12	90.44	92.42		
					19.91	19.25	96.65	43.22		
					27.26	32.15	117.92	39.59		
					4.90	5.68	115.95	8.42		

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SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
					2.50	2.09	83.59	4.15		
	SUB TOTAL :			31.33	118.84	117.29	98.69	190.19	90.437	32.23
30	BANKURA	BANKURA	3232		108.79	102.59	94.30	157.21		
					2.09	2.21	105.90	5.65		
					52.76	57.54	109.06	66.29		
					55.68	60.59	108.82	84.39		
					69.51	61.67	88.72	75.01		
	SUB TOTAL :			13.86	288.83	284.60	98.54	389.15	69.340	15.12
31	BANKURA	BISHNUPUR	3233		99.37	89.38	89.95	141.65		
					34.79	32.13	92.35	60.80		
					48.62	51.80	106.55	60.03		
					49.40	54.95	111.23	65.30		
					45.40	43.88	96.65	60.31		
	SUB TOTAL :			14.88	277.58	272.14	98.04	392.91	77.894	16.54
32	BANKURA	KHATRA	3234		61.64	59.56	96.62	96.39		
					4.62	4.28	92.74	10.15		
					25.79	25.48	98.78	31.45		
					1.56	2.66	170.82	4.07		
					4.65	4.17	89.76	6.12		
	SUB TOTAL :			29.14	98.25	96.15	97.86	148.50	65.649	30.66
33	PURULIA	PURULIA	3242		95.98	88.92	92.65	138.12		
					0.90	0.62	68.71	1.42		
					54.70	54.38	99.42	63.50		
					48.91	55.51	113.49	71.76		
				47.83	44.42	92.88	52.41			

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SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
	SUB TOTAL :			13.91	248.32	243.85	98.20	328.66	60.079	15.45
34	PURULIA	RAGHUNATHPUR	3243		75.01	69.58	92.76	111.38		
					0.21	0.09	40.53	0.24		
					35.85	38.20	106.57	44.37		
					26.91	29.51	109.66	36.37		
					4.03	2.99	74.23	4.66		
	SUB TOTAL :			15.72	142.02	140.38	98.84	199.42	39.974	16.70
35	MURSHIDABAD	BERHAMPORE	3314		170.25	162.27	95.31	247.61		
					5.37	4.83	89.97	10.22		
					71.06	71.98	101.30	84.71		
					21.26	23.36	109.86	30.56		
					22.74	21.08	92.70	27.15		
	SUB TOTAL :			18.70	290.68	283.52	97.54	401.74	104.900	20.71
36	MURSHIDABAD	RAGHUNATHGANJ	3315		172.35	161.22	93.54	255.02		
					7.84	7.70	98.19	17.50		
					63.50	65.74	103.52	78.74		
					119.14	126.77	106.40	173.67		
					25.95	22.07	85.06	25.79		
	SUB TOTAL :			20.06	388.78	383.49	98.64	552.45	148.183	21.15
37	MURSHIDABAD	KANDI	3316		107.53	97.44	90.62	156.07		
					27.57	26.04	94.44	61.63		
					36.59	38.71	105.81	46.82		
					14.07	14.91	105.95	20.04		
					20.84	20.09	96.38	26.27		
	SUB TOTAL :			36.78	206.61	197.19	95.44	312.97	205.717	39.66

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUMT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
38	MURSHIDABAD	DOMKAL	3317		80.28	76.40	95.16	123.76		
					4.50	3.08	68.54	6.51		
					32.89	35.12	106.78	43.33		
					1.10	2.09	190.27	4.47		
					1.96	1.74	88.89	3.18		
SUB TOTAL :				27.19	120.73	118.43	98.10	182.51	73.002	28.57
39	MURSHIDABAD	JIAGANJ	3318		101.67	96.27	94.69	151.95		
					8.84	9.51	107.57	20.65		
					36.56	36.31	99.31	43.88		
					19.38	20.77	107.18	27.74		
					5.77	4.76	82.44	6.66		
SUB TOTAL :				21.22	172.23	167.62	97.33	250.92	76.328	23.32
40	NADIA	KALYANI	3332		157.22	143.05	90.99	213.55		
					8.02	5.87	73.17	11.57		
					63.01	67.32	106.85	78.40		
					98.20	102.45	104.33	124.89		
					66.49	63.48	95.48	76.56		
SUB TOTAL :				6.25	392.93	382.17	97.26	509.44	49.250	8.82
41	NADIA	KRISHNANAGAR	3333		149.78	146.18	97.60	221.14		
					6.78	6.21	91.50	13.35		
					63.03	65.16	103.37	78.28		
					4.25	4.26	100.31	4.53		
					8.43	7.35	87.19	10.45		
SUB TOTAL :				11.26	232.27	229.16	98.66	328.92	46.763	12.45
42	NADIA	TEHATTA	3334		101.08	97.52	96.48	155.98		

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
					5.70	5.20	91.28	10.90		
					41.75	43.89	105.12	53.66		
					1.70	1.94	113.92	3.19		
					3.50	2.41	68.78	3.93		
	SUB TOTAL :			17.69	153.73	150.96	98.20	228.98	54.332	19.18
43	NADIA	RANAGHAT	3335		161.69	152.03	94.03	231.82		
					8.64	8.16	94.51	16.50		
					74.90	76.88	102.65	93.48		
					14.37	14.28	99.40	17.37		
					7.89	5.59	70.93	8.50		
	SUB TOTAL :			16.22	267.48	256.95	96.06	369.40	89.558	19.51
44	NADIA	NAKASI PARA	3336		79.40	77.09	97.09	121.93		
					7.83	5.69	72.71	11.47		
					31.03	32.44	104.56	38.54		
					2.03	2.04	100.46	3.51		
					16.84	15.56	92.40	16.97		
	SUB TOTAL :			20.20	137.13	132.82	96.86	193.80	56.945	22.71
45	MALDA	SOUTH MALDA	3342		217.41	215.94	99.32	337.08		
					9.66	8.35	86.47	17.17		
					87.42	89.92	102.86	106.55		
					60.68	64.87	106.91	81.01		
					25.62	19.45	75.90	25.83		
	SUB TOTAL :			18.73	400.79	398.53	99.44	569.41	135.244	19.19
46	MALDA	NORTH MALDA	3343		126.82	118.88	93.74	185.58		
					23.24	21.34	91.83	45.26		

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
					46.57	49.83	106.99	58.87		
					26.98	28.28	104.83	34.59		
					36.20	31.91	88.14	37.97		
				SUB TOTAL :	25.44	259.81	250.24	96.32	364.42	143.015
47	DARJEELING	SILIGURI	3412		203.56	194.44	95.52	263.66		
					0.00	0.00	29.32	0.00		
					121.91	125.49	102.94	141.73		
					89.88	91.33	101.61	98.91		
					33.67	31.61	93.89	44.43		
SUB TOTAL :	6.95	449.02	442.87	98.63	550.73	49.330	8.22			
48	DARJEELING	KURSEONG	3413		13.53	11.56	85.46	17.68		
					0	0	0	0		
					9.49	10.07	106.20	11.24		
					1.83	2.86	156.46	3.11		
					1.20	1.15	95.47	2.07		
SUB TOTAL :	16.85	26.05	25.64	98.46	34.88	7.726	18.13			
49	DARJEELING	DARJEELING	3414		24.34	22.77	93.55	34.20		
					0	0	0	0		
					22.36	23.95	107.11	26.37		
					4.73	4.02	85.02	4.05		
					10.37	8.11	78.21	7.62		
SUB TOTAL :	14.23	61.80	58.85	95.23	72.08	16.173	18.33			
50	DARJEELING	SILIGURI SUB-URBAN	3415		88.16	74.38	84.37	110.27		
					0.19	0.12	62.37	0.15		
					56.22	58.13	103.40	68.42		

SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
					176.94	168.41	95.18	208.16		
					28.21	40.01	141.86	46.20		
				1.45	349.71	341.05	97.53	437.28	17.709	3.89
51	DARJEELING	KALIMPONG	3416		15.75	14.23	90.37	20.39		
					0	0	0	0		
					11.02	11.90	107.94	13.57		
					4.63	4.58	98.86	4.45		
					3.48	3.45	98.96	4.82		
				4.48	34.89	34.16	97.91	43.58	3.021	6.48
52	JALPAIGURI	JALPAIGURI	3422		127.15	104.11	81.88	160.05		
					0.81	0.40	48.91	0.56		
					83.69	83.94	100.29	95.90		
					183.42	197.96	107.93	238.29		
					37.18	34.56	92.94	43.12		
				5.66	432.26	420.96	97.39	544.81	48.203	8.13
53	JALPAIGURI	MAL	3427		45.19	37.21	82.33	59.56		
					0.31	0.16	52.01	0.19		
					26.96	27.16	100.77	30.58		
					88.44	87.19	98.59	98.99		
					16.94	23.61	139.35	34.17		
				2.75	177.84	175.33	98.59	224.76	9.676	4.13
54	UTTAR DINAJPUR	RAIGANJ	3432		127.38	118.38	92.94	183.77		
					12.41	12.29	99.02	21.90		
					73.97	75.30	101.80	87.95		
					40.55	44.91	110.75	54.20		

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					42.57	36.51	85.76	41.75		
SUB TOTAL :				14.95	296.87	287.38	96.80	390.96	83.899	17.67
55	UTTAR DINAJPUR	ISLAMPUR	3434		80.53	74.41	92.40	117.17		
					1.21	0.72	59.54	1.27		
					48.81	49.71	101.85	54.38		
					67.08	72.27	107.73	84.23		
					39.33	34.97	88.91	41.35		
SUB TOTAL :				18.57	236.96	232.08	97.94	300.71	76.349	20.25
56	COOCHBEHAR	COOCHBEHAR	3444		110.18	102.04	92.61	154.92		
					5.54	5.36	96.66	9.08		
					48.08	51.77	107.67	59.26		
					29.33	30.44	103.78	36.63		
					21.51	20.82	96.80	23.47		
SUB TOTAL :				4.55	214.64	210.42	98.04	285.54	19.592	6.42
57	COOCHBEHAR	MATHABHANGA	3445		59.73	55.08	92.21	89.49		
					5.86	3.56	60.67	5.76		
					25.24	24.64	97.64	28.40		
					10.91	13.89	127.33	16.76		
					3.90	3.78	96.84	5.15		
SUB TOTAL :				13.59	105.65	100.95	95.55	147.26	31.100	17.44
58	COOCHBEHAR	DINHATA	3446		55.28	54.01	97.71	85.44		
					6.67	5.51	82.57	9.20		
					24.52	24.01	97.91	27.73		
					6.38	6.11	95.73	8.04		
					3.73	3.70	99.26	5.37		

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SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
	SUB TOTAL :			24.04	96.58	93.34	96.64	135.99	49.262	26.59
59	ALIPURDUAR	ALIPURDUAR	3453		126.12	117.89	93.47	188.78		
					0.79	0.42	53.11	0.61		
					61.97	62.78	101.31	71.76		
					66.25	69.57	105.01	80.42		
					18.78	18.22	97.02	26.30		
	SUB TOTAL :			9.49	273.91	268.88	98.16	370.69	46.552	11.16
60	DAKSHIN DINAJPUR	BALURGHAT	3461		70.37	65.18	92.62	100.40		
					10.68	9.51	89.08	18.20		
					32.82	35.81	109.12	41.41		
					16.50	16.69	101.12	19.99		
					4.82	3.22	66.80	4.32		
	SUB TOTAL :			20.27	135.19	130.41	96.46	186.18	55.910	23.09
61	DAKSHIN DINAJPUR	BUNIADPUR	3462		51.78	46.48	89.76	72.88		
					7.52	6.29	83.65	11.23		
					24.62	28.57	116.06	32.86		
					21.62	22.61	104.58	26.00		
					5.56	4.78	85.93	6.91		
	SUB TOTAL :			25.50	111.10	108.73	97.87	152.50	56.655	27.09
62	PURBA BARDHAMAN	BURDWAN (NORTH)	3512		88.20	80.18	90.91	126.68		
					19.53	15.01	76.88	34.25		
					34.11	35.18	103.14	39.85		
					108.26	115.36	106.56	146.49		
					19.48	18.16	93.19	26.04		
	SUB TOTAL :			13.04	269.58	263.89	97.89	379.76	66.346	14.87

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SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUNT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
63	PURBA BARDHAMAN	KATWA	3515		79.23	76.09	96.04	121.31		
					21.62	20.43	94.49	43.14		
					28.40	30.46	107.24	35.44		
					16.09	16.67	103.60	20.22		
					18.07	14.98	82.89	17.23		
SUB TOTAL :				26.63	163.42	158.63	97.07	238.14	96.225	28.78
64	PURBA BARDHAMAN	KALNA	3516		106.01	99.78	94.12	150.37		
					21.72	19.79	91.12	40.17		
					50.89	53.31	104.76	63.11		
					14.76	15.97	108.24	19.60		
					38.92	36.52	93.84	46.84		
SUB TOTAL :				19.72	232.30	225.38	97.02	322.22	91.471	22.11
65	PURBA BARDHAMAN	MEMARI	3517		83.32	74.57	89.50	118.88		
					14.19	12.84	90.46	27.43		
					38.14	38.67	101.39	45.31		
					79.42	85.14	107.20	109.31		
					32.04	33.85	105.65	47.92		
SUB TOTAL :				9.65	247.11	245.06	99.17	352.23	40.875	10.40
66	PURBA BARDHAMAN	BURDWAN (SOUTH)	3518		162.49	148.13	91.16	214.27		
					14.71	11.31	76.90	24.65		
					85.41	86.79	101.61	100.05		
					213.05	228.64	107.32	278.23		
					21.77	14.91	68.49	21.88		
SUB TOTAL :				8.02	497.43	489.78	98.46	646.66	67.370	9.44
67	BIRBHUM	SURI	3521		78.62	75.32	95.80	117.14		

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					5.96	5.24	87.93	11.76		
					52.97	52.06	98.28	58.45		
					40.65	43.72	107.55	49.23		
					14.68	11.57	78.83	16.05		
				SUB TOTAL :				33.21	192.87	187.91
68	BIRBHUM	RAMPURHAT	3522		131.36	129.22	98.37	202.03		
					24.45	23.91	97.78	54.40		
					104.24	107.78	103.39	122.52		
					44.62	47.12	105.61	58.62		
					57.26	45.46	79.39	57.50		
SUB TOTAL :				26.78	361.94	353.49	97.67	495.61	197.483	28.49
69	BIRBHUM	BOLPUR	3523		96.36	94.77	98.35	149.82		
					26.72	24.26	90.79	65.40		
					41.37	45.85	110.83	53.55		
					41.58	43.41	104.41	52.96		
					40.04	36.95	92.29	46.12		
SUB TOTAL :				18.08	246.07	245.24	99.66	372.12	83.679	18.36
70	HOOGHLY	SREERAMPUR	3531		136.96	121.34	88.60	177.85		
					0.22	0.14	62.87	0.26		
					79.04	78.94	99.87	91.49		
					451.71	465.69	103.09	614.70		
					54.62	52.12	95.42	65.45		
SUB TOTAL :				14.61	722.56	718.23	99.40	951.88	169.523	15.12
71	HOOGHLY	CHANDANNAGAR	3532		152.93	144.53	94.51	206.46		
					1.92	1.62	84.45	3.67		

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					56.21	57.13	101.63	65.30		
					101.26	110.99	109.61	141.49		
					19.35	12.52	64.73	17.19		
				7.03	331.66	326.79	98.53	436.19	39.963	8.39
72	HOOGHLY	ARAMBAGH	3533		133.67	123.85	92.65	193.66		
					17.87	17.24	96.47	38.06		
					56.55	65.11	115.14	77.32		
					44.92	47.71	106.20	56.79		
					43.77	39.68	90.66	53.78		
				11.29	296.78	293.59	98.92	423.81	59.146	12.25
73	HOOGHLY	TARAKESWAR	3534		119.46	111.15	93.05	172.46		
					9.16	9.23	100.76	19.07		
					43.49	43.09	99.08	48.11		
					81.20	82.41	101.49	105.38		
					31.62	33.35	105.46	48.26		
				7.82	284.93	279.22	98.00	394.38	42.205	9.67
74	HOOGHLY	SINGUR-HARIPAL	3535		80.19	73.86	92.11	109.99		
					3.34	5.23	156.76	11.59		
					35.34	35.91	101.60	43.71		
					24.81	25.62	103.28	27.62		
					13.69	14.78	107.96	21.95		
				1.70	157.36	155.39	98.75	214.20	6.470	2.93
75	HOOGHLY	MOGRA	3536		110.84	109.05	98.39	169.17		
					10.23	9.88	96.58	18.73		
					44.35	49.87	112.45	58.06		

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SL. NO.	NAME OF REGION	NAME OF DIVISION	DIV_CODE	DIST. LOSS (in %)	BILLED AMOUMT (in RS.CR)	COLLECTED AMOUNT (in RS.CR)	COLLECTION EFFICIENCY (in %)	REALISED ENERGY/UNIT (in MU)	ENERGY/UNIT UNREALISED (in MU)	AT&C LOSS (in %)
					46.63	52.26	112.07	66.78		
					114.19	101.44	88.83	125.66		
		SUB TOTAL :		6.38	326.24	322.50	98.85	438.93	35.324	7.45
76	PASCHIM BARDHAMAN	ASANSOL	3541		203.28	190.07	93.50	275.53		
					0.03	0.00	9.69	0.01		
					80.13	83.61	104.34	94.40		
					203.50	214.18	107.19	321.94		
					86.01	70.98	82.53	103.52		
		SUB TOTAL :		7.38	572.96	558.84	97.54	791.01	84.645	9.67
77	PASCHIM BARDHAMAN	DURGAPUR	3542		183.20	181.96	99.32	303.89		
					0.97	0.80	82.89	1.44		
					74.79	73.96	98.89	91.09		
					1251.31	1237.83	98.92	2449.47		
					30.84	23.84	77.30	39.79		
		SUB TOTAL :		9.77	1541.11	1518.39	98.53	2884.27	360.055	11.10
SL. NOS. (1-77)	TOTAL	WBSEDCL DISCOM			9182.35	8549.67	93.11	12934.76		
					597.27	546.84	91.56	1152.85		
					4317.20	4508.75	104.44	5234.27		
					7388.15	7649.07	103.53	10560.93		
					2288.40	2099.47	91.74	2693.20		
				15.11	23773.366	23353.805	98.24	32870.340	6544.416	16.60

ANNUAL ENERGY ACCOUNTING AUDIT, 2021 - 2022, WBSEDCL

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

Authorized Signatory and Seal		Signature: -	
Name of the DISCOM:	WBSEDCL	Name of Energy Manager:	Rajeev Nandan Sinha
Full Address:	Vidyut Bhavan, DJ-Block, Sector-II, Salt Lake, Kolkata – 700 091	Registration Number:	EA-16727
Seal			



Anjan Majumdar

ANJAN MAJUMDAR
Certified & Accredited Energy Auditor
Bureau of Energy Efficiency
Ministry of Power, Govt. of India
Reg. No.- CEA 0167/AEA-0193

(Details of Feeder -wise Losses)**Period From 1st Apr, 2021 - 31st March, 2022**

SI No.	Zone	Received at Circle (In MU)	Received at Division (In MU)	Received at Sub-division (In MU)	Name of the Station	Feeder Code/ID	Feeder Name	Type of Feeder (Urban/Mixed/Industrial/Agri cultural/Rural)	Type of feeder meter (AMI/AMR/Other)	Received at Feeder (Final in MU)	Feeder Consumption (In MU)	Final Net Export at Feeder Level (In MU)	T&D losses (MU)	AT&C losses (MU)	% Data Received through Automatically (if feeder AMR/AMI)	Remarks
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WBSEDCL is not maintaining or recorded any data regarding Feeder wise losses till FY 21-22

Photo Gallery in Field Survey:



Figure: Discussion with Addl. Chief Engineer at WBSEDCL



Figure: Discussion with Engineer at M-III Substation



Figure: Verification of Energy Meters at M-III Substation



Figure: Visit at M-III Substation

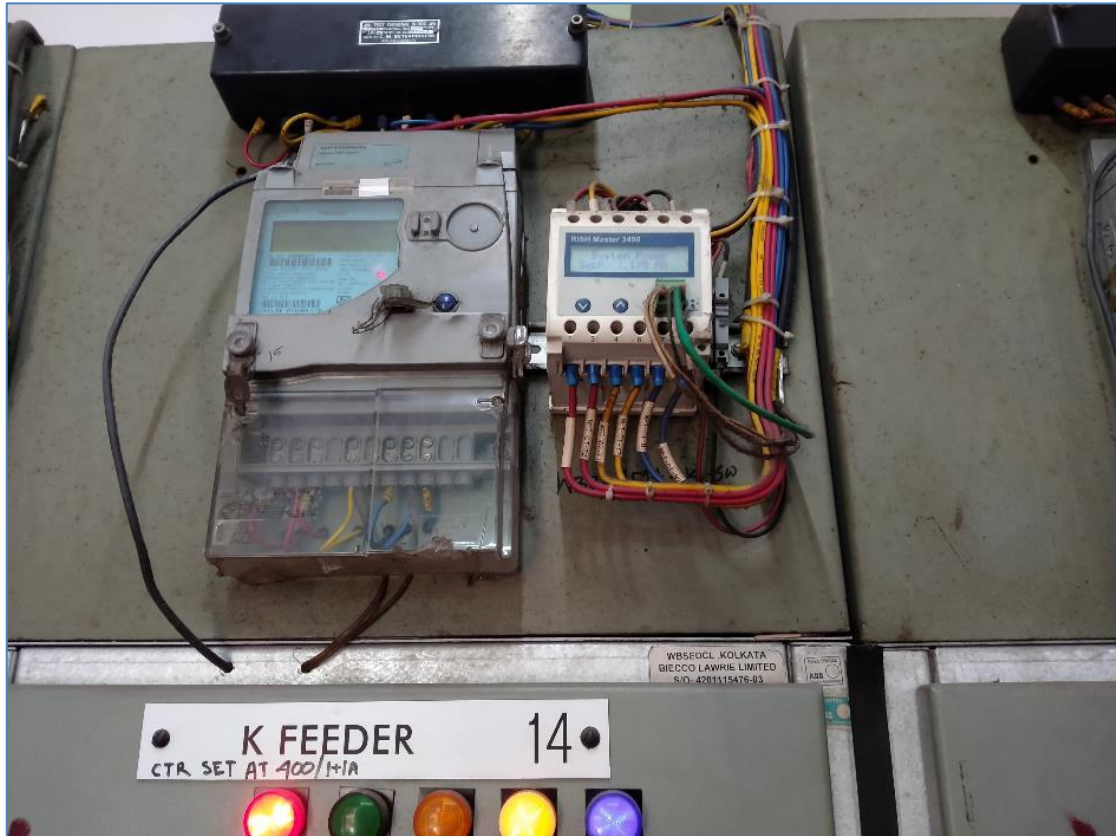


Figure: Energy Meter installed at Substation



Figure: DTR with online metering system

-: END OF REPORT :-