

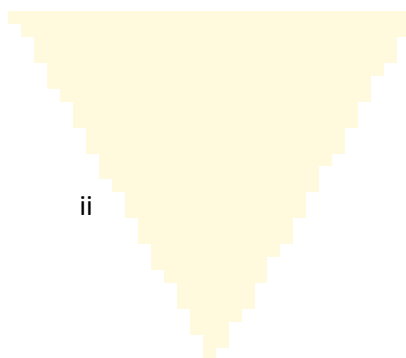
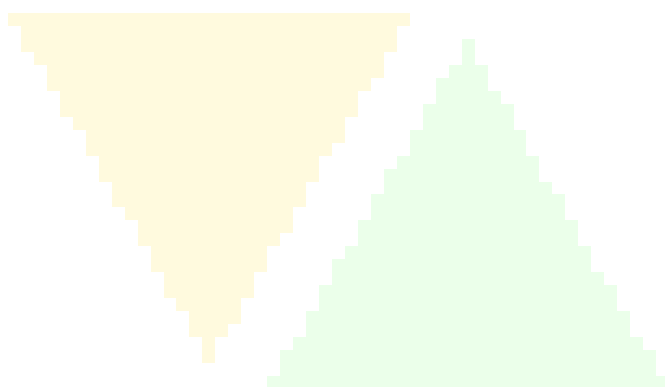
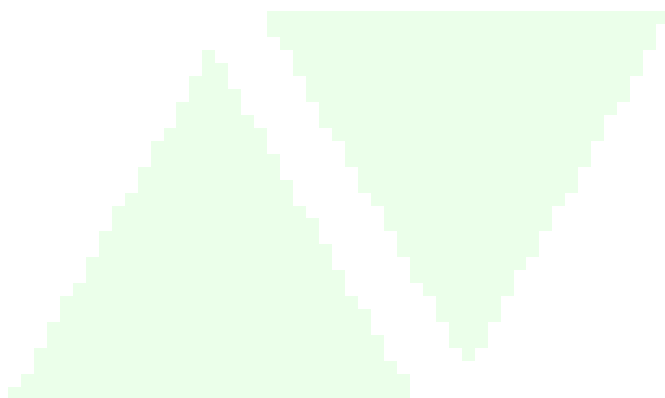
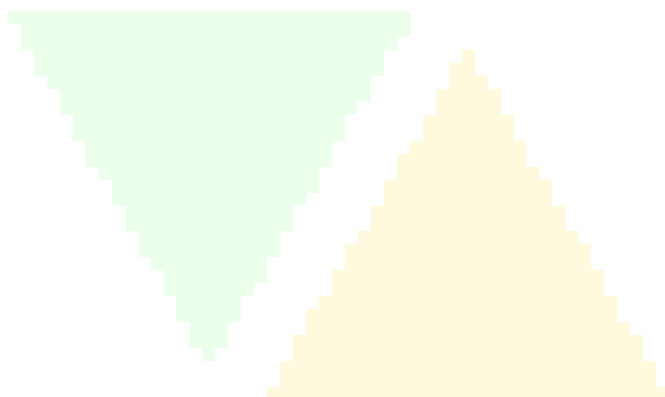


Ethiopian Electric Utility

Customer Satisfaction Survey

By Ethiopian News Agency

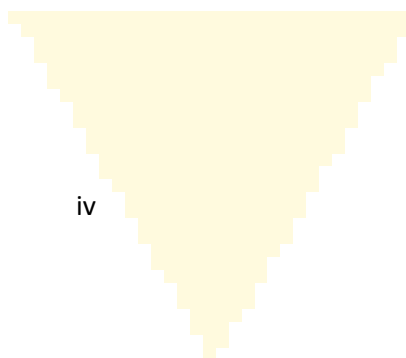
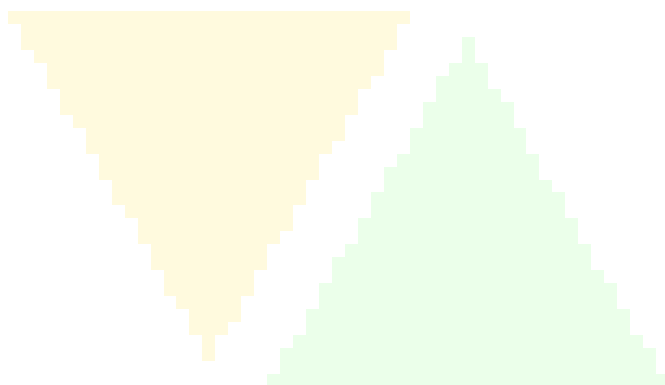
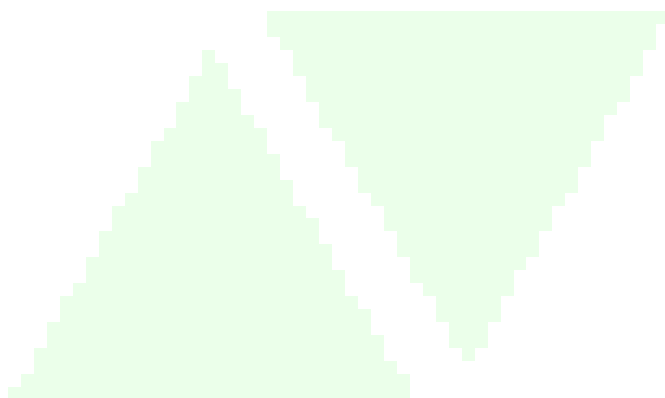
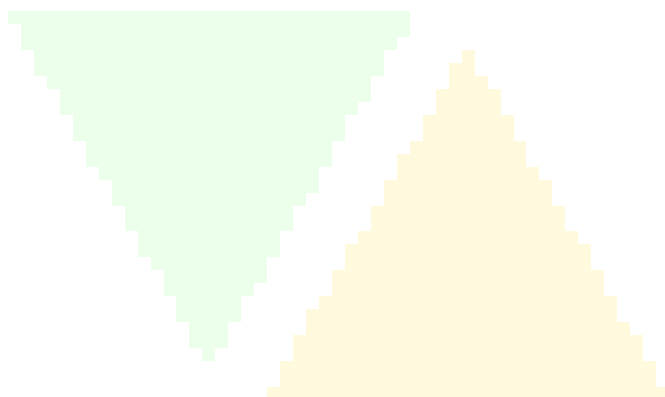
July 2025





Ethiopian Electric Utility Customer Satisfaction Survey

*By Ethiopian News Agency
July 2025*





Abstract

The purpose of this survey was to evaluate customer satisfaction with EEU's service delivery. It was conducted across 32 EEU regions and included 175 service centers operating in 12 regions of the country as well as two city administrations. Targeting 13,200 customers, the study collected data from June 8 to June 27, 2025. A total of 88 data collectors and 47 supervisors were involved in the process.

The study utilized a three-stage sampling procedure, with participants ultimately selected via simple random sampling. The study surveyed 10,948 regular customers and 2,252 key customers. Additionally, 500 more participants were recruited through 47 focus group discussions, each comprising 10–12 diverse individuals.

The survey data were collected using Kobo Toolbox's computer-assisted personal interviewing (CAPI) software. Customer satisfaction was evaluated using metrics adapted from the J.D. Power model, focusing on power quality and reliability, billing and payment, corporate citizenship, price, communication, and customer contact.

The study reveals that average customer satisfaction with EEU's service delivery is 66.2%, reflecting a 1.2% increase compared to the previous survey result of 65%.

In terms of customer type, the survey results indicate that the satisfaction is 66.2% for both regular and key customers.

The survey results indicate that customer satisfaction has improved across all EEU services, with the exception of power quality.



Lists of acronyms

AMI	Advanced Metering Infrastructure
CAPI	Computer Assisted Personal Interview
CBE	Commercial Bank of Ethiopia
CRM	Customer Relation Management
CMRI	Common Meter Reading Instrument
EAA	East Addis Ababa District
EEU	Ethiopian Electric Utility
ENA	Ethiopian News Agency
ERP	Enterprise Resource Planning
FGD	Focus Group Discussion
GPRS	General Packet Radio Service
Key Customers	Customers who have energy meter above 150 kw
KI	Key Informants
KV	Kilo volt
KMO	Kaiser–Meyer–Olkin
NAA	North Addis Ababa District
POS	Point of Sale
Regular Customers	Customers who have energy meter below 150 kw
SAA	South Addis Ababa District
CSC	Customer Service Center
ESQ	Electric Service Quality
SERVQUAL	Service Quality
SPSS	Statistical Package for Social Science
SE	Southern Ethiopia
WAA	West Addis Ababa District
Waiting Customers	Customers who requested new energy meter and waiting for it.



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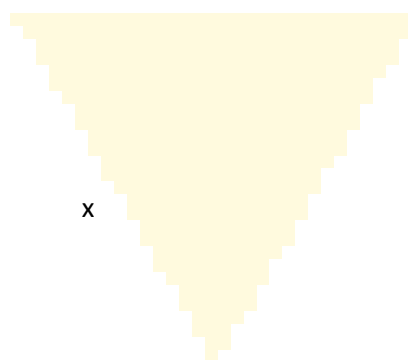
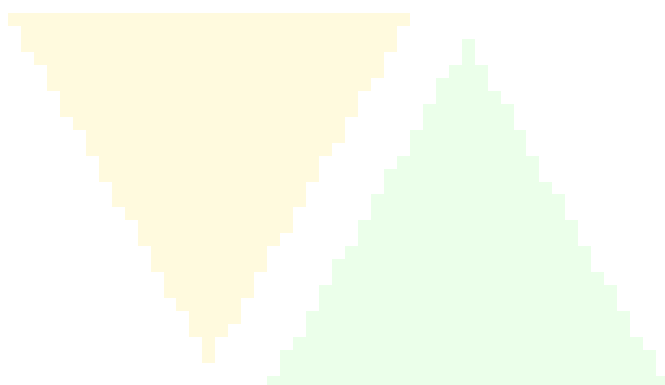
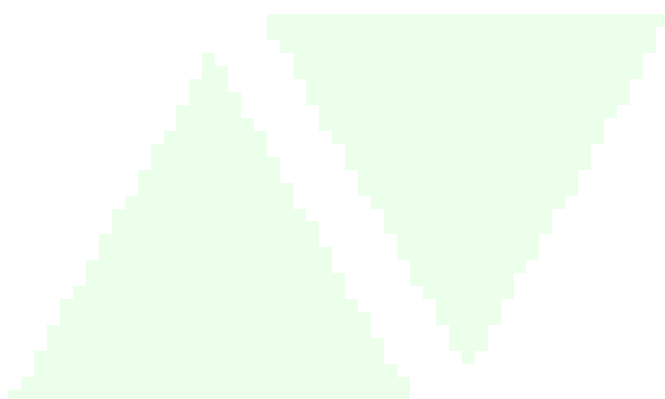
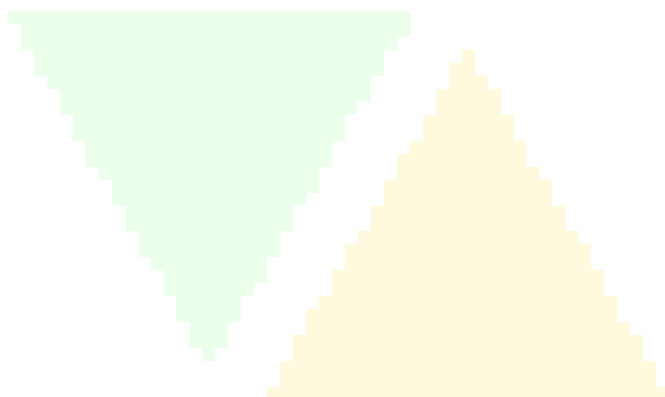


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CHAPTER ONE

INTRODUCTION

1.1. Background

Ethiopian Electric Utility (EEU) is responsible for managing the distribution network, overseeing 45/66 KV sub-transmission, implementing universal electrification projects, and supplying and selling electricity to consumers both within the country and at its borders. EEU also handles energy management, the construction and maintenance of electric lines, and the enforcement of electricity tariffs approved by the regulatory body. To ensure reliable electricity distribution and services that meet international standards, EEU is working to expand electricity availability and improve the necessary infrastructure in all regions of the country.

The vision of Ethiopian Electric Utility (EEU) aims to “Become the utility that fully energizing the Ethiopian economy and people in 2030.” Its mission is “To become the utility that underpins the economy and social transformation through delivery of cost effective, safe, reliable and high-quality power. Bulk Power purchase and sale, construct & operate off grid Generation, sub-transmission and distribution Networks. The institution has prioritized several key activities to enhance service delivery, including increasing the number of new customers seeking electricity services, ensuring timely and efficient revenue collection, reducing power outages and fluctuations, and providing transparent and efficient customer service.

Through its effective initiatives, the EEU has successfully increased the number of new electricity customers from 501,588 to 5,210,878, According to the institution's 2017 performance report, this represents an increase of 75,298 new customers, or 17.7%, compared to the previous fiscal year (2024).

According to the EEU's annual performance report, the EEU successfully increased the number of new electricity customers from 501,588 in the previous fiscal year to 5,210,878. This marks an increase of 75,298 or (17.7%) new customers compared to the previous year.

The Ethiopian Electric Utility (EEU) conducts an annual independent customer satisfaction survey to assess service quality and identify areas for improvement. The findings from these



surveys are utilized to enhance service delivery and address customer concerns effectively. The past four consecutive survey results have demonstrated a consistent improvement in customer satisfaction with the EEU's service delivery.

Consequently, the Ethiopian News Agency (ENA), leveraging its extensive experience from conducting similar surveys over the past four years, carried out this survey in accordance with its agreement with the Ethiopian Electric Utility (EEU).

1.2. Objective of the Survey

1.2.1. General Objective

The primary aim of the study is to assess the level of customer satisfaction with the services provided by Ethiopian Electric Utility (EEU), identify the underlying causes of customer complaints and dissatisfaction, and propose actionable recommendations to enhance service quality and address identified gaps.

1.2.2. Specific Objective

- To know the level of satisfaction of customers with the EEU's service delivery;
- To identify the causes of customer dissatisfaction with the EEU's service delivery;
- To identify comparison of result of satisfaction among regions & previous years.

1.3. Scope of the Survey

The survey was conducted across 32 EEU regions and included 175 service centers operating in 12 regions of the country as well as two city administrations. 10,948 regular customers and 2,252 key customers participated in the survey. The survey focused on the satisfaction-related dimensions derived from JD Power's model such as power quality and reliability, billing and payment, communication, customer care, corporate citizenship and price. the survey collected data from June 8 to June 27, 2015.

1.4. Limitation of the study

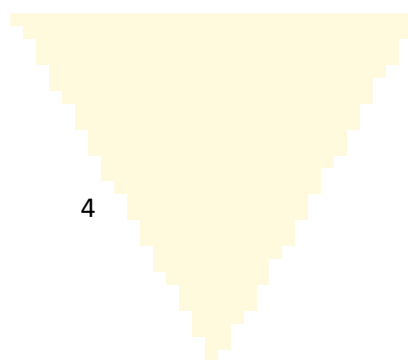
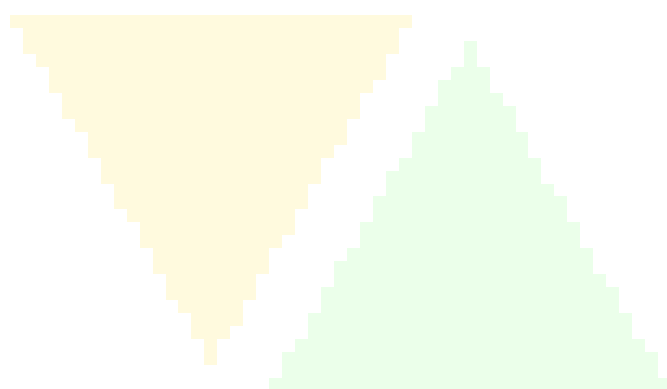
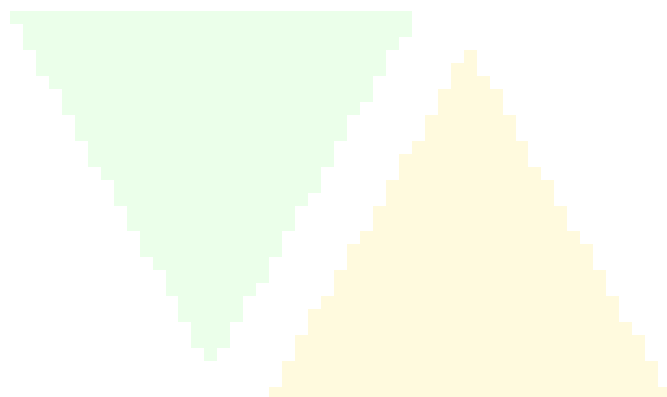
The study did not consider external factors beyond the institution's control that may affect the quality and reliability of the electricity supply. For instance, the impact of Ethiopian Electric



Power, the institution's power supplier, on customer dissatisfaction and other such external factors were not measured in this study.

1.5. Organization of the study

The first chapter outlines the study's background, objectives, scope, and limitations, providing the foundational context for the research. In chapter two, relevant literature is reviewed, and the conceptual framework guiding the survey is presented, establishing the theoretical underpinnings of the study. Chapter three details the research design, data collection methods, sampling techniques, and analytical approaches employed in the survey. The findings from the survey are discussed and analyzed in chapter four, highlighting key insights and patterns observed in the data. The final chapter interprets the results, draws conclusions, and offers recommendations based on the study's findings.





CHAPTER TWO

REVIEW OF LITRATURES

2.1. Definition of Customer Satisfaction

Customer satisfaction is a psychological condition that arises from a customer's evaluation of a service after using it. (Kurtz & Clow (2016) It refers to how well a service meets or exceeds customer expectations. it also encompasses customer needs, service price and characteristics, efforts to protect customer interests, and social values related to human relationships.

According to Oliver (1980), customer satisfaction is the "overall assessment based on the entire purchase and consumption experience." This evaluation is shaped by both cognitive and emotional aspects, such as perceived value, previous expectations, and actual experiences with the service. Additionally, satisfaction can be viewed as both transactional, related to specific interactions, and cumulative, reflecting the overall service experience.

Numerous studies have examined the connection between service quality and customer satisfaction, with most agreeing that service quality is a major factor influencing customer satisfaction. In other words, higher service quality increases the likelihood of customer satisfaction. Researchers like Zeithaml, Berry, and Parasuraman (1996) emphasize that service quality is a crucial driver of customer satisfaction. When customers perceive high service quality, they are more satisfied because they believe their expectations have been met or exceeded.

However, the relationship between service quality and customer satisfaction is not always straightforward. Various factors, such as customer expectations, the nature of the service, and the type of service provider, can affect how service quality impacts satisfaction. For instance, services in industries like hospitality may involve a stronger emotional component, while services such as transportation or telecommunications may be more focused on functionality.



2.2. Theories of customer Satisfaction

Expectation Disconfirmation Theory

Expectation Disconfirmation Theory is a psychological model commonly used in customer satisfaction surveys to evaluate how expectations align with actual performance or experiences. In the realm of customer satisfaction, it explains how customers assess whether a product, service, or experience meets, surpasses, or falls short of their pre-purchase expectations.

According to the theory (Oliver, 1980), customer satisfaction is determined by comparing expectations to perceptions. If the service meets or exceeds expectations, the customer feels satisfied. However, if the service does not meet expectations, dissatisfaction occurs. In this way, service quality directly influences customer perceptions by shaping their expectations both before and during the service experience.

Based on how perceptions align with expectations, the theory suggests three possible outcomes: Positive Disconfirmation (Satisfaction): If the perception exceeds expectations, customers feel they received more than anticipated, resulting in satisfaction. Negative Disconfirmation (Dissatisfaction): If the perception falls short of expectations, the customer feels disappointed, leading to dissatisfaction. Confirmation (Neutral Satisfaction): If the perception matches expectations, the customer experiences neutral satisfaction or indifference.

A key component of Disconfirmation Theory in customer satisfaction surveys is identifying the gap between expectations and perceptions. By measuring this gap, you can determine if customers feel they received more, less, or exactly what they expected. According to Disconfirmation Theory, the degree of disconfirmation influences future customer behavior. Positive disconfirmation may lead to repeat business, while negative disconfirmation can result in complaints or switching to a competitor.

The goal of applying Disconfirmation Theory is to gather insights that help businesses understand how they can improve their offerings. For example: If expectations are too high (resulting in negative disconfirmation), the company might need to manage customer expectations better. If the actual experience consistently falls short (negative disconfirmation),



improvements in the product or service are necessary. If positive disconfirmation is frequent (satisfied customers), the business can use this as a selling point in marketing.

In summary, Disconfirmation Theory in customer satisfaction surveys provides a structured way to assess the gap between customer expectations and their actual experiences, helping businesses understand the root cause of satisfaction or dissatisfaction and improve their offerings accordingly.

Service Quality Theory

Service quality is a major area of research in the service sector, as it significantly influences customer satisfaction, operational efficiency, and financial performance. It involves evaluating and enhancing the reliability, accessibility, and overall standard of services delivered to consumers. Therefore, service quality is essential for maintaining customer trust, supporting industrial production processes, and building effective institutions.

Electric Service Quality (ESQ) is a critical area of research within the energy and utility sectors, as it directly impacts customer satisfaction, operational efficiency, and financial performance for electric utilities. It focuses on evaluating and improving the reliability, accessibility, and overall quality of electrical service provided to consumers. It includes various aspects of the electricity service that impact the satisfaction of customers, the performance of electrical equipment, and the efficient operation of the electrical lines (Senthil Nathan 2011). Therefore, Electric Service Quality is essential for maintaining consumer trust, supporting industrial processes, and ensuring efficient energy consumption. Accordingly, the following are the key factors affecting customer satisfaction in electric services:

Power Reliability: Customers expect a consistent and uninterrupted power supply. Frequent outages or voltage fluctuations can lead to dissatisfaction.

Power Restoration Time: Customers expect not only a quick restoration of power but also clear communication about when the electricity will be restored. It's crucial for an electricity company to respond quickly, identify the cause of the outage, and resolve it efficiently to minimize inconvenience and meet customer needs. In addition to swift restoration, customers require a clear, understandable timeline outlining how long the restoration process will take.



Quick new energy meter connections: Customer satisfaction with the timely service provided by electricity companies for new energy meter connections plays a crucial role in shaping the company's reputation and overall service quality. Electricity companies that offer a fast, streamlined, and transparent process for new meter connections, along with excellent customer support, are more likely to experience higher levels of customer satisfaction.

Affordability: Customers are concerned about the cost of their electric bills. Competitive rates, especially for low-income households, can enhance satisfaction.

Clear and Accurate Billing: Transparent, easy-to-understand billing without errors is essential. Customers appreciate detailed explanations of charges, such as those for peak usage, late fees, or extra services.

Responsiveness: Customers expect prompt and helpful support when issues arise. Access to customer service via phone, email, or chat with minimal wait times is crucial.

Problem Resolution: The effectiveness of resolving complaints and concerns plays a large role in satisfaction. Offering self-service options for common issues (like paying bills or reporting outages) also adds convenience.

Knowledgeable Representatives: Well-trained staff who can answer questions and provide useful advice are a major factor in customer satisfaction.

Smart Metering and Energy Management: Customers appreciate the ability to monitor their energy usage through smart meters and digital platforms. Offering real-time usage data and recommendations on energy efficiency can improve satisfaction.

Timely Notifications and Emergency Alerts:

Customers do value proactive communication about scheduled outages, maintenance work, or service interruptions. Effective use of SMS, email, or app notifications helps in this regard. During extreme weather or emergencies, providing real-time updates on power outages and expected restoration times is essential for customer confidence.



Efficient Complaint Resolution: The way a company handles complaints, such as acknowledging complaints quickly and offering compensation, when necessary, can significantly influence customer satisfaction.

Electric Service Quality is also influenced by how customers perceive the quality of service, which includes factors like responsiveness, communication, and customer support during power outages or disruptions. Beyond technical performance, it also encompasses safety measures to prevent accidents and environmental sustainability, such as reducing emissions from power plants or minimizing waste from distribution networks.

Several methodologies have been developed for measuring ESQ, including: Outage Frequency and Duration, Voltage Quality and Customer Satisfaction Surveys. Studies suggest that a low frequency of outages and short restoration times are strong indicators of good ESQ. Utilities often track metrics like System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) to assess service reliability. Voltage sags, spikes, and harmonics can significantly affect the quality of electricity. Research indicates that customers in sensitive industries (like manufacturing and IT) have higher expectations regarding voltage quality.

Many studies suggest the use of predictive analytics to anticipate failures before they occur, based on data collected from sensors and smart meters. This proactive approach reduces the need for emergency repairs and improves system reliability. Some research emphasizes the importance of managing consumer demand, especially during peak times, to ensure that the grid remains stable and service quality is maintained. This can involve incentivizing customers to reduce consumption during peak hours through dynamic pricing or demand-response programs. Also, improving communication with customers is an essential strategy for enhancing ESQ. Customers appreciate timely updates on outages, estimated restoration times, and other relevant information. Several studies highlight the importance of social media and mobile apps as effective communication channels for electric utilities.

2.3. Empirical Literatures

A review of related literature shows that numerous studies have been conducted over the years regarding electric utility services.



Irechukwu M. E., & colleagues (2021) conducted a study titled "Assessment on Power Distribution Network Planning in Sub-Saharan Africa," which was presented at the 2021 International Conference on Electrical, Computer, Communications, and Mechatronics Engineering. The study focuses on the challenges and opportunities related to planning and improving the power distribution networks in the region. The study concludes that addressing the power distribution network challenges in Sub-Saharan Africa requires comprehensive and multi-faceted solutions. It emphasizes the importance of upgrading outdated infrastructure, reducing energy losses, and improving system efficiency. The study highlights the need for significant investments in both the expansion and modernization of distribution networks to ensure reliable electricity access across both urban and rural areas.

The study titled "Customer Engagement and Its Impact on Satisfaction with Electricity Services in East African Countries: A Case Study of Uganda and Ethiopia" published in Energy for Sustainable Development in 2020 explores the relationship between customer engagement and satisfaction with electricity services in Uganda and Ethiopia. Overall, the major findings focus on how customer engagement impacts perceptions of service quality, with specific insights into the dynamics of the energy sectors in Uganda and Ethiopia. The study likely recommends improvements in engagement strategies to enhance customer satisfaction and service delivery across East African countries. The study offers recommendations on improving customer engagement practices, such as developing more inclusive communication strategies, increasing transparency in billing, or investing in technologies that allow customers to track their consumption. It may suggest that electricity providers focus on strengthening engagement programs as a key strategy to improve customer satisfaction and loyalty.

Similarly, Joseph and Gerry (2022) examined the impact of service quality dimensions on customer satisfaction in Tanzania's energy sector. The study found a gap between customer expectations and the actual service provided by TANESCO, with expectations exceeding the perceived service quality. In general, Joseph and Gerry (2022) concluded that improving service reliability, responsiveness, infrastructure, and billing transparency are key to enhancing customer satisfaction in Tanzania's energy sector. Addressing these service quality dimensions would not only lead to better satisfaction but also potentially increase customer loyalty and overall trust in the energy provider.



Temam's (2013) research on customer satisfaction with Ethiopian Electric Utility (EEU) services examines the factors that influence customer satisfaction regarding the electricity services provided by EEU in Ethiopia. The research concluded that customer satisfaction with the Ethiopian Electric Utility is primarily influenced by factors such as power supply reliability, billing issues, service quality, affordability, and customer service. It emphasizes the need for improvements in EEU's operations, including better maintenance, customer support, transparency in billing, and addressing affordability concerns, to increase customer satisfaction and trust in the utility.

The study by Wodajo (2015), which focuses on customer satisfaction in the Southern Addis Ababa region of Ethiopia, examines the factors affecting customer perceptions of electricity services, particularly from the Ethiopian Electric Utility (EEU). The study concluded that customer satisfaction in the Southern Addis Ababa region is influenced by factors such as service reliability, billing accuracy, customer service quality, and perceptions of fairness. Improvements in these areas are likely seen as essential for increasing customer satisfaction with EEU's electricity services in the region.

Israel Birhanu's 2015 study on customer satisfaction with Ethiopian Electric Utility (EEU) services in North Addis Ababa likely explored the factors influencing how customers perceive the electricity services provided by EEU in that specific region. The study found that customer satisfaction with EEU services in North Addis Ababa is heavily influenced by service reliability, billing accuracy, customer service quality, affordability, and the condition of infrastructure. Recommendations for improvement included enhancing the reliability of electricity, improving billing transparency, addressing affordability concerns, and boosting the efficiency of customer service and complaint handling.

The doctoral dissertation by Akaranga, S. J. (2014) titled "Factors Influencing Customer Satisfaction with Service Provision by Kenya Power: A Case of Nairobi County, Kenya" explores the various factors that impact customer satisfaction with the electricity services provided by Kenya Power in Nairobi County. The study found that factors such as service reliability, accurate billing, customer support quality, affordability, and infrastructure are critical in determining customer satisfaction with Kenya Power's services in Nairobi County. It also



highlighted the need for improvements in these areas to enhance overall satisfaction levels and reduce customer complaints.

The research by M. T. Begovic, A. Banjac (2005), examines the electricity supply sector in developing countries, focusing on customer satisfaction. It identifies several customer segments, including low-income households, commercial businesses, and high-income residential users, each with varying levels of satisfaction influenced by service reliability, price sensitivity, and access to customer support. The study suggests that electric utility companies can enhance satisfaction by segmenting their customers and tailoring services to meet the specific needs of each group, such as offering flexible pricing options or improving service reliability in high-priority areas.

The study "Customer Satisfaction with Electricity Services in Rural Sub-Saharan Africa" by Manda, J., et al. (2015), published in the Journal of Energy in Southern Africa, examines customer satisfaction with electricity services in rural areas of Sub-Saharan Africa. The study underscores the major challenges faced by rural consumers in Sub-Saharan Africa with respect to electricity services, including unreliable supply, high costs, poor customer service, and inadequate infrastructure. Addressing these issues is crucial for improving customer satisfaction in rural areas and ensuring better access to reliable, affordable electricity.

Similarly, a study titled "Customer Satisfaction with Electricity Company of Ghana" by Energy Economics & Policy (2017) focuses on evaluating the level of satisfaction among customers of the Electricity Company of Ghana (ECG). The study concluded that improvements in service reliability, billing accuracy, customer service, and affordability are key to improving overall satisfaction with ECG. Recommendations for ECG could include: enhancing power supply reliability through investment in infrastructure and maintenance, upgrading the billing system to ensure more accurate readings and transparent charges, improving customer service by providing better training, faster response times, and clearer communication and reviewing and potentially reducing tariffs to make electricity more affordable, especially for low-income customers. In general, the study emphasize that customer satisfaction is closely linked to service quality, and addressing the issues identified could lead to improved relationships between ECG and its customers.



A 2016 study in *Energy Policy* examined how service quality factors like supply continuity, reliability, and customer support impacted customer satisfaction in Nigeria's electricity sector. It found widespread dissatisfaction due to unreliable power supply and slow technical support. However, improvements in customer service, such as quicker complaint resolution and clearer billing, positively influenced satisfaction. The study concluded that reliability, service responsiveness, and billing transparency are essential for improving customer satisfaction in Nigeria's electricity sector. It also recommended customer-focused reforms to enhance satisfaction.

A 2019 study in the *African Journal of Economic and Management Studies* explored the link between customer satisfaction and loyalty to electricity companies in South Africa. It found that satisfaction was largely influenced by the company's responsiveness to complaints and reliable electricity. Despite frequent outages, customers who felt their concerns were addressed promptly were more likely to remain loyal. The study emphasized the importance of strong customer relationships for improving satisfaction and loyalty.

2.4. J.D. Power Customer Satisfaction Index Model

The J.D. Power model of customer satisfaction in electric service focuses on understanding how customers perceive their electric utility companies. J.D. Power conducts surveys and studies to measure consumer satisfaction, helping utilities understand their performance and identify areas for improvement. The model typically assesses multiple factors that contribute to a customer's overall satisfaction with their electric service.

The core dimensions in the J.D. Power electric utility customer satisfaction model include: Power Quality & Reliability, Price, Billing & Payment, Customer Service, Communications, Corporate Citizenship, Energy Efficiency Programs, Digital Service Options and Outage Communications and Restoration. Customers expect their electricity to be available without frequent outages or fluctuations. High customer satisfaction is linked to fewer power outages, quick restoration of service after disruptions, and stable voltage levels.

The cost of electricity also plays a significant role in customer satisfaction. J.D. Power assesses how customers perceive their utility's pricing structure, whether they feel it is fair, transparent,



and competitive compared to other options in the market. On the other hand, Clarity and accuracy of billing are key factors. Customers are more satisfied when they understand their bills, can easily access payment options, and have flexibility in how they pay. Any confusion or errors in billing often lead to dissatisfaction.

The effectiveness of customer service is a major part of the model. This includes the quality of interactions with customer service representatives, the ease of reaching support, and how well the utility resolves issues, complaints, or inquiries. High customer satisfaction correlates with responsive, knowledgeable, and friendly customer support.

Electric Service Utilities that provide clear and timely information about service interruptions, maintenance schedules, and energy-saving tips tend to score higher on customer satisfaction. Proactive communication, especially during outages or service changes, enhances trust and satisfaction. Additionally, Corporate Citizenship is related to the company's being seen as trustworthy, responsive, knowledgeable, customer-focused, hardworking, and community-minded.

Many electric utilities offer energy efficiency programs or rebates to encourage customers to reduce their energy use or transition to more sustainable energy options. Satisfaction is higher when customers are aware of and can easily participate in such programs. The availability of online services like billing, outage tracking, and the ability to report issues or make payments through a mobile app can greatly improve customer satisfaction.

Customers increasingly expect the convenience of managing their account digitally. How utilities manage and communicate during power outages is a crucial aspect of customer satisfaction. Customers expect real-time updates, estimated restoration times, and fast resolution.

Therefore, J.D. Power uses these factors to generate annual satisfaction rankings across different regions and sectors, which can serve as a benchmark for utilities to gauge their performance. The rankings are often segmented based on different customer types (e.g., residential vs. business customers), and geographic regions. (J.D. Power & Associates).

Power Quality and Reliability: - Power quality refers to the consistent and high-quality supply of electricity and power reliability refers to the uninterrupted supply of power. SAIDI (System



Average Interruption Duration Index) and SAIFI (System Average Interruption Frequency Index) measure the reliability of the electric power system. Customers expect a consistent and uninterrupted power supply. Frequent outages or voltage fluctuations can lead to dissatisfaction.

Price: - The price customers pay for electricity is tied to whether customers see their monthly electric bills as transparent, reasonable and fair. Customers always examine the proportionality and rationality of electricity consumption price. Consumers tend to assess electricity pricing not only by monthly costs but by how well pricing aligns with service excellence and their past experiences.

Billing and Payment: - it is related to the accuracy and timely meter reading and it assesses how the electric utility billing and payment process is suitable and time saving. Offering convenient, easy-to-use payment options and providing clear information about charges significantly boost customer satisfaction. In contrast, unclear bills, unexpected fees, and cumbersome payment processes can lead to frustration, distrust, and lower satisfaction.

Communications: - It encompasses how effectively information flows between the provider and its customers covering outage alerts, billing updates, usage reports, and all other essential notifications.

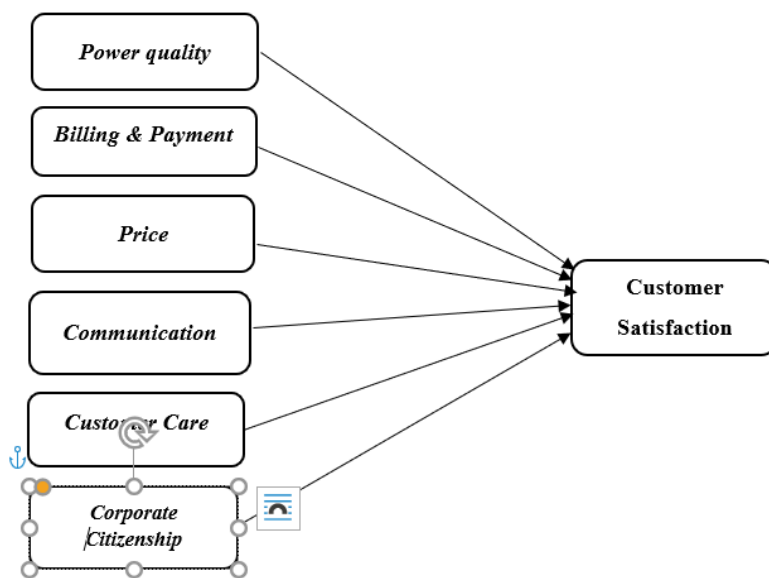
Corporate Citizenship: - It is related to providing customer-focused and equitable electricity services to the community, engaging the public in the institution's mission, supporting communities in need with voluntary services, and generally addressing emergency issues that arise within the community related to the institution's service delivery.

Customer handling: - it encompasses the assistance and ethical support provided to customers through various channels such as phone calls, social media interactions, and in-person visits when they seek to submit feedback, report issues, or request services.



2.5. Conceptual Framework of the Study

This survey employed the J.D. Power model to assess customer's satisfaction.



Source: JD Power



CHAPTER THREE

METHODOLOGY

1.1. Research Design and approach

The survey primarily employed a descriptive research design. A mixed-methods approach was applied, combining both quantitative and qualitative data, to ensure reliable results. Quantitative data was used to measure the level of customer satisfaction, whereas qualitative data provided deeper insights into the causes of dissatisfaction and allowed for comparison with the responses to the closed-ended questionnaire. In addition, inferential analysis was employed to assess the impact of factor variables on customer satisfaction and to test the correlations among them.

1.2. Target Population and Sample Size

According to C.R. Kothari, the sample size should be determined thoughtfully: a sample that is too small may not accurately represent the population, while one that is too large can be expensive and time-consuming to analyze. The sample size for this study was determined by the Ethiopian Electric Utility. All its 32 regional branches were included, and 30% (175) of the 583 service centers within these regions were selected for analysis. The number of customers included in the study was determined proportionally to the customer distribution across the EEU's regions. Accordingly, 10,948 regular customers and 2,252 key customers, making a total of 13,200 participants, were surveyed. A detailed breakdown of the study sample is presented in the table below.

Table 1 Distribution of Sample by Region, District and Customer Type

Region/City Administration	EEU Regions	Service Centers	Regular Customers	Key Customers	Total Sample
Addis Ababa	East A. A	East A. A No. 3	50	30	80
		East A. A No. 6	90	50	140
		East A. A No. 7	70	35	105
		East A. A No. 9	75	25	100
	Total		285	140	425
	South A. A	South A. A No. 5	75	20	95
		South A. A No. 6	80	30	110
		South A. A No. 9	90	85	175
		South A. A No. 3	80	25	105
		South A. A No. 10	80	35	115



Region/City Administration	EEU Regions	Service Centers	Regular Customers	Key Customers	Total Sample
	Total		405	195	600
	West A. A	West A. A No. 1	80	25	105
		West A. A No. 6	65	30	95
		West A. A No. 2	85	35	120
		West A. A No. 4	60	15	75
	Total		290	105	395
	North A. A	North A. A No. 1	75	25	100
		North A. A No. 7	55	40	95
		North A. A No. 4	60	30	90
		North A. A No. 5	80	30	110
	Total		270	125	395
Afar	Afar	Semera	120	20	140
		Dicheto	37	8	45
		Mille	35	1	36
		Aliwuha	25	1	26
		Asaita	120	13	133
	Total		337	43	380
Amhara	Bahirdar	Bahirdar No. 1	95	65	160
		Durbete	35	8	43
		Debretabor	65	8	73
		Debretabor No.2	25	4	29
		Bahirdar No. 3	70	27	97
		Adiskidam	24	3	27
		Wereta	43	30	73
		Dangila	45	8	53
	Total		402	153	555
	Dessie	Dessie No. 2	70	7	77
		KombolchaNo. 2	46	20	66
		Harbu	35	5	40
		Kutaber	26	2	28
		Hayik	48	3	51
		Bati	63	3	66
		Dessie No. 3	55	3	58
		Albeku	23	1	24
	Total		366	44	410
	Gonder	Gonder No. 1	90	10	100
		Koladiba	45	4	49
		Debark	60	3	63
		Gonder No. 2	80	6	86
		Dabat	50	10	60
		Chilga	45	25	70
	Total		370	58	428
	Debrebirhan	Deneba	45	1	46
		Debrebirhan No.2	65	20	85
		Shewarobit	70	5	75
		Lemi	45	5	50
		Debrebirhan No.1	75	8	83
		Chacha	47	20	67
	Total		347	59	406



Region/City Administration	EEU Regions	Service Centers	Regular Customers	Key Customers	Total Sample
	Debrebmarkos	Debrebmarkos No.2	75	10	85
		Dejen	50	5	55
		Bichena	55	3	58
		Debrework	32	1	33
		Debrebmarkos No.1	60	10	70
		Yejube	32	3	35
		Yedwuha	32	3	35
	Total		336	35	371
	Woldia	Woldia No.2	70	3	73
		Gashina	60	5	65
		Mersa	100	1	101
		Muja	45	1	46
	Total		275	10	285
Benishangul	Benishangul	Bambasi	55	3	25
		Assosa	130	5	135
		Mengie	40	1	74
	Total		225	9	234
Gambela	Gambela	Ababo	50	1	51
		Gambela No.1	110	8	118
		Baromeda	80	5	85
	Total		240	14	254
Direbawa	Direbawa	Direbawa No.2	150	45	195
		Melka	70	5	75
		Genet Menafesha	55	15	70
	Total		275	65	340
Harar	Harar	Diretiara	60	2	62
		Harar No.1	125	5	130
		Harar No.2	110	10	120
	Total		295	17	312
Oromia	Adama	Adama No.1	85	20	105
		Adama No.3	75	25	100
		Modjo	60	28	88
		Bekoji	45	8	53
		Bulbula	35	5	40
		Awash Melkasa	50	8	58
		Huruta	45	5	50
		Alemtena	35	1	36
	Total		430	100	530
	Sheger	Sululta	65	35	100
		Dukem	54	35	89
		Muger	40	20	60
		Muketuri	40	15	55
		Alemgena	65	55	120
		Bishoftu No.2	65	45	110
		Adulala	25	1	26
		Tatek	65	75	140
	Total		419	281	700
	Shashemene	Shashemene No.1	85	6	91
		Negele Borena	20	2	22



Region/City Administration	EEU Regions	Service Centers	Regular Customers	Key Customers	Total Sample
		Hagere Mariam	76	25	101
		Kofele	50	4	54
		Dimtu	15	0	15
		Asasa	70	25	95
		Yabelo	50	2	52
	Total		366	64	430
	Chiro	Chiro	80	3	83
		Haromaya	90	40	130
		Hirna	60	25	85
		Fedis	35	9	44
		Gursum	47	5	52
	Total		312	82	394
	Jima	Jima No.2	100	28	128
		Sokoru	70	8	78
		Agaro No.2	87	35	122
		Denbi	60	6	66
	Total		317	77	394
	Nekemte	Nekemte No.2	70	4	74
		Arjo Awraja	50	3	53
		Shambu	60	1	61
		Guliso	48	8	56
		Rob Gebeya	35	2	37
		Gimbi	75	5	80
		Hirosibu	42	2	44
		Fincha	63	2	65
	Total		443	27	470
	Ambo	Ambo	75	23	98
		Bako	65	27	92
		Bantu	40	9	49
		Weliso	72	18	90
		Guder	50	8	58
		Tulu Bolo	50	3	53
	Total		352	88	440
	Bale Robe	Bale Robe	85	30	115
		Dodola	70	10	80
		Bale Goba	75	25	100
		Dolo Mena	50	25	75
	Total		280	90	370
	Metu	Metu	75	15	90
		Yayu	61	5	66
		Becho	52	1	53
		Bedele	72	17	89
		Gore	63	3	66
	Total		323	41	364
Somali	Jigjiga	Jigjiga No.1	125	6	131
		Togochale	50	1	51
		Fafen	50	3	53
		Aysha	50	1	51
		Kebridhar	70	3	73



Region/City Administration	EEU Regions	Service Centers	Regular Customers	Key Customers	Total Sample
		Godeber	80	2	82
		Shilabo	49	0	49
		Total	474	16	490
South	Arba Minch	Arba Minch No.1	100	6	106
		Jinka	78	6	84
		Amaro kele	58	2	60
		Burji	67	2	69
		Konso	60	1	61
		Total	363	17	380
	Hosaena	Hosaena No.2	60	13	73
		Ginbichu	50	15	65
		Tora	45	5	50
		Emdibir	50	5	55
		Butajira	80	15	95
		Buie	47	2	49
		Alemgebeya	32	5	37
		Saja	40	1	41
		Total	404	61	465
	Wolaita	Dila	90	25	115
		Wolaita No.1	90	2	92
		Yirgachefe	63	2	65
		Areka	72	2	74
		Bele Gununo	50	2	52
		Total	365	33	398
Tigray	Mekele	Mekele No.2	90	40	130
		Kuha	65	10	75
		Adigodom	40	9	49
		Abiyadi	50	5	55
		Adigrat	70	9	79
		Wukro	55	5	60
		Maichew	50	2	52
		Total	420	80	500
	Shire	Edagarby	55	2	57
		Shire	70	6	76
		Adihagerey	40	1	41
		Adwa	67	10	77
		Endebaguna	60	2	62
		Axum	70	12	82
		Total	362	33	395
Sidama	Sidama	Hawasa No.4	45	60	105
		Yirgalem	60	7	67
		Hagere Selam	40	2	42
		Hawasa No.2	70	15	85
		Wendogenet	50	1	51
		Total	265	85	350
South West	South West	Bonga	65	1	66
		Tepi	72	2	74
		Mizan	80	2	82
		Ameya Konta	55	1	56



Region/City Administration	EEU Regions	Service Centers	Regular Customers	Key Customers	Total Sample
		Tarcha	60	2	62
		Total	332	8	340
		Grand Total	10,948	2,252	13,200

1.3. Sampling Techniques

The Ethiopian Electric Utility used a three-stage sampling process to select the study participants.

Stage 1: Thirty percent (175) of the 583 service centers under the organization's regions were selected using Simple Random Sampling.

Stage 2: Based on the number of customers in each service center identified in Stage 1 (proportional to size), the total sample of 13,200 customers 10,948 regular and 2,252 key customers determined using Yemane's (1967) formula, was proportionally allocated across the 175 service centers."

Stage 3: Data for the study was collected through face-to-face interviews conducted at customers' homes and service facilities. The sample allocated in Stage 2 was clustered, and lists of regular and key customers were selected using simple random sampling.

1.4. Data Sources

The primary data for the study was obtained from customers through a tablet-based questionnaire and focus group discussions, while the secondary data was drawn from the institution's annual reports, journals, and other relevant research articles.

1.5. Data collection methods

The study data were collected using Computer-Assisted Personal Interviewing (CAPI), Kobo Toolbox, and Focus Group Discussions (FGDs). The first section of the survey questionnaire contained questions on participants' demographic characteristics, while the second section focused on service delivery and customer satisfaction, measured using a five-point Likert scale. The third section of the survey consisted of open-ended questions that invited customers to share their opinions.



To ensure clarity and inclusiveness, the questionnaire was prepared in Amharic, Afan Oromo, Somali, Tigrigna, Afar, and English, enabling customers from different language backgrounds to understand the questions and express their views accurately. In addition, residential, commercial, government, private service providers, and small- and medium-scale industrial customers were invited to participate in group discussions. Efforts were made to ensure diverse representation by including residential owners, industrial and institutional owners and managers, elders, and religious leaders. A total of 47 focus group discussions were conducted, each comprising 10–12 participants. For data collection, 88 trained and ethically responsible enumerators were deployed

1.6. Method of Data Analysis

Data collected through Computer-Assisted Personal Interviews (CAPI) were exported from Kobo Toolbox and imported into STATA 15 for analysis. Among the five (5) response options provided in the questionnaire, the option “I have difficulty deciding” was provided to the study participants during the data collection process if they did not have sufficient knowledge or understanding on the issue; since this option does not indicate the level of agreement of the participants, it was labeled as “Missing” and did not weight in the study. For the overall satisfaction analysis, only four of the five response options were used, excluding the option ‘I have difficulty deciding.’ The study data were analyzed using descriptive statistics, an Ordered Logit Model, and thematic analysis.

1.7. Validity & Reliability of Survey Data

1.7.1. Research experience of ENA

The Ethiopian News Agency is an institution with extensive experience in conducting nationwide public opinion surveys and producing documents that inform government policy, operating through its 41 branches across the country. The ENA branches across the country provide an enabling environment for the study, allowing survey supervisors and data collectors who are familiar with the local culture, traditions, and languages—to conduct the research effectively. Over the past four years, ENA has gained extensive experience in conducting customer satisfaction surveys for the institution

1.7.2. Ethical consideration of the study

Adequate training for data collectors



Prior to data collection, data collectors and supervisors received training on the study's objectives, the locations and participants to be surveyed, the procedures for completing the questionnaire, research ethics, and the use of the data collection technology. In addition, an instruction manual was developed to guide the research and ensure that all personnel adhered to a consistent data collection process.

Involve the right informants

Only customers who owned an energy meter were eligible to participate in the survey and provide information. For key customers, participation was limited to the organization owner or their designated representative, administrator, or manager.

Determine the amount of data collected per day

To maintain the quality of data collection, data collectors were given a manageable workload. Collecting data from too many participants in one day could result in fatigue and errors. As a result, each data collector was limited to gathering data from 10-12 customers per day to ensure high-quality results.

Voluntary participation

All participants in this study were involved on a strictly voluntary basis. Prior to participation, they were informed about the study's objectives, the estimated time required to complete the survey, how the information would be handled, and the institution conducting the research.

Confidentiality & Anonymity

To ensure confidentiality, data collectors informed participants that their information would be kept private. Any personal details that could identify individuals would remain confidential, and sharing such information would require explicit consent. Data collected from participants was not shared with any external parties not involved in the survey. The exchange of information was limited to the Ethiopian Electric Utility headquarters.

Respecting Participants

All study participants were treated with respect, courtesy, and transparency. To ensure this, data collectors received training prior to the data collection process, and audio recordings on the



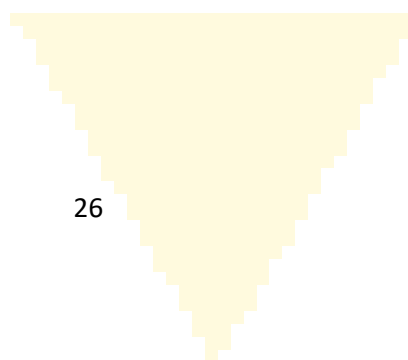
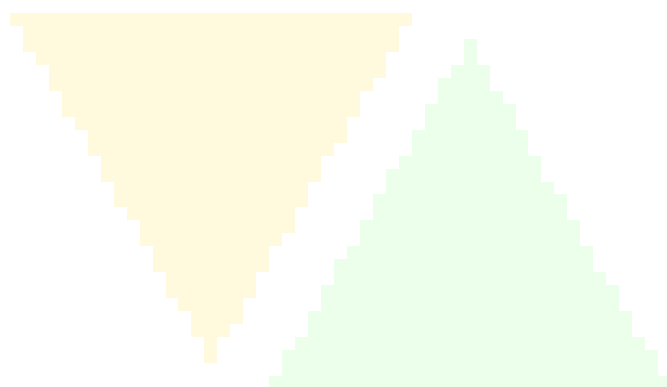
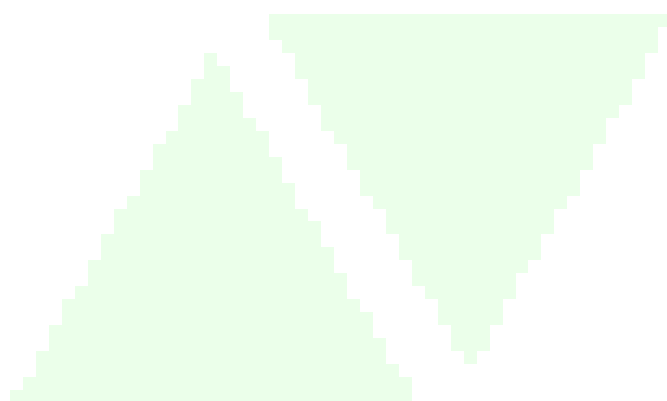
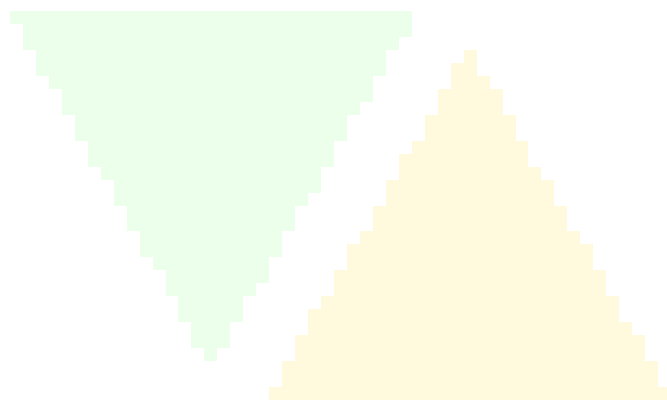
CAPI data collection app were used to monitor interactions between participants and data collectors.

Independent Review /Impartiality/

To prevent bias, data collectors received extensive training to remain neutral and avoid influencing participants with their own opinions. Close monitoring and the use of audio recordings ensured that data collectors gathered accurate and reliable information without any personal bias.

Technology

Data collection was conducted using CAPI, which enhances the reliability of the survey by capturing both written and audio responses. Throughout the data collection process, the Kobo Toolbox App recorded and evaluated the data daily on the main server. Additionally, the process was monitored using Google Maps technology, integrated into the data collection app, to track the direction and progress of data gathering.





CHAPTER FOUR

RESULT INTERPRETATION

This chapter analyzes and interprets the collected data using the parameters derived from the JD Power model.

4.1. General Information about Survey Participants

The table below summarizes the response rate of participants by EEU region. In total, 13,596 responses were obtained from customers. Following data cleaning to address non-response issues, 13,182 valid responses were retained. This represents 99.8% of the target sample size of 13,200 set by the Ethiopian Electric Utility.

Table 2 Number of Participants

Region	Regular	Key	Total	Region	Regular	Key	Total
East AA	286	138	424	Shashemene	362	61	423
South AA	412	182	594	Chiro	327	67	394
West AA	290	105	395	Jima	334	68	402
North AA	265	127	392	Nekemte	437	26	463
Afar	336	42	378	Ambo	353	88	441
Bahirdar	407	143	550	Bale	303	94	397
Dese	357	45	402	Metu	321	40	361
Gonder	365	63	428	Jijiga	456	23	479
Debre Berhan	339	60	399	Arbaminch	367	12	379
Debre Markos	325	33	358	Hosaena	404	64	468
Woldia	273	10	283	Wolayta	361	31	392
Benshangul G	225	14	239	Mekelle	419	76	495
Gambela	239	15	254	Shire	365	32	397
Diredawa	272	65	337	Sidama	263	85	348
Harar	298	18	316	South West	336	9	345
Adama	431	113	544	Total	10,959	2,223	13,182
Sheger	431	274	705				

Source: Own computation based on survey data, 2025

Among the EEU regions, the highest number of participants were recorded in Sheger (705; 5.4%), South Addis Ababa (594; 4.5%), Bahir Dar (550; 4.2%), and Mekelle (552; 4.2%). In



contrast, the lowest participation was observed in Gambella (254; 1.9%) and Benishangul-Gumuz (239; 1.8%).

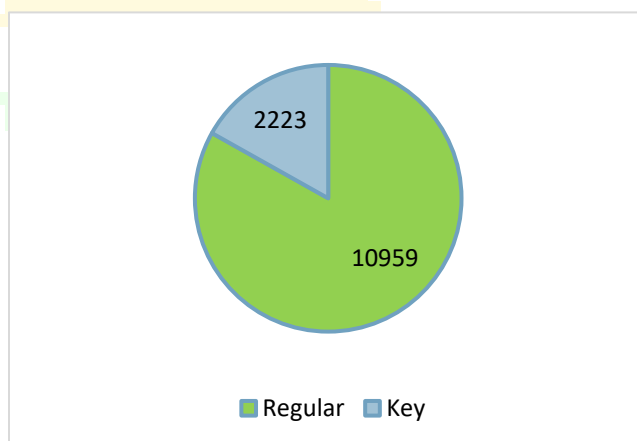


Figure 1 Respondents by Customer type

Source: Own computation based on survey data, 2025

The survey accounted for the composition of the utility's customer base, distinguishing between regular and key customers. As illustrated in the figure above, of the 13,182 respondents, 10,959 (83.1%) were regular customers primarily households and small businesses while 2,223 (16.9%) were classified as key customers.

Source: Own computation based on survey data, 2025

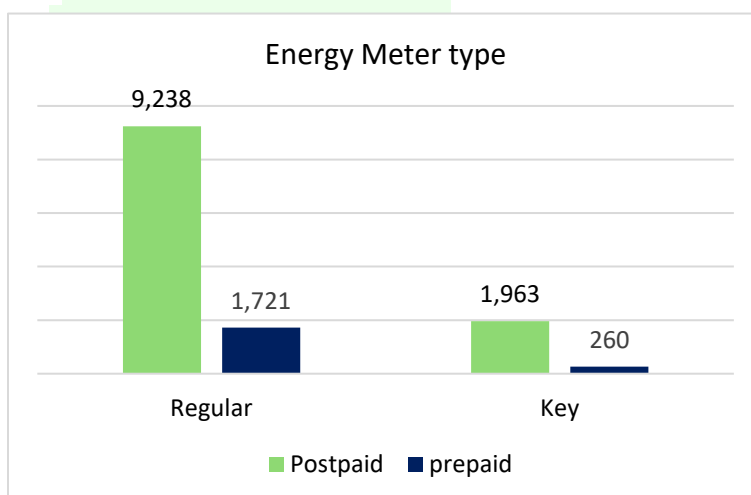


Figure 2 Participants by Energy Meter

As presented in the table above, of the 13,182 respondents, 11,201 (85%) were postpaid (bill) meter users, while 1,981 (15%) were prepaid (card) users.



4.2. Reliability Test

Table 3 Output of reliability test

	Average interitem covariance:	Number of items in the scale:	Scale reliability coefficient:
Power quality	0.179	5	0.753
Billing and payment	0.110	5	0.696
Communication	0.134	8	0.804
Corporate citizenship	0.149	6	0.764
Customer care	0.175	5	0.815
Electric Tariff	0.197	4	0.730

Source: Own computation based on survey data, 2025

Reliability analysis was conducted to assess the internal consistency of the variables in the research instrument. Cronbach's alpha, which ranges from 0 to 1, was used as the measure of reliability.

Values closer to 0 indicate weak or no internal consistency, while values closer to 1 reflect strong internal consistency. In line with widely accepted standards in the literature, a Cronbach's alpha of 0.7 or higher is considered acceptable.

In this survey, the Cronbach's alpha values for the 33 satisfaction items ranged from 0.696 to 0.815. Since these values are at or above the commonly accepted threshold of 0.7, the measurement instrument demonstrates adequate to high internal consistency, supporting its reliability for further analysis.



4.3. Participants responses to customer satisfaction items

4.3.1. Power quality

Table 4 Customers' Response for Power Quality

Questions	Customer type	F	Strongly Disagree	Disagree	Agree	Strongly Agree
The power outages do not occur frequently.	Regular	N	1,146	5,591	3,219	268
		%	11.21	54.69	31.48	2.62
	Key	N	363	1,171	528	44
		%	17.24	55.6	25.07	2.09
After the electric power outage, it turns back on quickly.	Regular	N	576	3,555	5,585	311
		%	5.74	35.45	55.7	3.1
	Key	N	180	834	943	60
		%	8.92	41.35	46.75	2.97
The occurrence of voltage drops is low.	Regular	N	750	4,045	5,143	417
		%	7.24	39.06	49.67	4.03
	Key	N	151	768	1,105	108
		%	7.08	36.02	51.83	5.07
The occurrence of power fluctuations is low.	Regular	N	696	4,590	4,608	365
		%	6.78	44.74	44.92	3.56
	Key	N	146	892	992	75
		%	6.94	42.38	47.13	3.56
Damage to property due to power fluctuations is low.	Regular	N	757	3,513	5,402	603
		%	7.37	34.19	52.57	5.87
	Key	N	180	758	1,055	118
		%	8.53	35.91	49.98	5.59

Source: Own computation based on survey data, 2025

A total of 12,330 participants responded to the question regarding the frequency of power interruptions ('Does the electricity not go out frequently?'). Of these, 8,271 respondents (67.1%) disagreed with the statement, while 4,059 respondents (32.9%) agreed. When examining responses by customer type, key customers exhibited higher levels of dissatisfaction compared to regular customers. Among the 2,223 key customers, 1,534 (72.8%) disagreed with the statement 'The electricity does not go out frequently.' In contrast, of the 10,959 regular customers, 6,737 (65.9%) disagreed with the same statement.

The qualitative data collected through focus group discussions (FGDs) across various study locations, along with responses to open-ended questions, support and enrich the quantitative



findings presented earlier. Participants identified several causes of frequent power outages, including aging poles, cables, and wires; extreme weather conditions; contact between tree branches and electrical lines; transformer and fuse burnout; theft and vandalism of electrical infrastructure; and ongoing corridor development projects, particularly in Addis Ababa.

For example, in an FGD held at Bahir Dar No. 2 Customer Service Center, participants reported that frequent theft and vandalism of cables, fuses, and other electrical materials are major contributors to power interruptions. Similarly, customers at Butajira and Hosahina No. 2 Customer Service Centers indicated that old electric poles are a primary cause of outages in their localities. Many participants expressed frustration that, given the frequency of power outages, uninterrupted electricity is more surprising than interruptions.

Participants also highlighted the practical impacts of frequent outages. Households reported difficulties in cooking, preserving food and medicines, grinding grains, and increased spending on candles for lighting. Key customers in industrial settings noted that frequent interruptions disrupt production processes, service delivery, and result in financial losses. For instance, representatives from Ambo mineral water factories, flour factories, and grinding mills emphasized that power outages negatively affect their businesses and revenue. Essential service providers, including telecommunication companies, banks, hospitals, and water supply offices, were also reported to experience significant operational challenges.

In Bahir Dar No. 1 and No. 3 Customer Service Centers, participants described disruptions along the transmission line from Zenzelma to Arib Gebeya, affecting electricity supply. Similarly, at Sheger Tatek and Kajawa flour factories, participants indicated that unreliable electricity requires reliance on generators and leads to reduced factory output despite full staffing. A private higher clinic in West Addis Ababa reported that frequent outages interfere with laboratory equipment operation, increasing operational costs. Overall, the FGDs revealed that frequent power outages significantly disrupt both daily life and business activities.

Regarding power restoration after outages, 12,044 survey participants responded to related questions. Of these, 6,899 (57.3%) agreed that power is restored promptly, while 5,145 (42.7%) disagreed. Disaggregating by customer type, 41.2% of regular customers and 50.3% of key customers indicated dissatisfaction with the speed of restoration. FGD participants noted that the



duration of outages depends on the severity of damage to transmission lines, substations, and other infrastructure. While EEU maintenance services have improved, participants highlighted ongoing inefficiencies, particularly due to aging infrastructure and limited use of technology to detect failures promptly.

Voltage fluctuations and drops were also discussed. Among 12,487 survey respondents, 5,714 (45.8%) disagreed that voltage drops are infrequent, while 6,773 (54.2%) agreed. Disaggregated responses showed that 46.3% of regular customers and 43.1% of key customers disagreed that voltage drops are rare. FGDs indicated that voltage drops, though less severe than outages, remain a concern. Participants from Assosa, Bale Robe, and West Addis Ababa reported that voltage drops cause repeated damage to equipment such as dynamos, refrigerators, electric stoves, and grinding machines, impacting both service delivery and income. Causes were attributed to excessive or inefficient electricity use, unauthorized tapping, and usage at inappropriate times.

Power fluctuations were also reported as a significant concern. Of the total participants, 5,208 (43%) disagreed that damage due to fluctuations is infrequent, while 7,178 (58%) agreed. Among regular customers, 41.6% disagreed, and among key customers, 44.4% disagreed. FGDs highlighted those fluctuations cause tangible damage to household and industrial equipment, including bulbs, refrigerators, stoves, computers, medical devices, and industrial machinery, leading to financial costs from repairs and replacements. Key industrial customers emphasized operational challenges and additional costs due to equipment damage. Moreover, participants expressed frustration over the complexity of obtaining compensation for losses, with many unaware of the established procedures. Specific examples from FGDs include: A printing house manager in West Addis Ababa noted that frequent fluctuations damaged computers and power supplies, leading to replacement costs. A higher clinic manager reported X-ray equipment damage costing approximately 600,000 Birr. A representative from Harar Water Development Office indicated that water pumps purchased with foreign currency were damaged due to fluctuations.

FGDs conducted in West Addis Ababa No. 2, North Addis Ababa No. 1, Sheger Alem Gena, Awash Melka, Debre Birhan No. 2, Hosahina No. 2, Woliso, Jimma No. 2, Dire Dawa, Gambela,



Gondar No. 1, Bahir Dar No. 3, Woldiya No. 2, Shire and Harar No. 1, highlighted that power fluctuations & outages are significant problems. While some areas, such as South Addis Ababa No. 9, Chiro, Shashemene No. 1, and Jinka, reported improvements in fluctuation issues, overall customer dissatisfaction with electricity quality remains high. These findings underscore the need for the utility to focus on improving power reliability, maintenance efficiency, and mitigation of voltage fluctuations to enhance customer satisfaction.

4.3.2. Billing & Payment

Table 5 Customers' response on billing and payment

Questions	Customer type	F	Strongly Disagree	Disagree	Agree	Strongly Agree
The reading of the energy meter is taken every month.	Regular	N	222	1,237	6,273	1,181
		%	2.49	13.88	70.38	13.25
	Key	N	48	258	1,334	235
		%	2.56	13.76	71.15	12.53
The bills I receive are accurate.	Regular	N	132	1,146	6,765	810
		%	1.49	12.94	76.41	9.15
	Key	N	26	224	1,434	184
		%	1.39	11.99	76.77	9.85
A bill invoice is prepared without delay every month.	Regular	N	454	2,498	4,393	359
		%	5.89	32.42	57.02	4.66
	Key	N	92	510	891	84
		%	5.83	32.34	56.5	5.33
Corrections will be made by the EEU workers on the disputed bill.	Regular	N	219	1,486	5,161	450
		%	2.99	20.31	70.54	6.15
	Key	N	37	225	1,166	126
		%	2.38	14.48	75.03	8.11
A disconnected power line will be reconnected immediately after payment.	Regular	N	211	1,249	7,566	1,569
		%	1.99	11.79	71.41	14.81
	Key	N	23	193	1,578	358
		%	1.07	8.97	73.33	16.64
EEU's payment options are suitable for customers.	Regular	N	124	1,258	6,648	871
		%	1.39	14.13	74.69	9.79
	Key	N	20	228	1,429	202
		%	1.06	12.13	76.05	10.75

Source: Own computation based on survey data, 2025



One of the key factors used to assess customer satisfaction in this study relates to billing and payment, measured across five indicators.

Regarding the timely reading of energy meters, the majority of participants (83%) agreed that meters are read monthly, while 17% disagreed. Among 9,281 postpaid bill customers, 5,727 (61.7%) confirmed that bills are issued without delays, whereas 3,554 (38.3%) disagreed.

In terms of bill correction for errors, 76.7% of regular customers and 83.1% of key customers agreed that EEU staff make corrections when errors occur. Conversely, 23.3% of regular and 16.9% of key customers disagreed with this statement.

Qualitative data from FGDs and open-ended responses revealed that while there has been improvement in timely meter readings, challenges remain. Many customers reported paying exaggerated bills due to infrequent readings or estimated billing, which results in higher costs and the need to seek corrections. Areas where meter reading problems were frequently reported include Sheger Alem Gena, Sheger Tatek, Weliso, Butajira, Jinka, Bonga, Awasa No.4, Shashemene No.1, Jimma No.2, Shambu, Nekemte No.2, Gimbi, Dese No.2, Bahir Dar No.3, Arba Minch, Shire, and Gode.

In contrast, participants from Wukro, Metu, Awasa No.4, and South Addis Ababa indicated that meter readings are generally timely but expressed confusion about how their bills are calculated, noting that no clear explanation is provided by EEU staff.

A common concern raised during FGDs was delayed billing, even when meter readings are timely, due to failures in transmitting data to the billing system. This often results in accumulated bills. For example, a participant from Shashemene No.1 CSC reported not having a meter reading for 10 months, leading to a cumulative bill of over 10,000 Birr. Another participant indicated that estimated bills of 10 Birr per month eventually accumulated to 30,000 Birr, while a third participant faced a delayed bill of 55,000 Birr for an 18-month period.

Smart meter customers reported a reduction in meter-reading issues. However, they noted confusion regarding how usage is measured and bills are calculated. For instance, a smart meter consumer at Debre Markos/Bichena CSC highlighted that electricity supply is intermittent, yet monthly bills range from 10,000 to 18,000 Birr, inconsistent with actual usage. Similarly, a smart



meter customer from the Water and Sewerage Service Office in Shambu CSC stated that their monthly income does not exceed 200,000 Birr, yet electricity bills often reach 1,500,000 Birr.

Regarding payment options, out of 8,901 respondents, 7,519 (84.5%) agreed that EEU's payment methods are suitable for customers. Among 1,879 industrial customers, 1,631 (86.8%) agreed with the suitability of payment options.

FGDs revealed that EEU has made notable improvements in service efficiency and accessibility, particularly through digital payment platforms such as Telebirr, Mobile Banking, CBE Birr, M-PESA Safaricom, Awash Birr Pro, Commercial Bank of Ethiopia, and Oromiya Bank. These platforms reduce time and effort for customers. However, elderly and less-educated customers face difficulties using digital systems and often encounter long queues at banks due to network or system issues. Overall, the survey indicated that responses from regular and industrial customers were largely similar regarding billing and payment satisfaction.

4.3.3. Communication

Table 6 Customers' response on billing and payment

Questions	Customer type	F	Strongly Disagree	Disagree	Agree	Strongly Agree
EEU will announce the bill payment program in advance.	Regular	N	533	3,379	4,881	405
		%	5.79	36.74	53.07	4.4
	Key	N	101	693	1,024	102
		%	5.26	36.09	53.33	5.31
EEU clearly informs the customers about the grievance redressal system.	Regular	N	1,237	4,978	3,506	341
		%	12.29	49.47	34.84	3.39
	Key	N	324	992	703	80
		%	15.44	47.26	33.49	3.81
EEU priory notify the customers about planned power outage.	Regular	N	396	2,746	6,006	512
		%	4.1	28.43	62.17	5.3
	Key	N	88	513	1,293	148
		%	4.31	25.12	63.32	7.25
EEU staffs give the necessary information to customers.	Regular	N	137	1,502	7,942	848
		%	1.31	14.4	76.15	8.13
	Key	N	16	251	1,669	197
		%	0.75	11.77	78.25	9.24
EEU informs its customers about the	Regular	N	474	2,857	4,466	409



available payment options		%	5.78	34.82	54.42	4.98
	Key	N	80	503	1,074	132
		%	4.47	28.12	60.03	7.38
EEU will notify customers before cutting off the electricity due to unpaid bills.						
	Regular	N	723	4,548	4,370	312
		%	7.26	45.69	43.91	3.13
	Key	N	151	966	846	59
		%	7.47	47.77	41.84	2.92
EEU aware customers about how energy consumption is calculated.						
	Regular	N	207	1,704	6,151	540
		%	2.41	19.81	71.51	6.28
	Key	N	38	296	1,278	113
		%	2.2	17.16	74.09	6.55
EEU clearly & timely announces the criteria that customers fulfill to get new connection						
	Regular	N	515	2,859	5,765	522
		%	5.33	29.59	59.67	5.4
	Key	N	99	609	1,162	110
		%	5	30.76	58.69	5.56

Source: Own computation based on survey data, 2025

Research by JD Power demonstrates that effective information exchange between utility companies and their customers significantly influences customer satisfaction. In this study, participants were asked eight questions related to EEU's communication and information provision.

Related to the advance announcement of planned power outages; out of 11,702 respondents, 7,959 (68%) agreed that EEU announces planned power outages in advance, while 3,743 (32%) disagreed. When analyzed by customer type, 67.5% of regular customers and 70.6% of industrial customers disagreed with the statement that EEU announces the bill payment program in advance.

FGDs highlighted gaps in consistent communication regarding planned outages, which negatively affect customers' daily activities. Conversely, participants from Metu, Gimbi, Chiro, Debre Birhan No.2 CSC, Awasa No.4 CSC, and North Addis Ababa No.1 CSC noted that EEU announces planned outages on platforms such as Facebook and Telegram, although consistency remains an issue.

Regarding bill payment announcements, 6,412 out of 11,118 respondents (57.7%) agreed that EEU announces bill payment programs in advance, while 4,706 (42.3%) disagreed. Among



12,161 respondents, 7,531 (61.9%) disagreed that EEU clearly informs customers about the grievance redressal system, whereas 4,630 (38.1%) agreed. When asked whether EEU staff provide the information customers need upon request, 10,656 of 12,562 participants (84.8%) agreed, while 1,906 (15.2%) disagreed. FGDs conducted across multiple CSCs—including East Addis Ababa No.6, West Addis Ababa No.2, Sheger Alem Gena, Awasa No.4, Hosana No.2, Butajira, Jinka, Wolayita Sodo, Woldiya No.2, Chiro, Harar No.1, Gode, Gambela, Ambo, Gimbi, Arba Minch, Bahir Dar No.1, Bahir Dar No.3, Wukro, Bale Robe, Metu, Bonga, and Jigjiga—revealed that customers often do not understand how their bills are calculated. The absence of detailed usage and charge information, including VAT deductions for prepaid users, contributes to this lack of understanding.

However, participants in Ambo noted positive awareness initiatives, such as mobile campaigns to educate customers about electricity usage and bill payment.

Out of 9,995 respondents, 6,081 (60.8%) agreed that EEU informs customers about available payment options. By customer type, 67.4% of key customers and 59.4% of regular customers confirmed that they are informed about payment options.

FGDs indicated that information on the criteria for new power connections is generally clear. Participants from West Addis Ababa No.2, East Addis Ababa No.6, Awasa No.4, Hosana No.2, Bale Robe, Bonga, Debre Birhan No.2, and Dese No.2 confirmed that EEU provides sufficient guidance. FGD participants from Alem Gena, Woliso, Metu, Awash Melka, Butajira, Hosana No.2, Bonga, Nekemte No.2, Jigjiga, Harar No.1, Woldiya No.2, and Wukro emphasized the need for EEU to engage customers through forums and interactive platforms rather than relying solely on paper-based communication. Key customers from North Addis Ababa No.1, Gimbi, Awasa No.4, Gambela No.1, Debre Markos Bichena, Dese No.2, and Bishoftu No.2 reported that CSCs are actively engaging major customers through forums and performing well in providing information.



4.3.4. Corporate Social Responsibility

Table 7 Customers' response on corporate social responsibility

Questions	Customer type	F	Strongly Disagree	Disagree	Agree	Strongly Agree
EEU works with attention to avoid electrical accidents.	Regular	N	458	2,640	5,858	560
		%	4.81	27.74	61.56	5.88
	Key	N	101	518	1,159	116
		%	5.33	27.35	61.19	6.12
EEU repairs the electrical faults quickly.	Regular	N	433	4,177	4,952	354
		%	4.37	42.12	49.94	3.57
	Key	N	80	836	1,031	80
		%	3.95	41.24	50.86	3.95
EEU provides awareness about the usage of electricity.	Regular	N	161	1,500	8,032	974
		%	1.51	14.06	75.3	9.13
	Key	N	30	267	1,636	241
		%	1.38	12.28	75.25	11.09
Service centers are located at nearby.	Regular	N	493	2,869	4,757	404
		%	5.78	33.66	55.81	4.74
	Key	N	136	615	861	83
		%	8.02	36.28	50.8	4.9
The EEU quickly responds to the request of new energy meter applicants.	Regular	N	634	2,126	5,194	839
		%	7.21	24.18	59.07	9.54
	Key	N	136	409	1,126	182
		%	7.34	22.07	60.77	9.82
EEU staffs Serve the customers without asking for bribe (undue benefit)	Regular	N	506	3,408	5,241	461
		%	5.26	35.44	54.5	4.79
	Key	N	119	708	1,094	102
		%	5.88	35	54.08	5.04

Source: Own computation based on survey data, 2025

Corporate social responsibility (CSR) is a key factor influencing customer satisfaction in service-based organizations. In this study, participants were asked six questions related to EEU's CSR practices and service delivery. Out of 11,410 respondents, 7,693 (67.4%) agreed that EEU prioritizes preventing electrical accidents, while 3,717 (32.6%) disagreed. FGDs revealed that while EEU workers perform well in minimizing accident damages, response times are often slow, and preventive measures for fallen poles or exposed cables are inadequate.



FGDs conducted at Addis Ababa No.6, West Addis Ababa No.2, Woliso, Butajira, Hosana No.2, Bale Robe, Shashemene No.1, Jimma No.2, Metu, Gambela No.1, Arba Minch, Bahir Dar No.3, Woldiya No.2, Debre Markos/Bichena, Dese No.2, Gondar No.1, and Harar No.1 CSC confirmed these findings. For example, in West Addis Ababa No.2 CSC, participants reported that a reported disconnected cable in Girar remained unattended for over 20 days. Similar delays were noted in Bale Robe, Debre Markos/Bichena, Metu, and Jimma, with exposed wires posing safety risks.

Regarding awareness creation, 10,883 out of 12,841 participants (84.8%) agreed that EEU provides guidance on electricity usage, while 1,958 (15.2%) disagreed. FGDs, however, highlighted gaps in awareness programs concerning theft and vandalism of electrical infrastructure. Participants from East Addis Ababa No.6, West Addis Ababa No.2, North Addis Ababa No.1, Sheger Alem Gena, Sheger Tatek, Bishoftu No.2, Awasa No.4, Debre Birhan No.2, Butajira, Hosana No.2, Bonga, Woliso, Shashemene No.1, Awash Melka, Jinka, Chiro, Bale Robe, Nekemte No.2, Gimbi, Ambo, Shambu, Debre Markos/Bichena, Woldiya No.2, Bahir Dar No.1, Gondar No.1, Dire Dawa, Harar No.1, Jigjiga, and Gode confirmed that public awareness is insufficient.

Participants noted that while EEU uses media and notice boards to raise awareness, engagement through forums is limited. Furthermore, awareness campaigns targeting theft and vandalism of electrical infrastructure are inadequate, and enforcement of penalties for such activities is insufficient.

Out of 10,218 respondents, 6,105 (59.7%) agreed that CSCs are conveniently located, while 4,113 (40.3%) disagreed. Among regular customers, 3,362 (39.4%) indicated CSCs were not nearby, and among key customers, 751 (44.3%) reported the same. FGDs revealed that while EEU is opening new CSCs to improve accessibility, some customers still travel long distances, leading to fatigue and additional expenses. For instance, participants at Woliso CSC reported traveling long distances to access services at Ambo CSC. Similarly, Debre Birhan No.2 CSC participants highlighted the need for new CSCs due to city expansion driven by industrialization and housing developments.



Out of 10,646 respondents, 7,341 (69%) agreed that EEU responds quickly to new energy meter requests, while 3,305 (31%) disagreed. Among those agreeing, 68.6% were regular customers, and 70.6% were key customers. FGDs indicated delays in providing new or upgraded energy meters. Participants at Debre Markos/Bichena CSC reported delays of 2–3 years for three-phase power, despite payment. Industry participants at Bale Robe highlighted delays in additional power requests, affecting business expansion and revenue generation. Some customers also expressed concerns about the fairness of charges for new meters. Conversely, participants in East Addis Ababa No.6, Chiro, Debre Birhan No.2, Dese No.2, Awash Melka, Butajira, Shire, Nekemte No.2, Gimbi, Jimma No.2, Awasa No.4, Gondar No.1, Bale Robe, and Bonga reported improvements in response times for new energy meter requests. Regarding ethical service delivery, out of 11,639 respondents, 6,898 (59.3%) agreed that EEU staff serve customers without requesting bribes, while 4,741 (40.7%) disagreed. FGDs highlighted that while many employees uphold ethical standards, some engage in unethical practices, including soliciting bribes or extra compensation. Issues such as favoritism, poor communication, and lack of attention to complaints were reported across Sheger Alem Gena, Tatek, Butajira, Jinka, Hosana No.2, Jimma No.2, Dila, Bahir Dar No.3, Gondar No.1, Gimbi, Mekele, Shire, Wukro, Semera, Dire Dawa, and Debre Markos/Bichena CSCs.

4.3.5. Customer Care

Table 8 Customers' response on Customer Care

Questions	Customer type	F	Strongly Disagree	Disagree	Agree	Strongly Agree
EEU resolves customer complaints quickly	Regular	N	436	2,398	5,602	436
		%	4.91	27.03	63.14	4.91
	Key	N	125	447	1,216	121
		%	6.55	23.42	63.7	6.34
Workers handling the complaint line pick up customer calls and offer them answers.	Regular	N	172	1,466	7,433	883
		%	1.73	14.73	74.67	8.87
	Key	N	36	320	1,512	163
		%	1.77	15.76	74.45	8.03
EEU service centers are clean and conducive	Regular	N	247	1,578	7,332	861
		%	2.47	15.75	73.19	8.59
	Key	N	45	333	1,467	190



		%	2.21	16.36	72.09	9.34
Staffs of EEU Serve the customers with due respect						
	Regular	N	309	2,730	6,330	565
		%	3.11	27.48	63.72	5.69
	Key	N	80	585	1,250	113
		%	3.94	28.85	61.64	5.57
Customers receive prompt service from the EEU staff						
	Regular	N	761	3,074	4,044	378
		%	9.22	37.23	48.98	4.58
	Key	N	139	579	896	81
		%	8.2	34.16	52.86	4.78

Source: Own computation based on survey data, 2025

Customer care is one of the key indicators used to measure customer satisfaction with EEU services. In this study, five dimensions were used to assess customer satisfaction in this area.

Out of 10,781 respondents, 7,375 (68.4%) agreed that EEU resolves customer complaints quickly, while 3,406 (31.6%) disagreed. FGDs revealed that although there has been improvement in complaint handling, notable gaps remain in providing prompt and efficient service. Participants indicated that a common challenge is the deflection of responsibility, where employees attribute issues to others or claim they fall outside their control. This problem is particularly evident in areas such as maintenance requests, electricity bill disputes, and new power connection applications. For example, FGD participants reported that when customers raise complaints about mistaken bills, they are often instructed to pay the bill first before the complaint is addressed. In Debre Markos/Bichena CSC, participants highlighted a four-month delay in resolving a damaged transformer issue despite submitting maintenance requests.

Areas identified with significant gaps in complaint resolution include: West Addis Ababa No.2, South Addis Ababa No.6, North Addis Ababa No.1, Woliso, Ambo, Hosana No.2, Debre Birhan No.2, Debre Markos/Bichena, Awasa No.4, Harar No.1, Dilla, Bahir Dar No.1, Bahir Dar No.3, Bonga, Jimma No.2, Metu, Shashemene No.1, Wolayita Sodo, Nekemte No.2, Woldiya No.2, Gimbi, Mekele No.2, Shire, Wukro, Gode, and Jigjiga.

FGDs also indicated that EEU complaint hotlines are often not answered promptly. Even when calls are answered, staff frequently acknowledge complaints without actively resolving them. These concerns were raised in North Addis Ababa No.2, East Addis Ababa No.6, Woliso,



Hosana No.2, Woldiya No.2, Bahir Dar No.3, and Semera CSCs. Regarding the cleanliness and conduciveness of EEU service centers, 9,850 out of 12,053 respondents (81.7%) agreed that the centers are clean and conducive to service, while 2,203 (18.3%) disagreed.

FGDs revealed that certain CSCs are not well-suited for service delivery, particularly for individuals with disabilities and older customers. Some centers are rented from private houses, resulting in limited space, inadequate seating, and insufficient restroom facilities. These challenges were particularly highlighted in Jimma No.2, Nekemte No.2, Awasa No.4, Arba Minch, and Bahir Dar No.1 CSCs. Out of 9,952 respondents, 5,399 (54.3%) agreed that EEU staff provide services quickly, while 4,553 (45.7%) disagreed. FGDs indicated slow response times in areas such as electrical maintenance, prepaid card purchases, handling billing complaints, processing new three-phase connections, and compensation claims for damaged property.

Participants noted that while many staff demonstrate exemplary customer service—being respectful, polite, and supportive—others show a lack of attentiveness, prioritizing personal relationships or showing indifference to customer needs. These gaps were particularly observed in Sheger Alem Gena, Nekemte No.2, Shambu, Shashemene No.2, Chiro, Hosana No.2, and Gambela No.2 CSCs. A recurring issue raised during FGDs is the long queues and extended wait times for purchasing prepaid cards, compounded by unavailability on weekends and holidays. Participants suggested digital solutions, recommending that prepaid cards be made accessible through mobile banking and platforms such as Tele-birr to improve convenience and reduce delays.

4.3.6. Electric Tariff

Table 9 Customers' response on Electric Tariff

Questions	Customer type	F	Strongly Disagree	Disagree	Agree	Strongly Agree
The issued utility bill is usually accurate	Regular	N	143	1,146	8,765	810
		%	1.49	12.94	76.41	9.15
	Key	N	26	224	1,424	184
		%	1.39	11.99	76.77	9.85
I feel that the price I pay for electricity is fair for the value I receive.	Regular	N	1,694	3,942	3,996	305
		%	17.05	39.67	40.21	3.07



	Key	N	360	812	729	53
		%	18.42	41.56	37.31	2.71
EEU's electricity rates are fair						
	Regular	N	1,269	4,208	3,917	187
		%	13.24	43.92	40.88	1.95
	Key	N	251	890	742	36
		%	13.08	46.38	38.67	1.88
The Adjusted price of EEU is fair						
	Regular	N	249	1,880	7,252	568
		%	2.5	18.9	72.89	5.71
	Key	N	54	339	1,535	128
		%	2.63	16.49	74.66	6.23

Source: Own computation based on survey data, 2025

Several JD Power studies indicate that electricity tariffs significantly influence customer satisfaction, contributing up to 22% to overall satisfaction in the utility sector. To assess customer perceptions of electricity pricing, participants were asked a set of four questions related to this topic.

Out of 11,891 participants who responded regarding the fairness of electricity prices, 6,808 (57.3%) disagreed that electricity prices are fair, while 5,083 (42.7%) agreed. FGD participants across various locations expressed concerns about the perceived unfairness of current electricity prices, especially for low-income households and pensioners. Participants noted that price increases are occurring at a time of rising living costs and during the nearing completion of the Grand Ethiopian Renaissance Dam (GERD), amplifying financial pressure on households.

Participants also highlighted that prepaid electricity meters deplete purchased electric cards quickly due to the impact of Value Added Tax (VAT). For example, a participant from Bichena CSC reported that a 600 Birr prepaid card was reduced by 150 Birr in VAT, while a participant at Jigjiga CSC indicated that a 200 Birr card previously lasted a week but now depletes much faster.

To understand opinions on rate adjustments, 11,500 participants were asked about the perceived fairness of electricity rate adjustments. A majority of 57.5% disagreed that the rate adjustments are fair, while 42.5% agreed. FGD participants reported that recurrent rate adjustments are



perceived as unfair, particularly for low-income customers, and emphasized the need for government subsidies to mitigate the financial burden on vulnerable segments of the population.

Out of 10,721 participants who provided responses regarding the accuracy of electricity bills, 9,193 (85.7%) agreed that bills are largely accurate, while 1,528 (14.3%) disagreed. When analyzed by customer category, 85.6% of regular customers agreed on the accuracy of electricity bills, whereas 86.6% of key customers disagreed, suggesting that key customers experience more concerns about billing accuracy than regular customers.

FGD participants across multiple locations reported instances of inaccurate billing. For example, at Woliso CSC, a soap factory participant reported being billed 88,000 Birr despite a 20-day power outage that prevented operations. Similarly, at Assoa CSC, the Elders and Pensioners Association was billed a substantial amount despite service interruptions caused by a fallen electric pole.

Participants at Bahir Dar No.3 and Awasa No.4 CSCs noted that previously, electric bills were sufficiently accurate to allow use of cooking appliances such as injera baking machines and electric stoves alongside lighting.

However, due to perceived inaccuracies and increased costs, many households have shifted to coal or other less electricity-intensive alternatives.

4.4. Customers Satisfaction Results

4.4.1. Satisfaction by Dimension

Table 10 Customer's satisfaction score on billing and payment

Power Quality			Average satisfaction
Stats	mean	SD	
PQ01	2.23	0.6882253	61.5
PQ02	2.54	0.6599353	
PQ03	2.51	0.6915813	
PQ04	2.46	0.6748905	
PQ05	2.56	0.7168741	
	2.46		

Source: Own computation based on survey data, 2025



Customer satisfaction with the utility's power quality was assessed based on five key indicators: frequency of prolonged outages (PQ01), frequency of short outages (PQ02), repeated interruptions (PQ03), power fluctuations (PQ04), and property damage resulting from power fluctuations (PQ05).

The findings indicate that customers reported the highest satisfaction with the speed of power restoration following an outage, with a mean score of 2.54 (63.5%). Conversely, the lowest satisfaction was recorded in relation to the frequency of power interruptions, with a mean score of 2.23 (55.7%). Overall, the study shows an average customer satisfaction level of 2.46, equivalent to 61.5%, for the quality of electric power provided by the utility.

This result is consistent with the 62.7% satisfaction level recorded in a similar assessment conducted during the first half of the current fiscal year. Interview and observation data indicate that the nationwide urban corridor development initiatives have had an impact on electricity infrastructure, contributing to significant power outages.

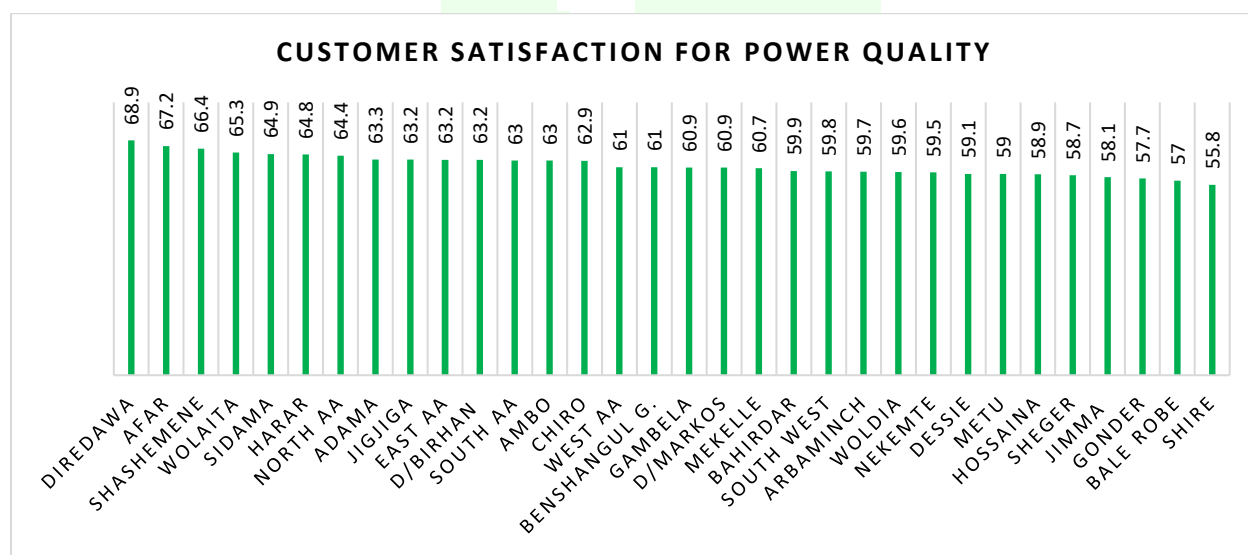


Figure 3 Customer's level of satisfaction on power quality by region

As illustrated in the graph above, Dire Dawa, Afar, and Shashemene recorded relatively higher customer satisfaction scores for power quality, whereas Gondar, Bale Robe, and Shire reported lower satisfaction levels compared to other regions.



Table 11 Customer's satisfaction score on billing and payment

Billing & Payment

Stats	mean	SD	Average Satisfaction
BP01	2.94	0.6055492	
BP02	2.94	0.5247009	
BP03	2.61	0.6722669	
BP04	2.81	0.5821006	
BP05	3.00	0.5811637	
	2.86		71.5

Source: Own computation based on survey data, 2025

Billing and payment were one of the dimensions used to measure customer satisfaction. This dimension was assessed through five indicators: monthly electricity meter reading (BP01), timely receipt of utility bills (BP02), prompt correction of billing errors (BP03), quick reconnection of power after payment (BP04), and convenience of available payment options (BP05).

Within the billing and payment dimension, customer satisfaction with available payment options was relatively high at 70%.

In contrast, satisfaction with the speed of correcting billing errors was lower at 65.3%, making it the least favorable parameter in this category. Customer satisfaction with the convenience of the institution's payment options was relatively high, with a mean score of 3.0 (75%). For the remaining dimensions, including monthly meter reading and timely receipt of bills, customer satisfaction was slightly lower, with an equal mean score of 2.94 (73.5%). Overall, customer satisfaction with billing and payment services was 2.86 (71.5%), which is comparable to the 71.8% reported in a similar survey conducted during the first half of the year, indicating that satisfaction levels have remained relatively stable.

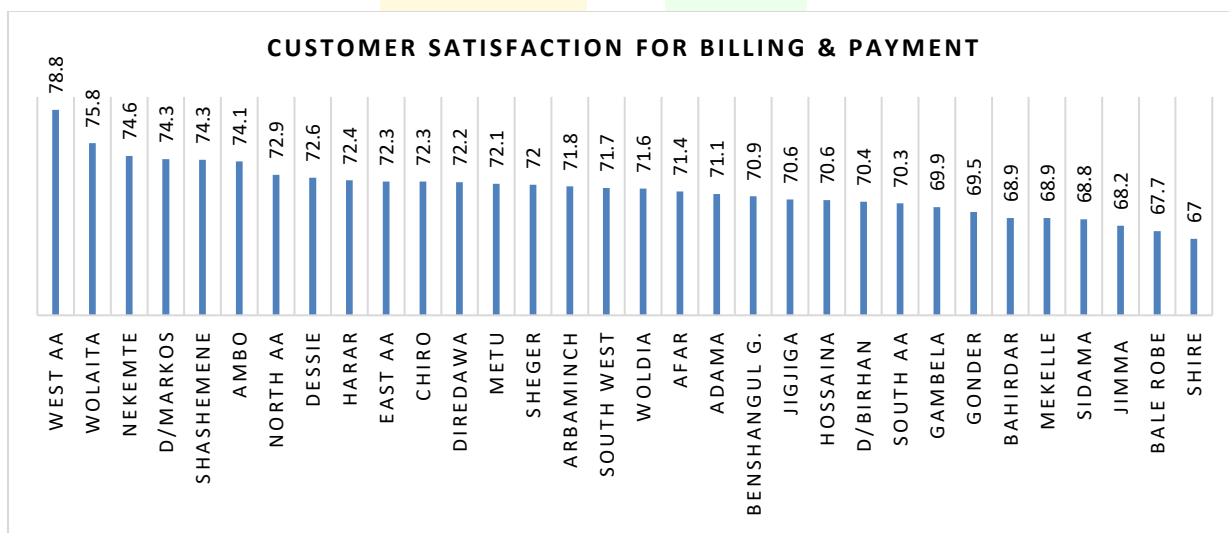


Figure 4 Customer's satisfaction level on billing and payment by region

Across all regions, customer satisfaction with billing and payment options was relatively high compared to other measured dimensions of satisfaction.

Table 12 Customer's satisfaction on Communication

Stats	mean	SD	Average Satisfaction
CO01	2.93	0.5353637	66.4
CO02	2.57	0.6715871	
CO03	2.29	0.7284418	
CO04	2.70	0.6383272	
CO05	2.92	0.5147417	
CO06	2.61	0.6765236	
CO07	2.42	0.6725165	
CO08	2.82	0.5658488	
	2.66		

Source: Own computation based on survey data, 2025

Communication was one of the key dimensions used to evaluate customer satisfaction in this study. It was measured through eight factors: advance announcement of the bill payment program (CO01), information on the grievance redressal system (CO02), announcement of planned power outages (CO03), provision of requested information to customers (CO04), communication about available payment options (CO05), notification of unpaid bills prior to disconnection (CO06), awareness on how energy consumption is calculated (CO07), and notification of the requirements for obtaining a new electric connection (CO08).



The results indicate relatively higher satisfaction with advance announcement of the bill payment program (mean 2.93, 73.3%), information on payment options (mean 2.92, 73%), and communication of new connection requirements (mean 2.82, 70.5%). In contrast, lower satisfaction was reported for announcements of planned power outages (mean 2.29, 57.3%) and awareness of how energy consumption is calculated (mean 2.42, 60.5%). Despite the relatively low satisfaction with outage announcements, the Ethiopian Electric Utility (EEU) has shown improvements compared to findings from the past four years.

Overall, customer satisfaction with communication reached 66.4% (mean 2.66), representing an increase from the 63.8% recorded in a similar study during the first half of the current fiscal year. However, while progress has been made, a gap remains between customer expectations and the utility's actual communication practices.

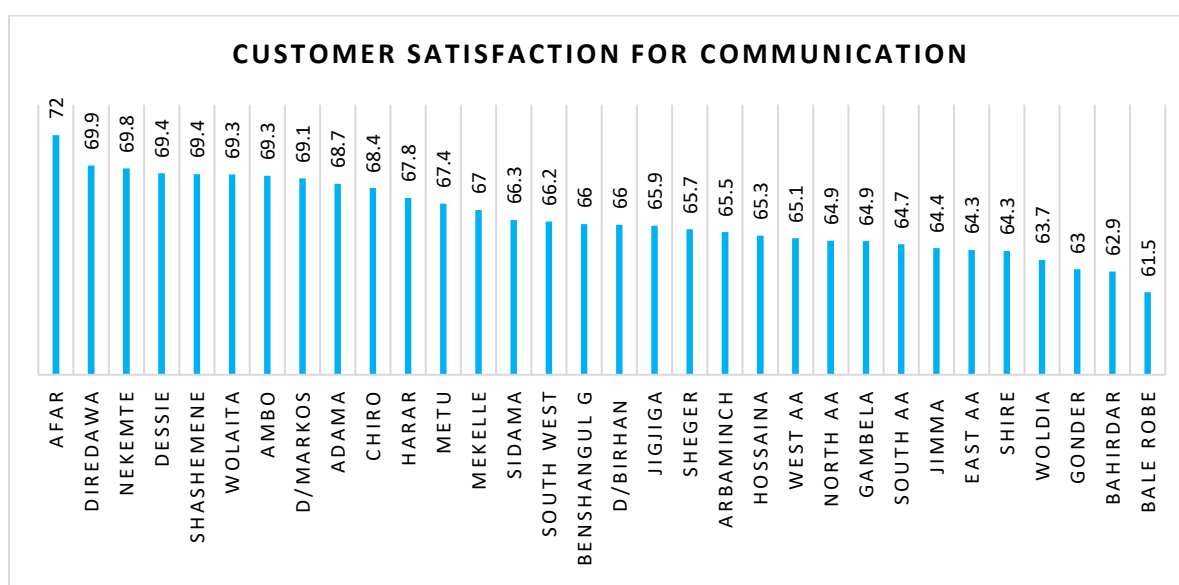


Figure 5 Customer's satisfaction on communication

Table 13 Customers satisfaction on corporate social responsibility

Corporate Social Responsibility

Stats	mean	SD	Average Satisfaction
CC01	2.65	0.6643353	
CC02	2.68	0.6576314	
CC03	2.53	0.6384975	
CC04	2.93	0.5352136	
CC05	2.58	0.6793364	
CC06	2.71	0.7355883	
	2.68		67.04



Source: Own computation based on survey data, 2025

Corporate Social Responsibility (CSR) is one of the dimensions commonly used in JD Power studies to measure customer satisfaction in service organizations. In this study, CSR was assessed using six indicators: measures taken to prevent electrical accidents (CC01), prompt response to electrical accidents (CC02), provision of awareness about electricity usage (CC03), proximity of Customer Service Centers (CC04), speed of response to new energy meter requests (CC05), and serving customers without requesting bribes or undue benefits (CC06). The results show that customer satisfaction was relatively low for the provision of awareness about electricity usage, with a mean score of 2.53 (63.3%), while the proximity of Customer Service Centers recorded higher satisfaction at 2.93 (73.3%). Overall, customer satisfaction with CSR stood at 2.68 (67%), reflecting a slight improvement from the 65.8% reported in a similar survey conducted during the first half of the current fiscal year.



Figure 6 Customer's satisfaction on corporate social responsibility

Table 14 Customer's satisfaction on customer care

Customer Care

Stats	mean	SD
CCA01	2.59	0.6682455
CCA02	2.68	0.6509182
CCA03	2.90	0.5444602
CCA04	2.88	0.5729987
CCA05	2.71	0.6183968

Average Satisfaction

68.8



Source: Own computation based on survey data, 2025

One of the key dimensions used to measure customers' satisfaction in organizations of service provider is customer care and this is also demonstrated by several JD Power researches. In order to measure customers satisfaction on customer care five dimensions were used, namely: resolving customer complaints quickly (CCA01), answering complaint phones promptly (CCA02), cleanliness and conduciveness of EEU service centers (CCA03), handling customers with due respect (CCA04) and providing quick services to customers (CCA05). Accordingly, the dimensions related to responding to complaint phones promptly 2.90 (72.5%) and cleanliness and conduciveness of EEU service centers resulted in relatively better customer satisfaction, but resolving customer complaints quickly 2.88 (72%) resulted in relatively low customer satisfaction. Generally, customer care satisfaction improved to 2.75 (68.8%) from 60.7% in the first half of the fiscal year.



Figure 7 Customer's satisfaction on Customer care

Table 15 Customer's satisfaction on electric tariff

Electric Tariff

Stats	mean	SD
ET01	2.50	0.7232982
ET02	2.28	0.7806672
ET03	2.31	0.7195369
ET04	2.82	0.5588819
	2.48	

Average Satisfaction

62.0

50



Source: Own computation based on survey data, 2025

Electric tariff is one of the dimensions used by electric utility companies to assess customer satisfaction. In this study, satisfaction with the recently implemented electric tariff was measured using four indicators: fairness of the price paid for electricity (ET01), fairness of electricity rates (ET02), fairness of electricity rate adjustments (ET03), and availability of detailed payment information on the bill (ET04).

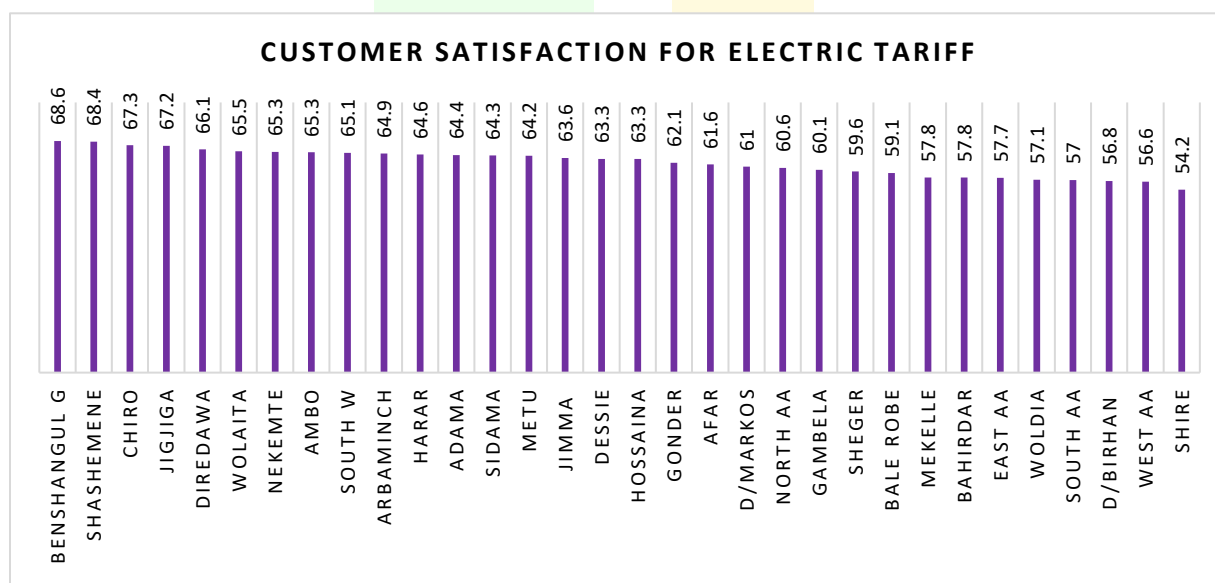


Figure 8 Customer's satisfaction on electric tariff by region

The results indicate that customer satisfaction was relatively low for the fairness of the price paid for electricity (mean 2.28, 57%) and fairness of electricity rate adjustments (mean 2.31, 57.8%).



4.4.2. Customers satisfaction by region

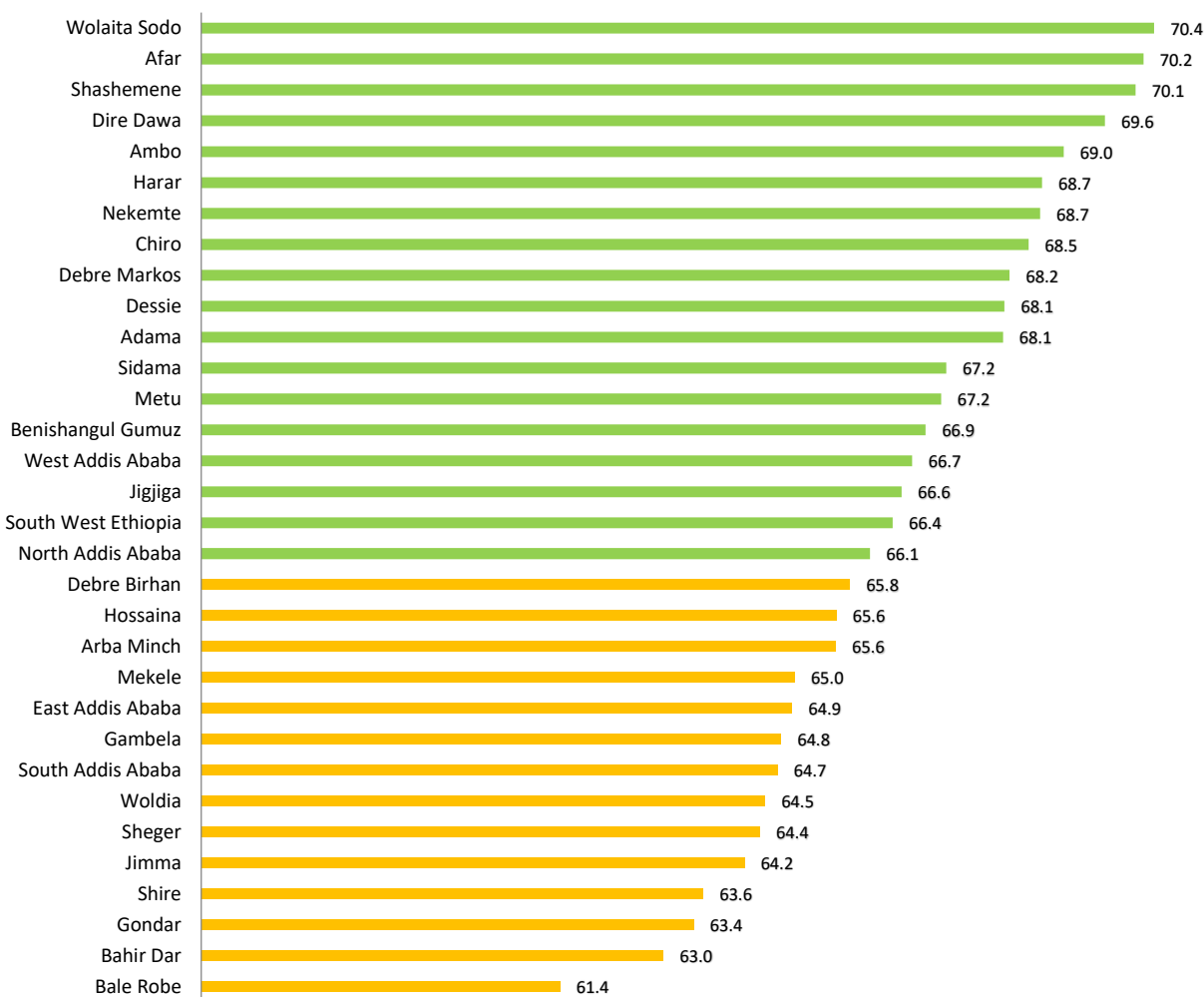


Figure 9 Customers satisfaction by region

Source: Own computation based on survey data, 2025

The study findings indicate regional variations in customer satisfaction. Wolayita Sodo, Afar, Shashemene, and Dire Dawa recorded relatively higher satisfaction levels, whereas Shire, Gondar, Bahir Dar, and Bale reported lower satisfaction. As illustrated in the graph above, 17 of the 32 surveyed regions had customer satisfaction scores above the study's average of 66.2%, while 15 regions scored below this average. Analysis of customer satisfaction at individual service centers, as shown in the annex, highlights that Bele Gonuno in Wolayita Sodo (85.4%), Arjo Wereda in Nekemta (84.3%), Kuta Ber in Desse (79.6%), Bantu in Anbo (78.6%), and Dimtu in Shashemene (78.1%) were among the top five centers with the highest satisfaction. In contrast, Adigudum in Mekele (56.3%), Hosana No.2 in Hosana (56.3%), Dodola (54.5%) and



Robe (54.1%) in Bale Robe, and Tatek in Sheger (53.8%) were among the lowest five centers. These results indicate a significant disparity in customer satisfaction across different service centers.

4.4.3. Regular and key customers satisfaction

Table 16 Regular & Key customers' satisfaction

Power Quality

Q104	PQ01	PQ02	PQ03	PQ04	PQ05	Mean	Satisfaction
Regular	2.26	2.56	2.5	2.45	2.57	2.47	61.7
Key	2.12	2.44	2.55	2.47	2.53	2.42	60.6

Billing & Payment

Q104	BP01	BP02	BP03	BP04	BP05	Mean	Satisfaction
Regular	2.94	2.93	2.60	2.80	2.99	2.85	71.3
Key	2.94	2.95	2.61	2.89	3.06	2.89	72.3

Communication

Q104	CO01	CO02	CO03	CO04	CO05	CO06	CO07	CO08	Mean	Satisfaction
Regular	2.93	2.56	2.29	2.69	2.91	2.59	2.43	2.82	2.65	66.3
Key	2.96	2.59	2.26	2.74	2.96	2.7	2.40	2.85	2.68	67.1

Corporate Citizenship

Q104	CC01	CC02	CC03	CC04	CC05	CC06	Mean	Satisfaction
Regular	2.65	2.69	2.53	2.92	2.6	2.71	2.68	67.1
Key	2.65	2.68	2.55	2.96	2.53	2.73	2.68	67.1

Customer Car

Q104	CCA01	CCA02	CCA03	CCA04	CCA05	Mean	Satisfaction
Regular	2.59	2.68	2.91	2.88	2.72	2.76	68.9
Key	2.58	2.7	2.89	2.89	2.69	2.75	68.8

Tariff

Q104	ET01	ET02	ET03	ET04	Mean	Satisfaction
Regular	2.49	2.29	2.32	2.82	2.48	62.0
Key	2.54	2.24	2.29	2.84	2.48	61.9

Satisfaction Regular customers 2.65 66.22
Key customers 2.65 66.20

Source: Own computation based on survey data, 2025



As illustrated in the graph above, regular customers reported a satisfaction level of 61.7% for power quality, while key customers reported slightly lower satisfaction at 60.6%. For billing and payment services, key customers' satisfaction was 72.3%, compared to 71.3% for regular customers, indicating marginally higher satisfaction among key customers in this area. Regarding communication activities, key customers recorded a satisfaction level of 67.1%, slightly above the 66.3% reported by regular customers.

The findings further indicate that key customers generally have relatively higher satisfaction than regular customers with EEU's payment options and communication services. For the dimensions of corporate social responsibility, customer care, and electric tariff, satisfaction levels of regular and key customers were found to be largely similar.

4.4.4. Overall customers satisfaction



Figure 10 over all customers satisfaction result

As shown in the graph above, satisfaction levels for both regular and key customers are equal. The satisfaction rate for regular customers is 66.22%, which is similar to that of key customers, resulting in an overall customer satisfaction rate of 66.2%. This represents an improvement over the 65% recorded in the first half of the current fiscal year, indicating positive progress.



4.4.5. Comparison of customers satisfaction by year

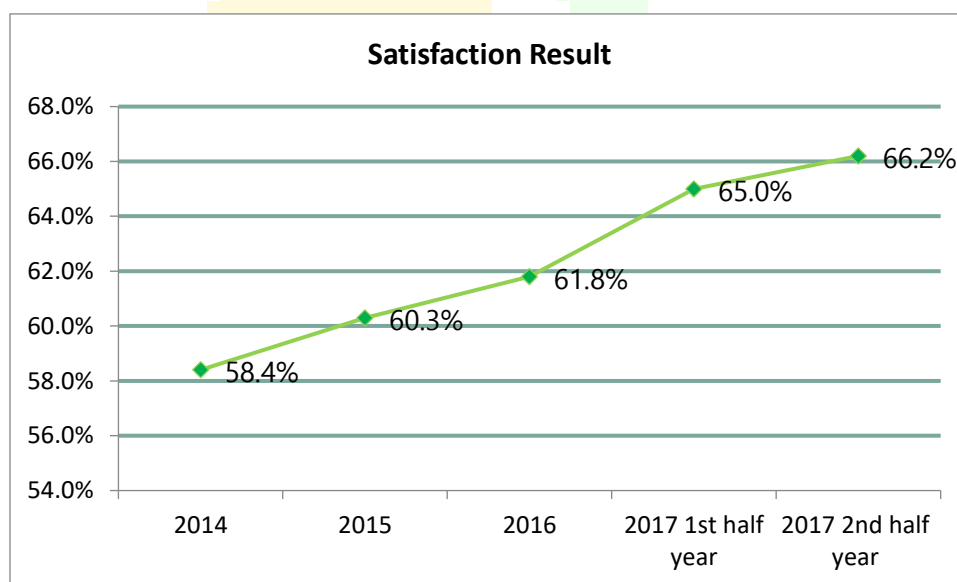


Figure 11 comparison of customers' satisfaction by year

Source: EEU survey report, 2021,2022,2023,2024 & 2025

Findings from five consecutive customer satisfaction surveys conducted over four years indicate that the EEU's customers satisfaction level increased from 58.4% in 2014 to 66.2% by the end of the 2017 fiscal year. This demonstrates a positive upward trend in customer satisfaction with the services provided by the Ethiopian Electric Utility.

4.5. Thematic Analysis

Table 17 Thematic analysis result

Dimension	Frequency	Percentage
Power Quality	4052	50.8
Electric Tariff	1384	17.4
Corporate Citizenship	888	11.1
Biling and payment	718	9.0
Customer Care	488	6.1
Communication	442	5.6

Source: Own computation based on survey data, 2025

During data collection, participants were asked to provide their opinions on the areas where the EEU should place greater emphasis. A total of 3,986 participants responded. The responses were



analyzed across six themes: Power Quality, Billing and Payment, Communication, Corporate Citizenship, Customer Care, and Electric Tariff.

The results indicate that the majority of participants, 2,052 (50.8%), identified the improvement of power quality as the top priority.

A total of 1,384 participants (17.4%) highlighted electric tariff concerns, particularly regarding rates that do not reflect customers' ability to pay.

Meanwhile, 888 participants (11.1%) emphasized the need for improvements in corporate citizenship, including good governance, faster repair of electrical faults, and increased awareness about electricity usage.

4.6. Inferential Analysis

4.6.1. Correlation Test

Correlation analysis was used to examine the relationship between two satisfaction measures independently, minimizing the influence of other related measures. Specifically, partial correlation analysis was employed to assess the relationship between a dependent satisfaction measure and the independent satisfaction measures included in the study, while controlling for the effects of all other satisfaction dimensions.

Each correlation coefficient therefore reflects the influence of an independent factor on customer satisfaction. The coefficients range from +1 to -1, indicating the strength and direction of the relationship, with positive values showing a direct relationship and negative values indicating an inverse relationship.

The Spearman correlation coefficient was used to assess the univariate relationship between independent and dependent variables. For this study, the mean of each satisfaction measure was calculated based on the factor variables, and the correlation between indices derived from the JD Power model and the selected measures was determined to evaluate customer satisfaction.



Table 18 Correlation test

Partial correlations of Satisfaction with

Variable	Partial Corr.	Significance Value
Power Quality	0.2451	0.000
Biling and payment	0.0017	0.927
Communication	0.0001	0.994
Corporate citizenship	0.0662	0.001
Customer care	0.1468	0.000
Electric Tariff	0.1241	0.000

Statistically significant at 5% level of significance

Source: Own computation based on survey data, 2025

As presented in the table above, the partial correlation coefficient results indicate that several satisfaction indicators specifically, power quality (0.2451), information provision and exchange (0.361), customer management (0.1468), institutional responsibilities (0.0662), and energy consumption price (0.1241) have a relatively low positive relationship with overall customer satisfaction. Aspects such as billing and payment and communication have minimal influence on customer satisfaction.

Based on the Pearson correlation coefficient, EEU's billing and payment recorded a coefficient of 0.25, indicating a relatively weak positive relationship with overall customer satisfaction. This suggests that there may be additional satisfaction factors related to billing and payment that were not captured in this study.

4.6.2. Ordered Logistic Regression Assumption Diagnostics Test

Ordinal Dependent Variable

Customer satisfaction in the study was measured using a five-point scale: 1 (very dissatisfied), 2 (dissatisfied), 3 (satisfied), 4 (very satisfied), and 5 (extremely satisfied), making the dependent variable ordinal. For instance, a response of 1 (very dissatisfied) is considered lower than a response of 2 (dissatisfied), reflecting the ordinal nature of the scale.



Independence of Observations

Each survey question was designed to be independent, ensuring that responses to one question did not influence responses to another. This allowed participants to provide answers freely, without being affected by their responses to other questions.

Linearity of Independent Variables & Log-Odds Assumption

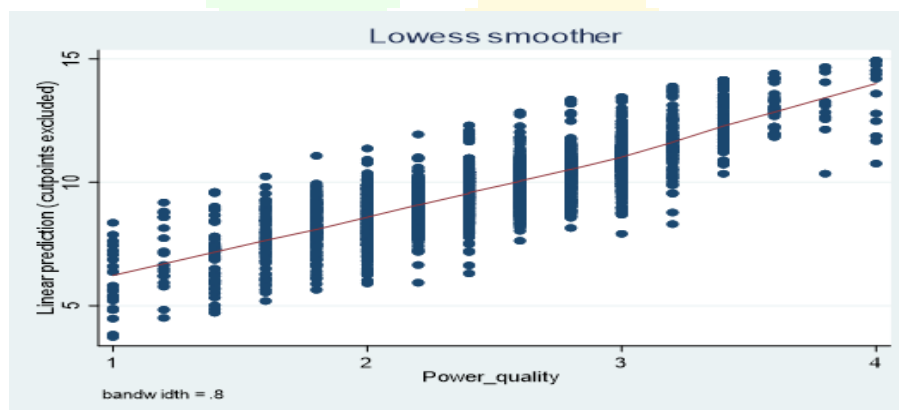


Figure 12 Linearity of Power quality

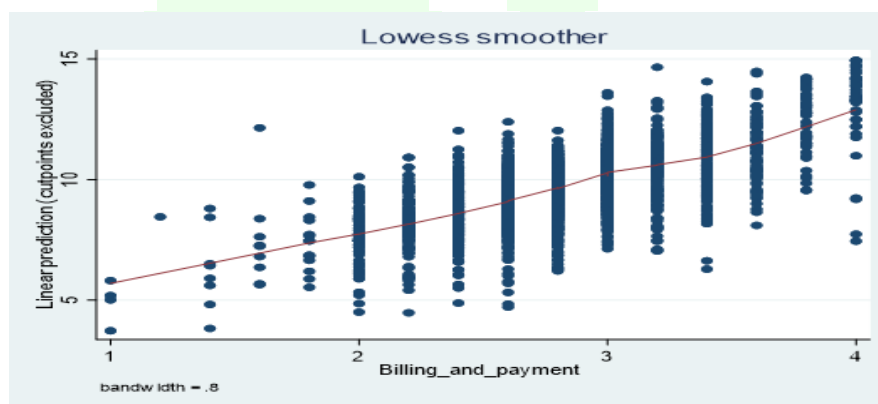


Figure 13 Linearity of Billing and payment

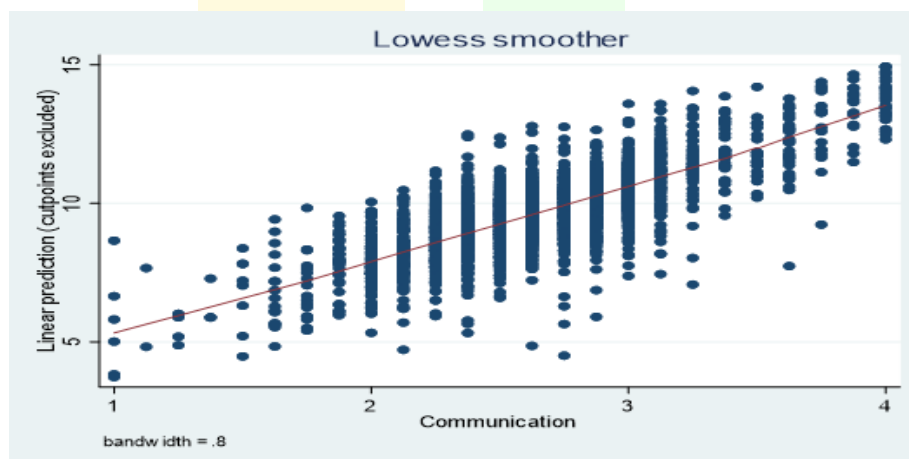


Figure 14 Figure Linearity of communication



Figure 15 Figure Linearity of Corporate citizenship

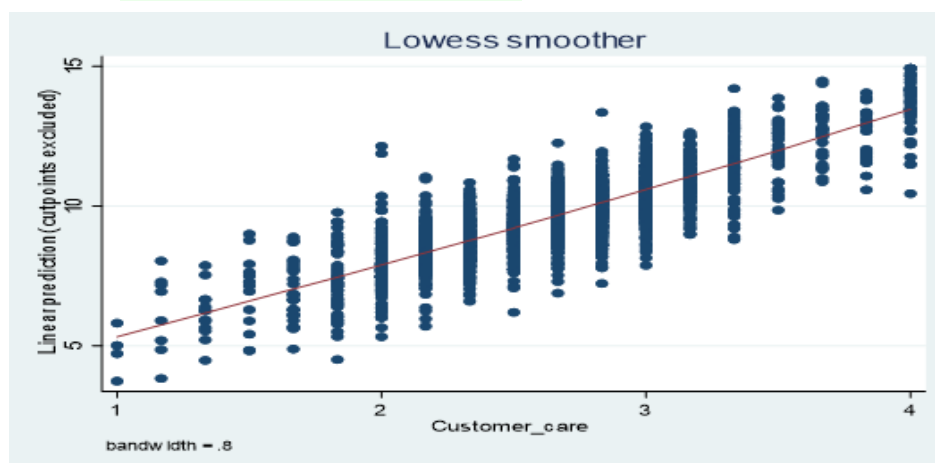


Figure 16 Figure Linearity of Customer care

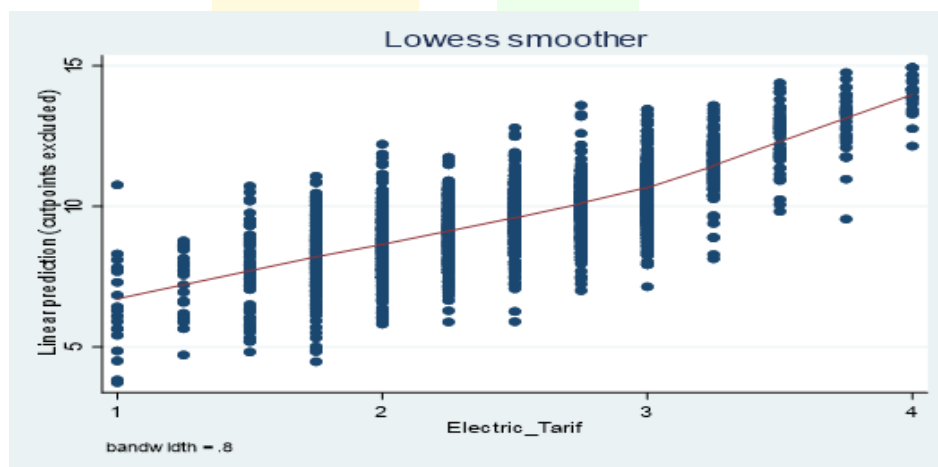


Figure 17 Figure Linearity of Electric tariff

As illustrated in the graphs above, the Lowess line remains approximately straight across all dimensions. This indicates that as the influence factor increases, the predicted effect also increases, demonstrating that the assumption of linearity between independent variables and log-odds is satisfied.

Proportional Odds Assumption

Table 19 Correlation test

Test of the parallel regression assumption

	Chi2	df	P>Chi2
Brant	79.63	12	0.000

The Brant test results indicate that the proportional odds assumption has been violated for the ordered logistic regression model. This suggests that the effect of at least one dimension on the log-odds of the outcome is not consistent across all levels of the ordinal dependent variable.



4.6.3. Ordered Logistics Regression Test

Table 20 Ordered logistics regression test

Ordered logistic regression	=	2735					
Number of obs							
LR chi2(6)	=	1196.55					
Prob > chi2	=	0					
Log likelihood	=	-2710.79	Pseudo R2	=	0.1808		
Customer Satisfaction	Coef.		Std.Err.	Z	P> z	[95% Conf. Interval]	
Power quality	1.301		0.1	12.96	0	1.104	1.497
Billing and payment	0.017		0.136	0.13	0.898	-0.25	0.285
Communication	0.026		0.165	0.16	0.874	-0.298	0.35
Corporate citizenship	0.539		0.158	3.4	0.001	0.228	0.849
Customer care	1.142		0.142	8.06	0	0.864	1.42
Electric Tariff	0.708		0.099	7.13	0	0.513	0.903

Statistically significant at 5% level of significance

Source: Own computation based on survey data, 2025

Ordered Logit Model

Customer Satisfaction = Power quality (1.301) + Corporate citizenship (0.539) + Customer care (1.142) + Electric tariff (0.708)

In this study, the Pseudo R² value ranged between 0.1 and 0.2, which is considered acceptable. The dependent variable customer satisfaction is explained by the independent variables, with a Pseudo R² of 0.18.

Ordered logistic regression was conducted to examine the relationship between the factor variables derived from the JD Power model and customer satisfaction at a 95% confidence interval. In this analysis, a p-value ≤ 0.05 indicates that the factor variable has a significant effect on customer satisfaction, whereas a p-value ≥ 0.05 indicates no significant effect.

The regression results show that Power Quality, Customer Care, Corporate Citizenship, and Electric Tariff have a significant effect on customer satisfaction. In contrast, Billing and Payment and Communication were not found to have a statistically significant effect; however, this does not imply that all individual indicators within these dimensions lack an effect.



Specifically, holding other dimensions constant:

- A one-scale increase in Power Quality corresponds to a 1.301 increase in the log-odds of customer satisfaction, indicating a strong positive correlation.
- A one-scale increase in Customer Care corresponds to a 1.142 increase in the log-odds of customer satisfaction, also reflecting a strong positive correlation.
- A one-scale increase in Electric Tariff corresponds to a 0.708 increase in the log-odds of customer satisfaction, indicating a positive correlation.
- A one-scale increase in Corporate Citizenship corresponds to a 0.539 increase in the log-odds of customer satisfaction, also showing a positive correlation.

Based on the ordered logistic regression results, Power Quality has the most significant impact on customer satisfaction, followed by Customer Care and Electric Tariff, respectively, as the second and third most influential factors.



CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1. Discussion

Power Quality is one of the key metrics used by JD Power to assess customer satisfaction in the Ethiopian Electric Utility. The reliability and consistency of electricity supply serve as a major indicator of customer satisfaction, significantly influencing customers' daily lives, work activities, and income. Power Quality was measured using five indicators: frequency of power outages, speed of power restoration, power loss and fluctuations, and damage caused by power fluctuations. The study results indicate that the average customer satisfaction with electricity quality was 61.5%, representing the lowest satisfaction level compared to other measured dimensions of customer satisfaction.

Compared to the 62.7% recorded in a similar survey conducted during the first half of the fiscal year, customer satisfaction with power quality has not improved. This highlights the significant impact of power quality on overall customer satisfaction, which is further supported by the regression results of the study.

Previous studies reviewed in this research consistently indicate that power quality has a significant impact on customer satisfaction in electricity utilities. Notable studies include Irechukwu, M. E., et al. (2021) on electricity supply in sub-Saharan Africa; Energy for Sustainable Development (2020) on electricity supply in Uganda and Ethiopia; Joseph and Gerry (2022) on electricity supply in Tanzania; and Temam (2013), Wedajo (2015), and Israel (2015) on electricity service delivery in Ethiopia. Additionally, Manda, J., et al. (2015) found that the quality of electricity supply has a strong influence on customer satisfaction.

According to a JD Power study, power quality accounts for 27% of the variation in customer satisfaction with an electric utility, demonstrating that improvements in power quality significantly enhance customer satisfaction. Consistent with these findings, the current study shows that the regression coefficient for power quality is higher than for other measures, confirming its significant impact on the satisfaction of the utility's customers.



The EEU's 2024 plan performance report shows that although special efforts were made to significantly reduce the frequency of power outages, the report shows that the reduction could not be achieved to the planned extent. This indicates that although the institution planned to reduce the frequency of power outages to 286 in the 2024 budget year, the performance was 517.4, achieving only 52.7% of the plan. Also, the plan to reduce the duration of power outages to 158 hours was implemented at 319 hours, achieving only 49.8% of the plan, a low performance was recorded. This finding reinforces the results of the study, indicating that customer satisfaction with power quality has not shown improvement.

Although power outages have been identified as a persistent issue in previous studies, the ongoing corridor development projects in several cities, which affected electrical infrastructure, were observed to have a negative impact on power supply during the period of data collection for this study. According to the Ethiopian Electric Utility's annual report, the Ethiopian Electric Power Company, which supplies electricity to the utility, was responsible for 9% of power outages and 16% of the total outages in 2017. This highlights the role of external factors in contributing to customer dissatisfaction with power quality.

The study results indicate that key customers report lower satisfaction with the quality of electricity supply compared to regular customers. This suggests that the impact of poor power quality on key customers' products, services, income, and assets is greater than that experienced by regular customers. Overall, since power quality is highly correlated with customer satisfaction, failure to achieve significant improvements in this area may hinder the institution's goal of increasing overall customer satisfaction. Therefore, it is evident that the utility should continue to prioritize and intensify efforts to enhance power quality, building on the initiatives already underway.

The second dimension used to assess customer satisfaction was billing and payment options. This dimension was measured using five indicators: monthly meter reading, timeliness of bill issuance, prompt correction of billing errors, speed of reconnection following disconnection due to non-payment, and the convenience of the utility's available payment options.

Overall, the survey results indicate that average customer satisfaction with billing and payment options is 71.5%, reflecting an improvement over previous survey finding. This suggests that the institution has successfully reduced customer frustration with bill payments by expanding digital



payment options, thereby enhancing overall customer satisfaction. However, the study findings indicate that fluctuations in utility bill estimates resulting from inaccurate meter readings continue to create discrepancies, negatively affecting customer satisfaction. The study results revealed that customer satisfaction with the institution's information exchange (communication) activities was 66.4%. Compared to previous survey findings, this indicates a notable improvement in the quality of information provided to customers by the institution. However, the study results indicate that the institution should enhance efforts to provide customers with timely information on power outage notifications, utility bill calculations, meter readings, and payment programs through multiple communication channels.

JD Power studies indicate that the social responsibility of electric utility companies is a key metric for measuring customer satisfaction. This encompasses preventing electrical accidents and responding promptly when they occur, raising customer awareness about electricity usage, establishing service centers closer to customers, responding swiftly to new energy requests, and protecting customers from solicitation of undue payments or bribes. According to JD Power, these corporate social responsibility practices contribute 13% to overall customer satisfaction.

The survey results revealed that customer satisfaction with EAA's social responsibility efforts is 67%, reflecting an improvement from the 65.8% recorded in the survey conducted during the first half of the fiscal year. This indicates that the institution is making positive strides in fulfilling the social responsibilities outlined above. Additionally, the study's regression analysis shows that fulfilling these social responsibilities is a direct factor influencing customer satisfaction, further reinforcing the survey findings. On the other hand, the survey assessed the level of customer satisfaction with the institution's customer service. This included questions such as quick resolution of customer complaints, reception and response to complaint and feedback phones, convenience of service centers, treating customers with respect, and providing prompt service.

The survey results indicated that the average customer satisfaction with these service-related aspects was 68.8%, marking a notable improvement from the 60.7% recorded in the survey conducted during the first half of the fiscal year. This demonstrates that the institution's recent reforms aimed at enhancing customer satisfaction through a customer-centric service approach are yielding tangible results. Furthermore, the study's regression analysis indicates that customer



service conditions have a direct effect on customer satisfaction. This finding is consistent with previous studies, which also confirmed the direct impact of service delivery conditions on customer satisfaction.

Another dimension used to assess customer satisfaction in this study was the price of electricity. Related questions addressed billing accuracy, fairness of utility bills, appropriateness of rate changes, and the clarity of information provided for payments. The study findings indicate that the average customer satisfaction with electricity pricing at EEU is 62%. Furthermore, the results show that electricity pricing is a significant factor influencing overall customer satisfaction. This finding is supported by previous studies conducted in various countries. Research by Temam (2013), Wedajo (2015), Israel (2015), Akaranga (2014), and Joseph and Gerry (2022) demonstrate that the affordability of electricity and transparency in billing directly affect customer satisfaction and warrant continued attention.

The findings indicate that customer satisfaction with electricity pricing at EEU is currently low. Factors contributing to this include recent price adjustments, as well as additional VAT and television surcharges, which affect customers' ability to pay and their perception of living costs. Prepaid card users, in particular, have reported discrepancies between the amount loaded onto their cards and the amount displayed on their meters, highlighting a lack of sufficient public information on the issue. Furthermore, the inclusion of the television fee in the agreement between the institution and EBC applied even to customers without televisions has caused dissatisfaction. These findings underscore the need for the institution to provide clear and comprehensive information to customers to improve understanding and enhance overall satisfaction.

The survey results indicate that the institution's overall customer satisfaction rate stands at 66.2%, reflecting an improvement of 1.2 percentage points compared to the 65% recorded in the first half of the fiscal year. An analysis of customer satisfaction by region shows that Wolayta Sodo recorded the highest satisfaction level, while Bale Robe reported the lowest. Compared to previous studies, the variation in satisfaction levels across regions has narrowed, indicating that regional performance in activities aimed at improving customer satisfaction is becoming more consistent.



5.1. Summary

The study results confirm that the Ethiopian Electric Utility has made progress in most service areas through its ongoing efforts to enhance customer satisfaction. Over the past four years, customer satisfaction has increased from 58% in 2014 to 66.2% in 2017. This upward trend is an encouraging outcome for an institution that continues to face both internal and external challenges in improving customer satisfaction.

However, the findings indicate that the institution still faces significant challenges in meeting its target of 80% customer satisfaction for the current fiscal year, with poor power quality identified as a major contributing factor. The study also confirmed that the satisfaction levels of both regular and key customers are currently at the same level. This suggests that the institution should continue strengthening the initiatives already underway to provide tailored services for key customers, who contribute 80% of the institution's revenue and play an important role in the country's economic growth by creating employment opportunities for many citizens.

The study results reveal that the variation in customer satisfaction across regions has decreased compared to previous assessments, indicating greater consistency in regional performance. This improvement contributes positively to the overall success of the Ethiopian Electric Utility's customer satisfaction enhancement plan. Therefore, to enhance overall customer satisfaction, the institution should work towards ensuring consistent levels of service delivery across regions, with particular attention given to regions and service centers where satisfaction levels are relatively low.

5.2. Recommendation

Power Quality

- To address the major factor affecting customer satisfaction, the institution should prioritize improving power quality. This requires upgrading and replacing old electrical poles, transformers, fuses, and distribution lines. Furthermore, a structured and regular



maintenance program should be implemented, with a strong emphasis on proactive inspection and timely repair of the electrical distribution infrastructure.

- The EEU should maintain the progress achieved in the first half of this fiscal year in reducing both the frequency of power outages (SAIFI) and their duration (SAIDI). Continued efforts are required to minimize outage duration through regular monitoring and maintenance, which will support faster reconnections and contribute to improved service delivery.

Billing and Payment

- The study identified challenges related to overdue bill payments caused by delayed energy meter readings for non-smart meter users. To address this issue, EEU should intensify efforts to expand the deployment of smart meters across its customer base. This initiative will reduce delays in meter readings and minimize the occurrence of overdue bills, improving overall billing efficiency and customer satisfaction.
- To manage related with billing errors, acknowledging the issues, taking prompt corrective actions to resolve errors, implementing preventive measures to avoid recurrence of billing inaccuracies, and offering compensation when necessary to maintain customer trust and satisfaction.
- The study revealed that the "Billing and Payment" dimension achieved the highest customer satisfaction score. To build on this success, EEU should adopt additional measures, such as: providing billing statements that are clear, accurate, and easy to understand, and insuring timely delivery of billing information to customers.

Communication

- The EEU should establish an independent system to collect and organize information on power outages from all regions and notify customers about both planned and unplanned outages. Such a system would serve as a reliable primary source of information, ensuring consistent communication about outages across all regions.
- In addition to existing communication channels such as social media, the utility should strengthen the use of mobile applications, SMS, email, and other modern information



dissemination technologies. A system should be implemented to provide timely, location-specific information, with particular focus on areas where outages or service issues occur frequently.

- The EEU should establish regular information exchange platforms between regions to provide customers with coordinated updates on planned power outages. These platforms will facilitate the sharing of outage schedules, updates on current and upcoming outages, and ensure that customers receive clear and accurate information.
- The EEU should conduct ongoing, participatory communication platforms to gather customer feedback on service quality and experiences. This approach will enable the institution to make evidence-based improvements and strengthen its relationship with customers.

Customer care

- EEU should regularly assess and maintain its customer service centers to ensure they are well-equipped for effective service delivery. Facilities should be improved as needed, and services should be provided in a hospitable manner that enhances customer satisfaction.
- EEU should regularly evaluate the performance of its call center operations, customer service, and overall operational efficiency. Ensuring that customers seeking support and information receive prompt and courteous responses is essential for improving customer satisfaction.
- To accommodate customers who are unable to access services during standard working hours, EEU should review and adjust its operating hours. Providing after-hours services will improve accessibility and customer satisfaction.
- EEU should continue to advance its technology-supported systems for receiving and managing customer complaints and feedback. This includes refining platforms for ease of use and accessibility while ensuring prompt responses and effective resolution of customer concerns.



- EEU should focus on developing its staff's skills in handling complaints, ensuring they can manage customer issues with professionalism, efficiency, and empathy. This will help foster trust and improve the customer service experience.
- Existing customer service centers should be evaluated for their convenience, accessibility to rural and satellite areas, and alignment with customer service standards. Based on the assessment, EEU should implement necessary improvements to meet customer needs effectively.

Corporate Citizenship

- EEU should prioritize timely electricity maintenance services by strengthening its human and material resources to meet service standards. Additionally, maintenance processes should be reviewed and streamlined to ensure prompt service delivery at all service points.
- To improve customer relations and promote awareness, EEU should increase efforts to educate customers on topics such as safety, electricity usage, theft and vandalism prevention, complaints handling procedures, and billing calculations. This can be achieved through various channels, including community engagement, workshops, feedback mechanisms, newsletters, bill inserts, text messages, and reward programs for energy-saving behaviors.
- EEU should organize awareness programs to educate customers about smart meter technology, including how electricity consumption is measured, how costs are calculated, and the reasons for penalty charges. These efforts will help reduce complaints related to high usage costs and penalties. Involving communities in preventing unethical practices will further uphold trust and integrity in service delivery.
- In response to study findings indicating customer losses due to power fluctuations, EEU should establish a transparent and efficient claims process for providing compensation. Policies and regulations related to compensation should be revised to align with principles of accountability and responsibility.



- EEU should take disciplinary action against unethical employees and review workplace ethics where standards are not being upheld. Ongoing on-the-job training focused on professional ethical standards should be implemented to foster continuous improvement and ethical behavior.
- To improve safety and reduce risks, EEU should implement regular inspection programs, replace outdated and worn-out electrical infrastructure, and ensure strict adherence to electrical wiring standards and codes. These measures will enhance safety features and minimize the risk of accidents.
- EEU should maintain regular engagement with key customers to gather feedback on service quality and overall service experiences. This feedback should inform ongoing improvements, fostering stronger relationships and customer satisfaction.

Electric Tariff

- The survey revealed limited public awareness regarding the institution's electricity tariff reform and distribution. To address this, the institution should conduct continuous awareness-raising initiatives, with particular emphasis on clarifying value-added tax (VAT) and other deductions applied during payment.



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Appendices

Customer satisfaction by Service center

Region	Service Center	Respondents	Mean	Satisfaction %
East A. A	East A. A N-3	80	2.56	64.1
	East A. A N-7	104	2.48	62.0
	East A. A N-6	140	2.46	61.6
	East A. A N-9	100	2.45	61.3
South A. A	South A. A N-5	88	2.50	62.5
	South A. A N-6	174	2.52	63.1
	South A. A N-9	104	2.51	62.8
	South A. A N-3	122	2.48	61.9
	South A. A N-10	106	2.48	61.9
West A. A	West A. A N-4	75	2.72	68.0
	West A. A N-6	95	2.59	64.8
	West A. A N-2	120	2.52	63.1
	West A. A N-1	105	2.50	62.5
North A.A	North A.A N-1	97	2.64	66.0
	North A.A N-7	104	2.59	64.8
	North A.A N-4	90	2.54	63.5
	North A.A N-5	101	2.48	61.9
Afar	Dicheto	44	2.96	73.9
	Asayta	136	2.86	71.5
	Semera	140	2.84	70.9
	Aliwuha	25	2.59	64.9
	Mile	33	2.41	60.2
Bahir Dar	Debretabor N.2	26	2.85	71.3
	Bahirdar N.3	97	2.59	64.7
	Wereta	73	2.57	64.3
	Dangla	53	2.55	63.8
	Addis Kidam	27	2.54	63.6
	Durbete	43	2.47	61.8
	Bahirdar N.1	158	2.32	58.1
	Debretabor	73	2.32	58.0
Dese	Kutaber	29	3.18	79.6
	Albeku	24	2.94	73.6
	Dese N.3	57	2.91	72.8
	Harbu	40	2.91	72.8
	Bati	65	2.85	71.3
	Hayk	51	2.78	69.6
	Kombolcha N.2	64	2.72	68.1



	Dese N.2	72	2.66	66.4
Gonder	Gonder N.1	100	2.80	70.0
	Dabat	60	2.56	64.0
	Debark	63	2.55	63.7
	Chilga	70	2.53	63.3
	Koladiba	49	2.51	62.6
	Gonder N.2	86	2.48	62.1
Debre Birhan	Deneba	47	2.80	70.1
	Chacha	65	2.71	67.9
	Shewarobit	71	2.68	67.0
	Lemi	50	2.63	65.7
	Debre Birhan N.2	85	2.37	59.3
	Debre Birhan N.1	81	2.31	57.8
Debre Markos	Yejub	34	2.92	73.0
	Yeedwuha	35	2.90	72.6
	Debrework	33	2.81	70.3
	Dejen	55	2.80	69.9
	Debre Markos N.2	85	2.76	69.1
	Bichena	58	2.63	65.7
	Finote selam	58	2.50	62.4
Woldiya	Muja	45	2.66	66.5
	Mersa	102	2.63	65.7
	Gashena	63	2.58	64.4
	Woldia N.2	73	2.33	58.3
Benishangul Gumuz	Bambasi	58	2.85	71.2
	Asosa	144	2.77	69.3
	Menge	37	2.73	68.3
Gambella	Abobo	51	2.82	70.5
	Gambella N.1	118	2.51	62.7
	Baro Meda	85	2.50	62.6
Direedawa	Melka	80	2.94	73.6
	Genet Menafesha	62	2.90	72.4
	Direedawa N.2	195	2.61	65.2
Harer	Harer N.1	130	2.87	71.7
	Harer N.2	124	2.82	70.6
	Direteyara	62	2.58	64.4
Chiro	Gursum	52	2.89	72.4
	Fedis	44	2.89	72.3
	Haromiya	130	2.81	70.2
	Hirna	82	2.79	69.8
	Chiro	86	2.72	67.9



Adama	Bulbula	44	2.93	73.3
	Haruta	49	2.89	72.2
	Awash Melkasa	57	2.84	71.1
	Alem Tena	47	2.81	70.4
	Adama N.1	105	2.79	69.8
	Bokoji	53	2.64	66.1
	Adama N.3	102	2.64	66.0
	Mojo	87	2.61	65.1
Sheger	Adulala	25	2.89	72.2
	Muketuri	55	2.85	71.2
	Muger	62	2.73	68.3
	Dukem	92	2.59	64.9
	Bishoftu N.2	109	2.59	64.8
	Sulilta	100	2.58	64.6
	Alemgena	124	2.53	63.2
	Tatek	138	2.15	53.8
Shashemene	Dimtu	16	3.13	78.1
	Kofele	57	2.98	74.4
	Asasa	100	2.97	74.3
	Shashemene N-1	97	2.84	70.9
	Hageremariam	102	2.67	66.8
	Yabelo	51	2.54	63.5
	Negeborena	22	2.34	58.4
Jima	Sokuru	79	2.71	67.6
	Agaro	122	2.70	67.5
	Denbi	72	2.64	66.0
	Jima N.2	129	2.58	64.5
Nekemte	Arjo awuraja	53	3.37	84.3
	Nekemte N.2	74	3.02	75.5
	Guliso	56	2.96	74.1
	Robgebeya	37	2.96	73.9
	Hirosebu	44	2.80	70.0
	Gimbi	75	2.60	65.1
	Shambu	61	2.52	63.1
	Finchia	63	2.52	63.0
Ambo	Bantu	49	3.14	78.6
	Tulubolo	55	3.00	75.0
	Bako	91	2.92	73.1
	Guder	58	2.72	67.9
	Weliso	93	2.67	66.8
	Ambo	95	2.54	63.6



Balerobe	Delomena	76	2.79	69.8
	Balegoba	102	2.67	66.7
	Dodola	80	2.18	54.5
	Balerobe	117	2.17	54.2
Metu	Gore	64	2.90	72.5
	Yayu	66	2.79	69.8
	Bedele	88	2.79	69.7
	Metu	90	2.74	68.5
	Becho	53	2.70	67.4
Jigjiga	Togochale	51	3.00	75.0
	Shilabo	38	2.97	74.2
	Kebridehar	75	2.77	69.4
	Aysa	51	2.75	68.7
	Gode ber	87	2.65	66.3
	Fafen	51	2.56	64.1
	Jigjiga N.1	126	2.46	61.5
Arbaminch	Amarokele	60	2.82	70.4
	Burji	73	2.68	67.1
	Jinka	83	2.68	67.0
	Konso	61	2.65	66.3
	Arbamich N-1	106	2.54	63.6
Hosaena	Endibr	56	3.04	76.1
	Ginbichu	65	2.85	71.2
	Alemgebeya	37	2.84	71.1
	Tora	50	2.84	71.0
	Butajira	93	2.65	66.2
	Saja	41	2.64	66.0
	Bue	49	2.58	64.4
	Hosaena N-2	73	2.25	56.3
Wolayta Sodo	Bele Gunino	52	3.42	85.4
	Areka	73	2.97	74.1
	Yirgachefe	65	2.86	71.5
	Wolayta Sodo N.1	89	2.62	65.6
	Dila	113	2.60	65.1
Mekele	Abiyadi	55	2.87	71.7
	Wukro	60	2.66	66.5
	Adigrat	79	2.59	64.6
	Maychew	50	2.44	61.1
	Kuha	75	2.43	60.7
	Mekele N.2	131	2.43	60.6
	Adigundom	45	2.25	56.3



Shire	Adihageray	41	3.07	76.9
	Edaga-arbiy	57	2.90	72.5
	Endabaguna	61	2.75	68.8
	Shire	77	2.54	63.6
	Adiwa	77	2.51	62.7
	Aksum	84	2.46	61.6
Hawasa	Wendogenet	49	2.80	70.1
	Hagereselam	41	2.75	68.9
	Yirgalem	67	2.75	68.7
	Hawasa N-4	105	2.73	68.3
	Hawasa N-2	86	2.64	66.0
Bonga	Ameya Konta	58	3.11	77.8
	Tepi	72	2.75	68.8
	Mizan	84	2.65	66.3
	Bonga	64	2.59	64.7
	Tarcha	67	2.58	64.4

Customer Satisfaction by Region: Regular vs. Key Customers

Region	Type of customers	Mean	Satisfaction
East Addis Ababa	Regular Customer	2.61	65.4
	Key Customer	2.56	64.0
South Addis Ababa	Regular Customer	2.58	64.4
	Key Customer	2.62	65.4
West Addis Ababa	Regular Customer	2.67	66.8
	Key Customer	2.66	66.6
North Addis Ababa	Regular Customer	2.63	65.8
	Key Customer	2.66	66.6
Afar	Regular Customer	2.78	69.5
	Key Customer	2.97	74.2
Bahirdar	Regular Customer	2.53	63.3
	Key Customer	2.48	62.0
Dese	Regular Customer	2.71	67.8
	Key Customer	2.81	70.3
Gonder	Regular Customer	2.56	63.9
	Key Customer	2.44	60.9
Debre Birhan	Regular Customer	2.60	65.0
	Key Customer	2.80	70.0
Debre Markos	Regular Customer	2.73	68.2
	Key Customer	2.72	67.9
Woldia	Regular Customer	2.57	64.3
	Key Customer	2.78	69.6
Benshangul Gumz	Regular Customer	2.68	67.1
	Key Customer	2.55	63.8
Gambella	Regular Customer	2.58	64.5
	Key Customer	2.74	68.5
Dire Dawa	Regular Customer	2.79	69.6
	Key Customer	2.79	69.6



Harer	Regular Customer	2.75	68.7
	Key Customer	2.79	69.8
Adama	Regular Customer	2.73	68.2
	Key Customer	2.71	67.8
Sheger	Regular Customer	2.59	64.7
	Key Customer	2.56	64.1
Shashemene	Regular Customer	2.81	70.2
	Key Customer	2.79	69.7
Chiro	Regular Customer	2.72	68.1
	Key Customer	2.81	70.1
Jima	Regular Customer	2.55	63.7
	Key Customer	2.65	66.3
Nekemte	Regular Customer	2.74	68.5
	Key Customer	2.86	71.5
Ambo	Regular Customer	2.77	69.2
	Key Customer	2.74	68.5
Balerobe	Regular Customer	2.39	59.7
	Key Customer	2.67	66.7
Metu	Regular Customer	2.70	67.4
	Key Customer	2.61	65.1
Jigjiga	Regular Customer	2.66	66.5
	Key Customer	2.73	68.1
Arbaminch	Regular Customer	2.62	65.5
	Key Customer	2.64	66.0
Hosaena	Regular Customer	2.62	65.5
	Key Customer	2.64	66.0
Wolayta	Regular Customer	2.82	70.6
	Key Customer	2.73	68.4
Mekele	Regular Customer	2.57	64.2
	Key Customer	2.62	65.4
Shire	Regular Customer	2.58	64.4
	Key Customer	2.60	65.1
Sidama	Regular Customer	2.67	66.8
	Key Customer	2.75	68.7
South West	Regular Customer	2.65	66.3
	Key Customer	2.89	72.2



Satisfaction indicators mean by EEU region

	PQ01	PQ02	PQ03	PQ04	PQ05	BP01	BP02	BP03	BP04	BP05	CO01	CO02	CO03	CO04	CO05	CO06	CO07	CO08	CC01	CC02	CC03	CC04	CC05	CC06	CCA01	CCA02	CCA03	CCA04	CCA05	ET01	ET02	ET03	ET04
District																																	
East AA	2.2	2.38	2.67	2.63	2.75	3.13	2.97	2.5	2.83	3.02	2.94	2.5	2.15	2.64	2.91	2.49	2.21	2.74	2.63	2.54	2.48	2.85	2.39	2.55	2.4	2.65	2.88	2.82	2.61	2.25	2	2.16	2.82
South AA	2.14	2.5	2.63	2.57	2.75	2.95	2.91	2.51	2.74	2.94	2.94	2.5	2.22	2.63	2.91	2.5	2.28	2.72	2.54	2.47	2.42	2.88	2.51	2.68	2.47	2.64	2.9	2.82	2.61	2.27	2	2.12	2.73
West AA	1.71	2.04	2.74	2.75	2.96	3.48	3.26	2.71	2.87	3.44	3.1	2.57	2.04	2.66	3.03	2.5	2.28	2.65	2.62	2.53	2.59	3.15	2.51	2.9	2.45	2.65	3.07	3.1	2.67	2.38	1.88	2.07	2.72
North AA	2.36	2.48	2.7	2.64	2.69	3.12	3.03	2.53	2.82	3.07	3.01	2.45	2.16	2.66	2.97	2.55	2.21	2.77	2.56	2.65	2.34	2.89	2.6	2.62	2.5	2.65	2.99	2.89	2.63	2.42	2.17	2.24	2.87
Afar	2.45	2.84	2.67	2.7	2.78	2.91	2.85	2.87	2.92	2.72	2.85	2.75	2.87	2.94	2.67	3.01	2.95	2.99	2.61	3.02	2.98	2.95			2.93	2.87	3.03	3.05	3.03	2.61	2.09	2.15	3.01
Bahirdar	2.24	2.54	2.41	2.34	2.44	2.88	2.85	2.44	2.72	2.89	2.88	2.37	2.16	2.52	2.8	2.48	2.26	2.65	2.44	2.5	2.33	2.83	2.29	2.55	2.43	2.6	2.81	2.7	2.54	2.34	2.07	2.1	2.73
Dese	2.04	2.5	2.39	2.34	2.54	2.86	2.94	2.67	2.94	3.11	3.03	2.66	2.36	2.78	3.01	2.95	2.43	3	2.65	2.78	2.65	3.02	2.67	3.05	2.74	2.77	3.07	2.98	2.86	2.62	2.33	2.31	2.87
Gonder	1.96	2.34	2.37	2.4	2.46	2.94	2.93	2.39	2.62	3.01	2.89	2.42	2.07	2.48	2.85	2.53	2.27	2.66	2.42	2.41	2.31	2.91	2.51	2.45	2.41	2.47	2.86	2.8	2.65	2.42	2.37	2.31	2.84
Debre Berhan	2.45	2.72	2.53	2.41	2.52	2.92	2.89	2.6	2.81	2.86	2.91	2.55	2.3	2.71	2.83	2.66	2.34	2.82	2.58	2.63	2.55	2.89	2.64	2.69	2.7	2.71	2.87	2.89	2.78	2.3	1.99	2.06	2.73
Debre Markos	2.12	2.56	2.42	2.46	2.61	3.06	3	2.73	3	3.07	3.03	2.74	2.35	2.83	2.99	2.71	2.46	3	2.85	2.85	2.64	2.99	2.68	2.78	2.74	2.87	2.95	2.95	2.82	2.41	2.15	2.29	2.91
Woldia	2.32	2.58	2.3	2.21	2.51	2.99	2.96	2.65	2.78	2.94	2.9	2.49	2.15	2.61	2.83	2.67	2.2	2.52	2.55	2.61	2.27	3.02	2.4	2.92	2.51	2.61	2.96	2.85	2.71	2.3	2.06	2.08	2.69
Benshangul Gumuz	2.18	2.63	2.45	2.39	2.55	3	2.9	2.6	2.72	2.96	2.88	2.64	2.28	2.67	2.92	2.47	2.45	2.82	2.73	2.67	2.54	2.77	2.58	2.63	2.59	2.83	3	2.88	2.65	2.72	2.65	2.69	2.91
Gambela	2.3	2.51	2.6	2.35	2.41	2.81	3.01	2.31	2.75	3.1	2.99	2.32	2.41	2.56	3.01	2.41	2.15	2.92	2.59	2.46	2.29	2.97	2.58	2.66	2.42	2.6	2.94	2.81	2.62	2.3	2.16	2.33	2.82
Diredawa	2.55	2.75	2.83	2.74	2.91	2.72	3.03	2.68	2.91	3.1	3.06	2.68	2.53	2.77	2.99	2.78	2.57	3	2.77	2.68	2.59	2.94	2.78	2.86	2.65	2.76	2.95	2.97	2.8	2.68	2.46	2.51	2.92
Harar	2.43	2.6	2.67	2.6	2.65	2.88	2.94	2.62	2.82	3.21	3.04	2.58	2.44	2.76	3.07	2.57	2.44	2.79	2.67	2.7	2.61	3.16	2.77	2.6	2.68	2.71	3.38	3.04	2.9	2.45	2.43	2.57	2.89
Adama	2.39	2.62	2.5	2.54	2.6	2.91	2.88	2.71	2.82	2.9	2.84	2.73	2.54	2.79	2.86	2.71	2.66	2.86	2.75	2.8	2.75	2.93	2.76	2.71	2.73	2.77	2.88	2.87	2.77	2.66	2.43	2.43	2.79
Sheger	2.04	2.31	2.51	2.43	2.44	2.89	3	2.54	2.82	3.14	3.06	2.51	1.9	2.68	3.08	2.61	2.36	2.82	2.61	2.63	2.46	2.92	2.31	2.4	2.41	2.58	2.73	2.8	2.53	2.39	2.1	2.14	2.9
Shashemene	2.48	2.81	2.63	2.6	2.76	2.99	3.03	2.84	2.92	3.07	2.92	2.76	2.46	2.85	2.96	2.68	2.69	2.88	2.88	2.89	2.63	2.92	2.73	2.83	2.79	2.82	2.95	2.99	2.83	2.73	2.64	2.65	2.92
Chiro	2.37	2.63	2.56	2.49	2.53	2.92	2.96	2.69	2.84	3.04	2.94	2.69	2.42	2.73	3.05	2.74	2.51	2.82	2.67	2.76	2.72	2.97	2.78	2.63	2.75	2.76	2.94	2.91	2.81	2.66	2.62	2.6	2.89
Jima	2.11	2.39	2.39	2.32	2.4	2.72	2.79	2.57	2.7	2.86	2.72	2.54	2.24	2.59	2.8	2.51	2.46	2.76	2.52	2.58	2.56	2.73	2.49	2.59	2.5	2.58	2.76	2.77	2.62	2.48	2.45	2.53	2.71
Nekemte	2.26	2.64	2.41	2.25	2.34	3.12	3.06	2.79	2.84	3.11	3.03	2.69	2.57	2.84	2.94	2.68	2.67	2.9	2.82	2.87	2.69	2.95	2.69	2.85	2.77	2.6	2.9	3.04	2.86	2.71	2.56	2.28	2.9
Ambo	2.36	2.72	2.57	2.48	2.46	2.97	3	2.74	3	3.11	2.97	2.66	2.4	2.85	3	2.64	2.63	3.01	2.76	2.83	2.63	3.06	2.63	2.88	2.78	2.79	2.89	2.98	2.86	2.67	2.43	2.36	2.98
Bale	2.15	2.38	2.29	2.25	2.33	2.81	2.82	2.43	2.65	2.83	2.79	2.31	2.03	2.54	2.75	2.25	2.29	2.72	2.48	2.62	2.38	2.85	2.23	2.22	2.31	2.32	2.69	2.5	2.39	2.44	2.19	2.14	2.69
Metu	1.97	2.46	2.5	2.48	2.38	2.92	2.97	2.69	2.84	2.99	2.97	2.44	2.36	2.82	2.96	2.56	2.41	3.05	2.78	2.78	2.56	2.96	2.73	2.82	2.51	2.72	2.98	2.98	2.8	2.68	2.42	2.43	2.74
Jijiga	2.46	2.54	2.53	2.51	2.6	2.86	2.85	2.79	2.85	2.77	2.83	2.52	2.41	2.61	2.7	2.7	2.58	2.75	2.65	2.63	2.53	2.82	2.58	2.62	2.59	2.68	2.74	2.76	2.66	2.77	2.61	2.51	2.86
Arbaminch	2.12	2.39	2.48	2.39	2.55	2.95	2.94	2.55	2.79	3.13	2.96	2.49	2.21	2.61	3.02	2.46	2.29	2.92	2.56	2.62	2.46	2.94	2.59	2.62	2.47	2.63	2.76	2.74	2.54	2.55	2.47	2.43	2.93
Hosaena	2.17	2.54	2.4	2.28	2.39	2.88	2.87	2.58	2.81	2.97	2.85	2.52	2.31	2.67	2.88	2.52	2.47	2.67	2.64	2.68	2.54	2.97	2.43	2.68	2.59	2.7	2.9	2.84	2.7	2.44	2.36	2.48	2.84
Wolayta	2.36	2.71	2.61	2.58	2.8	3.15	3.1	2.66	3.03	3.21	3.1	2.75	2.3	2.9	3.03	2.66	2.46	2.99	2.85	2.91	2.63	3.05	2.74	3	2.78	2.94	3.05	3.09	2.98	2.68	2.53	2.43	2.84
Mekelle	2.22	2.7	2.46	2.33	2.42	2.75	2.84	2.48	2.83	2.88	2.93	2.56	2.27	2.69	2.89	2.79	2.51	2.79	2.57	2.64	2.57	2.83	2.41	2.76	2.47	2.63	2.79	2.8	2.68	2.4	2.05	2.11	2.69
Shire	1.96	2.36	2.24	2.21	2.39	3.01	2.62	2.32	2.59	2.86	2.84	2.45	1.93	2.66	2.87	2.72	2.26	2.83	2.49	2.86	2.35	3.01	2.65	3.04	2.46	2.66	3.04	2.97	2.6	2.17	2.07	1.93	2.5
Sidama	2.45	2.66	2.61	2.6	2.65	2.82	2.79	2.67	2.7	2.78	2.75	2.72	2.39	2.63	2.76	2.7	2.55	2.72	2.75	2.74	2.71	2.78	2.78	2.71	2.76	2.78	2.86	2.84	2.81	2.65	2.28	2.52	2.84
South West	2.28	2.67	2.31	2.25	2.44	2.89	2.96	2.63	2.86	2.99	2.92	2.54	2.32	2.71	2.93	2.57	2.37	2.83	2.63	2.63	2.5	2.79	2.63	2.82	2.61	2.71	2.84	2.93	2.72	2.52	2.48	2.54	2.87



Survey Questionnaire

The main purpose of this survey is to find out the level of customer satisfaction with the services provided by Ethiopian Electric Utility and to collect the opinions of its customers that will enable it to provide better service in the future. All data collected will be strictly confidential, this means everything you tell us will be kept private. We will not share your name or personal information with third party or anyone else. When we write about what we learn from talking to people like you, we will combine all the answers together so no one can tell what you specifically said.

Thank you in advance for your willingness.

Are you willing to participate in the survey?

Section 1: General Information

1. Region/City Administration _____
2. District _____
3. Service Center _____
4. Subscription type: 1) Residential House 2) Commercial 3) LV Industry 4) MV Industry
5. Meter Type: 1) Postpaid (Bill) 2) Pre paid (Card)

Section 2: Demographic information

1. Full Name: _____
2. Phone number: _____
3. Gender 1) Male 2) Female
4. Age _____
5. Monthly Income = _____

Section 3: Satisfaction Items

1= Strongly Disagree 2= Disagree 3= undecided 4= Agree 5= Strongly Agree

S/N	Items	1	2	3	4	5
1. Power Quality & Reliability						
1.1.	The power outages do not occur frequently.					
1.2.	After the electric power outage, it turns back on quickly.					
1.3.	The occurrence of voltage drops is low.					



1.4.	The occurrence of power fluctuations is low.					
1.5.	Damage to property due to power fluctuations is low.					
2. Billing & Payment						
2.1.	The reading of the energy meter is taken every month.					
2.2.	The bills I receive are accurate.					
2.3.	A bill invoice is prepared without delay every month.					
2.4.	Corrections will be made by the EEU workers on the disputed bill.					
2.5.	A disconnected power line will be reconnected immediately after payment.					
2.6.	EEU's payment options are suitable for customers.					
3. Communication						
3.1.	EEU will announce the bill payment program in advance.					
3.2.	EEU clearly informs the customers about the grievance redressal system.					
3.3.	EEU priory notify the customers about planned power outage.					
3.4.	EEU staffs give the necessary information to customers.					
3.5.	EEU informs its customers about the available payment options					
3.6.	EEU will notify customers before cutting off the electricity due to unpaid bills.					
3.7.	EEU aware customers about how energy consumption is calculated.					
3.8.	EEU clearly and timely announces the required criteria that customers must fulfill to get new electric connection					
4. Corporate Social Responsibility						
4.1.	EEU works with attention to avoid electrical accidents.					
4.2.	EEU repairs the electrical faults quickly.					
4.3.	EEU provides awareness about the usage of electricity.					
4.4.	Service centers are located at nearby.					
4.5.	The EEU quickly responds to the request of new energy meter applicants.					
4.6.	EEU staffs Serve the customers without asking for bribe (undue benefit)					
5. Customer Care						



5.1.	EEU resolves customer complaints quickly					
5.2.	Workers handling the complaint line pick up customer calls and offer them answers.					
5.3.	EEU service centers are clean and conducive					
5.4.	Staffs of EEU Serve the customers with due respect					
5.5.	Customers receive prompt service from the EEU staff					
6. Price						
6.1.	I feel that the price I pay for electricity is fair for the value I receive.					
6.2.	EEU's electricity rates are fair					
6.3.	The Adjusted price of EEU is fair					
7. Overall Satisfaction						
1= Very Unsatisfied 2= Unsatisfied 3=Neutral 4= Satisfied, 5 =Very satisfied						
7.1.	How satisfied are you with the overall services of EEU?					

8. Mention the issues that EEU should be emphasis for the future?

9. In which EEU service show improvement?

Focus Group Discussion Questions

Guidelines

- A manageable group size of 10-12 customers should be involved in the Focus Group Discussions (FGDs)
- Women's participation must be 30% to 50%
- 30% of the participants should be key customers, while 70% should be regular customers
- The FGD participants should be selected from different a community that shares a specific characteristic relevant to the study
- audio recordings should be taken during the FGD sessions
- Summary of the Focus Group Discussions with the audio should be sent to the main office
- participants should be encouraged and briefed on the questions so as to obtain their detailed opinions



- Facilitators first need to introduce themselves by name, and then they should explain the objectives and relevance of the study
- The questions are categorized into four groups and a conclusion section. For each category, facilitators should clearly explain the purpose of the questions within each category briefly, then encourage opinion and discussion.

1. Service delivery and customer care questions

- 1.1. How frequently does power outage and power fluctuation occur in your surrounding? How these incidents significantly impact daily activities and income?
- 1.2. How do you evaluate the EEU's capacity to detect outages in real-time and deploy crews to the affected areas to restore electricity without delay?
- 1.3. Have you ever seen a situation where the EEU workers treated workers unequally? What are your main observation in relation to treating customers with respect?
- 1.4. Do you have an opinion regarding the convenience of Customer Service Centers to customers?

2. Billing and payment questions

- 2.1. What are the major challenges you face with billing and billing calculation?
- 2.2. What is your opinion on the current electricity bill payment?
- 2.3. What are the major problems when it comes to billing payment?
- 2.4. How convenient are the utility's payment options? What are the major gaps in this regard?

3. Questions on Service transparency and customers' relation

- 3.1. What is your opinion on EEU's power usage awareness program for customers?
- 3.2. How do you assess EEU's advance notification of planned power outage? How satisfied are you with the service response time during a power outage? How effective is the response to power outage?
- 3.3. How do you assess the performance of the EEU with regard to the completion time for new power customer requests, and the provision information on the required documents and others?
- 3.4. How is the utility fulfilling its responsibility when it comes to paying compensation for customers' damaged properties?



- 3.5. Does the EEU provide education on the care that should be given to prevent looting and other damaging activities on electric power lines? How it involve customers in forums related to these issues?
- 3.6. How do you view EEU's customer interactions, specifically regarding information exchange and communication?

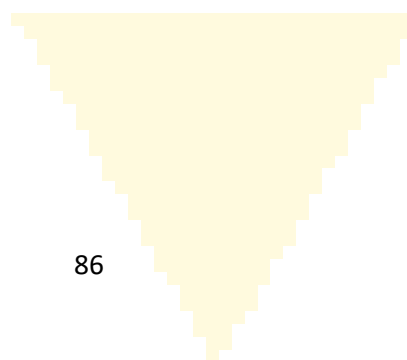
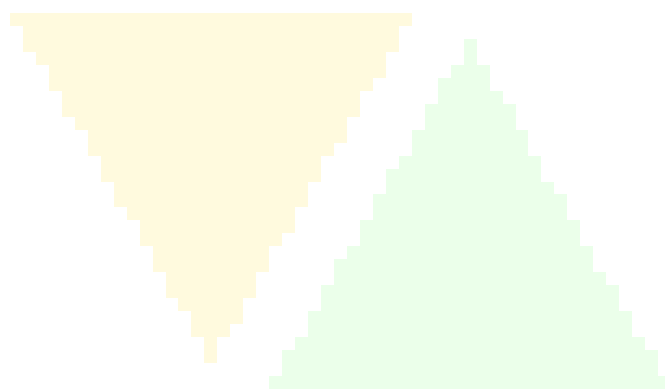
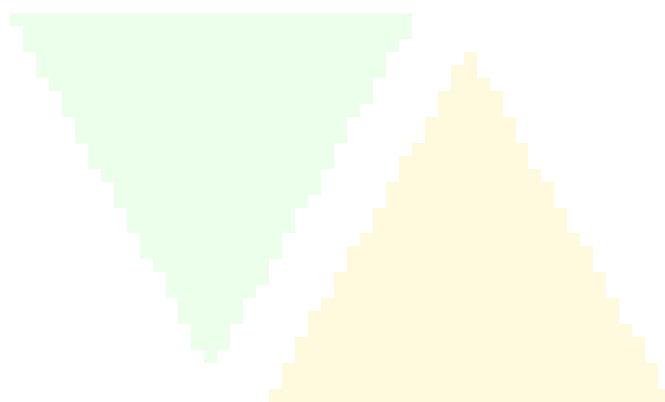
4. Questions on customer complaints handling

- 4.1. To what extent are employees and managers of the EEU motivated to respond to customer complaints?
- 4.2. How do you evaluate the EEU's grievance handling system?
- 4.3. Does the EEU provide clear information on procedures for filing complaints, relevant departments, and expected response times?
- 4.4. Do workers actively listen to customer complaints regarding power outages, showing due attention? Do they show respect to customers when responding to complaints?

5. Conclusion

What are the most serious issues not addressed within the organization?

- 1.....
- 2.....
- 3.....







*Ethiopian Electric Utility
Customer Satisfaction Survey*

*By Ethiopian News Agency
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