

A Major Project Report  
On  
Satisfaction Survey of Consumers  
Of  
TATA Power Delhi Distribution Limited

Submitted for the award of the degree of  
Master of Business Administration (Executive)

By

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Under the Supervision of

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Delhi School of Management  
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## DECLARATION

I, Gagandeep Kaur, student of Master of Business Administration (Executive)- 2013-15 of Delhi School of Management, Delhi Technological University, hereby declare that the project entitled“**Satisfaction Survey of Consumers of Tata Power Delhi Distribution Limited**”, submitted as a major project is my original work.

This project has been carried out under the able guidance and supervision of Dr. Rajan Yadav, Associate Professor, Delhi School of Management, Delhi Technological University.

I further declare that I have not previously submitted the project report to any other institute/university for any other degree/diploma.

Signature of the Student

(GAGANDEEP KAUR)

Place : Delhi

Date : 27/May/15

## CERTIFICATE

This is to certify that the project entitled “**Satisfaction Survey of Consumers of Tata Power Delhi Distribution Limited**” is a bonafide work carried out by **Ms Gagandeep Kaur**, student of Master of Business Administration(Executive)-2013-15, Delhi School of Management, Delhi Technological University, in partial fulfillment of the requirements for the award of the Degree of Master of Business Administration and that the project has not formed the basis for the award previously for any degree, diploma, fellowship or any other similar title.

Signature of Guide

(Dr. Rajan Yadav)

Place : Delhi

Date : 27/May/15

## **ACKNOWLEDGEMENT**

I am extremely thankful and express my profound indebtedness to my guide/faculty **Dr. Rajan Yadav**, Delhi School of Management, Delhi Technological University for his genuine concern, invaluable guidance and constant encouragement during the entire duration of the project.

I extend my gratitude towards **Delhi Technological University** for giving me this opportunity.

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And last but not the least, I express my gratitude to all of my fellow friends & batch mates who directly or indirectly helped me to complete this project report.

**Gagandeep Kaur**

**Batch of Master of Business Administration (2013-2015)**

**Delhi School of Management**

**Delhi Technological University**

## **EXECUTIVE SUMMARY**

TATA Power Delhi Distribution Limited, TPDDL (earlier North Delhi Power Limited) was incorporated in July 2002 as a JV of Tata Power (51%) and Delhi Government(49%) on the Public-Private Partnership (PPP) model. TPDDL took over the license to distribute electricity to North & North Westpart of Delhi through a competitive bidding process initiated to reform the distribution sector in Delhi. The Company changed itsname from North Delhi Power Limited to Tata Power Delhi Distribution Ltd. in Nov 2011. The new name, while signifying TPDDL'sdirect relationship with the Tata Power Company Limited, allows the company to significantly leverage its TATA lineage forenhancing sustainability and growth of business.

Electricity distribution is a utility service affecting the daily life of the population and is a socio-political matter. As part ofUniversal Service Obligation (USO), TPDDL is committed to provide electricity to all customers in its licensed area withoutdiscrimination as long as they are bonafide 'customers' under the provisions of Electricity Act 2003.

All processes of TPDDLare consumer centric. Company has taken a lot of initiatives to meet the consumer expectations to provide reliable, competitive power and services and be the company of choice for all its stakeholders. The various customer segments TPDDL deliver electricity to, range from Domestic to Xpress consumer base.

Since TPDDL is a Service Distribution organization, this research has been carried out to assess the satisfaction level of consumers of TPDDL about the Service Quality offered, through a questionnaire survey on 100 number of TPDDL consumers. The research results throw light on the satisfaction achieved so far against the initiatives taken by TPDDL in providing the differentiated services to its customers.

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Power Industry Profile**

(I) “Make power distribution reforms a top priority”: World Bank

As per the World Bank, Power distribution in India needs high level of reforms if it is to bring back the country to a high growth trajectory and meet its goal of expanding access to electricity to all by 2019. Today, India’s annual per capita power sector consumption is at around 800 units, which is among the lowest levels in the world. World Bank’s latest report named — More Power to India: The Challenge of Distribution — is a review of the Indian power sector across key areas of access, utility performance, and financial sustainability. A chain is as strong as its weakest link and “Electricity Distribution” is a weak link in the power sector.

The World Bank’s report acclaims freeing utilities and regulators from external interference, increasing accountability and enhancing competition in the sector to move it to a higher level of service delivery. In 2014, Total accumulated losses in the sector were reported to be \$30 billion. These losses are concentrated among discoms including the State Power Departments and State Electricity Boards (SEBs). By tackling the losses through a concentrated approach, it would be possible to make a marked difference in sector performance.

“Revitalizing the power sector by improving the performance of “Distribution Utilities”, and ensuring that players in the sector are subjected to financial discipline is the need of the hour,” World Bank Country Director in India.

## (II) Need for Privatization of Distribution business

Distribution and Retail Supply is the most crucial link in the electricity market, which interfaces with the end customers and provides revenue for the entire value chain. Indian electricity distribution supplies to nearly 200 million consumers with a connected load of about 400 GW that places the country among the largest electricity consumer bases in the world. Power is a common subject with the involvement of both the central and state governments. Distribution, however, is the exclusive responsibility of the state governments. The State Electricity Boards (SEBs) which were set up under the Electricity Supply Act, 1948 are responsible for generation, transmission and distribution of electricity within a particular state. The development of the sector till the time of liberalization was envisioned at the state level through the monopolistic SEBs with the CPSUs (Central Public Sector Undertakings) supporting SEBs. The growth and development of the electricity industry has been steady and proportionate with the growth in the Gross Domestic Product (GDP). The operations and financial conditions of the SEBs began to deteriorate and impose increasingly unsustainable burden on the finances of the state governments.

In order to improve the sector performance and to mobilize investments for its development, the Government of India introduced the **policy of private participation** in 1991, as a part of its economic reforms program. The initial policy focused on private sector participation in generation. Some of the main reasons for deteriorating performances of SEB/DVB were:-

- Lack of commercial alignment
- Transmission & Distribution (T&D) losses
- Authority for Tariff setting requiring political decision making
- Deteriorating Quality of supply
- Poor Work culture
- Lack of accurate Metering
- Inefficiencies in Collection and billing

### (III) Recent developments

In view of the critical state of the Indian power sector, on the distribution side, strategies for improvement have focused on the following:-

- (i) Setting up of Independent Regulatory Commissions
  - (ii) Metering of all consumers
  - (iii) Reduction of losses at the sub-transmission and distribution level
  - (iv) Increased investment for strengthening the system and reducing losses in transmission &
  - (v) Reliability improvement
  - (vi) World Bank support for reforms
- Of the above action points, there has been significant progress towards the evolution of an independent regulatory mechanism through the enactment of the Electricity Regulatory Commission Act in 1998 and the State Reforms Acts. Apart from the Central Electricity Regulatory Commission, State Electricity Regulatory Commissions have been set up in nineteen states.

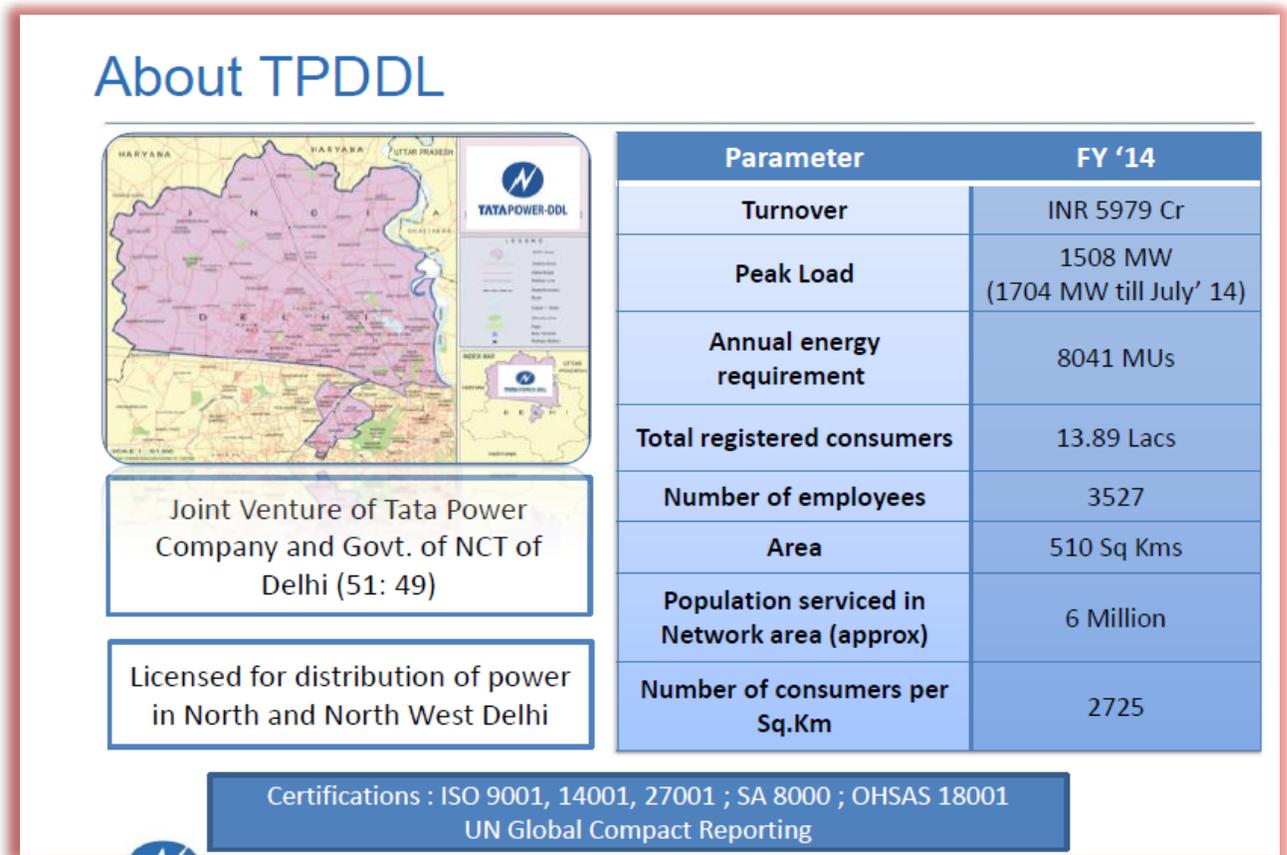
## **1.2 TPDDL Profile**

TPDDL (earlier North Delhi Power Limited) was incorporated in July 2002 as a JV of Tata Power (51%) and Delhi Government(49%) on the Public-Private Partnership (PPP) model. TPDDL took over the license to distribute electricity to North & North West part of Delhi through a competitive bidding process initiated to reform the distribution sector in Delhi. The Company changed its name from North Delhi Power Limited to Tata Power Delhi Distribution Ltd. in Nov 2011. The new name, while signifying TPDDL's direct relationship with the Tata Power Company Limited, allows the company to significantly leverage its TATA lineage for enhancing sustainability and growth of business.

TPDDL's utility business is governed by the provisions of license issued by the DERC for the distribution and retail supply of electricity in North & North West Delhi for a period of 25 years. The DERC regulates the working of entire power sector of the Delhi state, including determination of tariff chargeable to end consumers and establishing performance norms (mainly related to loss reduction, reliability of power supply and

consumer service delivery). The norms/targets are set by the DERC after taking into account the past performance, existing levels and current operating environment, i.e., the ground realities and prevailing norms for other power distribution utilities across the country. Further, keeping the stakeholders' interest paramount, it captures the future expectations of the general Public/Govt./Utilities etc. through a public hearing.

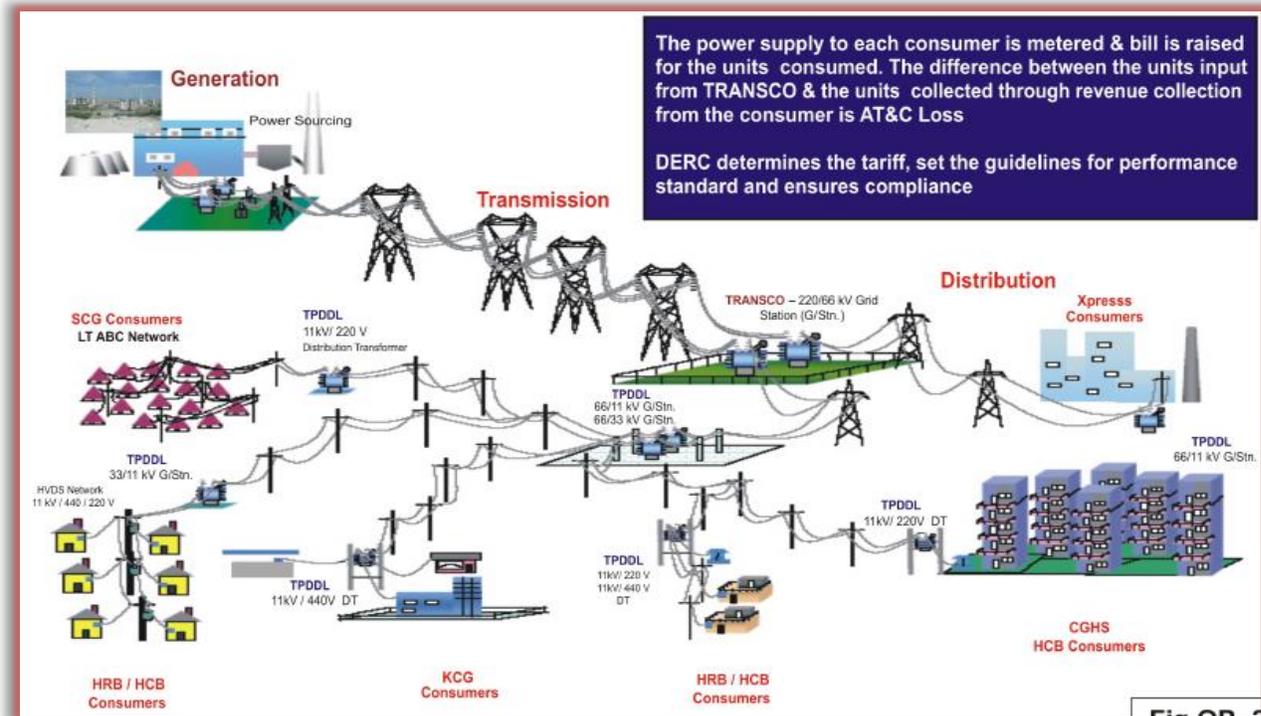
TPDDL has consistently over achieved its targets and scripted an unprecedented turnaround story. In a short span of 10 years, the AT&C loss levels have been reduced from 53% to around 11% - showcasing one of the few success stories of the PPP model post implementation of distribution reforms. Besides, major improvements have been effected in the reliability of network and consumer services. The key differentiating factor has been the optimal and effective deployment of technology interventions through a comprehensive roadmap.



Source: Tata Power Delhi Distribution Ltd.

Figure 1.1

✚ **Single line diagram showing the “Power supply distribution Process”:-**



Source: Tata Power Delhi Distribution Ltd.

Figure 1.2

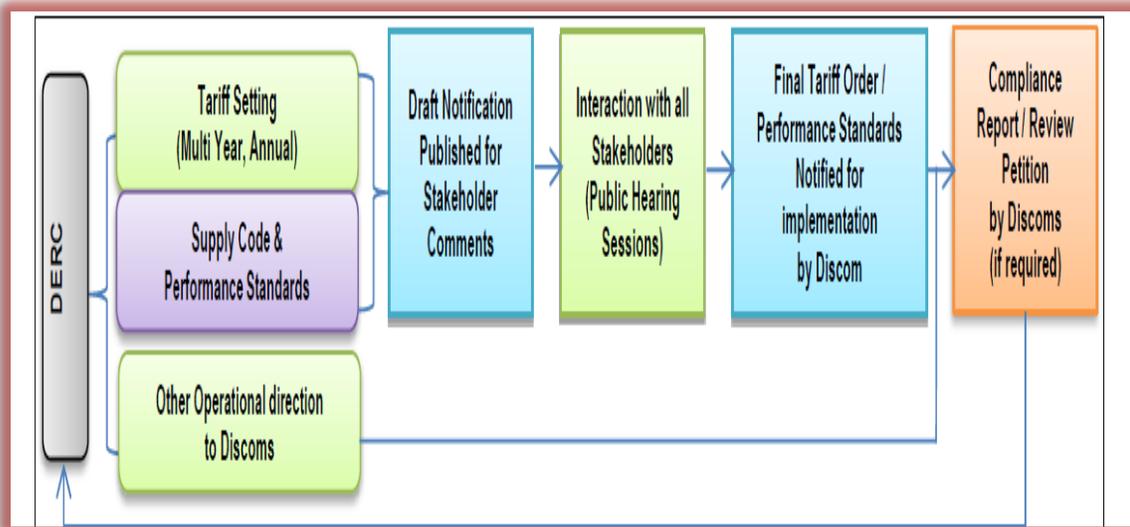
TATA Power Delhi Distribution Limited has been the frontrunner in its “Customer focus” activities. Electricity distribution is a utility service affecting the daily life of the population and is a socio-political matter. As part of Universal Service Obligation (USO), TPDDL is committed to provide electricity to all customers in its licensed area without discrimination as long as they are bonafide ‘customers’ under the provisions of Electricity Act 2003.

Electricity Distribution Supply Code and Performance Standard for service delivery are set by DERC after extensive discussions with all stakeholders.

There are 6 main consumer segments that TPDDL serves (on the basis of Sanctioned Load (in kW)):-

SCG, HCB, HRB, KCG, Xpress, G & I

## ✚ Tariff setting by DERC:-



Source: Tata Power Delhi Distribution Ltd.

Figure 1.3

The “key processes” followed by TPDDL for ensuring the Satisfaction of its customers are:-

### 1) Voice of the Customer/ Customer listening

TPDDL uses both formal and informal approaches for listening, interacting with customers and obtaining actionable information on products/services.

Information and feedback about product and services are gathered through various sources and mechanisms such as Call Centers, CRCs, Customer Portal, mechanisms like CGRF and meetings with key customers.

Transactional feedback obtained from the customers are collated and analyzed for undertaking appropriate improvements.

List of various methods to listen, interact and observe customers of different segments to obtain actionable information in the different stages of their life cycle is as displayed below:-

Customer	Build and Manage - Customer Relationship, Customer Support	Segments					
Life Cycle	(Listen-Interact-Observe)	SCG	HCB	HRB	KCG	Xpress	G&I
Pre sales	Call Centre, Website, Customer Care Centre	✓	✓	✓	✓	✓	✓
	New Connection Counseling (Client Managers)				✓	✓	
	Inputs from Master Plan and Interactions with Land Developing Agencies	✓	✓	✓	✓	✓	✓
Entry	Camp Connection (Instant/ Normal/ Industrial Areas)	✓		✓	✓	✓	✓
	New Connection Documentation, CMG Hearing Cell, Video Conferencing	✓	✓	✓	✓	✓	✓
	Meter Installation - Protocol	✓	✓	✓	✓	✓	✓
Relationship Management	Load shedding Schedule, Munadi	✓	✓	✓	✓	✓	✓
	Zonal Service Centre	✓	✓	✓	✓	✓	✓
	Customer Care Centre / CRO's	✓	✓	✓			
	Client Manager				✓	✓	✓
	IVRS / Outbound Calling, Electronic & Print media, Customer Newsletters	✓	✓	✓	✓	✓	✓
	Customer Meet with Management – RWA / Udyam / IWA / Vishwas / Bhagidari	✓	✓	✓			
	Interaction with Top Management/ Seminars / Conferences				✓	✓	✓
	Corporate Social Responsibility Intervention	✓	✓	✓	✓	✓	✓
	Nukkad Natak (on safety / theft)	✓	✓				
	Safety Audit of Customer Sub stations				✓	✓	
	Privileged Customer Scheme (for regular paying Customers)	✓	✓	✓	✓	✓	✓
	Pay-n-Win Scheme	✓					
	Customer Complaint Analysis Group / PA Cell	✓	✓	✓			
	Customer Feedback from Meets & Touch Points / Anubhav (VoC)	✓	✓	✓	✓	✓	✓
	Dispute Redressal through / PHF/ Lok Adalats / Apex Committee	✓	✓	✓	✓	✓	✓
	CSS / Transaction Feedback	✓	✓	✓	✓	✓	✓
Public hearing / Policy Advocacy at DERC/Govt Bodies (MLA meets – Sangam)	✓	✓	✓	✓	✓	✓	
Exit (Voluntary)	Exit Feedback				✓	✓	

Source: Tata Power Delhi Distribution Ltd.

Figure 1.4

## 2) Customer Engagement

### a) Product Offerings

In electricity distribution sector, product offerings are only limited to the voltage levels at which electricity is supplied to the end user i.e. 33 KV / 11 KV / 440-230 V. The tariff and other charges applicable to the customer are determined and fixed by the regulator. Under USO, while TPDDL cannot discriminate in providing services at the ground level among different customer categories, dedicated Groups have been created at the back office to cater to different customer segments and their requirements, which are more granular than the tariff-based categories as defined by DERC.

A comprehensive strategy was adapted to encourage slum / JJ area customers to take metered connections and to exceed their expectations viz. formation of SCG coupled with initiatives like Instant Connection Camp, CSR Interventions & Affirmative Action and Insurance Scheme etc. Similarly, to attract new customers in the industrial area within TPDDL's licensed area, KCG advocates on regular basis with the development agencies (DSIIDC) and new connection camps are organized, jointly.

Continuous efforts are being made to reduce the cost of electrification for 33/11 KV grid / sub stations, so that, very high loadcustomers (>4 MW), Banquet Halls / Marriage Farms having seasonal load are encouraged to take permanent electricityconnection, instead of running their business on Diesel Generator (DG) sets.

To further exceed customer expectations, in addition to various monthly meets like RWA/IWA, PHF etc. TPDDL has also adopted social engagement meets such as Udyam, Vishwas and Bhagidari (open forumof Govt of Delhi), for creating engagement across all segments and for sharing the recent / newly initiatives undertaken forcustomer conveniences. Privileged customer schemes, Pay-n-Win scheme, public installation safety audits, energy club, DSMinitiatives and website interactions also help in increasing customer engagement. Engagement is also promoted bysenior leadership through their active interactions in these meets which also act as an effective medium for two-waycommunication, wherein customers are sensitized on social factors like climate change, energy conservation, CSR initiatives, safety etc. Customers are sensitized and encouraged through RWA/IWA/schools toparticipate in Climate Change initiatives like Energy fairs at Circle level, tree plantation, Earth Day, usage of CFL etc. Following table shows how the Product offerings to consumer has been gradually improved since TPDDL’s 2002 inception.

Trigger	Product Offering (2002-07)	Product Offering (2008-13)
Safety	LTABC / HVDS Installation MCB Installation	Installation of ELCB (> 5 KW connection) Dry Type Transformer Installation
Reliable & Quality Power Supply	N-1 Concept Usage of Armoured Service Cable Installation of Capacitor Banks Mobile Transformers Dedicated Feeders for Essential Services viz Railways / DMRC / DJB	Cap on Tap for Voltage Moderation Packaged Sub-Station New Connection Meter Installation in a newly constructed building through Bus Bar (FY11) 1 MW Solar Power Plant (FY12) 108 MW Gas based Power Generation Plant (FY12) Automatic Changeover for Xpress consumers(FY13)
Metering & Billing Arrangement	Single Phase Meters for Loads upto 10 KW Poly Phase / LTCT Meters for Loads 10-100 KW HT Metering arrangement for Loads >100 KW Pre-paid Metering for G&I Customers Automated Meter Reading for all High Revenue Customers	Special Metering Arrangement for SCG Customers - Group Metering / 15 Panel Meter Boxes / Construction of Special Wall / Arrangement for Tyco Boxes. Online Spot Billing for SCG Customers. Tamper proof Meter Box (FY11) SMART Metering on pilot basis for Xpress Customers (FY12) ToD Billing for 300 KW and above customers (FY13)

Source: Tata Power Delhi Distribution Ltd.

Figure 1.5

Some more innovative Product offerings to consumers for their benefits are mentioned below:-

Innovative Product Offering	Customer Benefit
Delight Team	Visit to customer premises for energy conservation solutions and relationship building
Mobile Bill Collection Van	For ease of payment at remote locations
Safety inspections and Safety Audits	Only utility to provide these services to its consumers for safe workplace
Touch Screen payment kiosks	Interactive touch screen payment kiosks for ease of payments and viewing / printing of bills
Feedback Management System	For customer to share their valuable feedback and suggestion
Ease in Bill payment	ECS, Online payment option through debit / credit card and net banking, Mobile collection van, Kiosk, Post offices, Drop boxes, ITZ Cards, Suvidha outlets, ICICI Bank
Automatic Meter Reading	Accuracy in meter reading available for detailed analysis
Multi lingual customer portal in 3 languages	Information of accounts in three languages - English, Hindi and Marathi
Customer Relations Centers	Philosophy of Care for customer in the design of CRCs and well trained executives
Demand Side Management	Reduction of energy bills and incentives from Tata Power, balancing the load during peak hours

Source: Tata Power Delhi Distribution Ltd.

Figure 1.6

b) Customer Support

Key communication and customer support requirements for the use of services are determined and deployed for different customer segments through the Customer Segmentation, Support & Relationship determination Process. The improvements required in customer support and communication mechanism, in line with customer expectations, are identified through the EoC (Experience of Consumers) process.

Customer Group Requirement	Key Support Mechanism	Key Communication Mechanism
<b>Seek Information</b>		
Industrial, Essential, Commercial, Residential	Website, Call centre, Customer meeting, Customer Relations Centre, KAM	Telephone, Email, Fax, Call centre, Website, SMS, Customer portal, Delight team, Customer meets, Electricity bills, KAMs, Contact plans of senior management, Write to senior leadership
Generation Customers	Control Rooms, Divisional Heads	Telephone, Email, Fax, Website, Review meetings with customers, Technical coordination meeting
Project Customers	Project Manager and team, monthly reports, Project progress S-Curve	Telephone, Email, Fax, Website, Review meetings with customers, Technical coordination meeting, Site visits
<b>Conduct Business</b>		
Industrial, Essential, Commercial, Residential	Marketing, Customer Engineering, Call centres, Customer Relation Centre, Online payment system (Credit Cards and Net Banking), Mobile Bill collection van, O&M Team, Meter reading team, Demand Side Management, Delight team	Telephone, Email, Fax, Customer meets, Site visits
Generation Customers	Control Rooms, Divisional Heads, PSCC, Commercial teams	Telephone, Email, Fax, Customer meets, Site visits
Project Customers	Project manager and team	Telephone, Email, Fax, Customer meets, Site visits

Source: Tata Power Delhi Distribution Ltd.

Figure 1.7

c) Customer Retention

In the current scenario, retention of customers within licensed area is limited to the customers who have beendisconnected or have moved out of the distribution network on account of non-payment of outstanding / dues. TPDDL providesplatforms like PHF, MLA etc. to such customers to come forward and liquidate their arrears and get a fresh electricityconnection.

	Common	Xpress	KCG	G&I	HRB	HCB	SCG
Seek Information & Customer Support	Call Centre, IVRS, Email, Customer News Letter, FAQs on Website, Customer Charter, Zonal Service Centre, PUSH / PULL SMS Service, Hotline, Drop Boxes at OCCs	Client Manager Dedicated Call Centre Desk KCG Customer Care Cell Consumer Site Visit			Customer Care Centre, Customer Meets like Udayam, Vishwas, Bhagidari		
					Account Manager, IWA Meet	RWA Meet	Local Franchisees Project - Aap Ke Sameep (FY13)
Conduct Business	Website, District Office, Customer Feedback Forms, Zonal Service Centre, SMS based Fault Restoration, Load Shedding Schedule, Reduced Meter Installation Cycle Time, Meter Manual, Meter Testing, Proactive Account Cleaning, E-Bill, E-Payment, Mini Bill at ATPM, ATPM, CCAG, PA Cell, PHF, MLA, OMS (FY 13), 33 New Collection Counter / ATPMs installed in FY13 (one counter within 3 KM in urban areas)	Supply at 11 KV and above level, Planned shutdown at customer convenience, Maintenance of Customer Transformer, AMR, Monthly Billing, Awareness to customers for Low Power factor, Load violation etc., Seminars & Energy Audits to educate Customers for optimum utilization of electricity (FY12), Load Survey Data on website for ToD Consumer (FY13)			Supply at 440 V, Munadi for Load Shedding, Earth Leakage Indication, TPDDL Certified Local Electricians, Video Conferencing, Subsidy to residential consumers consuming upto 200 units per month (FY11), Auto Debit Facility for Meter Testing - Reconnection Charges in the Bill (FY12), Relaxed Norms for New Connection (FY13), Bill Format Redesigning for better understanding of tariff breakup (FY13)		
		Dedicated Feeders for essential services, N-1 Concept	N-1 Concept	Account Officers, Pre-paid Metering, Single Due Date, Personal Bill delivery to officials	AMR, Planned Shutdown on Weekly Offs	Faulty Meter Photograph (FY12), Reducing the billing cycle time from 60 Days to 45 Days (FY13)	Electrification of JJ Clusters, Instant Connection Camps, Instalment of New Connection Charges, Special Metering Arrangements, Online Spot Billing (monthly), CS&AA interventions, Pay-n-Win Scheme (FY12)

Source: Tata Power Delhi Distribution Ltd.

Figure 1.8

3) Relationship Management

Electricity Distribution in Delhi is a licensed business and customers of competitors do nothave access to TPDDL’s service offerings and vice–verse. However, in order to build and manage relationships with multilocationalhigh end customers (like DJB / DMRC / Mother Dairy / IGL etc. ) having electricity connection under both TPDDL andBSES, branding through exhibitions, social events, conferences, interactions with Top Management and media managementare done.

TPDDL has undertaken various 'Industry First' initiatives like concept of CROs, Client Manager, OMS,RWA / IWA Meets etc. to manage relationship with existing customers. Formation of SCG is an example of TPDDL's approach towards acquiring and retaining unmetered customers within the licensed area, by enhancing the payment capacity of SCG customers through various CSR interventions like skill up gradation, entrepreneurship development, life insurance schemes etc.

TPDDL has also relaxed the documentation and commercial formalities required for obtaining a new connection, installments are allowed to SCG customers for making the payment of initial connection charges and efforts are being made to bring potential customers like Banquet Halls, Marriage Farms running on DG sets into TPDDL's distribution network. TPDDL also provides new connections in areas where no developing agency is identified or coming forward for electrification, to the extent possible.

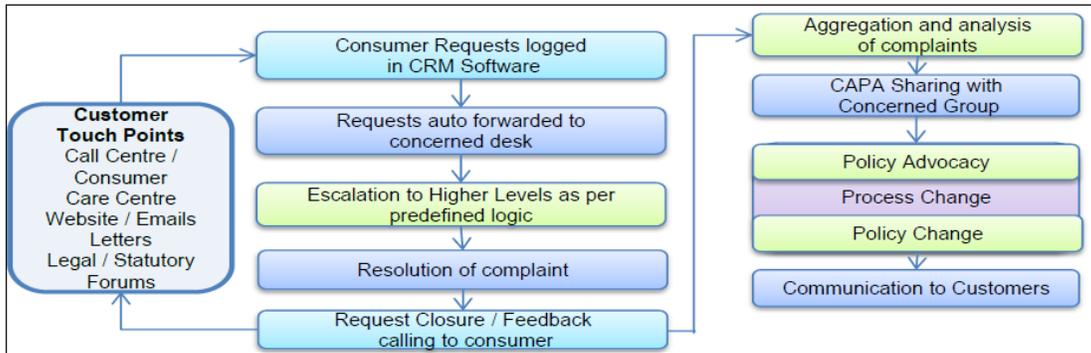
#### 4) Complaint Management

TPDDL's CMP is continuously evaluated and improvements are made to keep it current with the changing needs. TPDDL has an integrated CMP for logging and tracking customer request/complaints on Metering, Billing, No current and Street light through SAP-ISU with an inbuilt auto escalation mechanism. Complaints are registered by providing a unique system generated request number and all the complaint processing information are updated against the corresponding number with which the customers can seek the status of their complaint/request from any touch point.

At TPDDL, customers are provided with three layered CMP from Front Desk with escalation to District Manager / Commercial Manager / Group Head and thereafter to APEX Committee which acts as a last option with customer to approach TPDDL before escalating unresolved complaints to statutory forums like CGRF, Ombudsman etc.

TPDDL also organizes PHFs, MLAs for liquidation of long pending billing disputes. Spot resolution of complaints (due date extension, installment, and reading correction) is in place through empowerment at the front desk level. Pro-

active outbound calls and auto SMS are sent after resolution of complaints to ensure effectiveness of complaint closure and build customer confidence. Communications on new offerings with RWAs/IWAs, implementation of OMS have helped in enhancement of customer confidence and satisfaction levels.



Source: Tata Power Delhi Distribution Ltd.

Figure 1.9

### 5) Exceeding Customer Expectations

TPDDL is the first utility to start various customer focused initiatives like providing complete details pertaining to meter reading, billing, payment, consumption pattern etc. online for all the consumers, ATPMs, video conferencing for customers, Pay-n-Win scheme, push / pull SMS service, customer engagement meets etc., thus enabling TPDDL to exceed customer expectation.

Due to the nature of business, often changes brought in metering system, tariff, efforts for bringing un-metered consumers into billing net etc. is resisted and resented by the consumer. These also have adverse impact on customer perception and business sustainability. In order to avoid such situations and to maintain cordial relationship with customers, TPDDL has undertaken various customer friendly initiatives, after advocacy with GoNCTD and DERC, some of which are mentioned in the figure below:-

FY	Initiatives Taken
FY04	Meter Replacement Drive (removing the myths related to the electronic meters)
FY05	Internal Wiring Checking Campaign to build consumer confidence w.r.t accuracy of electronic meter
FY06	Voluntary Disclosure Scheme for reporting tampered meter
FY06	LPSC Waiver Scheme – regularization of outstanding dues / disconnected cases
FY08	Waiver of DVB period arrears – account cleaning & assistance in release of new connection
FY09	Waiver of TPDDL period arrears for un-metered consumers, encourage metered connection to Slum / JJ customers
FY10	Extension of subsidy to low consumption consumers (subsidy of Re 1/unit to consumers consuming upto 200 units /month) Replacement of Oil-type transformers with Dry-type transformers for customer safety
FY11	Load Enhancement Drive, providing safe network i.e. meter and service line of suitable rating as per load usage
FY12	Introduction of On-line Spot Billing in TPDDL area Upward revision in cash limit for electricity bill payment
FY13	Unit slab revision for Domestic Consumers i.e. from 0-400 units to 0-200 and 201-400 Units Revision of billing cycle to 45 days instead of 60 days Extension of Targeted Subsidy to Domestic Customers Time-of-day tariff for Industrial & Commercial Customers

Source: Tata Power Delhi Distribution Ltd.

Figure 1.10

### 1.3 Objective of the Study

The Primary objective was to study the Satisfaction level of Customer with respect to the parameters / services provided by Tata Power Delhi Distribution Ltd. and to identify the opportunities for further improvement.

## **CHAPTER 2**

### **LITERATURE REVIEW**

Source: Consumer Behaviour, Leon G. Schiffman  
S. Ramesh Kumar

(I) About Customer Satisfaction:

"*Customer satisfaction*" is a term commonly used in marketing. It is a measure of how products and services supplied by a company meet or exceed customer expectations. Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals."

In a survey of nearly 200 senior marketing managers, 71 percent responded that they found a customer satisfaction metric beneficial in managing and monitoring their businesses. It is seen as a *key performance indicator* within any business and is often part of a Balanced Scorecard.

In a competitive marketplace where businesses compete for customers, customer satisfaction is seen as a crucial differentiator and progressively has become a key element of business strategy. When a brand has loyal customers, it gains positive word-of-mouth marketing, which is both free and highly effective." Therefore, it is essential for businesses to effectively manage customer satisfaction. To be able to do this, firms need reliable and representative measures of satisfaction. "Customer satisfaction provides a leading indicator of consumer purchase intentions and loyalty." Customer satisfaction data are among the most frequently collected indicators of market perceptions.



Source: Google website

Figure 2.1

**Customer satisfaction** is important because it provides marketers and business owners with a metric that they can use to manage and improve their businesses.

✚ **Top six reasons why customer satisfaction is important:**

It's a leading indicator of consumer repurchase intentions and loyalty.

- 1) It's a point of differentiation.
- 2) It reduces customer chaos.
- 3) It increases customer lifetime value.
- 4) It reduces negative word of mouth.
- 5) It's cheaper to retain customers than acquire new ones

• **Customer Value, Satisfaction, Trust, & Retention**

For a business to outperform its competitors, it must achieve the full profit potential from each and every customer. i.e. it must make the customer the core of the company's organizational culture, across all departments and functions.

**a) Customer Value:-**

- It is the ratio between the customer's perceived benefits (economic, functional, and psychological) and the resources (monetary, time, effort, psychological) used to obtain those benefits.

**b) Customer Satisfaction:-**

- It is the individual consumer's perception of the performance of the product or service in relation to his or her expectations.
- It is a highly personal assessment that is greatly affected by customer expectations.
- Satisfaction also is based on the customer's experience of both contact with the organization (the "moment of truth" as it is called in business literature) and personal outcomes. A satisfied customer is one who receives significant added value" to his/her bottom line.
- Customer satisfaction is a highly personal assessment that is greatly influenced by individual expectations.
- Customer satisfaction depends on the product's performance relative to a buyer's expectation. If preference matches expectations, the customer is satisfied. If preference exceeds expectation, the customer is highly satisfied or delighted. Satisfied customers make repeat purchases and tell others about their good experiences with the product/service. The key is to match customer expectations with company performance.

**c) Customer Trust:-**

- Closely related to the challenge of satisfying consumers is the challenge of establishing and maintaining consumer trust in a company and its products.

**d) Customer Retention:-**

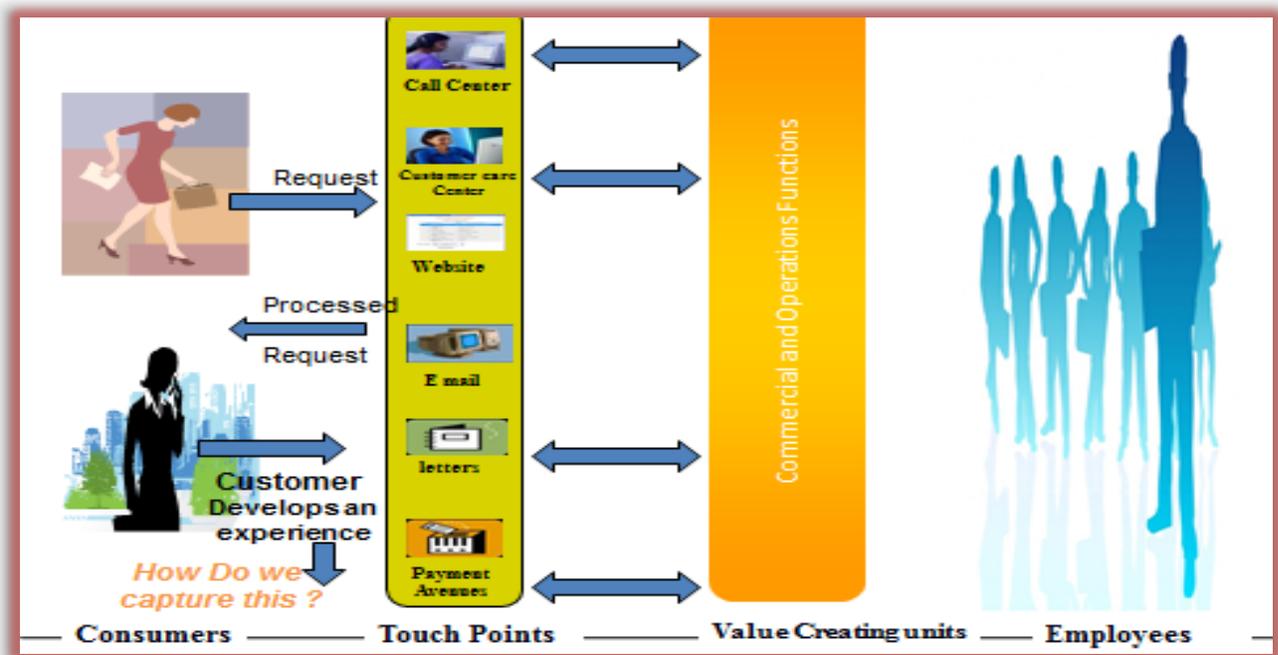
- The overall objective of providing value to customers continuously and more effectively than the competitor is to have and to retain highly satisfied and trusting customers, and from time to time even surprise them by providing the element of delight to their dealings with the company. Customers are the best source of information. Whether to improve an existing product or service or whether firms are planning to launch something new. There is no substitution for "getting it from customer's mouth". By talking to the customer directly, company can improve the odds for achieving success.

- When asked in routine manner, feedback from customers and involve them in business they, in turn, become committed to the success of business.
- A strategy of “Customer Retention” is designed to make it in the best interest of customers to stay with a company rather than switch to another company.

Businesses monitor customer satisfaction in order to determine how to increase their customer base, customer loyalty, revenue, profits, market share and survival. They work to make their customers happy and make “customer satisfaction” as the key to survival and profit. According to U.S. consumers’ affairs department, it costs five times more to gain a new customer than to retain an existing one. Other studies have repeated that with just a five percent increase in Customer retention’s a firm can raise its profitability.

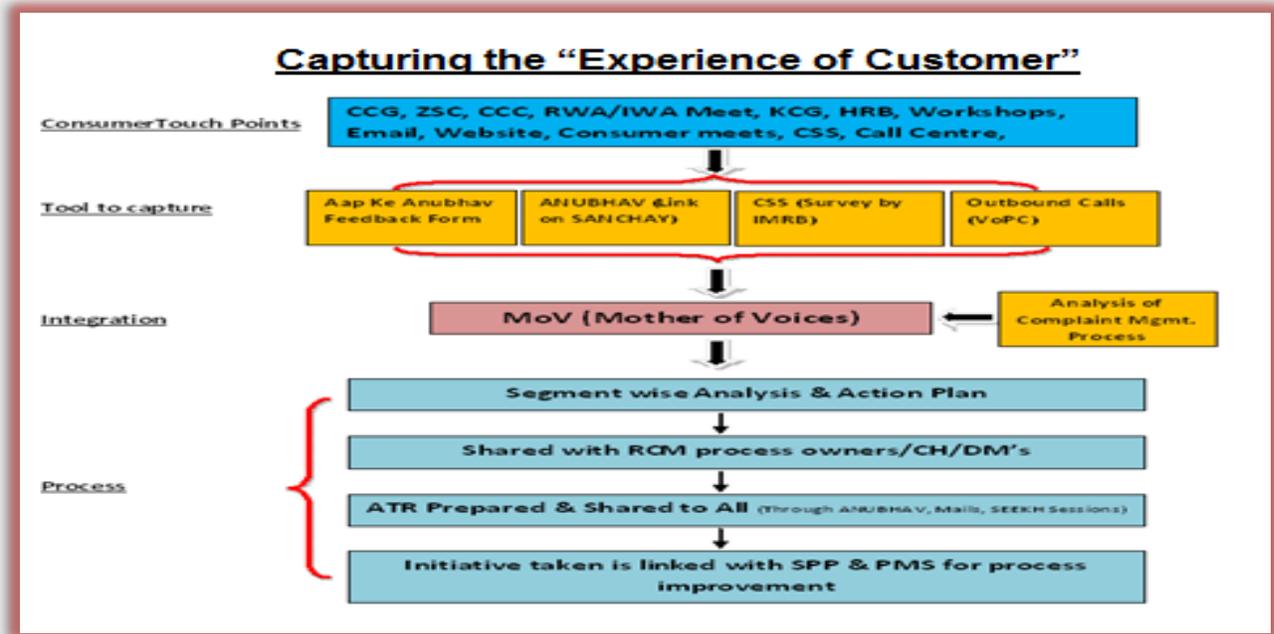
Source: TATA Power website

(II) How does a Consumer develops “experience” at TPDDL:



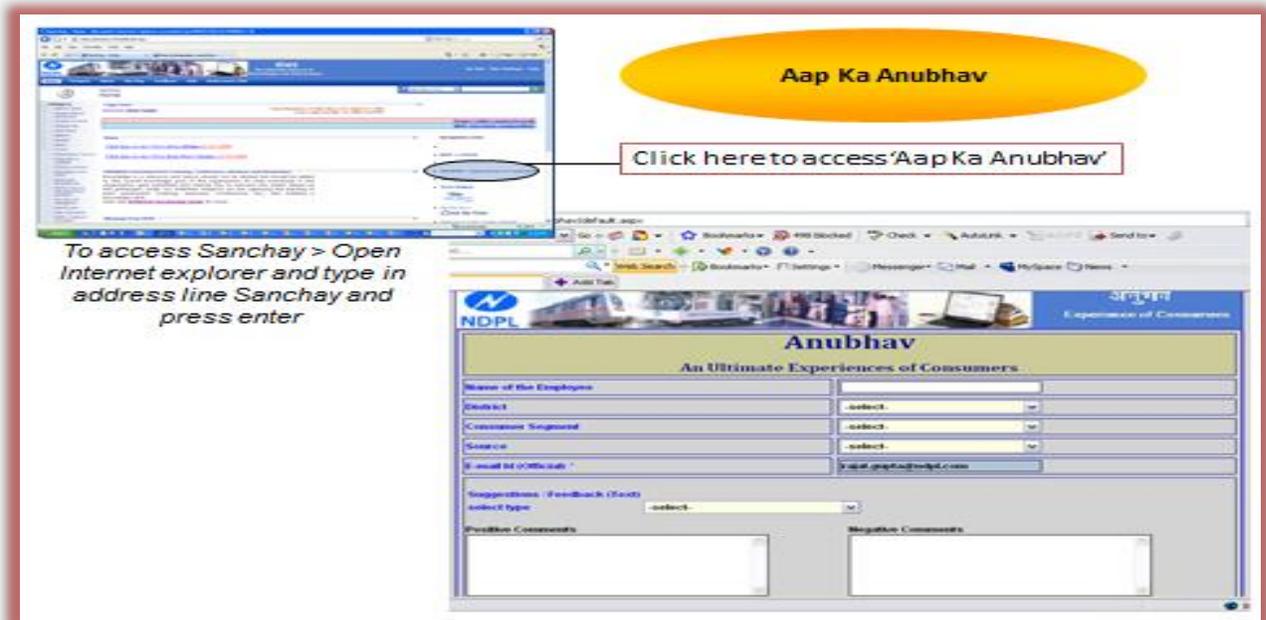
Source: Tata Power Delhi Distribution Ltd.

Figure 2.2



Source: Tata Power Delhi Distribution Ltd.

Figure 2.3



Source: Tata Power Delhi Distribution Ltd.

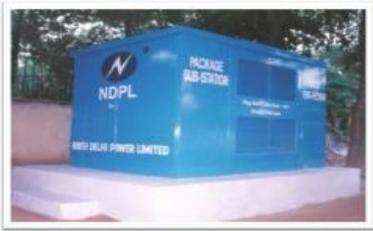
Figure 2.4

(III) TPDDL's Initiative for "Enhancing Power Supply Reliability":

## Initiatives: Reliability Improvement



Unmanned Grids



Packaged Substation



SMS Based Fault Management

**Many Industry Firsts!**



Outage Management System



GIS – Mapping all electrical assets and consumers

Source: Tata Power Delhi Distribution Ltd.

Figure 2.5

## Initiatives – Reliability Improvement

- **Power Purchase Agreements**
  - Executed long term PPAs for 1050 MW over 914 MW allocated ; sufficient to meet requirements till FY 18
- **Future Plans**
  - No captive power plants to be added - due to adequate availability
  - Bids invited for Long Term procurement of 846 Mus of renewable power (solar & non-solar) from FY '16.

---



Wind



Solar



Biomass



Small Hydro

Source: Tata Power Delhi Distribution Ltd.

Figure 2.6

(IV) Enhancing Customer Satisfaction:



Source: Tata Power Delhi Distribution Ltd.

Figure 2.7



Source: Tata Power Delhi Distribution Ltd.

Figure 2.8

## Revamping Consumer Experience

- Meetings with RWAs/IWAs on a monthly basis in all Districts
- Segmented meets
- Annual Consumer Meet “Milaap”
- Relationship Approaches
  - Client & Account Managers : Xpress, KCG, HRB, G&I
  - Consumer Relationship Officers (CROs): HCB
  - Special Consumer Group: JJ Clusters
- BPR of Revenue Management Cycle
- Automated Workflow (SAP ISU)
- Instant/ Speedy New Connections
- Performance Assurance Standards



Source: Tata Power Delhi Distribution Ltd.

Figure 2.9

## Revamping Consumer Experience

### Value Added Services

- Lucky draw for consumers using E-Payment options
- Energy Audit of Key Consumers
- Safety Audits at Customer Premises
- Discount coupons to paying consumers
- Pay & Win Schemes for SCG consumers

### Integrated Call Center launched through BCM

- Common IVR for No Supply & Commercial.
- Reduction in response time through pre-fed information.
- Auto response for outage information & registration of No Supply complaint using BCM-CRM-OMS integration.
- Capturing caller's experience with call through IVR.
- Voice mail recording for theft/harassment/project execution related complaint.



Source: Tata Power Delhi Distribution Ltd.

Figure 2.10



Source: Tata Power Delhi Distribution Ltd.

Figure 2.11



Source: Tata Power Delhi Distribution Ltd.

Figure 2.12

Be a **Green Customer**  
Win Exciting Prizes



Earn Rewards and Benefits  
Opt for 'STOP Paper Bill' and  
'ECS Payment'

Enroll yourself for E-services  
by opting "Stop Paper Bill"  
and/ or "ECS payments" between  
1st Dec' 2014 to 31st' May' 2015  
and get a chance to  
be a lucky draw winner



Receive, manage and pay  
your bills on a click...



Every 3000 bills printed  
cost a Tree

There's a substitute for paper  
But there's none for Trees



GO PAPERLESS  
GO GREEN

14 Lacs Customer | 1.25 Crs Bills Printed | 4100 Trees Cut

\*Terms & Condition Apply

To register for E-services contact our Sampark Kendra - 66404040 or write to us at [customer-care@tatapower-ddl.com](mailto:customer-care@tatapower-ddl.com)

Source: Tata Power Delhi Distribution Ltd.

Figure 2.13

**NEW**

**Emergency Services Notification**

Advance information on Power outages through SMS

For customer who rely on electricity to power life-support equipment in their homes\*

Contact TPDDL Customer Relationship Executive for Enrollment.

Free of Cost Service




\*Terms and conditions apply

Source: Tata Power Delhi Distribution Ltd.

Figure 2.14

(V) Customer Satisfaction Surveys:

Surveys and questionnaires are the most common marketing research methods.

Typically, they are used to:

- Assess the level of customer satisfaction with a particular product, service or experience
- Identify factors that contribute to customer satisfaction and dissatisfaction;
- Determine the current status or situation of a product or service;
- Help establish customer service standards
- Surveys allow an organization to quickly capture vital information with relatively little expense and effort. A primary advantage of this method is its directness: “the purpose is clear and the responses straightforward.” Additionally, the information gathered by surveys can easily be analyzed and used to identify trends over time.
- A major disadvantage of customer surveys is that the responses may be influenced by the measurement itself through various forms of bias. For example, most surveys are voluntary, and some researchers have found differences between survey respondents and non-respondents. People who respond to surveys answer questions differently than those who do not respond, and late responders answer differently than early responders.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **1) Sampling Methodology:-**

**Sample Size:** 100 respondents

**Sample Unit:** TPDDL consumers have been taken as sample unit

**Sampling Technique:**Sampling Area: North and North-west Delhi

**Sampling Technique:**Convenience non-probability sampling out of population of TPDDL consumers. It covers major load types including domestic, office, industry etc.

#### **2) Research Design:**

- Visited the consumers across North and North-west Delhi and gathered information required as per the questionnaire.
- Descriptive/ Exploratory research design has been undertaken.
- The research approach is “deductive” where hypotheses are developed for checking the various service parameters and questionnaire developed for testing the hypotheses.

#### **3) Data Collection:**

- Primary data has been used by me in the form of Questionnaire.
- Secondary data sources like catalogue of the company, and various internet sites such as google.com, tatapower.com have been used.
- Responses collected on Paper.
- Responses coded back onto online questionnaire.

#### **4) Research Purpose:**

- To understand customer satisfaction towards services offered by TPDDL by conducting a systematic and formal research.
- **Test Units:** - Are individuals, organizations, or other entities whose response to the independent variables is being examined.
- **Dependent Variable:** - Are the variables that measure the effect of the independent variables on the test units.

- In the present research study, following dependent variable has been defined:-  
“CustomerSatisfaction level for the quality of services offered by TPDDL”.
- **Independent Variables:** - Are the variables that are manipulated and whose effects are measured and compared. In the present research study, following independent variables have been defined:-
  - a) Overall service value
  - b) Commitment and loyalty
  - c) Quality of electricity supply
  - d) Price of supply
  - e) Metering services
  - f) Billing services
  - g) Bill payment process
  - h) Communication/Relationship building

**5) Research Strategy:**

- Questionnaire developed for conducting survey for measuring satisfaction of customers of TPDDL.
- Total questions are 43 Nos. which have been further categorized as constructs of 8 Nos. independent variables.
- Respondent profile has also been fetched by 3 Nos. questions.
- Information about the Overall usage of power by respondents have been derived separately from 4 Nos. questions.
- 3 Nos. questions are unstructured/ open-ended questions.
- 32 Nos. questions are structured questions.
- 3 Nos. questions are dichotomous.

**6) Scale used:**

5 point Likert scale used mostly with bipolar objectives (such as strongly agree/strongly disagree) anchored at the ends of an odd-numbered continuum.

## **CHAPTER 4**

### **DATA ANALYSIS AND INTERPRETATION**

#### **4.1 Data Collection Sources/techniques:**

- Primary data has been used by me in the form of Questionnaire.
- Secondary data sources like catalogue of the company, and various internet sites such as google.com, tatapower.com have been used.

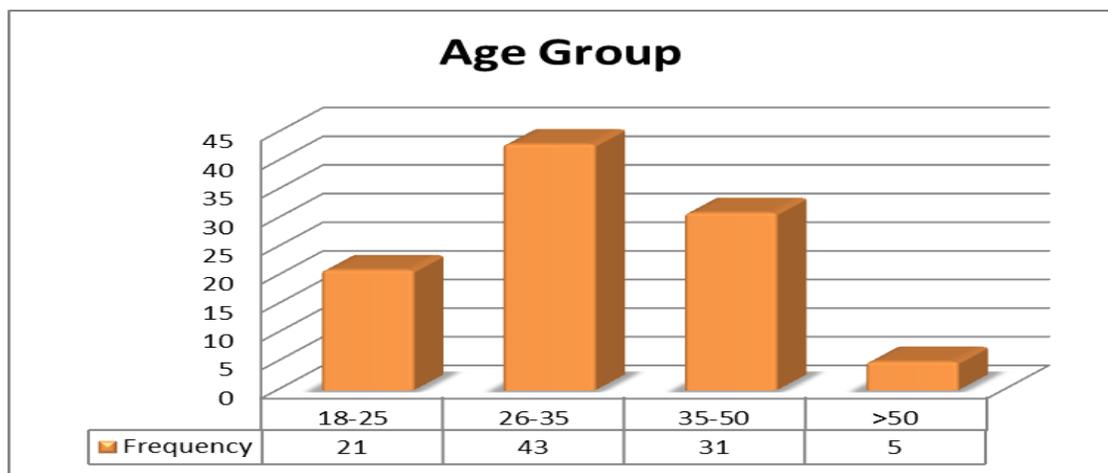
#### **4.2.1 Descriptive Statistics:**

##### **(A) Respondent Profile:**

##### **Q.1 Age group:**

**Table Number 1**

Age group	Frequency
18-25	21
26-35	43
35-50	31
>50	5
<b>Total</b>	<b>100</b>



Y-Axis → Percentage, X – Axis → Age group

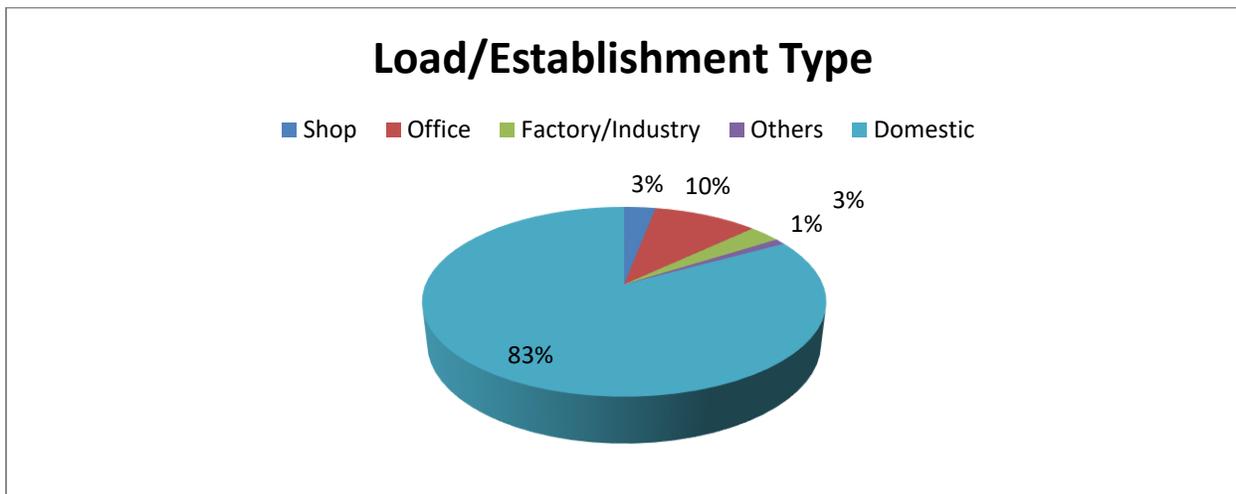
#### **Inference**

- The graphical representation of the table shows that out of 100 respondents, 21% belong to age group of 18-25, 43% respondents are of the age-group of 26-35 years, 31% belong to age group of 35-50 years and 5% belong to >50 years of age.

**Q.2 Load/establishment type:**

**Table Number 2**

Load/Establishment Type	Frequency
Shop	3
Office	10
Factory/Industry	3
Others	1
Domestic	83
<b>Total</b>	<b>100</b>



**Inference**

- The graphical representation of the table shows that out of the 100 respondents, 3% have shop, 10% are office users of power, 3% are factory owners, 83% are domestic consumers and 1% belong to Others category.

**(B)Usage of Power:**

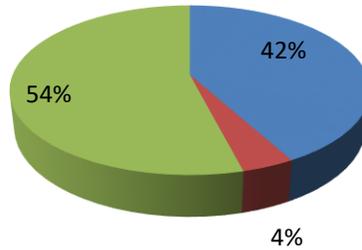
**Q.3 Back-up arrangement for Power supply**

**Table Number 3**

Backup arrangement	Frequency
Invertors	42
DG Set	4
No backup arrangement	54
<b>Total</b>	<b>100</b>

## Back-up power supply

■ Invertors   ■ DG Set   ■ No backup arrangement



### Inference

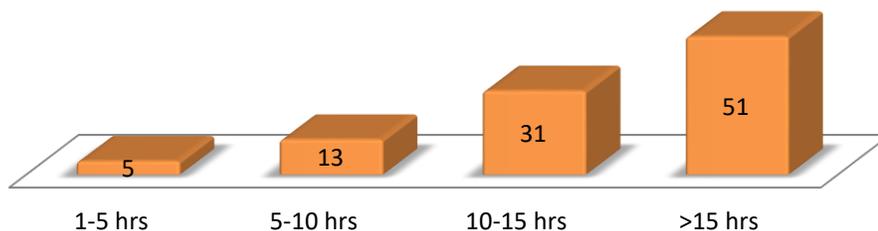
- The graphical representation shows that out of the 100 respondents, 54% respondents have no back-up supply arrangement, 42% have invertors installed, and 4% use DG set. More than 50% respondents trust continuity and reliability of services of TPDDL.

### Q.4 Normal daily usage of Power Supply (in hours)

**Table Number 4**

Usage of power supply(in hrs)	Frequency
1-5 hrs	5
5-10 hrs	13
10-15 hrs	31
>15 hrs	51
<b>Total</b>	<b>100</b>

## daily usage of power supply



**Inference**

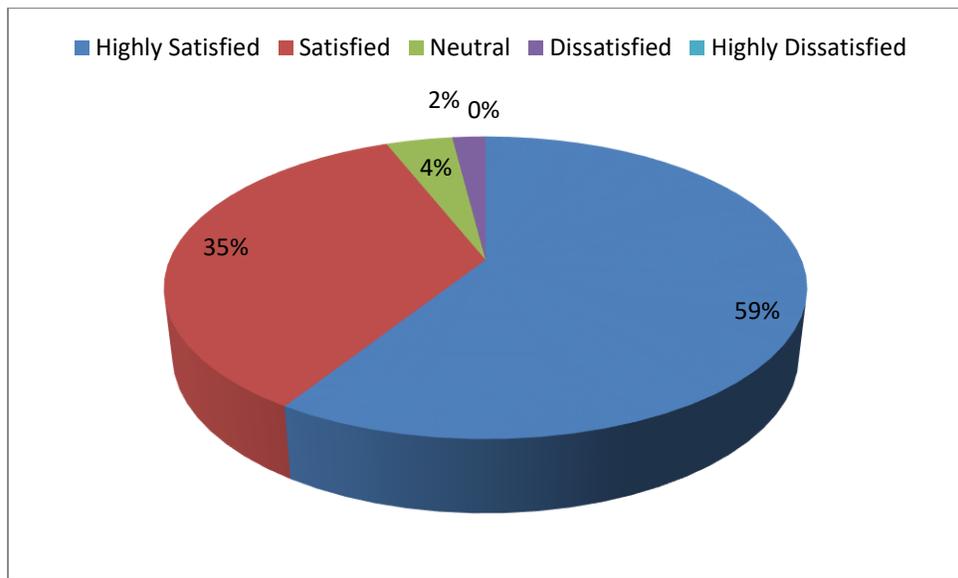
- The graphical representation shows that out of the 100 respondents, 5% use power supply 1-5 hrs, 13% use 5-10 hrs, 31% use 10-15 hrs, and 51% respondents use power supply for > 15 hours a day.

**(C) Overall Customer Satisfaction level:**

**Q.5 Overall Customer Satisfaction level from Services offered by TPDDL**

**Table Number 5**

Overall Satisfaction level	Frequency
Highly Satisfied	59
Satisfied	35
Neutral	4
Dissatisfied	2
Highly Dissatisfied	0
<b>Total</b>	<b>100</b>

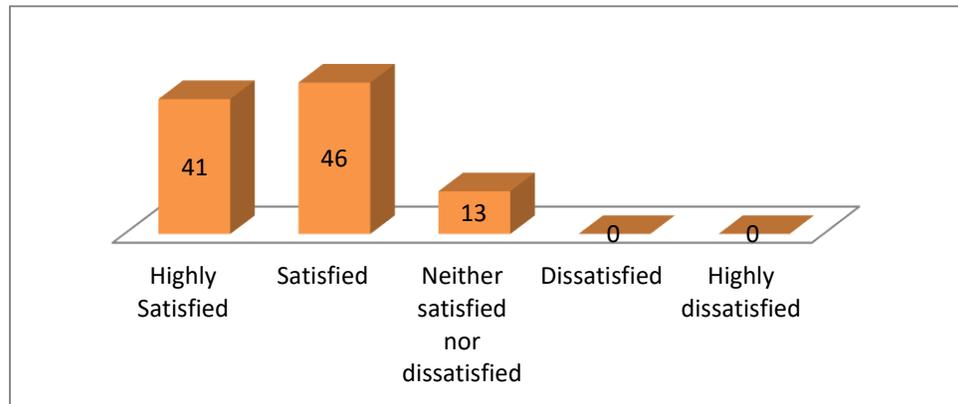


**Inference**

- The graphical representation shows that out of the 100 respondents, 59% respondents are highly satisfied, 35% are satisfied, 4% are Neutral, & 2% are dissatisfied with the overall quality of services offered by TPDDL.

**(D) Overall Value of Services offered by TPDDL:-**

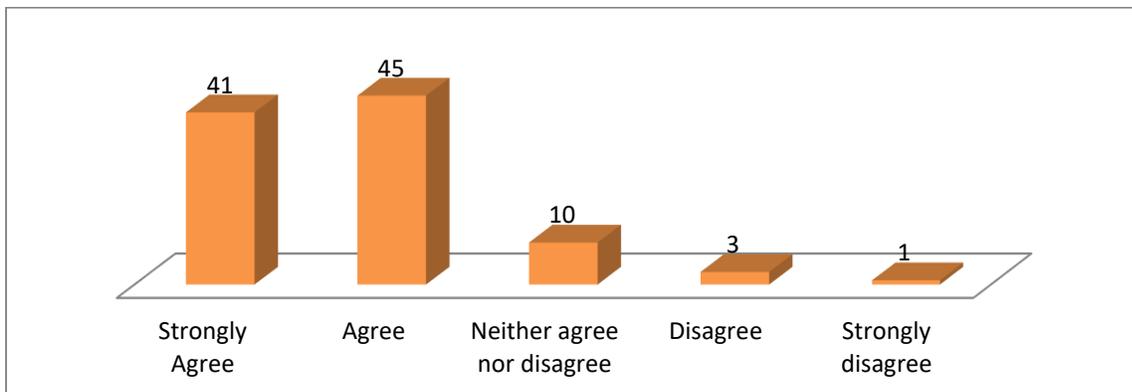
**Q.6 Considering the electricity and service that you get and the price you have to pay, your satisfaction for the Value for Money (VFM) you get from the electricity company.**



**Inference**

- Out of the 100 respondents, 41% are highly satisfied, 46% are satisfied, 13% are neither satisfied nor dissatisfied, with the overall value of services offered by TPDDL.

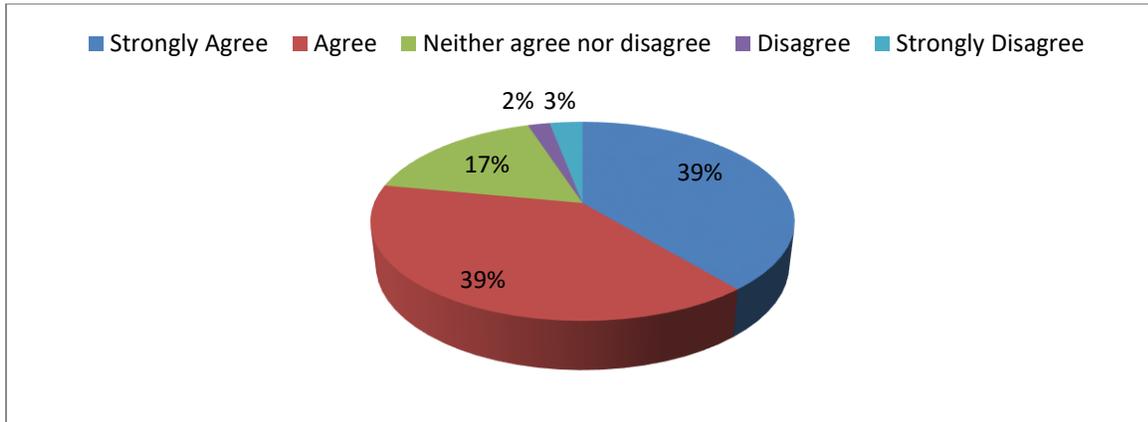
**Q.7 Is a company that really cares about its customers OR Delivers upon its promises.**



**Inference**

- Out of the 100 respondents, 41% strongly agree, 45% agree, 10% neither agree nor disagree, 3% disagree and 1% strongly disagree that TPDDL really cares for its customers and delivers upon its promises.

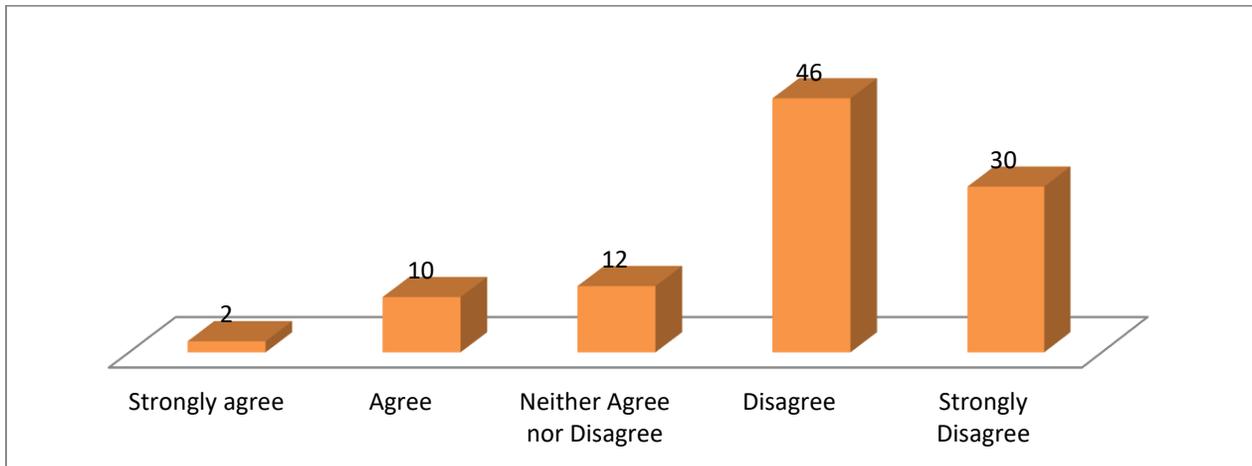
**Q.8 Is a company with best-in-class practices.**



**Inference**

- Out of the 100 respondents, 39% strongly agree, 39% agree, 17% neither agree nor disagree, 2% disagree and 3% strongly disagree that TPDDL uses best-in-class practices.

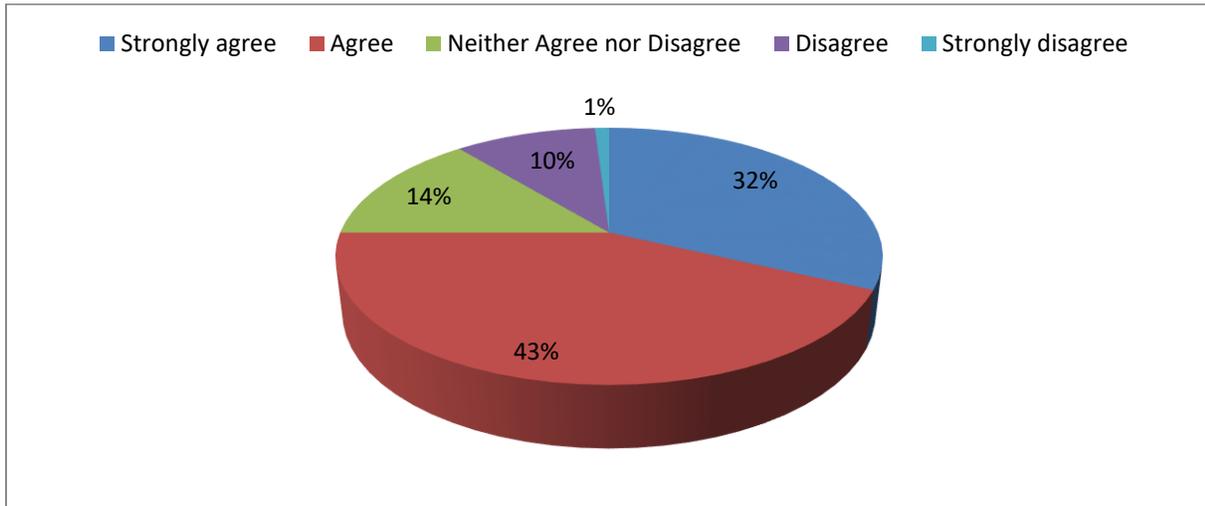
**Q.9 Employees of the Company are not easily accessible.**



**Inference**

- Out of the 100 respondents, 2% strongly agree, 10% agree, 12% neither agree nor disagree, 46% disagree and 30% strongly disagree that TPDDL employees are not easily accessible.

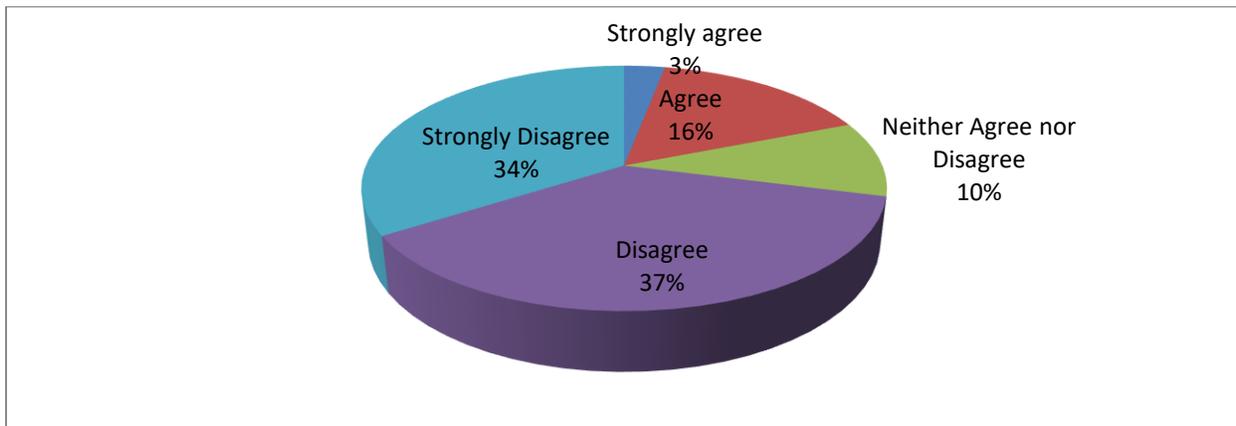
**Q.10 Company is transparent in its dealings.**



**Inference**

- Out of the 100 respondents, 32% strongly agree, 43% agree, 14% neither agree nor disagree, 10% disagree and 1% strongly disagree that TPDDL is transparent in its dealings.

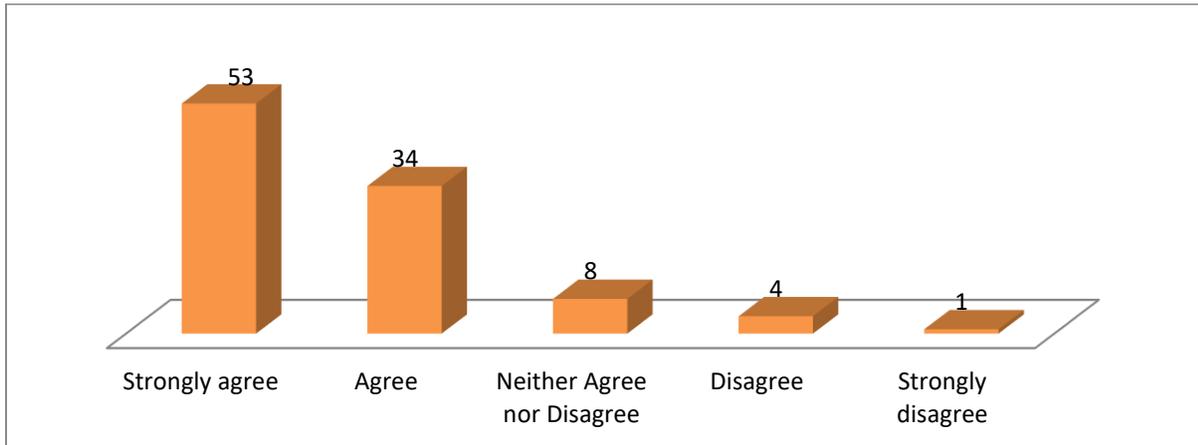
**Q.11 The Company lacks focus towards its (Customer) Safety in terms of network, tools used, and safety precautions at time of work.**



**Inference**

- Out of the 100 respondents, 3% strongly agree, 16% agree, 10% neither agree nor disagree, 37% disagree and 34% strongly disagree that TPDDL lacks focus towards its (Customer) Safety.

**Q.12 Is a company that drives community initiatives (CSR activities) earnestly.**

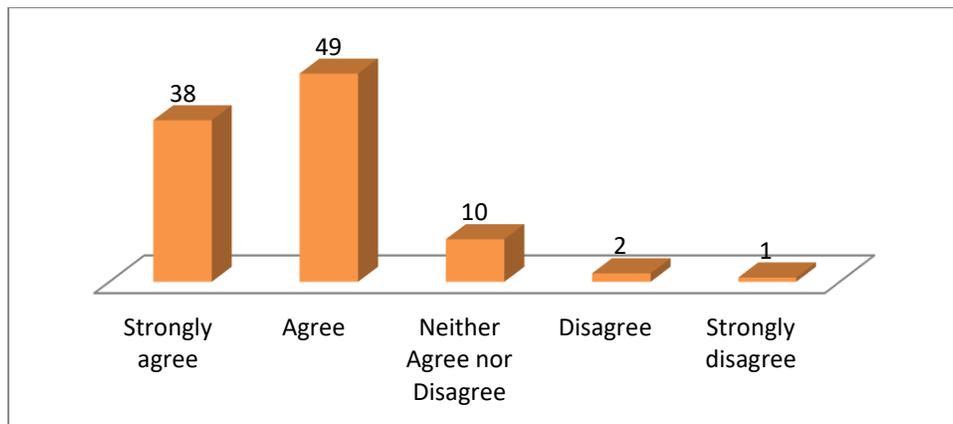


**Inference**

- Out of the 100 respondents, 53% strongly agree, 34% agree, 8% neither agree nor disagree, 4% disagree and 1% strongly disagree that TPDDL drives CSR activities earnestly.

**(E)Commitment and Loyalty:**

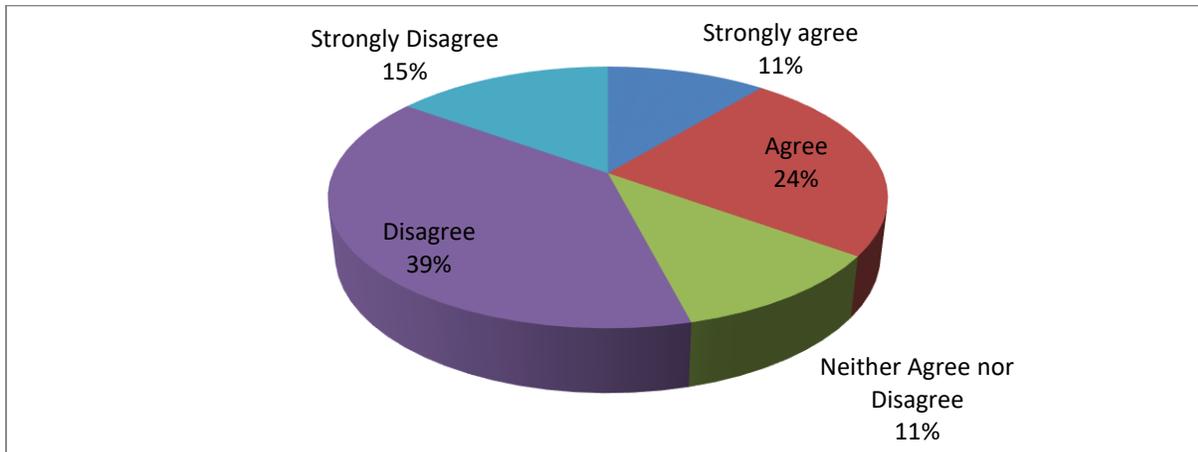
**Q.13 You feel very confident about the services you receive from the electricity company.**



**Inference**

- Out of the 100 respondents, 38% strongly agree, 49% agree, 10% neither agree nor disagree, 2% disagree and 1% strongly disagree about the services offered.

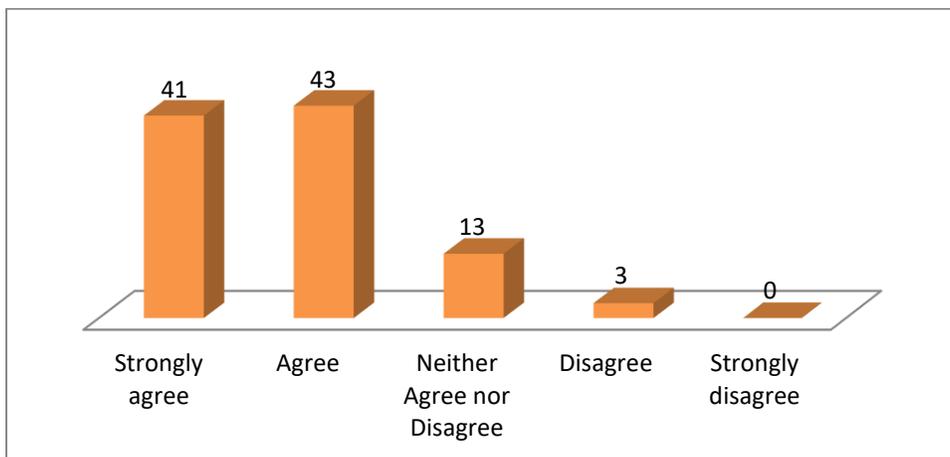
**Q.14 You would opt for availing the services of other power distribution company. (In the event of having more than one electricity company to choose from).**



**Inference**

- Out of the 100 respondents, 11% strongly agree, 24% agree, 11% neither agree nor disagree, 39% disagree and 15% strongly disagree that they would opt for availing services of power distribution company other than TPDDL.

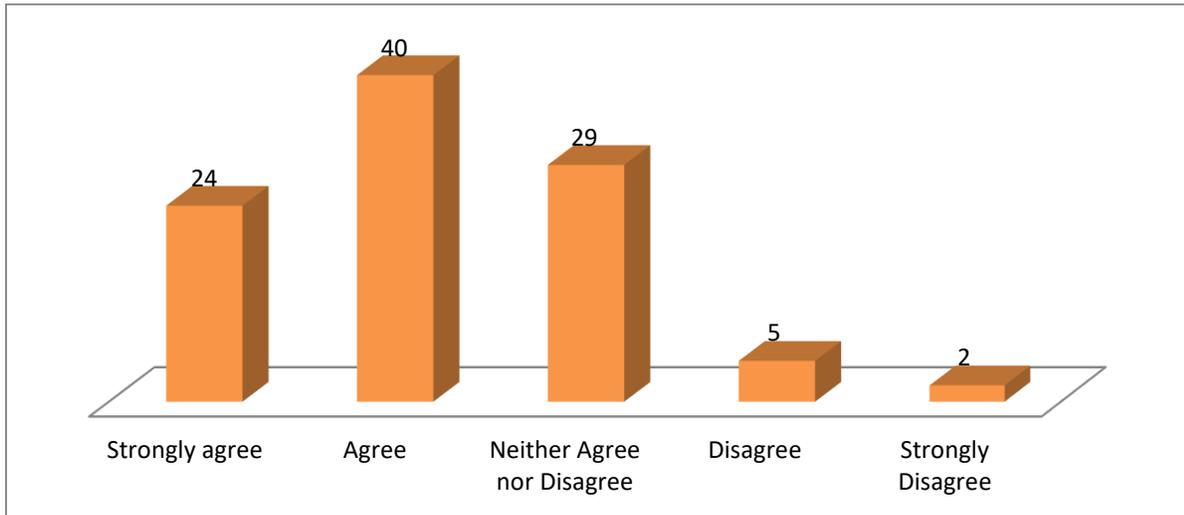
**Q.15 You say good/positive things and recommend the electricity company as a power distribution company.**



**Inference**

- Out of the 100 respondents, 41% strongly agree, 43% agree, 13% neither agree nor disagree, 3% disagree and no one strongly disagree that respondents have good/positive opinion about the electricity company.

**Q.16 It would matter a lot to you if you could not avail the services of THE ELECTRICITY COMPANY and you had to use the services of another power distribution company.**

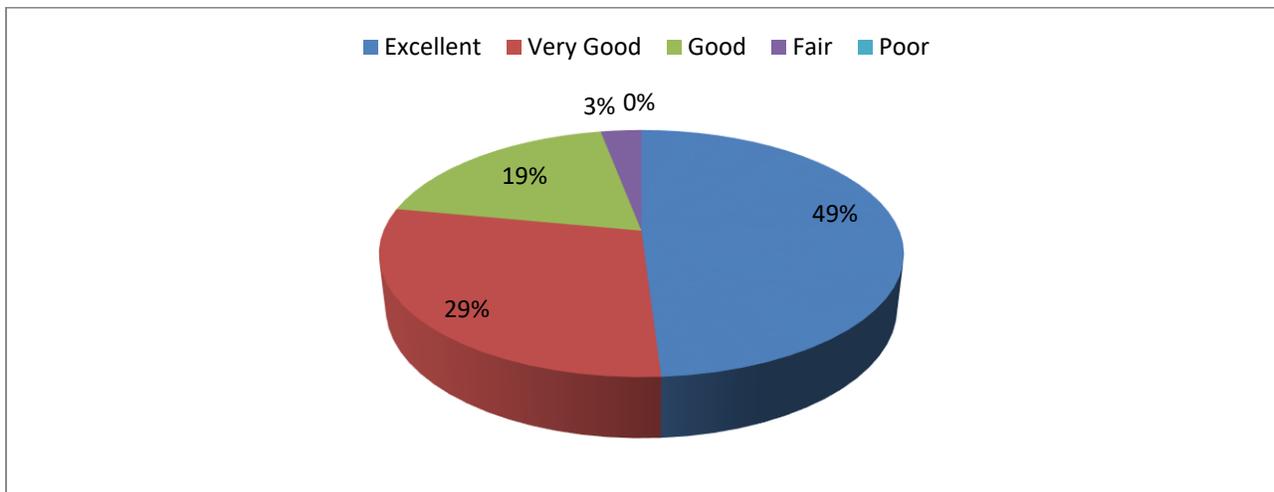


**Inference**

- Out of the 100 respondents, 24% strongly agree, 40% agree, 29% neither agree nor disagree, 5% disagree and 2% strongly disagree that it would matter a lot to them if they could not avail the services of TPDDL.

**(F) Quality of Electricity Supply:-**

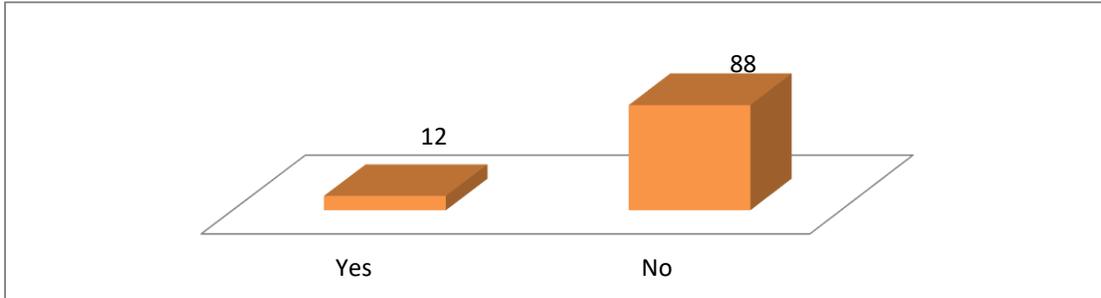
**Q.17 Overall Quality and Reliability of electricity supply**



**Inference**

- Out of the 100 respondents, 49% rated excellent, 29% rated very good, 19% rated good, 3% rated fair about the quality & reliability of power supply.

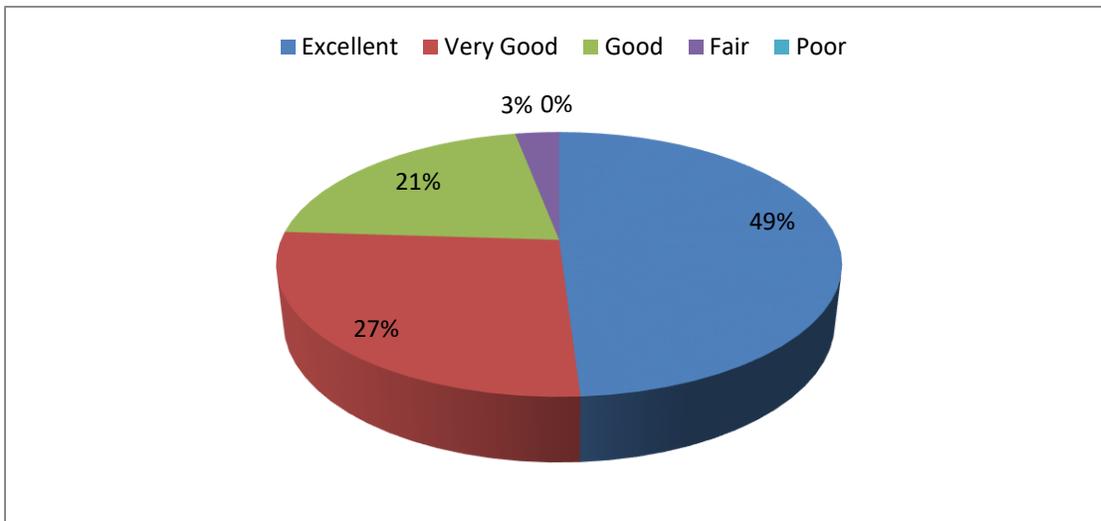
**Q.18 You encounter voltage fluctuations in power supply**



**Inference**

- Out of the 100 respondents, 12% experience voltage fluctuations and 88% do not.

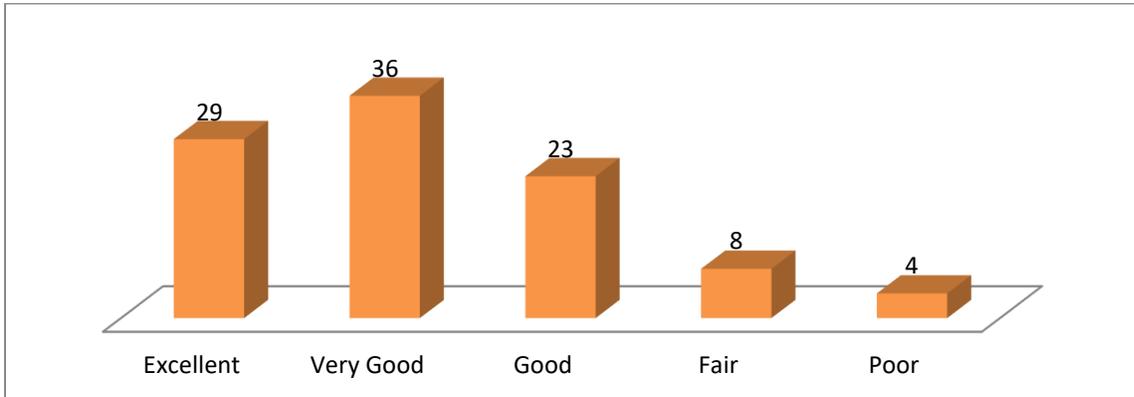
**Q.19 There is reliability(24\*7) of power supply**



**Inference**

- Out of the 100 respondents, 49% rated excellent, 27% rated very good, 21% rated good, 3% rated fair about the reliability of power supply.

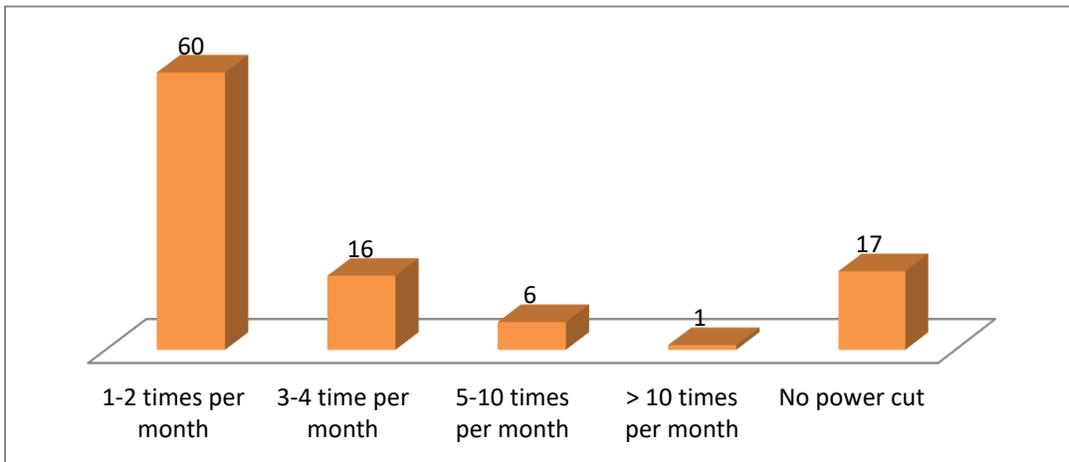
**Q.20 Adherence to the announced time of planned shutdowns communicated by the electricity company**



**Inference**

- Out of the 100 respondents, 29% rated excellent, 36% rated very good, 23% rated good, 8% rated fair and 4% rated poor about adherence to the planned shutdowns communicated by TPDDL.

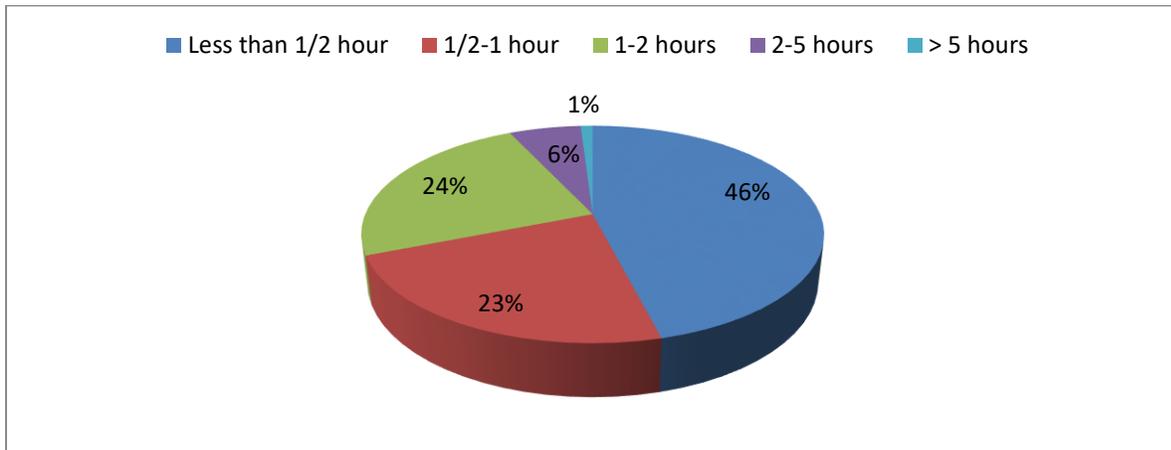
**Q.21 Thinking about the past 6 months, on an average, power cuts you experience in a month**



**Inference**

- Out of 100 respondents, 60% respondents experience 1-2 times power cut per month, 16% respondents experience 3-4 times per month, 6% experience 5-10 times per month, 1% experience more than 10 times per month, & 17% experience no power cut.

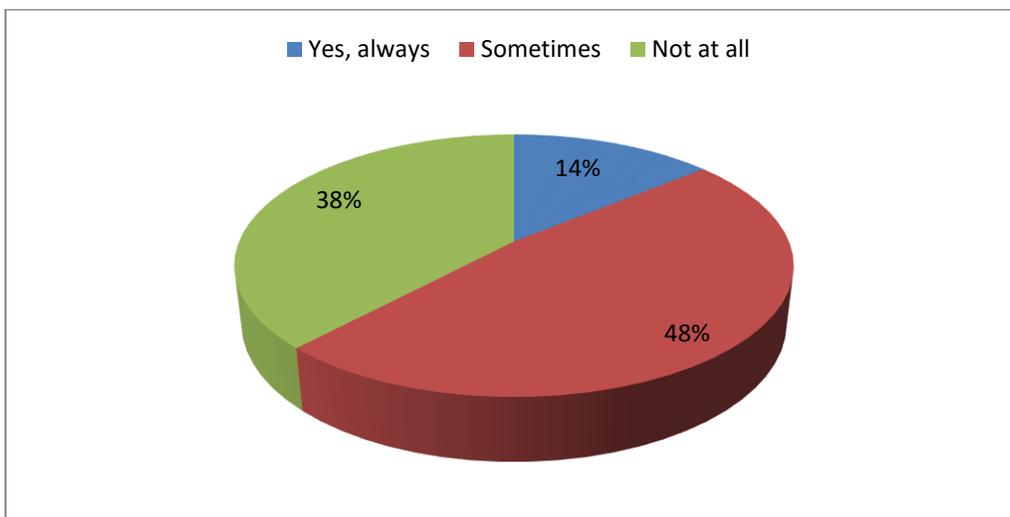
**Q.22 Duration of the different power cuts that you have experienced in the past six months**



**Inference**

- Out of 100 respondents, 46% respondents experienced less than half hour, 23% experienced half-to-one hour, 24% experienced one-to-two hours, 6% experienced two-to-five hours, and 1% experienced more than 5 hours of power cut in the past 6 months.

**Q.23 You get any prior information about the power cuts**

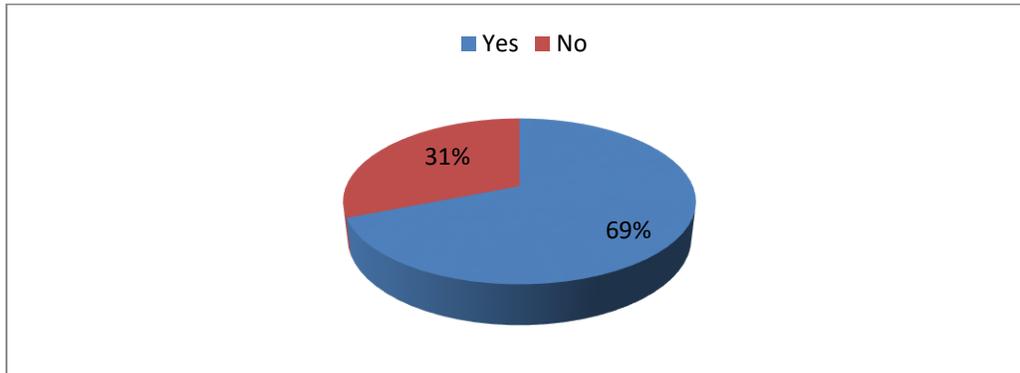


**Inference**

- Out of 100 respondents, 14% always get, 48% sometimes get and 38% don't get at all any prior information about the power cuts.

### (G) Price of electricity

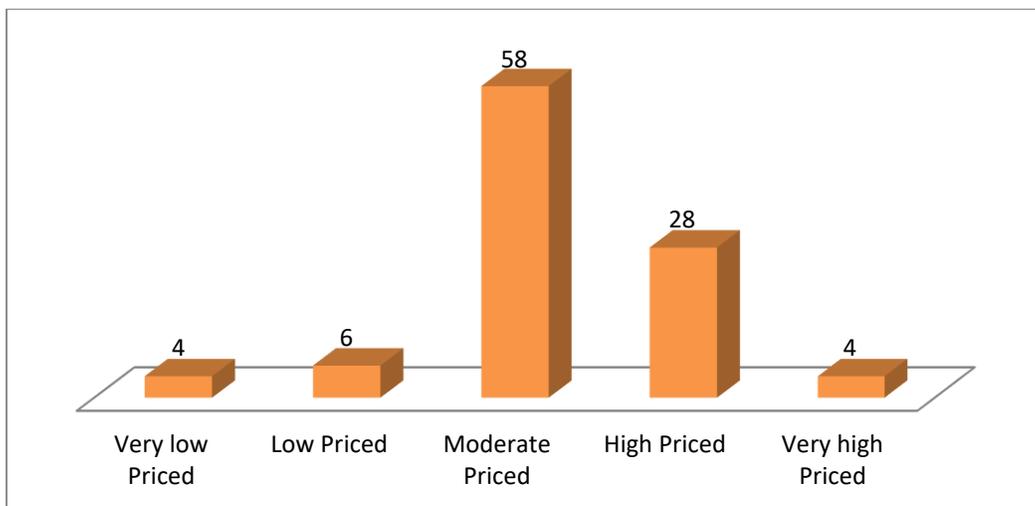
**Q.24 You are aware that DERC (Delhi Electricity Regulatory Commission) is fixing the electricity price/tariff**



#### **Inference**

- Out of 100 respondents, 69% respondents are aware that DERC is fixing the tariff rates and 31% are not aware.

**Q.25 Price charged by the electricity company**

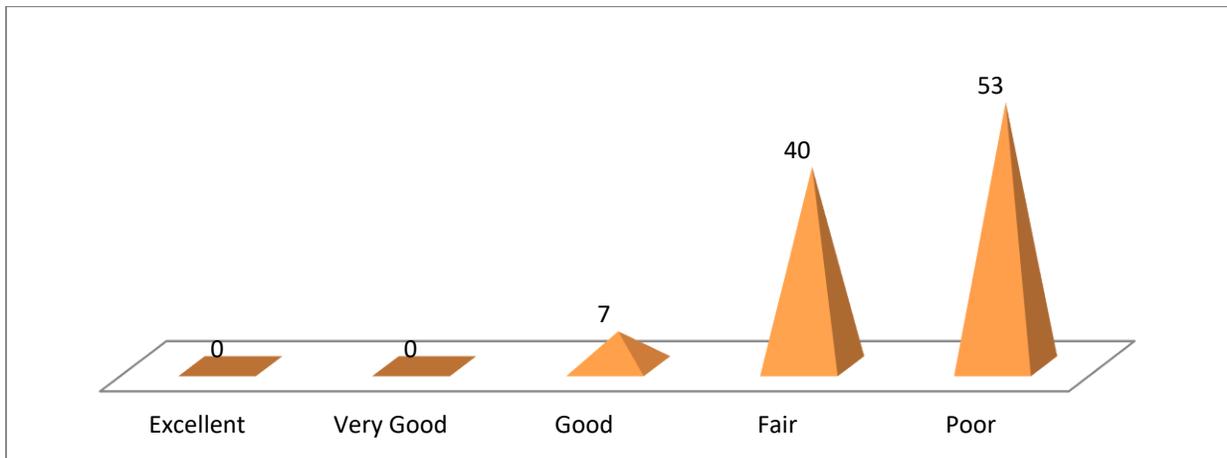


#### **Inference**

- Out of 100 respondents, 4% perceive very low price, 6% perceive low price, 58% respondents perceive moderately priced, 28% perceive as high price, & 4% perceive as very high priced.

## (H) Metering Services

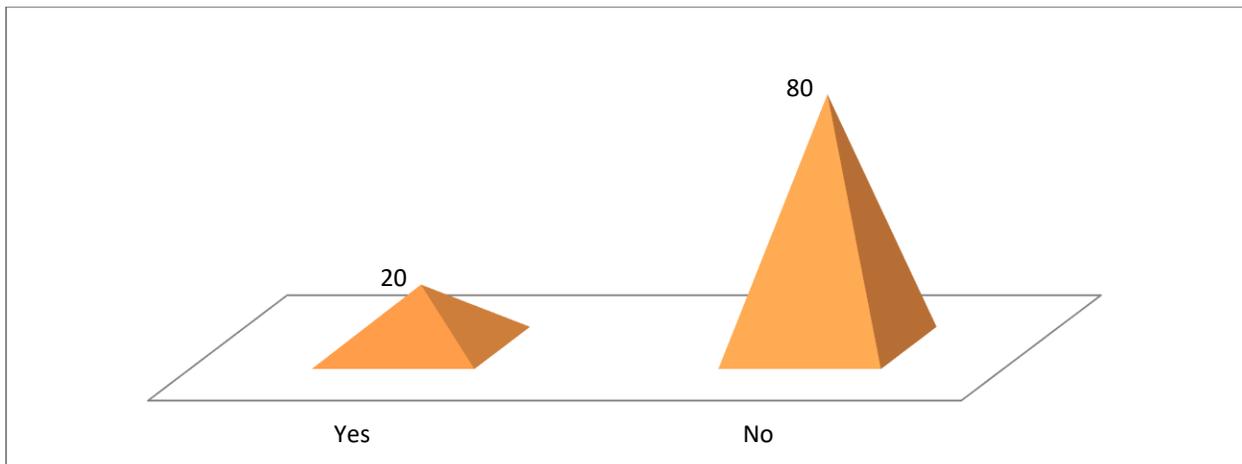
### Q.26 Overall quality of metering



#### Inference

- Out of 100 respondents, 53% perceive poor, 40% perceive as fair, and remaining 7% perceive as good. No respondent rated metering services as excellent or very good.

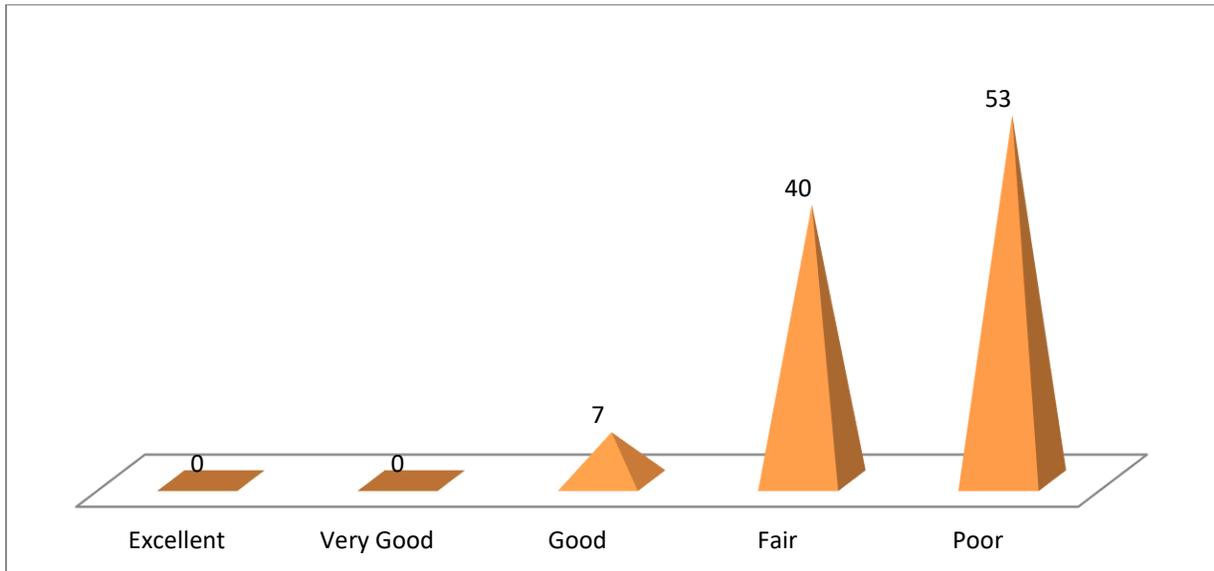
### Q.27 Your power consumption is still measured through an old meter



#### Inference

- Out of 100 respondents, 80% respondents have new electronic meter placed at their metering points.

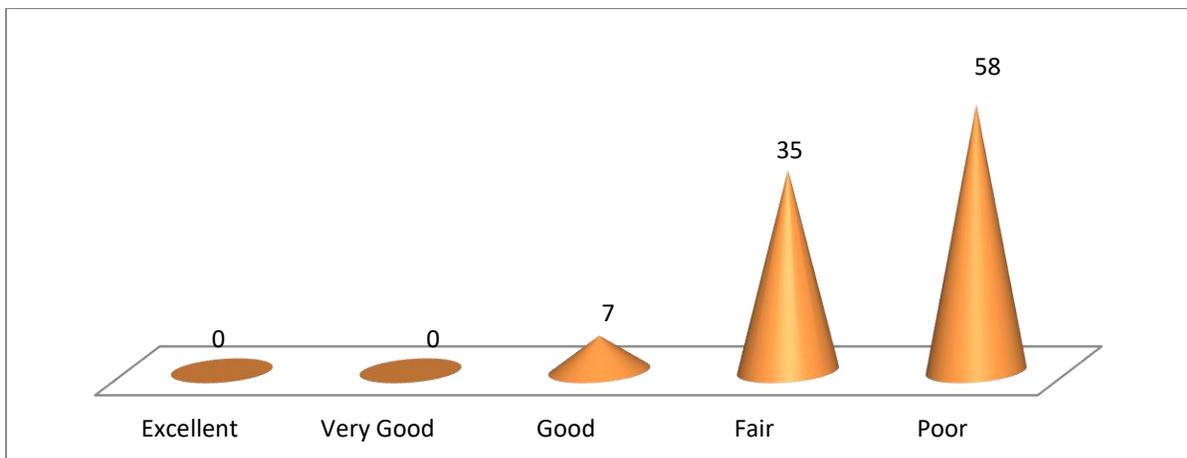
### Q.28 Accuracy of Meter installed at your premises



#### Inference

- Out of 100 respondents, 53% rate as poor, 40% rate as fair, 7% rate as good, and no one rated as excellent or very good regarding the accuracy of meters installed at their premises.

### Q.29 Information provided for Understanding the meter to monitor consumption

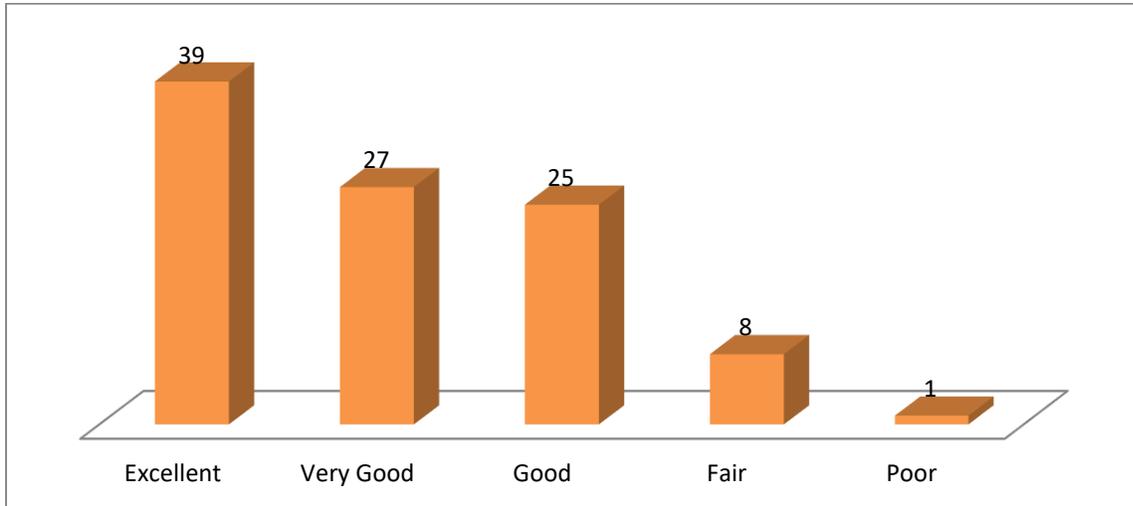


#### Inference

- Out of 100 respondents, 53% rated as poor, 40% rated as fair and 7% rated as good about the information provided for understanding the meter to monitor consumption.

**(II) Billing related Services**

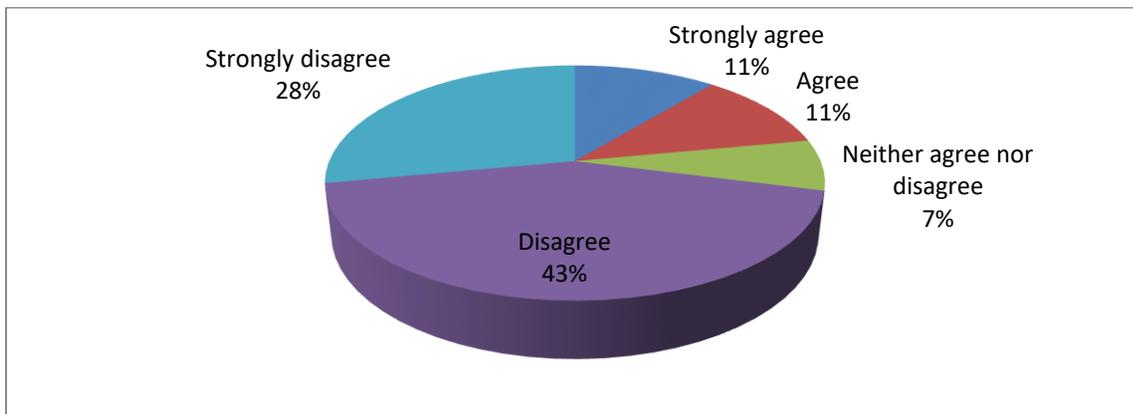
**Q.30 Your perception of Overall quality of billing**



**Inference**

- Out of 100 respondents, 39% rate as excellent, 27% rate as very good, 25% rate as good, 8% rate as fair, and 1% rate as poor about their perception of the overall quality of billing.

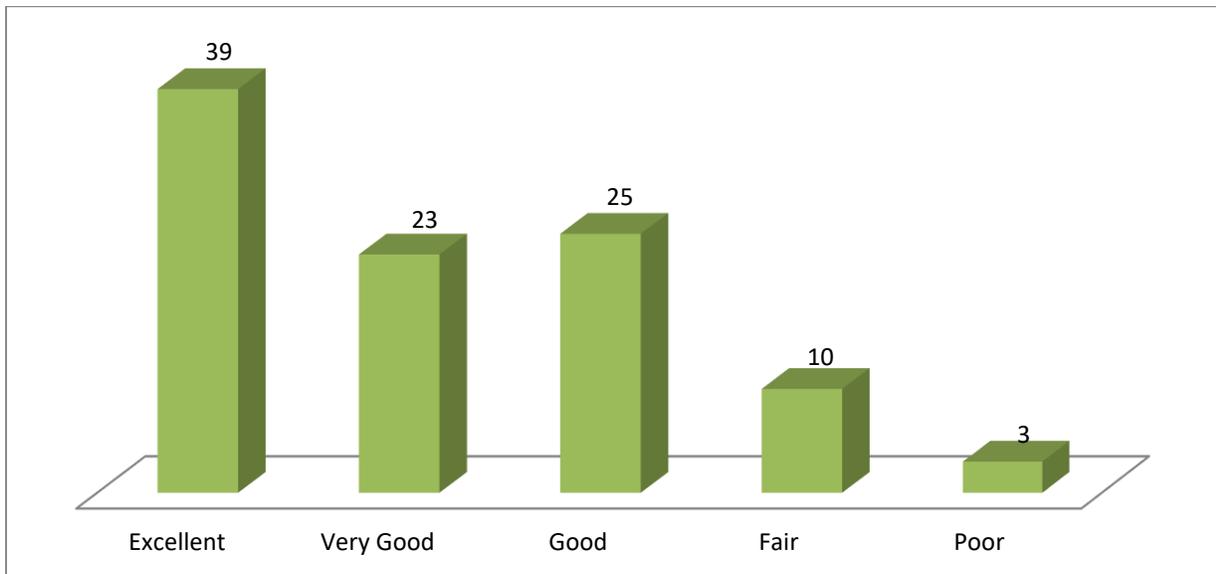
**Q.31 Timeliness and regularity of bill receipt is not adhered to**



**Inference**

- Out of 100 respondents, 28% strongly disagree, 43% disagree, 7% neither agree nor disagree, 11% agree and 11% strongly agree that their bill receipt is timely and regular.

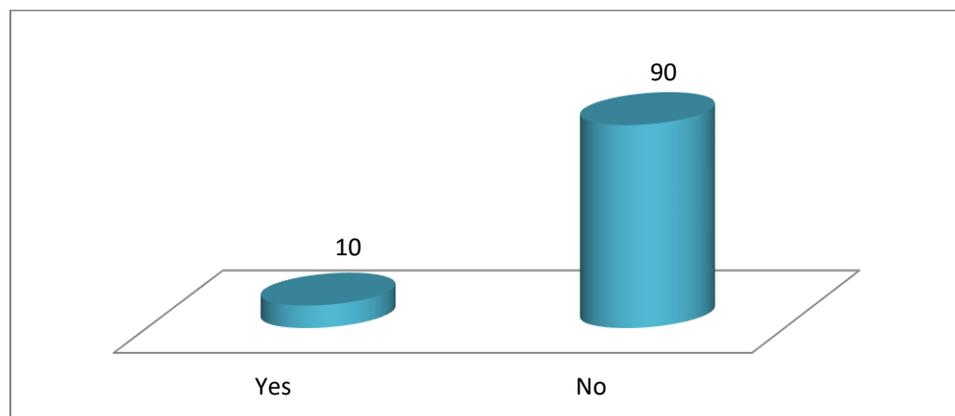
**Q.32 Timeliness of alerts received through SMS or Email regarding your payment**



**Inference**

- Out of 100 respondents, 39% rate as excellent, 23% as very good, 25% as good, 10% as fair and 3% as poor regarding the receipt of timely alerts through SMS/e-mail regarding payment of bills.

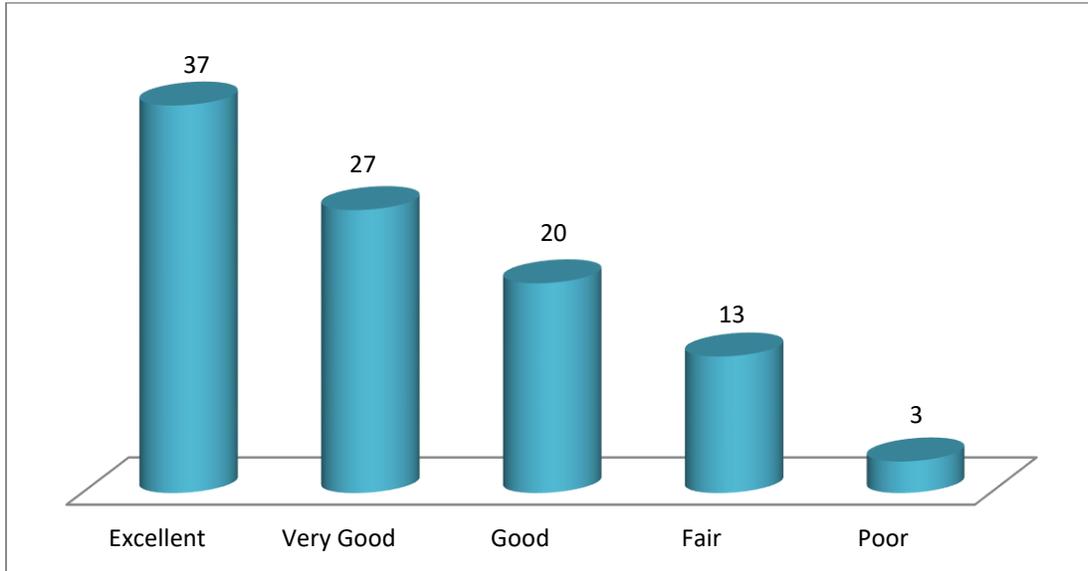
**Q.33 You experience inadequate time gap between receipt of bill and due date for payment**



**Inference**

- Out of 100 respondents, 90% respondents get adequate time gap between receipt of bills & its due date of payment.

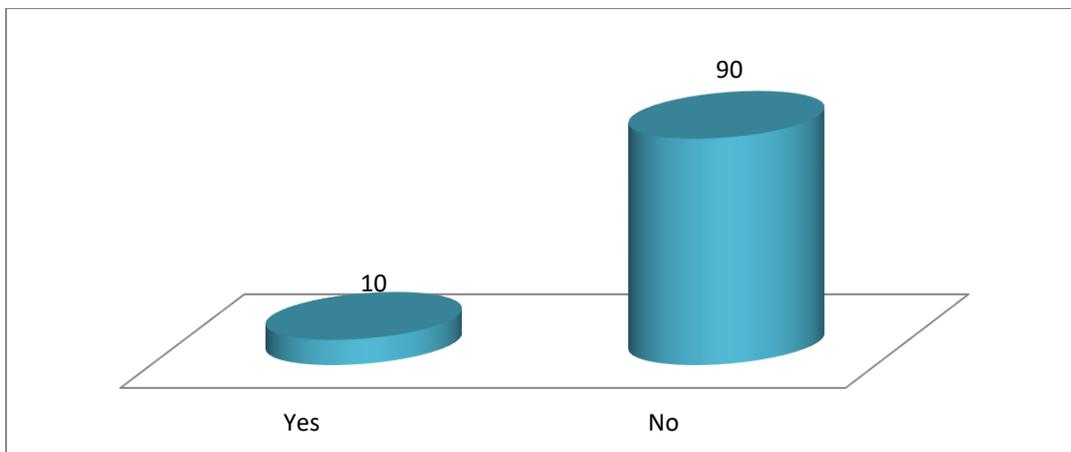
### Q.34 Accuracy of billing



#### Inference

- Out of 100 respondents, 37% rate as excellent, 27% as very good, 20% as good, 13% as fair, and 3% as poor regarding the accuracy of bills.

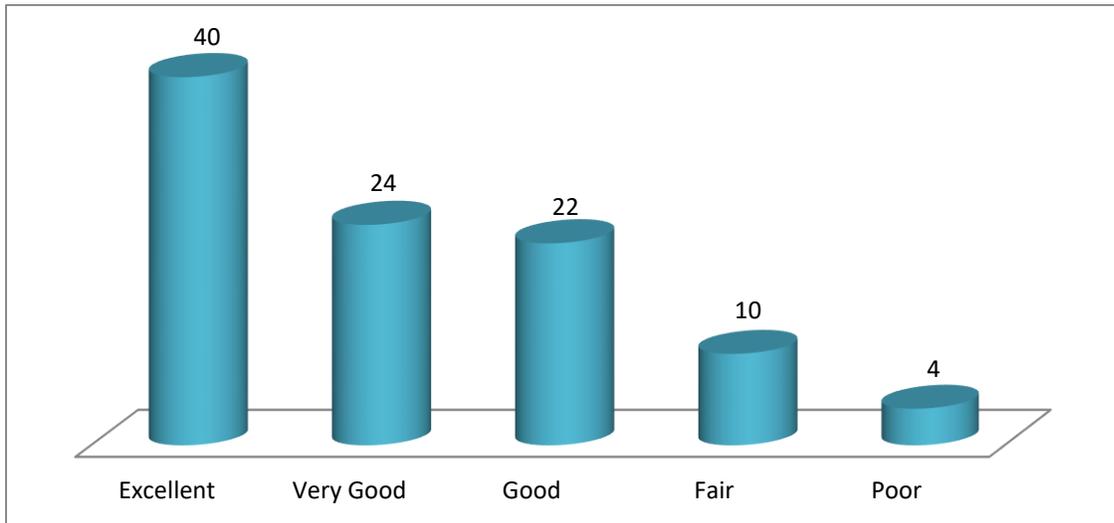
### Q.35 Ambiguity in understanding / reading the bill



#### Inference

- Out of 100 respondents, 90% respondents have no ambiguity in understanding/reading the bill.

**Q.36 Quality of information provided on the bill (front / back side / important messages)**

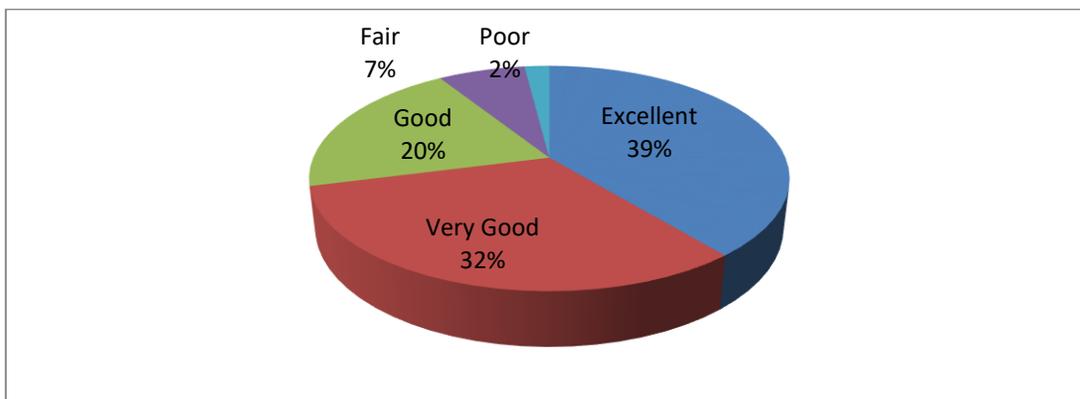


**Inference**

- Out of 100 respondents, 40% rate as excellent, 24% rate as very good, 22% rate as good, 10% as fair and 4% as poor reading the quality of information provided on the bill.

**(J) Bill Payment Process**

**Q.37 Overall quality of the bill payment process of the electricity company**



**Inference**

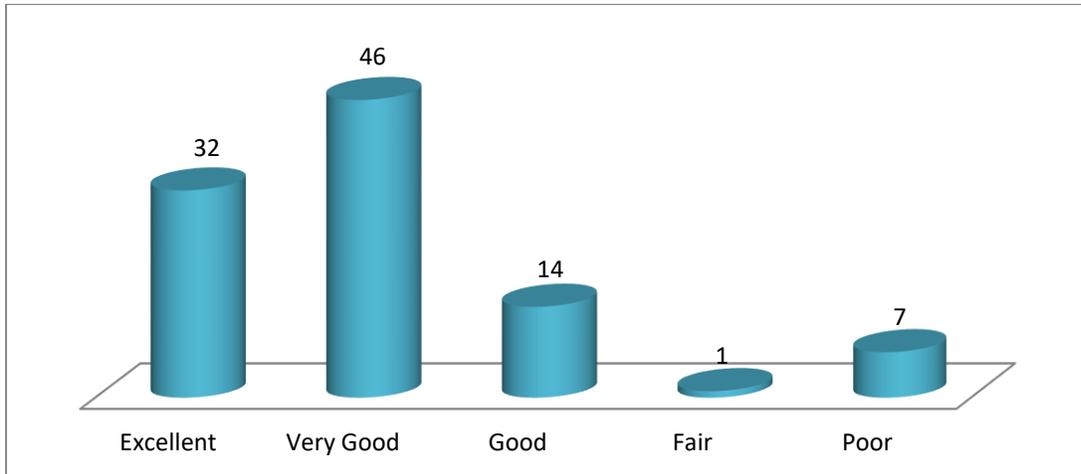
- Out of 100 respondents, 39% rate as excellent, 32% rate as very good, 20% rate as good, 7% as fair & 2% as poor regarding the overall quality of bill payment facilities offered.

**Q.38 Modes of payment or options for payment offered by the electricity company for payment of your electricity bill(Please specify)**

- APTM Counters, Cash Collection Centers, Online payment

**(III) Communication/Relationship Building**

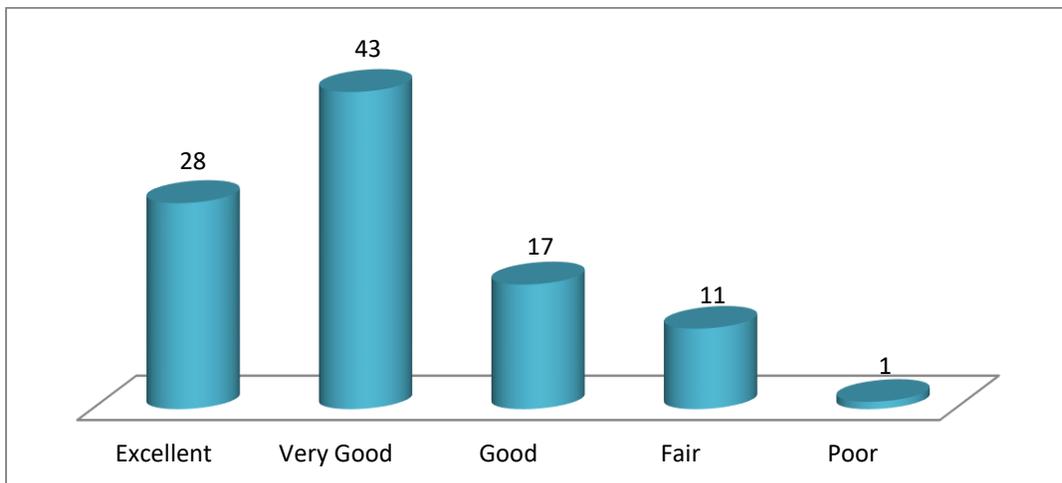
**Q.39 Overall quality of the communication of the electricity company**



**Inference**

- Out of 100 respondents, 32% rate as excellent, 46% rate as very good, 14% rate as good, 1% as fair, 7% rate as poor regarding the overall quality of communication of the electricity company.

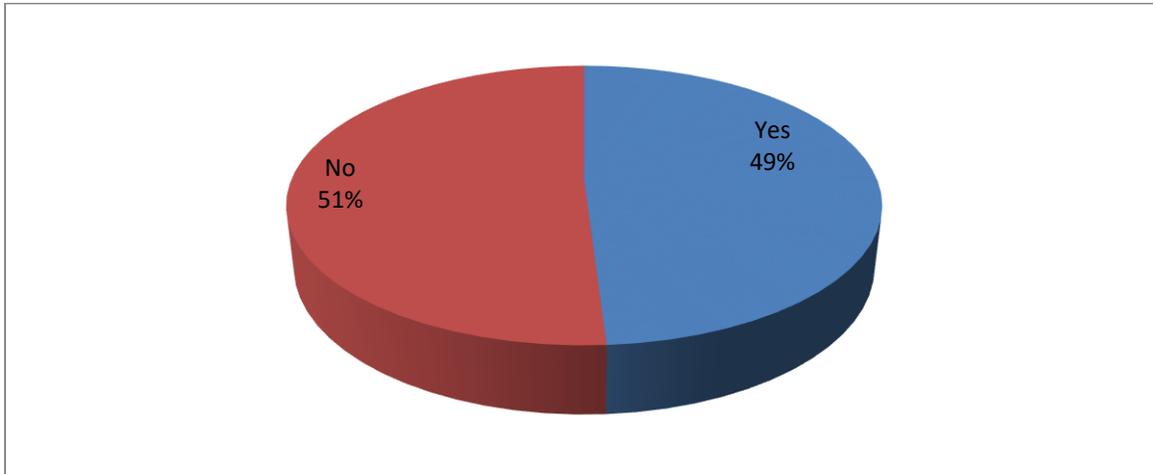
**Q.40 Customer newsletter and other awareness correspondence done by Client Manager**



### **Inference**

- Out of 100 respondents, 28% rate as excellent, 43% rate as very good, 17% rate as good, 11% rate as fair, & 1% rate as poor about the access to information through consumer newsletters/client managers.

### **Q.41 Quality of Information provided through the Website is not adequate**



### **Inference**

- Out of 100 respondents, 51% respondents find quality of information provided through the website as adequate.

### **Q.42 Modes of communication you would prefer while dealing with the electricity company for various activities like accessing your bills, making bill payments, registering for queries, complaints and fault repair, viewing important notices and announcements?**

- Call Center, Customer Care Center, SMS, Client Manager, Mobile App
- The most effective medium for listening to customers at TPDDL is the Call Center, where 90% of the total customer requests / complaints are registered and the balance are received through District Customer Care Centers, Website, E-mails, Letters etc.

## 4.2.2 Linear Regression Analysis results:

### Model Summary

Model	R	R Square	Adjusted R Square
1	.644 <sup>a</sup>	.415	.361

a. Predictors: (Constant), Price\_AVG, Commitment\_loyalty\_avg, Billing\_AVG, OverallValue\_AVG, Quality\_Supply\_AVG, Communication\_Relationship\_building\_AVG, Metering\_AVG, Bill\_Payment\_AVG

### Inference

- R=64% indicates overall model fit. i.e. the set of independent variables chosen define only 64% of “Overall Customer Satisfaction” level.

#### Hypothesis defined for each independent variable:-

H1: Overall quality of services offered has a positive influence on the Overall customer satisfaction level.

H2: Commitment and Loyalty has a positive influence on the Overall customer satisfaction level.

H3: Quality of electricity supply has a positive influence on the Overall customer satisfaction level.

H4: Price has a positive influence on the Overall customer satisfaction level.

H5: Metering has a positive and significant influence on the Overall customer satisfaction level.

H6: Billing has a positive influence on the Overall customer satisfaction level.

H7: Bill Payment process positive has a positive influence on the Overall customer satisfaction level.

H8: Communication and Relationship Building has a negative influence on the Overall customer satisfaction level.

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.	Hypotheses Support
	B	Std. Error	Beta		
Overall_Value_AVG	0.019	0.021	0.085	0.027	H1: Supported
Commitment_loyalty_avg	0.043	0.027	0.161	0.043	H2: Supported
Quality_Supply_AVG	0.025	0.016	0.172	0.049	H3: Supported
Price_AVG	0.004	0.059	0.007	0.064	H4: Not supported
Metering_AVG	0.035	0.026	0.121	0.059	H5: Not supported
Billing_AVG	0.015	0.017	0.13	0.004	H6: Supported
Bill_Payment_AVG	0.084	0.084	0.161	0.016	H7: Supported
Communication_AVG	0.012	0.01	0.152	0.074	H8: Not Supported

### **4.3 Findings and Recommendations**

#### **(A) Findings:**

##### **(i) Demographic Profile:-**

- The respondents are majorly of age-group 26-35.
- 83% have domestic load.
- > 50% of respondents have no back up arrangement facility.

##### **(ii) Dependent Variable selected:**

Overall Customer Satisfaction level

- More than 90% of respondents are satisfied with the overall services provided by TPDDL.

##### **(iii) Independent Variables evaluated:**

- (a) Overall value of services
- (b) Commitment and loyalty of consumers
- (c) Quality & Reliability of supply
- (d) Price of electricity
- (e) Metering services provided by TPDDL
- (f) Billing services provided by TPDDL
- (g) Bill payment procedures
- (h) Communication & Relationship building

**🚩 Descriptive analysis & Linear regression analysis results:-**

**(a) Overall value of services – 7 constructs have been evaluated.**

- As per linear regression analysis, the hypothesis considered

“H1: Overall quality of services offered has a positive influence on the Overall customer satisfaction level”

- So the hypothesis is supported -significant value being less than 0.05.

- All the constructs favour the hypothesis support wherein the overall satisfaction level of respondents is more than 70%.

<b>Constructs</b>	<b>Level of Agreement/Satisfaction</b>
satisfaction for the Value for Money (VFM)	> 80 % satisfied
Perception of Delivery of promises	> 80 % agree
Perception of Best-in-class practices adoption	>70% agree
Perception of accessibility of supply	>70% agree
Perception of transparency in dealings	>70% agree
Perception of focus towards Safety	>70% agree
Perception of CSR activities/ initiatives	> 80 % agree

**(b) Commitment and loyalty of consumers – 4 constructs have been evaluated.**

- As per linear regression analysis, the hypothesis considered

“H2: Commitment and Loyalty has a positive influence on the Overall customer satisfaction level”

- So the hypothesis is supported-significant value being less than 0.05.

- All the constructs favour the hypothesis support wherein more than 60% respondents show positive commitment and loyalty towards TPDDL and only 35% agree for opting services from any other distribution utility.

<b>Constructs</b>	<b>Level of Agreement/Satisfaction</b>
Feel confident about the services received	>80% agree
Opt for other electricity company (if given a chance)	Only 35% agree
Positive WOM	> 80% agree
Would matter a lot if could not avail the services from TPDDL	>60 % agree

**(c) Quality & Reliability of supply – 7 constructs have been evaluated.**

- As per linear regression analysis, the hypothesis considered “H3: Quality of electricity supply has a positive influence on the Overall customer satisfaction level”
- So the hypothesis is supported-significant value being less than 0.05.
- The satisfaction level is more than 75% regarding the overall quality and reliability of supply, 60% experience 1-2 power cuts per month, only 14% respondents getting prior information about the power cuts. This needs to be improved, 60% experience only 1-2 power cuts per month.

<b>Constructs</b>	<b>Level of Agreement/Satisfaction</b>
Overall quality & reliability of supply	>75% rate very good and more
Encountering voltage fluctuations in supply	>85% experience no voltage fluctuations
24 X 7 reliable power supply	>75% rate very good and more
Adherence to planned shutdowns	65% rate very good and more
Average power cuts experienced per month	60% experience 1-2 power cuts per month, 17% experience no power cuts
Duration of power cuts experienced in past 6 months	46% experienced less than half hour
Prior information about the power cuts	14% always get

**(d) Price of electricity – 2 constructs have been evaluated.**

- As per linear regression analysis, the hypothesis considered “H4: Price has a positive influence on the Overall customer satisfaction level”.
- So the hypothesis is not supported-significant value being more than 0.05.
- More than 25% consider tariff rate to be highly priced and 58% as moderately priced.

<b>Constructs</b>	<b>Level of Agreement/Satisfaction</b>
Awareness about DERC fixing the tariff rates	69% are aware
Price charged by electricity company	58% as moderate priced, 30% as high priced

- Consumers are not happy with linking of the fixed charges with their average power factor in the tariff structure.
- Consumers are not aware that that fuel/power generation cost forms more than 80% of the electricity tariff.
- Only 69% consumers aware about DERC fixing the tariff rates.

**(e) Metering services provided by TPDDL– 4 constructs have been evaluated.**

- As per linear regression analysis, the hypothesis considered

“H5: Metering has a positive and significant influence on the Overall customer satisfaction level”

- So the hypothesis is not supported -significant value being more than 0.05.

<b>Constructs</b>	<b>Level of Agreement/Satisfaction</b>
Overall quality of Metering	53% rated as poor, 40% as fair
Old meters replaced with new meters	80% have new electronic meters installed
Accuracy of meters	53% rated as poor, 40% as fair
Information regarding understanding the meter	58% rated as poor, 35% as fair

-Consumers are not happy with the meter of particular make.

- Consumers are not well informed about the reading parameters being displayed by the meter recording their consumption.

- Consumers perceived new electronic meters to be faster than old electromechanical meters.

**(f) Billing services provided by TPDDL–7 constructs have been evaluated.**

- As per linear regression analysis, the hypothesis considered

“H6: Billing has a positive influence on the Overall customer satisfaction level”

- So the hypothesis is supported - significant value being less than 0.05.

<b>Constructs</b>	<b>Level of Agreement/Satisfaction</b>
Overall quality of billing	> 65% rated very good and more
Adherence to timeliness and regularity of billing	>70% agree
Timeliness of alerts through SMS or email regarding payment	> 60% rate as very good and more
Sufficiency of time between bill receipt and payment due date	90% satisfied
Perception about Accuracy of billing	> 60% perceive very good and more
Ambiguity in understanding the bill	90% have no ambiguity
Perception about the Quality of information provided on bill	> 60% rate as very good and more

- Consumers are not aware about the information that is being sent to their registered Emails.

(g) **Bill payment procedures– 2 constructs have been evaluated.**

- As per linear regression analysis, the hypothesis considered

“H7: Bill Payment process positive has a positive influence on the Overall customer satisfaction level”

- So the hypothesis is supported - significant value being less than 0.05.

<b>Constructs</b>	<b>Level of Agreement/Satisfaction</b>
Overall quality of bill payment process	> 70% perceive very good and more
Modes of payment used	APTM Counters, Cash Collection Centers, Online payment

(h) **Communication & Relationship building– 4 constructs have been evaluated.**

- As per linear regression analysis, the hypothesis considered

“H8: Communication and Relationship Building has a negative influence on the Overall customer satisfaction level”

- So the hypothesis is not supported - significant value being more than 0.05.

<b>Constructs</b>	<b>Level of Agreement/Satisfaction</b>
Overall quality of communication	> 75% perceive very good and more
Customer newsletter and other awareness correspondence done by Client Manager	> 70% perceive very good and more
Quality of Information provided through the Website	> 50% find as adequate
Common modes of communication preferred	Call Center, Customer Care Center, SMS, Client Manager

**(B) Recommendations:**

**1) Quality & Reliability of power supply:**

- Consumers must be made aware about the power procurement by TPDDL from Central Sector generation plants and other states, percentage generation/ power procured from Delhi base power plants being only 925 MW out of 4037 MW (as on date 26<sup>th</sup> May'15) – 23% only. Still TPDDL managing to provide quality and reliable power supply.

Source: Delhi SLDC(State load dispatch center)

## DYNAMIC DATA

Current Frequency (Hz)	49.89
UI Rate (Paise/Unit)	253
Delhi Load (MW)	4923
Delhi Schedule (MW)	4076
Delhi Drawal (MW)	3999
OD/UD (MW)	-77
Delhi Generation (MW)	925
Max Load (Today, so far)	5170 at 00:00:02
Min Load (Today, so far)	3562 at 06:47:36
Max Load (Yesterday)	5273 at 15:07:08
Min Load (Yesterday)	3603 at 07:29:10



Drawl Schedule currently in force no.:20 issued at:26/05/2015 11:49:21 Hrs.

NORMAL

DELHI LOAD	SCHEDULE	DRAWL	TIME	MAX LOAD TODAY	MAX LOAD (YES'DAY)
4962	4076	4037	26-May-15 12:09:15	5170 at 00:00:02	5273 at 15:07:08
FREQUENCY	DSM RATE	OD/UD	DELHI GENERATION	MIN LOAD TODAY	MIN LOAD (YES'DAY)
49.92	228 (228)	-39	925	3562 at 06:47:36	3603 at 07:29:10

DISCOM DRAWL ( 12:09:15Hrs)					DELHI GENERATION ( 12:09:15Hrs)				STATES DRAWL ( 12:08:42Hrs)				
Discom	Schedule	Drawl	OD/UD	DSM	GENCO	Schedule	Actual	UI	STATE	Schedule	Drawl	OD/UD	Load
BRPL	2066	2030	-36	228	BIPS	300	306	6	CHANDIGARH	288	303	14	303
BYPL	1107	1109	3	228	Rajghat	-3	-3	0	HARYANA	3145	3121	-23	5231
NDPL	1471	1443	-28	228	GT	64	67	3	HIMACHAL	295	292	-3	851
NDMC	303	290	-13	228	Pragati	260	264	4	J & K	895	908	6	1358
MES	36	42	6	456	CCGT-Bawana	275	278	3	PUNJAB	3978	3759	-219	6626
Delhi Discoms	4983	4915	-68		TOWMP-Okhla	11	11	0	RAJASTHAN	3482	3450	-31	8278
Total (DTL)	5030	4962	-68		CCGT-Rithala	0	0	0	UTTARAKHAND	694	920	226	1247
Ext. Utilities	38	38	0		Total	907	923	16	UTTAR-PRADESH	5611	5837	226	12234
GRID LOADINGS ( 12:08:51Hrs)					CENTRAL SECTOR GENERATION			DELHI IMPORT ( 12:08:52Hrs)					
Sub-Station	RTU*	MW	Mvar	Voltage	GENCO NAME	Schedule	Actual	TRANSFORMER/FEEDER	MW	MVAR			
Bamnauli	1	878	-15	393	ANTA	235	235	Bawana-400/220KV ICT-1	209	3			
Bawana	1	1050	58	401	AURIYA	141	54	Bawana-400/220KV ICT-2	216	21			
DIAL	1	33	0	217	BAIRASIUL	179	178	Bawana-400/220KV ICT-3	213	7			
DSIDC	0	139	0	0	BHAKRA	950	956	Bawana-400/220KV ICT-4	206	5			
Gazipur	0	112	-9	212	CHAMERA-1	540	581	Bawana-400/220KV ICT-5	0	0			
Geeta Colony	0	89	14	0	CHAMERA-2	300	-222	Bawana-400/220KV ICT-6	206	22			
GopalPur	1	141	-17	213	DADRI-GAS	376	314	Bamnauli-400/220KV ICT-1	223	0			
HCM Lane	0	60	22	216	DADRI-TH	711	700	Bamnauli-400/220KV ICT-2	218	1			
Harsh Vihar	1	164	6	398	DADRI-TH-2	865	807	Bamnauli-400/220KV ICT-3	202	-7			
IP Power	0	150	-3	0	DEHAR	600	612	Bamnauli-400/220KV ICT-4	236	-9			
Kanjhawla	0	88	17	216	DHAULIGANGA	83	219	Mandaula-400/220KV ICT-1	201	48			
								Mandaula-400/220KV ICT-2	204	38			

## 2) Pricing of Electricity:

- Consumers to be made aware about DERC fixing the tariff rates.
- Consumers to be made aware about the tariff differences between Delhi and other neighbouring states and between Delhi and other Metro cities reflecting the low tariff rates prevailing in Delhi.

- Since all of the consumers are not aware about the fuel/power generation cost forming more than 80% of the electricity tariff, the awareness about the same to be spread on large scale so that they can appreciate the electricity tariffs and clear their doubts that the utility is not responsible for the tariffs.

## Tariff Benchmarking- Neighboring States

TARIFF COMPARISON ACROSS DIFFERENT STATE UTILITIES NEAR DELHI NCR					
		Delhi (TPDDL)	Haryana	Uttar Pradesh	Rajasthan
	Units	Rs. / Unit	Rs. / Unit	Rs. / Unit	Rs. / Unit
Dom - 2 Kw	200	3.00	4.14	5.00	5.16
Dom - 2 Kw	400	4.67	4.60	4.90	5.17
Non Domestic/ Commercial- 20 kV	1500	10.15	8.50	9.45	7.35
LT Industrial - 20 kV	1500	9.20	8.16	10.1	6.32
HT Industrial - 100kV/10S KVA	15000	8.30	6.88	8.10	6.51
Power Outage During Summer(Avg.)**	Hours/ day	0	4-6	4-6	2-2.5

**Please Note:**

- \*\*Power outage is Nil in TPDDL area as compared to neighboring states (Source: CEA report on power reliability, SAIDI)
- Subsidies offered by various govt. are considered for those updated in Tariff Orders.
- Other charges like Regulatory surcharge, PRAC, Taxes etc. not included as on 17<sup>th</sup> July 2014 (DERC Tariff Order)
- Domestic Tariff of Delhi includes subsidy of Rs.1.20 for first 200 units and Rs.0.80 for 201-400 units as approved on 3<sup>rd</sup> Sept 2014 (The subsidy will be applicable w.e.f. 11<sup>th</sup> Aug 2014)

## Tariff Benchmarking- Metro Cities

TARIFF COMPARISON ACROSS DIFFERENT UTILITIES OF METRO CITIES IN INDIA					
		Delhi (TPDDL)	Mumbai	Kolkata	Chennai
	Units	Rs. / Unit	Rs. / Unit	Rs. / Unit	Rs. / Unit
Dom - 2 Kw	200	3.00	5.10	5.12	3.58
Dom - 2 Kw	400	4.67	6.05	5.62	4.46
Non Domestic/ Commercial- 20 kV	1500	10.15	12.88	7.64	7.71
LT Industrial - 20 kV	1500	9.20	10.63	6.88	5.90
HT Industrial - 100kV/10S KVA	15000	8.30	9.44	8.77	7.66

**Please Note:**

- The cost includes Fixed and Energy Charges only and does not include other charges like Regulatory surcharge, PRAC etc. as on 17<sup>th</sup> July 2014 (DERC Tariff Order)
- Domestic Tariff of Delhi includes subsidy of Rs.1.20 for first 200 units and Rs.0.80 for 201-400 units as approved on 3<sup>rd</sup> Sept 2014 (The subsidy will be applicable w.e.f. 11<sup>th</sup> Aug 2014)

### 3) Meter related Services:

- Consumers can get checked the accuracy of meters through 3<sup>rd</sup> party outsource government agency through their meter testing laboratories.

- Educate the customer about reading the meter and the various electrical parameters. Also about the ELCB working and checking of the earth leakage at their premises.
- Industrial consumers(with more than 50 kW) must be made aware about provision of 25% discount in billing if they consume TOD in the night hours.

#### **4) Billing related services:**

- Making consumers aware about the energy conservation and use of star rated BEE equipments and LED lights and how to reduce their electricity consumption, thus reducing their bill values.
- To enhance awareness among the consumers about the reading parameters being used for Billing purpose, posters depicting parameters being used for Billing purpose should be installed at the district offices and handouts of the same be sent to the industrial consumers through Bill Distribution agencies. The same information be uploaded on the company's website.

#### **5) Communication & Relationship Building:**

- Proper OMS implementation.
- Fast and timely redressal of complaints.
- Providing Mobile app for all electricity related information.
- Consumers to be made aware about Safety related aspects of electricity.

#### **4.4 Limitations of the Study:**

A small sample size of 100 consumers is taken, so exact inference cannot be drawn about the population from this sample size.

Time period is short and resource constraints.

This study is based on the prevailing consumer's satisfaction. But the consumer's satisfaction may change according to time, technology, development, etc.

## **CHAPTER 5**

### **BIBLIOGRAPHY/ REFERENCES**

#### **BOOKS:**

CONSUMER BEHAVIOUR -	Leon G. Schiffman S. Ramesh Kumar
SPSS 17.0 for Researchers-	Dr S L Gupta Hitesh Gupta
Marketing Research-	Naresh K Malhotra

#### **Web Resources:**

[www.google.com](http://www.google.com)

[www.tatapower.com](http://www.tatapower.com)

<http://www.delhisldc.org/>

## **CHAPTER 6**

### **ANNEXURES**

#### **Abbreviations**

ABC	Aerial Bunched Conductor
ABT	Availability Based Tariff
AMI	Advanced Metering Infrastructure
AMR	Automated Meter Reading
AMRDA	AMR Data Acquisition Software
APSM	Area Power System Manager
AQC	Apex Quality Council
ARR	Aggregate Revenue Requirement
AT&C	Aggregate Technical and Commercial Losses
ATPM	Any Time Payment Machine
Bhagidari	A joint initiative of Delhi Government and Citizens of Delhi
BIRD	Bill Inward Receipt Desk
CCAG	Consumer Complaint Analysis Group
CCG	Consumer Care Group
CCM	Corporate Commercial Management
CGRF	Consumer Grievances Redressal Forum
CH	Circle Head
CRC	Consumer Relationship Cell
CRO	Consumer Relations Officer
CSR	Corporate Social Responsibility
DJB	Delhi Jal Board
DM	District Manager
DMRC	Delhi Metro Rail Corporation
DSIIDC	Delhi State Industrial & Infrastructure Development Corporation
DSM	Demand Side Management
DVB	Delhi Vidyut Board
ELCB	Earth Leakage Circuit Breaker
EoC	Experience of Consumer
GoNCTD	Govt. of National Capital Territory of Delhi
G&I	Government and Institutional
GIS	Geographical Information System

HCB	High Consumer Base
HRB	High Revenue Base
ICC	Integrated Call Centre
IWA	Industrial Welfare Association
JJ	Jhuggi Jhopadi (Slum Clusters)
KCG	Key Consumer Group
OMS	Outage Management Systems
PHF	Personal Hearing Forum
PMS	Performance Management System
RCM	Revenue Cycle Management
RWA	Resident Welfare Association
SCG	Special Consumer Group
SAP-ISU	SAP-Integrated Service Utility
SPP	Strategic Planning Process
USO	Universal Service Obligation
VoC	Voice of Consumer
Xpress	Consumers whose Load is greater than 500Kw

**Questionnaire for "Customer Delight Survey" of TATA Power Delhi Distribution**  
**Limited**

**(A) Respondent Profile**

Q.1 Age group

18-25 26-35 35-50 >50

Q.2 What is your of load/establishment type?

Shop

Office

Institutions (School, Hospitals etc.)

Factory/Industry

Showroom/Malls/Cinema Halls

Banquet Halls

Domestic

**(B) Usage of Power**

Q.3 Your backup arrangement for Power Supply

Invertors

DG Set

No Backup arrangement

Others

Q.4 Normal daily usage of Power Supply (in hours)

1-5 hr            5-10 hrs            10-15 hrs

**(C) Overall Customer Satisfaction level**

Q.5 Overall Customer Satisfaction level from Services offered by TPDDL

Highly satisfied                      Satisfied      Neutral                      Dissatisfied                      Highly dissatisfied

**(D) Overall Value of Services Offered**

Q.6 Considering the electricity and service that you get and the price you have to pay, Your satisfaction for the Value for Money (VFM) you get from the electricity company

Strongly Agree Agree                      Neither agree nor disagree      Disagree      Strongly Disagree

Q.7 Is a company that really cares about its customers OR Delivers upon its promises

Strongly Agree Agree                      Neither agree nor disagree      Disagree      Strongly Disagree

Q.8 Is a company with best-in-class practices

Strongly Agree Agree                      Neither agree nor disagree      Disagree      Strongly Disagree

Q.9 Employees of the Company are not easily accessible

Strongly Agree Agree                      Neither agree nor disagree      Disagree      Strongly Disagree

Q.10 Company is transparent in its dealings

Strongly Agree Agree                      Neither agree nor disagree      Disagree      Strongly Disagree

Q.11 The Company lacks focus towards its (Customer) Safety in terms of network, tools used, safety precautions at time of work

Strongly Agree Agree                      Neither agree nor disagree      Disagree      Strongly Disagree

Q.12 Is a company that drives community initiatives (CSR activities) earnestly

Strongly Agree Agree                      Neither agree nor disagree      Disagree      Strongly Disagree

**(E) Commitment& Loyalty**

Q.13 You feel very confident about the services you receive from the electricity company

Strongly Agree Agree      Neither agree nor disagree    Disagree    Strongly Disagree

Q.14 You would opt for availing the services of other power distribution company.(In the event of having more than one electricity company to choose from)

Strongly Agree Agree      Neither agree nor disagree    Disagree    Strongly Disagree

Q.15 You say good/positive things and recommend the electricity company as a power distribution company

Strongly Agree Agree      Neither agree nor disagree    Disagree    Strongly Disagree

Q.16 It would matter a lot to you if you could not avail the services of THE ELECTRICITY COMPANY and you had to use the services of another power distribution company

Strongly Agree    Agree      Neither agree nor disagree    Disagree    Strongly Disagree

**(F) Quality of Electricity Supply**

Q.17 Overall Quality and Reliability of electricity supply

Excellent    Very Good    Good    Fair    Poor

Q.18 You encounter voltage fluctuations in power supply

Yes    No

Q.19 There is reliability(24\*7) of power supply

Excellent    Very Good    Good    Fair    Poor

Q.20 Adherence to the announced time of planned shutdowns communicated by the electricity company

Excellent    Very Good    Good    Fair    Poor

Q.21 Thinking about the past 6 months, on an average, power cuts you experience in a month

1-2 times per month 3-4 per month 5 to 10 per month More than 10 per month

Q.22 Duration of the different power cuts that you have experienced in the past six months

Less than ½ hour ½ – 1 hour 1 – 2 hours 2 – 5 hours More than 5 hours

Q.23 You get any prior information about the power cuts

Yes, always Sometimes No not at all

### **(G) Price**

Q.24 You aren't aware that DERC (Delhi Electricity Regulatory Commission) is fixing the electricity price/tariff

Yes No

Q.25 Price charged by the electricity company

Very low Priced Low Priced Moderate Priced High Priced Very high Priced

### **(H) Metering**

Q.26 Overall quality of metering

Excellent Very Good Good Fair Poor

Q.27 Your power consumption is still measured through an old meter

YES NO

Q.28 Accuracy of Meter installed at your premises

Excellent Very Good Good Fair Poor

Q.29 Information provided for Understanding the meter to monitor consumption

Excellent Very Good Good Fair Poor

### **(I) Billing Services**

Q.30 Your perception of Overall quality of billing

Excellent    Very Good    Good    Fair    Poor

Q.31 Timeliness and regularity of bill receipt is not adhered to

Excellent    Very Good    Good    Fair    Poor

Q.32 Timeliness of alerts received through SMS or Email regarding your payment

Excellent    Very Good    Good    Fair    Poor

Q.33 You experience inadequate time gap between receipt of bill and due date for payment

Yes    No

Q.34 Accuracy of billing

Excellent    Very Good    Good    Fair    Poor

Q.35 Ambiguity in understanding / reading the bill

Yes    No

Q.36 Quality of information provided on the bill (front / back side / important messages)

Excellent    Very Good    Good    Fair    Poor

### **(J) BILL PAYMENT PROCESS**

Q.37 Overall quality of the bill payment process of the electricity company

Excellent    Very Good    Good    Fair    Poor

Q.38 Modes of payment or options for payment offered by the electricity company for payment of your electricity bill (Please specify)

**(K) COMMUNICATION / RELATIONSHIP BUILDING**

Q.39 Overall quality of the communication of the electricity company

Excellent    Very Good    Good    Fair    Poor

Q.40 Customer newsletter and other awareness correspondence done by Client Manager

Excellent    Very Good    Good    Fair    Poor

Q.41 Quality of Information provided through the Website is not adequate

Yes    No

Q.42 Two modes of communication you would prefer while dealing with the electricity company for various activities like accessing your bills, making bill payments, registering for queries, complaints and fault repair, viewing important notices and announcements?

[ANY TWO RESPONSES POSSIBLE]

Call center    Client Manager    Customer Care Centre    Emails    SMS    Mobile Application/  
Mobile Website