



Powering Prosperity

(2021-22)

Uttar Gujarat Vij Company Limited

Committed to Supply Continuous, reliable and quality power

CIN – U40102GJ2003SGC042906

Acknowledgement

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Message



State Government is always prepared to provide basic needs to the people of Gujarat. Providing constant water and electricity supply to all the people of the state is being motto for the state government since more than last two decades. Gujarat Electricity Board was restructured in 2005 with an aim to become growth engine of the development in the field of power generation, power transmission and power distribution. After corporatization, **Uttar Gujarat Vij Company Limited (UGVCL)** has made significant contribution to the social and economic development of the North Gujarat by maintaining **A+** rating constantly.

I am much pleased to learn that **UGVCL** is publishing **Powering Prosperity (2021-22)** every year along with details about its exemplary performance in all fields. I admire the initiative undertaken by the electricity distribution company with achievement of targets given by the Government for various schemes like “**Jyotigram Yojana**” and “**Kisan Suryodaya Yojana**”. I am sure the Book to be released will be most useful among all the stakeholders and people of Gujarat. I convey my best wishes to **Team-UGVCL** for a bright future ahead.

BHUPENDRABHAI PATEL
Chief Minister, Gujarat State



Message



After the reorganization of Gujarat Electricity Board, Uttar Gujarat Vij Company Limited has achieved significant performance during its tenure of 17 years and has received national and national-level awards for outstanding performance in various fields. The company has been ranked as an A⁺ category company for 10 consecutive years.

I congratulate to all present and former employees of the company, for the results they have achieved by setting high standards of performance and maintaining them.

I am proud and happy to note that the company has set a tradition of evaluating its performance every year. The performance captured by the company in the book **“Powering Prosperity”** is impressive. If the performance of various departments done by the company is compared with other power distribution companies, the total and accurate picture emerges.

Any company can perform admirably only when all its employees work effectively as a team by bringing out their efficiency.

I am confident that the work presented in this book will serve as a catalyst for the future success.

The company’s performance is moving in the direction of making Gujarat proud in the whole of India in the field of energy.

KANUBHAI DESAI
Energy Minister, Gujarat State



Message



It is pleasure to share that all the Gujarat State Power Distribution, Transmission and Generation companies under the Gujarat Urja Vikas Nigam Limited are doing remarkable work to revolutionize the State's energy sector.

As we are aware, Indian Power Sector is undergoing significant changes with Government of India's focus on 500 GW Renewable Energy Installed Capacity by 2030. We are on a journey to challenge conventions, set benchmarks and consistently innovate to explore solutions to meet the energy needs of the present and the future.

Government of Gujarat under the visionary leadership of our Hon'ble Prime Minister and then the Hon'ble Chief Minister of Gujarat, Shri Narendra Modi undertook pioneering and far-sighted energy policy decisions across various aspects as well as implemented several innovative and sustainable energy development programmes in the State. As a result, today Gujarat is not only self-sufficient in all prospects of the energy sector but is also doing exemplary work to inspire other states.

The **Uttar Gujarat Vij Company Limited**, which was the first to implement the "Jyotigram Scheme" in India, has maintained its leading position as a power distribution company in India for the past 18 years. With the quest to provide 24 X 7 electricity to all the areas under its jurisdiction in sustainable manner and at an affordable price to all category of customers, it has proven its ability, done inspiring work and made the Gujarat power distribution system stronger.

The book "**Powering Prosperity**" provides several insights about the innovative and pioneering projects as well as developmental and critical work carried out by Gujarat Urja Vikas Nigam Limited. I congratulate all the officials and employees involved in the publication of this book. My best wishes to Gujarat Urja Vikas Nigam Limited in all their future endeavors and urge them to continue with their innovative and pioneering work to reach the pinnacle of success in the energy sector.

MAMTA VERMA, IAS

Principal Secretary, Energy & Petrochemicals Department, Chairperson, GUVNL



Message



It is heartening to know that UGVCL has been doing remarkable work in the field of power distribution and has maintained its consistency at national level for providing reliable and quality power. It has consistently bagged A⁺ ratings under Annual Integrated Ratings conducted by MoP and have remained among top two state utilities in the country.

Compilation of its success story into a souvenir book titled **Powering Prosperity**, is an initiative worth lauding and certainly will serve as ready-reckoner for various databases and important milestones.

I am glad to note that UGVCL has holistic view to bring professionalism, efficiency, and accountability in company and continue its role of empowering the lives of people by providing 24x7 power in every nook & corner of Uttar Gujarat. Also, UGVCL has fared well in terms of infrastructure strengthening in distribution network at a large scale to ensure uninterrupted quality power and successfully delivered on the targets set by the management and state government.

I commend team UGVCL for their hard work and dedication. I am certain that it will continue to make all of us proud and strive in making significant contribution to uplift the socio-economic development of North Gujarat. I extend my warm greetings on successful publication of this booklet and wish the entire team UGVCL a best of luck for year 2023.

JAI PRAKASH SHIVAHARE, IAS
Managing Director, GUVNL



Message



After perusal of the book “**Powering Prosperity**” presenting a rich performance by Uttar Gujarat Vij Company Limited year by year, I am very happy with the work done by all the employees with their outstanding dedication and tireless efforts. I heartily congratulate all the officers and employees of the company.

The ongoing performance of all departments in the power distribution sector and the awards received so far as a result, the A⁺ rating obtained for 10 consecutive years, and the story of successful performance by all employees even under difficult circumstances speaks volumes.

I feel proud to have consistently maintained our position as India’s leading power distribution company through high standards of performance by presenting our annual accounts of our performance.

From the first and successful implementation of the “Jyotigram Yojana” to the implementation of the “Kisan Suryodaya Yojana”, the targets given by the Government are being achieved very well.

I applaud the work being done by the company. I am sure we will continue to reach higher heights of success through better performance in the future and continue to contribute significantly to the social and economic development of North Gujarat.

RAVI SHANAKAR, IAS
Director (Administration & Finance), GUVNL



Message



Pursuing the mission of “Consumer Satisfaction through Service Excellence”, Uttar Gujarat Vij Company Limited, operating on a commercial basis for the last sixteen years, is committed to providing excellent service to the esteemed consumers of North Gujarat through its robust power distribution system.

For the last three years, the company has started preparing its annual performance report. It aims at analysing the activities being done every year and striving to go beyond in the next year. The company also aims at maintaining its position as the leading power distribution company in India and undertakes activities that will give direction to other power distribution companies as well.

With thirty-one awards at the national and international level and an A⁺ rating received for the last 10 years, the company is constantly contributing towards the development of North Gujarat and making the name of Gujarat bright in the field of power distribution across India.

Through the book published every year, the information about the company’s performance has been successfully conveyed to the competent authorities and more confidence has been gained regarding the sound performance of the company. I thank and congratulate all the employees and wish them a successful future.

PRABHAV JOSHI, IAS
Managing Director, UGVCL



Message

I am proud to be a part of the successful operations of Uttar Gujarat Vij Company Limited. Last year, when we compiled and published our activities in a book format, we expressed confidence that we will achieve our next goals and we have been successful in it.

I would like to thank the Managing Director of the company and all my colleagues for their continuous support.

We have worked hard and achieved success even in these difficult times and I am sure that we will continue our efforts efficiently in the coming years.



V M SHROFF

Chief Engineer (Operation) UGVCL



Message

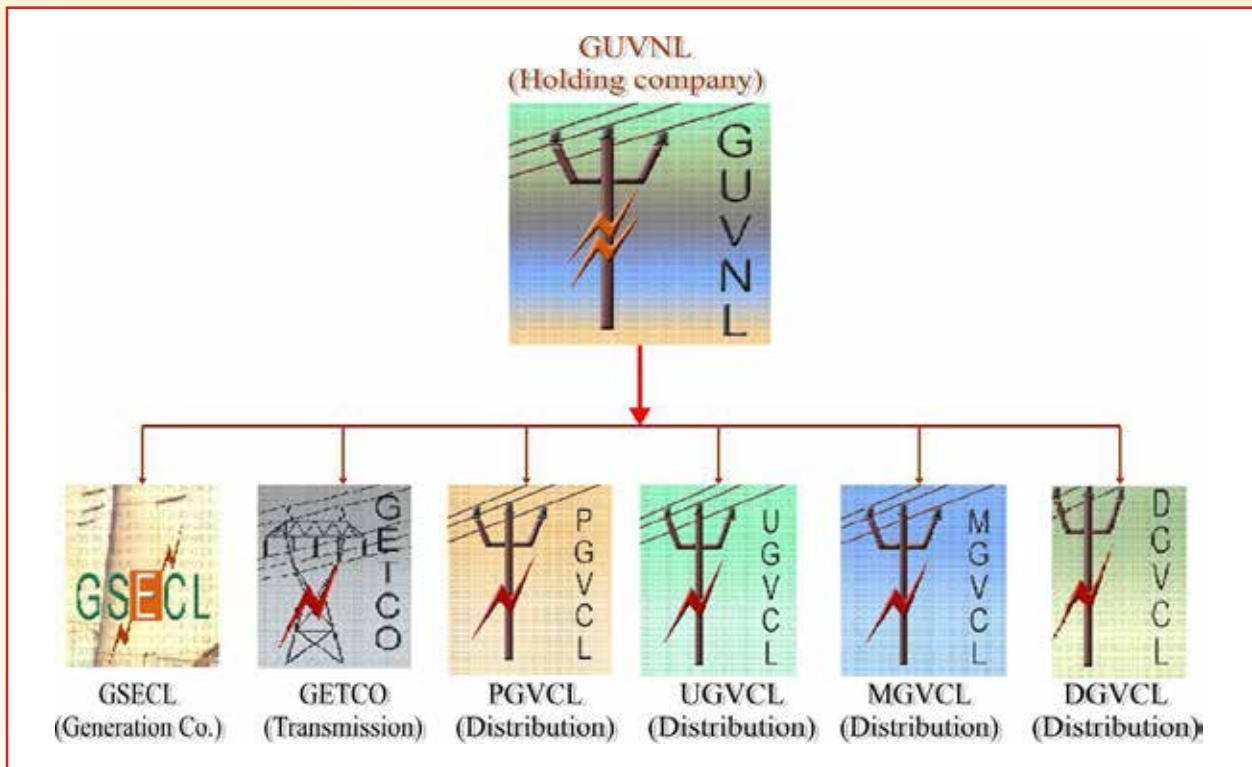
With the efforts of the employees concerned with this publication, it has been a successful publication and pride of UGVCL. This publication has been made possible with the joint efforts of the officials of all the departments and their team members. The company management has consistently encouraged them to improve their performance year by year. The planning and guidance of the company's operations get reflected in this publication. Congratulations to all the department heads and their teams for the successful activities. I am proud to be a part of this successful activity.



J R CHAUDHARY

Additional Chief Engineer (Tech.), UGVCL

UGVCL: Subsidiary company of GUVNL



UGVCL: Vision, Mission & Core Values

Vision:

- Consumer satisfaction through service excellence.

Mission:

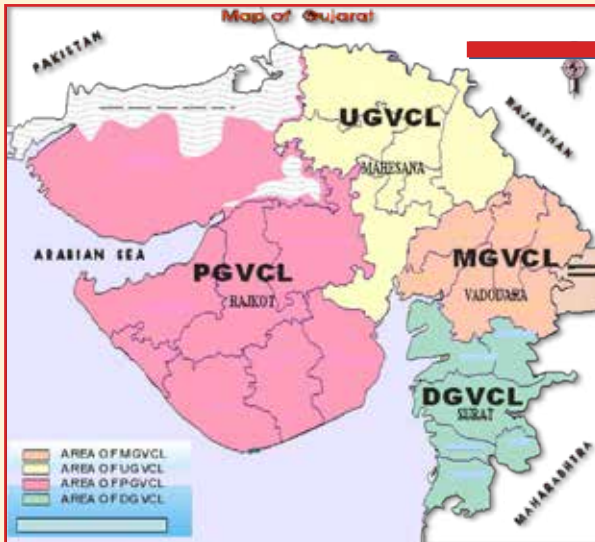
- To provide reliable and quality power at competitive cost.
- To reach global standards in reducing distribution losses.

Core Values:

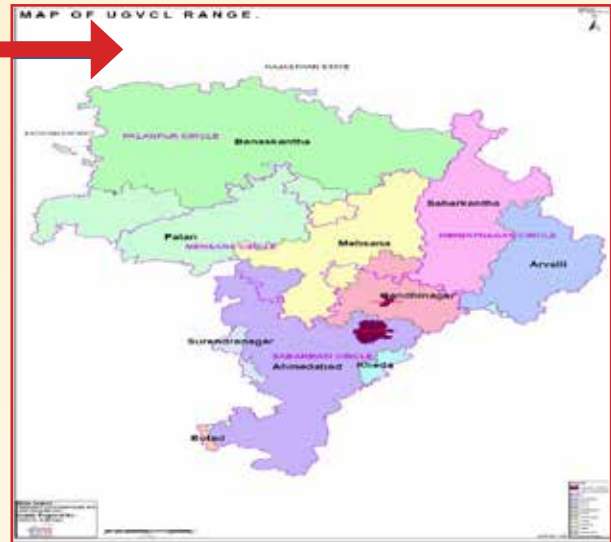
- Consumer Satisfaction
- Participative Work Culture
- Pride and belongingness
- Excellence
- Being ethically and socially responsive

UGVCL: Area

GUJARAT



UGVCL



UGVCL Overview (As on 31.03.22)

Area	Sq. Km	49,950
District Covered	No.	7+3 (Partly)
Town	No.	38
Village	No.	4,503
Population (Census 2011)	No.	1,19,12,882
Circle	No.	4
Regional Store	No.	4
Division	No.	22
Sub-Division	No.	143+3(REC)

UGVCL Overview (As on 31.03.22)

Sub-Station	No.	546
Feeder	No.	6195
HT Line	Km	115991
LT Line	Km	76810
Transformer Population	No.	361688
% Transformer Failure (FY 2021-22)	%	6.88
Total Consumer	No.	3930308
Employee Sanction (Technical)	No.	5591
Employee Sanction (Non-Tech)	No.	3859

Consumer and Feeder Profile (As on 31.03.22)

Consumer & Load Mix		
Category	Nos.	Load in MW
Residential	3016118	3733.38
GLP	26000	78.86
LTMD & NRGP	428532	2534.17
HT	5313	3022.78
Water Works	24546	354.11
Public Lighting	17926	41.75
Agricultural	411873	6066.59
Total Consumers	3930308	15831.64

Feeder Mix	
Category	Nos.
EHT	98
HT	302
INDUSTRIAL	423
URBAN	377
GIDC	55
JGY	1031
AG	3421
SST	488
Total Feeders	6195

UGVCL at a glance...

It is brought to your notice that as part of reforms in the power sector and as part of restructuring of the earlier Gujarat Electricity Board, during the transitional period of the division of the Gujarat Electricity Board, *Uttar Gujarat, Dakshin Gujarat, Madhya Gujarat and Paschim Gujarat Vij Companies* were formed under the control of *Gujarat Urja Vikas Nigam Limited* with the support and cooperation of employees. Also separate companies formed, such as Gujarat State Electricity Corporation Limited for power generation and Gujarat Electricity Transmission Corporation Limited for power transmission.

Uttar Gujarat Vij Company Limited has been operating on a commercial basis since 01-04-2005. The company has provided excellence especially in the areas of compensation of power distribution deficit, revenue generation, implementation of *Jyotigram* scheme etc. with the shared effort of the employees. As a result, it has established itself as the leading power distribution company in the public sector of the country.

Maintaining the continuity of the new dimensions that the company has embarked on, remains a challenge and a special responsibility for all of us. The employees of the company have always

been at the forefront in adopting new technology and doing challenging work in every field. A clear example of this is the implementation of 'E-Urja'. *Uttar Gujarat Vij Company Limited* has always been the leader among all power distribution companies under the "E-urja empowering People, Anywhere Any Time" programme.

It is only because of the creative energy and functional approach of the employees working in any organisation that the organisation can achieve new heights of success. The employees who possess exceptional intelligence and efficiency have been given an opportunity time and again by the organisation to express their ideas and innovations for the benefit of the organisation as well as fellow employees, resulting in 31 national and national level awards and achieving A⁺ rating for the past 10 years establishing *Uttar Gujarat Vij Company* as a leading Power Distribution Company.

Strengths of UGVCL

Consumers and employees are alerted through various programs for electricity safety. By creating awareness about the Solar Roof Top Scheme, people are encouraged to install solar roof tops. Farmers are encouraged to

generate electricity in agricultural fields through solar agriculture pump sets, 400 watt PV system was distributed at a cost of only Rs.4500/- in places where power distribution system was difficult to provide through solar home light system and distributed free of cost to SC/ST/BPL category consumers. A total of 10,400 solar home light system has been installed in under the jurisdiction of a company in the last three years.

Due to the ambitious *Jyotigram* scheme of the government to provide continuous 24 hours 3 phase power supply to all the villages of Gujarat, the pace of development in Gujarat has been accelerated. A need arose to study the actual consequences of social and economic impacts on rural life in Gujarat. The important thing here is that “GEB TURN AROUND AND COMPLETE RURAL ELECTRIFICATION IN GUJARAT” has been selected as the case study topic by “London School of Business” by Mr. Rakesh Mohan Joshi, Chairman of “Indian Institute of Foreign Trade (CIFT)”. And it was presented at Aditya V Birla India Centre at London.

An exploratory experiment conducted between UGVCL and Columbia Water Center to save water, electricity and money. In order to make the farmers economically strong by efficient use of groundwater, under the leadership of the then Chief Minister Shri Narendrabhai Modi under the “Vibrant Gujarat Global Investors

Summit - 2011”, a joint initiative of the Government of Gujarat, Uttar Gujarat Vij Company Limited and Columbia Water Center, a three-year pilot in the area of Kukarwada Sub-Division Office. The project implemented a plan to increase the income of farmers by saving water and electricity.

From time to time, efforts are made to provide result-oriented solutions by organizing consultation meetings with MLAs and Parliamentarians to address the issues of esteemed consumers.

In order to achieve the company’s set targets and keeping in view the current competitive environment of the power sector and keeping in mind the changes required by the Electricity Regulatory Commission for consumer facilities and necessary infrastructure, *Uttar Gujarat Vij Company Limited* has made sincere efforts to satisfy the consumers and thereby achieving ISO: 9001 certificates 4 times since 23.12.2008. By achieving ISO-9001:2015 certification, UGVCL has demonstrated its commitment to meet the expectations of consumers and all stakeholders through its excellent power distribution system.

Other important activities include regular timely billing, proper arrangements for collection of electricity bills from consumers, efforts to recover electricity bills from PDC consumers through Lok Adalat, various audits like internal audit, statutory audit, cost audit, tax audit, secretarial

audit, audit for electrical duties, Audit of GERC as well as audit of C&AG is also being undertaken effectively.

The Government of India allotted Rs. 3527 crore under the “Revamped Distribution Sector Scheme to the state of Gujarat making it the first state in India for such an initiative out of which Rs 2,255.76 crore worth of smart meters and Rs 1,243.83 crore have been sanctioned to reduce power deficit and strengthen power infrastructure under which all consumers of *Uttar Gujarat Vij Company Limited* will be electrified in the next 5 years. It is planned to install smart pre-paid meters which will fulfil the company’s mission of providing “customer satisfaction through service excellence”.

Every year during the monsoon season, a round the clock control room is started at the registered office of the company for 24 hours to ensure uninterrupted power supply to the consumers. Such Control Room started at all the Divisional Offices, Sub-Divisional Offices of four Circle Offices are continuously monitored so that all the valued consumers of the area under the company’s jurisdiction get continuous power supply and wherever there is interruption in the power distribution operations, the work is completed quickly and power distribution is started to the consumers as expected. Sincere efforts are made by the employees of the company to provide power supply



on a continuous basis. A robust system for redressal of power interruption complaints has been put in place in all the company owned offices. Also, in the event of a natural calamity in any area of Gujarat, the company’s employees are sent to help. In the past, during the Kandla cyclone, Bhuj earthquake and Surat floods, successful efforts were made to immediately restore the power distribution system by sending personnel from UGVCL.

Every year, on the occasion of Bhadravi Poonam, more than 20 lakh devotees visit the Ambaji work area of Palanpur circle office and advance arrangements are made to meet any kind of situation related to power supply. On the occasion of Bhadravi Poonam, constant efforts are being made to ensure that the pilgrims coming

on foot do not face any inconvenience related to power supply on the road.

Challenges faced by UGVCL

- 39 percent of consumers' electricity consumption is in agricultural sector.
- Water levels are very low in certain region.
- Land acquisition issue for pole erection for overhead network.
- The nearest Torrent Power company has urban area having 'underground cable' arrangement while UGVCL has an overhead network considering urban and rural area.
- Quick disposal of power interruption complaints in rural areas.
- Special measures and consumer oriented approach to ensure quality and consistent power supply to consumers
- In line with the company's mission, the Power Reliability Index SAIFI, SAIDI and MAIFI have been achieved as per national and international standards, always alert to provide consistent power supply to its consumers.

Efforts on the part of UGVCL to counter the challenges

- A fencing is erected around the transformer center to prevent electrical accidents involving animals.

- 90 percent target has been achieved by disposing of new electricity connection applications of consumers coming on daily basis as per the guidelines issued by Gujarat Electricity Regulatory Commission.
- Under the Government's Sardar Krishi Jyoti Yojana (SKJY), 100 percent achievement has been achieved by spending necessary fund to ensure quality power supply to agricultural feeders.
- Under the Surya Gujarat Yojana, electricity consumers have installed the required solar capacity by installing roof top solar panels, through which the consumers, the government and the power company have made an important contribution in the fight against global warming.
- Under the Suryashakti Kisan Yojana for Agricultural Consumers, four agricultural feeders have been charged, thereby increasing the income of agricultural consumers.
- The feeders have been divided and new feeders have been installed so that consumers can get continuous and full voltage power supply.
- As per the Five Year Plan of the Central Government, necessary substations have been planned and substations have been planned for industrial development.

- The company has always been a leader in successfully implementing various government schemes by achieving their targets.

Measure for revenue enhancement

- Use of “insulated conductors” to prevent electrical faults.
- Mass checking of meters, mass checking of meters, night and at different times are carried out to prevent direct power abuse from the pylons using “Aerial Bunch” cables. During the year the electricity connection is checked and bills are assessed by the company to the delinquent consumers. By getting the information about the possible areas of malpractice, installing meters on the transformer centres and studying the calculation of losses, necessary steps are taken. “Awareness” programs are conducted to alert consumers to prevent electricity malpractices.
- Agricultural consumers have been sensitized for regularise electricity charges under the Voluntary Disclosure Scheme.
- Revenue collection and administration has been done through the organisation of Lok Adalats.
- High load and high loss feeders are divided.

Measures to reduce T&D losses

- Throughout the year intensive checking, mass checking and intensive campaign against electricity malpractice has been carried out.
- Amorphous transformers are installed as part of the drive to reduce transformer losses.
- “Smart Meters” have been installed in Naroda Urban subdivision.
- Significant achievements achieved as a result of successful operations over a period of 17 years.
- Top cover project for T&D loss reduction in strong headed theft prone area.

Remarkable achievements attained by the company during the span of 17 years

- The focal point of Jyotigram Yojana Dasaj village of Vijapur Taluka of Mehsana District, which was handed over to the nation on 11-11-2006 by the Honourable President of India in which Uttar Gujarat Vij Company has become the first power distribution company by successfully implementing this Jyotigram Yojana of India which has given direction to the entire nation.
- It has received as many as 31 national and national level awards

for its outstanding performance in the power distribution sector, which is a matter of pride for the entire nation and for Gujarat.

- Being the first power distribution company in India to innovate Specially Designed Transformer (SDT) and certified by ERDA to provide 24 hours continuous power supply to farmhouses and scattered residences. Because of which the successful operation of “Jyotigram” scheme can be effectively conveyed to the people.
- Underground power cable system was commissioned in Bopal, Ghuma, Chandkheda and Adalaj areas near Ahmedabad city to provide uninterrupted power supply. As a part of consumer oriented approach, “Consumer Meet” programs have been organized and “underground” cables of nearby 66 KV substations in Kalol, Chhatral, Kadi etc. GIDC have been laid with public participation. Infrastructure feeders have been commissioned at Sardar Patel Ring Road and Gandhinagar areas at the cost of Rs. 540 lakhs.
- Agricultural power consumption accounts for 58 to 60 percent of the total power consumption. Also, under Jyotigram scheme, all feeders in rural areas have been declared agricultural.
- In consideration of urban

development, the government’s Distribution Infrastructure Shifting Scheme (DISS) scheme for moving electric pylons obstructing traffic on the main roads in the municipal area, work worth Rs. 18.51 crore has been completed and overall targets of 123.38 percent has been achieved.

- In order to fulfill the objective of providing “consumer satisfaction through best service”, the Managing Director conducts consultation meetings with MLAs, Sarpanches and local people’s representatives etc.
- Impressed by the successful performance of the company, in addition to representatives of South Asia, the ministers of Punjab, Haryana, Bihar and other states, elected representatives and civil servants of the energy sector have visited to perform such operations in their state by taking frequent face-to-face meetings to get information about the company’s performance.
- During the emergency period of natural calamities recorded during the year, every officer/employee works shoulder to shoulder and does a very commendable job.

This is the commitment of Uttar Gujarat Vij Company Limited for the social, economic and overall upliftment of North Gujarat.

UGVCL got registration of a patent for “Planned Load Shedding Transformer”

Uttar Gujarat Vij Company Limited is constantly striving to strengthen the power distribution system by conducting innovative research in various fields to fulfill its humane goal of “Consumer Service Through Service Excellence”.

For the successful implementation of Jyotigram Yojana, the researcher of Special Designed Transformer (SDT) developed a system to provide 24 hours uninterrupted single phase power supply to the farmhouses, hamlets and scattered residential areas. In fact, UGVCL has become the first power distribution company in India to be certified by IP India. The company has installed and commissioned successfully these transformers in different states of India like Rajasthan, Maharashtra and Haryana.

Continuous research was carried out to make the specially designed transformer safer, more advanced, more efficient and to increase the capacity, which has resulted in another successful attempt by inventing the Pilot Advanced Transformer (PAT). Recently another invention has been made by Uttar Gujarat Vij Company Limited, which can not only cater the aforesaid power supply but also can effectively conserve the electricity. This invention is known

as “An ENERGY CONSERVATION SYSTEM WITH A PLANNED LOAD SHEDDING TRANSFORMER”. Patent No. 494345 has been registered by the Central Government’s Patent Office with respect to Application No. 3073 / NUM / 2012 for a period of 20 years from 20.10.2012, the certificate of which has been issued to UGVCL on 06.04.2022.

Good to get the design and patent of Pilot Advanced Transformer (PAT). Shri R B Patel – Rtrd Add.I Chief Engineer, as well as the collaborator late. Mr. P.R. Chaudhary- Joint Managing Director, Shri S.A. Patel - Retired Add.I Chief Engineer, Shri S.P. Patel - Retired Superintendent Engineer, Shri A.R. Vakharia - Retired Executive Engineer, Late. Mr. G.R. Patel-Deputy Engineer, a team of experts has made a concerted effort to spread light in the lives of innumerable families living in the scattered farm and farmhouse area.

This transformer is also being used by the other states and its royalty has been paid to Uttar Gujarat Vij Company Limited. Thus UGVCL has become the first company in the entire nation to have undertaken such research by a government owned power company and adopted it by other states and also got its royalty. UGVCL is proud of the above research.

UGVCL AWARDS

UGVCL Bags the Total **31** Nos. of
National Awards Since 2005.



UGVCL Awards



BRONZE SHIELD

Excellent Performance In
Power Distribution

NATIONAL AWARD FOR EXCELLENCE IN COST MANAGEMENT - 2007



IEEMA POWER AWARD 2008

Excellence In Rural
Electrification

UGVCL Awards



**INDIA POWER
AWARDS - 2009**

**ICWAI GOOD
PERFORMANCE
AWARD - 2009**

Excellence In Anagement



**3rd India Power
Awards 2010**

UGVCL Awards



INDIA POWER AWARD - 2011

Women In Power Sector

GOLD SHIELD
For Excellence
Performance In Power
Distribution 2010-11



INDIA POWER AWARD - 2012

Overall Utility
Performance (Distribution)
Rural

UGVCL Awards



POWER LINE AWARDS-2021

Best Performing
State Discom

IPPAI POWER AWARDS FOR GREENEST DISCOM - 2013



INDIA POWER AWARD - 2014

Best Overall Performance
In Private Sector & **Psu**



UGVCL Awards



IUKAN AWARD - 2014

Innovations And Others In
Power Distribution

IPPAI POWER AWARDS - 2015

Best Performing
Distribution Company



NATIONAL AWARD FOR EXCELLENCE IN COST MANAGEMENT - 2016

Public-Service
Sector (Large)

UGVCL Awards



INDIA POWER AWARD - 2016

Best Overall Performance
In Private Sector & Psu

CBIP AWARD - 2016

Best Performing Power
Distribution Utility
Of Central Board Of
Irrigation & Power



IPPAI - AWARD 2017

Best Performing
Distribution Company

UGVCL Awards



SKOCH AWARD - 2018
At&C Losses System

ICC AWARD - 2018
Uday Performance Award



IPPAI AWARD 2018
Best Performing
Distribution Company

UGVCL Awards



PTC EXCELLENCE AWARD - 2019

Best Discoms

CBIP AWARD - 2020

Best Performing Power
Distribution Utility



SKOCH AWARD - 2020

For At&C Losses And
Power Reliability

UGVCL Awards



8th Innovation with Impact Awards for DiSCOMS 2020
Ranked 3rd Under Category of E (Performance Improvement)



8th Innovation with Impact Awards for DiSCOMS 2020
Ranked 3rd Under Category Of B (Efficient Operations)



8th Innovation with Impact Awards for DiSCOMS 2020
Ranked 3rd Under Category Of C (Quality Of Service & Consumer Empowerment)

UGVCL Awards



National Ability Awards

1st Position in Category-A (Service Industry) Under
“Energy Conservation & Awareness Awards-2021”



1st GREEN URJA AWARDS 2020

UGVCL Awards



UGVCL won **“Certification of Merit in DISCOM sector”** under “National Energy Conservation Awards-2021”



UGVCL won Silver under the category of Top DISCOM-EE (State) in **“2nd edition Green Urja and Energy Efficiency Awards”**

Ugvcl Rating By Investment Information And Credit Rating Agency (ICRA)

Year	Rating
2013	A ⁺
2014	A ⁺
2015	A ⁺
2016	A ⁺
2017	A ⁺
2018	A ⁺
2019	A ⁺
2020	A ⁺
2021	A ⁺
2022	A ⁺

Ministry Of Power Rating (Marks out of 100)

DISCOM	2013	2014	2015	2016	2017	2018	2019	2020	2021
UGVCL	89.9	93.6	91.2	96.3	91.1	98.1	93.30	96	94.9
DGVCL	91.6	94.8	93.7	95.9	91	98.9	96.2	91.4	99.4
MGVCL	89.8	94.8	92.3	92.3	89.5	94.4	94.7	91.6	98
PGVCL	80.3	81.7	82.9	78.0	80.2	84.6	80.2	84.3	91

Grade A⁺: 80 & Above marks

Grade A: 65 to 80 marks

UGVCL's Strength Achievement

- 100 % Rural Electrification.
- Jyotigram scheme - Segregation of Agriculture Sector & Provide 24 X 7 Three phase power supply to Rural sector (Except agriculture) since August 2005.
- Pioneer Company for providing 1-Ph 24 hrs power to Farm House with Special Design Transformer (SDT) since 2005. SDT installation 3391 nos. (as on Mar-22, 100% AG Feeder).
- Working 24X7 Centralised consumer care centre at Mehsana since 2013 (Toll free no 19121).
- Recently, Company has commence consumer services through Whatsapp.
- Low Non Agri. T & D Losses maintaining i.e. 5.58% (As on Mar-22)
- Less LT to HT ratio i.e. 0.66 (should be <1 for ideal condition)
- Maintaining low SAIDI level i.e. 03:22 (HH:MM) as on Mar-22.

UGVCL's Strength Achievement

- GOI initiative “Urja Mitra” is effectively implemented for intimation of Scheduled and Unscheduled Outages to Consumers through SMS.
- First Public Sector DISCOM to receive the NABL ISO/IEC certification and NABL certification has been awarded to Hi-Tech Lab, Sabarmati from June-2009.
- Ranked 1st by Ministry of Power among 44 DISCOMs of India in last FY and bags 31 nos. of Awards since 2005.
- Consistently Profit making Company since inception i.e. 2005.
- The Lowest Debit arrears as on 31.03.22 i.e. 4.27 % among all DISCOMs of Gujarat
- The Lowest PDC arrears as on 31.03.22 i.e. Rs. 74.80 Cr among all DISCOMs of Gujarat
- Specific work oriented training by in house, virtual as well as on site mode is given to all employees for capacity building.

Corporate Communication Cell, the department that projects the company's image

Any company strives to better reach its human consumers and stakeholders in the activities it is doing. “Corporate Communication Cell” has to play this role very effectively. In accordance with the efforts made by the authorities in this direction establishment of “Corporate Communication Cell” was done, it has been functioning effectively since the year 2006, as part of which the company has published about 66 issues of its mouthpiece “Aapnu UGVCL” in addition to that power-saving, power-safety, a corporate film named “Kisan Suryodaya Yojana” promoting and disseminating information on Solar Roof Top and Sky Yojana a documentary film named “Surya Gujarat” is prepared. Also, a documentary film on “Power Safety” has been prepared to spread the message of prevention of power accidents to the consumers.

The function of a corporate communication cell is an excellent means of conveying the work being done by the company to the right place. The company always uses corporate communication very rigorously well to maintain and improve its image. The responsibility of creating, maintaining or improving the image of the company is very well done by the corporate communication cell.

The important work is being carried out

by the company for the last 16 years is being successfully delivered to the government as well as to the valued consumers by the Corporate Communication Cell. During the last year, apart from the regular editions of the company's regular in-house magazine “Aapnu UGVCL”, “Peak of Success 2020-21” has been published which includes detailed information about the company's performance and important achievements besides the prestigious historical information of the awards. Documentary films have also been produced on various activities of the company during the year.

“Kisan Suryodaya Yojana” means 28 (twenty-eight) public programs for the promotion and dissemination of the scheme of providing electricity to farmers during the day, an attempt is made to create awareness among the consumers.

The company's performance has been boosted by greeting messages from Hon'ble Chief Minister, Energy Minister, and Minister of State for Energy for the magazine “Aapnu UGVCL”.

In the next year also, a conscientious effort will be made by the “Corporate Communication Cell” to better communicate the work done by the company to the consumers by doing this type of work better.

Business Development and Marketing Wing: A New Initiative Of UGVCL

In the words of the prolific management guru and the father of modern Marketing Prof. Philip Kotler Marketing is “The science and art of exploring, creating and delivering value to satisfy the needs of a target market.” With a mission to better meet the expectations and the needs of our esteemed consumers, our company has created the Business Development & Marketing Wing.

In order to meet the requirements of rapidly changing business landscape in the modern era, identifying the needs of the consumers and designing the ways to better satisfy those need is of utmost important for any organisation. Moreover, the current era of the Digital Worlds where individuals spend large amount of their daily time on the various mediums of virtual world, reaching out to them on those digital mediums is of paramount of importance.

This Business Development and Marketing Wing of our

organisation not only helps identify the needs of our consumers and helps designing the various means to satisfy those needs but it also communicates the service delivery and various to our consumers on various digital media platforms like Twitter, Facebook and Instagram etc. This Business Development and Marketing Wing also communicates various schemes of our organisation to our consumer through various audio-video, print and digital mediums of mass communications. The wing is also entrusted with the responsibility of creation of positive brand image of our organisation into the minds of various stakeholders of our organisation. Further, the wing is also responsible for identifying various problems encountered by our Industrial Consumers who are of significant importance for driving the revenue to our organisation and providing the solutions to their problems on priority basis.

CSR Activities by UGVCL

Corporate Social Responsibility (CSR) is a self-regulating business model that helps a company be socially accountable to itself, its stakeholders, and the public. By practicing corporate social responsibility, also called corporate citizenship, companies can be conscious of the kind of impact they are having on all aspects of society, including economic, social, and environmental. The concept of Corporate Social Responsibility has gained prominence from all avenues. Uttar Gujarat Vij Company Limited (UGVCL) interfaces with the community through its nature of business i.e. by distributing electricity on retail basis.

UGVCL has an ethical and social responsibility through its core value i.e. being ethically and socially responsive to support communities ostensibly impacted by its business in any manner. To fulfill the rooted values, UGVCL is creating framework to identify, access and manage socio-economic development. UGVCL is committed to attain sustainable economic and infrastructure development with an interconnected vision of people's welfare, social growth and environmental conservation through adopting people-centric approach within the business. In order to streamline the assessment and screening procedure, bring clarity among executing link of CSR, increase the level of involvement through dedicated work force for CSR activities in all levels of

operation and comply with the directives of the Companies Act, 2013, UGVCL desires to formulate comprehensive Corporate Social Responsibility Policy.

This Policy deals with the basic aspects of CSR with reference to UGVCL. The Policy will provide an institutional framework to establish an efficient and effective platform to perform CSR activities. The Policy will ascertain role and responsibility, budget provision, information disclosure at different levels of operation in Field and at the corporate level. The following is the list of CSR activities carried out by UGVCL.

CSR Activities / Projects

2016-17: (1) Vocational Skills for individuals with Special Needs at Ahmedabad, by Gujarat CSR Authority

2017-18 : (1) Vocational Skills for individuals with Special Needs at Ahmedabad, by Gujarat CSR Authority

2018-19: (1) Vocational Skills for individuals with Special Needs at Ahmedabad, by Gujarat CSR Authority

2019-20: (1) Vocational Skills for individuals with Special Needs at Ahmedabad, by Gujarat CSR Authority
(2) Water Sources augmentation located at Nana Village, Taluka Dhansura in Arvali District, by Gujarat CSR Authority
(3) Socio-economic and ecological upgradation in Ajapura-Virampur Cluster

in Banaskantha District, by the Company itself in association/collaboration with Banaskantha Forest Division, Forest Department, Palanpur (4) Sustainable farming in Shankheswar Taluka of Patan District, by Centre for Environment & Social Concerns (5) Training / promotion and development of education and scientific research at Gujarat Power Education Research Institute, Mehsana (6) Distribution of Food Kits and sanitization kits to the needy people in the society during COVID-19 Pandemic

2020-21: (1) Repairing of check dam located at Gulab Ni Muwadi, Taluka Talod in Sabarkantha District, by Gujarat CSR Authority (2) Promotion of education by supporting 25 schools in tribal areas in Danta Taluka of Banaskantha District, by Janpath (3) Construction of check dams in Dhanpura, Dabhchitra, Ganji and Chikanvas in Banaskantha District, by the Company itself in association/collaboration with Banaskantha Forest Division, Forest Department, Palanpur (4) Sustainable farming in Shankheswar Taluka of Patan District, by Centre for Environment & Social Concerns (5) Contribution to Prime Minister National Relief Fund.

2021-22: (1) Setting up of temporary COVID Care Center at Narayani Heights, Bhat, Gandhinagar from 30-Apr-2021 to 31-May-2021. Creation of temporary accommodation for quarantine with medical and health care facilities for Members of Society who were tested positive but were Stable COVID during

second wave. (2) Repairing of check dam located at Bhadra and Sadarpur, Deesa Taluka, Banaskantha District, by Gujarat CSR Authority (3) Construction of check dams in Ajapura-Virampur tribal cluster in Banaskantha District, by the Company itself in association/collaboration with Banaskantha Forest Division, Forest Department, Palanpur

UGVCL will seek to identify suitable projects or programs or activities for implementation in line with the CSR objectives of the Company and also to the benefit of the stakeholders and the community for which those projects or programs or activities are intended. These projects or programs or activities would be done either independently or through any company registered under Section 8 of the Act or a registered public trust or a registered society or an entity which satisfies the criteria as specified in the Act or the Rules and has CSR Registration Number issued by the Central Government.

The Company may engage international organisation as defined in the Rules for designing, monitoring and evaluation of the CSR projects or programs or activities as well as for capacity building of its own personnel for CSR.

The Company may also collaborate with other companies for undertaking CSR projects or programs or activities in such a manner that the CSR Committees of respective companies are in a position to report separately on such projects or programs or activities in accordance with the Rules.

Technical Section

For any power distribution company, its technical department plays a very important role. The technical department has to coordinate all the departments to enhance the performance of the company. Proper disposal of direct or indirect consumer complaints has to be done and advance planning is also needed to prevent such complaints in future.

To ensure the timely availability of valuable transformers and other essential materials, the company has to balance the demand and its supply. In order to meet the future demand for power supply, it is necessary to plan in advance and continuously monitor and observe the work being done under various schemes of the Central Government and the State Government.

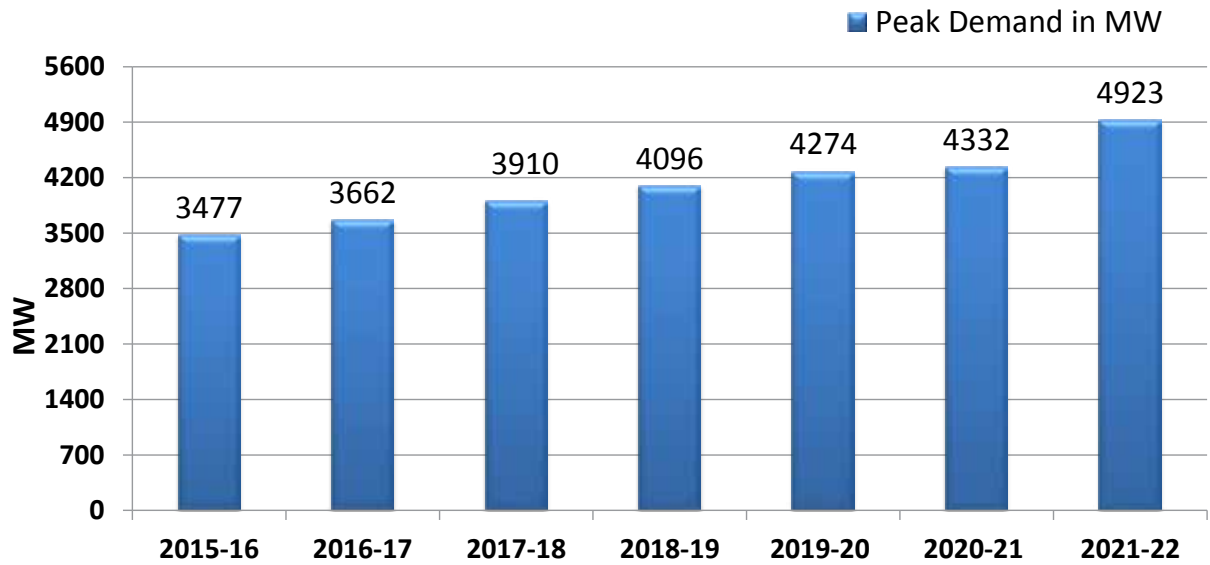
The monthly, as well as annual, performance of the company, is reviewed and its reports are prepared and sent to the competent authority for approval. The core business of the company is to provide new electric connections and to provide an uninterrupted power supply to the consumers to maintain continuity of the strong power distribution system.

It is also imperative to achieve the targets as per the policies and norms announced by Gujarat Electricity Regulatory Commission.

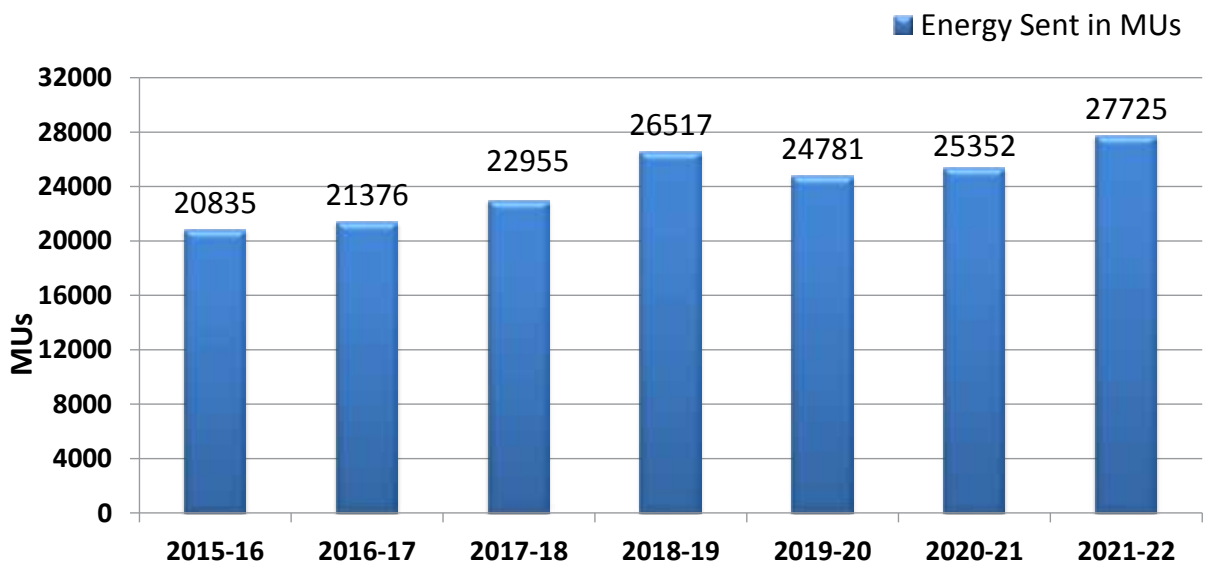
In order to meet the gradual increase in the number of consumers and to properly assess the workload of the sub-division office, the requirements of the new division offices and sub-division offices are taken into consideration and the demands are then taken up with the competent authority for approval. The Consumer Facilitation Center is properly managed and maintained to deal with the complaints of the company's esteemed consumers. To provide quality power supply to the consumers, new transformers, new feeders, new substations have to be approved from time to time and put into operation in coordination with Gujarat Energy Transmission Corporation Limited.

Thus, the technical section acts like a brain for Uttar Gujarat Vij Company Limited. The company has established itself as one of the leading power distribution companies in India with a commitment to maintaining its position forever.

ALDC : Peak Demand in MW



ALDC: Energy Sent

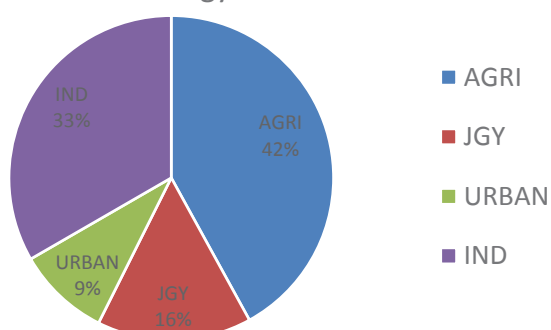


Category Wise Sent Energy in MUS

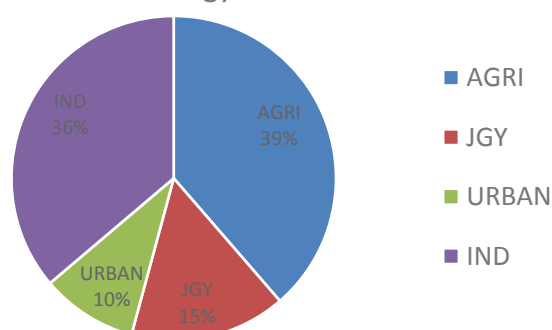
Year	2020-21				
Category	AGRI	JGY	URBAN	IND	TOTAL
Units	10648	3903	2351	8450	25352

Year	2021-22				
Category	AGRI	JGY	URBAN	IND	TOTAL
Units	10714	4314	2662	10035	27725

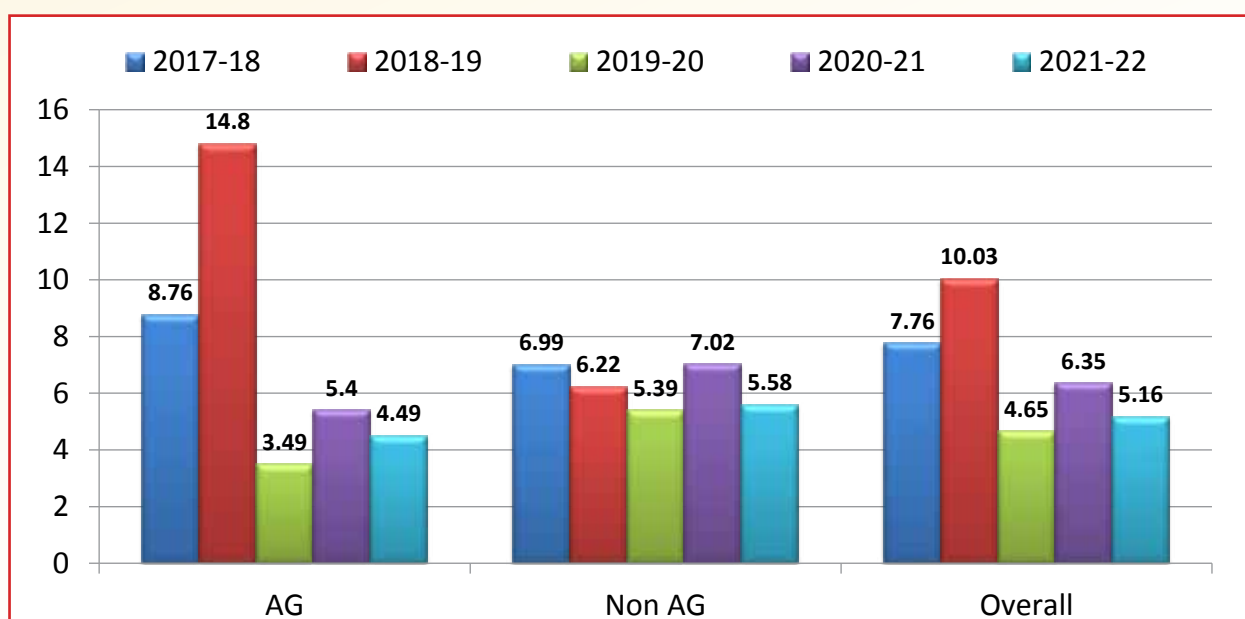
Sent Energy in MUS in 2020-21



Sent Energy in MUS in 2021-22



Distribution Losses in %



Endeavoring Activities to bring down the losses at lower level...

Technical Loss:

- Creation of 120 New Sub station and 2077 New Feeders since Last Eight Years.
- Up gradation of network by replacing conductor from Rabbit to Dog (> 350 KM).
- Implemented HVDS system by installing new 3512 nos. of Transformers.
- Effective and Preventive and Post maintenance of HT /LT lines & Transformers.
- Utilisation of Proper size of cables & Load Balancing of Transformers.
- Replacement of Over aged transformer by amorphous type having lower no load losses on Non-AG feeders.
- Minimizing joints of conductors and cables.
- Utilised 1925 KM of Arial Bunched Cable in theft prone areas during last Six years.
- Shifting of transformers to load centre.
- Pilfer proof installations and armoured service especially in theft prone area.

Endeavoring Activities to bring down the losses at lower level...

Commercial Loss:

- Vigorous Vigilance drives viz..
 1. Regular monitoring of vigilance activity from Head office
 2. Checking of installations in odd hours as well as randomly .
 3. After identifying theft prone areas , Mass drives with the help of SRP and local police.
 4. Assessment of 197.39 Crore in last six years.
- 100 % AMR Meters on HT/EHT installations .
- Remotely data analysis of all 5313 nos. of HT/EHT connections and got enormous results leading revenue enhancement.
- 100 percent Static meters, Replacement of Faulty Meters immediately
- Adequate Consumer Indexing.
- Energy Audit by Analysis of DTC metering data so as to identify the gap of Energy.
- Accurate and timely Billing through 100% GPRS and spot billing system.
- Developed **Photo billing** software to identify Lock ed and Zero consumers.

Endeavoring Activities to bring down the losses at lower level...

Commercial Loss:

- Analysis of various Parameters (As under) through LT Billing software and taking measures accordingly for revenue enhancement.
 1. Consumption Overflow/Underflow Consumers
 2. Locked Consumers
 3. Faulty Meters
 4. Zero Consumption Consumers
 5. Master with No Bill
 6. PDC Consumer details
 7. Residential <20 Units consumption
 8. Commercial <= 50 Units
 9. Illogical Consumption
 10. Details of Debit Arrear
- Separate Police Stations under UGVCL to file FIR and charge sheet against theft cases.
- Created a Whatsapp group of High loss feeder manager to monitor daily activities.

Endeavoring Activities to bring down the losses at lower level...

Commercial Loss:

- In order to preventing direct theft , company has developed Top cover on LT bushing of Transformer and provided individual armoured services to consumers and removed LT lines by means of HVDS at the places from where persons are habituated to tap from LT stud.
- Senior officers from corporate office are appointed in highly losses theft prone area of 18 nos. of subdivisions and 2 nos. of towns for achieving best result and benchmarks.
- Feeder Managers from field offices are appointed on identified feeders having very high losses for micro level planning and related activities to bring down losses below the benchmark.
- As per supply code 4.95 Suo Motto is implemented to regularize the load.
- Roles and responsibilities fixed from Corporate Office for line staff and meter reader at field level.
- Best subdivisions are appreciated for achievement on the occasion of National Day.
- On site CT-PT testing van is developed with help of R&D section for all HT consumers.

Gujarat: Overall Distribution Losses in %

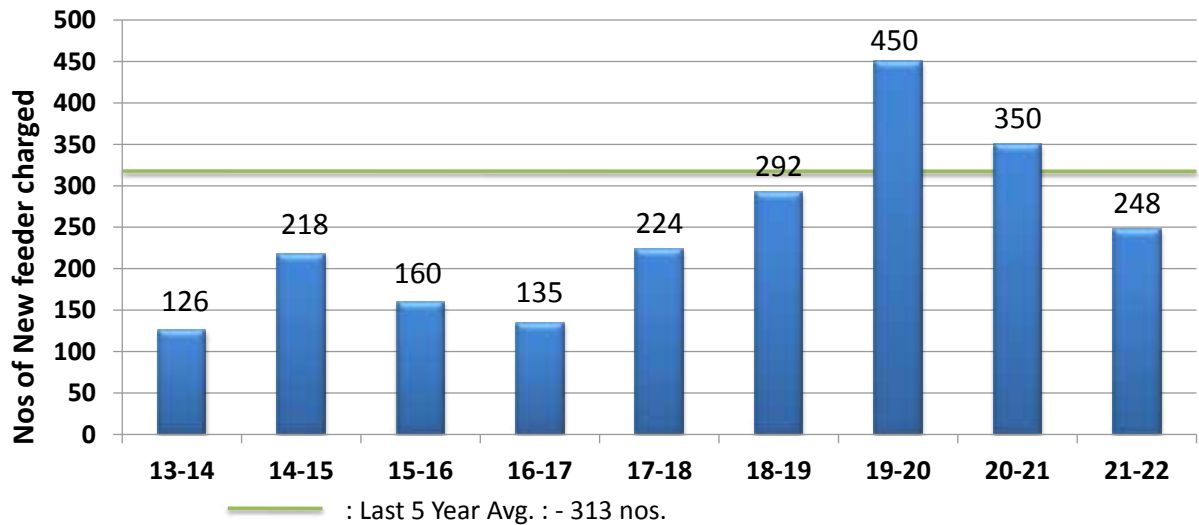
DISCOMs	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22
UGVCL	10.12	14.07	6.04	9.87	11.04	8.18	7.76	10.03	4.65	6.35	5.16
DGVCL	12.78	11.95	9.97	9.33	9.07	8.23	7.70	7.34	5.22	8.79	5.35
MGVCL	13.13	12.94	10.78	11.80	11.68	10.08	9.60	9.12	8.34	9.96	8.52
PGVCL	26.54	27.63	20.55	22.77	22.58	19.06	17.89	18.95	14.71	16.61	15.08
GUVNL	17.29	18.55	12.86	14.64	14.85	12.42	11.72	12.59	8.86	11.16	9.17

Gujarat: Non-Ag Distribution Losses in %

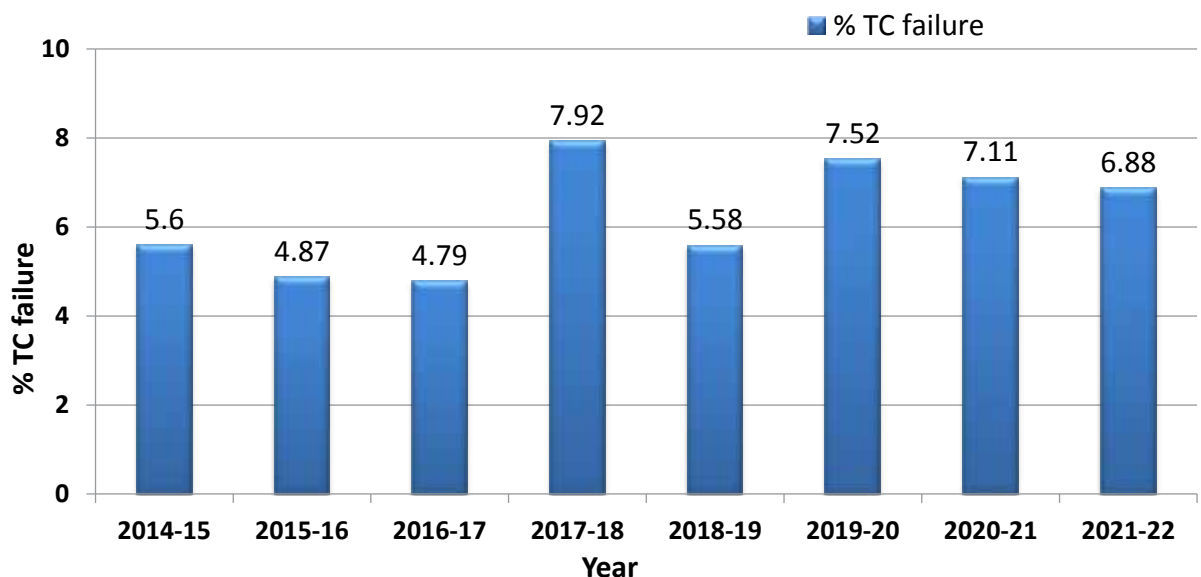
DISCOMs	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22
UGVCL	9.28	8.75	8.58	8.08	7.74	7.49	6.99	6.22	5.39	7.02	5.58
DGVCL	13.00	11.75	10.35	9.06	8.68	7.96	7.46	6.66	4.98	8.32	5.21
MGVCL	12.82	12.47	11.47	11.71	11.28	10.31	9.86	8.97	8.45	10.31	8.77
PGVCL	20.93	19.64	17.10	15.77	14.66	13.07	12.14	11.15	10.32	12.89	10.85
GUVNL	15.00	13.95	12.35	11.45	10.86	9.94	9.32	8.45	7.33	9.92	7.65

Feeder Bifurcation Progress

During last 5 year we are intensified the work of feeder bifurcation and achieved 1564 nos of feeder bifurcation which are all time highest



% Transformer Failure



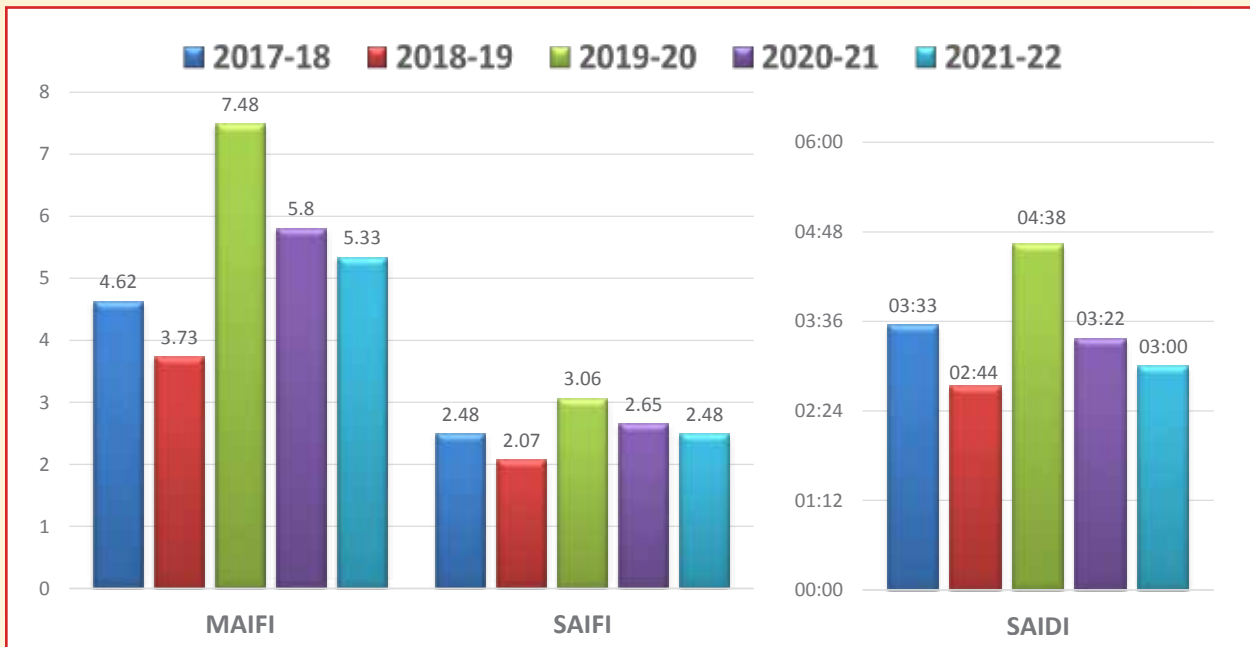
GUJARAT : % Transformer Failure (Year 2020-21 & 2021-22)

DISCOM	% Transformer Failure (FY 2020-21)			% Transformer Failure (FY 2021-22)		
	Population	Nos of Failed	% Failure	Population	Nos of Failed	% Failure
DGVCL	190624	10773	5.65	202856	11792	5.81
MGVCL	161749	10151	6.28	174631	9404	5.39
PGVCL	1005097	111768	11.12	1029349	114258	11.10
UGVCL	340872	24248	7.11	361688	24880	6.88
GUVNL	1698342	156940	9.24	1768524	160334	9.07

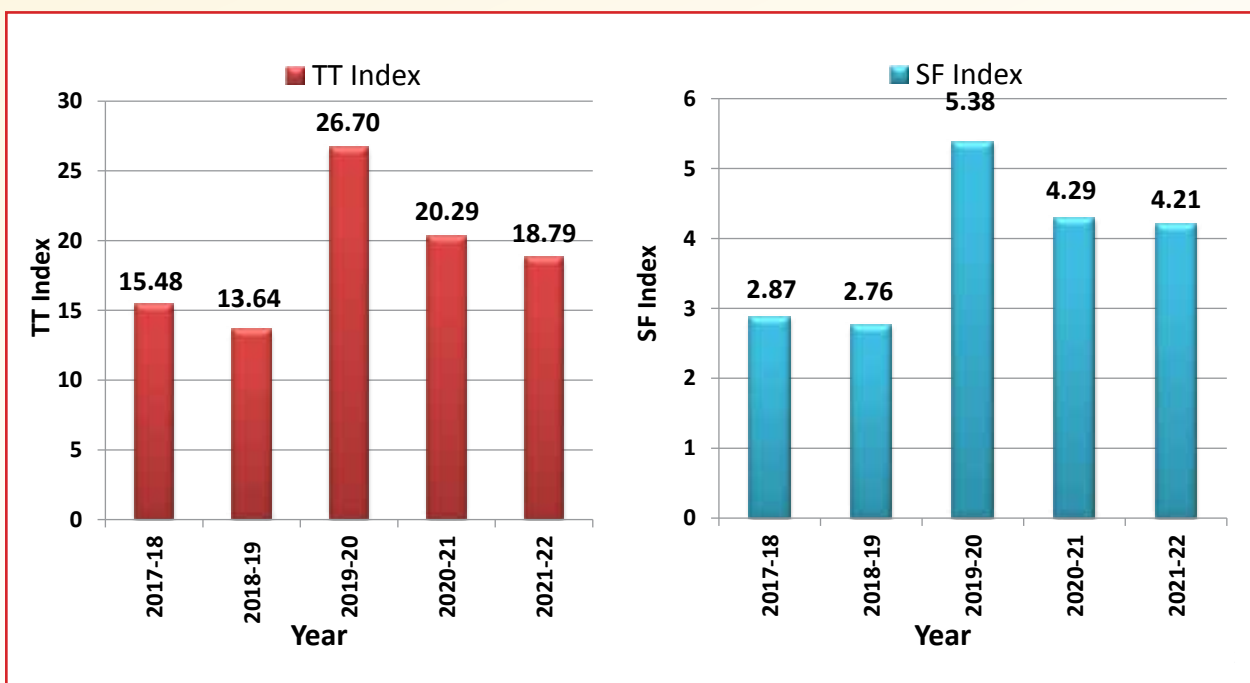
Efforts for sustaining lower Transformer Failure

- Feeder wise analysis of failure is carried out and plan for Transformer Maintenance accordingly.
- Replacement of overaged transformer.
- As major portion in UGVCL having agriculture pocket where water depth is increasing day by day, So that overloading affect on the transformer failure. Hence vigorous Installation Checking carried out to curb the overloading and total 321.56 MW load has been regularized in last five years.
- Effective utilization of Transformer Maintenance Squad, Mini Maintenance Gang & line staff with photographs of Before & After Maintenance activities.
- Initiate online tender for transformer maintenance activity through outsourcing.
- Various Transformer Maintenance activity carried out like:
(1) Providing of Fuse Element, Lighting Arrester, Breather, LTDB, LT Spacer, HT-LT Boot and HT/LT Protection. (2) Maintenance of LT Line. (3) Load Balancing and Topping of Oil (4) Reactivation of earthing.

Power Supply Reliability Indices



Year to Year TT/SF Index



GUJARAT : Power Supply Reliability Indices (Year 2020-21 & 2021-22)

DISCOM	Achievement (FY 2020-21)			Achievement (FY 2021-22)		
	SAIFI	SAIDI	MAIFI	SAIFI	SAIDI	MAIFI
DGVCL	5.08	6:32	10.72	4.61	6:21	10.13
MGVCL	3.95	5:41	10.98	3.80	4:47	9.82
PGVCL	8.01	12:55	11.16	7.99	17:31	9.57
UGVCL	2.65	3:22	5.80	2.48	3:00	5.33

Slab Analysis of Total TT for Year 2021-22

Sr. No.	Feeder category	Total Feeders	Zero TT	1 to 50	51 to 100	101 to 200	Above 200
1	HT	297	54	241	2		
2	IND	419	28	352	29	10	
3	GIDC	53	2	46	5		
4	URBAN	372	14	277	68	13	
5	JGY	1023	4	430	396	179	14
6	AG	3406	19	2252	847	266	22
Total		5570	121	3598	1347	468	36

Slab Analysis of Total SF for Year 2021-22

Sr. No.	Feeder category	Total Feeders	Zero SF	1 to 15	16 to 35	Above 35
1	HT	297	106	182	9	
2	IND	419	60	323	35	1
3	GIDC	53	6	39	8	
4	URBAN	372	44	296	30	2
5	JGY	1023	42	763	203	15
6	AG	3406	99	2387	829	91
Total		5570	357	3990	1114	109

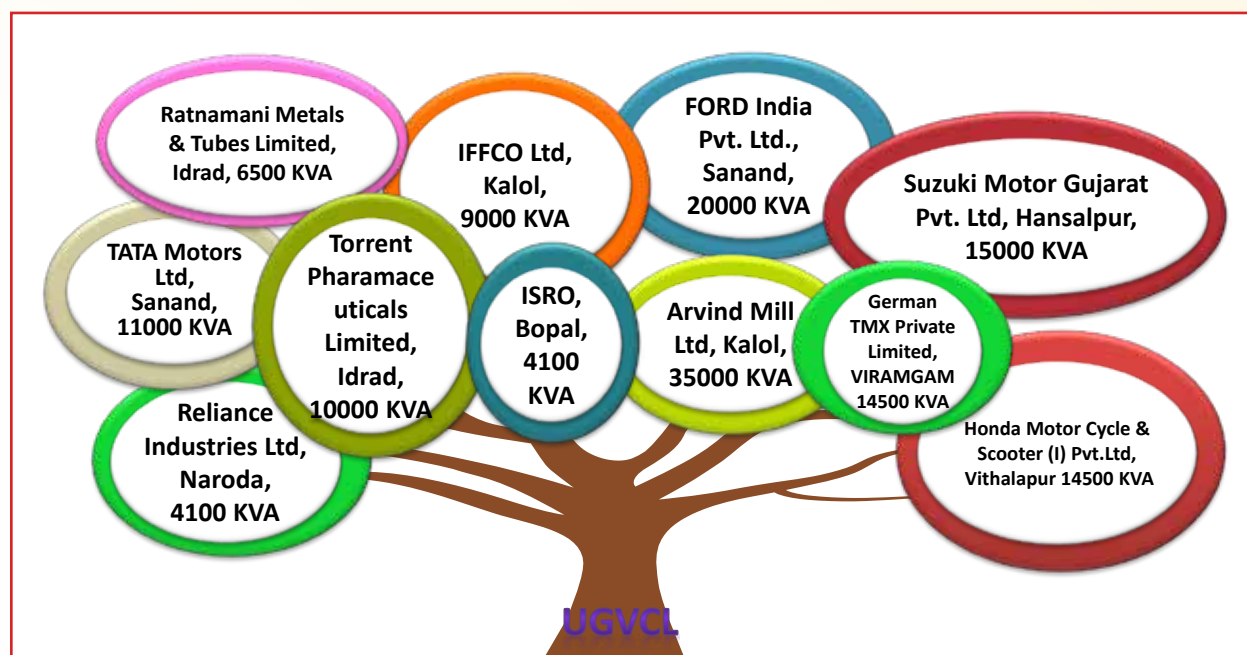
How we achieved better Power Reliability?

- Creation of 120 New Sub station and 2077 New Feeders since Last Eight Years.
- Total 20 nos. of feeder bifurcated having consumers more than 5000 from last 3 years.
- Advance planning of bus outages during summer and winter season with GETCO i.e. avoid frequent shutdown. During SS shutdown, mass manpower are engaged for maximum output.
- Newly underground network charged with RMU having interlinking facility for quick restoration of power.
- Monitoring of Daily, Weekly & Monthly Report.
- Total 27760 nos. of Smart Meters installed in Naroda-Urban subdivision as a pilot project.
- Line crossing removal activity carried out and total 23139 nos. of crossing removed in last 2 years.
- Proper Patrolling of feeder carried out before maintenance and accordingly planning is carried out for required material in advance for effective utilization of Line staff.

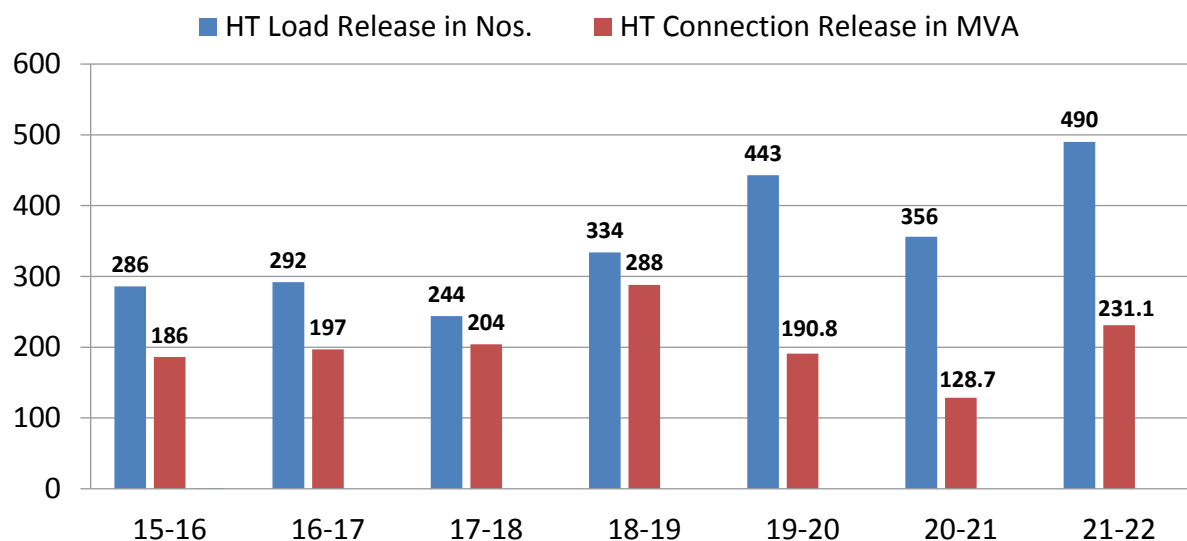
Status of HT/EHT Consumers

Sr. No.	Year	HT/EHT Connections in Nos	HT/EHT Load in MVA	Net Annual Assessment of HT Connection in Crore
1	2008-09	1751	999.94	1264.49
2	2015-16	3283	2014.73	4598.8
3	2016-17	3575	2211.95	4997.88
4	2017-18	3819	2415.92	5699.77
5	2018-19	4153	2703.07	6376.04
6	2019-20	4486	2924.58	7270.17
7	2020-21	4827	3082.27	6669.58
8	2021-22	5313	3361.28	7989.58
(LT+HT) Connections of UGVCL (2021-22)		3930308	15831.64	12851.77
% Weight age of HT connection (2021-22)		0.14%	21.23%	62.17%

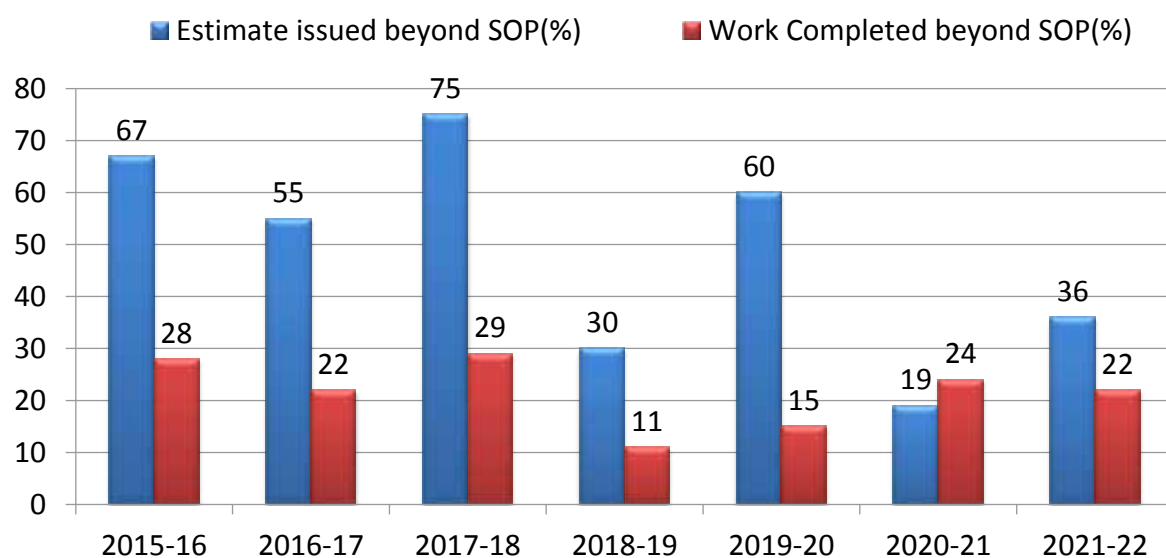
KEY HT & EHT Consumers



New HT Connection Added in Nos & KVA Year 15-16 to 21-22



HT Connection SOP (Year 2013-14 to 2021-22)



% Clearance of LT Applications

UGVCL has cleared more than 99 % of application in FY 2021-22 which is all time highest. We make 117 out of 143 nos. of Subdivision having ZERO Pendency i.e No register pending & paid pending application.

25 nos. of subdivision selected for On Spot New connection and 32629 nos. of Connection released during the FY 2021-22.

Sr No	Circle	Total Pending Applications as on Mar'21	Released during Year 2021-22	TMN as on Mar'22	Total Cleared Applications	Total Applications	Cleared in Percentage
1	2	3	4	5	6=4+5	7=3+6	8=6/7*100
1	HMT	0	14475	771	15246	15246	100.00 %
2	MSN	1	20742	590	21332	21333	100.00 %
3	PLN	521	24316	1139	25455	25976	97.99 %
4	SBT	288	57808	8371	66179	66467	99.57 %
5	UGVCL	810	117341	10871	128212	129022	99.37 %

NABL accredited laboratory at Sabarmati made more proficient with the help of new modern meter testing Equipment's

The accuracy class of different testing equipment is 0.05,0.02 & 0.008. A workout for our respected customers for correct and speedy testing of the meters.

To achieve "Customer satisfaction through service excellence" UGVCL is doing different activities constantly. In the compound of Sabarmati Circle Office, Hi-Tech meter testing laboratory is the laboratory which is certified by the central government's National Accreditation Board for testing and calibration laboratories (NABL).

Under Gujarat Urja Vikas Nigam Ltd among all the Discoms, this laboratory is the first laboratory who has been certified by NABL in the whole country which was inaugurated on 23.05.2007. In order to improve the work ability of the Hi-Tech meter laboratory, modern equipments have been installed by UGVCL.

In support to this initially a German make meter testing equipment (MTE) test bench costing Rs 1,02,11,336/- having capacity of testing 20 meter testing position with 0.05 accuracy. After that Slovakia's Applied Precision make equipment which at one time

can test 5 meters and having accuracy class of 0.02 costing Rs.61,95,000/-, German make Zera equipment which can test 10 meters with 0.008 accuracy costing Rs 93,64,291, German make Zera equipment which can together test 20 meters with 0.02 accuracy costing Rs 99,00,000/-, German make Zera equipment which can together test 40 meters with 0.02 accuracy costing Rs 99,00,000/-.

Up to now in Hi-Tech laboratory MTE German make only one testing bench was available on which both testing and calibration work were done but today the laboratory has been made more proficient with more work capability with the help of modern 05 nos. of meter testing bench. For this work the laboratory staff is being imparted with training for smooth work.

Since 17 years without the help of any agency the laboratory is successfully obtaining NABL accreditation. Hi-Tech meter testing laboratory is NABL

accredited in Electrical Testing (TC-5914) field since 23.05.2007 and in Electro-Technical Calibration (CC-2281) since 23.06.2011.

For testing of each meter on each bench there is a scanning head, one error calculator and one isolation current transformer (ICT). With the use of ICT system testing is possible without opening the lock between the circuit of current and voltage. Full test bench operation is done by different electrical parameter, control computer and with a special type of software.

The test equipment having current range from 1 mili amp to 120 amp and voltage range from 30 volt to 300 volt. The accreditation is being given by taking into consideration the authentication of meter examination by national accreditation board for testing and calibration laboratories (NABL) Delhi as per ISO 17025:2005 and currently 17025:2017. UGVCL Hi-Tech

Meter laboratory is the first Discom Laboratory of India to receive such an accreditation. For the first time by Uttar Gujarat Vij Company Ltd to obtain this certificate the work done by taking the help of a consultant namely Electronics quality development. Presently UGVCL has itself become self-dependent to get this type of certificate.

Fifteen years have been completed for first certificate of NABL. During the tenure of these fifteen years, the Hi-Tech laboratory has followed the rules and regulations of ISO 17025:2005 to ISO 17025:2017. Above and over that every year NABL does rating with the help of the team of experts. Expected ratings have been successfully achieved by the Hi-Tech laboratory. Moreover to obtain Hi-Tech laboratory with the help of electrotechnical calibration certificate on date 23.06.2011. The most important thing regarding this is that without any help of outside consultants



the certificate has been received on 23.06.2011 and it is currently renewed upto 23.06.2024.

On date 24 and 25 May 2022, NABL Audit had been done by the experts successfully for the continuation of Accreditation in Electrical Testing. So the expiry of the certificate has been extended up to 01.07.2024 for Electrical Testing and on date 07 and 08 June 2022 NABL Audit had been done by the experts successfully for the continuation of Accreditation in Electro Technical Calibration. So the expiry of the Calibration certificate has been extended up to 23.06.2024

Till now at Hi-Tech laboratory Sabarmati, Total 58818 nos. of different types of meters are tested including UGVCL & Private meter also. From that Testing charge of Rs.25,94,92,209/- is saved and Rs. 5,32,13,606/- is earned as private meter testing charges. Total 3417 nos. of different types of Accucheck reference meters are calibrated.

Commercially the total cost is going to be Rs.2.84 CR for calibration which is to be saved by UGVCL as it is in-house calibration facility developed by UGVCL. There were also 350 (three hundred and fifty) meters tested which were sent by the government's E&P department. For the consumers in today's scenario to opt for open access necessary ABT meter is also tested correctly.

At Hi-Tech laboratory the testing of 11 KV CTPT unit and CT Coils are also done. Whose estimated cost of equipments is Rs 16,00,000/- and estimated cost of civil work for that is approximately Rs. 10,00,000/-. Since the laboratory was established total 6970 nos. of CTPT/CT coils have been tested till November-2022. Commercially approximately the work is done for cost of Rs 6.78 CR

The hard working team of Deputy Engineer Shri A N Diwan and experts are constantly working to give Maximus satisfaction to our valuable customers.

NABL, Sabarmati



CT-PT Testing and Calibration Work Carried Out AT- NABL SABARMATI

Sr. No.	Year	Total Testing Nos	Testing fees, amount in Lacs	Test Quantity Per Month Nos	Testing fees , amount in Per Month in Lacs
1.	October 2010 TO March 2017	2637	257.94	34	3.31
2.	2017-2018	1294	115.65	108	9.64
3.	2018-19	906	91.63	76	7.64
4.	2019-20	1086	81.32	91	6.78
5.	2020-21	915	103.58	76	8.63
6.	2021-22	1454	308.82	122	25.73

Meter Testing and Calibration Work Carried Out AT- NABL SABARMATI

Year	Total Testing And Calibration		Testing fees, amount in Lacs		Testing fees in Lacs, <i>Actual</i> received by Invoice Total Yearly	Testing fees in Lacs, <i>Actual</i> received by Invoice Per Month
	Testing	Calibration	Testing Fees/ Month	Calibration Fees/Month		
2007-08	528	66	24.13	7.86	7.42	0.62
2008-09	1590	133	44.57	10.93	1.92	0.16
2009-10	1120	151	35.66	12.53	2.82	0.24
2010-11	1047	182	24.36	9.64	1.49	0.12
2011-12	1278	184	37.15	8.85	9.87	0.82
2012-13	794	196	38.99	12.63	21.05	1.75
2013-14	978	271	66.68	16.97	21.80	1.82
2014-15	1588	440	103.64	28.14	12.49	1.04
2015-16	1263	282	66.84	17.42	22.74	1.90
2016-17	1418	188	94.82	9.72	21.53	1.79
2017-18	3728	243	157.81	12.50	29.53	2.46
2018-19	9493	209	260.54	10.96	33.91	2.83
2019-20	8771	246	238.75	13.03	34.03	2.84
2020-21	5200	193	267.12	51.61	42.70	3.56
2021-22	12809	211	621.04	34.49	152.68	12.72

Govt. & Individual references

Current year total 1482 nos of various references/representation/complaints are received and all are complied within time limit as on 31-Mar-2022.

Received From	No. of Complaints Received	No. of Compliance Given	No. of Pending Complaints as on Dt. 31-03-2022
PMO Portal	202	202	0
CMO/Swagat / JanSampark	3	3	0
Minister	35	35	0
MP/MLA	3	3	0
EPD	90	90	0
Liaison Office	98	98	0
GUVNL	99	99	0
GERC	10	10	0
GVC	1	1	0
Other	5	5	0
MD Cell	199	199	0
General	295	295	0
Press Note	442	442	0
Grand Total	1482	1482	0

Geo Urja Progress Report of UGVCL as on 31.03.2022

CIRCLE		HMT	MSN	PLN	SBT	UGVCL
Feeders (No.)	Total	1,100	1,339	2,147	1,503	6,089
	Mapped	1,084	1,312	2,099	1,456	5,951
	% map.	98.55%	97.98%	97.76%	96.87%	97.73%
HT-Line (KM)	Total	28,247	24,927	37,310	21,550	112034
	Mapped	23,284	21,484	36,846	17,894	99,508
	% map.	82.43%	86.19%	98.76%	83.04%	88.82%
LT-Line (KM)	Total	27,721	10,250	24,908	12,832	75711
	Mapped	3,410	1,848	6,081	1,942	13281
	% map.	12.30%	18.03%	24.41%	15.14%	17.54%
Transformers	Total	92,775	57,636	1,27,403	63,058	3,40,872
	Mapped	82,384	56,364	1,22,868	52,035	3,13,651
	% map.	88.80%	97.79%	96.44%	82.52%	92.01%
HT- CONSUMERS	Total	540	931	611	2,719	4,801
	Mapped	539	906	604	2,608	4,657
	% map.	99.81%	97.31%	98.85%	95.92%	97.00%
LT- CONSUMERS	Total	8,13,234	9,48,155	9,40,901	11,01,191	38,03,481
	Mapped	1,99,665	2,13,218	2,67,354	2,54,473	9,34,710
	% map.	24.55%	22.49%	28.41%	23.11%	24.58%

Centralised Customer-Care Centre

Customer is the ultimate king and we have a goal to satisfy the customer with motto to increase our business through giving uninterrupted and quality power to our valuable customers. The new generation customers are awake customers. This cell staunchly believes that “Customer is our God and we have to serve him”.

The objective of the Centralised Customer-Care Centre is not just to

customer by giving them quick and calm satisfactory reply.

The motive of this cell is to forward the complaint received from the customer directly to the sub division with the development of real time data software thereby working as a strong coordinator between customer and field. Moreover, this cell is making its efforts to reduce the call waiting period of customer and quick resolution of customer complaint.

The cell thrives to reduce the customer complaints day by day and reaching to NIL customer complaint and thus increasing the satisfaction level of the customers. Also the feedback of the customers is important for the area of improvement and better functioning of the cell. Also the data



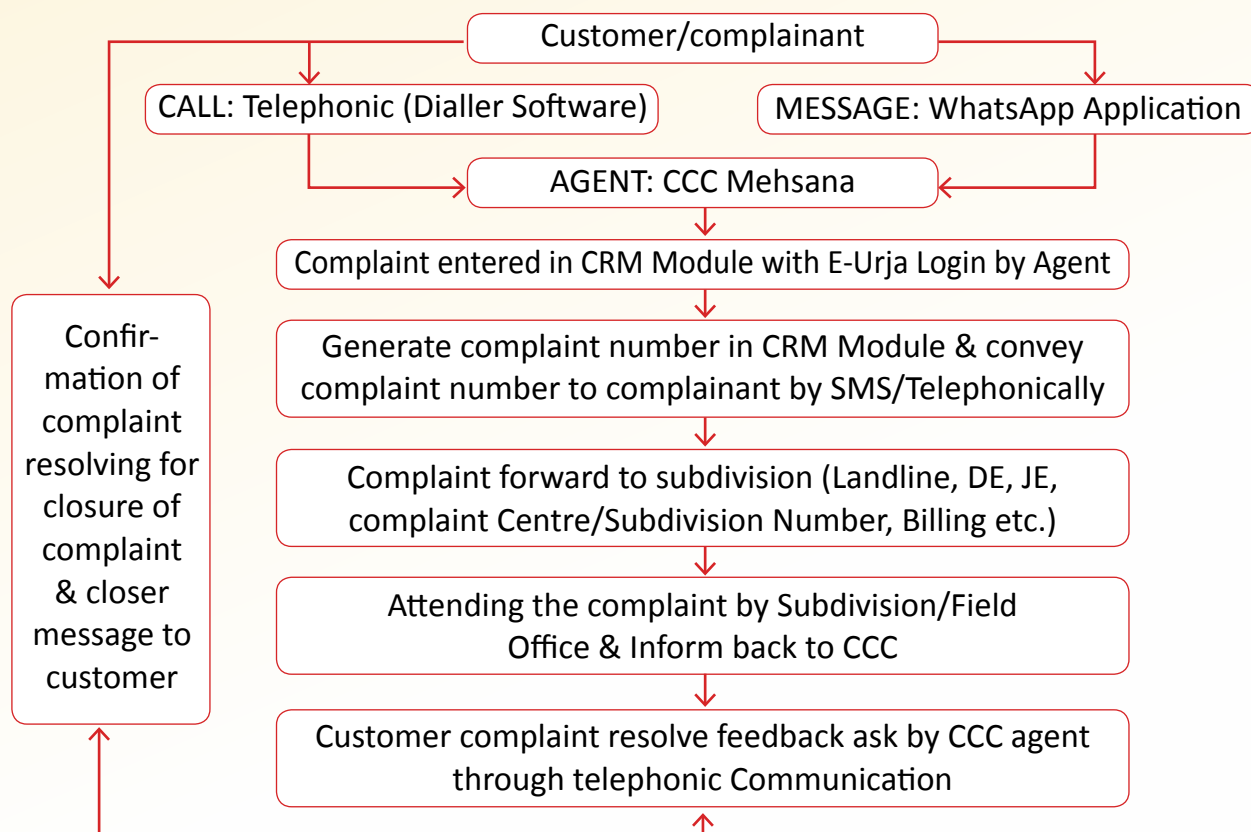
solve out the complaints regarding the power supply of our customers but also to guide the customers regarding any information of new connection and upcoming schemes of the company in the northern region of our state. This cell thrives to the efficient working of handling of the complaints of the

analysis of complains in order to identify the weaker area and to prepare the action plan for improvement in power quality and customer service. The cell ultimately thrives to achieve the customer satisfaction through service excellence by dedicated staff of customer care center.

UGVCL : Centralised Customer-Care Centre (CCC)



Complaint Attending Mechanism



CCC-Operation

To facilitate Consumers for 365 days 24*7 CCC is working for:

- Power complaint booking
- Support for new & existing connection process
- Support for bill information & payment process.

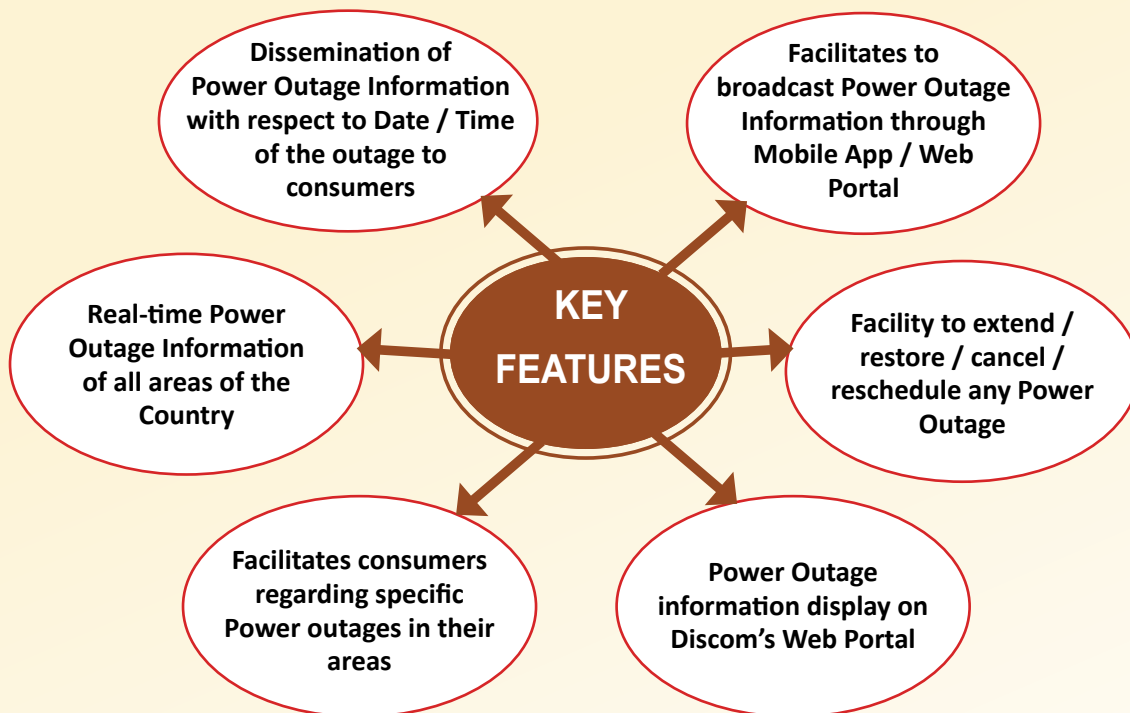
Specialties:

- Dedicated WhatsApp number (98258 19121) made functional since October 21 for registration of complaints and for access of bill information and payment
- Dialer software with dedicated server and call recording facility for real time monitoring of all calls and if required improvement or modification planning
- To reduce the consumer call waiting time: Number of agents per shift can be reschedule / increase / decrease as per call traffic input from dialer software
- Two CUG card & mobile phone for convey of complaint to field offices
- Junior Engineers working to monitor overall CCC complaint redressal system
- Nodal officer assigned at : (1) Corporate level (2) Circle level (3) Division level for day to day monitoring of complaints received

UGVCL:CCC MIS Report (Year- wise)

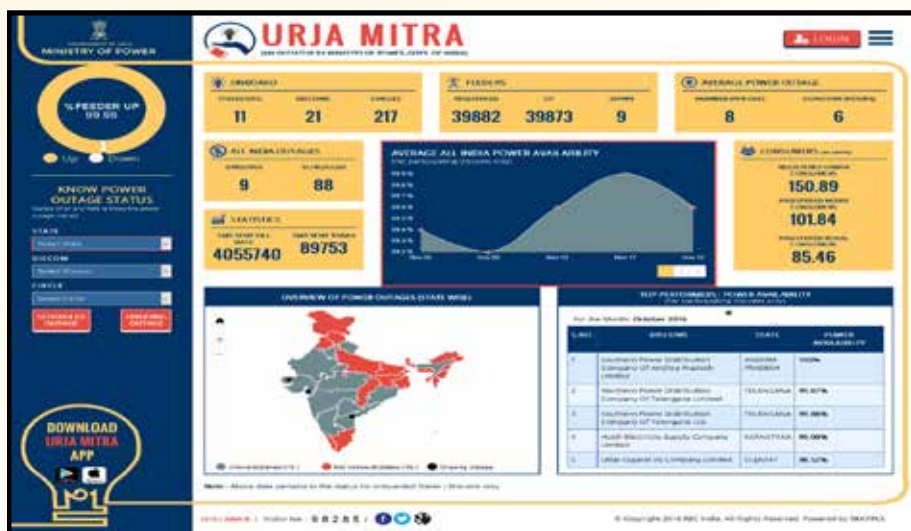
FY	Total Complaint			0 to 1 Hr		1 to 5 Hr		5 to 24 Hr		More than 24 Hr	
	Received	Closed	Cancel	No.	%	No.	%	No.	%	No.	%
Yr 17-18	893	887	6	153	17.25	108	12.18	123	13.87	503	56.71
Yr 18-19	12151	11933	218	3538	29.65	3113	26.09	3621	30.34	1661	13.92
Yr 19-20	22163	22013	150	6362	28.90	10963	49.80	4612	20.95	76	0.35
Yr 20-21	26741	26727	14	10373	38.81	11113	41.58	4661	17.44	580	2.17
Yr 21-22	21769	21769	0	6964	31.99	10228	49.98	4116	18.91	461	2.12

Outage Management System of “Urja Mitra”



Urja-Mitra Web Portal and Mobile App

Web Portal



Mobile App



Outages upload in Urja Mitra Year 2021-22

Name of Circle	Scheduled		
	Nos. of outages Executed	Nos. of outages Uploaded in Urja Mitra	% Achievement
Mehsana	2454	2454	100
Sabarmati	2797	2797	100
Palanpur	3748	3623	96.66
Himatnagar	2402	2402	100
UGVCL	11401	11276	98.90

Name of Circle	Unscheduled		
	Nos. of outages Executed	Nos. of outages Uploaded in Urja Mitra	% Achievement
Mehsana	7570	1965	25.96
Sabarmati	14921	1726	11.57
Palanpur	30057	2831	9.42
Himatnagar	9527	2326	24.41
UGVCL	62075	8848	14.25

UJALA : Unnat Jyoti by Affordable LED for All

- Government of Gujarat had launched UJALA-GUJARAT (Unnat Jyoti by Affordable LED for All) on dated 26.05.16.
- **Energy saving activity in association with EESL (Energy Efficiency Services Limited) by cash or in installment (EMI) option**
- **First phase-** Launching dt.26-05-2016
Domestic Efficient Lighting Programme (DELP) :
9 Watt LED bulbs i.e. saving of 40 watt per Bulb
Cash Rate-Rs.70 , EMI rate Rs. 75 - Five bi monthly bill Rs. 15,
Total LEDs Sold up to 31.03.22 :- **8031636**
- **Second Phase-** Launching dt.26-01-2017
 - (I) Energy Efficient Tube Light Programme (EETP) :
20 Watt LED Tube i.e. saving of 20 watt per Tube
Cash Rate-Rs.220, EMI rate Rs. 240 – Six bi monthly bill Rs .40
Total Tube light Sold up to 31.03.22 :- **270054**
 - (II) Programme for Acceleration of Energy Saving Fans (PAVAN) :
50 Watt , 5-Star Rated EE Fans i.e. saving 30 watt per Fan-Cash
Rate-Rs.1110
EMI rate Rs. 1400 – Eleven bi monthly bill Rs. 120 & Last Rs. 80, Total
Fan Sold up to 31.03.22 :-**166129**

Remark: From January-2018 Installment option-not given

DSM Cell for Safety action taken in FY-2021-22

Understanding and implementing workplace electrical safety practices is critical for all DISCOMS to keep their employees physically safe. Line staff employees each year get injured and even end up losing their lives. The likelihood of electrical injuries or fatalities occurring in the workplace can be dramatically reduced if employees are made aware of the possible risks associated with electricity, as well as how they can stay safe while completing their responsibilities.

The safety activities are carried out and action taken in F.Y. 2021-22 to prevent electrical accident to departmental staff and general awareness in citizen are as under.

- New revised Accident circular was issued vide Letter No:- UGVCL/R&C office/safety cell/115 dated:-06.09.2021.
- Documentary Short film on Safety for line staff was launched on date 24.09.2021 through various e-platforms like Whatsapp, Youtube, Email etc. and shown to all line staff.
- As per new revised circular, the mass surprise checking drive of line staff works at site were carried out in all Circles and after drive review meeting were arranged by H'ble MD Sir and suitable instructions were conveyed to field accordingly.
- Penalty was imposed on 292 nos. of employees and 29 memos issued for not using safety gadgets or not following the safety working procedures.
- For 1132 nos. of feeders having 12920

nos. of crossing were rectified/removed in F.Y. 2021-22.

- Total 6960 nos. Metallic wires / strings were removed in Mass drive program which was arranged one day program on dated:-30.09.2021.
- For General public awareness, total 300 nos. of safety hoardings were installed at our 100 nos. of interior s/dn office, 102 big villages & 38 nos. of nagarpalika.
- Safety advertisement was provided on GSRTC buses (300 nos.) moving in UGVCL area.
- On 15th August, appreciation letter was issued to 6 nos. SDO for Zero Accident occur in Last three Years.
- All line staffs have taken regularly safety oath daily in the morning before working.
- The safety week was celebrated from 1st week (1.06.2021 to 7.06.2021) of June 2021.
- MD Sir Safety message was distributed to UGVCL staff during safety week.

Thus, maximum efforts have been made to control and reduce accidents, to the department staff and citizens as above during F.Y. 2021-22.

UGVCL is vigorously monitoring the accident preventive activities to save human/animal lives with keen interest with safety related continuous efforts & awareness towards adopting safe work practice by staff.

The DSM Cell continuously works for reducing the accidents. Also the company has a goal of zero accident and it is working on it continuously.

Safety Practice Adopted

For General Public

- Distribution of safety Pamphlet/ Banner
- Wide Publicity on News Paper during Kite Festival & Navratri across the company through Newspapers, Channel display, Pamphlet distribution etc
- Safety Announcement by Rixa pheri in urban area
- Celebration of Safety week during First week of June on every year.
- Removal of Hoarding / Channel wires/iron wires from Network,
- Verifying unauthorized construction below / near network and issued notice thereof,
- Providing of Consumer Earthing

For Line staff/Employee

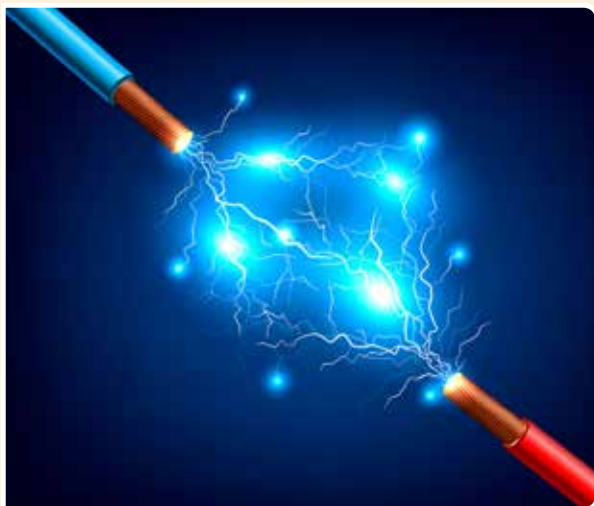
- Regular interval Line staff meetings at SDn /Dn level about usage of safety tools and adopting safe work practice
- Implementation of safety measures for Prevention of accidents & imposing penalty upon the defaulters
- Higher Officer Visit of Line staff work
- Various key activities
 - CD of safety is being shown during safety week
 - Cross boundary Providing and Maintenance,
 - Removal of HT/HT & HT/LT line crossing,
 - Providing of LT Line Spacer
 - Reactivation of Network Earthing
 - Providing of Fencing

Accident Detail of FY 2020-21 & 2021-22

Details	No. of accidents in Year 2020-21					Total	No. of accidents in Year 2021-22					Total
	Dept.		Outsider		Animal		Dept.		Outsider		Animal	
	FH	NFH	FH	NFH			FH	NFH	FH	NFH		
Total	7	26	51	18	66	168	8	23	37	16	92	176
Dist. Network	0	0	44	1	3	48	0	0	26	4	5	35
Pvt. Premises	7	26	95	19	69	216	8	23	63	20	97	211
FH--Fatal Human , NFH--Non-fatal Human												

ROLE & FUNCTIONS of LEGAL CELL

- Observance of Delegation of Powers for Conduct of Legal Affairs uniformly/common in force in all Discoms (Powers of various officials, Procedure of institution of suits on behalf of the Company, Defense of suits, Appeals, Execution of Decrees, etc.)
- Empanelment of Advocates as per GUVNL Circular



- Approving payment of fees as per GUVNL Circular
- Preparation of Case-wise and Advocate-wise Statements of Cases pending and Status of Cases (except IR cases) on quarterly basis
- Submission of data and information to GUVNL periodically including the reports on cases settled in Lok Adalats as and when held
- Ensuring compliance with all applicable Circulars of GUVNL
- Preparation & compilation of Audit Details
- Correspondence with IRP/ IP/ Liquidator in NCLT Cases
- Providing legal advice to other sections whenever required
- iILMS system (Integrated Institutional Litigation Management System) developed by NIC (National Informatics Center) that is also adopted by various Government bodies and amongst all DISCOMs, UGVCL become a very first DISCOM to onboard all cases and users in this system.
- Monitoring of notices and summons issued by Advocates/ Courts to Corporate Office
- Approving filing/defending of civil suits as per Legal DoP
- Change of name in case of consumer-companies
- Dealing with HBA files
- Advising the field officers during Lok Adalats and on any legal matter

Rural Electrification

After the unbundling of erstwhile Gujarat Electricity Board, the Rural Electrification Department functioning with the establishment of Uttar Gujarat Vij Company Limited is mainly carrying out Agriculture, Slum Scheme, Tribal Electrification work to achieve the targets of various schemes declared by the Government.

The disposal of pending petitions before the lifting the Dark Zone sanctions in 2014 has been implemented on war shooting basis. The targets given by the Government have been achieved 100% by Uttar Gujarat Vij Company Limited in its area of operation.

During the year 21- 22 ,100% targets have been achieved for all government schemes like Tribal Areas Sub Plan Scheme, Normal (SPA) Scheme, Dark Zone Schme, Tatkall Scheme, High voltage distribution system, Kutir Jyoti Scheme, Zuppadpatti Schme, Sagarkhedu Sarvangi Vikas Yojna (SSVY), Sardar Krishi Jyoti Yojana, Distribution Infrastructure Shifting Scheme (DISS) and Kisan Suryoday Yojana.

The targets given by the Government of Gujarat to Uttar Gujarat Vij Company Limited for coming year are being implemented at a proper pace

and a commitment has been made to achieve 100% targets in the next year as well.

Norms of GOG Agriculture Well Electrification

TASP :Tribal Area Sub-Plan Schme

- Tribal area
- 100% grand provided by the State Government for HT/LT lines and Transformer Centres
- Applicant has to pay only energy deposit charges.
- In year 2021 -22 1630 nos of well is electrified against the target of 1700 numbers
- 95.9 % achievement.

Normal (SPA) Schme

- Non Tribal Area and Non Dark Zone area.
- Priority of registration maintained at subdivision level and as per the annual programme of GOG.
- Service connection as well as Energy Deposit is to be recovered from Applicant.
- In year 2021 -22 2649 numbers of well is electrified again target 2600 nos.
- 101.9% Achievement

Dark Zone Scheme

- Non Tribal Area and Dark Zone Area.
- Drip irrigation in minimum 2 acres land or 50% of total land which ever is higher (compulsory)
- Service connection charge as per GERC and energy deposit is to be recovered from the applicant.
- In year 2021-22 9485 numbers of well is electrified against the target of 10400 nos
- 91.2% achievement

Schedule Caste Plan

- Implemented in all over area of Gujarat.
- For schedule caste beneficiary only.
- Applicant has to pay only energy deposit charges.
- In year 2021-22 385 nos of wells electrified against target of 450 nos.
- 85.6% achievement

Tatkal Scheme

- Any registered applicant under normal scheme can be allowed to switchover for Tatkal scheme
- Works are taken up by overriding priority of normal scheme
- Applicant has to adopt Drip irrigation in minimum 2 acres land or 50% of total land which ever is higher
- Applicant has to pay 70% of the estimated cost and Energy Deposit
- In year 2021-22 278 nos of well is electrified.

GOG Schemes: Electrification of House Hold

Kutir Jyoti Scheme

- Applicable to tribal beneficiaries having Annual Income below Rs 150000/- for urban and 120000/- for Rural Area
- Applicant will get connection free of cost
- Beneficiaries will get connection with one point wiring, meter and one bulb in huts.
- In year 21-22 2825 number of connections is given against the Target 2825
- 100 % achievement

Zupadpatti scheme

- Annual Income of Beneficiaries shall be below (Rs 150000/- for Urban area and 120000/- for Rural area)or name in BPL list
- Beneficiaries will get connection with one point wiring, meter and one CFL in the huts.
- No Registration fee
- In year 2021-22 15553 numbers of connection given again 13460 NOS
- 115.5% achievement

Schedule Caste Sub Plan

- Applicable to Schedule Caste Beneficiaries without income limit for any areas.
- For Society electrification where the population of schedule caste

is more than 50%

- Beneficiaries will not pay any Charges except Deposits and Test Report charges
- In year 2021 -22 3553 nos of connection is given against target of 2750.
- 129.2% achievement

GOG Schemes : HVDS & Sagarkhedu

HVDS Scheme

- HVDS Scheme “High Voltage Distribution System” is by installing smaller size of Distribution Transformers and thereby reducing LT lines up to the negligible level by converting it into HT line
- To improve Voltage profile in rural area
- HVDS scheme is granted by GOG from Energy Conservation fund
- In the year 2021-22 4.34 Cr has been occurred against target of 4 Cr
- 109 % achievement

Sagarkhedu (SSVY)

- GOG has implemented the Sagar khedu sarvangi Vikas Yojana scheme in various coastal area of Gujarat for old network strenghting work ie. Old conductor replacement Old Distribution Box, Electric poles replacement, V-cross arms etc. in UGVCL the coastal area of Dhandhuka and Dholera

Taluka covered in this scheme from year 2012-13.

- Year 2021-22 target of 1.00 Cr. has been incurred against the Target Rs.1.00 Cr.in this scheme.
- 100% achivement

Kisan Suryoday Yojana

- An innovative approach of “Kisan Suryoday Yojana” intending to use generated solar power by shifting night hour’s agriculture supply to day time. i.e. Providing three phase agriculture power supply during 5:00 a.m. to 9:00 p.m.
- It will have dual benefit by extending relief to farmers on one hand through daytime agriculture power supply and on another hand facilitate consumption of generated solar power during day time by agriculture sector.
- The Gujarat budget of year 2021-22 aims to boost farmer income
- The main advantage of KSY implementation is farmers facing hardships as well as risk of animals and insects of agriculture activity during night hours is reduce
- Construction of 234 numbers of New 66 lines totally 3490 circuit km
- Creation of New 9 no’s of 220 KV substations
- Financial outlay of Rs. 3500 Crores.

The launch of Kisan Suryodaya

Yojna in Gujarat with the blessings of the Hon'ble Prime Minister of India Shri Narendrabhai Modi, the scheme was inaugurated by the Hon'ble Chief Minister of the state of Gujarat ,Shri Vijaybhai Rupani on January 05,2021 for the farmers of North Gujarat at Bayad.

Earlier, the power distribution companies owned by Gujarat Urja Vikas Nigam Limited used to provided 8 hours of electricity to the farmers of Gujarat at different times of the day/night. According to the schedule, 8 hours electricity was provided for farming at night also.

Due to the power being provided at

night , farmers had to face the danger of being bitten by the wild animals as well as toxic organisms. The head the face woes of nocturnal activities.

Efforts have been made by the Gujarat government under the Kisan Suryodaya Yojna to overcome this problem of farmers. Arrangement have been made in different districts of Gujarat to provide power supply only during the day hours by proper planning.

The Target is to complete the distribution of 5519 MW power supply 2 total 380956 agriculture power consumers in 4501 villages of North Gujarat by providing electricity at the daytime at end of the year 2022.

Kisan Suryoday Yojana: UGVCL

Details Of Districtwise Talukawise Census Villages Covered Under

District	Total Nos. of Taluka	Total Nos. of Villages	Nos. of Non-AG Villages	Nos. of Full Charged Villages	Nos. of Partial Charged Villages	Total Nos. of Charged Villages	Nos. of Pending Villages
Ahmadabad	9	441	60	101	64	165	216
Arvali	6	676	6	122	36	158	512
Banaskantha	14	1237	15	8	28	36	1186
Gandhinagar	4	252	1	58	19	77	174
Kheda	3	56	0	1	3	4	52
Mahesana	10	610	3	72	86	158	449
Patan	9	516	36	125	50	175	305
Sabarkantha	8	700	3	80	72	152	545
Surendranagar	4	15	7	6	1	7	1
UGVCL TOTAL	67	4503	131	573	359	932	3440

AG & HH Scheme Target & Achievement (FY 2021-22)

AS ON 31.03.2022	TARGET for 2021-22		CONSIDERED Progress		%Age Achiev.	
	PHY	Fin. In Lacs	PHY	Fin. In Lacs	PHY	FINANCIAL
AG.WELLS						
TASP	1700	2400	1630	2400.09	95.88	100.00
SPA (Normal)	2600	4268	2649	4258.87	101.88	99.79
DARK ZONE	10400	17072	9485	17081.28	91.20	100.05
SCSP-Wells	450	733.80	385	734.03	85.56	100.03
TATKAL			278	155.40		
TOTAL WELLS	15150	24473.80	14427	24629.67	95.23	100.64
Household Connection						
SCHEDULE CAST- Beneficiaries	2750	190.5	3553	190.51	129.20	100.00
ZUPADPATTI SCHEME	13460	767	15553	767.05	115.55	100.01
KUTIR JYOTI (For ST Beneficiaries)	2825	151	2825	151.00	100.00	100.00
Total Household	19035	1108.5	21931	1108.56	115.21	100.01

Circle wise status of registered pending AG Application

NAME OF CIRCLE	NAME OF SCHEME	YEARWISE REGD. PENDING APPLICATIONS (SURVEYED & UNSURVEYED)				FQs UNDER PAYMENT	PAID PENDING	TOTAL PENDING Appln.
		2020	2021	2022	TOTAL			
SBT	SPA		540	420	960	647	407	2014
	DZ	314	1143	341	1798	69	97	1964
	TOTAL	314	1683	761	2758	716	504	3978
MSN	SPA		116	78	194	20	40	254
	DZ	624	2128	613	3365	127	111	3603
	TOTAL	624	2244	691	3559	147	151	3857
PLN	TASP		235	39	274	4	59	337
	SPA		87	23	110	6	5	121
	DZ	1694	7376	1785	10855	453	836	12144
	TOTAL	1694	7698	1847	11239	463	900	12602
HMT	TASP	211	685	353	1249	387	436	2072
	SPA		594	419	1013	464	448	1925
	DZ	190	508	151	849	68	66	983
	TOTAL	401	1787	923	3111	919	950	4980
UGVCL	TASP	211	920	392	1523	391	495	2409
	SPA		1337	940	2277	1137	900	4314
	DZ	2822	11155	2890	16867	717	1110	18694
	TOTAL	3033	13412	4222	20667	2245	2505	25417
Issued notice for drilling of tube well to all AG applications registered up to 31-03-2022.								

Sardar Krushi Jyoti Yojana (Maint.)

Year	Target & Planning			Achievement			
	Nos. of Feeder	Conductor to be Replaced in KM	Approximate Expenditure to be Incurred (In Lacs)	Nos. of Feeder	Conductor Replaced in KM	Expenditure Incurred (In Lacs)	% Achievement
2018-19	233	3272.71	1640.83	223	3225.74	1641.89	100.06%
2019-20	217	2995.94	1653.60	212	3008.31	1660.25	100.40%
2020-21	203	2084.56	1657.49	203	2125.50	1661.11	100.22%
2021-22	58	448.67	380.65	58	456.77	386.86	101.63%

SKJY Work of 11KV Chandrapura Feeder of Salal S/dn



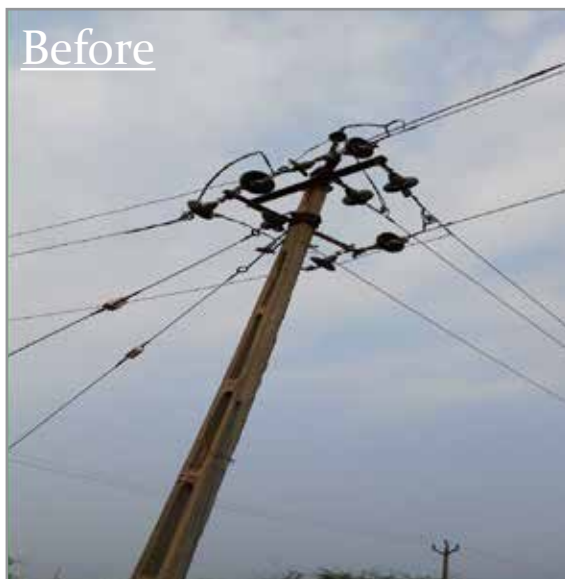
Before conductor replacement



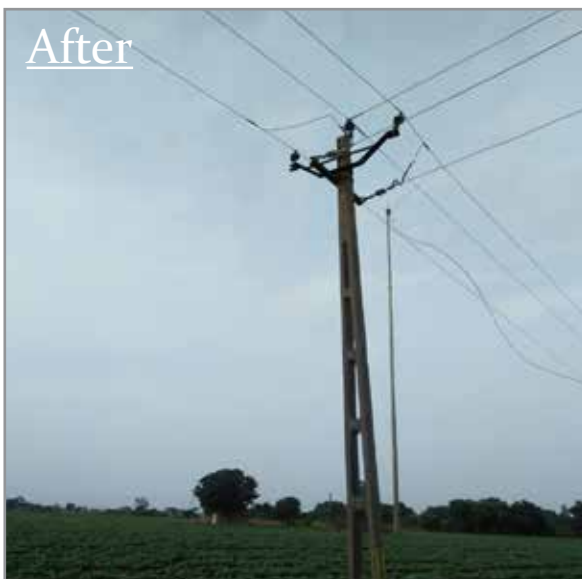
After conductor replacement

SKJY Work of 11KV Chandrapura Feeder of Salal S/dn

Before



After



Distribution Infrastructure Shifting Scheme (DISS)

Year	Target in Crore	Expenditure booked (in Crore)	% Achievement of Exp. Booked ref. to Target
2016-17	9.00	9.00	100%
2017-18	26.00	26.82	103.15%
2018-19	15.00	15.869	105.8%
2019-20	15.00	18.507	123.38%
2020-21	15.00	15.498	103.30%
2021-22	11.05	11.05	100%



Renewable Energy

Renewable energy is often referred to as clean energy. India, the world's third largest carbon dioxide emitter, aims to meet half of its energy demand from renewable resources. MNRE (Ministry of new and Renewable energy) with state governments has set a target of 500 GW of renewable energy by 2030. Gujarat is blessed with plenty of renewable sources. So the central Government is expecting handsome contribution from Gujarat. Since the existence of solar cell, under UGVCL, 45623 nos of solar rooftop projects are commissioned having capacity of 306.983 MW as on 31.03.2022.

Surya Gujarat (Surya Urja Rooftop Yojana-Gujarat) is one of the flagship schemes of govt. of Gujarat. This scheme has received immense popularity among residential consumers of the state under all DISCOMs of Gujarat. The target of Gujarat state for installations of solar rooftops is to cater cumulatively 7 lac consumers by the end of the financial year 2024-25.

Modhera Sun temple Solarisation: Gujarat's Modhera Village is India's first 24x7 Hrs Solar-Powered Village with BESS (Battery energy storage

system) and it is under the jurisdiction of UGVCL.

PM KUSUM-B (Pradhan Mantri Kisan Urja Suraksha Evam Utthan Mahabhiyan), PM KUSUM-C, and SSDSP (Small Scale Distributed Solar System) along with Solar Rooftop for Residential, commercial, industrial, government and other categories are operational.

18 nos of agriculture feeders are commissioned benefiting 621 no of farmers with solar capacity of 19.54 MW under SKY scheme. Under PM KUSUM-B, 70 nos of off grid solar water pumps installed with capacity of 475 KW. Under PM KUSUM-C (Feeder level solarisation) scheme, tender under process for 144 nos of feeders with Solar Power plant capacity 114.213 MW. Under SSDSP scheme, 9 nos of Solar Power plants are commissioned of capacity 14.4 MW and 158 no of power plants are under pre commissioned stage having 161.4 mw capacity

So solar installations are increasing day by day. UGVCL is performing well in this direction and importance of Solar cell has become prime, for implementation of various solar schemes and achieving the targets.

SMALL SCALE DISTRIBUTED SOLAR PROJECTS-2019

- Objectives of SSDSP-2019
- To facilitate and promote speedier development of Solar Projects in multiple scattered pockets of barren and uncultivable land.
- To provide visibility about available tariff for sale of power to Small Solar Power Projects developers who can't participate in competitive bidding.
- To mobilize local resources, enhance, skill development and create employment opportunities in solar energy sector by promoting small scale entrepreneurs.

Small Scale Distributed Solar Projects-2019

- Eligibility of SSDSP-2019
- Individual/Partnership Firm/Company /Society
- Capacity:- 0.5 MW to 4.0 MW
- Processing Fee:- Rs. 5/- per KW +GST
- Ownership Lock in Period:- 1.0 Year from COD.
- Project Commissioning Guarantee:- Rs. 5.00 Lakhs/MW
- Project Commissioning Period:- 18 Months (from the date of PPA signed)

SSDSP Application at UGVCL

Report of Small Scale Distributed Solar Projects-2019

Name of C.O.	Applications Registered		Net applications after exit 1		Plants commissioned (Till March 22)		Work under Progress & upcoming as on March 22	
	Nos.	MW (AC)	Nos.	MW (AC)	Nos.	MW (AC)	Nos.	MW (AC)
HMT	839	579.19	141	81.1	1	1.8	140	79.3
MSN	945	668.66	147	112.07	5	9.2	142	102.9
PLN	1522	1098.01	125	152.75	3	3.4	122	149.4
SBT	234	155.88	25	14.5	0	0	25	14.5
Grand Total	3540	2501.74	438	360.37	9	14.4	429	345.98

SURYA Gujarat

OBJECTIVE:-

- “SURYA-Gujarat” (Surya Urja Rooftop Yojana-Gujarat) scheme has following provisions:
- Target: The target of Gujarat for installations of solar rooftops shall be to cater cumulatively 7 lac consumers by the end of the financial year 2024-25, over and above the capacity commissioned as of 31/03/2022.
- Operative Period: The Policy operative period shall be up to the financial year 2024-25.
- Subsidy: State subsidy of
 - 40 % shall be available for solar rooftop systems up to 3 kW;
 - 20 % for solar rooftop systems beyond 3 kW up to 10 kW, installed and commissioned by private residential consumers. Any solar rooftops in the residential sector commissioned during the operative period of this scheme shall be eligible for the subsidy.

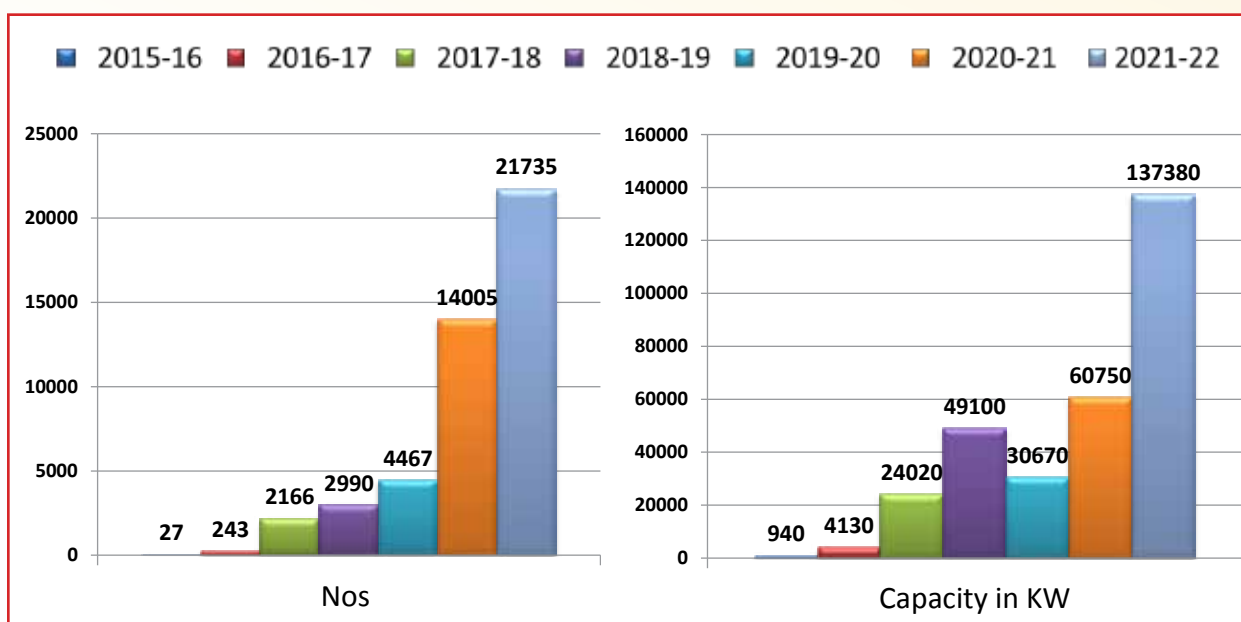
- **Capacity:** Any capacity of solar rooftop system equal to or greater than 1 kilowatt DC can be installed irrespective of the sanctioned load of the consumer; however, the subsidy shall be limited to maximum capacity of 10 kW.
- **Net Metering and Surplus Power:** As per Gujarat Solar Power Policy-2021, the electricity generated from the solar rooftop system shall be net metered on the billing cycle period and the surplus power fed to the grid upon self-consumption shall be purchased by the concerned DISCOM at the rate of Rs. 2.25 per unit for the first 5 years from commissioning of project and thereafter for the remaining term of the project at 75% of the simple average of tariff discovered and contracted under competitive bidding process conducted by GUVNL for non-park based projects in the preceding 6 month period i.e. either April to September or October to March as the case may be, from the commercial operation date (COD) of the project..
- The state subsidy shall be eligible throughout the operative period of the policy.
- **Eligibility:** All consumers of all the DISCOMs in the state having service connection under residential category of the DISCOM shall be eligible.

Solar Rooftop Overview- (As on 31.03.2022)

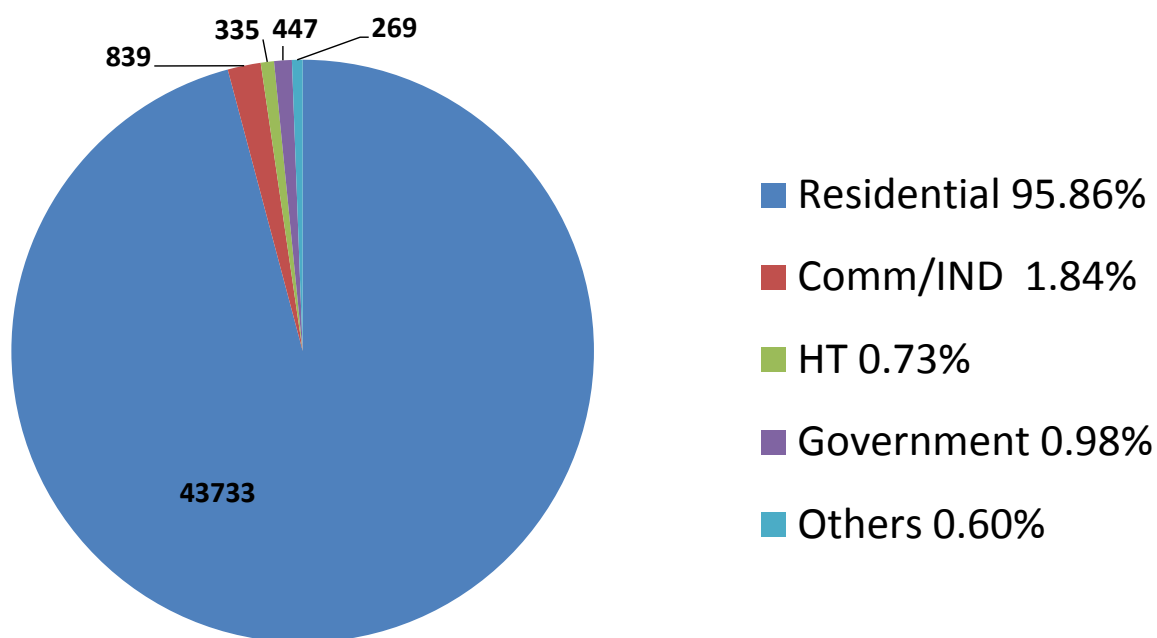
Particulars	Type of Connection					
	R/L	COM/ IND	HT	Govt	Others	Total
Released in No's	43733	839	335	447	269	45623
Released in KW	168694	15130	109162	8827	5170	306983



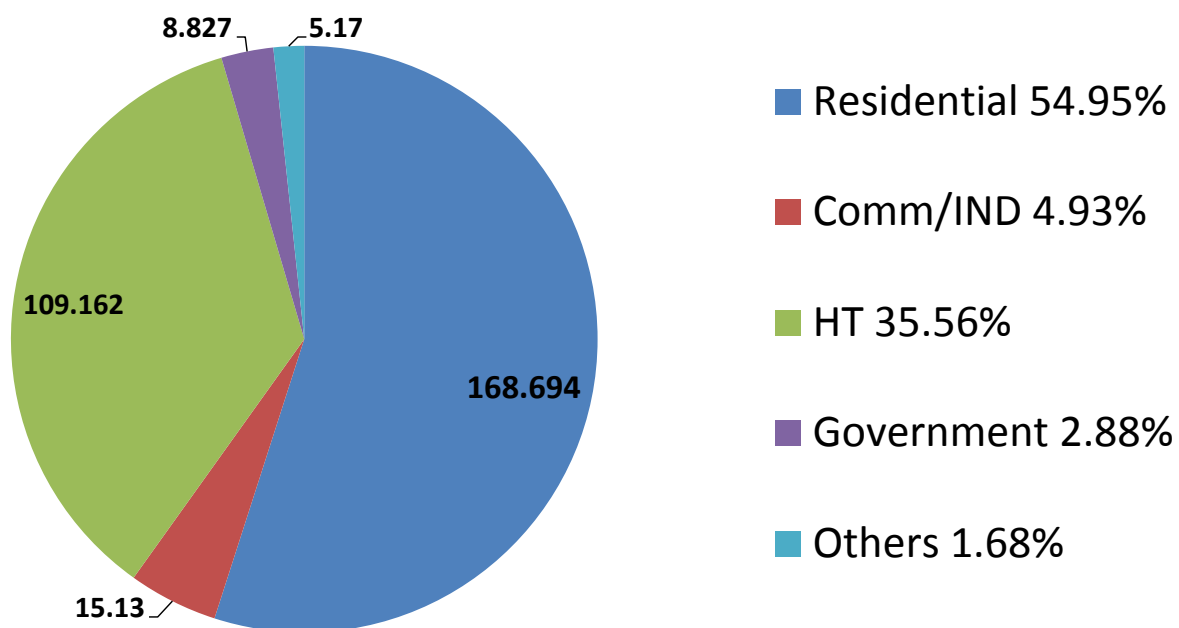
Solar Rooftop Progress (Year wise)



SRT Projects Commissioned (Nos) as on 31.03.2022



SRT Projects Installed capacity (MW) as on 31.03.2022



GOG Schemes : Solar AG Pump Sets

Solar Agriculture Pump Sets

- Scope of work: New agriculture connection with stand alone (off-grid) solar system with 3HP, 5 HP & 7.5 HP pump sets.
- Beneficiary has to pay Rs.5000/- per HP for normal category and Rs.1000/-HP for SC/ST category.
- Total 934 Nos. of Solar Pump Sets has been installed in last Four Year.



GOG Schemes : Solar Home Lights

Solar Home Light System

- **Scope of work:** New lighting connection in scattered residential area with stand alone (off-grid) solar system with 400 watt PV system.
- Beneficiary has to pay Rs.4500/-per system for normal category and free of cost for SC/ST/BPL category.
- Total 10200 Nos. of Solar Home Light System has been installed in last Three Year.



PM KUSUM Component- A

- Capacity per Plant :0.5 to 2MW.
- Distance from sub-station :05 Km
- Substation capacity : 33/11kV or 66/11kV or 110/11kV
- Setup by farmers/cooperatives/panchayats/project developer/ Farmer Producer Organisation(FPO) /Water User associations(WUA)
- Scheme to be implemented primarily on barren/uncultivable land
- On agricultural and solar power plant to be installed in stilt fashion
- DISCOM eligible for PBI@Rs.0.40per unit or Rs.6.6lakh per MW
- DISCOMs to purchase power:
 - At pre-fixed tariff or
 - Tariff based bidding if applications are more than capacity feasible.
- DISCOM obliged to buy the entire power from RPG within the contract capacity
- Extension of the PPA period beyond 25years through mutual agreements between the RPG and DISCOM
- DISCOM to maintain LC and Escrow Arrangement
- RPG to commission plant within nine months from issued of LoA
- Payment made to RPG for power supplied to DISCOM

PM KUSUM –B (Stand Alone)

- CFA@30% of benchmark cost or the Tender cost, whichever is lower.
- (50% for NE States including Sikkim, Hilly States and Island UTs)
- 30% subsidy by the State Governments
- Balance 40% by farmer (20% in case of NE/hilly States & Island UTs)
- Bank finance may be available to farmers for 30%/10% of the Cost.
- Pump:1. Submersible (Water filled/oil filled) 2. Surface motor
- Capacity: DC/AC: 1.0 HP to 10.0 HP
- USPC: Universal Solar Pump Controller (Optional & cost borne by Beneficiaries)
- Beneficiaries select one of the empaneled agencies
- Application register by empaneled agencies.
- In PM-KUSUM B as per GOG Amend. GR SLR/11/2020/1144/B1 Dtd.16.11.2021 fixed cost to be recover in SPA Scheme & in TASP Scheme no any cost to be pay by applicant.

PM KUSUM–C (Grid Connected)

- 30% CFA from GOI-MNRE (up to 7.5 HP)
- 30% Subsidy from GoG
- 10% Farmer's initial contribution
- 30% Farmer's contribution through Loan
- Solar System Capacity equivalent to 1.75 times of contracted load (5.595 kW) i.e 9.79 KW (5.595 KW x 1.75).
- Subsidy and CFA - limited for Pump capacity up to 7.5 HP.
- Agriculture Feeders on which minimum 70% of Consumers ready to participate.
- Consumers under Kisan Suryoday Yojana - Minimum 70% criteria will not be applicable but 3-PH power will be only 8 Hrs.
- An agreement will be signed between the farmer and DISCOM for surplus energy injected in to the grid after subtracting energy used for irrigation purpose will be purchased by the DISCOM at a rate of Rs. 2.83 per unit for 25 years.

Objectives of the SKY Scheme

- Provide adequate and reliable day-time power to farmers
- Incentivise farmers for surplus power exported to the grid
- Provide a secondary source of income
- Encourage farmers to efficiently utilise power and water.
- Help farmers become self-reliant for their power requirement
- Create employment opportunities for rural areas.
- Help the DISCOM to promote renewable energy
- Reduce the subsidy burden on GoG
- Reduce cross subsidy burden on other consumers
- Reduction in Distribution loss
- Emphasis to distributed solar generation

Salient features of the SKY Scheme

- Scheme is for the farmers having Agriculture Connection
- Participation of minimum 70% farmers of Selected AG Feeder
- Farmers will be provided grid connected SPV System (1.25 time of Contracted Load in HP) with 7 year warranty.
- Day time Power Supply to SKY consumers for 12 Hrs.
- Non-SKY AG consumers will get 8 hours 3-Ph power.
- Purchase of Surplus energy by DISCOM at the rate of Rs. 3.50 /KWh for 25 years
- 30 % Capital subsidy from MNRE, GOI
- 30 % Subsidy from GOG in form of EBI (Evacuation-based Incentive) Rs. 3.50 per KWh on exported energy after deduction feeder losses in excess of 5 % (Up to 1000 unit /Kw/Year) for 7 years.
- 5 % Contribution from farmer
- 35 % Loan by GOG on behalf of farmer, for which installment will be paid within 7 years from amount to be paid to farmer against purchase of surplus energy.
- Farmer will get ownership of PV system after payment of loan

Achievement of the SKY Scheme

Sr. No	Feeder	SPV System Capacity AC (KW)	SKY AG Consumers	CUF (%)		T&D Loss (%)		Consumer Refund / Recovery (2021-22)	
				FY : 2020-21	FY : 2021-22	FY : 2020-21	FY : 2021-22	Nos. of SKY Consumers Payable	Nos. of SKY Consumers Recoverable
1	Madhav	123	15	18.36%	16.41%	3.12%	4.30%	11	4
2	Napda	177	23	18.43%	17.23%	4.51%	2.08%	18	5
3	Nityanand	625	12	17.94%	16.11%	2.62%	2.07%	9	3
4	Rajgadh	219	20	18.83%	18.03%	3.89%	3.89%	20	0
5	Aantarness	931	13	17.31%	16.82%	5.07%	5.47%	12	1
6	Dehgamda	601	36	18.73%	17.15%	4.07%	4.62%	23	13
7	Baliyadev	413	10	15.32%	15.25%	4.26%	4.83%	9	1
8	Bakrol	534	29	15.41%	13.14%	4.59%	4.16%	8	21
9	Mahakali	1915	25	19.34%	18.37%	4.24%	3.90%	24	1
10	Naliya	3180	34	18.22%	17.62%	5.93%	8.20%	31	3
11	Navagam	1420	43	18.76%	17.43%	5.46%	5.97%	42	1
12	Zanzansar	1590	21	17.87%	17.19%	6.25%	9.02%	20	1
13	Ganeshpura	239	20	19.49%	17.88%	4.32%	6.44%	16	4
14	Sardar	1065	35	16.06%	16.87%	7.15%	7.17%	12	23
15	Aniod	851	81	17.33%	15.55%	8.66%	4.26%	43	38
16	Banas	2845	40	19.50%	18.74%	7.65%	8.80%	35	5
17	Singpur	1763	147	18.22%	16.65%	5.86%	5.78%	89	58
18	Rupnagar	1049	17	19.10%	17.04%	5.70%	5.11%	16	1
Total		19540	621	18.26%	17.31%	5.81%	6.49%	438	183

Project

Uttar Gujarat which company limited is providing an uninterrupted and reliable power supply to its 38 Lakhs consumers through a robust power distribution system.

A project department has been set up by the company for current requirements as well as future plans.

The government of India has approved the Revamped Distribution Sector Scheme (RDSS) to help DISCOMs improve their operational efficiencies and financial sustainability by providing result-linked financial assistance to DISCOMs to strengthen supply infrastructure based on meeting pre-qualifying criteria and achieving basic minimum benchmarks. The scheme has an outlay of Rs. 3,03,758 Crore over 5 years i.e. FY 2021-22 to FY 2025-26. The outlay includes an estimated Government Budgetary Support (GBS) of Rs 97,631 Crore. REC and PFC have been nominated as nodal agencies for facilitating the implementation of the scheme.

The scheme aims to meet the following objectives:

- Reduction of AT&C losses at Pan-India levels to 12-15% by 2024-25.
- Reduction of ACS-ARR gap to

zero by 2024-25.

- Improvement in the quality, reliability and affordability of power supply to consumers through a financially sustainable and operationally efficient distribution sector.

Power Finance Corporation, New Delhi has issued sanction letter to UGVCL for Revamped Reforms based and Results Linked Distribution Sector Scheme having an outlay of Rs. 3,526.71 Cr.



The project department has been successfully completed various Underground Projects in BOL GIDC, Japanese park, women's park, MSME park, Remaining Area of BOL GIDC and Bhagapura GIDC for providing uninterrupted power supply to multinational companies under the guidelines of the department of energy and petrochemicals.

GIDC Industrial Park Electrification

- EPD Guidelines dated 20.07.2016
- Projects for Conversion of Over Head Network to Under Ground Electrification Network
- Funding Pattern : 80 % Critical Infrastructure Project & GIDC ; 20% UGVCL
- **PROJECTS COMPLETED**
 - BOL GIDC, Sanand
 - Japanese Park, Vithhlapur
 - Women's Park, Sanand
 - Defense Park, Ukardi
 - Bhagapura Industrial Estate
 - MSME Park, Mandal
- **PROJECTS UNDER PROGRESS**
 - Remaining Area of BOL GIDC, Sanand

GIDC Industrial Park Electrification

Sr. No.	Name of Project	Actual Project Cost in Rs. (Crores)	Amount Recovered from GIDC + IC in Rs. (Crores)	Project Status
1	BOL GIDC	68.61	66.32	Completed
2	JAPANESE PARK	10.56	6.61	Completed
3	DEFENSE PARK	4.80	3.26	Completed
4	WOMEN's PARK	12.25	9.65	Completed
5	BHAGAPURA GIDC	28.24	23.70	Completed
6	MSME PARK	21.68	18.09	Completed
7	REMAINING BOL	43.50	35.17	WUP

GIDC Industrial Park Electrification



RMU with Fencing and CTC installed at Women's Park



RMU with Fencing and CTC installed at Women's Park

Benefits of Underground Electrical Network In GIDC

Main Objectives:

- To provide uninterrupted, reliable and quality power supply to the consumers.
- The Consumer satisfaction is our prime important and also the vision of Company.
- To preserve aesthetic beauty of area and to reduce numbers of accidents ultimately save to human life.
- Hassle free connections.
- Aesthetics beauty of the area will be preserved.
- Reduction in % age Technical & Distribution Losses.
- Creation of Underground Network Asset at Financial Implication of 20 % of Project Cost.

Proposed Exposure Under GOG Circular for Valuable Consumers of GIDC

- There are several GIDC under Jurisdiction of UGVCL has applied for conversion of existing overhead electrical network into Underground Cable Network
- Naroda GIDC
 - UGVCL has resubmitted application for financial assistance to Office of the Industrial Commissioner on Date: 04.03.2022.
 - IC office has scrutinized the application and UGVCL has resolved the observations raised by IC Office on Date: 07.05.2022.

SCADA

(Supervisory Control and Data Acquisition System)

Ministry of Power, Government of India, has launched the Restructured Accelerated Power Development and Reforms Program (R-APDRP) in the 11th Five-year Plan, Power Finance Corporation (PFC) has been designated by Government of India as the Nodal Agency for the program. The program spans from data acquisition at distribution level till monitoring of results of steps taken to provide an IT backbone and strengthening of the Electricity Distribution system across the Country.

The objective of the program is real time monitoring & control of the distribution system through state-of-the art SCADA/DMS system encompassing all distribution Sub-stations & 11 KV network would help in achieving this objective of R-APDRP in the project areas.

The program is divided into two parts: Part-A & Part B. Part A is covering Ahmedabad Town periphery area with 1.44 lakh consumers. Initially for Part A 100% funds for the approved projects

shall be provided through loan from GOI and the loan 33.81 Cr. shall have converted into grant after establishing the base line data.

The project objective to provide uninterrupted quality power and for reduction in aggregate technical & commercial (AT&C) losses in the project area can be achieved by,

- Faster identification of fault & early restoration of power
- Proper planning and design of distribution network
- Load balancing
- Feeder re-configuration

Project is established in Ahmedabad Peripheral area which covers 19 substations and 12 Sub Division offices and 3 Division offices. The control room has been established at SCADA center, Gandhinagar for real-time monitoring and control of SCADA/DMS activities for with a goal to reduce minimal nos. of interruption and to provide reliable power.

The project also covers installation of 626 Nos of RMU, 5 Nos of

Sectionalisers and 503 Nos. of FPIs to enable the SCADA control room to take decision in case of abnormal condition and decision making for changing of power to another feeder to reduce the interruption on the feeders.

RVDU (Remote Video Display unit) is also provided to SDO to enable them to take timely action in the case of abnormal condition. Total 411 nos. of FRTUs are installed on RMU for taking remote operation from SCADA control room to restore power immediately.

The SCADA control room is in operation since June-19 and take more than 800 operations in real time to enable the SDO for providing/restoring power in abnormalities. Also, 25 FRTUs installed by UGVCL SCADA Team. The main motive of the project is to provide uninterrupted power supply to consumer and in turns improve the level of consumer satisfaction.

Advantages of SCADA

- **Optimizing performance:** SCADA systems minimize errors by accurately measuring data and increasing the overall efficiency of the system. It eliminates the need for manual data collection.
- **Reliability and robustness:** The specific development of SCADA is performed within a well-established framework that enhances reliability and

robustness where power requirement is crucial. Alarms and system-wide monitoring enable operators to quickly spot and address problems

- **Reduce operating and maintenance costs:** Less personnel and trips are required to monitor in remote locations, this reduces maintenance and training costs.
- SCADA systems provide many advantages including increased reliability, reduced costs, improved, worker safety, greater consumer satisfaction and improved utilization. Their alarms and real-time views, into operations can prevent small problems from becoming big ones, and can also speed restoration time.
- SCADA system can be implemented on a large scale in power systems so as to increase their performance, reliability, and durability. Data acquisition and monitoring can be very convenient and accurate if power systems are upgraded to SCADA.

Way Forward:

UGVCL will propose to include more towns to provide reliable power to consumer and will aims to achieve optimum level of consumer satisfaction in near future.

SCADA Project

Supervisory Control and Data Acquisition

- Its involves net working of a group of Substation/11 KV Line for data collection in respect of all equipment at a host station.
- System can be monitored on real time and also controlled by issuing commands to remote station where RTUs/FRTUs are located.

UGVCL : SCADA - A

Project..

- Area : Ahmedabad Periphery area of UGVCL
- Substation : 19 Nos
- Division covered : 3
- Subdivision : 12
- Feeder : 136
- Consumer Covered : 2.75 lakh approx
- GOI has approved Rs. 33.82 cr as Grant amount
- PFC is Nodal Agency
- It is approved for establishment of IT equipment communication.

Project Cover..

- Installation of RTUs (Remote Terminal Unit) in 19 nos. of substation
- Installation of FRTU (Field Remote terminal unit) for RMU & Sectionalizer in field.
- Installation of Modem at FPI location(With DCU)
- Installation & commissioning of centre control room
- Establishment of communication system (MPLS & GPRS)

UGVCL : SCADA - B

Project..

- Area : Ahmedabad Periphery area of UGVCL
- Substation : 19 Nos
- Division covered : 3
- Subdivision : 12
- Feeder : 136
- Consumer Covered : 2.75 lakh approx
- GOI has approved Rs. 68.54 Cr
- 25 % of Expenditure is given by GOI as loan amount as loan amount
- PFC is Nodal Agency

Project Cover..

- It is approved for establishment of SCADA enable Equipment
- Installation & Commissioning of RMUs (Ring main Unit) in 626 nos.
- Installation & Commissioning of sectionalizer at 5 location
- Installation of FPI (Fault passage Indicator) with DCU (Data concentrator Unit) at 503 location

UGVCL : SCADA

Project Status

- RTU : 19/19
- RMU: 626/626
- For RMU & Sectionalizer : 411/ 626
- FPI : 429/503
- DCU: 429/503
- Communication system : 1. RTU & FRTU- Chemtrol Ind Limited 2. Airtel

SCADA Building, Gandhinagar



UGVCL : SCADA

Server Room



Centre Control Room



RMU



RMU

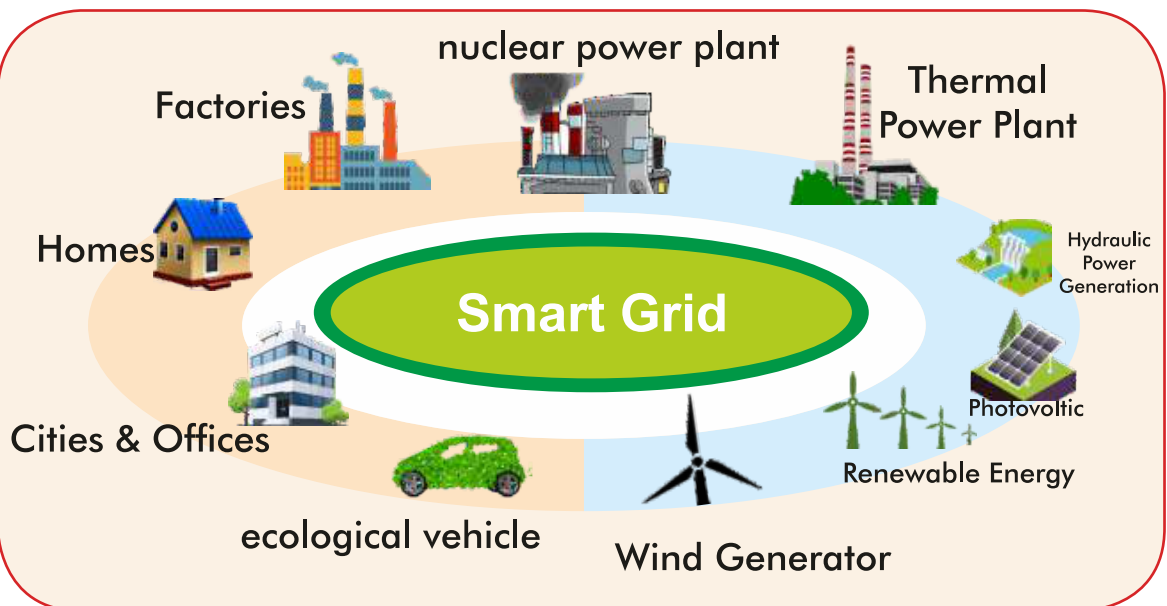


Benefit of the SCADA Project

- Faster Identification of fault & Easy Restoration of Power.
- Control room is in operation since June.2019
- More than 834 remote operation has been taken through SCADA Control room
- Proper Planning and Design of Distribution Network.
- Better & Quick complain reduction.
- Improve Reliability Indices & Quality of Power.
- Load changing remotely using Breaker / RMU / Sectionalizer.
- Real time Monitoring & Control of Distribution System.
- Better Utilisation of Asset

Smart Grid Pilot Project : Naroda Urban Area

Smart Grid Pilot Project Naroda Urban Area



Smart Grid Naroda Pilot Project

The Government of India's initiatives like 'Make in India' and 'Smart Cities' need the efficient, reliable and continuous power supply. The advanced energy management and increased use of renewable energy resources are the foremost areas to concentrate by governments for the development of country. Ministry of Power has initiated ISGF (Indian Smart Grid Forum) which works very closely with public, private and research organisations for developing standards and policies so as to deploy the 'Smart Grid' to assure efficient and cost effective power for all stakeholders. The smart meter is very important constituent for smart grid and is expected to provide cost-effective, social and ecological advantages for various stakeholders. The most significant key factors that determines the success of the smart meters is data analysis that deals with data acquisition, communication, processing and elucidation that benefits to consumer, utility company and government.

The idea of smart grid increases the efficiency of power usage by the introduction of bi-directional flow of information from utilities to consumer

and vice-versa. This can be possible by the introduction of 'Advanced Metering Infrastructure (AMI)'. The information about electrical consumption of a consumer is recorded in a timely manner and this data is aggregated and analyzed by 'smart meter' installed at consumer premises. The analyzed data is communicated to utilities using AMI. The AMI includes the advanced communication system including home area networks (HAN), neighborhood area networks (NAN) and wide area networks (WAN). Thus, AMI not only communicates the smart meter data to utilities but also transmits information to consumer from utilities about the peak demand, cost of energy consumption enabling the consumer to shift peak loads to some other time. Smart grid using smart metering and AMI technologies establishes the wide area monitoring, protection and control.

The Smart Grid Naroda Pilot project is among the 8 pilot projects selected by Government of India, Ministry of Power for testing the Smart Grid technologies in the power Distribution sector. The project has been sanctioned under NSGM (National Smart Grid Mission) with a 50% grant from MoP

and remaining from UGVCL's own fund.

The smart grid pilot project involves a mix of residential, commercial, industrial consumers. The area chosen as the pilot site are Naroda urban sub-division of Sabarmati circle. This project covers the five functionalities of the Smart Grid decided by MoP.

The functionalities covered under the project are as under:

- AMI for Residential and Industrial
- Peak load Management
- Renewable integration
- Demand Response
- Outage management system (through SCADA)

Under the project, more than 27000 Smart meters have been installed on different category of consumers. The meters installed are complied with IS: 16444 which was first time in India for the smart grid pilot project.

Smart meter is an advanced energy

meter that measures electrical energy consumption and provides additional information as compared to a conventional energy meter. It aims to improve the reliability, quality and security of supply

Under the Smart Grid Pilot Project, all meters' parameters like instantaneous data, load profile have been recorded for every 15 minutes' interval. All tampers and events have been recorded with snapshot of instantaneous data whenever it occurs in the meters.

The main utilization of the system is as under:

- **Automatic meter reading and bill generation:** UGVCL has Started automated reading of meters from August 18 onwards for more than 27000 consumers and cumulatively 3.5 lakh bills are generated. This has nullified the errors made through human intervention (Reduction in 60 man-days per month).



- **Remote connect/disconnect:** UGVCL has worked for disconnection of overdue payment consumers. UGVCL has intimated the overdue consumers for payment of bills through SMS gateway before 24 hours before disconnection of meters. Even after this intimation, if the consumers are not able to come forward then disconnection has been initiated for MDMS system of Smart grid. Since November 18. There are about more than 15000 consumers are disconnected and connected from the smart grid system (with SMS payment notices and notifications) which results in quick recovering of due payment. (Reduction in 10 man-days per month)
- **Net-metering for solar rooftop consumers:** Smart grid is all about bi-directional communication. There are 120 connections having solar roof top system installed at their premises are integrated in the smart grid system. Import and export reading of such consumers are integrated in the system. This can serve the purpose of renewable integration.
- **Consistent data availability** – the benefit of the system is excellent availability of data. Through this system upto 99% has been achieved

which includes data fetching from 1-phase and 3-phase consumers in 15-minute interval for load survey, alarms and events (as and when its occur) and daily billing data. Due to the above, UGVCL has able to identify the consumers violating the contracted demand, alerts etc.

- **Energy audits:** UGVCL has achieved energy audit up to DT level & feeder level for the pilot feeder area in real-time with efforts of installing bi-directional meters on distribution transformers.
- **Consumer portal and mobile application:** under the project consumer portal and mobile application has been developed for monitoring of energy data by the consumer. The consumers can monitor their history of consumption, payment, billing history through portal and mobile application.
- **Real time alert information:** Through the smart Grid system, UGVCL has get tamper/event information in real-time with a snapshot of instantons parameters for that consumers as and when event occur in the meters.
- **Outage Management:** UGVCL will get outage management data up to the consumer level through smart grid system.

Benefits of Smart Grid Pilot Project:

Overall, this system enables to achieve consumer satisfaction by carrying out following activities as under:

- Accurate billing
- Mobile application
- Consumer portal
- SMS facilitation
- Demand side management

UGVCL has also contacted Hon. GERC for implementation of ToU tariff where GERC has suggested to carry out ToU tariff after successfully completion of the project. So following are the Way Forward:

- ToU Tariff
- Pre-paid functionality adoption

Advantages of Smart Meters for Utilities & Consumers

- With the advent of advanced monitoring technology the number of personnel required will be less.
- The increased ability for load management during peak load times.
- Encourages the renewable energy resources by consumers.
- Benefits the consumers in more accurate and timely electrical billing.

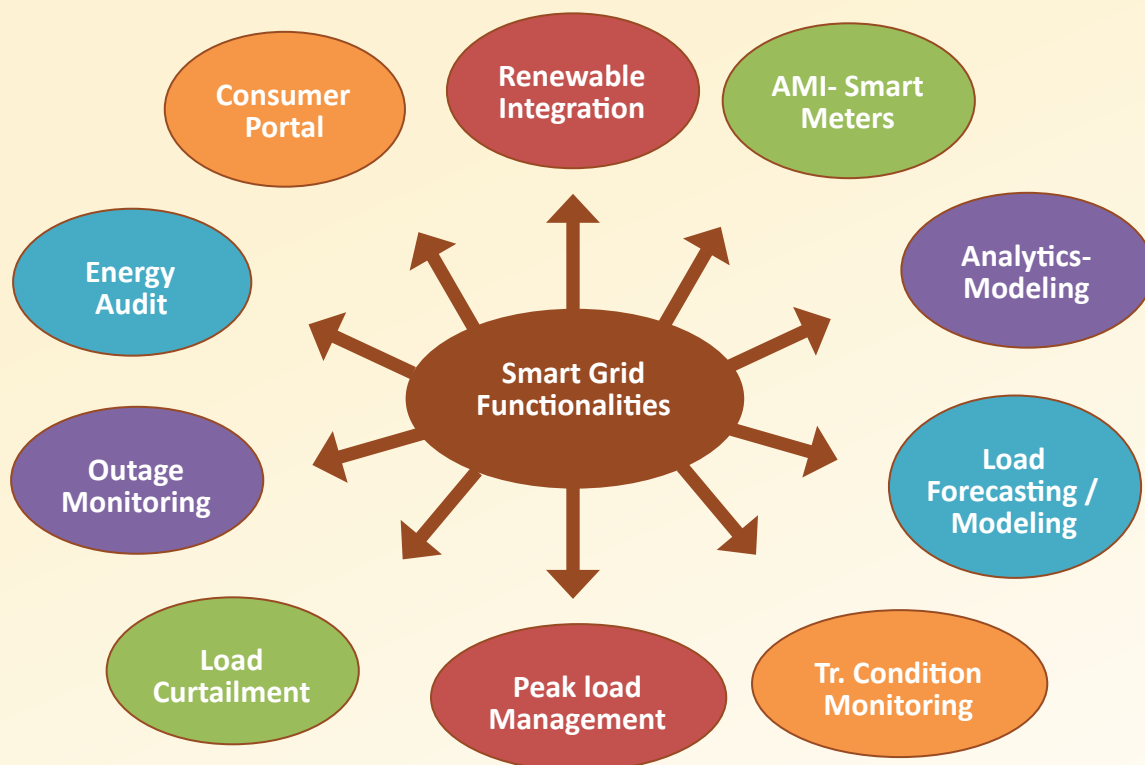
- Allows the consumer to schedule the electrical usage in the most optimal manner.
- Allows the user to think about the better plan for using the electrical equipment during the expensive hours.
- Allows the consumer to switch between conventional to renewable resources based on the tariff.

Way forward:

The main objective of smart meters is for assuring the systematic energy management with the active participation of end user by coordinating utility companies in making intelligent decisions. The smart grid will enhance the stability and reliability of power systems using AMI technologies. The better outage management increased remote monitoring on power losses and controlling them and accurate billing are most important advantages of smart meters using AMI.

The commissioning of smart grid pilot projects for research and supporting them by Government of India shows the interest of future development. Smart meter definitely has a great role in smart grid and is considered as most important for future energy management. UGVCL is also going to propose more than 35 lacs smart meters which covers 24 Sub Divisions across UGVCL under RDSS scheme.

Smart Grid Pilot Project



Project..

- Area : Naroda Urban area of Ahmedabad city.
- Project cost Rs.35.45 crore.
- Additional PO was given for Rs.3.08 crore.
- Consultancy is hired from Power grid corporation
- Supply and installation of smart meter are provided by M/S Genus
- Data center, application and integration is managed by M/S Fluent grid
- RF communication has been done by M/S Cyan cannode.

Project activity field..

- | | |
|---|--|
| <ul style="list-style-type: none"> ■ Smart meter covered under the original project. <ul style="list-style-type: none"> ● 1-phase-21300 ● 1-phase (net meter)-200 ● 3-phase whole current-2050 ● 3-phase whole current (net meter)-100 ● 3-phase CT operated-100 | <ul style="list-style-type: none"> ● 3-phase CT operated (net meter)-10 ● Smart meter covered under the additional PO project. <ul style="list-style-type: none"> ● 1-phase-3000 ● 3-phase CT operated-300 ● 3-phase whole current-700 |
|---|--|

Smart Grid Pilot Project

Project cover..

- Supply and installation of 1Q / 3Q Meter as per IS-16444
- Supply and installation of CT- operated DLMS Meter as per IS-14697
- Installation and commissioning Data center, Application development & Integration with existing system
- RF communication

Project cover..

- Outage management system for all the Consumer
- Development of various application like AMI, Outage management, Peak load management, Demand response etc.
- Infrastructure rectification by UGVCL when ever required.
- Net metering component for renewable integration

Project Status...

- Total (1Q&3Q) 27760 meters has been received
- Project get operation acceptance from Dec.2020
- Every month more than 13000 consumers get billed from the system(Without manual intervention)
- More than @8000 consumers get connected/Disconnected remotely from the system annually.
- 165 nos of Communication Gate Way are installed.

Modem

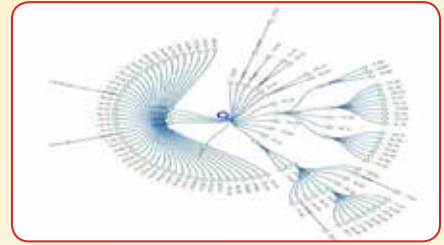


Communication Technology Used

RF Mesh Technology

- Total 165 Nos. of gateway used for @26100 meters
- DCU-to-control center-GPRS technology
- Less Recurring cost compared to GPRS based meters

RF Mesh



Smart Grid Pilot Project

Utility Benefits..

- Automatic meter reading for bill generation (without human intervention)
- Remote connect/disconnect
- Vigilance activity
- Pre-paid metering and net-metering functionality

- Real-time AT & C loss calculation on monthly basis.

Consumer benefits..

- ToU tariff
- Web portal and mobile application for load monitoring for consumers
- Demand side management

Utility IT Applications

Meter Installation



DCU Position



Meter Communication to DCUs



Gol Scheme – IPDS & DDUGJY



Integrated Power Development Scheme (IPDS)

Scheme

- GOI Scheme
- Scheme cover the town area
- Cover all 4 circle
- DPR Approved Rs.102.22 Crore
- Work completed Rs.102.22 Crore as on 31.08.19
- Achievement = 100 %
- Objective : Strengthening of Distribution network in the Urban areas, Metering of Distribution Transformer / Feeders / Consumers in the Urban areas and IT enablement

Scheme cover...

- Providing of UG & AB Cable
- Provision of 11KV line Augmentation
- Replacement of Electromechanical meter by Static meter
- Providing of Transformer & RMU
- Provision of Solar Panel at UGVCL offices for total 440 KW
- Provision of Fencing to Distribution Transformer
- Replacement of Old Services with Armoured cable Services

Scheme

- GOI Scheme
- Scheme cover the Rural area
- Cover all 4 circle
- DPR Approved Rs.121.54 Crore
- Work completed Rs.121.54 Crore as on 31.08.19
- Achievement = 100 %
- Objective : Strengthening & Augmentation of Distribution Infrastructure in Rural areas included Metering at Dist. Transformers, Feeders and Consumers to ensure 24x7 Power supply.

Scheme cover...

- Provision of Feeder Bifurcation
- Provision of Renovation of 11KV Feeder
- Providing of AB Cable
- Replacement of Electromechanical meter by Static meter
- Providing of New HVDS transformer
- Provision of New 1Ph Connections
- Provision of Sub Station

IPDS & DDUGJY



**Solar PV Plant,
R&C Office :
Mehsana
Under IPDS**

**5060 Nos.
Residential
Connection to BPL
House Holder
Under DDUGJY**



Revamped Distribution Sector Scheme (Objectives of Scheme)

- Improve the Quality, Reliability and Affordability of Power Supply to consumers through a financial sustainable and operationally efficient Distribution Sector
- Financially and operationally efficient distribution sector
 - Reduce AT&C losses to 12-15% by 2024-25*
 - Reduce ACS-ARR gaps to zero by 2024-25*
 - AT&C = Aggregate Technical & Commercial Loss
 - ACS = Average Cost of Supply
 - ARR = Average Revenue Realised

**AT&C loss reduction and ACS-ARR gap reduction targets mentioned above are national targets and state-wise targets would depend on their current levels of AT&C losses and ACS-ARR gap*

Revamped Distribution Sector Scheme (Sanctioned DPR)

Grant No.	Name of Project	Approved Project Cost	GoI Grant Sanctioned	Additional Incentive (GoI Grant)
G1581001	RDSS Smart Metering Works	2255.76	338.36	20.74
G1584S01	RDSS PMA Grant for Smart Metering Works	8.46	5.08	NA
	Total	2264.22	343.44	20.74
G1582001	RDSS Loss Reduction Works	1243.83	746.30	NA
G1584L01	RDSS PMA Loss Reduction Works	18.66	11.19	NA
	Total	1262.49	757.49	NA
	Grand Total	3526.71	1100.93	20.74*
Additional Incentives in case of Smart Metering Works of Phase - I				

Store Purchase Section



SP section has ensured continuous & quality material flow for smooth working of UGVCL for the year 22-23. SP Section has published 25 Tenders for key materials for the completion of work in timely manner so that key material for various important schemes to should be available & All Targets to be achieved in time Also, for year the upcoming financial year 2023-24, 20 tenders has already been

floated & work under progress for & timely finalization of the same.

In total 140 applications has been received for vendor registration for HT/LT line erection and Transformer replacement.

SP section has starated Material Review with User section Regularly so that shortage of Materjal may be identified and timely material planning to be done.

Purchase Process

Registration of Vendor & Vendor Development Policy

Indent of Material from Technical/
User Section

Evaluation of bids in PQC stage

Analysis of Quantity to be purchased
after total availability

Technical Scrutiny of Bids
By QCC section

Tender published at n-Procure Website for
online tender / UGVCL website / News Papers

Opening of Price Bids of Technically
acceptable bidders

Online Submission within 21 days,
Bidder has to submit their bid through
online as well as physical Bid

Approval of Purchase Proposal &
issuance of LOA. On receipt of SD and
Agreement - AT is issued

Critical/Non critical Items

Critical Items :

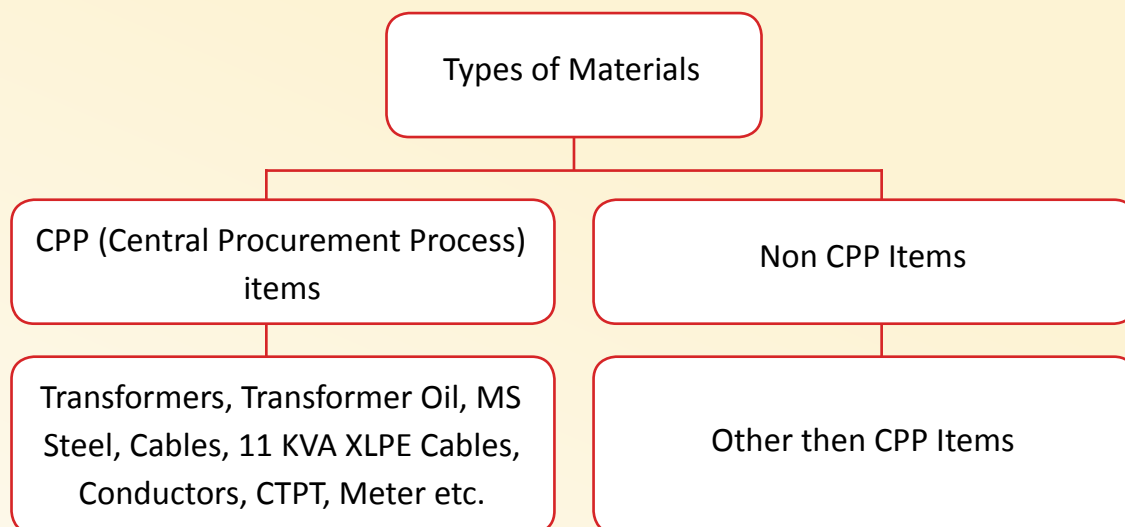
- All types of Meters and its accessories.
- CTPT Units
- Ring type CTs.
- Transformers and Transformer Oil
- 11 KV Insulators & above ratings
- All types of Conductors
- All types of Cables
- LT Breakers and Ring Main Unit

Non- Critical Items :

- More than 74 No. of Items other than above

Year	Purchase Value of Critical Items (In Crs)
2013-14	163
2014-15	405
2015-16	150
2016-17	321
2017-18	215
2018-19	288
2019-20	440
2020-21	240
2021-22	486
Total	2708

CPP & Non CPP Items



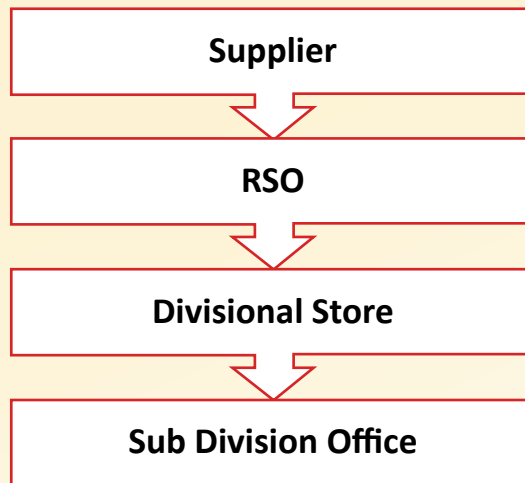
- GUVNL rotationally authorize each DISCOM to take responsibility for inviting and finalizing tenders for CPP items on behalf of all DISCOMs.
- Tender for Non-CPP items are invited and finalized at individual DISCOM.

Disposal of Scrap

Year	Scrap Disposed in Amt Rs Cr.
2013-14	3.98
2014-15	7.06
2015-16	0.91
2016-17	0.40
2017-18	0.40
2018-19	20.99
2019-20	7.77
2020-21	10.71
2021-22	10.33
Total	62.55

- Previously, huge quantum of scrap items were lying with different store. Revise proposal for rate of scrap item is approved by Competent Authority in May-18.
- All Scrap items are sold and space constraint for new material reduced.
- Revenue Enhancement
- Reduction In Inventory

Flow of Material



- Each Circle is having one Regional Store Office.
 - (1) Narol (Sabarmati Circle)
 - (2) Mehsana (Mehsana Circle)
 - (3) Palanpur (Palanpur Circle)
 - (4) Limbhoi (Himatnagar Circle)
- All Division offices are having one Divisional Store Office except where RSO is existing in same Head Quarter.

Quality Control Cell

As per the approval of the competent authority “A Quality Control Cell” is created for UGVCL for maintaining the quality of goods purchased by the SP section and to avoid deviation in the quality of actual goods supplied from the year 2013.

Quality Control Cell is concerned that the material performs as desired and that its use delivers benefits too. It is concerned with imparting proper quality performance of the goods.

Initiative Web-based portal for performance for Meter, Scrutiny of acceptance report -39 Nos. lacuna found, Sampling criteria for audit testing is tightened considering the quality concept, Vagarious physical verification of lot received - 5 Nos. lacuna observed, Audit testing of additional items- PVC Rigid pipe, CI Earthing Plate, SMC LTDB, plastic seals, XLPE Private Cables and Printing material, Training for inspectors (Theoretical + Practical) at ERDA, Vadodara is finalized for up to mark know-how.

Challenges

- Balancing with quality and material flow
- Limitation of Inspectors



- Price Vs. Quality
- Hurdles/Issue raised by Supplier

Roads Ahead

- Web-based Portal for the performance of all materials
- In-house material testing on PPP model
- Regular training to inspectors
- Enhancement of production process of the supplier
- Discussion Forum of stack holders.

Function of QC Cell

Deputation of inspector for material inspection

Scrutiny of inspection report

Sampling of Material for Audit testing

Testing of Material at NABL Lab

If the material fails, the whole lot is considered as rejected.
The penalty is decided by the Committee.

Year-wise Audit testing carried out at ERDA

Year	ERDA Material						ERDA Transformer					
	No. Of Lot			No. Of Sample			No. Of Lot			No. Of Sample		
	Pass	Fail	Total	Pass	Fail	Total	Pass	Fail	Total	Pass	Fail	Total
2015	181	37	218	2872	288	3160	214	16	230	858	17	875
2016	188	17	205	2170	112	2282	145	11	156	488	12	500
2017	54	10	64	93	11	104	51	1	52	51	1	52
2018	175	9	184	208	9	217	104	2	106	105	2	107
2019	346	4	350	351	5	356	302	11	313	302	11	313
2020	304	6	310	327	6	333	253	8	261	253	8	261
2021	256	10	266	511	6	517	267	17	284	310	17	327
Total	1504	93	1597	6532	437	6969	1336	66	1402	2367	68	2435

Year-wise Audit testing carried out at EQDC, ATIRA & Other Lab

Year	EQDC Cable					
	No. Of Lot			No. Of Sample		
	Pass	Fail	Total	Pass	Fail	Total
2015	112	6	118	924	8	932
2016	66	5	71	538	5	543
2017	39	1	40	39	1	40
2018	61	5	66	61	5	66
2019	223	13	236	223	13	236
2020	135	5	140	137	6	143
2021	199	8	207	209	8	216
Total	835	43	878	2131	46	2176

Year	ATIRA, Hi-Tech lab (SBT) & Other LAB					
	No. Of Lot			No. Of Sample		
	Pass	Fail	Total	Pass	Fail	Total
2020	55	9	64	1338	17	1355
2021	49	4	53	856	4	860
Total	104	13	117	2194	21	2215

UGVCL - Consumer Oriented IT Applications

Consumer Care Centre

Consumer Portal

SMS Gateway

WhatsApp Complaint Booking

E Gram collection

Online Bill Payment

Urja Mitra

Utility IT Applications

AT&C loss System

Automatic Meter Reading

Consumer Monitoring System

Power Management System

GPRS Billing

Helpdesk support system

SMS Gateway

Vigilance system

Utility ERP Implementation For Day to Day working

**Human Resource Management
System**

**CRM-Consumer Relationship
Management**

Payroll

**EAM-Enterprise Asset
Management**

Accounts Payable & Receivable

Inventory For Material

HT & LT Billing

Purchase & Project

Fixed assets, General Ledger

Quality Lab

Benefit Of IT Applications

Utility

- Billing Analysis
- Feeder & DTC wise loss Analysis
- Faulty Meter Analysis
- Remote Meter Reading
- Daily Distribution activity Analysis
- Saving of Time & Pin Point Hammering

Consumer

- Online Bill Payment
- E-gram Cash Collection
- Single window Consumer Care Centre
- Improve Power Reliability
- Information of Outage in advance
- Company information on Website
- Complaint and consumer details on WhatsApp

Consumer Portal

Consumer can..

- Apply for New connection
- Apply for load change
- Payment facility
- Complaint Booking & Tracking
- Online Bill view
- Online Payment through Net banking, Credit card, Debit card etc

The screenshot displays the Uttar Gujarat Vij Company Limited (UGVCL) Consumer Portal. The header features the UGVCL logo and the company name. A navigation bar includes links for Home, Sign Up!, Forgot Password?, Forgot Username?, Quick Online Pay, Payment Status, New Complaint, and Complaint Status. The main content area is divided into several sections: a large image of hands holding a sapling, a Login section with fields for Username and Password, a Quick Links section with buttons for Quick Online Pay and Payment Status, and a News Corner section with a list of news items. The footer contains logos for (n)Procure, Customer Care, Service Request, and e-Shiksha, along with a Support Chat section and a call number.

UTTAR GUJARAT VIJ COMPANY LIMITED

Home Sign Up! Forgot Password? Forgot Username? Quick Online Pay Payment Status New Complaint Complaint Status

Login

Username Remember Me

Password Login

New User? [Register Now!](#)

Quick Links

Quick Online Pay Payment Status

About Company

Uttar Gujarat Vij Company Limited is one of the pioneer Power Distribution Utilities in India in the Electricity Industry. Incorporated under the Companies Act, 1956 in Sept-2003 as a result of unbundling of erstwhile Gujarat Electricity Board pursuant to Power Sector Reforms initiated by the Central and State Governments, the Company became commercially operational since April-2005. The Company is a wholly-owned subsidiary of Gujarat Urja Vikas Nigam Limited (A Govt. of Gujarat Undertaking).

[More...](#)

What's New

- New Tariff Plan
- Bill Calculator

News Corner

1 UGVCL-ERDA establish testing lab at Ahmedabad.

Related Links Please Select Link

Planned Outage Please Select Planned Outag

SUPPORT CHAT

CALL NOW 1-800-233-155335

Accounts & Finance

The power sector, globally as well as in India, is undergoing a sea change. This is visible in the increasing deployment of Clean Renewables sources of energy, Corporate Governance and Financial Stability.

The Government of India is transforming the power sector by incorporating new business models and clean energy portfolios that can modernise the grid and improve the sector's financial and operational performance.

Recently, the Government of India has approved the Revamped Distribution Sector Scheme (RDSS) to help DISCOMs to improve their operational efficiencies and financial sustainability by providing result-linked financial assistance to DISCOMs to strengthen supply infrastructure based on meeting pre-qualifying criteria and achieving basic minimum benchmarks which includes timely publishing of quarterly un-audited accounts, timely publishing of audited annual accounts, no new regulatory assets, advance payment of subsidy etc.

To avail the financial assistance under the RDSS, UGVCL's Account team has time to time prepared and got approved quarterly accounts for the FY 2021-22 (previously on yearly basis).

Further, UGVCL recorded the highest ever turnover i.e. Rs.15,000 crores (approx.) during FY 2021-22.

For better operation performance of the Company, Account Team has made regular follow up with the field offices and achieved lowest debit arrears among all Gujarat DISCOMs i.e. Rs.12.51 crores and 4.27%. UGVCL has also achieved 34.29% & 77.61% online transaction count and collection respectively which helped in managing working capital of the company resulting in lower interest cost. Further, UGVCL is still putting its efforts to encourage consumers to make more and more online payment.

UGVCL is also able to get its three PFC loan (RAPDRP-A, RADPRP-B & SCADA-A) converted into grant by achieving all the parameters laid down by PFC. Now, only Rs.9.51 crores (as on 31-03-2022) lying as loan from PFC which is a strong step towards debt free company.

Power Finance Corporation has carried out rating of all 52 DISCOMs (Public as well as Private DISCOMs) through Mckinsey Agency in India for the FY 2020-21. Out of 52, UGVCL stood on 5th rank (got 91.3 marks which is provisional). At last, we have decided to put in extra efforts which make us stronger for tomorrow.

Category wise Consumers

Category	31.03.2015	31.03.2016	31.03.2017	31.03.2018	31.03.2019	31.03.2020	31.03.2021	31.03.2022
Residential	2432337	2520821	2612174	2672013	2764417	2849251	2926307	3016118
Industrial								
LT	295632	315654	335774	350530	366645	386339	407171	428536
HT	2949	3229	3511	3755	4153	4486	4827	5297
Total Industrial	298581	318883	339285	354285	370798	390825	411998	433833
Agriculture	283432	308607	332618	347746	364969	380956	398472	411873
Others	47961	51894	55777	57938	61801	64305	66354	68472
Total	3360892	3519088	3679139	3786267	3849758	3685337	3803131	3930296

% Consumer Growth

Category	% Growth 31.03.16	% Growth 31.03.17	% Growth 31.03.18	% Growth 31.03.19	% Growth 31.03.20	% Growth 31.03.21	% Growth 31.03.21
Residential	3.64	3.62	2.29	3.34	3.06	2.70	3.07
Industrial							
LT	6.77	6.37	4.39	4.39	5.37	1.05	5.25
HT	9.49	8.73	6.95	9.58	8.02	1.08	9.74
Agriculture	8.88	7.78	4.55	4.72	4.38	1.05	3.36
Others	8.20	7.48	3.87	6.25	4.05	1.03	3.19
Total	4.50	4.36	2.76	1.64	3.42	1.03	3.19

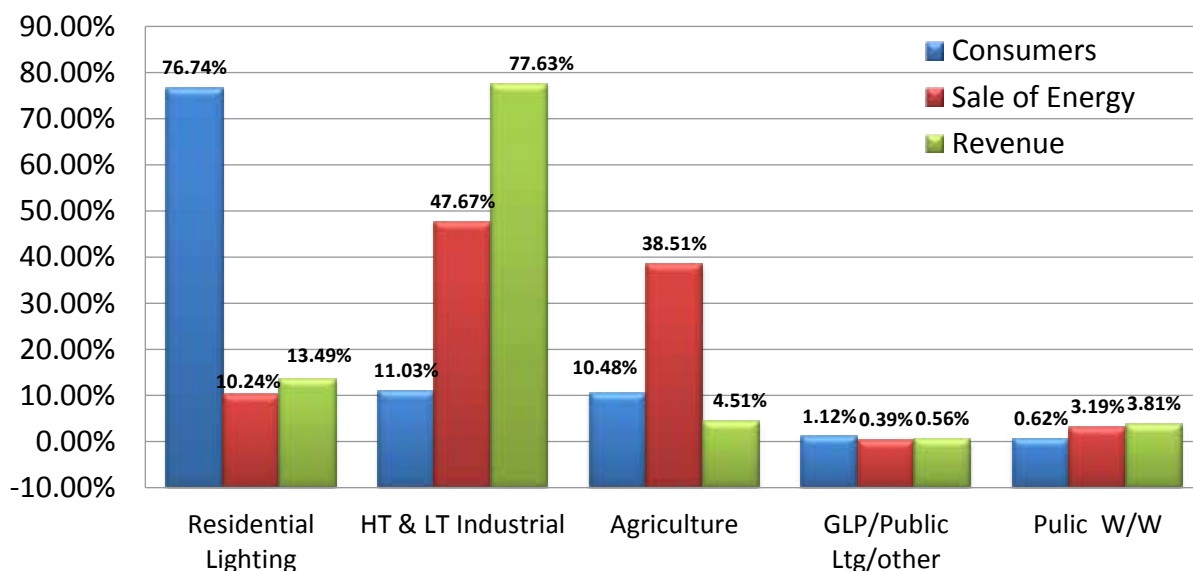
Collection in Crores

Sr. No.	Year	UGVCL Window Collection		E-Payment		Other		Total
		Rs/-	%	Rs/-	%	Rs/-	%	Rs/-
1	2014-15	3570.03	60.94	1413.25	24.12	875.43	14.94	5858.71
2	2015-16	4030.77	60.83	1632.64	24.64	936.19	14.13	6626.60
3	2016-17	4767.42	64.96	1791.95	24.42	779.23	10.62	7338.60
4	2017-18	5293.81	63.53	2276.33	27.32	762.93	9.16	8333.07
5	2018-19	3790.21	40.02	5256.34	55.50	424.22	4.48	9470.77
6	2019-20	2474.84	24.22	7363.69	72.07	378.58	3.71	10217.11
7	2020-21	2297.81	23.52	7223.87	73.94	247.75	2.54	9769.43
8	2021-22	2378.55	20.44	9030.35	77.61	226.91	1.95	11635.81

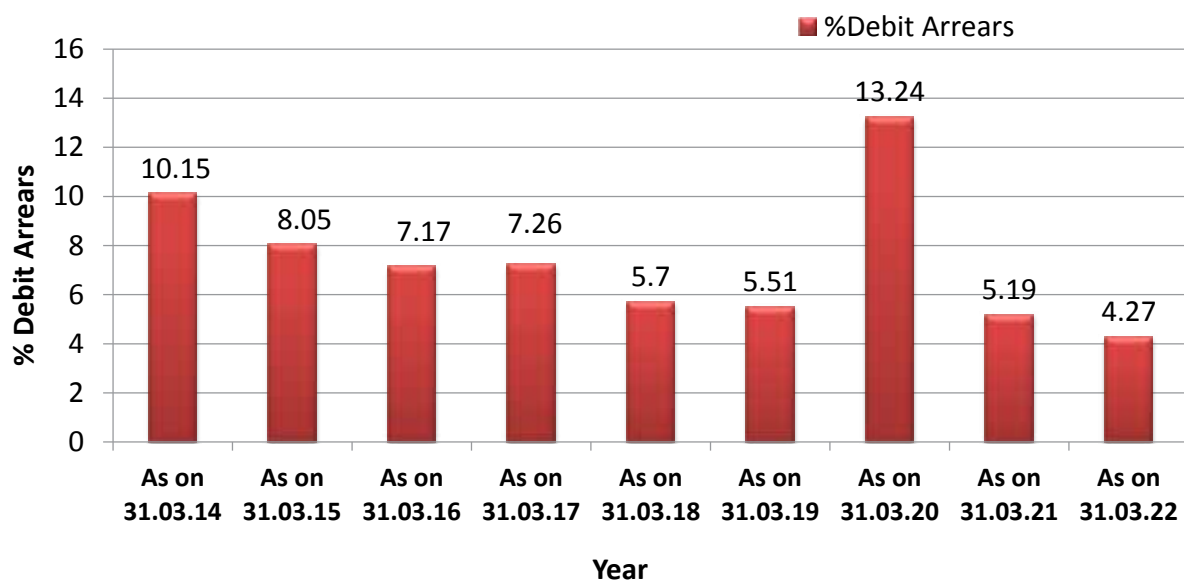
Consumption Pattern

Category	FY: 2006-07				FY: 2021-22			
	Consumers (Nos.)	% Share	Consumption (Mus)	% Share	Consumers (Nos.)	% Share	Consumption (Mus)	% Share
Residential	1569817	77.60	835	8.71	3016118	76.74	2680	10.24
MSI	227269	11.23	836	8.72	428536	10.90	2195	8.38
HT Ind.	1441	0.07	1821	18.99	5297	0.13	10285	39.29
Agricultural	207577	10.26	5700	59.44	411873	10.48	10081	38.51
Water Works	10419	0.52	366	3.82	24546	0.62	836	3.19
Public Lighting(GLP)	6509	0.32	32	0.33	43926	1.12	103	0.39
Total Consumers	2023032	100	9590	100	3930296	100	26180	100

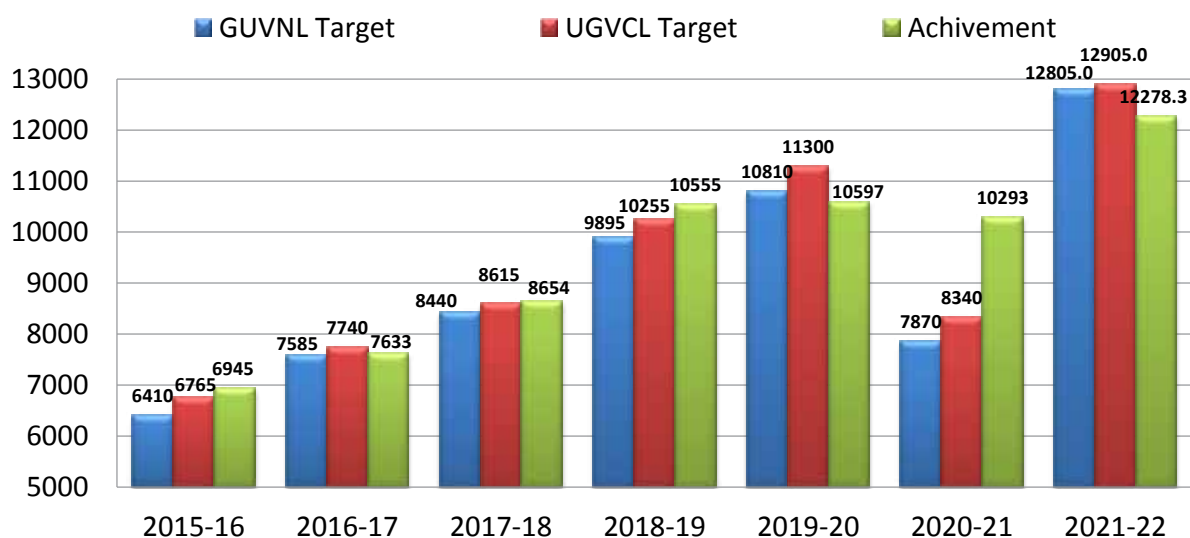
% Share : Category wise Consumer, Energy sale & Revenue (2021-22)



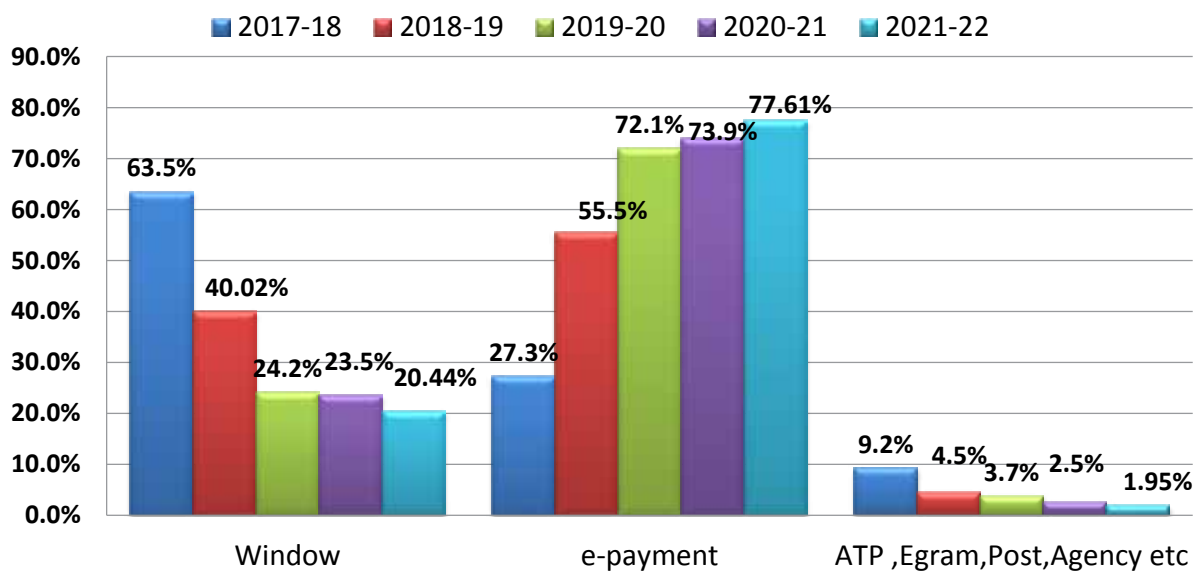
% Debit Arrears



Collection Achievement (In Cr.)



Mode of Energy Bill Collection from 2016-17 to 2020-21



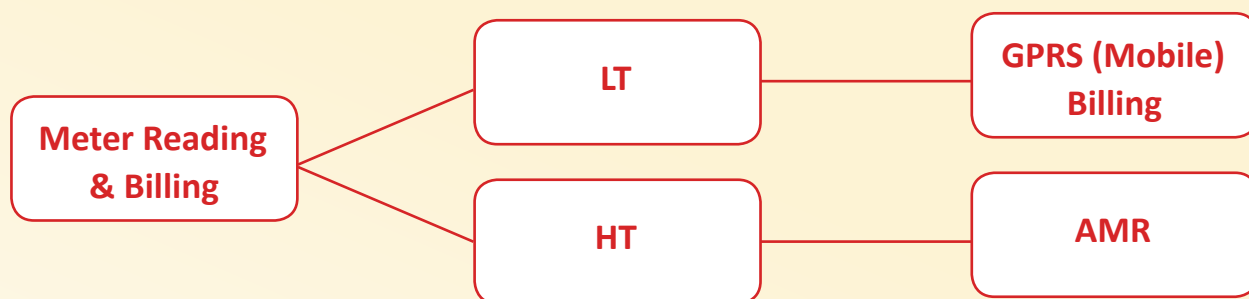
Financial Data

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Total Income (in Cr.)	9313.44	10270.83	12356.21	13054.58	12,945.03	15,294.51
Total Expenses (in Cr.)	9226.13	10155.13	12304.54	12915.59	12,811.39	15,184.05
Net Profit (Before Tax) (in Cr.)	87.31	115.70	51.67	138.99	133.64	110.46
Net Profit (After Tax) (in Cr.)	66.55	101.32	36.62	116.60	74.29	99.39
Cost to Serve (Rs/Unit)	4.82	4.88	5.35	6.20	5.44	5.84
Average Revenue Realization Income (Rs/Unit)	4.86	4.93	5.37	6.26	5.50	5.88
Gap (Rs /Unit)	-0.04	-0.05	-0.02	-0.06	-0.06	-0.04
*The details for the FY 2021-22 are provisional & un-audited.						

Best Practices

- Timely starting of Billing for New Consumers.
- Timely Billing within Schedule of Billing Programme.
- Consumer wise Monitoring for arrears recovery.
- Arranging Lok Adalat for disposal & recovery arrears from PDC Consumers.
- Various Level of Audits i.e. Internal Audit, Statutory Audit, Cost Audit, Tax Audit, Secretarial Audit, Audit for Electricity Duty, Audit by GERC, Audit by C&AG.
- Cost-reflective tariffs
- Timely subsidy by State Govt.
- Automatic pass-through of quarterly increase in fuel & power purchase cost
- 100% collection efficiency
- Rationalization of power purchase cost entailing huge savings

Meter reading and Billing



Note :-

In case of **LT Billing**, only meter reading is taken by Meter readers and punched in the billing system. Then after, Billing system calculates the bill amount. Accordingly eliminates the chances of Manual Error while billing.

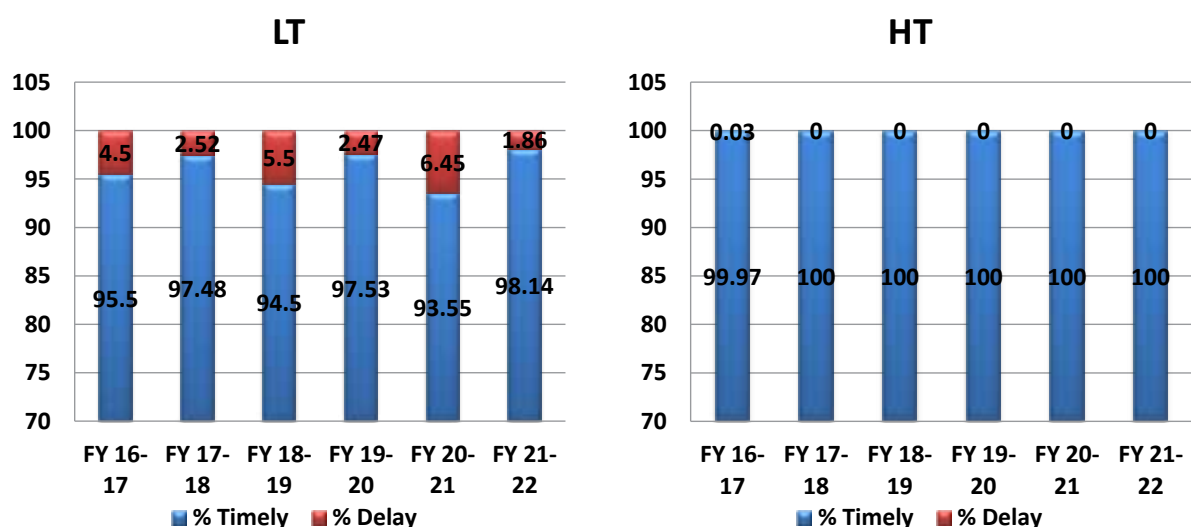
In case of **HT Billing**, the billing is done through AMR by which even meter reading is done by system.

Various Billing Cycles used in billing

Monthly :- 10 HP and above, Demand based consumers, HT etc.

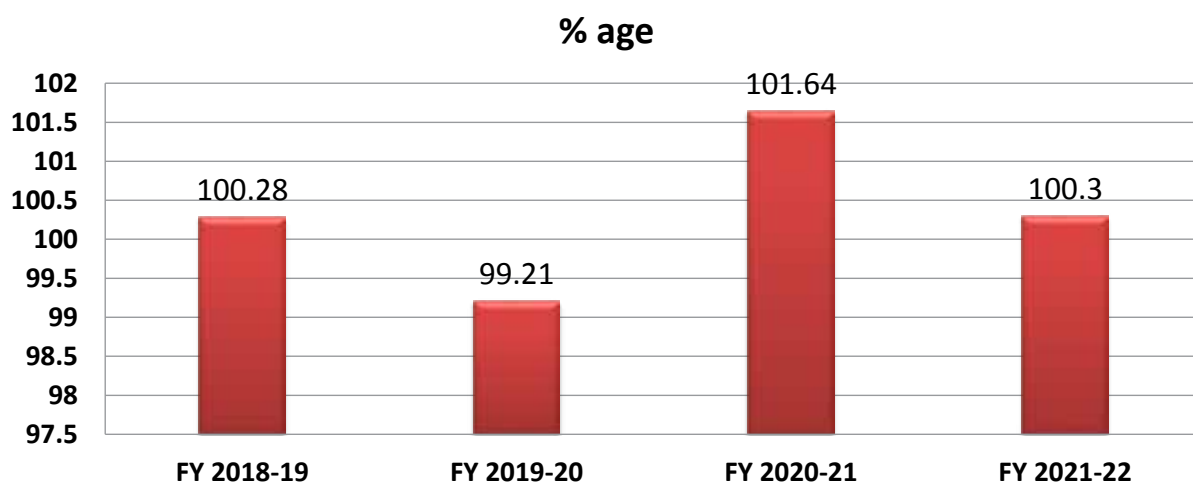
Bi-Monthly :- Below 10 HP, Residential, Agriculture etc.

Billing Efficiency (% age)



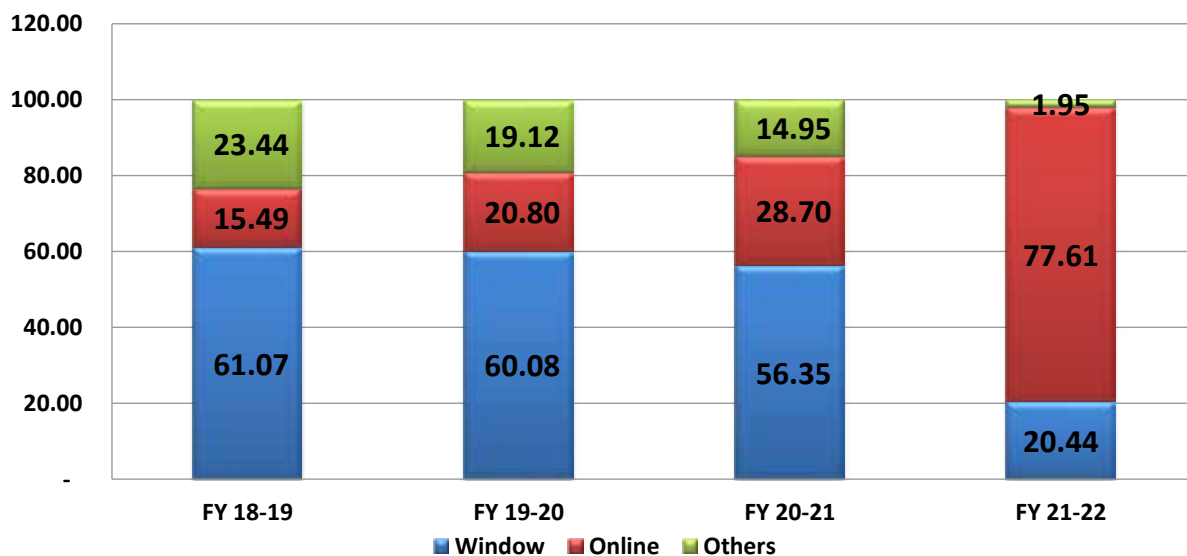
During the FY 2020-21, on account of prevailing COVID-19 Pandemic situation, the billing activity got hampered

Collection Efficiency (% age)



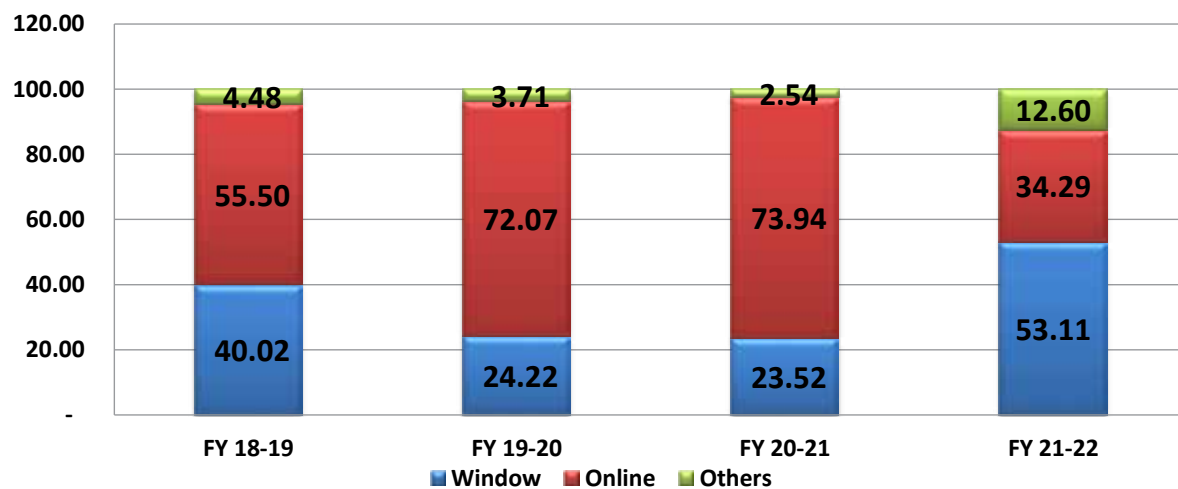
During the FY 2019-20, Govt. of Gujarat has granted extension for payment of energy dues for the month of March and April-20 without DPC upto 30-May-20 which got resulted in reduced collection efficiency for the FY 2019-20

Mode of Energy bills collection - % Count



Others include ATP Kiosk, Pvt. Agencies, E-Gram, Post offices etc.

Mode of Energy bills collection - % Rupees



Others include ATP Kiosk, Pvt. Agencies, E-Gram, Post offices etc.

HR at a Glance

Human resource management deals with the effective management of all the employees of an organisation in order to raise it to an advantageous position against its competitors. The rapidly changing domain of business comes with the development of new challenges for human resource management in any enterprise which it has to face while ensuring the optimum development of the company.

The recruitment process constitutes another common human resource management challenge, due to the fact that we cannot be sure that we have hired the right candidate until they work for a period of time in our company. Hiring the right candidate becomes difficult also due to the expedited hiring process consisting of Written Test/Online Test or interview. The best way to meet this challenge is to screen the candidates effectively and accurately to determine whether their skills or experience matches with the job profile or not. This can be ensured through more in-depth interviews, aptitude tests as well as other related recruitment rounds that can be added for the hiring process of a profile thus to make sure that the best candidates

for a particular job get hired.

As the demand for highly trained professionals at the 'top of their game' grows, it becomes a challenge for HR to attract the best talents. HR should pay attention to how well an employee fits into the organisation; along with the job role. Factors like an employee's dedication, work ethic, and fit in our company are more crucial than any other skills he/she might have at present.

The Key function of Team HR at UGVCL are as mentioned below.

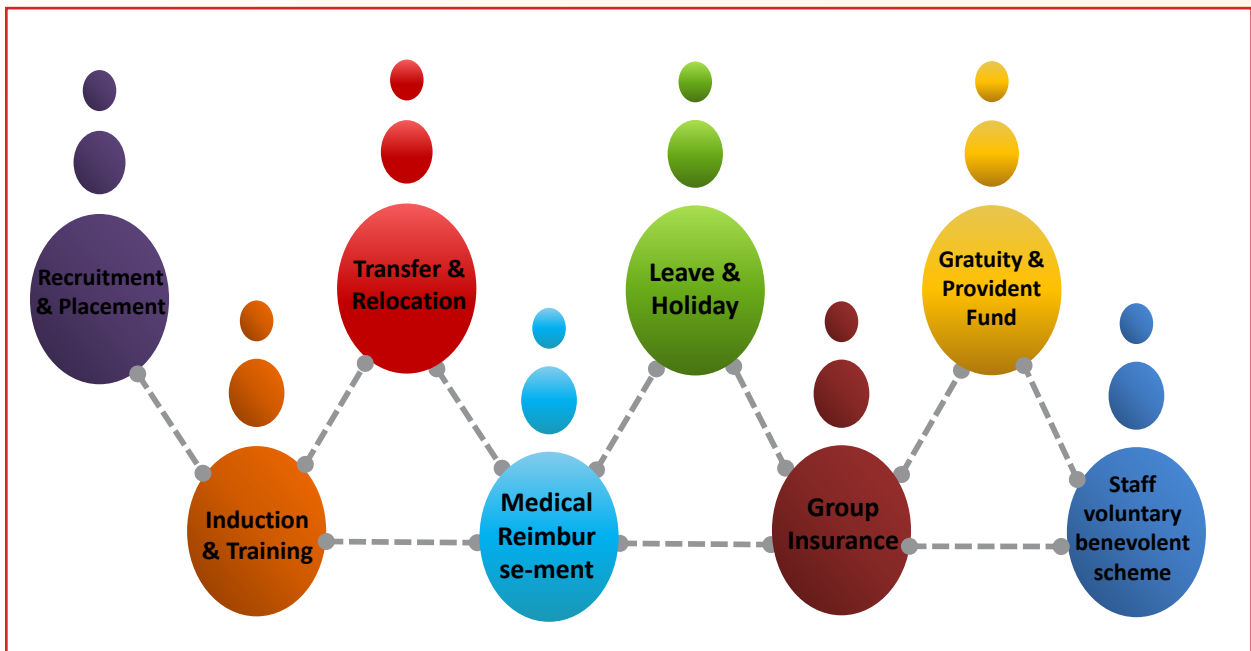
- Development of Leadership/
Developing the Leaders of Tomorrow
- Building a Culture of Continuous Learning.
- Training and Development
- Retaining Top Talents
- Succession Planning
- Performance Management
- Compensation Systems
- Looking After Health and Safety
- Zero Accident concept
- Conducive Work Environment
- Adapting to Changing Technology & Embracing Change with an Open Mind
- Compliance with Ever-changing Laws and Regulations
- Globalization

HR: Objective / Essence

- Focus on “People first” Initiatives
- Creating Positive environment within the Organisation
- Assisting employees for work performance through Training & Development
- Making a Good Team Work to achieve the results of the Organisation



HR Functions



HR : Career Progression



- Junior Engineer → Deputy Engineer → Executive Engineer → Supdt.Engineer → Addl. Chief Engineer → Chief Engineer.
- Junior Assistant → Senior Assistant → Dy.S.A → Supdt. Account → Account Officer → Dy. Controller of Account → Controller of Account → Chief Finance Manager → General Manager (Finance).
- Junior Assistant → Senior Assistant → Dy.S.Est → Executive HR → Assistant Secretary → IRP/ PO → Dy.General Manager → Addl. General Manager → General Manager (HR).
- Electrical Assistant → Assistant Line Man → Line Man → Line Inspector.

HR : Employee Strength

Class	Sanctioned	Filled up	Vacancy	% Vacancy
I	361	348	13	3.60
II	568	550	18	3.17
III	4288	4211	77	1.80
IV	4233	4158	75	1.77
Total	9450	9267	183	1.94

Class	Sanctioned	Filled up	Vacancy	% Vacancy
Technical	5591	5513	78	1.40
Non- Tech	3859	3754	105	2.72
Total	9450	9267	183	1.94

HR : Induction & Training

Induction Training :

- All the entry level employees has to given Induction training for better knowing of organisation, its practice and day to day working.
- To establish the framework for good employee involvement.
- Enhance the knowledge and skills of employees.

Regular Training :

- Outside Workshops / Training programs for regular employees for development of New Subject / Scheme / Projects etc.
- Per Person Yearly 4 Man days of all Employees for training impart- Achieved 93% in FY 2017-18

Infrastructure for Training :

- **GETRI Vadodara** : An autonomous training and research Institute promoted by GUVNL.
- **GEKC** : Gujarat Energy Knowledge Centre located at Mehsana & Sabarmati facilitates various training programs for the employees.

Civil Section

- We have constructed around 80 new office buildings.
- 8 nos. of new offices constructed recently: Palanpur CO & DO, Deesa D.O.-1 & 2, Deesa Rural-1 sdn, Dantiwada sdn, Sami sdn, Canteen – Gymnasium & Recreational club at Mehsana campus
- 5 new offices under construction: Dhansura sdn, Sadarpur RSO, Palanpur-2 DO store at Vadgam, Patan City-2 & Rural sdn
- Renovation work recently carried out in 10 nos. of various office buildings recently: Kalol DO, Gambhoi sdn, Bayad sdn, Idar DO, Talod DO store, Himatnagar DO store, Dhanera-1 sdn, Sidhpur DO & Rural sdn, Lodra sdn, Jangral sdn
- Renovation work under progress in 6 various offices: Vadali sdn, Choriwad sdn, Visnagar sdn, Kadi DO, Mehsana H/W & Ind sdn
- We have provided & commissioned new modular furniture in around 96 new as well as renovated office buildings.
- 12 offices provided with modular furniture recently: Palanpur C.O. & D.O.-1, Deesa D.O. - 1 & 2, Deesa Rural-1 sdn, Bavla (Ind) sdn, Rakhiyal sdn, Bhiloda D.O., Modasa D.O., Kanodar sdn, Dhanera-1 sdn, Dantiwada sdn
- New civil construction works tenderized: Bopal DO, Shela & Shilaj sdn at Ambli, Sabarmati Divisional store at RSO Narol, Modular furniture for Sami & Dhansura sdn
- Civil renovation works tenderized: Dhandhuka sdn, Modasa DO, Modasa Rural & Town sdn
- Water harvesting system work under progress at Himatnagar C.O. campus.
- 2 nos. of Trunk based Underground Power Distribution network project completed during last year: BOL women's Park, Sanand, Bhagapura GIDC
- 1 no. of Trunk based Underground Power Distribution network project under progress: BOL GIDC-II, Sanand
- 2 nos. of new approved offices hired: Radhanpur Rural-2 sdn, Rah sdn
- Against around 9 nos. of 8M PSC pole suppliers in 2006-07, we have raised 23 PSC pole suppliers at present by encouraging & developing new PSC pole vendors across UGVCL.
- Procurement of PSC poles since 2005-06 has increased several fold with current annual procurement reaching approximately 2,30,000 in 2021-22.

Initiative taken by Civil Section

- New land acquired / finalized : Ambli, Tragad, Narol RSO, Ranasan Sdn, Talod DO & Talod-1 Sdn & Talod Dn Store, Meghraj1&2, Tharad-2 sdn, Chandisar sdn, Vinzol
- 7 nos. of new building constructed: Bavla (I) sdn, Bhiloda Dn, Kanodar sdn, Consumer care center-Viramgam, Deesa Do-1 & 2, Dantiwada sdn, Sami sdn
- 5 nos. of new building approved and under construction: Patan City-2 & Rural sdn,, Dhansura sdn, Palanpur RSO at sadarpur, Palanpur DO-2 store at Vadgam, MT Lab Bopal
- Renovation / maintenance / Enhancement work carried out in 23 nos. of various office buildings
- Renovation / maintenance / Enhancement work under progress in 7 nos. of various office buildings
- 2 no. of Turnkey based Underground Power Distribution network project carried out: Defence Parks, Ukardi& Bhagapura GIDC
- 1 nos. of Turnkey based Underground Power Distribution network project under progress: BOL GIDC-II, Sanand.
- 6 nos. of Newly approved office buildings hired: Santej sdn, Vij Suvidha Kendra-Shankheshwar & Poshina section office, Radhanpur-2 sdn, Rah sdn, Changodar, Dholera MNF Staff Hiring bldg
- Modular Furniture Completed : Bhiloda Dn, Palanpur CO & DO, Rakhiyal, Bavla Ind, Deesa DO-1&2, Kanodar sdn
- Modular Furniture under Progress: Dantiwada sdn, Dhanera-2 sdn, Modasa DO

Civil Department : Function

- Construction/Renovation of office premises.
- Procurement, quality control & assurance as well as billing of PSC poles.
- Developing new vendors for supply of PSC poles & other civil materials.
- Testing of other structural steel products.
- Procurement, quality control & assurance of CC blocks.
- Provision of Modular furniture.
- Maintenance of UGVCL office buildings.
- Ensuring Cleanliness of R&C office.
- Hiring of Premises for office.
- Assisting in underground electrical networking.
- HBA Proposal scrutiny, certification & site verification.
- Executing & assisting various agencies regarding CIVIL related CSR activities.

Civil : Construction of New Building



**Construction of 66 nos.
New office Premises & 30 nos.
of Residential quarter
in last 10 year**

**Provided Modular
Furniture in 85 offices**



Civil : Renovated Offices



Renovation of 75 office building In 10 Year



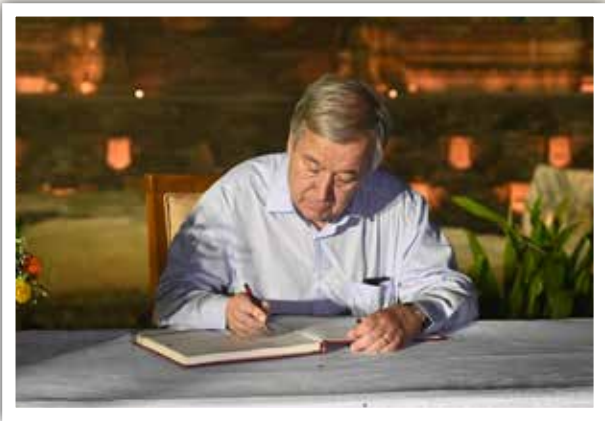
UGVCL :Various Issues and Challenges

- Nearby Torrent Power area in Ahmedabad & difficulty to meet exception of consumer without Underground Network.
- Agriculture consumption is about 39%.
- Water ground level is very low.
- Old Over head Network.
- Land Problem for laying of overhead network.
- Sustain the present level of T&D losses, TT/SF Index, TC Failure etc.
- Prompt consumer service in Rural area.



**Historical visit at
Modhera Sun Temple by
Hon'ble Prime Minister
Shri Narendra Modi and
Secretary General of the
United Nations António
Guterres**





Esteemed consumers of UGVCL can avail better service by using below mentioned power bill payment options

Why we should stand in line to pay bills?

E-gram

Through various collection agencies

In any Sub Divisional Office

Skip the Line... Come Online...

You can pay your electricity bill online through the following method

- Through Net Banking (Direct Bill Pay Facility).
- From www.ugvcl.com website.
- From the Banks' website.
- Through Bank of Baroda, HDFC Bank ATMs.
- BOB/ ICICI Bank Virtual Account Transfer bill amount through RTGS/NEFT. Visit at www.ugvclinfo/UGBILL/index.php (charges as per RBI guidelines).
- Through UGVCL Mobile App (<https://play.google.com/store/apps/details?id=com.mob.ugvcl>).
- Through e-Wallet / Cash Card / Rupay Card / Debit Card / Credit Card / Visa Bill Pay etc. (Payment made through Card will be chargeable).
- From portal.guvnl.in.
- Through UPI & Bharat QR Code.



Toll Free Number 19121 or 1800 233 155 335

Committed to Supply Continuous, reliable and quality power



UTTAR GUJARAT VIJ COMPANY LIMITED

CIN- U40102GJ2003SGC042906

Regd. & Corporate Office, Visnagar Road, Mehsana -384001

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