

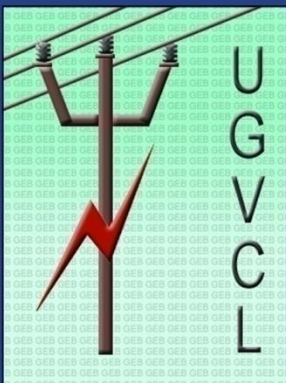


# UGVCL

## At a Glance 2019-20

### Uttar Gujarat Vij Company Limited

Committed to supply continuous, reliable and quality power



CIN – U40102GJ2003SGC042906

## Acknowledgement

**Guidance by:** Dr. Mahesh Singh, IFS, MD, UGVCL

**Published by:** Uttar Gujarat Vij Company Ltd., Mehsana

**Text by:** Shri J. K. Darji, Additional Chief Engineer (Tech)

**Edited by:** Shri Shailesh Naik, Assistant Manager, (Public Relations),  
Corporate Communication Cell

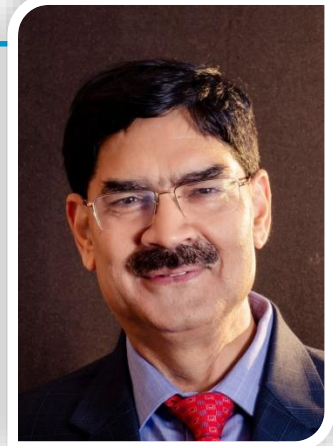
**Information by:** Technical Section, Account Section, HR Section, RE Section,  
Procurement Department

**Coordinated by:** Shri M. H. Pathan, Jr. Asst. Corporate Communication Cell

**Designed by:** Aalekhan.com

**Published Year:** 2020

## Message from Managing Director, UGVCL



### **My beloved UGVCL employees,**

Since last 15 years, UTAR GUJARAT VIJ CO. Ltd has been serving the northern part of Gujarat State, at all the faces of life, viz., social, economical, educational, environment and public related subjects.

The company has bagged 21 awards of National level and has set the benchmark and standards in the power sector, even for the others who are in race for excellence. It has made the entire array of the customers satisfied by serving them the best on the subjects of the vision, mission and the core values. It is worth here to take the note of the endeavours of the employees, who have earned the name and fame for the company throughout the nation, as the best DISCOM.

Nevertheless, the company has acknowledged the appreciable efforts and toils by the employees of the company by time to time. It will be worth to have a bird eye view observation of the activities carried out throughout the year. SHRI J K Darji, Addl. C.E has made a PPT on the same, going through which, I could have a detailed information about the various activities being carried out at the grass root level.

While going through, I did feel it necessary to get it published in a book form, not only to make a documentation of the same, but also, a guide to the pathway and a roadmap for the years tomorrow. I am sure, this book shall serve as a light house for the administrators in hierarchy, at the times to come. In future, when the history of the company shall get book-bound, this will be a page carved in gold.

In the end, I personally congratulate the employees who have prepared this booklet, taking note of their quality efforts.

A handwritten signature in black ink, appearing to read 'Mahesh Singh'.


**Mahesh Singh, IFS  
MD, UGVCL**

## Message from Chief Engineer (Operations), UGVCL

The Uttar Gujarat Vij Company Ltd. (UGVCL) started its journey in 2005 and since its inception, the company has been progressing at a satisfactory pace.

Backed with committed efforts of all the employees and officials, the company has been able to set high standards and earn a name as a leading power distribution company of the entire nation. I feel honoured to lead such a prestigious company as a chief engineer, under the valuable guidance of our Hon'ble managing director.

The performance information for the year 2019-20 compiled in this booklet will be a guide for us to do better next year. I hope that it will provide a wonderful opportunity for the employees of the company to prove their efficiency and be a pillar of the company's historic operations. Good luck to all for better performance.



**P. B. Pandya,**

**Chief Engineer (Operations), UGVCL**



## Message from Add. Chief Engineer (Tech), UGVCL

Under the leadership of Hon'ble Managing Director Shri Mahesh Singh and Chief Engineer (Operations) Shri P. B. Pandya, the Uttar Gujarat Vij Company Ltd. (UGVCL) is excelling in its operations. I had the opportunity to present a presentation on the operations of company for the year 2019-20 to the Hon'ble Managing Director. Expressing his appreciation for the carefully compiled data, he suggested to convert the presentation into a booklet form.

It gives me immense pleasure to present this booklet, developed with wholehearted cooperation of the company officials and the corporate communication cell.

This booklet will serve as a guide for the years to come. It will also provide a ready platform to update every year and build trust among our valued customers as well as among the government about our abilities and efficiency.



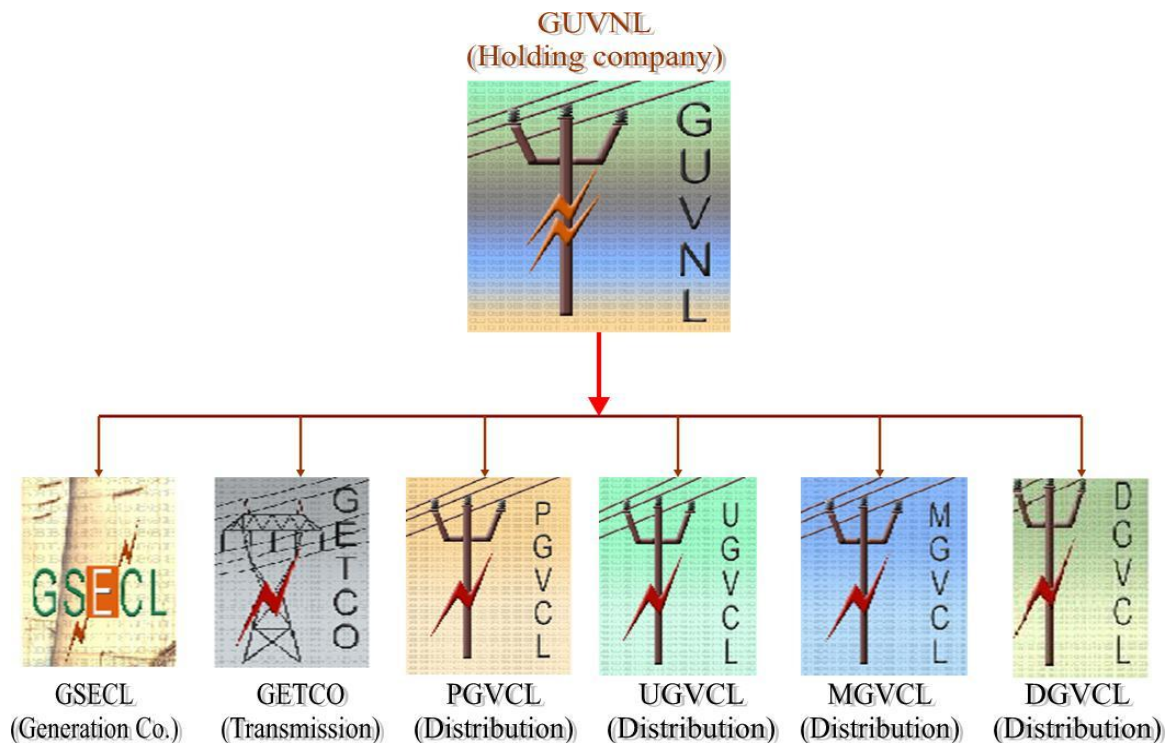
**J. K. Darji**

**Additional Chief Engineer (Tech), UGVCL**





## UGVCL: A subsidiary company of GUVNL



## UGVCL: Vision & Mission



### Vision:

- To be world class electricity utility, striving for the social and economic development of our region.

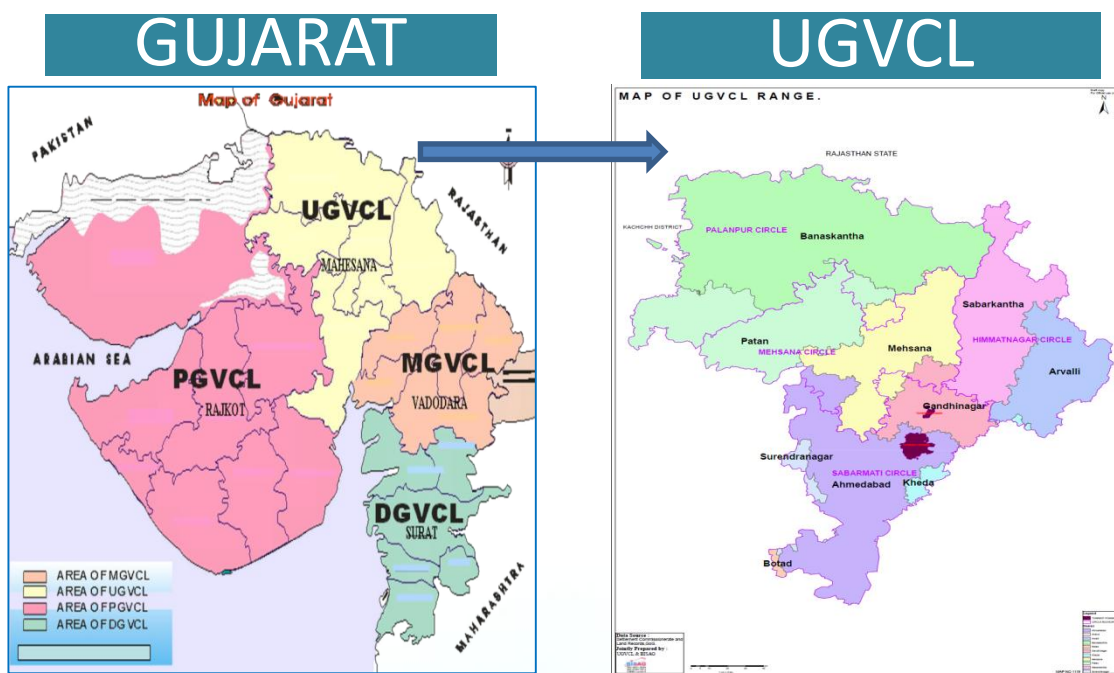


### Mission:

**“We meet the expectations of our customers and stakeholders by:**

- Providing a sustainable, affordable, safe and reliable electricity supply
- Providing prompt and efficient customer services
- Developing and incentivizing our employees
- Being the preferred equal opportunity employer
- Undertaking our business in an environmentally acceptable manner”

## UGVCL: Area



## UGVCL: Overview (As on 31.03.2020)

Area	Sq. Km	49,950
District Covered	No.	7+3 (Partly)
Town	No.	38
Village	No.	4,501
Population ( Census 2011)	No.	1,19,12,882
Circle	No.	4
Regional Store	No.	4
Division	No.	22
Sub-Division	No.	141+3(REC)

## UGVCL: Overview (As on 31.03.2020)

66 KV Sub-Station	No.	520
66 KV & 11 KV Feeder	No.	5610
HT Line	Km	111467
LT Line	Km	74779
Transformer Population	No.	315431
% Transformer Failure (April-19 to Mar-20)	%	7.52
Total Consumer	No.	3685337
Employee Sanction (Technical)	No.	5539
Employee Sanction (Non-Tech)	No.	3823

## Consumer and Feeder Profile (As on 31.03.20)

Consumer & Load Mix		
Category	Nos.	Load in MW
Residential	2849251	3173.04
GLP	25294	67.78
LTMD & NRG	386339	2139.55
HT	4486	2632.28
Water Works	22789	423.42
Public Lighting	16222	36.15
Agricultural	380956	5591.05
Total Consumers	3685337	14063.26

Feeder Mix	
Category	Nos.
EHT	86
HT	261
INDUSTRIAL	374
URBAN	336
GIDC	51
JGY	914
AG	3116
SST	472
Total Feeders	5610

## UGVCL Parameter (As on 31.03.20)

T & D Losses (2019-20)		
MUs Sent Out (19-20)	MUs	25137.733
MUs Sold Out (19-20)	MUs	23968.052
MUs Difference	MUs	1169.681
% T&D Loss – Overall	%	4.65
% T&D Loss – Non-AG	%	5.39
% T&D Loss – AG	%	3.49
Power Reliability (2019-20)		
MAIFI	Indices	3.67
SAIFI	Indices	2.25
SAIDI	HH:MM	2:57
TT Index	Per 100 KM	14.00
SF Index	Per 100 KM	3.43

## UGVCL Parameter (As on 31.03.20)

Account		
Annual Assessment	In Rs. Cr.	11855.84
Annual Collection	In Rs. Cr.	11761.83
Collection Efficiency	%	99.21
% Debit Arrears	%	13.24
Billing Efficiency (HT)	%	100
Billing Efficiency (LT)	%	97.53
PDC Arrears	In Rs. Cr.	58.00
Annual Turn Over (18-19)	In Rs. Cr.	12356.21
Profit after Tax (18-19)	In Rs. Cr.	36.62
Cost to Serve (18-19)	Rs. / unit	5.35
Average Revenue Realization(18-19)	Rs. / unit	5.37

# **UGVCL AWARDS**



**UGVCL bags total **22** Nos. of  
National Awards Since 2007**



# UGVCL Awards



**2007 - Bronze Shield for  
'Meritorious Performance  
in Electricity Distribution'  
during 2005-06 by  
Government of India**

**National Award for 'Excellence  
in Cost Management 2007'  
by ICWAI**



**2009 - First Prize  
'Excellence in Rural  
Electrification ' in IEEMA  
Power Awards-2008**

# UGVCL Awards



**2009 - Winner of 2nd 'India Power Awards 2009' in recognition for overall utility performance in agriculture dominated area**

**2010 - Winner of ICWAI Good Performance Awards**



**2010 - Winner of 3rd India Power Awards 2010**

# UGVCL Awards



**2012 - UGVCL receives  
Gold Shield for the year  
2010-11**

**2012 - UGVCL wins  
POWER LINE Award - 2012**



**2012 - UGVCL wins  
India Power Award -  
2012**



# UGVCL Awards



**2013 - UGVCL - one of the  
India's Greenest DISCOM**



**2014 - UGVCL gets IUKAN  
Award**



**2014 - UGVCL wins India  
Power Award-2014**

# UGVCL Awards



**2015 - UGVCL wins  
IPPAI Award 2015**

**2016 - UGVCL wins  
National Award for  
Excellence in Cost  
Management 2016**



**2016 - UGVCL wins India  
Power Award 2016**



# UGVCL Awards



**2016 - UGVCL wins  
CBIP Award**



**2017 - UGVCL  
wins IPPAI  
Award 2017**



**2018 - UGVCL Wins  
SKOCH Award**

# UGVCL Awards



**2018 - UGVCL wins ICC Award**

**2018 - UGVCL wins IPPAI Award**



**2019 - UGVCL wins PTC Excellence Award**

**2020 - UGVCL wins CBIP Award as best Performing Power Distribution Utility**



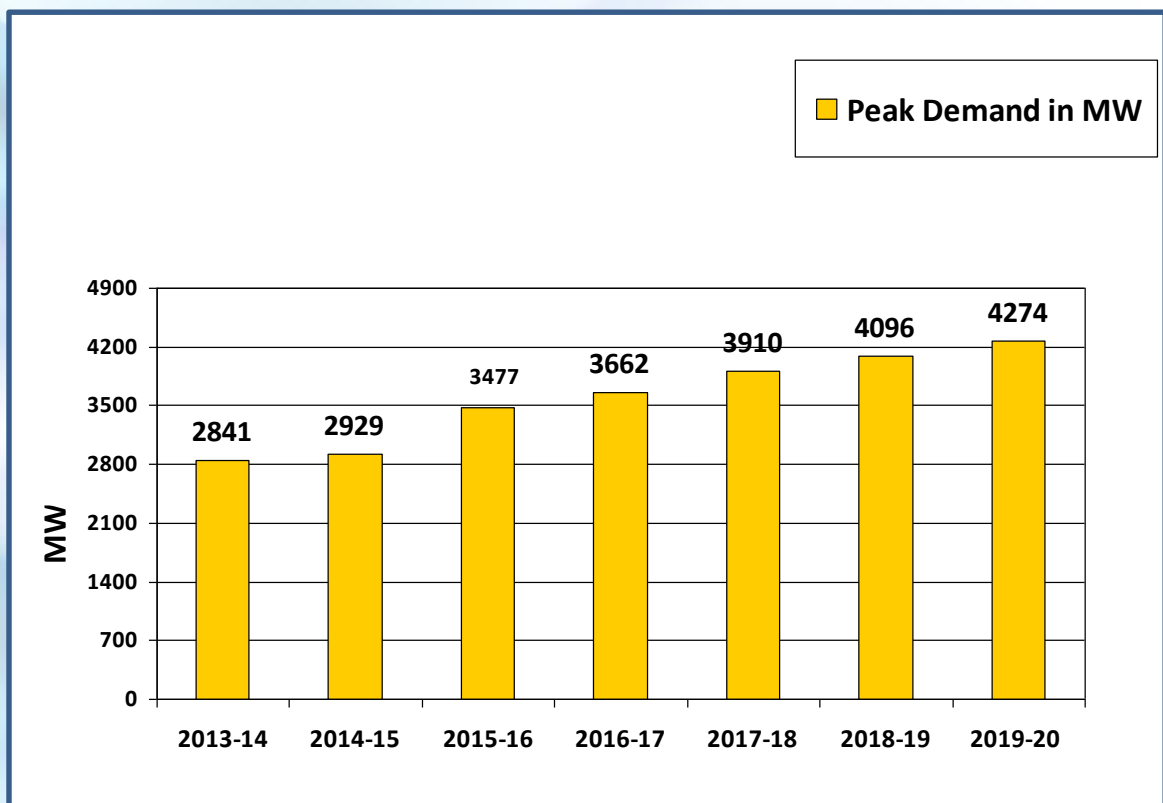
## Ministry Of Power Rating (Marks out of 100)

Particulars	2013	2014	2015	2016	2017	2018
UGVCL	89.9	93.6	91.2	96.3	91.1	98.1
DGVCL	91.6	94.8	93.7	95.9	91	98.9
MGVCL	89.8	94.8	92.3	92.3	89.5	94.4
PGVCL	80.3	81.7	82.9	78.0	80.2	84.6

**Grade A+ : 80 & Above marks**

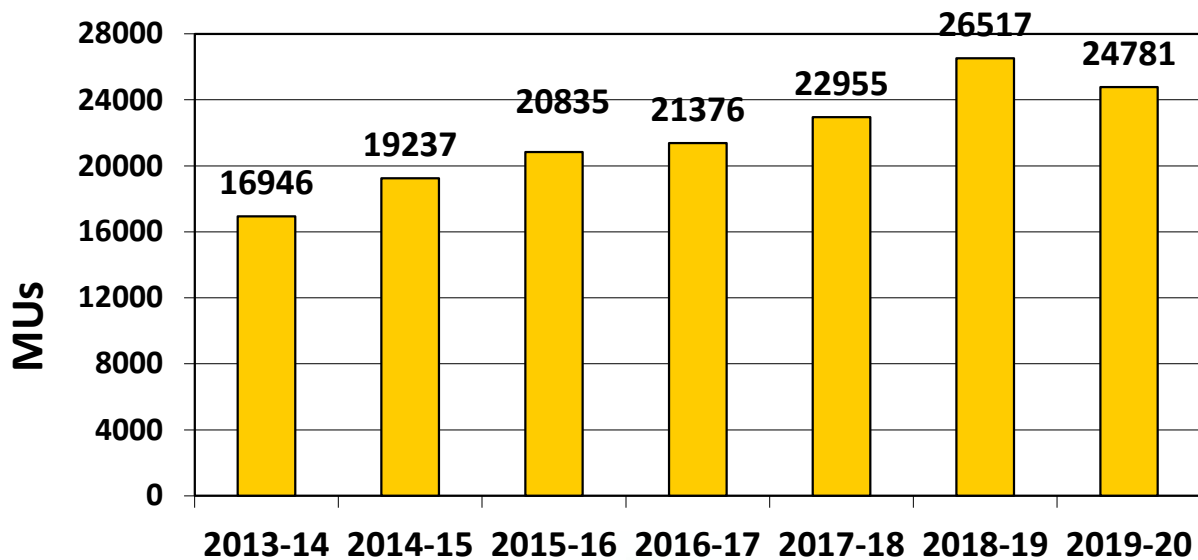
**Grade A : 65 to 80 marks**

## ALDC : Peak Demand in MW



## ALDC: Energy Sent

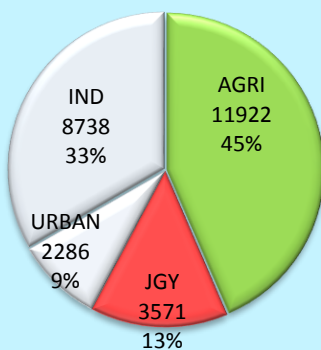
■ Energy Sent in MUs



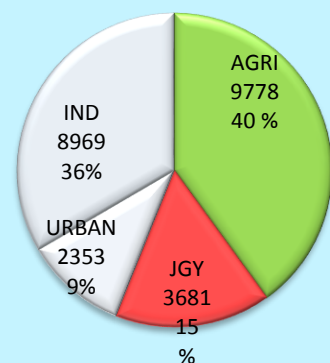
## Category Wise Sent Energy in MUS

Year	2018-19					2019-20				
Category	AGRI	JGY	URBAN	IND	TOTAL	AGRI	JGY	URBAN	IND	TOTAL
Units	11922	3571	2286	8738	26517	9778	3681	2353	8969	24781

Category Wise Sent MUs - 2018-19



Category Wise Sent MUs - 2019-20



## UGVCL's Strength

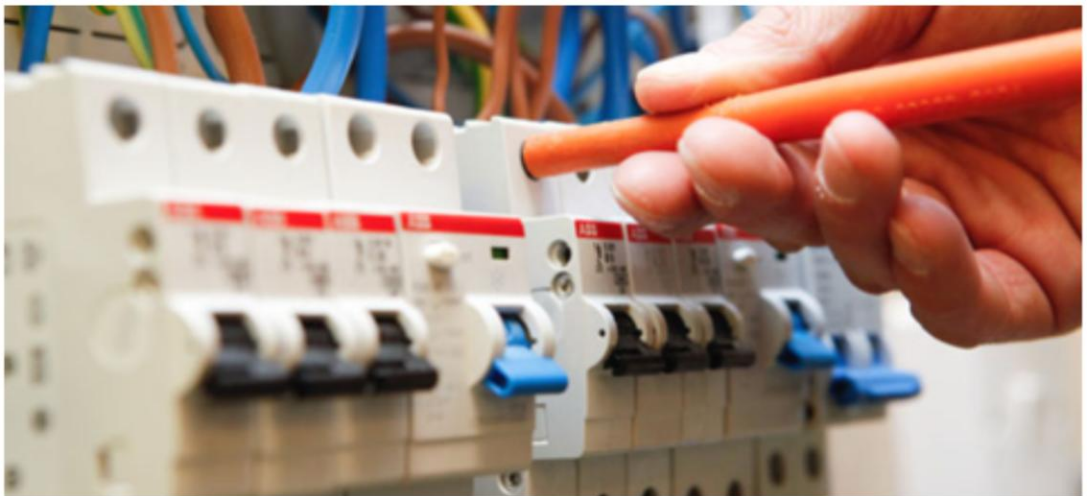
- ✓ 100 % Rural Electrification
- ✓ Lowest Non Agri. T & D Losses
- ✓ Segregation of Agriculture & Non Agri. Feeder i.e 24 X 7 Power supply
- ✓ Less LT to HT ratio i.e. 0.67
- ✓ Lowest TT/SF Index
- ✓ Achieve the 100 % of Target in GOG scheme

- ✓ A Company with annual turnover of more than Rs 10,000 cr.
- ✓ Consistently Profit making Company since inception i.e. 2005
- ✓ Will become Debt free Company by the end of FY 2019
- ✓ Ranked 1<sup>st</sup> by Ministry of Power among 44 Discom of India

- ✓ Rated AA- and A1+ for Long Term Borrowing and Short Term Borrowing respectively
- ✓ The Lowest Debit arrears as on 31.03.20 i.e. 13.24% among four Discom of Gujarat
- ✓ The Lowest PDC arrears as on 31.03.20 i.e. Rs. 58.00 Cr among four Discom of Gujarat
- ✓ "NIL" Comments from C&AG Office on the Accounts of the Company for the FY 16-17
- ✓ Highest Man days in Induction & Regular training for Year 17-18.



# **TECHNICAL ASPECTS**



# Jyoti Gram Yojna ( JGY )-2005

(Unique Model of Distribution Reform)

## Before JGY

- 8-14 Hours of 3-Phase Power Supply
- 10-12 Hours of Single Phase Power supply
- 3-4 Hours of No Power Supply
- Higher Transformer Failure Rate, T&D Losses & Interruption

## After JGY

- Implemented from 2005
- 24 Hours 3 Phase supply to JGY Feeders
- Min. 8 Hours 3 Phase Continuous Supply to AG Dom. Feeders
- 1 Phase Power Supply in the remaining Hours on AG Dom. Feeders
- Reduction in Transformer Failure Rate, T&D Losses & Interruption

## Benefits of JGY Scheme

- ✓ Enabled flexible load management
- ✓ Better quality and reliability of power supply
- ✓ Reduction in Transformer/ system failure
- ✓ Speedy restoration of power supply at the time of calamity
- ✓ No Load shedding - 24x7, 3-phase Power supply available to villages
- ✓ Students encouraged to use computers for education
- ✓ Provision of better health services & infrastructure
- ✓ Reduction in migration from Rural to Urban areas
- ✓ Development of Small Scale & cottage Industries in Rural areas

# Benefits of JGY Scheme



24×7 Power Availability promotes Entertainment through television

24×7 Power makes it possible to use Modern Medical Equipment in villages



24×7 Power helps villagers to avail easy Repair & Maintenance of their machineries / vehicles through facilities of welding/lathe in the village.

24×7 Power enables the villagers to setup local dairy and in house milk testing.



## Benefits of JGY Scheme



24×7 Power empowers the villagers with Mobile Communication thereby making their life easy and more manageable

24×7 Power has made it possible for the villagers to have the facilities of Copier machines making it easy for their important documents to be processed further.



## Special Design Transformer (SDT)



Uttar Gujarat Vij Company Limited  
Mehsana

### The Incarnation of SDT

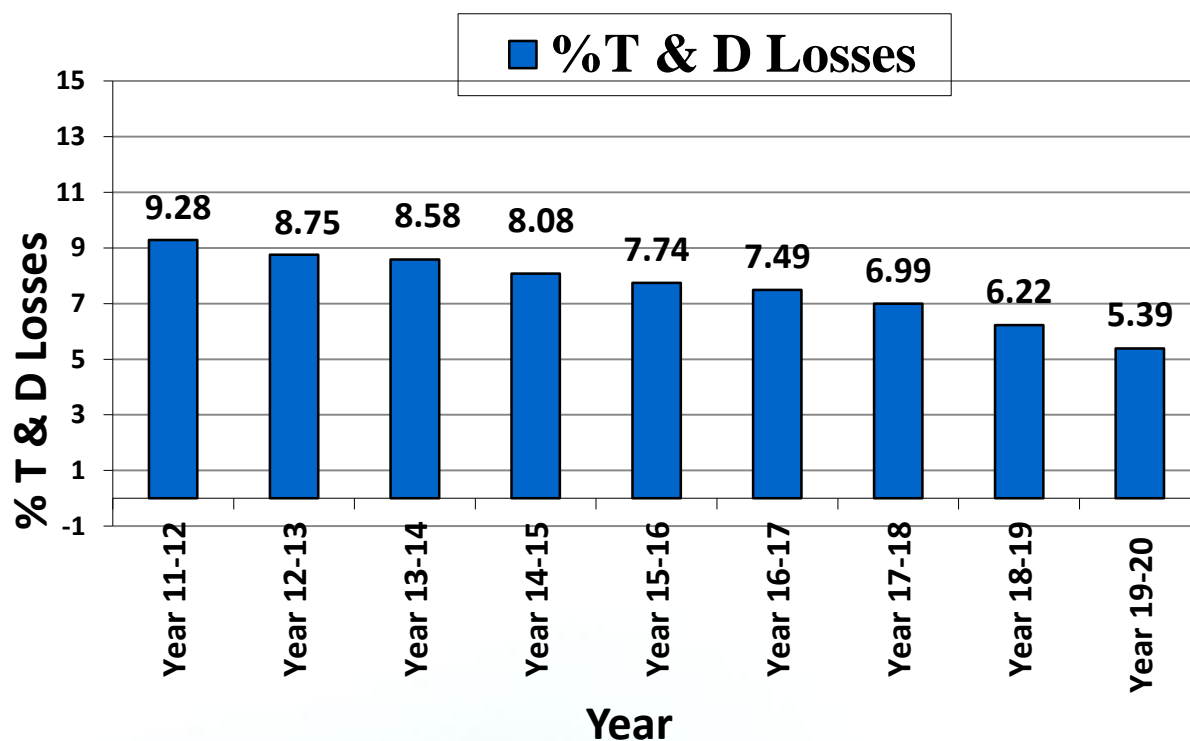
- ✓ The UGVCL engineers, designed a specially designed transformer which could cater the 1Ø supply with absolute control.
- ✓ The entire state is enjoying the JYOTI GRAM Yojna with catering the power supply to the deep rural areas.

### Measure Taken

- ✓ The unique design of windings in the SDT provides
  - full voltage on one phase i.e. 230 volt
  - Very low voltage on other two phases
- ✓ Only one full phase voltage and two very low phase voltages makes the use of TETA (Phase-Splitter) impossible.



## % Non Agri T&D Losses



## Distribution Losses in %

Category	Feeder as on March-20	FY:2016-17		FY:2017-18		FY:2018-19		FY:2019-20	
		MUs	% Loss	MUs	% Loss	MUs	% Loss	MUs	% Loss
AG	3116	868.13	9.02	874.00	8.76	1703.95	14.80	342.52	3.49
Non-AG	2494	890.48	7.49	914.38	6.99	896.17	6.22	827.16	5.39
Overall	5610	1758.62	8.18	1788.38	7.76	2600.12	10.03	1169.68	4.65
Target of UGVCL		2050.77	9.77	2090.31	9.72	2146.64	9.31	2413.16	10.00



## Reason for Lower Losses...

- ✓ Creation of 94 New Sub station since Last Six Years.
- ✓ Creation of 1302 New Feeders since Last Six Years.
- ✓ Providing of XLPE and AB Cable.
- ✓ Installation of Static Meters – 100 %.
- ✓ Network Analysis and Energy Audit
- ✓ Vigorous Installation Checking activity.
- ✓ Transformer Load Balancing activity.
- ✓ Pilfer proof installation

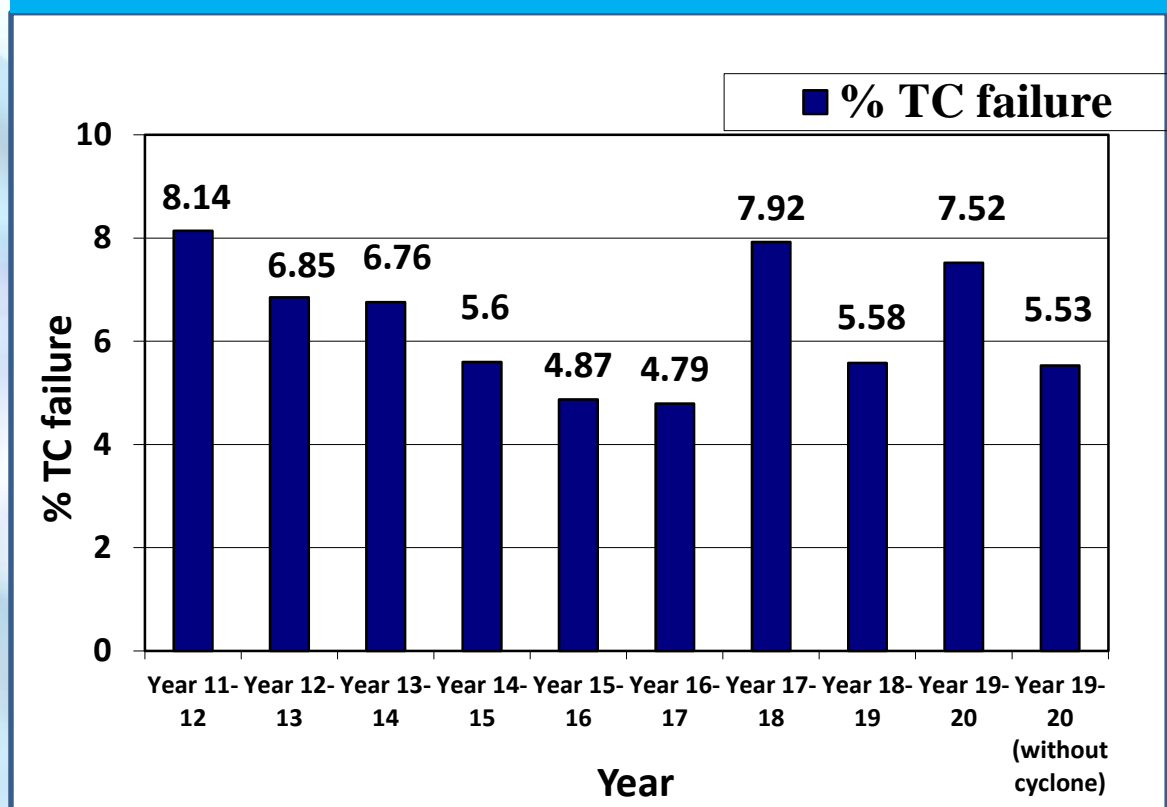
## Gujarat: Overall Distribution Losses in %

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

## 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
UGVCL	9.28	8.75	8.58	8.08	7.74	7.49	6.99	6.22	5.39
DGVCL	13.00	11.75	10.35	9.06	8.68	7.96	7.46	6.66	4.98
MGVCL	12.82	12.47	11.47	11.71	11.28	10.31	9.86	8.97	8.45
PGVCL	20.93	19.64	17.10	15.77	14.66	13.07	12.14	11.15	10.32
GUVNL	15.00	13.95	12.35	11.45	10.86	9.94	9.32	8.45	7.33

## % Transformer Failure



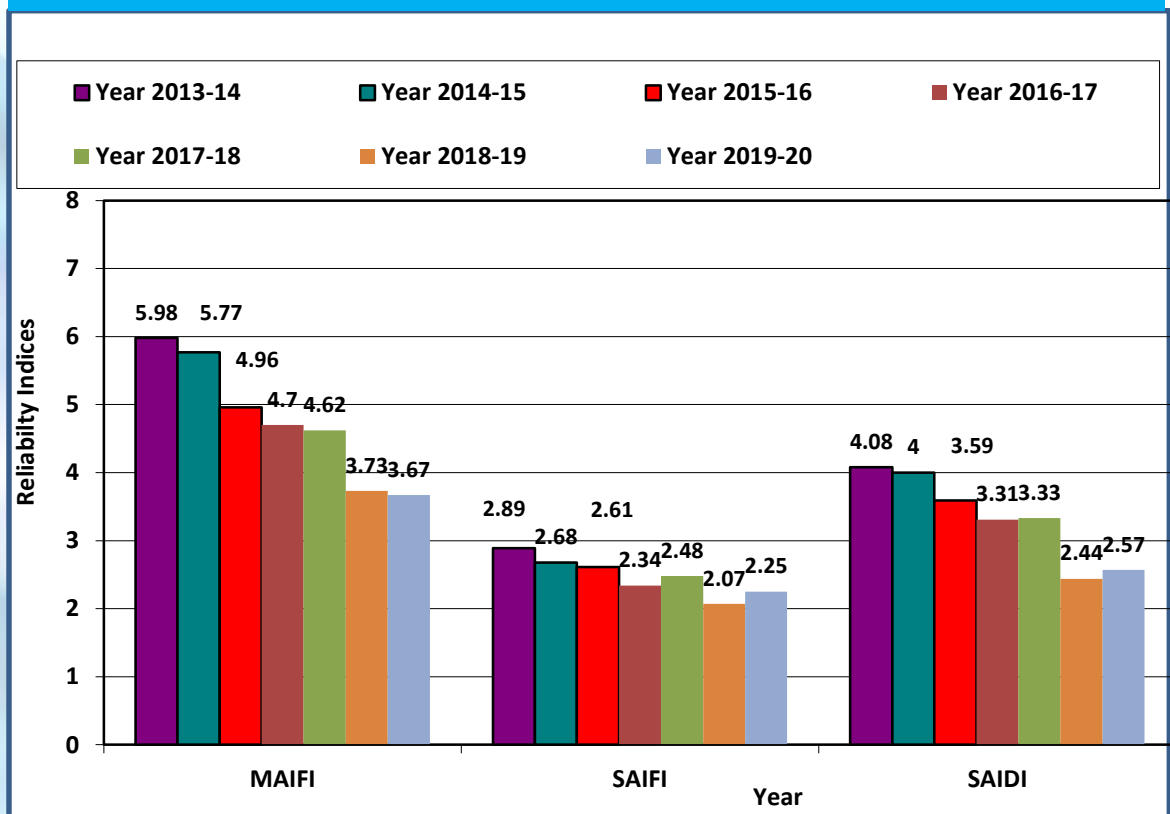
## Reason for Lower Transformer Failure

- ✓ Quality Transformer Maintenance
- ✓ Added New Transformers in Existing System
- ✓ Vigorously Installation Checking to curb the overloading
- ✓ Various Transformer Maintenance Squad (TMS) activity carried out

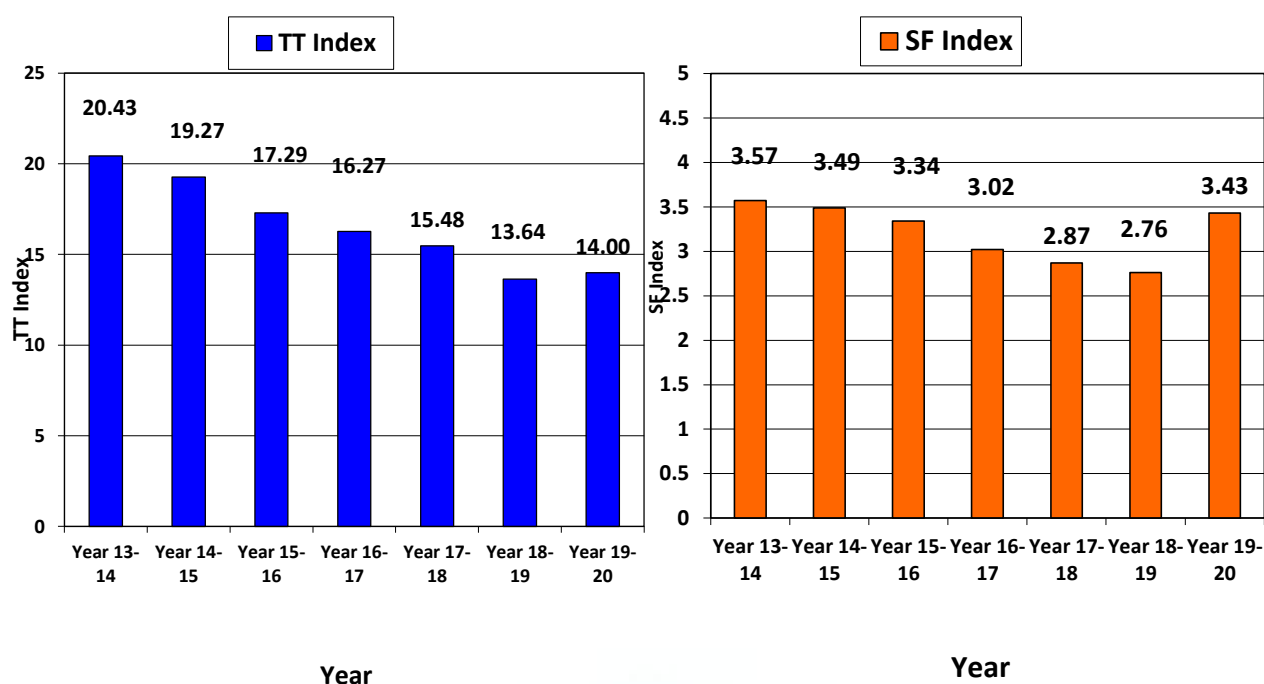
like...

- Proving of Fuse Element.
- Proving of HT/LT Protection.
- Maintenance of LT Line.
- Providing of Lightning Arrester / Breather
- Load Balancing
- Topping of Oil

## Power Reliability Indices



## Year to Year TT/SF Index



## GUJARAT: Power Supply Reliability Indices Year 2018-19 & 2019-20

DISCOM	Achievement (FY 2018-19)			Achievement (FY 2019-20)		
	SAIFI	SAIDI	MAIFI	SAIFI	SAIDI	MAIFI
DGVCL	7.0	7:31	15.25	6.34	8:35	12.11
MGVCL	3.77	4:35	14.25	4.03	5:04	12.20
PGVCL	6.3	10:38	9.60	6.37	10:40	8.14
UGVCL	2.07	2:44	3.73	2.25	2:57	3.67

## Slab Analysis of Total TT for Year 2019-20

Sr. No.	Feeder category	Total Feeders	Zero TT	1 to 50	51 to 100	101 to 200	Above 200
1	HT Express	254	50	203	1	0	0
2	Ind	373	8	353	11	1	0
3	GIDC	51	0	48	3	0	0
4	Urban	334	21	274	36	3	0
5	JGY	909	8	548	304	49	0
6	Agri	3107	26	2196	818	65	2
Total		5028	113	3622	1173	118	2

## Slab Analysis of Total SF for Year 2019-20

Sr. No.	Feeder category	Total Feeders	Zero SF	1 to 15	16 to 35	Above 35
1	HT Express	254	109	144	1	0
2	Ind	373	60	303	10	0
3	GIDC	51	6	41	4	0
4	Urban	334	84	240	10	0
5	JGY	909	46	754	107	2
6	Agri	3107	161	2239	646	61
Total		5028	466	3721	778	63



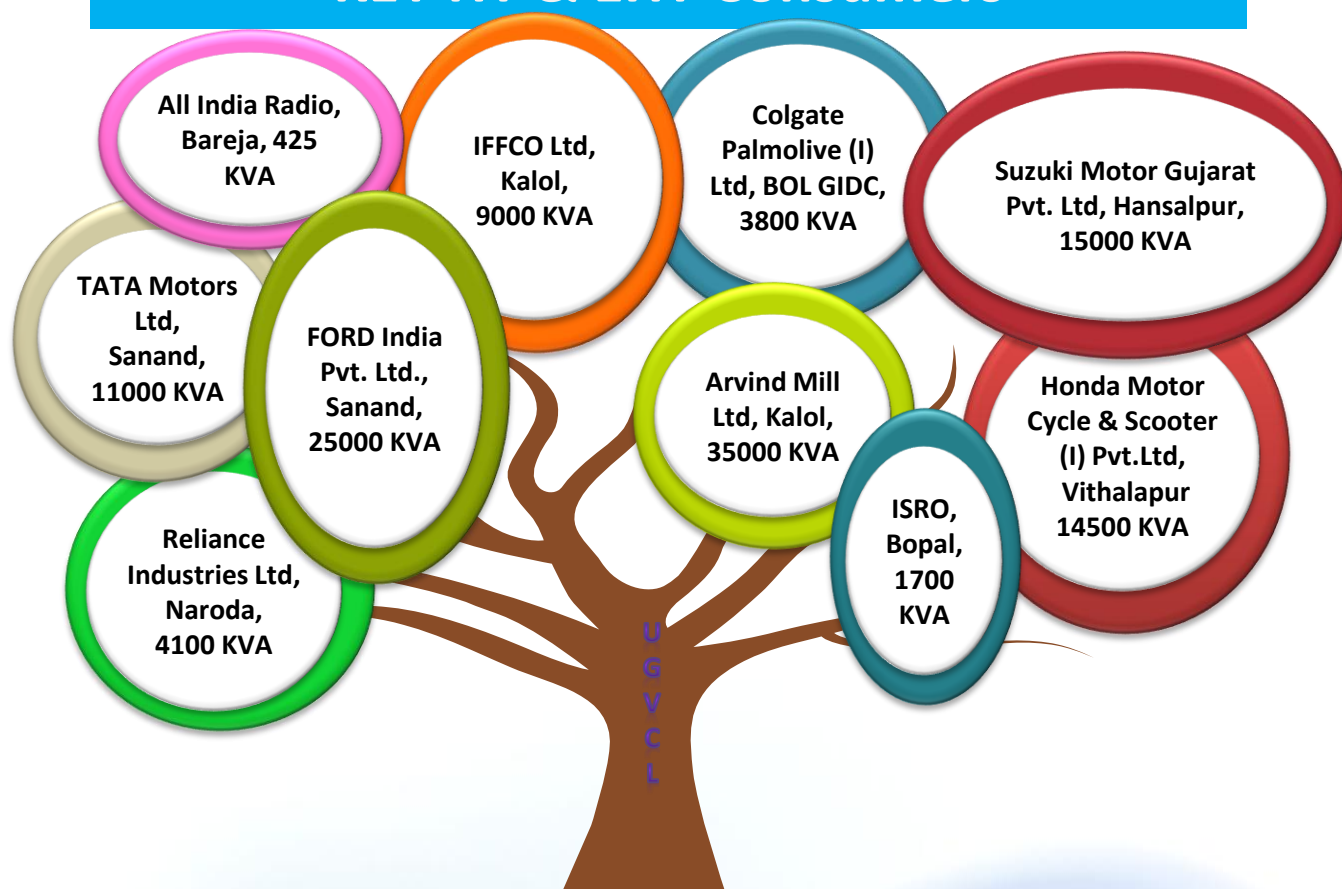
## Why Power Reliability is better during last six years....

- ✓ Arranging Mass Program for Maintenance i.e. Crew management
- ✓ Use automation i.e. RMUs
- ✓ Early Restoration of Power supply
- ✓ Monitoring of Daily, Weekly & Monthly Report
- ✓ Implementation of Govt. Scheme. (SCADA, Smart Meter, SKJY, DISS etc)
- ✓ Effective utilization of TMS gang
- ✓ Creation of 94 New Sub station & 1302 New feeder since Last Six Years.
- ✓ Providing of XLPE and AB Cable.

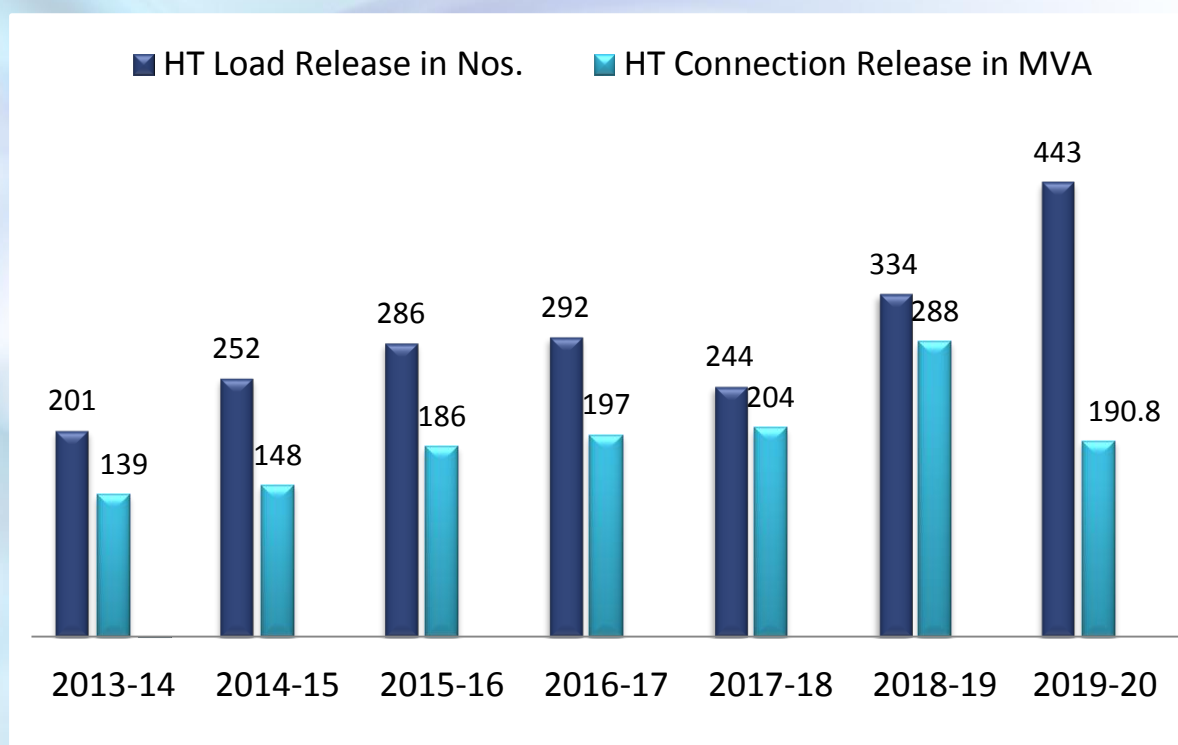
## Status of HT/EHT Consumers

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	4598.80
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
(LT+HT) Connections of UGVCL (2019-20)		37,08,475	16350.13	11855.84
% Weight age of HT connection (2019-20)		0.12%	17.88%	61.32 %

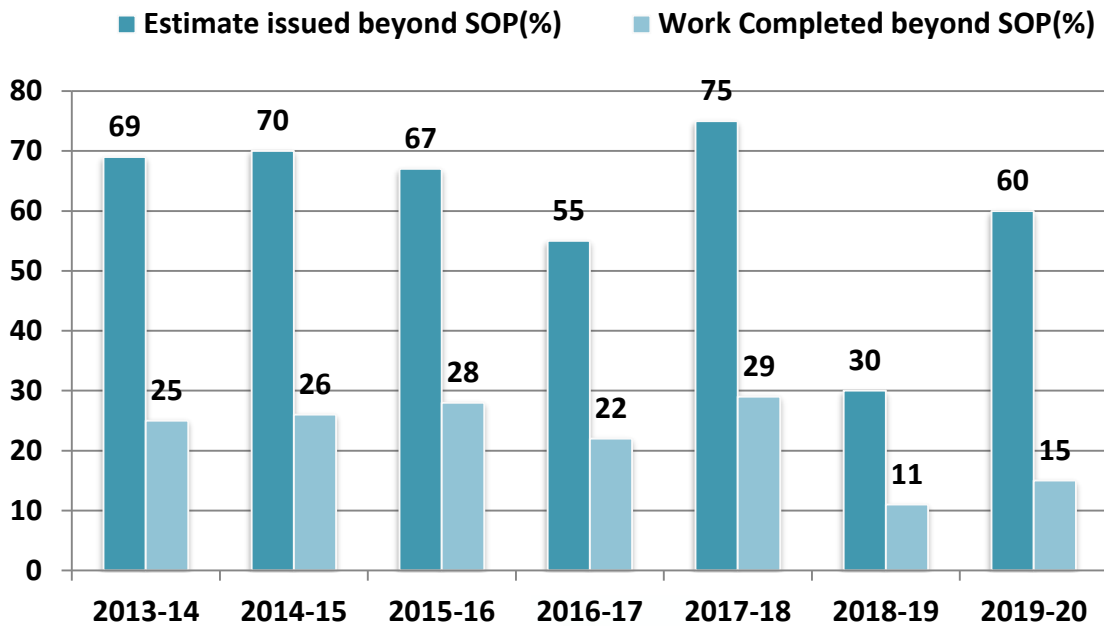
## KEY HT & EHT Consumers



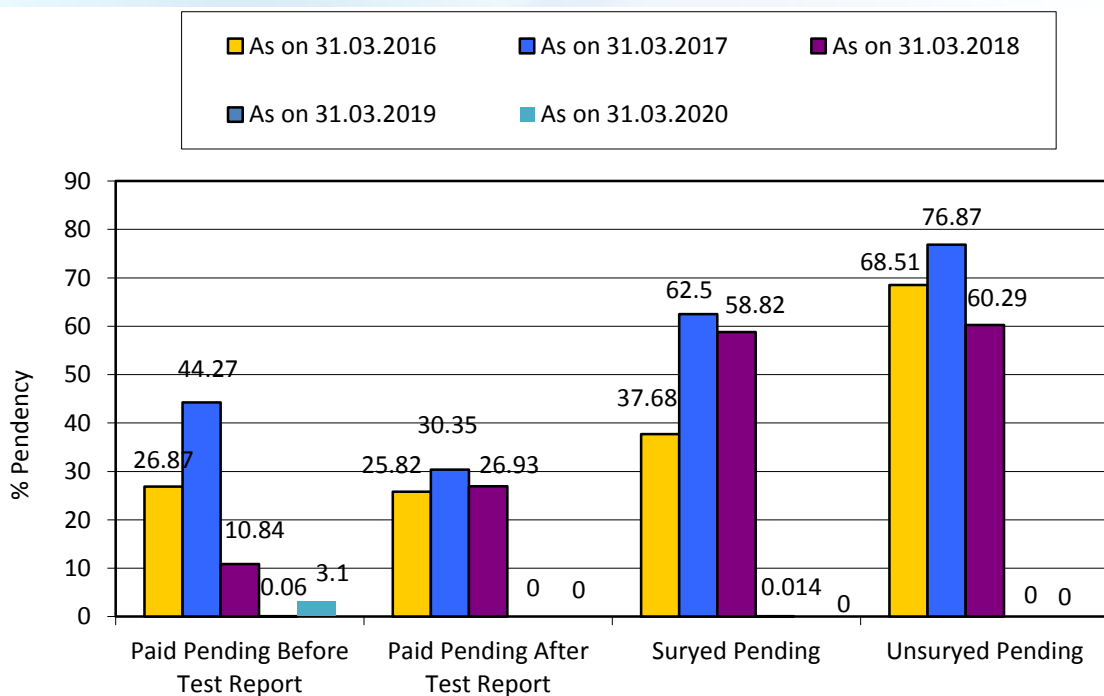
## New HT Connection Added in Nos & KVA ( Year 2013-14 to 2019-20 )



## HT Connection SOP (Year 2013 to 2019-20 )



## % LT Pendency Beyond SOP



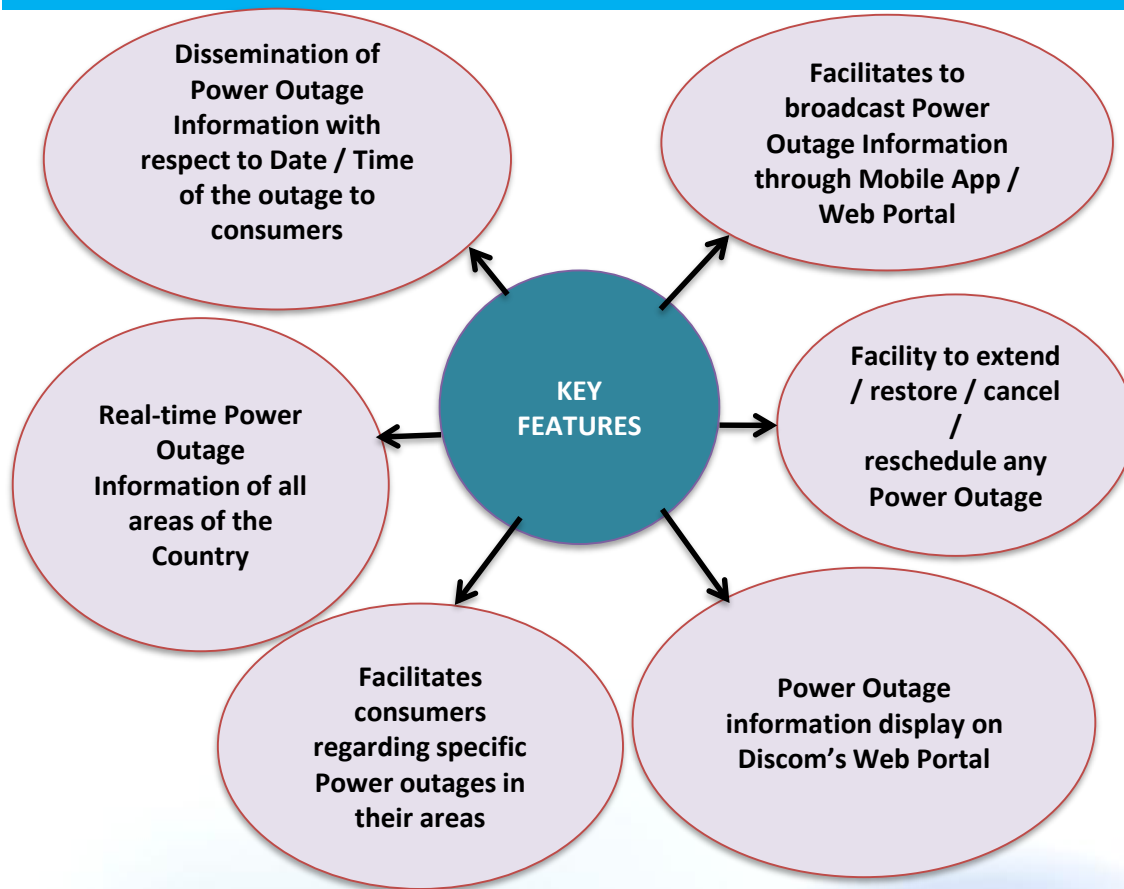
# Centralized Customer-Care Centre(CCC)



## CCC-Introduction & Function

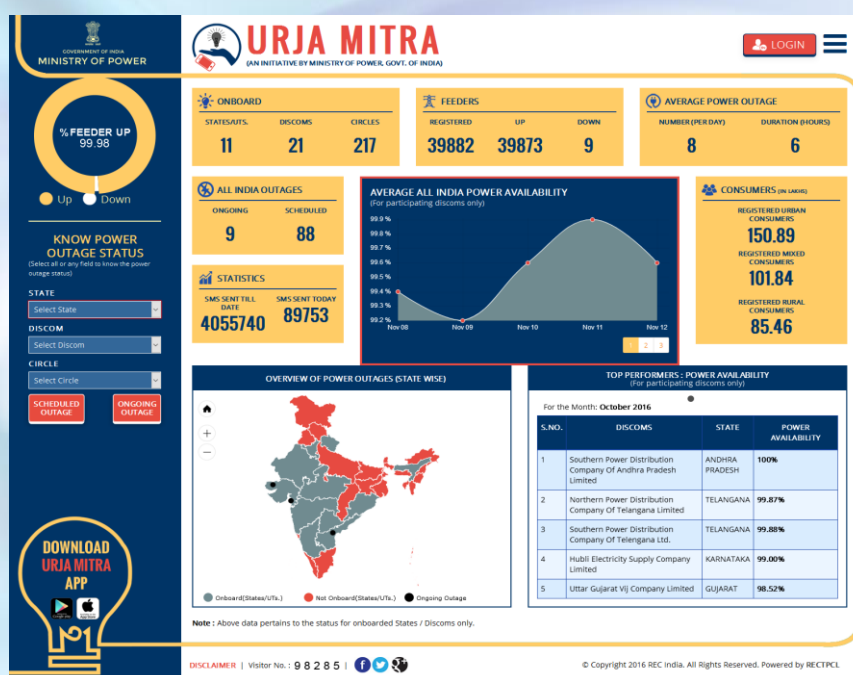
- ✓ UGVCL have Centralized Customer care center for the booking of any type of complaint of the Consumer / Non consumer .
- ✓ Customer can book complaint on **19121**  
OR **1800 233 155 335**. (Toll free number )
- ✓ Customer care center is working 24 X 7 hours at Mehsana.
- ✓ It has following specialities:
  - Single Window Complaint Management System
  - Computerized
  - IVR Equipped
  - Customer has not to wander from table to table for any query, he will get answers from single window only
  - Person sitting at the Care Center have the history of particular customer or of Particular Case on the clicks of the computer so he can straight forward, and confidently reply to the customer about the issue.

# Outage Management System of “Urja Mitra”

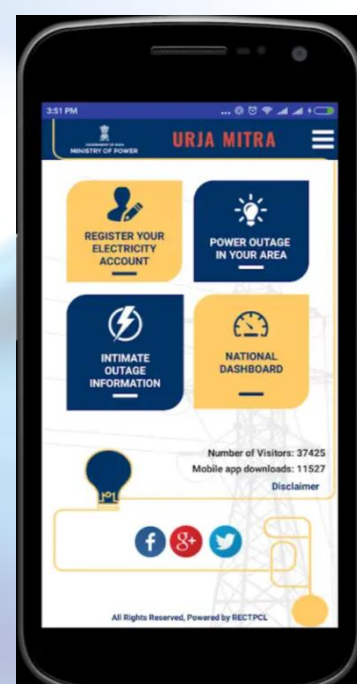


## Urja-Mitra Web Portal and Mobile App

### Web Portal



### Mobile App





## 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 31.03.20 :- **8031385**
  - **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 31.03.20 :- **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 31.03.20 :- **166129**
- Remark:** From January-2018 Installment option-not given

## 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

## Details of Accident

Details	No. of accidents in Year 2018-19					Total	No. of accidents in Year 2019-20					Total
	Dept.		Outsider		Animal		Dept.		Outsider		Animal	
	FH	NFH	FH	NFH			FH	NFH	FH	NFH		
Total	3	13	78	24	54	172	3	12	105	33	113	266
Dist. Network	3	13	39	20	53	128	3	12	48	30	111	204
Pvt. Premises	0	0	39	4	1	44	0	0	57	3	2	62
FH--Fatal Human , NFH--Non-fatal Human												

## Compensation

### Human

- Initial Assistance of Rs 50000/- is being paid for outsider Fatal human accident in network
- Final compensation for outsider human-Rs 4 lakhs minimum or as per Bai Nanda case formula (If fault or negligence on part of victim shall not be eligible)

### Animal

- In case of Animal accident initially 50% relief of compensation amount
- Animal final compensation is being paid after receipt of CEI report (if in network)
- Amount of Animal compensation (In Rs)
  - A)** Bullock- 25000/-
  - B)** She Cow - 30000/- ,  
He Cow – 7500/-
  - C)** She Buffalo – 30000/-,  
He Buffalo – 16000/-
  - D)** Camel -25000/-
  - E)** Goat/ Sheep – 3000/-

# **RURAL ELECTRIFICATION (RE)**



# Norms of GOG Agriculture Well Electrification

## TASP : Tribal Area Sub-plan Scheme

- Tribal Area
- 100% grant provided by state Government for HT/LT lines and Transformer Centres
- Applicant has to pay only energy deposit charges only.
- In Last five year total **9510** nos of Well electrified.
- 100 % Achievement

## Normal (SPA ) Scheme

- Non Tribal Area and Non Dark Zone Area.
- Priority of registration maintained at sub division level and as per the annual program by GOG
- Service connection as well as Energy deposit is to be recovered from applicant.
- In Last five year total **17820** nos of Well electrified.
- 100 % Achievement

## Dark Zone Scheme

- Non Tribal Area and Dark Zone Area.
- Drip irrigation in minimum 2 acres land or 50% of total land whichever is higher (compulsory)
- Service connection charge as per GERC and energy deposit is to be recovered from applicant.
- In Last five year total **59145** nos of Well electrified.
- 100 % Achievement

## Schedule Caste Sub Plan (SCSP AG)

- Implemented in all over area of Gujarat.
- For Schedule Cast beneficiary only.
- Applicant has to pay only energy deposit charges only
- In Last five year total **2448** nos of Well electrified.

## 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- whichever is higher.
- Applicant has to pay 70 % of the Estimated cost and Energy deposit.
- In Last five year total **1408** nos of Well electrified



## GOG Schemes: Electrification of House Holds

### 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 the Huts.
- In Last five year total **11784** nos of HH electrified.

### Zupadpatti Scheme

- Annual Income of Beneficiaries shall be below (Rs.150000 for urban area Rs.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 fees
- In Last five year total **63439** nos of HH electrified.

### Schedule Caste Sub Plan (SCSP)

- Applicable to Schedule Caste Beneficiaries without income limit for any areas.
- For Society Electrification where the population of Schedule Caste is more than 50%.
- Beneficiary will not pay any Charges except Deposits and test report charges.
- In Last five year total **17675** nos of HH electrified.

## GOG Schemes: HVDS & Sagarkhedu

### HVDS Scheme

- HVDS Scheme “ High Voltage Distribution System” by installing smaller size of Distribution Transformers and thereby reducing LT Lines up to 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 Last Five Year Total Rs.**34.65** Cr. Has been incurred in the scheme.

### Sagarkhedu (SSVY)

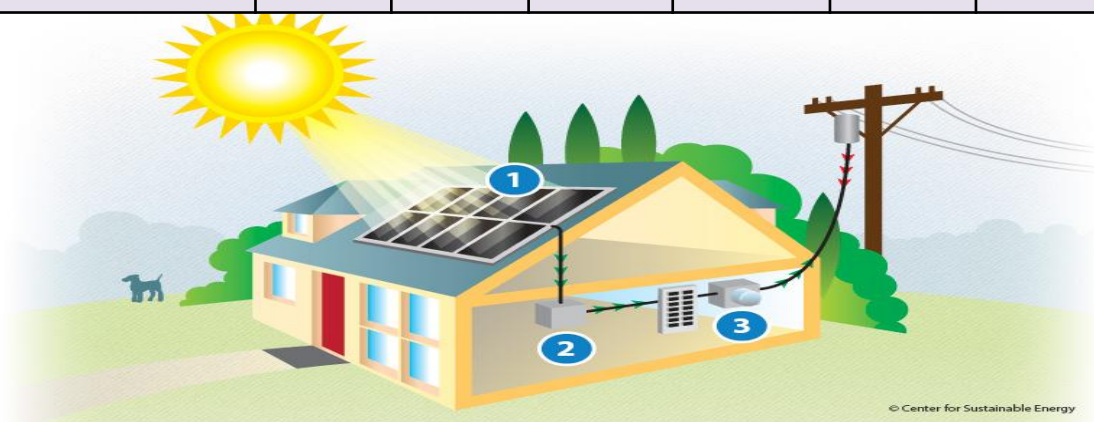
- GOG has implemented the Sagar Khedu Sarvangi Vikas Yojana (SSVY ) scheme in various coastal area of Gujarat for old network strenghtning work i.e. Old conductor replacement, Old distribution box, Electric pole replacement, V-cross arms etc. In UGVCL, the coastal area of Dhandhuka & Dholera taluka covered in this scheme from the year 2012-13.
- In Last Five Year Total Rs.**15.06** Cr. Has been incurred in the scheme.

# **Renewable Energy**

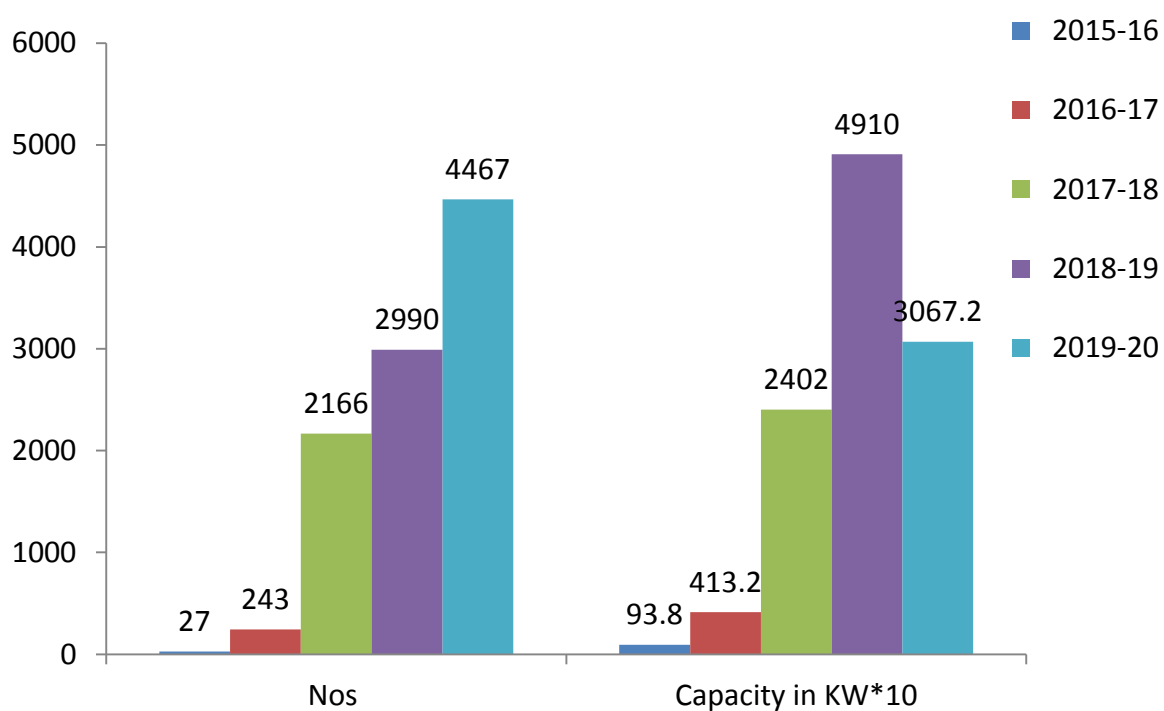


## Solar Rooftop Overview- (As on 31.03.2020)

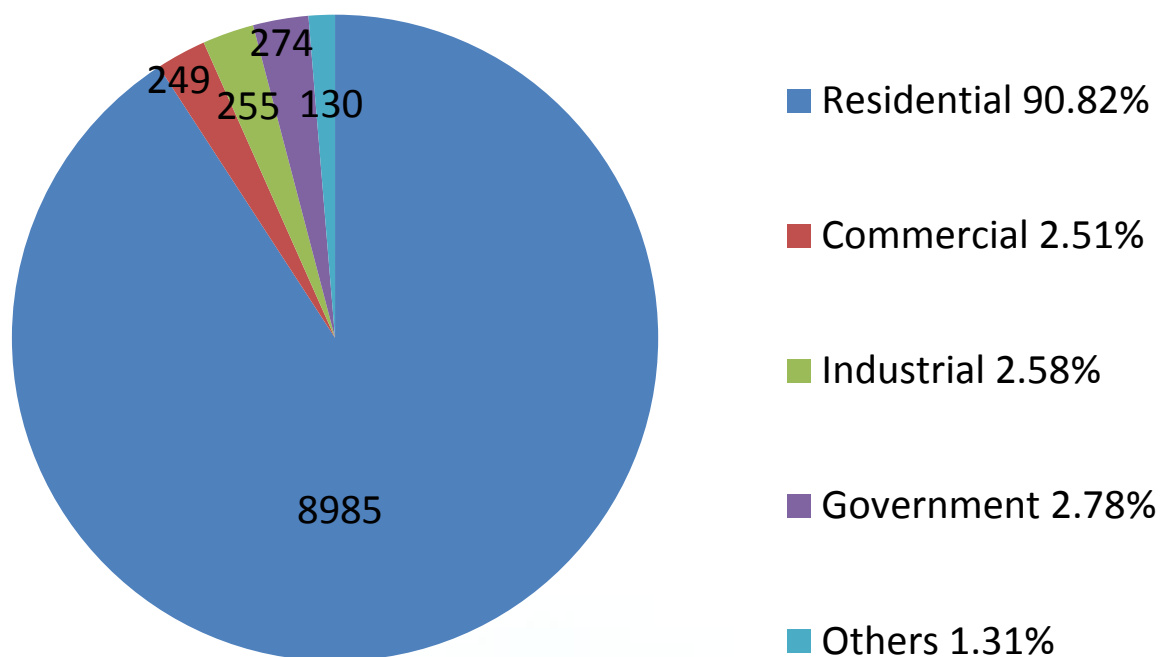
Particulars	Type of Connection					
	R/L	C/L	Ind	Govt	Others	Total
Released in No's	8985	249	255	274	130	9893
Released in KW	34629	4695	60366	6014	3159	108864



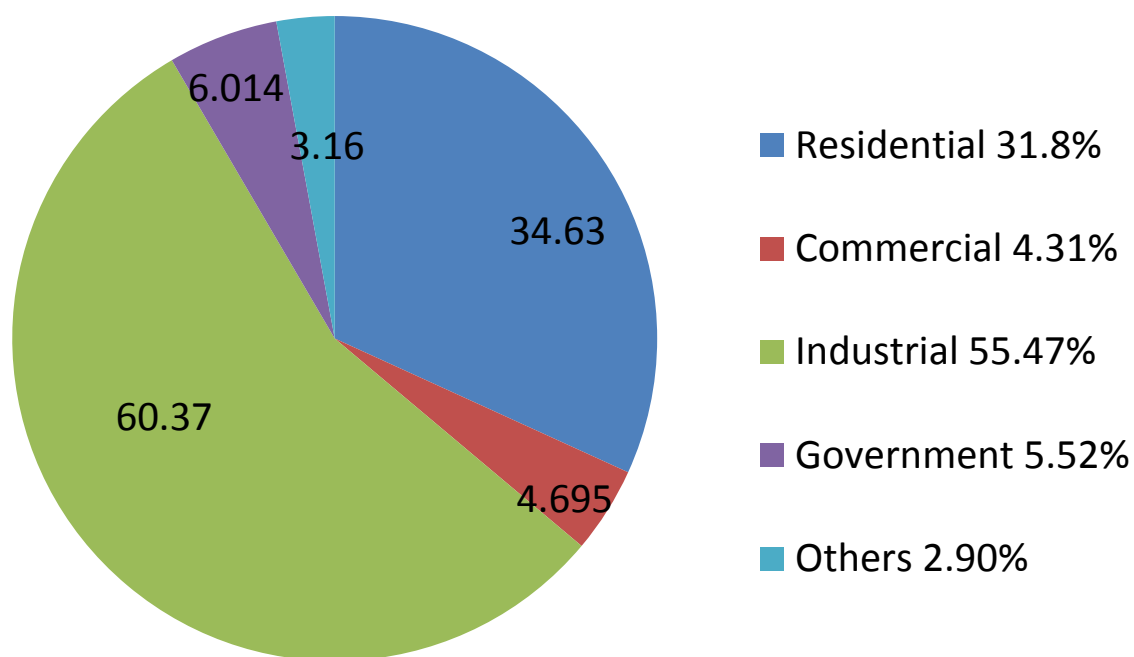
## Solar Rooftop Progress (Year wise)



## SRT Projects Commissioned (Nos) as on 31.03.2020



## SRT Projects Installed capacity (MW) as on 31.03.2020





## GOG Schemes : Solar AG Pump Sets

### Solar Agriculture Pump Sets

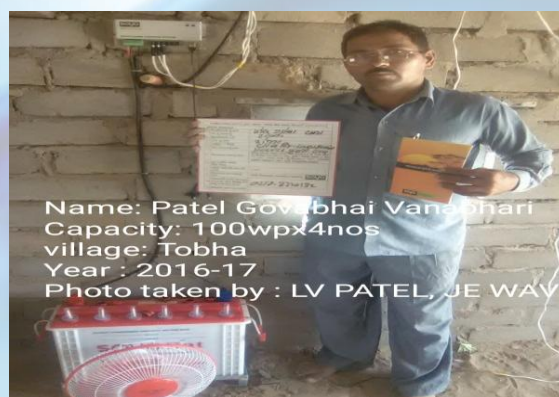
- Scope of work: New agriculture connection with stand alone (off-grid) solar system with 3HP, 5 HP & 7.5 HP pump sets.
- Beneficiary has to pay Rs.5000/- per HP for normal category and Rs.1000/-HP for SC/ST category.
- Total 934 Nos. of Solar Pump Sets has been installed in last Four Year.



## GOG Schemes : Solar Home Light

### 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 10400 Nos. of Solar Home Light System has been installed in last Three Year.



# **GOG Scheme**



## Sardar Krushi Jyoti Yojana (SKJY)

### Scope of the work:

- Scheme applicable only for Agricultural feeder
- Replacement of old/deteriorated conductors having more than three joints in one span & conductor life more than 35 years in Ag feeder
- In this scheme various activity like plumbing of pole, replacement of deteriorated insulator, Providing of stay sets, trimming of tree branches are being carried out.
- Total project cost : Rs. 4498.93 Lacs ( 80% GoG Grant)
- Project Period: Three Years (2017-18, 2018-19, 2019-20)

### Out Come :-

- Improve the Power Reliability.
- Reduction of interruption resulting enhance in consumer satisfaction
- Reduction in snapping of conductor resulting reduction in incident of accident.

## Sardar Krushi Jyoti Yojana (SKJY)

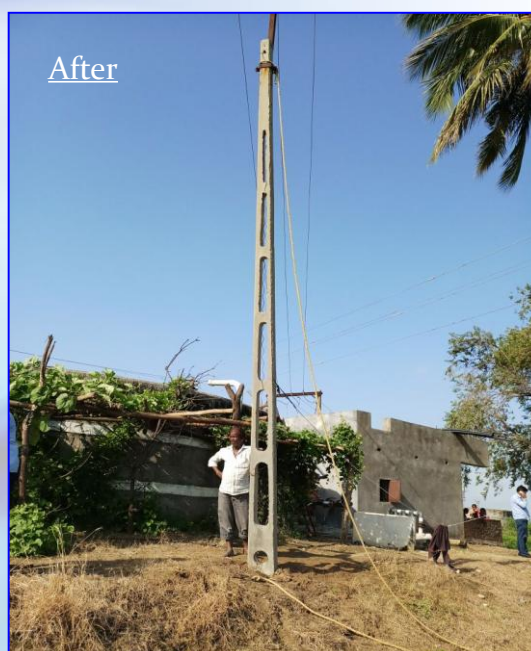
UGVCL	Target & Planning			Achievement			
	Nos. of Feeder	Conductor to be Replaced in KM	Approximate Expenditure to be Incurred (In Lacs)	Nos. of Feeder	Conductor Replaced in KM	Expenditure Incurred (In Lacs)	% Achievement in Cost
2017-18	258	2296.20	1204.51	240	2297.02	1204.80	100.02
2018-19	233	3272.71	1640.82	223	3225.74	1641.89	100.06
2019-20	217	2995.94	1653.60	211	3008.31	1660.25	100.40

## Outcome-Year 2019-20

### Sardar Krushi Jyoti Yojana (SKJY)

Circle	Nos. of work complete d Feeders	FY 2018-19			FY 2019-20		
		TT Index	SF Index	ESD Index	TT Index	SF Index	ESD Index
MSN	32	12.48	2.68	2.85	9.07	1.62	1.22
SBT	48	14.15	3.23	5.36	13.91	3.85	6.30
PLN	92	17.31	3.99	8.19	15.98	4.47	7.27
HMT	45	8.55	2.16	2.24	7.10	1.94	2.26
UGVCL	217	13.13	3.05	4.91	11.71	3.12	4.60

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





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



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





## Distribution Infrastructure Shifting Scheme (DISS)



- **Scope of the work:** Shifting of HT,LT line and Transformer Centre obstructing to the existing road /road widening in Nagarpalika / Panchayat area
- 100% GOG Grant

- **Out Come :** To facilitate development such as road widening ,. etc
- Strengthening the electrical network for Improvement in power reliability & Safety of the general public
- Improvement in aesthetics of distribution network and towns / villages.



## Distribution Infrastructure Shifting Scheme (DISS) FY: 2016-17 & 2017-18 ,2018-19 & 2019-20

UGVCL	Target in Crore	Nos. of NagarPalika /Gram Panchayat	Nos. of works completed	Expenditure booked (in Crore)	%Achievement of Exp. Booked ref. to Target
2016-17 (Only Urban)	9.00	38	250	9.00	100%
2017-18 (Urban + Rural)	26.00	(38 + 1844) =1882	2175	26.82	103.15%
2018-19 (Urban + Rural)	15.00	(38+2550) =2588	1416	15.869	105.8%
2019-20 (Urban + Rural)	15.00	(38+2550) =2588	1511	18.507	123.38%

# **GOI Scheme - SCADA**



## 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** : 118
- **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** : 118
- **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
- **FRTU**: 410/ 626
- **Sectionalizer**: 1/5
- **FPI** : 423/503
- **DCU**: 423/503
- **Communication system** : 1. RTU & FRTU- Chemtrol Ind Limited  
2.Airtel

### SCADA Building , Gandhinagar





## Server Room



## Centre Control Room



## RMU



## RMU



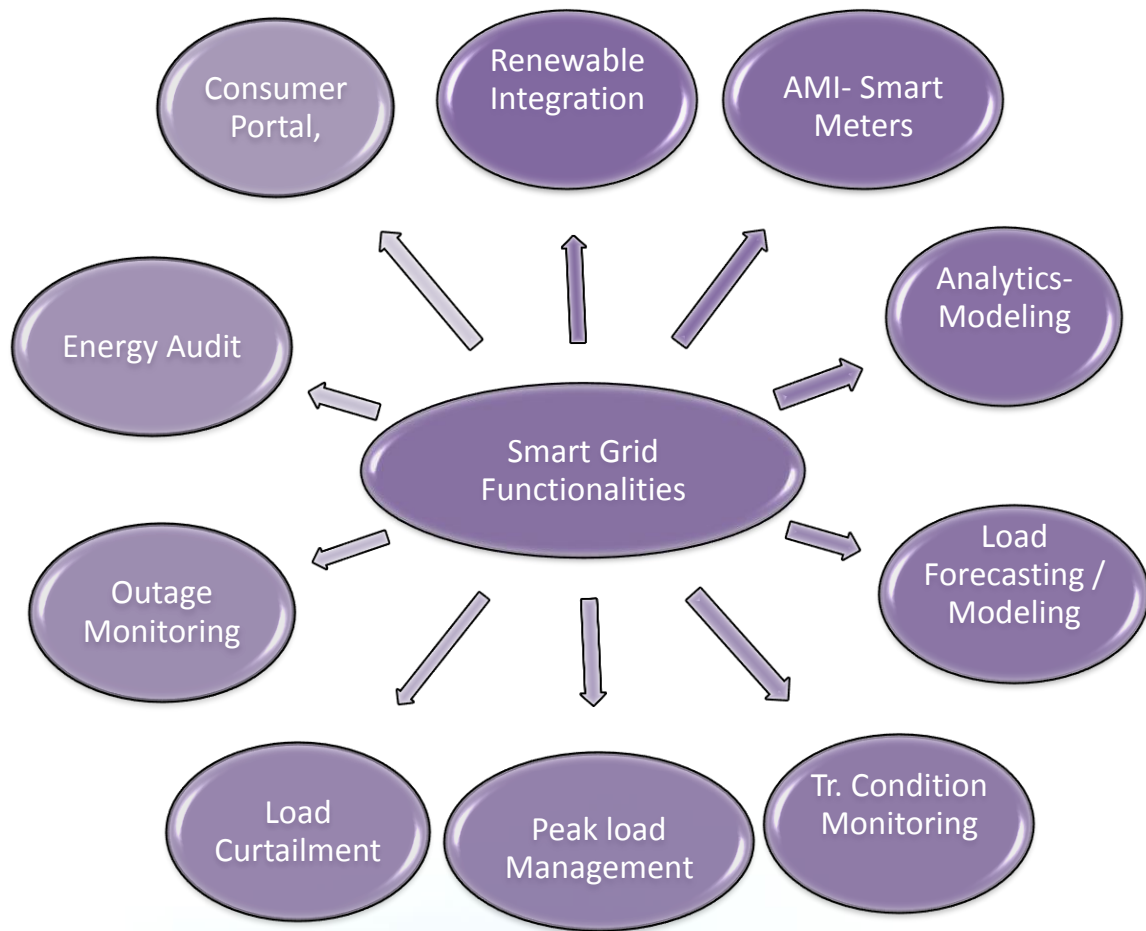


## Benefit of the SCADA Project

- Faster Identification a fault & Easy Restoration of Power.
- 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 Utiliasation of Asset

## Smart Grid Pilot Project Naroda Urban Area





## Smart Grid Pilot Project

### Project..

- **Area** : Naroda Urban area of Ahmedabad city.
- **Project cost** Rs.35.45 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..

- Installation of Smart meter as following.
  - 1-phase-23130
  - 1-phase (net meter)-97
  - 3-phase whole current-2556
  - 3-phase whole current (net meter)-95
  - 3-phase CT operated-58
  - 3-phase CT operated (net meter)-6

## 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

## Smart Grid Pilot Project

### Project Status ..

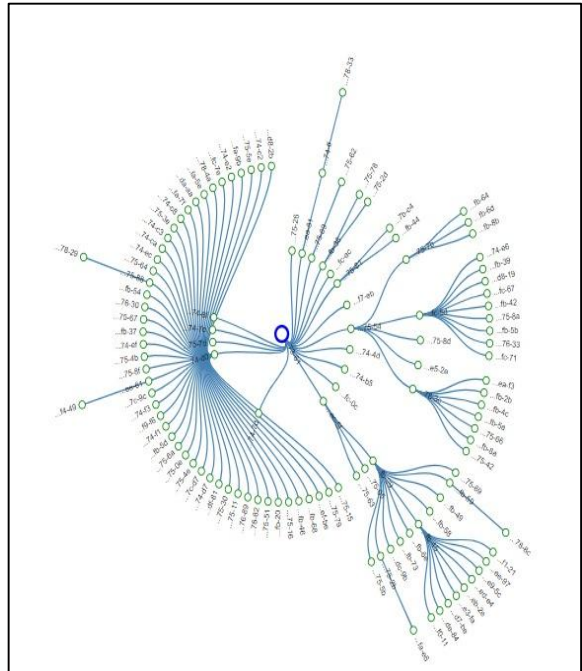
- Total (1Q&3Q) 27760 meters has been received
- Total 23233 Nos of 1-phase smart meters are installed.
- Total 2715 nos of 3Q meter are installed.
- Data center equipments are installed and configured
- Integration work is under progress.
- 152 nos of Communication Gate Way are installed.



## Communication Technology Used

### RF Mesh Technology

- Total 152 Nos. of gateway used for @27000 meters
- DCU-to-control center-GPRS technology
- Less Recurring cost compared to GPRS based meters



## 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

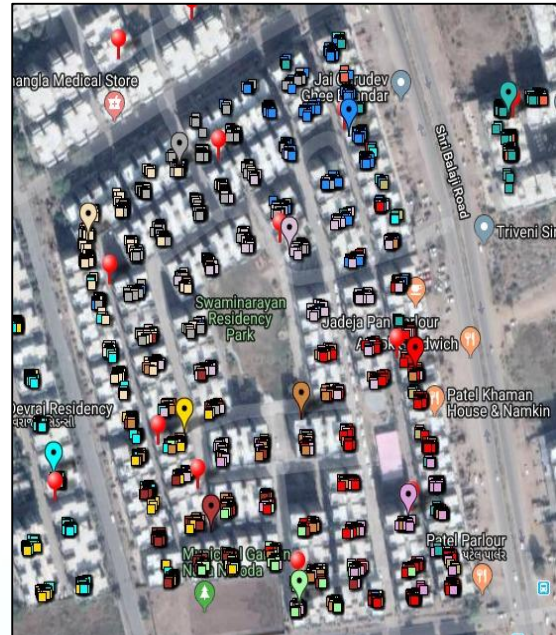


# Utility IT Applications

## Meter Installation



## DCU Position



## Meter Communication to DCUs





# **GOI Scheme - RAPDRP**



## UGVCL : RAPDRP - A

- ✓ Re-Structured Accelerated Power Development & Reform program
- ✓ Central Govt .Scheme-11 th Five Year Plan
- ✓ Nodal Agency- Power Finance Corporation
- ✓ Loan of Rs. 35.31 Cr sanction & Expenditure of Rs.28.29 Cr
- ✓ Covered 20 Town & 41 subdivision
- ✓ Implementing Agency : TCS
- ✓ Consulting Agency : Zensar

## UGVCL : RAPDRP - A

### Project Status..

- **GIS Consumer survey** : 6.16 lakhs / 100 % completed
- **GIS Asset Mapping** : 228 feeder / 100 % completed
- **Meter & Modem installation** : 9026/ 100% completed
- **Integrated Town** : 20 nos / 100% completed
- **Go live Town** : 20 nos / 100% completed
- Customer care centre commissioned
- **% DTR Availability** = 27.19% ( Oct-17)

### Module covered..

- Meter Data Acquisition & Energy Audit
- GIS based consumer Indexing & Asset Mapping
- GIS based Integrated Network analysis Module
- Centralized Customer Care services
- Management Information System
- Web Self Service & System Security Requirement
- Identity & Access Management System

## GIS Utilizations

- ✓ For Electrical Network data Map
- ✓ Instantly Prepare Proposal For New Connection
- ✓ Reduced Power Supply Down time
- ✓ Actual evaluation of assets
- ✓ Network Analysis and Energy Audit
- ✓ Preparation of Feeder Bifurcation proposal
- ✓ Integrating with Customer Care System
- ✓ Finding alternate source for restoration of power supply

## MDAS/MDM/EA Utilizations

### Utilize for...

- Sub-station / Feeder / DTR / HT consumer meter data acquisition
- AT&C loss monitoring
- Integrated with Billing Module
- Audit with minimum manual intervention
- Real time energy data collection
- Load survey/Tamper data profiles

### Utilize for...

- Utilization factor analysis
- Load factor report analysis
- Current imbalance analysis
- Load survey analysis
- Power factor details
- Outage information
- Tamper events
- Contract demand / Peak load / off day violation
- Energy / Demand profile

## UGVCL : RAPDRP - B

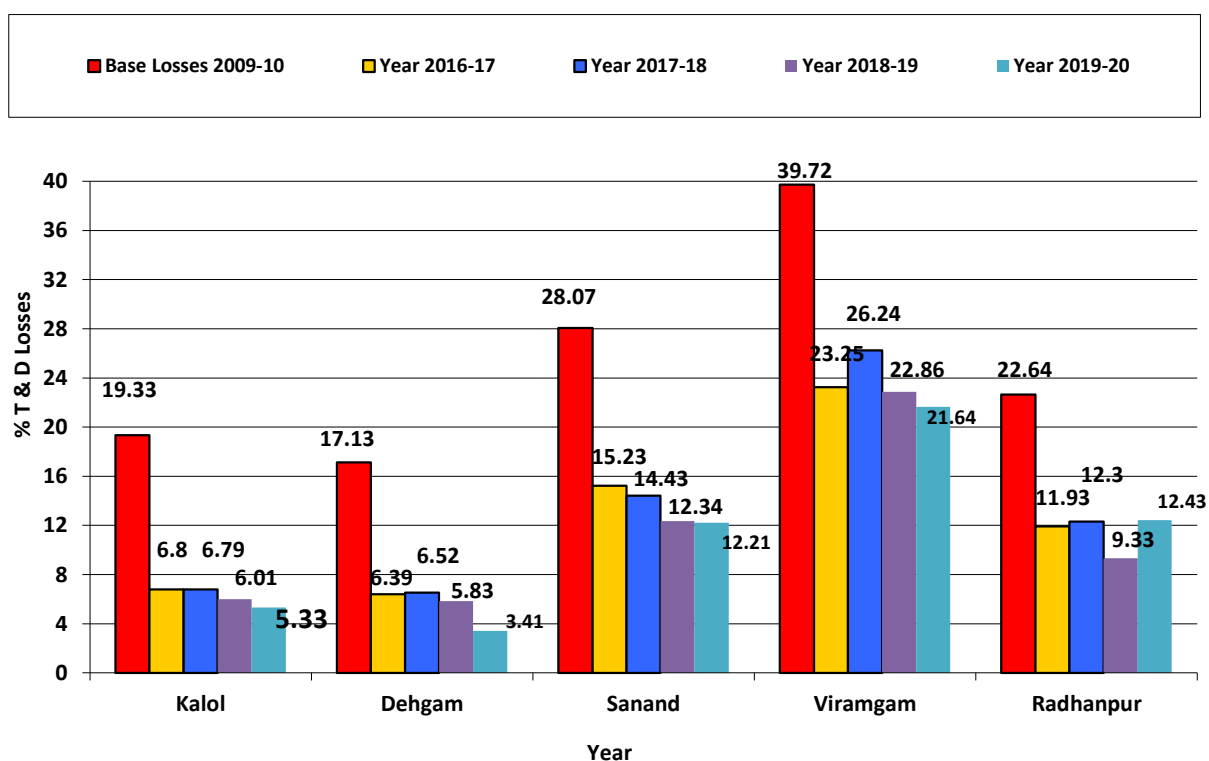
### Project

- Covered Town: 5
- Kalol, Dehgam, Sanand, Viramgam, Radhanpur
- Sanction cost : Rs 20.5Cr
- Expenditure Incurred : Rs 19.29
- GOI Fund is as loan @25 % of Project Cost

### Project covered..

- Replacement of Conductor
- New HT/LT Line
- Augmentation of Transformer
- Propose New Transformer
- Replacement of Meter
- Providing Of HT/LT ABC cable

## % Losses in RAPDRP Town



# **GOI 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 Armourd cable Services

## Deen Dayal Updadhayay Gram Jyoti Yojna (DDUGJY)

### 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**



## Industrial Park Electrification

### Japanese Park- Vithhlapur

- Electrical Network and Civil Work carried out at /the Total cost of Rs.8.67 Cr.
- Fund Mechanism :
  - 40 % GOG (Critical Infrastructure Project)
  - 20 % GIDC
  - 40 % UGVCL



**RCC Cable Trench for UG Network**



**Compact Transformer Cubical**

## Forthcoming Projects

### GOI Scheme :

#### Smart Metering for Bopal under IPDS (For UDAY States)

- Nos. of Meters : **38,950 Nos.**
  - Estimated Cost : **Rs. 38.09 Cr.**
  - DPR Approved by PFC on : **28.03.18**
  - Govt. funding : **Rs. 4.67 Cr as Grant**
- ( Rs. 1200/- per Node)

#### Industrial Park (GIDC) Underground Electrification

- Woman's Park BOL GIDC
- GIDC Electrification , Ukardi
- GIDC Electrification, Bhagapura
- GIDC Electrification , BOL Phase-II

# Procurement



## 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

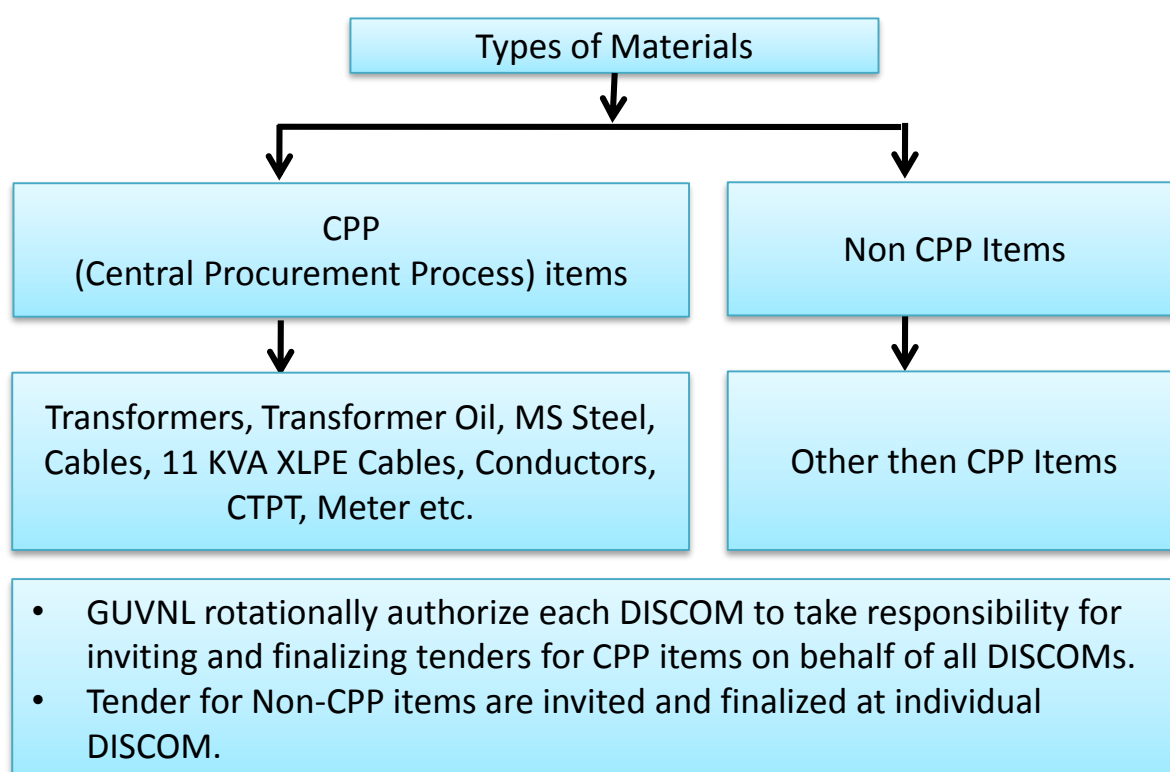
### Non- Critical Items :

- ✓ 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
Total	1982



## CPP & Non CPP Items

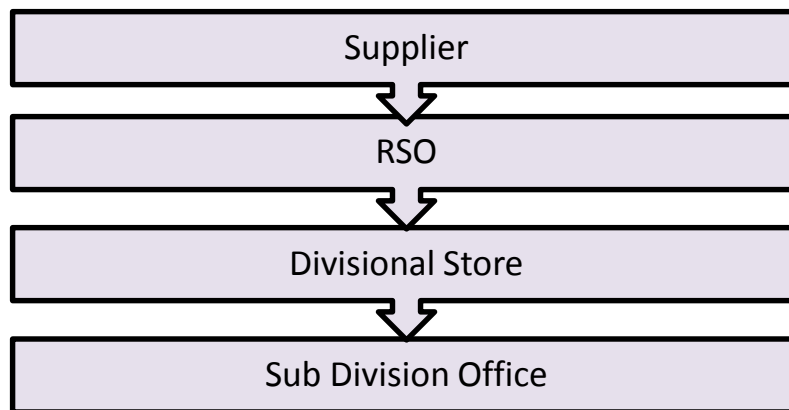


## Disposal of Scrap

- ✓ 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

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
Total	41.51

## Flow of Material



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

## 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 & EQDC.

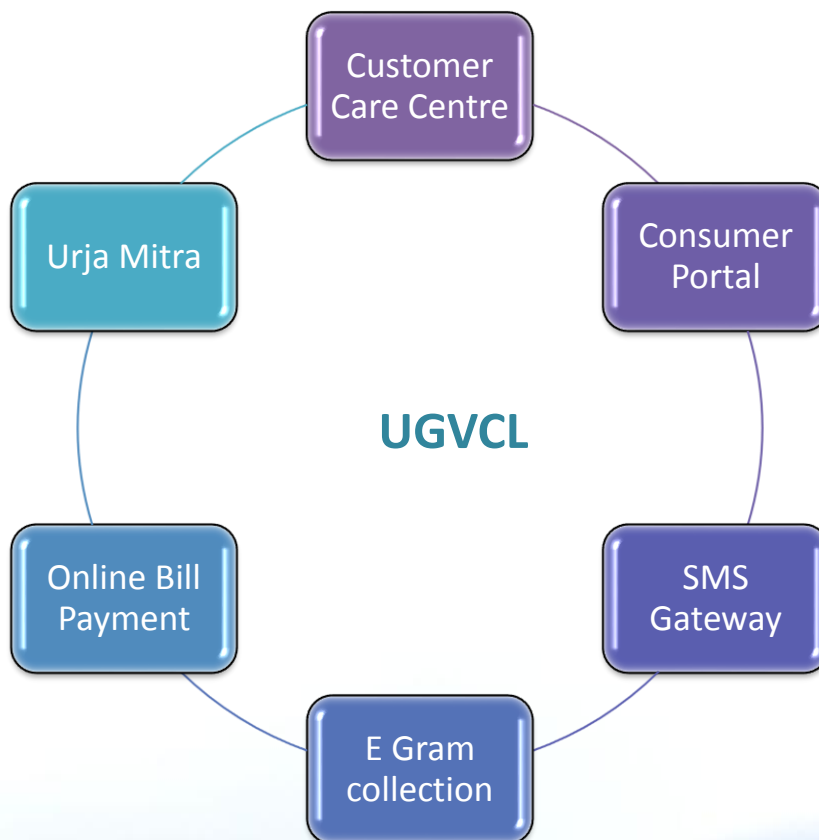
Year	ERDA Material						ERDA Transformer					
	No. Of Lot			No. Of Sample			No. Of Lot			No. Of Sample		
	Pass	Fail	Total	Pass	Fail	Total	Pass	Fail	Total	Pass	Fail	Total
<b>2015</b>	<b>181</b>	37	218	2872	288	3160	214	16	230	858	17	875
<b>2016</b>	<b>188</b>	17	205	2170	112	2282	145	11	156	488	12	500
<b>2017</b>	<b>54</b>	10	64	93	11	104	51	1	52	51	1	52
<b>2018</b>	<b>175</b>	9	184	208	9	217	104	2	106	105	2	107
<b>2019</b>	<b>346</b>	4	350	351	5	356	302	11	313	302	11	313
<b>Total</b>	<b>1211</b>	153	1364	9012	872	9884	1145	95	1240	3730	124	3854

Year	EQDC Cable					
	No. Of Lot			No. Of Sample		
	Pass	Fail	Total	Pass	Fail	Total
<b>2015</b>	112	6	118	924	8	932
<b>2016</b>	66	5	71	538	5	543
<b>2017</b>	39	1	40	39	1	40
<b>2018</b>	61	5	66	61	5	66
<b>2019</b>	223	13	236	223	13	236
<b>Total</b>	501	30	531	1785	32	1817

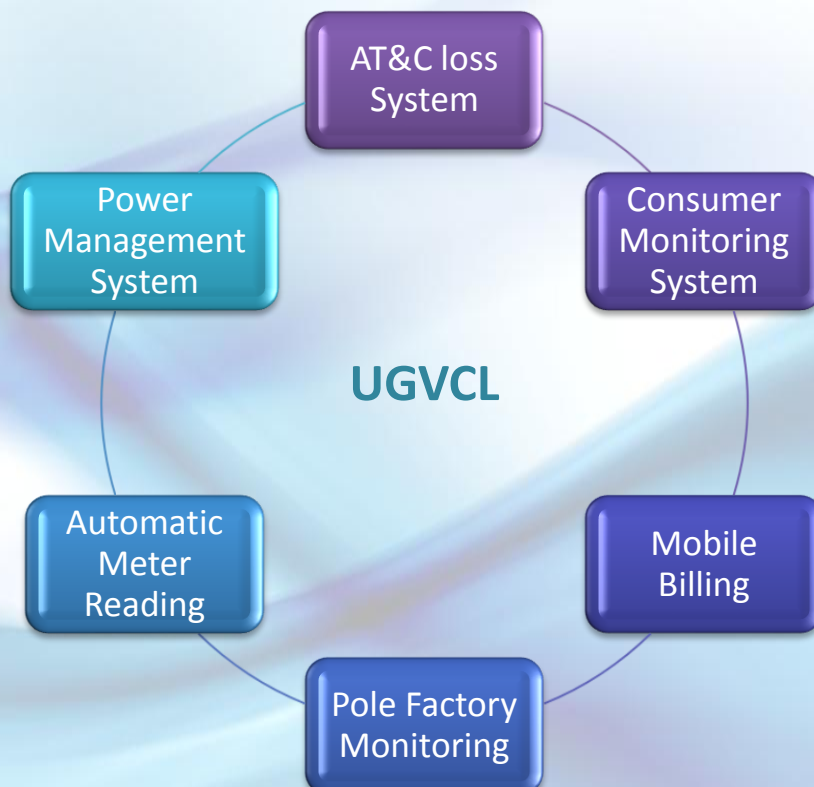
# EMC & IT Section



## Consumer Oriented IT Applications

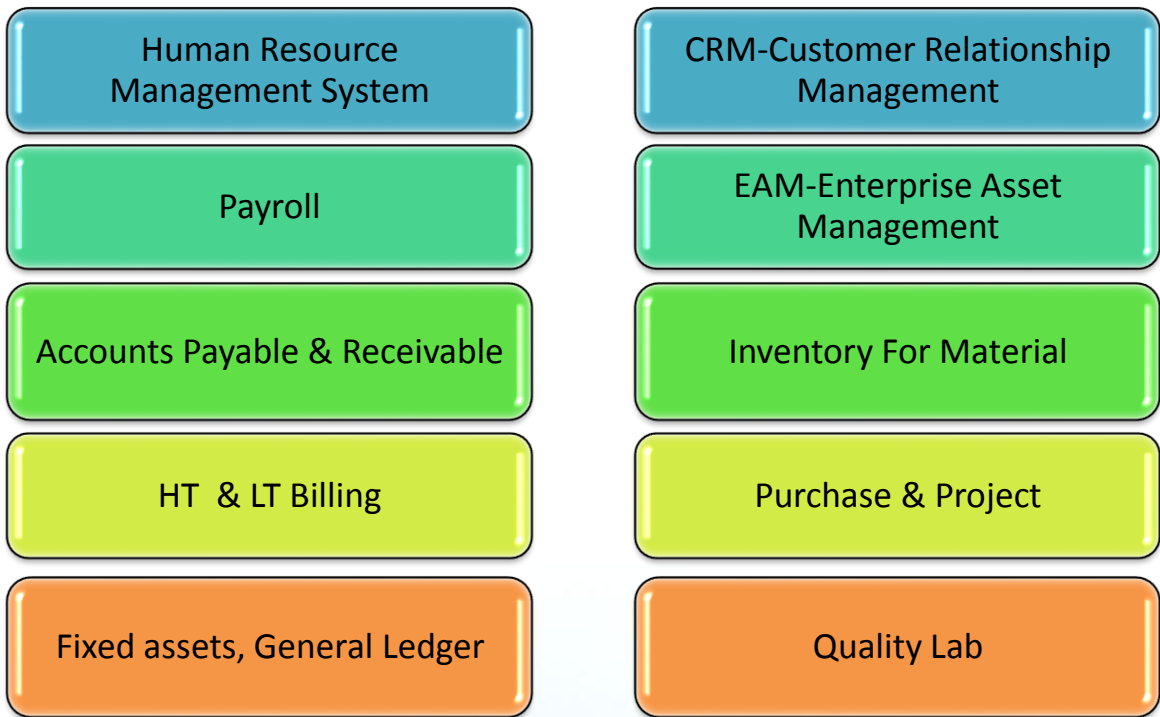


## Utility IT Applications





## Utility ERP Implementation For Day to Day working



## Benefit Of IT Applications

Utility	Consumer
<ul style="list-style-type: none"> <li>• Billing Analysis</li> <li>• Feeder &amp; DTC wise loss Analysis</li> <li>• Faulty Meter Analysis</li> <li>• Remote Meter Reading</li> <li>• Daily Distribution activity Analysis</li> <li>• Saving of Time &amp; Pin Point Hammering</li> </ul>	<ul style="list-style-type: none"> <li>• Online Bill Payment</li> <li>• E-gram Cash Collection</li> <li>• Single window Customer Care Centre</li> <li>• Improve Power Reliability</li> <li>• Information of Outage in advance</li> <li>• Company information on Website</li> </ul>

## SMS Service to Consumer

### SMS for

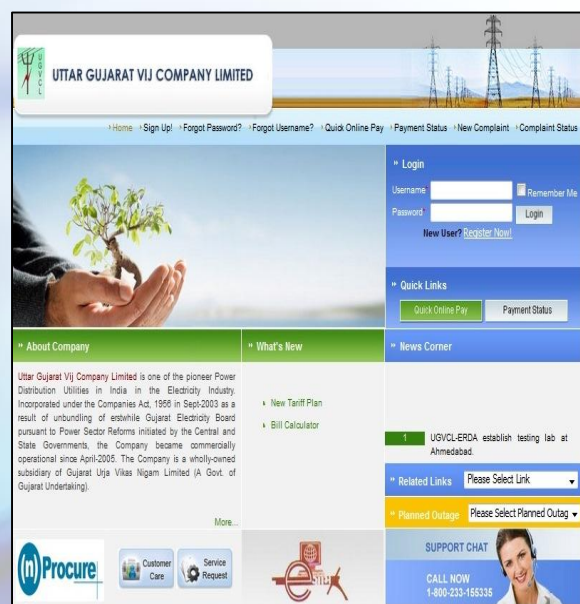
- Complaint Booked/Resolved
- Schedule/ Unscheduled Outage
- Energy Bill Generation
- Energy Bill Payment
- New Connection Application Registration, FQ issued, work completion etc
- Online Payment on consumer Portal



## 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



# **Account & Finance Section**



## Category wise Consumers

Sr. No.	Category	31.03.2014	31.03.2015	31.03.2016	31.03.2017	31.03.2018	31.03.2019	31.03.2020
1	Residential	2368434	2432337	2520821	2612174	2672013	2764417	2849251
2	Industrial							
	LT	281035	295632	315654	335774	350530	366645	386339
	HT	2708	2949	3229	3511	3755	4153	4486
	Total Industrial	283743	298581	318883	339285	354285	370798	390825
3	Agriculture	261589	283432	308607	332618	347746	364969	380956
4	Others	45096	47961	51894	55777	57938	61801	64305
5	Total	3242605	3360892	3519088	3679139	3786267	3849758	3685337

## % Consumer Growth

Sr. No.	Category	% Growth 31.03.2015	% Growth 31.03.2016	% Growth 31.03.2017	% Growth 31.03.2018	% Growth 31.03.2019	% Growth 31.03.2020
1	Residential	2.70	3.64	3.62	2.29	3.34	3.06
2	Industrial						
	LT	5.19	6.77	6.37	4.39	4.39	5.37
	HT	8.90	9.49	8.73	6.95	9.58	8.02
3	Agriculture	8.35	8.88	7.78	4.55	4.72	4.38
4	Others	6.35	8.20	7.48	3.87	6.25	4.05
5	Total	3.50	4.50	4.36	2.76	1.64	3.42

## Collection in Crores( Rupees)

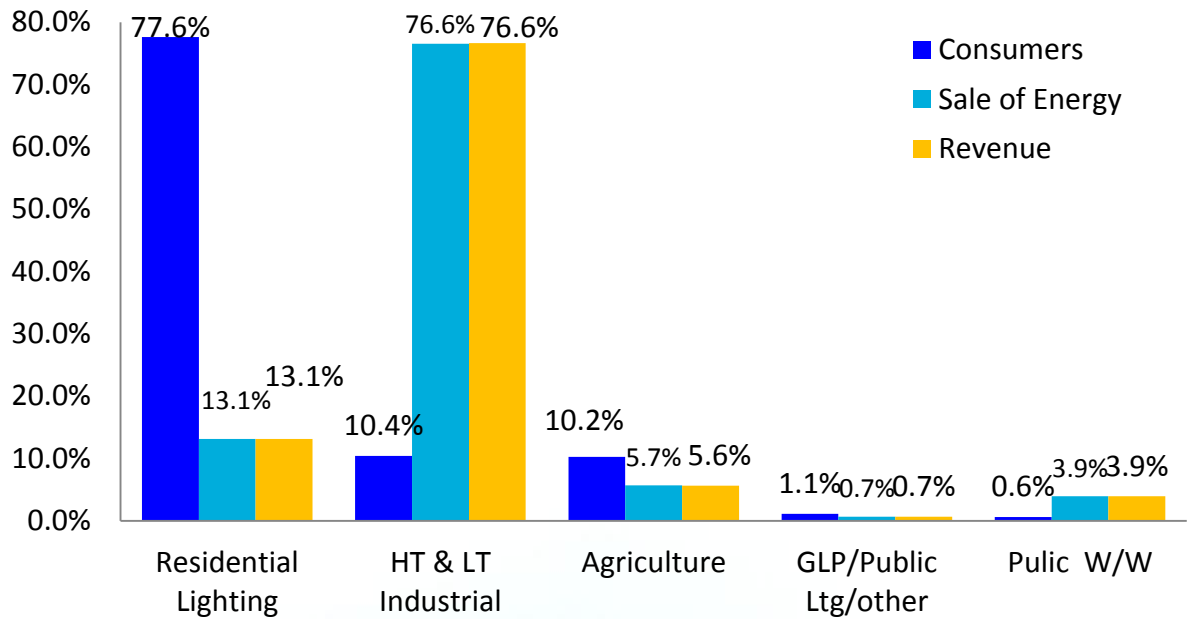
Sr. No.	Year	UGVCL Window Collection		E-Payment		Other		Total
		Rs/-	%	Rs/-	%	Rs/-	%	Rs/-
1	2013-14	3199.10	63.34	1069.01	21.17	782.27	15.49	5050.38
2	2014-15	3570.03	60.94	1413.25	24.12	875.43	14.94	5858.71
3	2015-16	4030.77	60.83	1632.64	24.64	936.19	14.13	6626.60
4	2016-17	4767.42	64.96	1791.95	24.42	779.23	10.62	7338.60
5	2017-18	5293.81	63.53	2276.33	27.32	762.93	9.16	8333.07
6	2018-19	3790.21	40.02	5256.34	55.50	424.22	4.48	9470.77
7	2019-20	2474.84	24.22	7363.69	72.07	378.58	3.71	10217.11

## Consumption Pattern

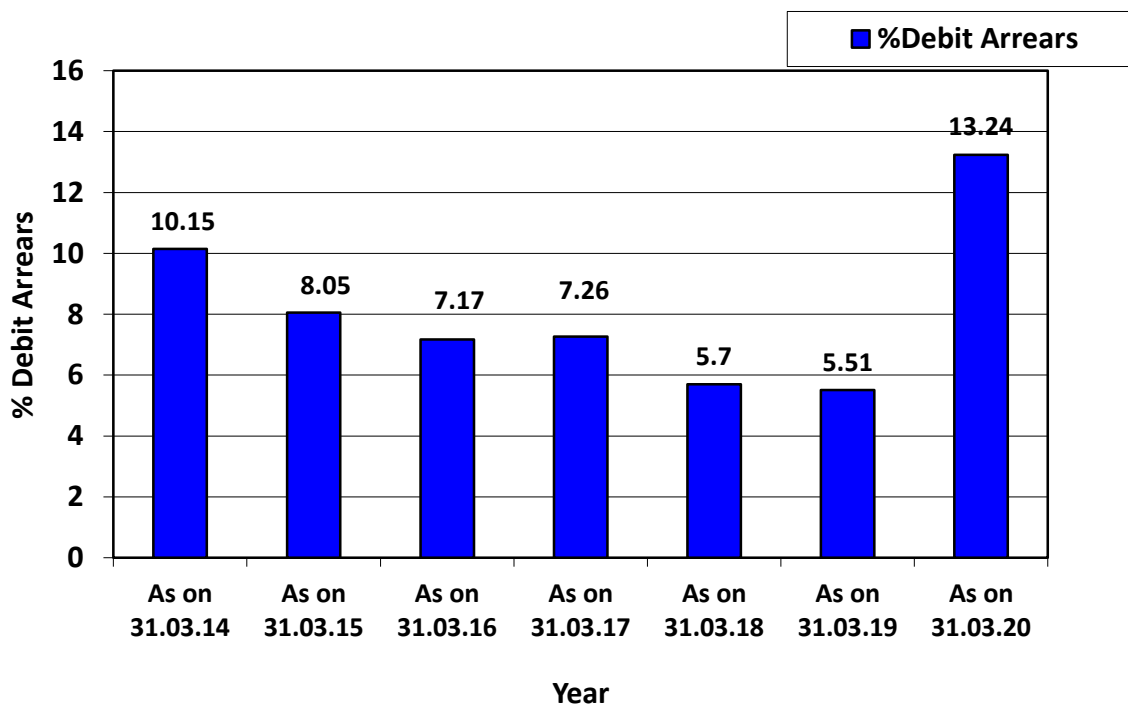
Category	FY: 2006-07				FY: 2019-20			
	Consumers (Nos.)	%Share	Consumption (Mus)	%Share	Consumers (Nos.)	%Share	Consumption (Mus)	%Share
Residential	1569817	77.60	835	8.71	2849251	77.85	2426.59	10.20
MSI	227269	11.23	836	8.72	386339	10.56	2011.38	8.46
HT Ind.	1441	0.07	1821	18.99	4486	0.12	9182.89	38.60
Agricultural	207577	10.26	5700	59.44	380956	10.41	9357.93	39.34
Water Works	10419	0.52	366	3.82	22789	0.62	752.52	3.16
Public Lighting	6509	0.32	32	0.33	16222	0.44	57.87	0.24
Total Consumers	2023032	100	9590	100	3660043	100	23789.18	100



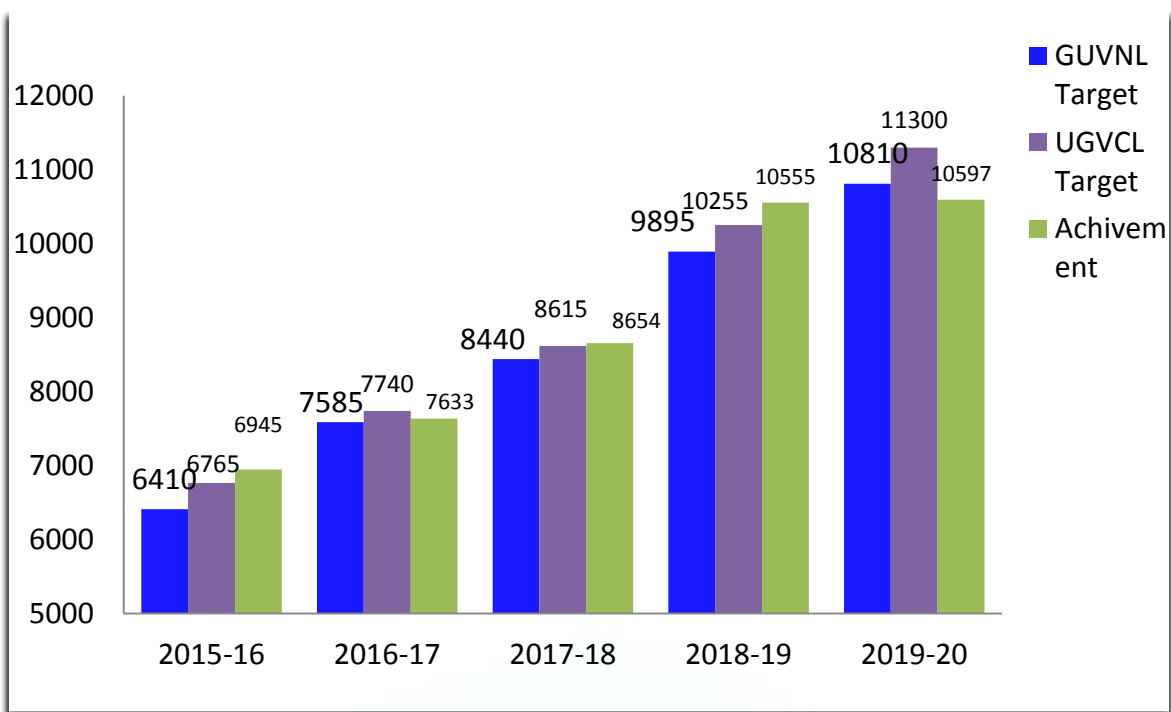
## % Share : Category wise Consumer, Energy sale & Revenue (2018-19)



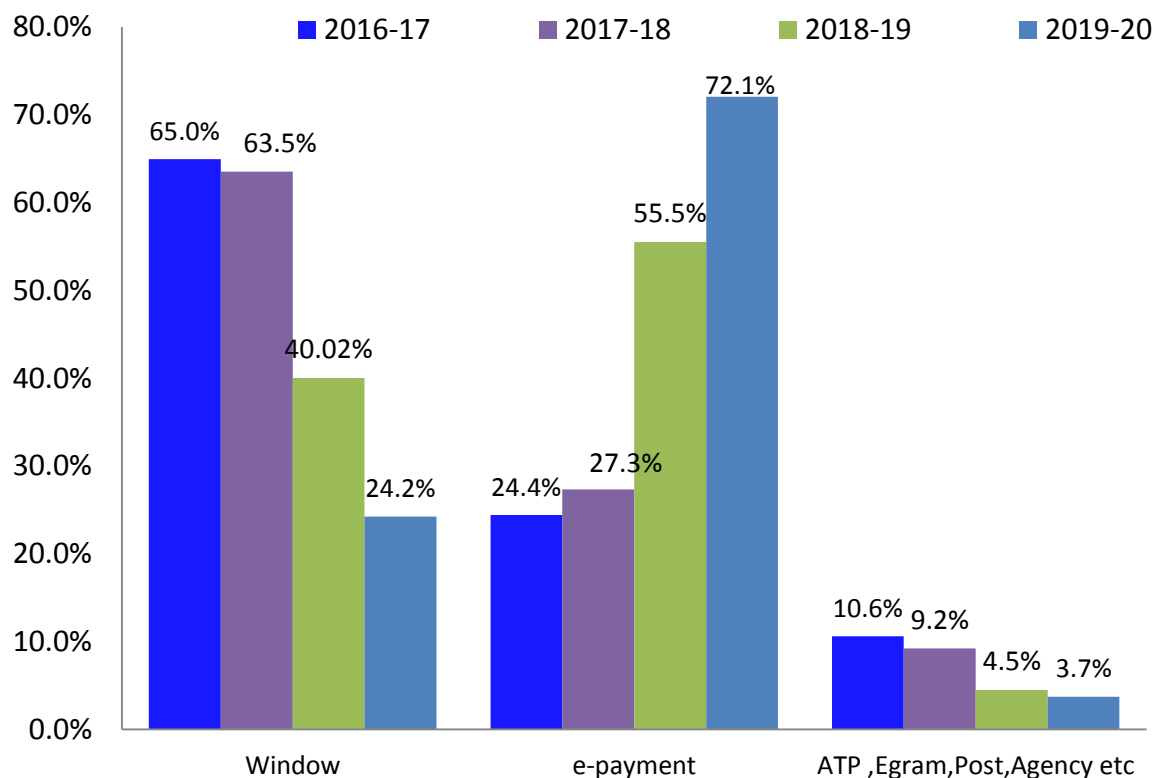
## % Debit Arrears



## Collection Achievement ( In Cr.)



## Mode of Energy Bill Collection (2019-20)



## Financial Data

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Total Income (in Cr.)	8969.46	9313.44	10270.83	12356.21
Total Expenses (in Cr.)	8880.67	9226.13	10155.13	12304.54
Net Profit (Before Tax) (in Cr.)	88.79	87.31	115.70	51.67
Net Profit (After Tax) (in Cr.)	71.65	66.55	101.32	36.62
Cost to Serve (Rs/Unit)	5.01	4.82	4.88	5.35
Average Revenue Realization Income (Rs /Unit)	5.06	4.86	4.93	5.37
Gap (Rs /Unit)	0.05	0.04	0.05	0.02

## 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

# HR- Section

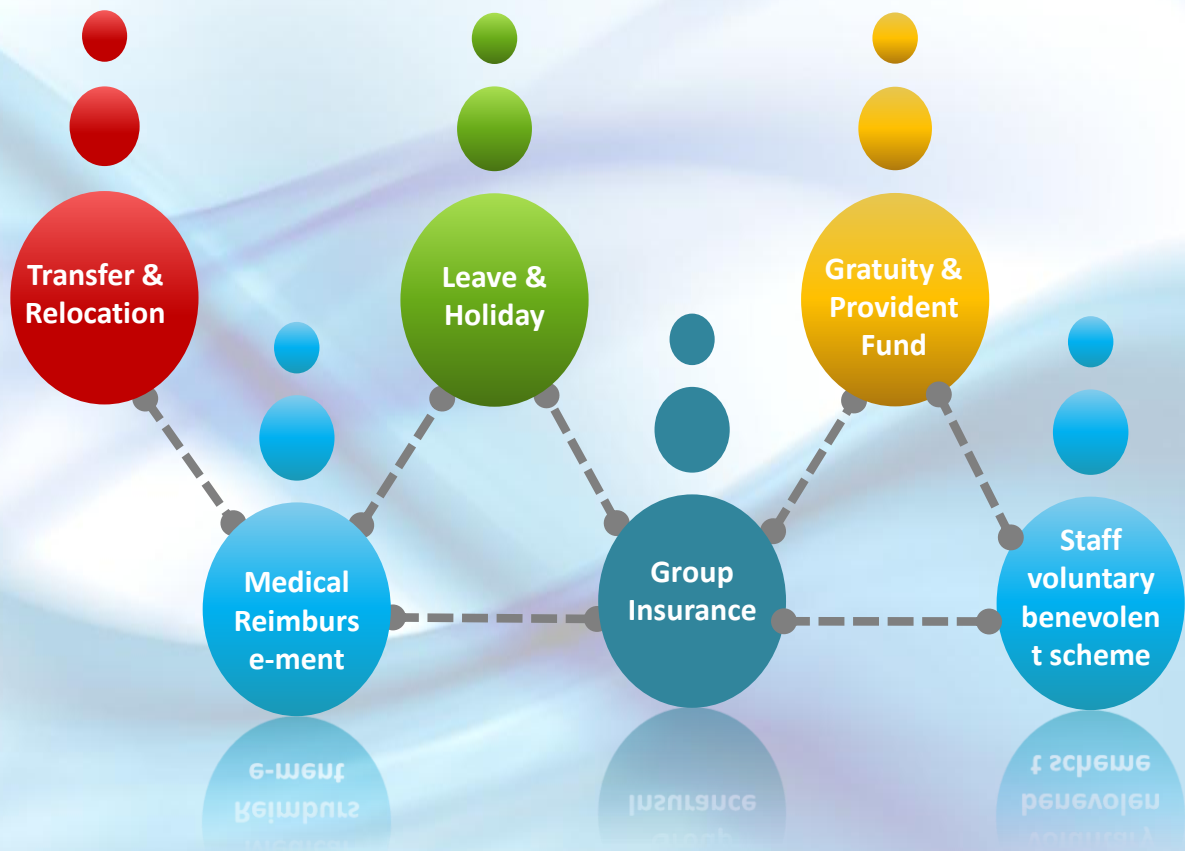


## HR: Objective / Essence

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



## 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

Electrical Assistant → Assistant Line Man → Line Man → Line Inspector

## HR : Employee Strength

Class	Sanctioned	Filled up	Vacancy	% Vacancy
I	362	353	9	2.49
II	548	526	22	4.01
III	3758	3156	602	16.02
IV	4694	4628	66	1.41
Total	9362	8663	699	23.93

Class	Sanctioned	Filled up	Vacancy	% Vacancy
Technical	5539	5468	71	1.28
Non- Tech	3823	3195	628	16.43
Total	9362	8663	699	7.47

## HR : Induction & Training

### **Induction Training :**

- ✓ All the entry level employees has to given Induction training for better knowing of organization, 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 Department : Function

- ✓ Construction/Renovation of office premises.
- ✓ 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

## Civil : Construction of New Building



Construction of 61 nos. New office Premises & 30 nos. of Residential quarter in last 10 year



Provided Modular Furniture in 83 offices



## Civil : Renovated Offices

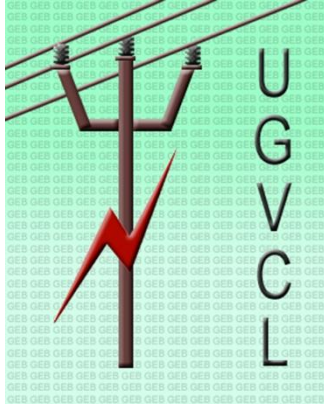


Renovation of 68 office building In 10 Year



## UGVCL : Various Issues and Challenges

- ✓ 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
- ✓ Nearby Torrent Power area in Ahmedabad & difficulty to meet exception of consumer in overhead network
- ✓ Prompt customer service in Rural area
- ✓ Threat due to Open Access: (F.Y. 15-16: 1346.09 Mus) (FY 16-17: 1462.54 Mus) (FY 17-18-:1333.90 Mus) (FY 18-19:881.04 Mus)
- ✓ Need of Professional Staff to overcome the issues of various Taxes, Ind-AS and various Audits etc.



**Proudly Powering the  
Growth Engine of Nation**

**Uttar Gujarat Vij Company Ltd.**





**Trust Only**

**Security Measures**

**Don't leave it on fate.**

**Use ELCB**

**Avoid Electrical Accidents.**

**Uttar Gujarat Vij Company Limited**

