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Dynamic Notification Process for real-time updation of Consumer with Network using advanced integrated digital platforms

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Team Lead – ADMS & FFA Operational Support Tata Power Delhi Distribution Limited









02 - 04 March 2022



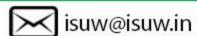
Introduction







Parameter	Unit	July '02	March'21	% Change			
OPERATIONAL PERFORMANCE							
AT&C Losses	%	53.1	7.3	88%			
System Reliability – ASAI -Availability Index	%	70	99.61	41%			
Transformer Failure Rate	%	11	0.84	90%			
Peak Load	MW	930	2069	123%			
Length of Network	Ckt. Km	6750	16513	145%			
Street Light Functionality	%	40	99.41	150%			
CONSUMER RELATED PERFORMANCE							
New Connection Energization Time	Days	52	3	94%			
Meter Replacement Time	Days	25	2	92%			
Provisional Billing	%	15	0.86	94%			
Defective Bills	%	6	0.13	98%			
Bill Complaint Resolution	Days	45	4	91%			
Mean Time to Repair Faults	Hours	11	1.50	87%			
Call Center Performance - Service Level	%	-	95				
Payment Collection Avenues	Nos.	20	6725	33525%			
Consumer Satisfaction Index	%	-	90				
<u>OTHERS</u>							
Capex (Cumulative)	Mn USD	187	984	428%			
Consumers	Count Mn	0.7	1.79	156%			
Employees	Count	5600	3217	43%			









Technology Evolution





- **Field Force Automation (FFA)**
- **Smart Meter Integration**

2021

onwards

2007-09

- Distribution Management System
- Outage Management System
- **SCADA System**
- Integration of GIS -DMS
- **Sub Station Automation**
- Fiber communication infrastructure
- **Geographical Information System**
- Old and Non communicable Grid Panel & Relay

2005-07

Manned Grid S/Stn - No data at Load Dispatch Center.



2002-04







ADMS

ISO 27001- Security certification



Foundational Blocks for Smart Grid



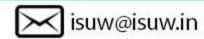


Dynamic consumer connectivity with electrical equipment

Faster relay of information

Accurate calculation of Reliability Parameter

Future Network Planning & Maintenance activity





Importance of Network Updation





Real-time Calculation of Reliability Parameter

Consumer back feeding

Asset Performance monitoring

Accuracy in Prediction logic





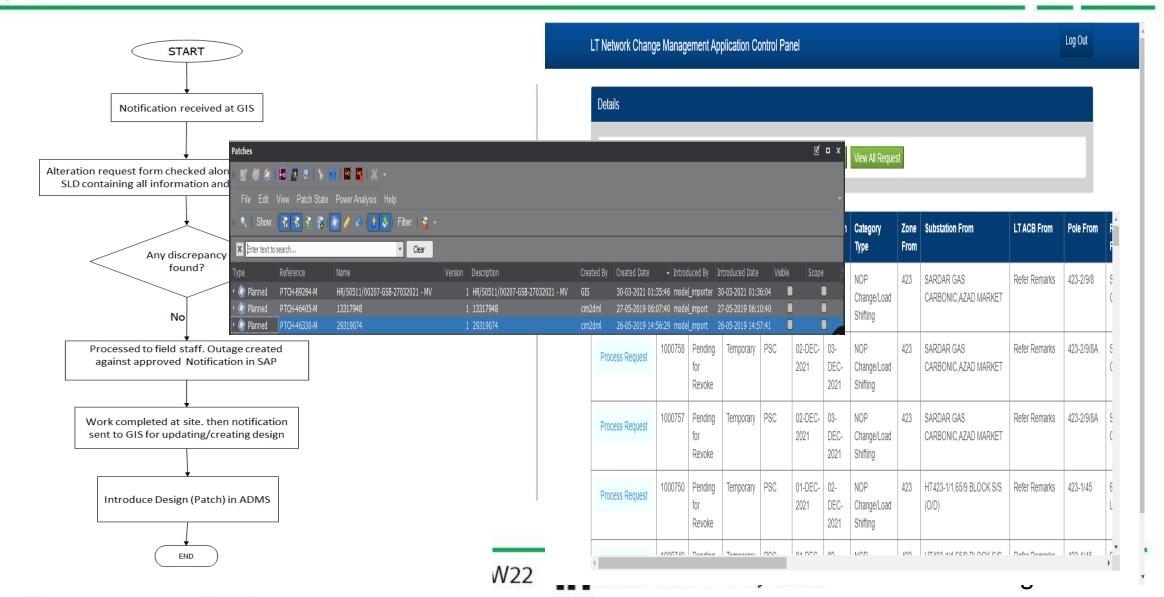




Platform for Updation









Platform for Updation



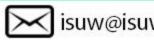
Smart Meter

Ping Meter Option

Verification of Smart Meter connected Consumers

Network updation turnaround time reduced from 3 days to 15 mins

LV Cal	ls:55 SP_C:36	8 SP_E:4 S	Streetlight - CSL:62	2 MV C
S.No.	Take Action	Ping Meter	Skill	Zone
1	*		Streetlight - ZSL	503
2	*	0	Ç	503
3	*	0	LV	521







Benefits to Stakeholders



Consumer

- Faster restoration of service
- Transparency in service

Employee

- Faster decision making
- Route optimization

Organization

- Asset management
- BD opportunity for other Utility

Safety

Confidence in operating Network







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Recognition







Extracts from the Register of Copyrights



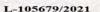
Dated: 22/07/2021

- Registration Number
- Name, address and nationality of the applicant
- Nature of the applicant's interest in the copyright of the work
- Class and description of the work
- Title of the work
- Name, address and nationality of the author and if the author is deceased, date of his decease

- Whether the work is published or unpublished
- Year and country of first publication and name, address and nationality of the publisher
- Years and countries of subsequent publications, if any, and names, addresses and nationalities of the publishers
- Names, addresses and nationalities of the owners of various rights comprising the copyright in the work and the extent of rights held by each, together with particulars of assignments and licences, if
- Names, addresses and nationalities of other persons, if any, authorised to assign or licence of rights comprising the copyright
- 13. If the work is an 'Artistic work', the location of the original work, including name, address and nationality of the person in possession of the work. (In the case of an architectural work, the year of completion of the work should also be shown).
- 14. If the work is an 'Artistic work' which is used or capable of being used in relation to any goods or services, the application should include a certification from the Registrar of Trade Marks in terms of the provision to Sub-Section (i) of Section 45 of the Copyright Act, 1957.
- If the work is an 'Artistic work', whether it is registered under the Designs Act 2000 if yes give details.
- 16. If the work is an 'Artistic work', capable of being registered as a design under the Designs Act 2000, whether it has been applied to an article though an industrial process and .if yes .the number of times



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Thank You

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