India's 1st Operational Smart City & IFSC

GIFT
GUJARAT INTERNATIONAL FINANCE TEC-CITY

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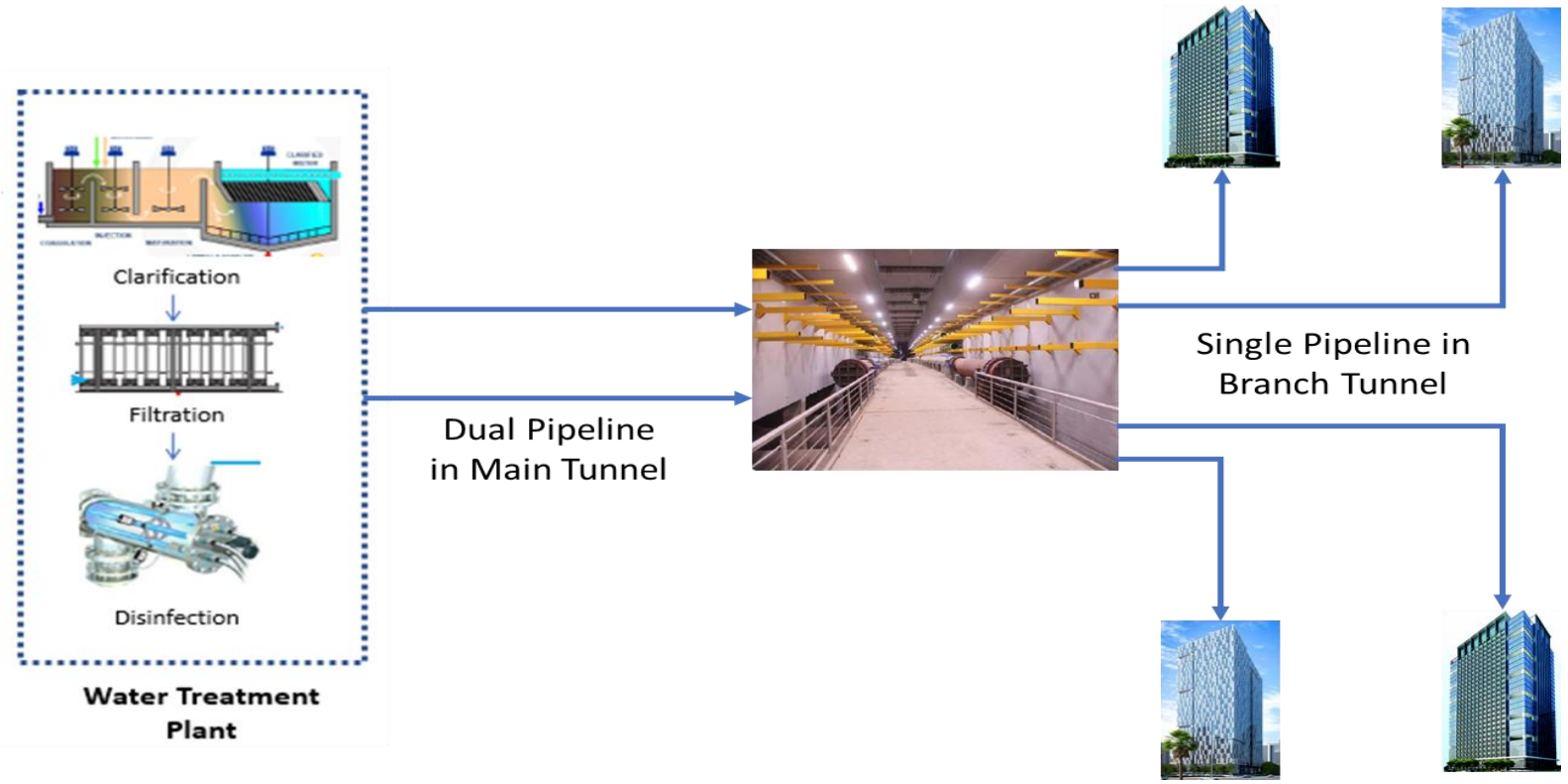
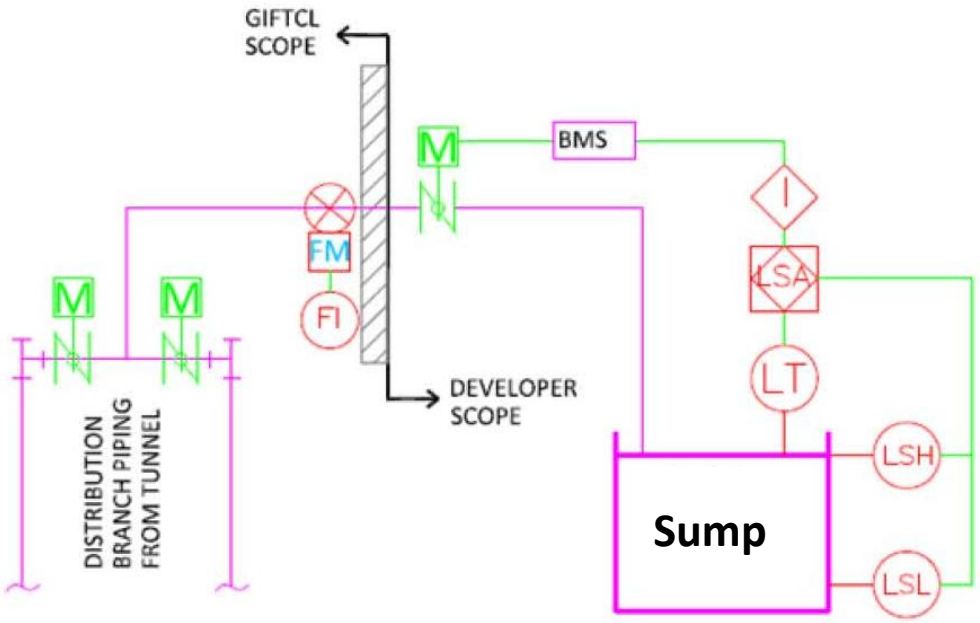
www.giftgujarat.in

Potable Water Supply



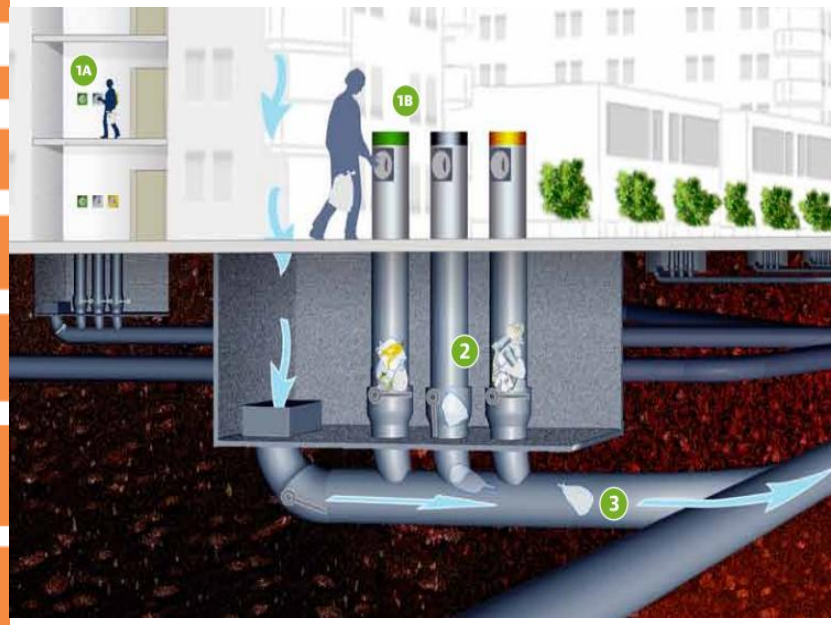
- The potable water shall be conveyed by pumping from the WTP's directly to the underground tanks of various packages/individual buildings through utility tunnel.
- The entire water network for the GIFT city is installed with electronically controlled valve and flowmeters at the entrance of each building.
- The communication of main PLC to individual RIO panel is through fibre optics cable with provision of redundant communication cable for each package or building.

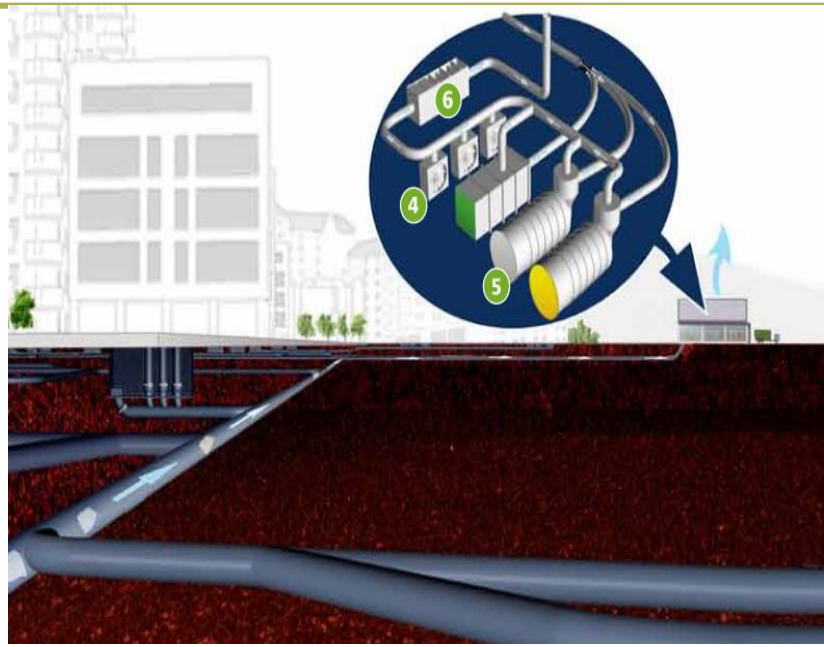
Potable Water Supply



- The Water Collection Sump inside Developer's Building is equipped with Level Sensors and Transmitter, Level Switches and Electronically Controlled Valves.
  - The Open/Close Feedback of these three signals is connected to GIFTCL SCADA for monitoring Purpose
- The Electronically Controlled Valves of Developer's Building will remain in open position, till the Water Collection Sump Level is above 90%.
- After, the Water Collection Sump Level reached 90%, Developer's Valve shall be automatically closed.
  - If this does not happen, GIFT's Valve will change to Close Position

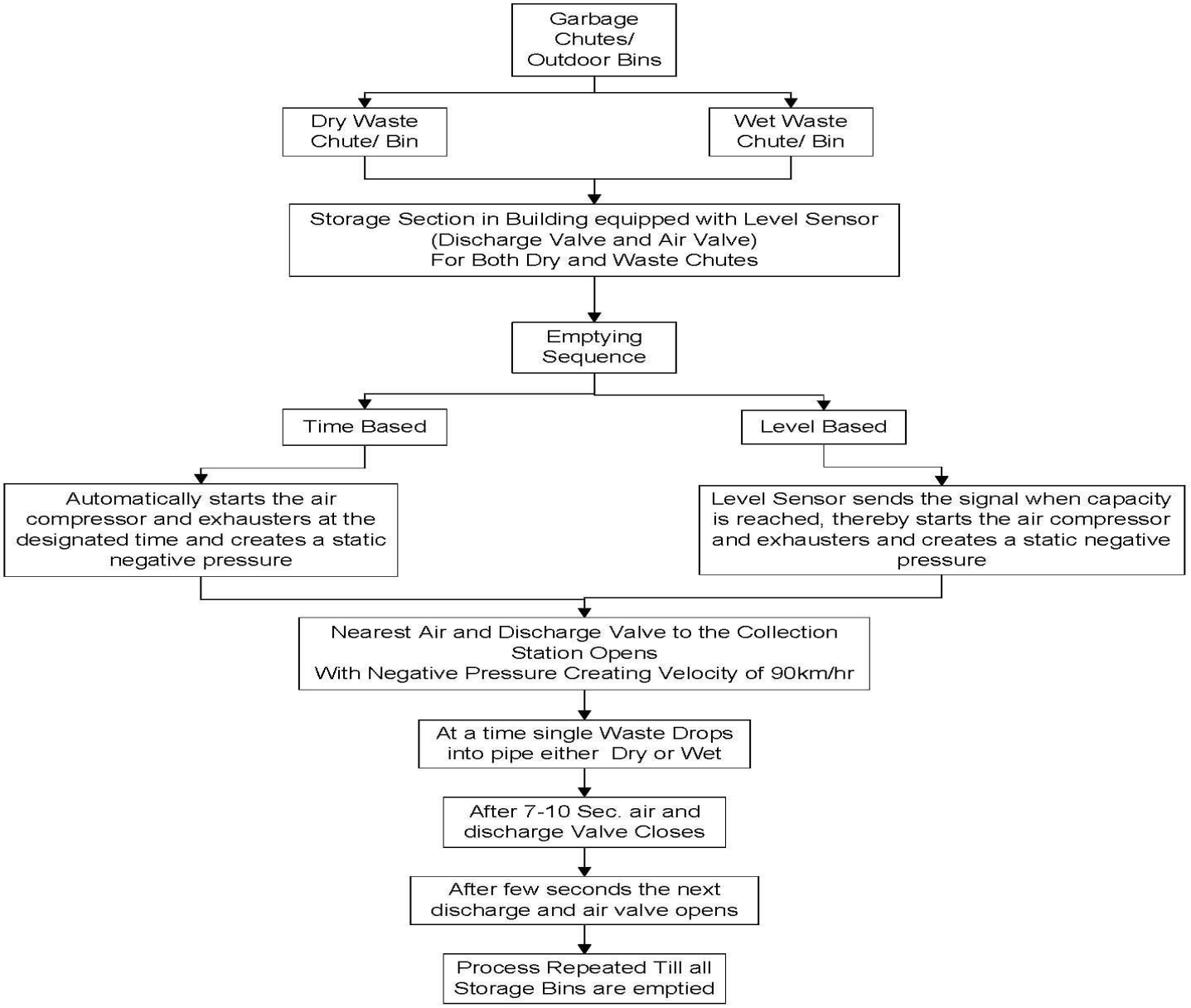
Automated Waste Collection System





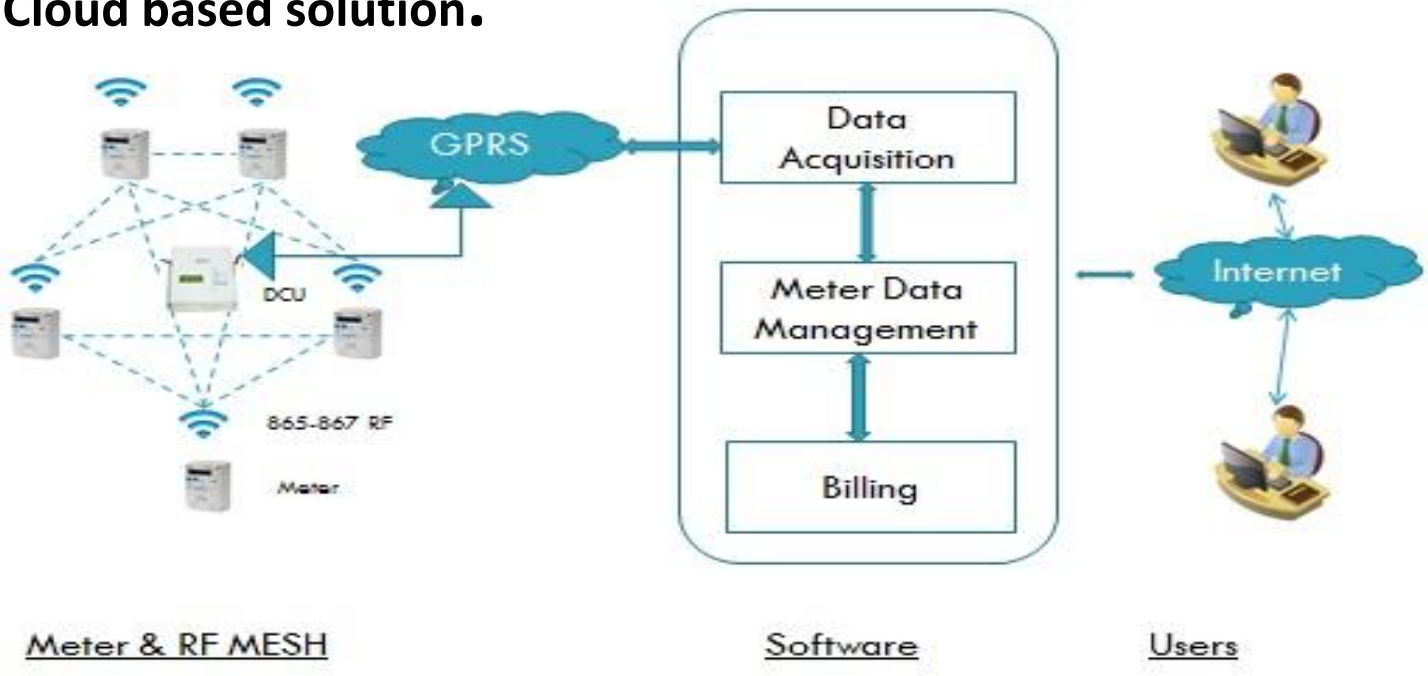
1. Waste is thrown into a waste inlet either in Chute or in Outdoor Bins – Either in Dry Waste Chute or Wet Waste Chute
2. Each chute is connected to temporary storage section which is equipped with level based sensor
3. At a time single type of waste (dry or wet) is sucked out through a network of pipes at speed of 90 km/hr
4. Exhauster Fan creates the vacuum that sucks the waste to Central Waste Handling Facility
5. The waste is directed to Segregation if it is dry waste or to the compactor if it is wet waste
6. The air is cleaned by filters before it is released.

Automated Waste Collection System



Automated Meter Reading : Implemented

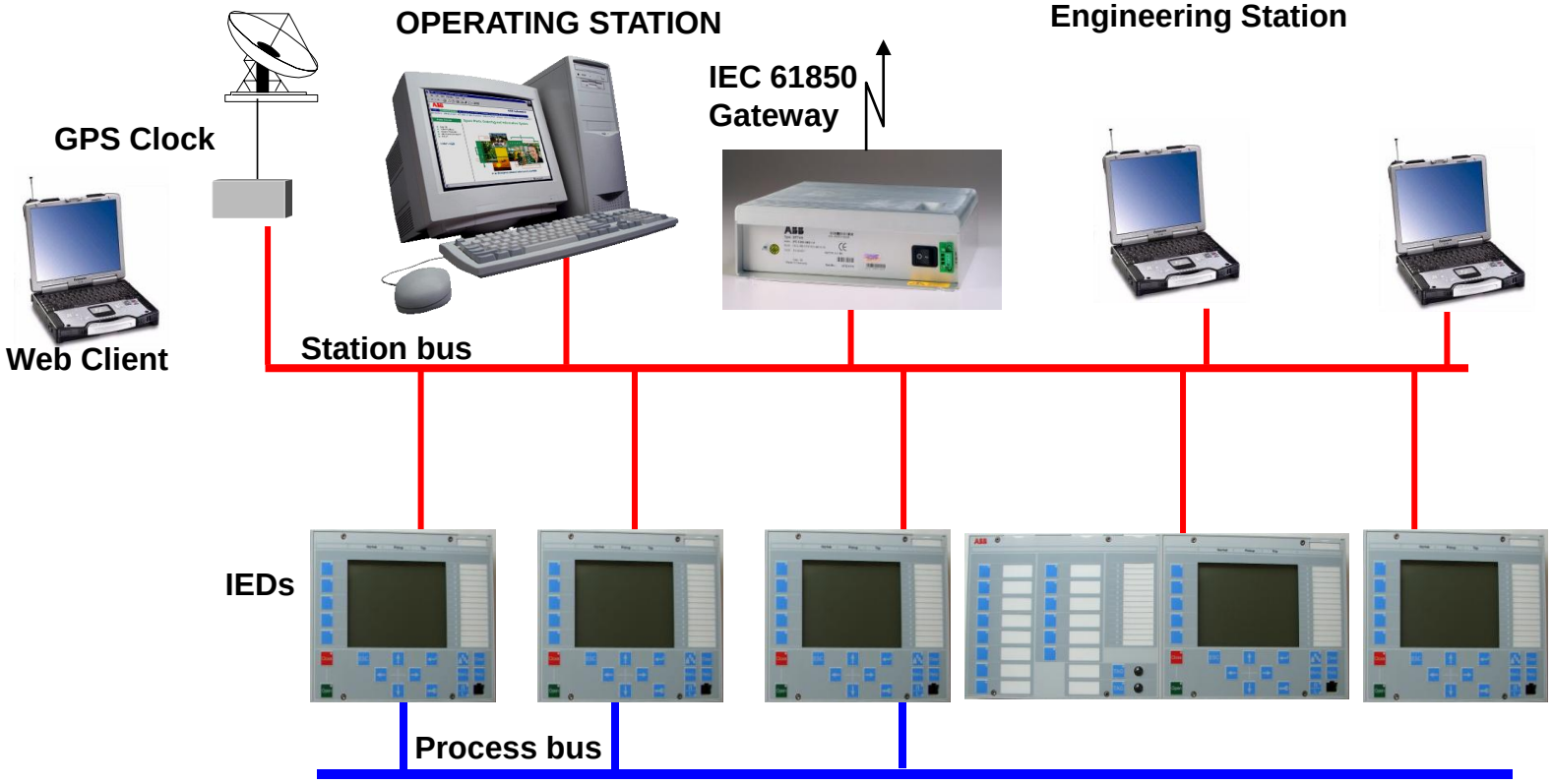
- Energy consumption reading By RF and GSM network
- Multi utility billing, Platform for multi-biller for same consumer.
- Customer Portal with web access, android app and IOS app.
- Online consumer registration, billing, payment.
- Communication with consumer via SMS/E-mail for billing, payment, shut down and power failure.
- Cloud based solution.



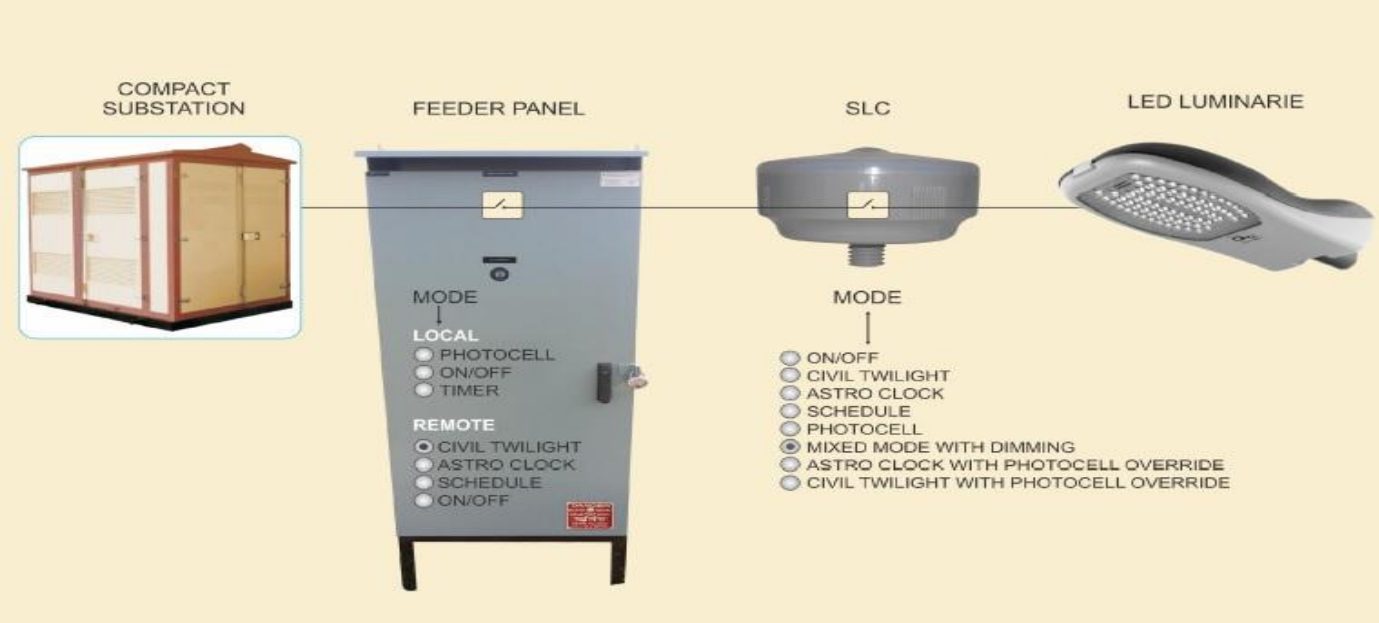
AMR vs Conventional System

AMR System	Conventional System
➢ Accurate and error free billing.	➢ Manual meter reading.
➢ Energy management through profile data graphs.	➢ Manual data entry for billing software.
➢ Bill distribution by e-mail and SMS.	➢ Manual Bill distribution.
➢ Quick detection of faulty meter.	➢ Time consuming for meter reading.
➢ Demand side management by mapping of customers and online data monitoring.	➢ Chances of error due to manual intervention.
➢ Improved security and tamper detection.	
➢ Less financial burden correcting mistakes.	

Substation Automation : Architecture



Intelligent Streetlight System : Salient Feature



- **Effective monitoring, controlling of the Individual Light**
- **Reduced Energy Cost**
- **Web-based Software with GPS mapping**
- **Asset Management**
- **Extensive reporting on performance and energy savings**
- **Real Time Alerts/Alarms in case of light failure**

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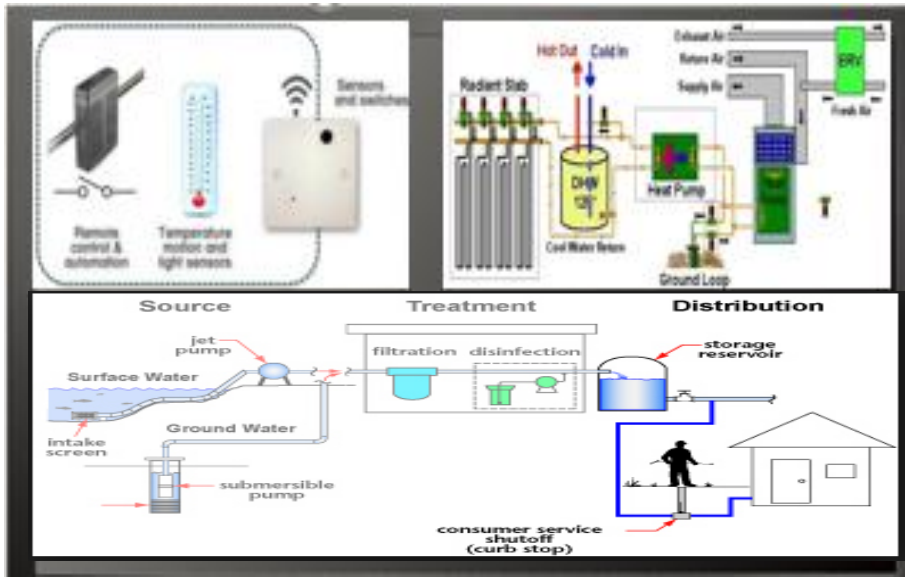
City Command and Control Centre



Public Utilities Integration and Automation

Select Findings by ResearchAndMarkets.com on Convergence of AI & IoT Technologies and Solutions (AIoT)

- IoT will represent **83%** of the entire AI chipsets market by 2023
- Global AI in embedded IoT devices market will approach **$26.2B USD by 2023**
- The Global general AI market will reach **$50.8 billion** USD by 2023 with **42% CAGR**
- Total AI driven networking solution market is expected to reach **$5.8 billion** by 2023
- Over **50%** of the enterprise organizations will leverage AI technology for networking by 2023

- For solving a wide range of problems across a diverse number of industry verticals
- Optimizing system and network operations as well as extracting value from industry data through dramatically improved analytics and decision making processes

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Thank you.