



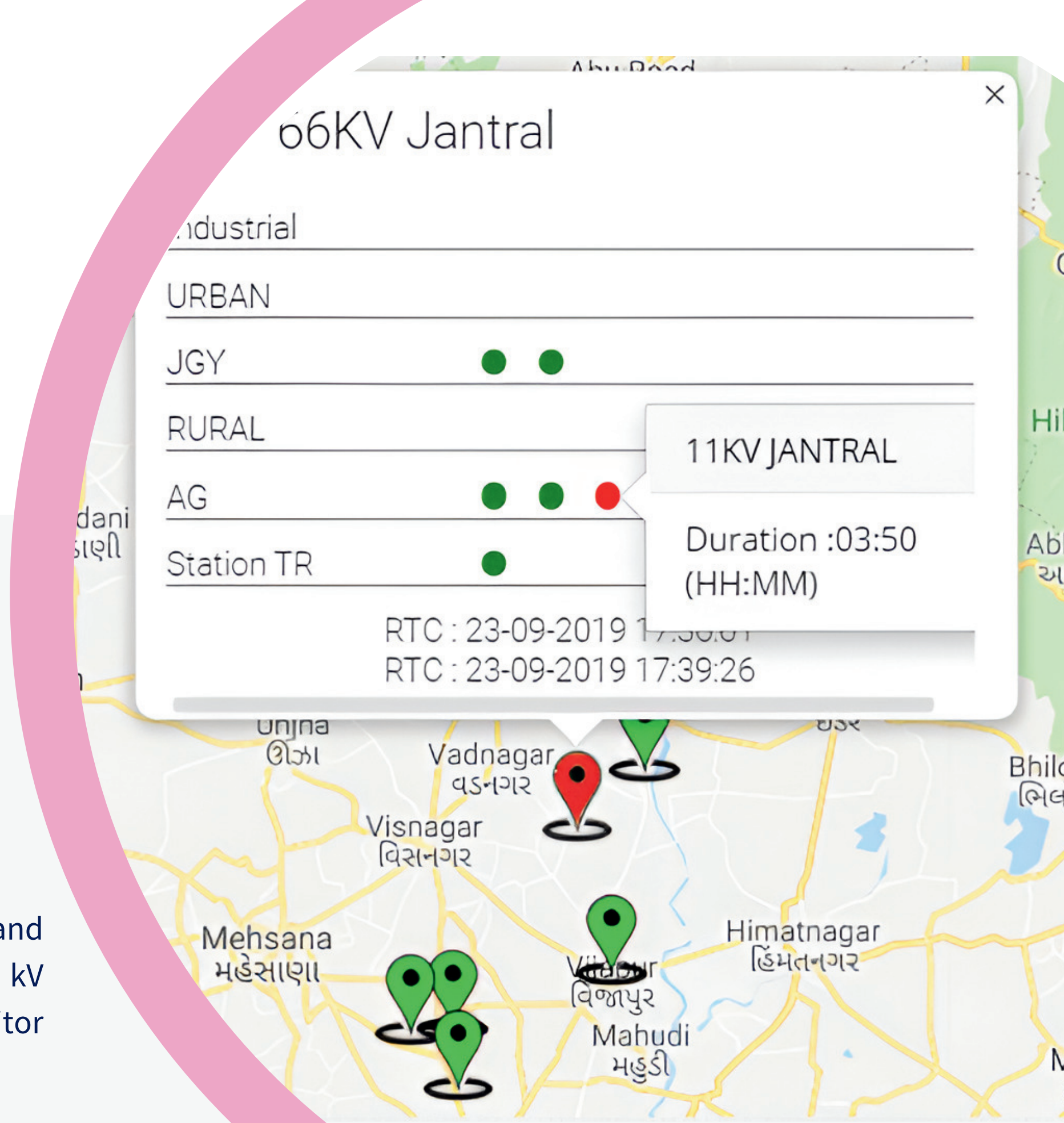
# GUJARAT POWER RESEARCH & DEVELOPMENT CELL

## GUJARAT URJA VIKAS NIGAM LTD

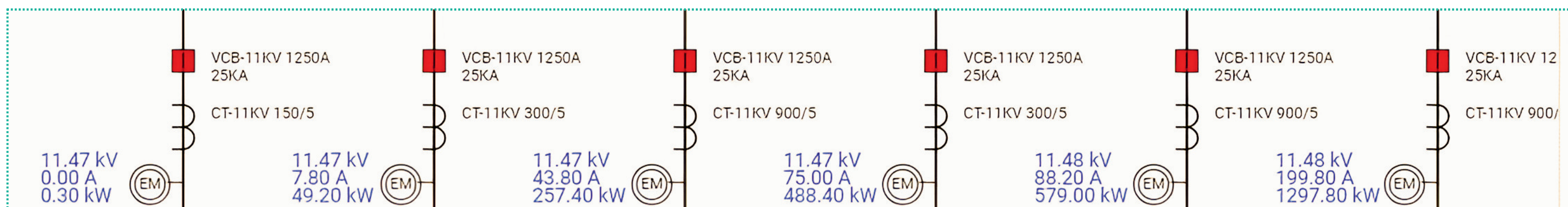
The Smart Feeder Monitoring System (SFMS) is an advanced, self-sustained, web-based system designed to automate the monitoring and management of critical electrical infrastructure at 66/11 kV substations. Utilizing IoT-based technology, SFMS captures and logs real-time data on essential parameters such as feeder breaker status, transformer health, and electrical parameters from energy meters.

The system allows for the remote monitoring and control of key components, including 66 kV incomers, power transformers, OLTC, capacitor banks, and 11 kV feeders.

By providing real-time visibility and analysis, SFMS enhances power supply reliability, facilitates energy audits, and supports the generation of critical management information system (MIS) reports without the need for manual intervention. Deployed by GPRD Cell in collaboration with GETCO, SFMS ensures more efficient, reliable, and automated substation management.



## SMART FEEDER MONITORING SYSTEM (SFMS)



### FEATURES

- Real-time monitoring of feeder breaker status
- Automated substation energy audits and real-time data acquisition
- Real-time feeder outage monitoring by category and duration
- Automatic calculation of reliability indices (SAIFI, SAIDI, and CAIDI)
- Continuous health monitoring of power transformers
- Custom notifications and alerts for stakeholders
- Geo-monitoring of feeder status in real time
- IoT-based communication for data logging and control
- Web-based access for remote system monitoring

### BENEFITS

- Improved power supply monitoring and faster response to issues
- Enhanced Power supply reliability and automated reliability indices
- Comprehensive energy audits for better energy management
- Reduced equipment downtime through proactive monitoring
- Increased operational efficiency with automated reporting
- Actionable insights from holistic MIS reports
- Remote access for flexible system control
- Lower operational costs through optimized performance
- Scalable solution for expanding distribution networks