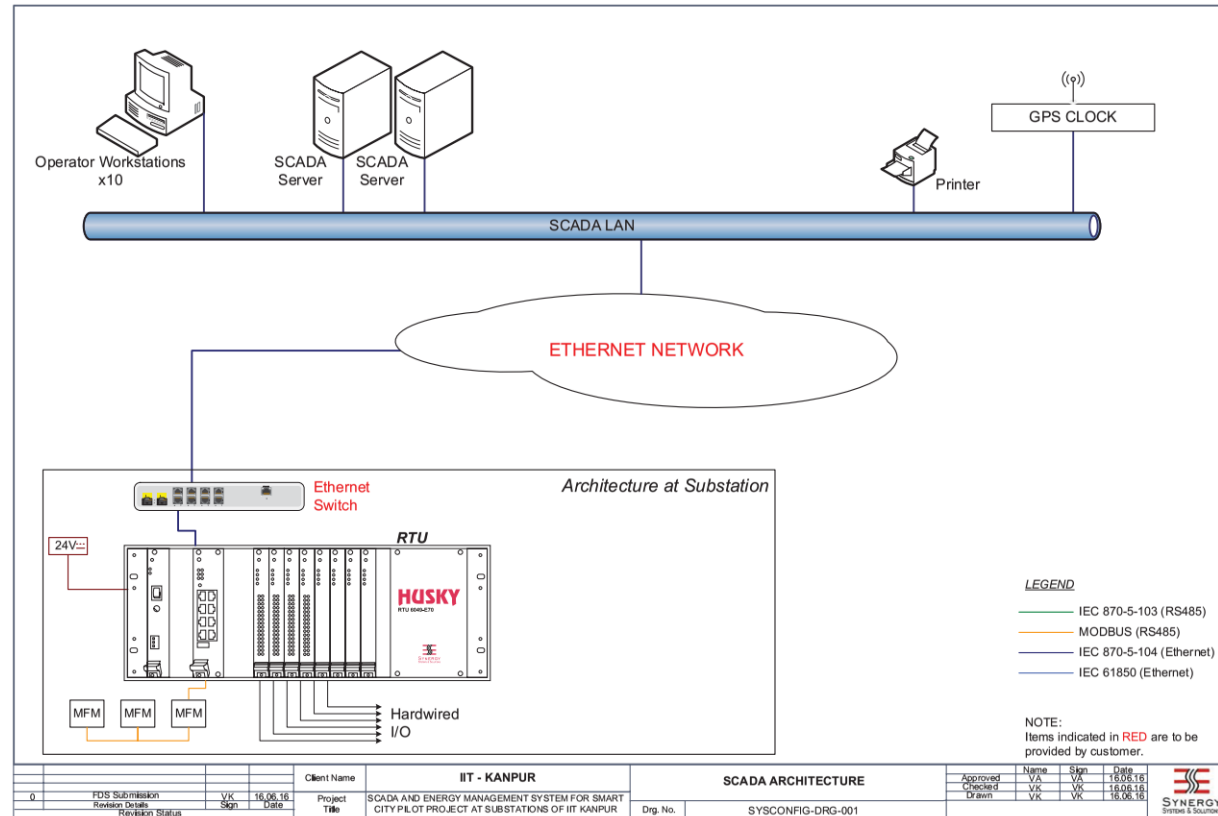# SMART GRID PILOT PROJECT AT IIT-KANPUR
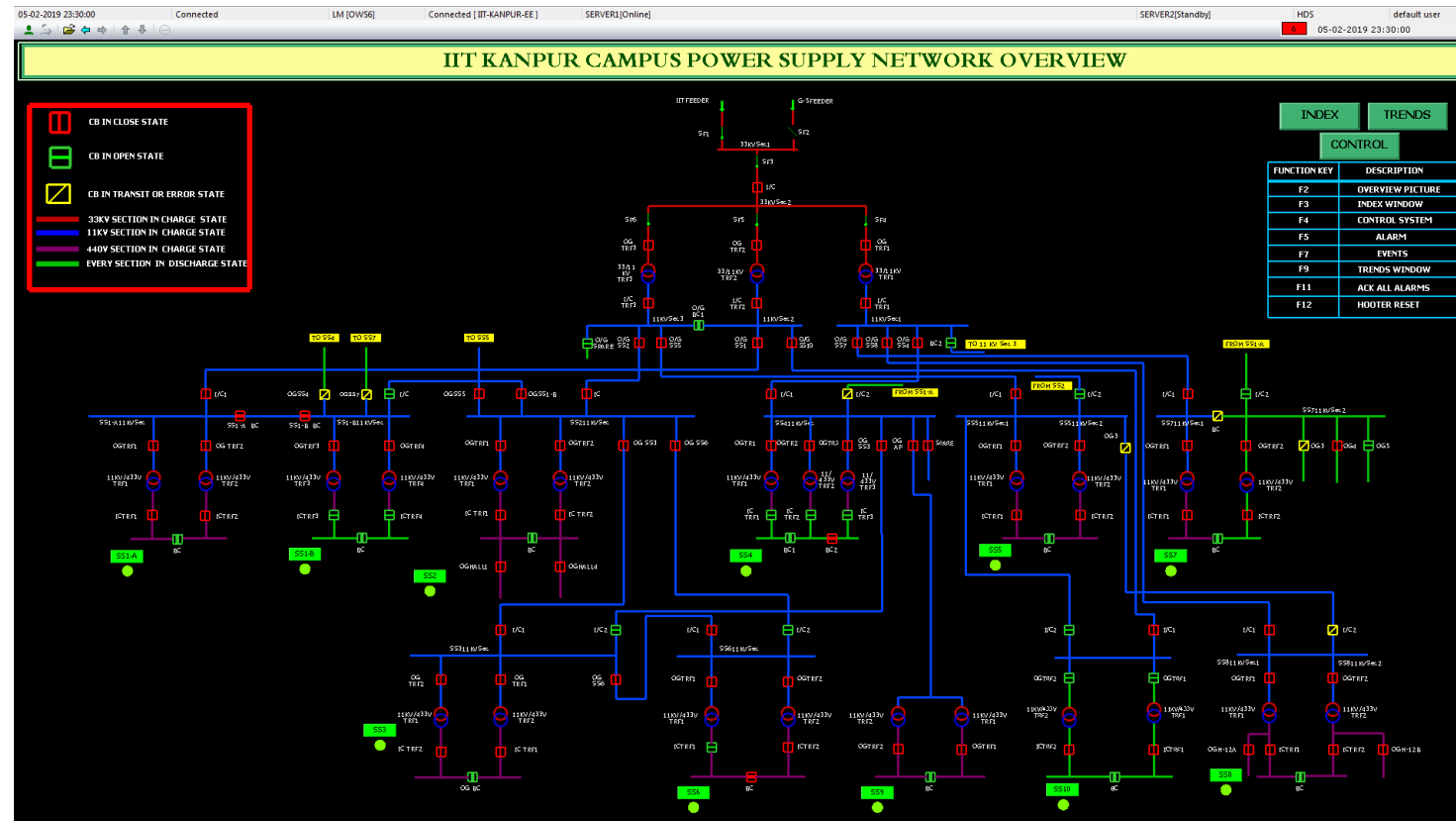
SCADA IMPLEMENTATION

ABOUT THE PROJECT

- Smart city pilot project in Indian Institute of Technology Kanpur (IITK) received funding from MoP, GoI in 2014

- IITK 'Smart City' project is equally funded by the MOP and IITK

- The project looked into only the 'electrical' aspects of a smart city

- IITK campus is chosen as the installation site

- The campus spans around 1000 acre (~4 km2), accommodating close to 10,000 people.

- The electrical infrastructure of a prototype smart city installed using state-of-the-art technologies, keeping typical Indian market and consumer behavior.

- Test-bed for future research in smart city/ smart grid related areas

SCADA ARCHITECTURE

SINGLE LINE DIAGRAM

SALIENT FEATURES

- Real-time monitoring of HT & LT network within the campus

- HT network control facilities for feeder reconfiguration

- Power quality and energy monitoring

- Test bed for students and researchers

  - Power system studies

  - Advanced Distribution Management System

  - Cyber security

RECOGNITION

- The overall project got Gold Award @ ISGF Innovation Awards, 2019.

- https://www.iitk.ac.in/smartcity/