



CECPL: Fire Protection System(IIoT)

Control Electric Company Pvt. Ltd.

Ultimately enhanced Safety, better Controls and more Reliability



Agenda

CECPL Intro

Fire Incidents

Our Specialty

Sites Automated

About Solution

Features & Benefits

Pump House Panel



About Us

- Dynamic and professionally managed since 1995.
- Introduced one Innovative product every year.
- Understand present and future energy requirements of the country’s power sector.
- Customized solar solutions.
- Single stop for all Problems needing Intelligent Solution.

Certifications	ISO Certified MNRE Channel Partner MSME Approved CPRI Approved
Location	Employees & Dealers across pan India.
Experience	More than 25 years in EPC Electrical, automation and in Solar.
Manufacturing Plant	A 80, Sector 80, NOIDA, Uttar Pradesh, India





Fire Incidents in Oil Industries

Authorized
Solar Distributor

Schneider
Electric

Date	Place	Description
Aug 2000	TLF Gantry	Fire accident, 1 killed
May 1989	Prod. Building, IBP, Korba	Major fire causing loss of Rs 1.11 crores
Nov 1998	Oil Depot, Jhansi	Fire accident
May 1999	Panipat Refinery	Fire accident, 5 killed
Feb 2001	Vishakh Refinery, HPCL	Fire in CDU, site damage and shut down
Feb 2001	Numaligarh Refinery	Fire causing shut down

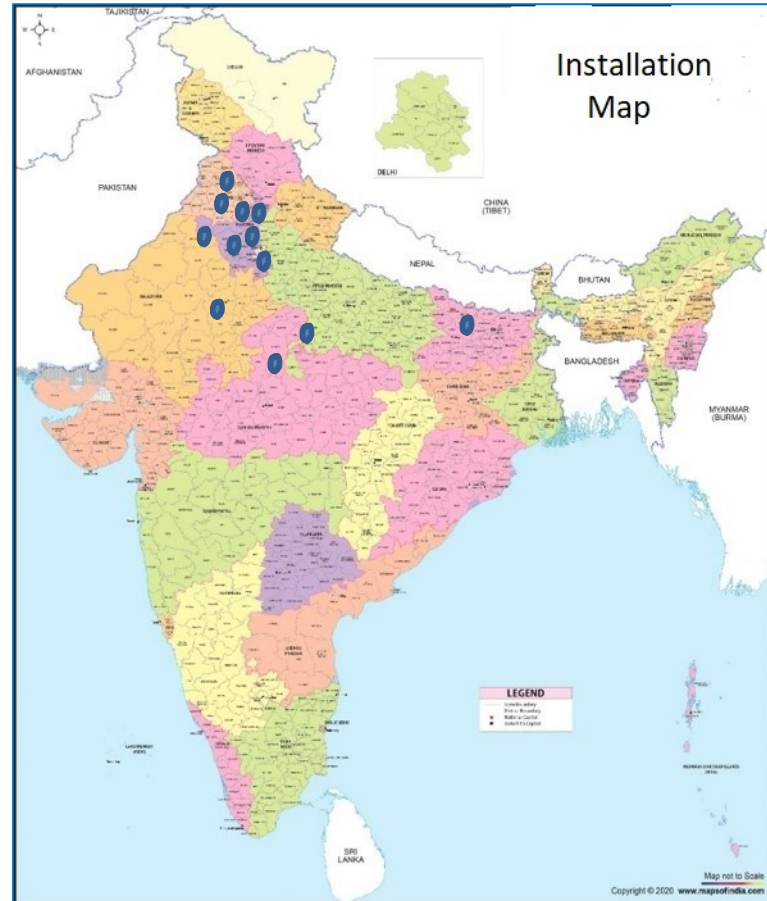


Sites Automated by CECPL

Authorized
Solar Distributor

Schneider
Electric

1. Ambala,
2. Asoti
3. Mughal Sarai
4. Jalandhar
5. Bijwasan
6. Palam AFS
7. Pathankot
8. Ajmer
9. Jhansi, Ambabai
10. Amritsar
11. Hissar
12. Aonla





About the Solution

Authorized
Solar Distributor

Schneider
Electric

- CC&M
- Computerized Control and monitoring System
- Salient Features
- PC Based Self Diagnosing, Customized, Reliable,
- Fully Integrated and Automatic system





Conventional Vs CC&M

Conventional	CC&M
System not integrated	Integrated
Manual monitoring	Centrally monitored
No data base	Auto log book facilities
Manual	Automatic
Upgradation not easy	Upgradable & Scalable
Questionable Reliability	Reliable (proven)
Local Monitoring	Cloud Monitoring
Needs checking regularly	Alerts automatically when system is down





Technicalities

■ Hardware

- PC control, remote Panels, Cabling of entire system elements to Centralized Panel
- Transducers used instead of switches
- IIoT hardware for Remote Diagnosis & Trouble Shooting.
- High MTBF

■ Software

- Cloud software, Microprocessor Programming, User friendly GUI accessible on phone / Laptop / Tab / PC.



Features & Benefits

Authorized
Solar Distributor

Schneider
Electric

Integration

Automation



Information

Reliability



Integration

- *Centralized control and monitoring of all the devices*
 - Supervision of multiple systems from single point
 - Fire & Safety Management , control and data collection centrally
 - Alarm logging at PC with duration of fault
 - No Manpower requirements.





Integration: Contd..

- *Integration of all the systems*
 - ❖ Pressurization System for Fire Hydrant
 - ❖ Main Fire Fighting Pumps
 - ❖ Fire Water Tank Filling System
 - ❖ Tank cooling System
 - ❖ Fixed Foam Installation
 - ❖ Fire Alarm and PA System





Automation

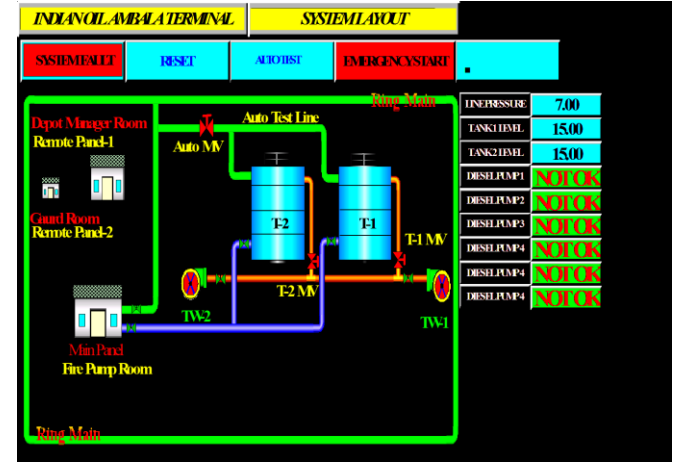
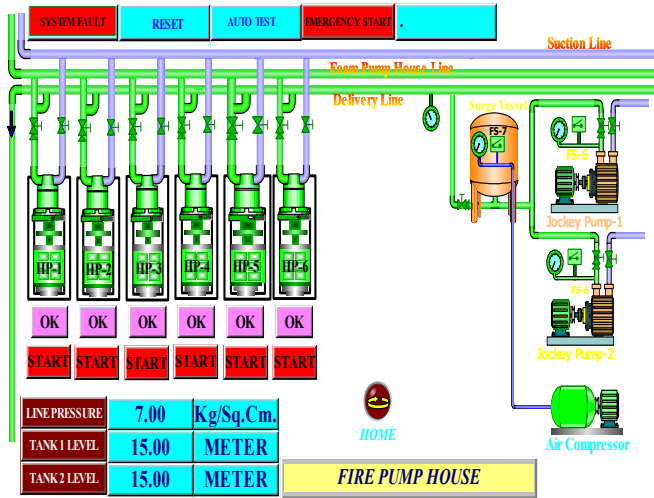
Authorized
Solar Distributor

Schneider
Electric

- *Auto Test*
 - Self-monitoring – Alarms and self printed reports in case of faults and periodic auto test reports
 - Self-test of all fire fighting equipment
 - Self-test of the controlling software / hardware
- *No Manpower for normal operation*
 - Standard predetermined response - irrespective of training , location or level of motivation of personnel .
 - Escalation of Faults on Time based Matrix.



Auto Test Report

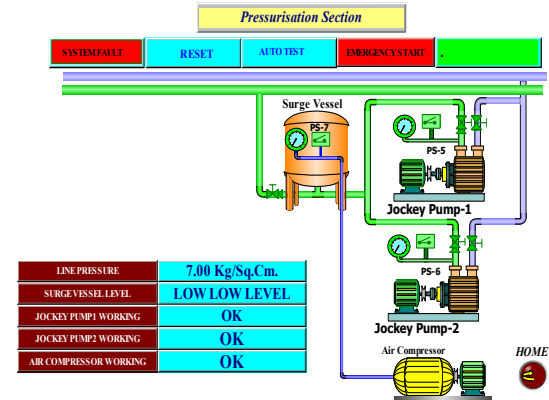


IOCL MS Terminal
Mughal Sarai

24-Dec-02
11:08 AM

System Auto Test Report

Auto Test Motorised Valve	OK	
Tank 1 Motorised Valve	OK	
Tank 2 Motorised Valve	OK	
Tank 3 Motorised Valve	OK	
Diesel Engine Pump 1	OK	Pressure 7 Kg/cm ²
Diesel Engine Pump 2	OK	Pressure 7 Kg/cm ²
Diesel Engine Pump 3	OK	Pressure 7 Kg/cm ²
Diesel Engine Pump 4	Faulty	Pressure Kg/cm ²
Jockey Pump 1	OK	
Jockey Pump 2	OK	
Air Compressor	OK	
Tube well 1	OK	
Tube well 2	OK	





Information

- Fault Logging and display
 - ❖ Instant access to fault location/equipment
 - ❖ Data base of past faults through auto logbook
- 24X7 monitoring report
- Concise Information without misrepresentation of Facts
- Very Easy to use and operate
 - ❖ User friendly GUI





Reliability

- Rugged Hardware and Software
- Latest state of art, standard, off the shelf hardware & software
- Buffer relay between input and IIoT device for added safety
- Hardware used tested world wide in large quantities
- Already proven & accepted at companies like IOCL.
- Low Failure rate – High MTBF (10 years +)





Benefits Contd...

- **Uptime of up to 99.995%**
- **Upgradable: Modular**
- **Easy to modify to suit changing requirements**
- **Future Options**
 - **All India Single point monitoring is possible**
 - **Video Monitoring System**
 - **Fire Brigade, Control Room Connectivity**





Pump House Panel





After Sales Service

- Personalized Services - One point contact
- TAT (Less than 24 hrs. - Online)
- Professionally trained service engineers
- Support - 9.30 AM to 6.00 PM (Mon-Sat)

Name	Mobile	E-mail
Vishal Bhat	9871470676	vishal@plcpanel.com