



Electrification & Control System Integration

Electrification - Electrical Engineering Services

Electrification is the major part of the project. We provides Supply, Erection, Testing & Commissioning of H.T. Substation, Switchgear, Transformers Power Cabling, Street Lighting, Power and lighting Wiring, Computer Data Cabling, Earthing Conductor, Lightning Protection Systems, Security Surveillance System & P.A. System etc. and also specialises in Technical Facility Management (Operation & Maintenance) of Electrical Installation and Control Systems.

We as a leading Electrical Engineering Design Outsourcing Company providing a comprehensive Electrical designs & Schematic CAD Drawings to meet specific needs of the clients in various electrical projects.

Our team of Senior Electrical Engineer & CAD designer have wide-ranging experience and unambiguous understanding of HT & LT electrical designs & schematics, electrical plans, circuit layouts, wiring diagram and planning requirements for various electrical control circuits for our clients around the globe. We have been offering our Electrical Design Services for over 10years now and successfully completed many projects in Industrial and Building Services for our International Clients.

We offer following Services:

- We provide Technical Facility Management services for:
- HT Installations including RMU Unit, HT Panel, Transformer, etc.
- Diesel Generator Set with AMF panel & Engine Control Unit.
- LT Electrical & allied systems including Main LT Panel with Power Factor Control Panel, Breaker & BUS Coupler, Power Control Center, PDU, Auto Transfer Switch (ATS), Static Switch, Earth pit, Earth Grid, Lightning Arrestor System, Stringer Earthing, etc.
- UPS with Active / Passive Filter, PF compensation unit, LBS Unit.
- Precision AC / PAHU / AHU, Comfort AC/Package AC, Chiller Plant and accessories and Cooling Tower.
- SMPS, Battery Bank
- Fire Detection and Fire Suppression System / Handheld Fire Extinguisher.

- VESDA System.
- Access Control System
- Water Leakage Detection System
- Rodent Repellant System
- Integrated Building Management System
- Close Circuit Television System
- Public Address System

Our key Electrical Design services includes:

- Electrical single line diagram & Load list preparation.
- Determining the size of transformers, switchgears, Schematic drawings are used in determining sizes of generators, HV equipments, bus duct, and one-line diagrams for distribution systems.
- Electrical panel schedules, which are integrated with the design and change as the design changes.
- Electrical site plans, which provide you the services of experts with extensive experience, as well as low-cost solutions and 3D modeling.
- Cable/harness Drawings that enable you to minimize data entry, maintaining data integrity, saving time and reducing overheads.
- Cable Tray layouts, Cable sizing and schedules.
- 3D Model drawings for complete electrical system.
- Layout Drawings of Panel Room, Site Electrical development,
- Electrical, power and lighting plans, including lighting load estimations, Light Fixture Layout Designing.
- Exterior & Interior Lighting & Lux level calculations.
- Design of Emergency system design.
- Design of Power distribution system.
- Design of fire protection system
- Preparing Bill of Material for Electrical items
- CCTV & Data communication design system.
- Audio & Visual system design

Why Select Transindia for Electrical Design Services on your Project:

- 20+ Strong Engineering Team
- 10+ Years of Experience working with Reputed Clients
- Knowledge of International Codes and Standard

- Latest Technology like AutoCAD Electrical & BIM Used for Designs & Drawings
- Low Cost with Assured Quality Services

Control System Integration -

Electrification & Process Control System has generated much discussion over the years. Even though Plant Managers know that integration improves efficiency over time, they often have difficulty justifying the initial project cost. We can help by developing a logical control system integration solution for your facility that will deliver substantial return on investment.

We begin by helping you select the right components & subcomponents for process control system integration. This helps to Reduce Maintenance cost, Reduced Training needs, Improve Quality Control, Greater Flexibility, Reduced Downtime.

1. Programming & Configuration
2. Technology Recommendation
3. I&E Design & Engineering
4. Data Integration
5. Security Assurance
6. System Simulation & Testing
7. System Startup & Commissioning
8. Training

1. Programming & Configuration

To facilitate control system integration, we provide complete programming & configuration services including logic, conversation, coding & building I/O and control application. We configure and program even the most advance control strategies within customers integrated control system, ensuring I/O optimization.

2. Technology & Recommendation

As your facility ages, depend on us for timely upgrades that help you maintain operational efficiency and optimal control system integration. We recommend the right technologies to complement your existing infrastructure, I/O points, environment and applications. Because of our platform independence, we have gained practical experience with all major automation products and have learned how to achieve control system integration for a range of disparate systems.

3. I&E Design & Engineering

We deliver design, engineering and troubleshooting services to ensure proper, high-quality control system integration. An integrated instrument and electrical (I&E) system may include motor control circuits, power supplies, programmable logic controllers (PLCs) and other system components.

4. Data Integration

Data are key to control system integration. Work with us to identify the valuable data across your enterprise and integrate them in manufacturing execution systems (MES), enterprise resource planning (ERP) systems and other tools to enable real-time decision making.

5. Security Assurance

We ensure the security of every control system integration solution, verifying proper access controls to protect your systems and proprietary information.

6. System Simulation & Testing

Software simulation and prototyping allow us to ensure the effectiveness of your control system integration solution before implementing it for your facility.

7. System Startup & Commissioning

WE provide comprehensive processes, tracking procedures and documentation through our SureStart® services to ensure successful systems operation and control system integration. We work in parallel with construction efforts and partner with your team to minimize downtime, enhance reliability and finish ahead of schedule. By drawing on the efficiencies gained through eStartSM, our breakthrough digital commissioning tool, and 200,000+ hours of collective annual experience, our proven process helps you start up smarter — and sooner.

8. Training

No control system integration project is complete until the operators have undergone thorough training. We offer on-site training as well as an array of training courses at Headquarters as part of our Duty..