

Electrical Engineering Field Service and Power Systems Engineering

Field Services

- Electrical system trouble shooting and repair
- · Plant shutdown services
- Preventative maintenance
- Low/medium/high voltage circuit breaker testing
- Arc flash assessments
- Time travel analysis
- Insulating oil filtration
- · Ground fault testing
- Relay tests and calibration
- Ground resistance testing
- · Meter calibration
- Motor vibration analysis

- · Infrared and ultrasonic detection
- Motor surge comparison testing
- · Variable speed drives testing
- Fiber optic testing
- Line disturbance analysis
- Generator testing
- Harmonic and power quality measurements
- Transfer switch testing
- Voltage/load recording
- Impedance testing
- Load bank testing
- Insulating fluid sampling and analysis

- Turns ratio testing
- Transformer commissioning
- Transformer repair and maintenance
- Magnetic field (EMF) testing and mitigation
- Infrared thermography
- · Cable fault location
- · Insulation resistance testing
- · Power factor testing
- Online partial discharge testing
- · High potential testing
- · Communication cable testing

Engineering and Consultation

ENGINEERING SERVICES

- Shutdown planning and management
- Substation design/build services
- Project management services
- Asset assessment
- · Protective relay programming
- Maintenance planning and program development
- Process instrumentation calibration
- Reliability based maintenance

ENGINEERING STUDIES

- · Arc flash studies
- Harmonic studies
- Short circuit studies
- Coordination studies
- Grounding studies
- Load flow analysis
- Transient stability studies
- · Power factor analysis
- Reliability centered maintenance studies
- Power system reliability studies
- Voltage imbalance/regulation studies

LIFE EXTENTSION SERVICES

- Modernization of outdated and underrated equipment
- Replacement parts
- Static exciter retrofit
- Solid state protective relay retrofit
- Circuit breaker retrofit/rebuild

Predictive Maintainence

- · Online partial discharge testing
- Ultrasonics
- Oil analysis
- Thermography

Education and Certification

- · Certification to recognized industry standards
- Onsite and classroom courses
- Skills assessment/development planning
- Computer-based and self-paced learning

Equipment Startup

- Code compliance evaluation
- Performance baselining
- Installation, startup and commissioning
- Acceptance testing

Entities Serviced

- Power plants
- Industrial facilities
- Defense & space
- Electrical contractors

- Manufacturing plants
- Waste water facilities
- Utility substations

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· Renewable energy facilities

