

TECHNICAL FIELD SERVICES



**SOLUTION DRIVEN COMMISSIONING, TESTING,
AND STUDIES FOR COMPLEX POWER SYSTEMS**



**ROOT-CAUSE
TROUBLESHOOTING**
FINDINGS TO FIXES

COMMISSIONING PLANS
ENGINEER-REVIEWED,
COMPLIANCE-VERIFIED

ADVANCED TESTING
GENERATORS,
TRANSFORMERS, RELAYS

MAINTENANCE PLANS
TRENDING AND
PROACTIVE ACTION

CORE TECHNICAL CAPABILITIES

- End-to-end delivery: assess, engineer, build, implement, verify
- Owner-side commissioning authority to plan, review, oversee, and support energization
- Substation and rotating machinery commissioning, ELCID testing, and associated control verification
- Protection testing and legacy relay calibration
- System studies: arc flash, coordination, load flow, and power quality
- Transformer health: dissolved gas analysis plus oil degassing/dehydration and online processing
- Remote diagnostics and 24/7 support: event file review, guided data capture, fast response
- As-left documentation and operator SOPs

THE ITI APPROACH

- **Solutions-oriented** field service that identifies deficiencies, recommends corrective actions, and implements the required solutions.
- **Whole-system** focus backed by engineering review of commissioning plans, protection settings, and system studies to ensure accurate integration and safe operation.
- **Integrated model** with one team from diagnosis through engineered upgrades, fabrication, installation, commissioning, and maintenance.

COMMISSIONING AND ENERGIZATION



Full-system commissioning verification

- **Substation commissioning** with protection and control, SCADA integration and primary injection
- **Rotating machinery commissioning** with generator controls verification and synchronization checks
- **End-to-end testing** utilizing IRI modules on both Omicron and Doble platforms
- **Commissioning authority** for plan development, review, oversight, and energization support

ADVANCED TESTING AND DIAGNOSTICS



Transformer testing and diagnostics

- Protection relay testing and legacy relay calibration across all major manufacturers and relay types
- Transformer diagnostics including integration into maintenance trending
- Oil processing including degassing, dehydration, online processing, and DGA review
- ELCID testing for generators and critical rotating equipment

SYSTEM STUDIES AND SAFETY



Relay settings implementation

- Arc flash studies, client training, and practical hazard reduction recommendations
- Coordination studies, relay settings updates, and implementation support
- Load flow studies for capacity planning, expansions, and system modifications
- Harmonic studies for power quality issues, troubleshooting, and engineered solutions

MAINTENANCE AND SUPPORT



24/7 field support for critical infrastructure

- Recurring maintenance plans built from site baselines and standardized test plans
- Document control including drawings, settings, reports, as-left records, and SOPs
- Trending of test results year over year to drive proactive actions before failure
- Remote diagnostics and 24/7 support including event file review, guided data capture, and dedicated technical contacts

INDUSTRY EXPERIENCE

- Utilities and grid-connected assets
- Independent power producers and generation facilities
- Pulp and paper mills, refineries and heavy industrial sites
- Mining operations and remote facilities
- Data centers and critical infrastructure

STANDARDS AND QUALIFICATIONS

- Testing performed to NETA, IEEE, and industry standards
- NERC-qualified technicians for NERC-regulated facilities and grid-connected assets
- Technicians include P.Eng., EIT, ASCT, CET, and Red Seal designations



LET'S CONNECT



PROJECT INQUIRIES

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24/7 EMERGENCY CONTACT

Emergency services available
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