

Power Engineering & Services

For the Utility & Heavy Industrial Markets

Industry Challenges

- Aging Infrastructure
- Years of Hardware Neglect
- Lacking Analytical Insight
- Generational Workforce Issues
- Changing Regulations
- Complexities of Alternate Energy

Solution

- WM is a multi-disciplined Engineering firm.
- Active in Power Industry
- Seasoned Experts in diverse solutions
- Proven capabilities in both Engineering and Fabrication
- Design, modernize, or maintain your assets.

Benefit

- Single Source for solving customer requirements.
- Having a technical partner who is customer dedicated
- WM can provide support from the asset to the cloud.
- Strong relationships with all major industry vendors, software & technologies



Dedicated to the Power Industry

Wunderlich-Malec's capabilities in the Power Industry cover power generation, transmission and distribution, as well as renewables. Our utility industry experience includes all phases of a project from conceptual design through start-up, commissioning and long-term support.

Capabilities

- Advanced designs using the latest IEC 61850 functionality
- Knowledgeable in all major DCS PLC, and SCADA platforms
- Modular Enclosure and P&C Cabinet Fabrication
- ASPEN System Modeling and Short Circuit Analysis
- Single and Three line development & design
- Power and Electrical engineering design
- Relay Settings
- Hardware procurement and fabrication
- Custom Training



The Wunderlich-Malec Difference

New England Offices

- Winslow, ME
- Biddeford, ME
- Hampton, NH

Collaborating to Provide Superior Customer Service

Priority Focus - Easy to do Business With

- Providing Independent Services & Capabilities
- Supporting Sub Contractor Efforts & Collaboration
- Allowing Independent 3rd Party support for confirmation
- Power System Studies
- Power Engineering, Design & Relay Settings
- Fabrication & Assembly
- IEC 61850 System Design & Implementation
- Fabrication & Assembly
- Simulate Customer Power Philosophies
- Provide System Test & Full 100% FAT
- Install, Test & Commission
- Collect Data, Analyze & Integrate to PI & MES / IT Level



Manufacturing & Power Engineering

Winslow, Maine

104,600 Sq. Ft Campus
ISO 9000:2015 Certified
UL508A Certified

Fabrication Facility

- Protection & Control Panel Fabrication
- Skidded P&C System Fabrication
- (MICE) Modular Integrated Control Enclosure Fabrication
- Switchgear & Power Distribution Enclosure Fabrication

Full Power Engineering and Design Capabilities

- Protection & Control Engineering
- Conceptual One-Lines
- Specification Development
- Budget Development
- One Line & Three Line Development
- Schematics & Wiring Diagrams
- Advanced Electrical System Modeling
- Power System Studies
- Relay Settings
- NERC Reliability
- Construction Management
- Project Management
- Schedule Management
- Cost Management
- Review of Technical Documentation
- Compliance Analysis
- Control Enclosure Design for Third Party Approval for Individual State Compliance



ETG – Electrical Test Group

**Biddeford, ME
Manchester, NH
Worcester, MA**



Electrical Testing & Commissioning Expertise

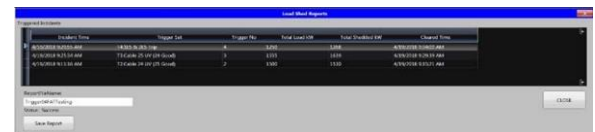
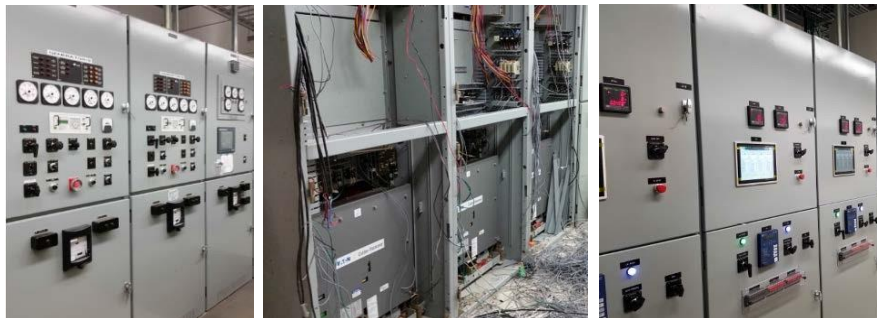
- Complete Relay & Switchgear Turnkey Upgrades
- Complete Relay Testing & Simulation Lab
- IEC61850 Programming, Test and Commission
- Protective Relay Testing
- RTU/HMI System Integration
- Power Line Carrier Testing
- End to End Satellite Testing
- P&C Circuit Commissioning
- Low/Medium Voltage Switchgear Testing
- Primary Equipment Testing
- SF6/Nitrogen Evacuation and Filling
- Battery Bank/Charger Commissioning



Power Automation & Load Shedding SCADA Solutions

Hampton, New Hampshire

- Power Automation – RTUs and SCADA - Platform Independent
- Full Power System Study and Analysis Capabilities
- Complete Customized Automation & Power Solutions
 - ABB, GE, SEL, Siemens, Schneider, Rockwell, WAGO, Phoenix Contact
 - Wonderware, OSIsoft - PI, SKM, ETAP, PSS®E, EasyPower



- Quality Documentation • Full Turn-Key Capabilities • Customized

