

WESLEY D. GERRISH, P.E.

EDUCATION

MBA – Business Administration, University of Maine, 1998
B.S. – Electrical Engineering Technology, University of Maine, 1995

PROFESSIONAL REGISTRATIONS AND CERTIFICATIONS

Professional Engineer – Maine, Connecticut, New Hampshire, New York, North Carolina,
Pennsylvania, Wisconsin, Vermont

EMPLOYMENT HISTORY

2024 to present – Sevee & Maher Engineers, Inc., Cumberland, Maine, Principal Electrical Engineer
2015 to 2024 – SGC Engineering, LLC, Bangor, Maine, Electrical Engineer
2006 to 2015 – Kleinschmidt Associates, Pittsfield, Maine, Senior Electrical Engineer
2003 to 2006 – TSI, Inc., Scarborough, Maine, Senior Electrical Engineer
2000 to 2003 – International Paper, Jay, Maine, Capital Project Manager

AFFILIATIONS

Institute of Electrical and Electronics Engineers
National Society of Professional Engineers, Maine Chapter

PROFESSIONAL EXPERIENCE

Mr. Gerrish is a licensed Professional Engineer with over 30 years of experience providing electrical engineering solutions for industrial power and controls systems, hydroelectric power generation plants, wind farm collector stations, utility substations, and related projects. He has specialized expertise in the planning, design, and construction phases of hardwired and automated process control systems, local and remote hydro turbine-generator control systems, power distribution systems, protective relaying, short circuit and arc flash studies, equipment and performance specifications, testing and commissioning, and interconnections agreements with utilities. Projects completed with his participation and under his direct technical supervision balance the requirements for new or rehabilitated facilities and associated site improvements with the goal of long-term sustainable development.

Project experience in his areas of expertise include:

Energy Storage

- **Brookfield Renewable, Battery Storage Projects, Maine and New Hampshire** – Project Manager and Senior Electrical Engineer responsible for preliminary power system design and owner's engineer support. Engineering efforts included one-lines and three-lines, detailed engineering for system tie-ins, equipment specification development, and vendor submittal technical reviews. The projects included the installation of one (1) 14MW and two (2) 8MW battery systems.

Wind and Solar Power

- **Apex Clean Energy, 126 MW Wind Farm Collector Substation, Columbia Falls, Maine** – Lead Electrical Protection and Controls (P&C) Engineer responsible for the metering, protective relaying, and controls design. Engineering efforts included development of the system one-lines, three-lines, AC & DC Elementaries, control panel elevation and wiring diagrams, equipment wiring diagrams, bill of materials, and cable and conduit lists, as well as SCADA and communications design. The project included five collector circuits tying into three 34.5kV feeder breakers, a 115/34.5/13.8kV step-up transformer, a 45MVAR synchronous condenser, and a 115kV high-side breaker as well as a 115kV motor operated disconnect switch that tied to the 115kV utility substation.
- **Reed & Reed, Roxwind Wind Farm and Roxbury Substation Upgrade, Roxbury, Maine** – Project Manager and Senior Electrical Engineer responsible for overall design and coordination of the project. Design efforts included equipment specification development, relay P&C design, various electrical design drawing packages, and vendor submittal technical reviews. The project included four (4) new GE 3.8MW turbines (15.2MW total), 34.5kV collector system, 34.5kV Recloser, 34.5kV utility line section, and 34.5kV substation breaker installation.
- **EDP Renewables, Rosewater Wind Farm, White County, Indiana** – Senior Electrical Engineer responsible for equipment specification development, relay P&C design, various electrical drawing packages and vendor submittal technical reviews. The project included a new 34.5kV/138kV substation, servicing 20 new 4.2MW wind turbines and five new 3.6MW wind turbines (102MW total) with three collector feeder circuits.
- **EDP Renewables, Timber Road III Wind Farm, Paulding County, Ohio** – Senior Electrical Engineer responsible for equipment specification development, relay P&C design, various electrical drawing packages, vendor submittal technical reviews and on-site construction support. The project included a new 34.5kV/135kV substation, servicing fifty new 2.1MW wind turbines (105 MW total) with four collector feeder circuits.

Utility Substations

- **Versant Power, 46kV Substation Upgrade, Orono, Maine** – Lead Electrical P&C Engineer responsible for the metering, protective relaying, and controls design. Engineering efforts included development of the system one-lines, three-lines, AC & DC Elementaries, control panel elevation and wiring diagrams, equipment wiring diagrams, bill of materials, and cable and conduit lists, as well as SCADA and communications design. The project included a new 46kV breaker and a new 46kV/12.47kV transformer, as well as two motor operated disconnects.
- **Versant Power, new 115kV Substation, Columbia Falls, Maine** – Lead Electrical P&C Engineer responsible for the metering, protective relaying, and controls design. Engineering efforts included development of the system one-lines, three-lines, AC & DC Elementaries, control panel elevation and wiring diagrams, equipment wiring diagrams, bill of materials, and cable and conduit lists, as well as SCADA and communications design. The project included three new 115kV breakers in a ring bus design. An existing 115kV transmission line was parted with each end coming into the new substation as well as one radial connection out to a new wind farm collection substation.

- **Avangrid/New York State Electric & Gas (NYSEG), 115kV Substation Expansion, Carmel, New York** – Senior Electrical Engineer responsible for electrical design packages for in-ground and above-ground work as well as coordination of civil/structural and P&C design. The project included the addition of two new 115kV breakers to reconfigure a straight bus arrangement to a ring bus as well as reconfiguring a 46kV line. Project tasks included a complete electrical drawing package, ground grid analysis and design, relay P&C design, TOV study and lightning and lighting drawing packages.
- **Avangrid/Central Maine Power (CMP), 12.47kV Substation Expansion, Pittsfield, Maine** – Senior Electrical Engineer responsible for coordination of civil/structural and electrical design packages, as well as equipment specification development, relay P&C design and ground grid analysis and design for a new 12.47kV bay expansion to integrate a new 9.9MW solar farm. Construction support was provided as well as commissioning and testing support.

Hydropower/Dams

- **Central Vermont Public Service, Proctor Hydro Redevelopment Project, Proctor, Vermont** – Senior Electrical Engineer responsible for conceptual design, equipment specifications, contractor and design specifications, construction support and submittal reviews of a major hydro power house redevelopment. The project included the replacement of four new turbine-generators, and the integration of an existing unit, into a new power distribution system. Unit, plant and RTU controls were all new and integrated into the systems.
- **PPL Generation, Holtwood Hydroelectric Redevelopment Project, Holtwood, Pennsylvania** – Senior Electrical Engineer responsible for the coordination of electrical and power distribution engineering, utility interconnection and SCADA and controls design activities for 128MW expansion and upgrade project. Responsible for all electrical and controls design for balance-of-plant equipment and systems.
- **City of Albany, Mill Street Hydro, Albany, New York** – Senior Electrical Engineer responsible for design and specification of new small hydro turbine-generator for a local municipality. The project design included a new power distribution system and utility interconnection, as well as the installation and integration of a vendor supplied control system.
- **Mt. Equinox, Hydro Redevelopment, Manchester, Vermont** – Senior Electrical Engineer responsible for the design and integration of a new small hydro turbine-generator into an existing power distribution systems that required a new utility tie-in and optical fiber connection for direct transfer tripping.
- **Brookfield Power, Inflatable Flashboard Integrations, various locations in Maine** – Senior Electrical Engineer responsible for power feeder and remote network designs, as well as controls integration of several inflatable flashboard systems, including:
 - Shawmut Hydro Station – Fairfield, Maine
 - Bonny Eagle Hydro Station – Saco, Maine
 - Deer Rips Hydro Station – Lewiston, Maine
 - Monty Hydro Station – Lewiston, Maine
 - West Buxton Hydro Station – West Buxton, Maine
 - Hiram Hydro Station – Hiram, Maine

- **Various Short Circuit and Arc Flash Hazard Studies, Maine and Pennsylvania** – Senior Electrical Engineer responsible for gathering field information and developing a power system model using EasyPower™ software. Using data from the model, a short circuit and arc flash report was created identifying various levels of hazards for medium and low voltage equipment. Hazard warning labels were created and applied to each piece of equipment. Projects included:
 - Ellsworth Hydro Arc Flash Study – Ellsworth, Maine
 - Stillwater 'B' Hydro Arc Flash Study – Orono, Maine
 - Milford Hydro Arc Flash Study – Milford, Maine
 - Holtwood Hydroelectric Redevelopment Project – Holtwood, Pennsylvania
 - Worumbo Hydro Arc Flash Study – Lisbon Falls, Maine
- **Myllykoski, Madison Paper Industries, Hydro Unit and Plant Control Systems, Madison, Maine** – Senior Electrical Engineer responsible for the design of the power distribution and unit control system, relay protection and equipment interconnections for a new 3,333kVA hydro turbine-generator. Supported Client with specifications, vendor submittal reviews, contractor management and start-up support.
- **Brookfield Power, Hydro Unit and Plant Control Systems, School Street, Liverpool, New York** – Senior Electrical Engineer responsible for the design of upgraded station service power and integration of vendor supplied pneumatic flashboard system. Supported Client with specifications and vendor submittal reviews.
- **London Economics, Sebec Lake Hydro Project, Willimantic, Maine** – Senior Electrical Engineer responsible for site inspection to identify assets in service and level of operability. Developed a report of the findings, which included a list of safety concerns and a list of opportunities for improvements and automations.
- **Oswego Falls East Brookfield Power Project, (2) 550kVA Hydro Unit Installations, New York** – Senior Electrical Engineer responsible for design of the power distribution system, relay protection and equipment interconnections. Supported Client with specifications and vendor submittal reviews.
- **Brookfield Power, Sherman Island Unit 6, 1,388 kVA Hydro Unit Installation, Queensbury, New York** – Senior Electrical Engineer responsible for the design of the power distribution system, generator step-up transformer installation, utility interconnection, relay protection and equipment interconnections. Supported Client with specifications, vendor submittal reviews and contractor management.
- **Brookfield Power, Sherman Island Unit 1, 8,000kVA Hydro Unit Installation, Queensbury, New York** – Senior Electrical Engineer responsible for the design of the power distribution system, relay protection and equipment interconnections. Supported Client with specifications, vendor submittal reviews and contractor management.
- **Ridgewood Maine Hydro Partners, LP, Burnham Fish Passage, Burnham, Maine** – Senior Electrical & Controls Engineer responsible for PLC program development, HMI screen development and construction supervision. Completed start-up and commissioning services.
- **Florida Light & Power, Lockwood Fish Passage, Waterville, Maine** – Senior Electrical & Controls Engineer responsible for PLC program development, HMI screen development and construction supervision. Completed start-up and commissioning.
- **Benton Falls Associates, Benton Fish Passage, Benton, Maine** – Senior Electrical & Controls Engineer responsible for PLC program development, HMI screen development and construction supervision. Completed start-up and commissioning services.

Other

- **City of Ellsworth, Marine Dock Expansion, Ellsworth, Maine** – Senior Electrical Engineer responsible for design and specification of new utility service drop and power distribution system. The float expansion included an underwater service supplying power and communication pedestals for guest yacht connections.
- **Pittsfield Public Library Expansion, Pittsfield, Maine** – Senior Electrical Engineer responsible for design and specification of electrical systems for building expansion, including lighting, HVAC, elevator power and controls and fire protection systems.
- **New England Infrastructure, Pontoosuc Lake Level Control, Pittsfield, Massachusetts** – Senior Electrical Engineer responsible for design, installation, start-up and commissioning of an automated gate-valve and pond level control system. Client had trouble sourcing control panel, so we worked with local panel builders to build and furnish turn-key package.
- **Green Mountain Power, Essex 19 Min-Flow and Diesel Upgrade, Essex, Vermont** – Installation of one 945kVA hydro unit and four-2500kVA diesel units: Senior Electrical Engineer, responsible for the design of the power distribution system, generator step-up transformer, relay protection, equipment interconnections and controls integration oversight. Supported Client with specifications and vendor submittal reviews.
- **Verso Paper, Bucksport Mill Coal Handling System Recommissioning, Bucksport, Maine** – Senior Electrical Engineer responsible for conducting a full review of in-place assets associated with the coal handling system. Identified maintenance, safety and code issues requiring action prior to start-up.