

# Stephen Wilder, P.E.

## Curriculum Vitae

info@DADoddridge.com

800.717.7523 (o)

January, 2018

Page | 1

---

### EDUCATION

MBA in Management, Rotterdam School of Management – 2000

MS in Electrical Engineering, Northeastern University – 1997

BS in Electrical Engineering, University of Massachusetts, Amherst - 1992

### CERTIFICATIONS/LICENSES

Registered Professional Engineer: New York, North Carolina, New Jersey, Connecticut, Pennsylvania, Maryland, Michigan, Oregon, Maine

### SKILLS

ETAP, SKM, AutoCAD, C++, Visual Basic, MatLAB, SQL, SPSS, and various other programming/software

### EXPERIENCE SUMMARY

Mr. Wilder has over 10 years experience engineering electrical power, control and communication systems for nuclear power, fossil power, water/wastewater, industrial, and commercial facilities. He has performed many calculations for load flow analysis, short circuit analysis, arc flash and circuit breaker coordination studies. He has sized equipment, programmed PLCs, and designed systems for lighting, fire alarm, SCADA, communications and controls. He has written specifications, drawn one-line diagrams and control schematics in AutoCAD and drawn circuit breaker time-current curves for electrical designs. He has managed many projects successfully within budget and schedule. He has undertaken sole responsibility for design of plant electrical systems for fossil power, water treatment, and wastewater treatment plants. He also has eleven years experience in the investment industry in which his entrepreneurial approach helped him develop his own investment franchise; he successfully managed many projects and processes and developed many client relationships which led to excellent profitability.

### Owner / Electrical Engineer – Wilder Engineering (2015-present)

As an independent consultant, Mr. Wilder has provided electrical engineering support for other engineering firms and contractors in design and forensics (electrical fires, electrocution) for commercial and residential properties.

**Worcester, MA:** 27 June St., Worcester, MA 01602  
**Orleans, MA:** 179 Brick Hill Rd, Orleans, MA 02653  
**New York, NY:** 4768 Broadway New York, NY 10034

Major Projects:

- **Dovetail Office Building**, Parsippany, NJ - designed lighting and power and for a 20,000 sq ft office building
- **Great Neck Generator**, Great Neck, NY- designed five generator systems for water treatment plants
- **Warren Hospital Generator**, Warren, PA - designed generator and supporting electric power system
- **Clarks Summit Hospital Generator**, Clarks Summit, PA - designed generator and supporting electric power system
- **Computer Associates Electrical Calculations**, Islandia, NY – wrote arc flash/short circuit/coordination calculation for data center electrical system
- **ARCCA** (forensics) – provided litigation support for clients being sued for allegedly providing the causes of electrical fires/injuries
- **CAD Signs**, Hackensack, NJ - designed lighting, power and fire alarm for a 12,000 sq ft sign manufacturer
- **World Group Properties**, Newark, NJ - designed lighting, power and fire alarm for a 11,000 sq ft trucking hub
- **Mary's Land Farm**, Endicott, MD - designed lighting, power and fire alarm for a 11,000 sq ft restaurant
- **Washington Mixed Use Building**, Washington, NJ – designed lighting and power for a 22,000 sq ft commercial/residential building
- **A Perfect Solar Design, New Rochelle**, NY – designed electrical system for rooftop solar for a commercial building
- **Christ Church**, Tarrytown, NY – designed fire alarm system for church, parish hall and schoolhouse
- **Millenia Apartment Building**, New Rochelle, NY – designed lighting, power and fire alarm for a new 93,000 sq ft luxury apartment building
- **Verizon Bedminster Coordination Calculations**, Bedminster, NJ – wrote coordination calculation for communication facility electrical system

**Senior Electrical Engineer – Covanta Energy (2014-present)**

Covanta owns and/or operates 46 energy-from-waste facilities. Mr. Wilder performed a number of tasks within the electrical engineering department to support plant operations.

Major Projects:

- **Arc Flash Calculations**  
**Brief Description:** As Lead Electrical Engineer, wrote and reviewed arc flash calculations for forty six waste-to-energy facilities, including high voltage substations. Led the engineering effort to implement remediation solutions to continue maintenance

**Worcester, MA:** 27 June St., Worcester, MA 01602  
**Orleans, MA:** 179 Brick Hill Rd, Orleans, MA 02653  
**New York, NY:** 4768 Broadway New York, NY 10034

while keeping the plants running at a 95%+ operating rate. Led the engineering effort to revise electrical safety procedures.

- **Fairfax Crane Replacement Project, Lorton, VA**  
**Brief Description:** As Electrical Engineer, reviewed engineering drawings, specifications and calculations for the installation of three 20 ton cranes for a waste-to-energy facility with four 20MW generators. Provided engineering support to ensure timely construction. Reviewed one line, schematics, wiring and physical layout drawings for power, instrument, and control systems.
- **Essex High Voltage Breaker Replacement Project, Newark, NJ**  
**Brief Description:** As Lead Electrical Engineer, managed the replacement of a 138kV circuit breaker. Wrote Request for Proposal, reviewed bids, created engineering drawings and specifications. Provided engineering support to ensure timely construction. Reviewed schematics, wiring and physical layout drawings for power, instrument, and control systems.
- **Huntsville Baghouse Project, Huntsville, AL**  
**Brief Description:** As Electrical Engineer, reviewed engineering drawings, specifications and calculations for the installation of two baghouses for a waste-to-energy facility with two 15MW generators. Provided engineering support to ensure timely construction. Reviewed one line, schematics, wiring and physical layout drawings for power, instrument, and control systems.
- **Fairfax Baghouse Project, Lorton, VA**  
**Brief Description:** As Electrical Engineer, reviewed engineering drawings, specifications and calculations for the installation of four baghouses for a waste-to-energy facility with four 20MW generators. Provided engineering support to ensure timely construction. Reviewed one line, schematics, wiring and physical layout drawings for power, instrument, and control systems.
- **Essex Baghouse Project, Newark, NJ**  
**Brief Description:** As Electrical Engineer, reviewed engineering drawings, specifications and calculations for the installation of three baghouses for a waste-to-energy facility with two 38MW generators. Provided engineering support to ensure timely construction. Reviewed one line, schematics, wiring and physical layout drawings for power, instrument, and control systems.
- **Essex Air Cooled Condenser Project, Newark, NJ**

**Brief Description:** As Lead Electrical Engineer, reviewed engineering drawings, specifications and calculations for the replacement of three air-cooled condensers for a waste-to-energy facility with two 38MW generators. Provided engineering support to ensure timely construction. Reviewed one line, schematics, wiring and physical layout drawings for power, instrument, and control systems.

### **Senior Electrical and Instrumentation and Controls Engineer – Sigma Energy Solutions (2012-2014)**

Sigma is a medium-sized architectural engineering firm specializing in the design of power plants. Mr. Wilder performed a number of tasks within the engineering department, including creating drawings, writing proposals and general engineering tasks.

#### Major Projects:

- **Rush Island Energy Center, Festus, MO**  
**Brief Description:** As Lead Electrical Engineer, supervised and designed the electrical systems for the electrical systems for the addition of activated carbon injection system for a 1242MW coal-fired plant. Created wiring and physical layout drawings for power, instrument, controls, fire alarm. Sized circuit breakers, cables and panelboards.
- **Red Hills Power Plant, Starkville, MS**  
**Brief Description:** As Lead Electrical Engineer, supervised and designed the electrical systems for the replacement of a fabric filter system for a 514MW coal-fired plant. Created drawings for power, instrument, controls, fire alarm: wiring and physical layout. Sized circuit breakers, cables and panelboards. Performed calculations: load flow, ampacity, and coordination.
- **Durham-York Waste-to-Energy Power Plant and Substation, Clarington, Ontario**  
**Brief Description:** Reviewed vendor drawings, proposed engineering changes, and created one-line, schematic and wiring drawings for a greenfield 19MW waste-to-energy power plant and its substation.
- **Middletown Gas Insulated Substation, Middletown, CT**  
**Brief Description:** Performed circuit breaker coordination and equipment sizing calculations of a gas insulated substation undergoing modifications. Created one-line diagrams and control schematics. Performed miscellaneous engineering tasks to support plant start-up.

**Equity Analyst  
2012)**

**(2001-**

**Worcester, MA:** 27 June St., Worcester, MA 01602  
**Orleans, MA:** 179 Brick Hill Rd, Orleans, MA 02653  
**New York, NY:** 4768 Broadway New York, NY 10034

### Senior Electrical Engineer – Stowe Engineering (2000-2001)

(2000-2001)

Stowe was a small architectural engineering firm specializing in the design of power plants. As sole electrical engineer, Mr. Wilder performed a number of tasks within the engineering department, including writing calculations and specifications, creating drawings, and writing proposals. He demonstrated strong self-initiative in managing projects within budget and schedule.

Page | 5

#### Major Projects:

- **Trigen Gas-Fired Power Plant and Substation, Boston, MA**  
**Brief Description:** Performed short circuit, voltage drop, circuit breaker coordination and equipment sizing calculations for a small gas-fired power plant and its substation undergoing modifications. Wrote specifications and drew one-line diagrams, control schematics and circuit breaker time-current curves.
- **South Boston Gas-Fired Power Plant, South Boston, MA**  
**Brief Description:** Performed short circuit, voltage drop, circuit breaker coordination and equipment sizing calculations for a small gas-fired power plant undergoing modifications. Wrote specifications and drew one-line diagrams, control schematics and circuit breaker time-current curves.
- **Gillette Industrial Plant, South Boston, MA**  
**Brief Description:** Performed short circuit, voltage drop, circuit breaker coordination and equipment sizing calculations for an industrial plant undergoing modifications. Wrote specifications and drew one-line diagrams, control schematics and circuit breaker time-current curves.

### Electrical and Instrumentation and Controls Engineer – Arcadis (1997-1998)

Arcadis is an international architectural engineering firm specializing in the design of infrastructure and water/wastewater treatment facilities. As sole electrical and instrumentation and controls engineer, Mr. Wilder performed a number of tasks within the engineering department, including writing calculations and specifications, creating drawings, and writing proposals. He demonstrated strong self-initiative in managing projects within budget and schedule.

#### Major Projects:

**Worcester, MA:** 27 June St., Worcester, MA 01602  
**Orleans, MA:** 179 Brick Hill Rd, Orleans, MA 02653  
**New York, NY:** 4768 Broadway New York, NY 10034

- **Dayton Water Treatment Plant, Dayton County, VA**  
**Brief Description:** As sole electrical and instrumentation and controls engineer, was responsible for all electrical engineering and design for a greenfield water treatment plant. Performed short circuit and equipment sizing calculations, wrote specifications and drew one-line diagrams, control schematics and circuit breaker time-current curves, reviewed vendor drawings, reviewed contractor bids. Sized circuit breakers, high and low voltage cables, transformers, uninterruptible power supplies, emergency generators, electrical panels and motor control centers. Designed lighting, communications, and fire alarm systems.
- **Monroe County Water Treatment Plant, Monroe County, NC**  
**Brief Description:** As sole electrical and instrumentation and controls engineer, was responsible for all electrical engineering and design for plant modifications of a water treatment plant. Performed short circuit and equipment sizing calculations, wrote specifications and drew one-line diagrams, control schematics and circuit breaker time-current curves, reviewed vendor drawings, reviewed contractor bids. Sized circuit breakers, high and low voltage cables, transformers, electrical panels and motor control centers. Specified and programmed PLCs and HMI interfaces for plant control.
- **Burlington Wastewater Treatment Plant, Burlington, NC**  
**Brief Description:** As sole electrical and instrumentation and controls engineer, was responsible for all electrical engineering and design for plant modifications of a water treatment plant. Performed short circuit and equipment sizing calculations, wrote specifications and drew one-line diagrams, control schematics and circuit breaker time-current curves, reviewed vendor drawings, reviewed contractor bids. Sized circuit breakers, high and low voltage cables, transformers, emergency generator, electrical panels and motor control centers.
- **High Point Wastewater Treatment Plant, High Point, NC**  
**Brief Description:** As sole electrical and instrumentation and controls engineer, was responsible for all electrical engineering and design for plant modifications of a water treatment plant. Performed short circuit and equipment sizing calculations, wrote specifications and drew one-line diagrams, control schematics and circuit breaker time-current curves, reviewed vendor drawings, reviewed contractor bids. Sized circuit breakers, high and low voltage cables, transformers, emergency generator, electrical panels and motor control centers. Specified and programmed PLCs and HMI interfaces for plant control.

**Electrical Engineer – Shaw Group**  
**1997)**

**(1993-**

**Worcester, MA:** 27 June St., Worcester, MA 01602  
**Orleans, MA:** 179 Brick Hill Rd, Orleans, MA 02653  
**New York, NY:** 4768 Broadway New York, NY 10034

Shaw Group is a Fortune 500 architectural engineering firm specializing in the design of power plants and heavy industry facilities. Mr. Wilder performed a number of tasks within the engineering department, including writing calculations and specifications, creating drawings, and inspecting electrical construction projects. He was respected within the department for his technical skills and his organizational skills which allowed him to manage projects successfully.

#### Major Projects:

- **Bellafonte Nuclear Power Station, Hollywood, AL**  
**Brief Description:** Performed short circuit, load flow, voltage drop, circuit breaker coordination and equipment sizing calculations for a nuclear plant undergoing modifications. Wrote specifications and drew one-line diagrams, control schematics and circuit breaker time-current curves.
- **Beaver Valley Nuclear Power Station, Shippingport, PA**  
**Brief Description:** Performed short circuit, voltage drop, load flow and equipment sizing calculations for a nuclear plant undergoing modifications. Wrote specifications and drew one-line diagrams, control schematics and circuit breaker time-current curves.
- **Indian Point Nuclear Power Station, Buchanan, NY**  
**Brief Description:** Performed short circuit and equipment sizing calculations for a nuclear plant for a nuclear plant undergoing modifications.
- **Dresden Nuclear Power Station, Grundy County, IL**  
**Brief Description:** Performed short circuit and equipment sizing calculations for a nuclear plant for a nuclear plant undergoing modifications.
- **North Anna Nuclear Power Station, Louisa County, VA**  
**Brief Description:** Performed short circuit and equipment sizing calculations for a nuclear plant for a nuclear plant undergoing modifications.
- **Pilgrim Nuclear Power Station, Plymouth, MA**  
**Brief Description:** Performed circuit breaker coordination studies and equipment sizing calculations for a nuclear plant undergoing modifications. Drew circuit breaker time-current curves.
- **Maine Yankee Nuclear Power Station, Wiscasset, ME**  
**Brief Description:** Performed short circuit, voltage drop, circuit breaker coordination studies and equipment sizing calculations for a nuclear plant undergoing modifications. Wrote specifications and drew one-line diagrams, control schematics and circuit breaker

**Worcester, MA:** 27 June St., Worcester, MA 01602  
**Orleans, MA:** 179 Brick Hill Rd, Orleans, MA 02653  
**New York, NY:** 4768 Broadway New York, NY 10034

time-current curves. Modified operating procedures for safe shutdown of the electrical systems in a nuclear plant in the event of an emergency.

- **AT&T Facilities**, numerous nation-wide  
**Brief Description:** Performed short circuit, circuit breaker coordination and equipment sizing calculations for a numerous facilities nation-wide. Wrote specifications and drew one-line diagrams and circuit breaker time-current curves.
- **La Salle Nuclear Power Station**, La Salle County, IL  
**Brief Description:** Modified operating procedures for safe shutdown of the electrical systems in a nuclear plant in the event of an emergency.
- **Quad Cities Nuclear Power Station**, Cordova, IL  
**Brief Description:** Modified operating procedures for safe shutdown of the electrical systems in a nuclear plant in the event of an emergency.
- **Deer Island Wastewater Treatment Plant**, Boston Harbor, MA  
**Brief Description:** Coordinated the work of numerous electrical contractors and subcontractors to ensure construction project milestones were met on schedule and budget for fire alarm and communication systems. Inspected electrical installations for compliance to the National Electrical Code.