

# PowerStudies.com PS

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## **Robert E. Fuhr; P.E. Senior Engineer and President**

### PROJECT DESIGN AND IMPLEMENTATION

- \* Designs control systems for circuit breakers, metering circuits, transformers, protective relays, gas turbines and generators.
- \* Performs short circuit, protective device coordination, arc flash, harmonic, load flow & other power system studies for industrial, commercial, and governmental clients.
- Proficient in the use of SKM PowerTools and ETAP software
- \* Writes and reviews bid specifications, revised prints, ordered equipment and coordinated installations.
- \* Co-designed 115 kV Substation and 13.8 kV Distribution system for Boeing - Renton Facilities.
- \* Creates and Writes electrical commissioning specifications for various construction projects.

### ANALYSIS AND EVALUATION

- \* Investigates power quality problems and installs monitoring equipment.
- \* Performs start-up maintenance and calibration tests on power delivery equipment.
- \* Investigates problems and repairs power delivery equipment and control circuits (analog and digital).
- \* Evaluates test results and writes both summaries and large reports.
- \* Performs Commissioning Services by reviewing drawings & specifications and witness acceptance testing for construction projects.

### CUSTOMER RELATIONS AND SERVICE

- \* Appraises customer's distribution systems and prepared quotes for large and small jobs.
- \* Teaches customer electrical safety, harmonics, protective device coordination, arc flash hazard assessments, power factor correction, and equipment operation seminars and workshops.
- \* State of Washington Electrical Education Course Instructor

### SUPERVISION AND LEADERSHIP

- \* Own and operate consulting firm specializing in power system studies.
- \* Officer and Chairman for Seattle - IEEE Industrial Applications Society 1991-92.
- \* Supervised service shop craftsmen and electricians in installation, maintenance and repair jobs.
- \* Teaches seminars on Arc Flash Energy Calculations and Ways to Reduce Arc Flash Energy.
- \* State Certified Electrical Instructor and e-Hazard.com Certified Instructor

### EMPLOYMENT HISTORY

- 1986 - Present President-PowerStudies.com (Formerly Power Systems Engineering); Covington, WA.
- 1986 -1989 Senior Facilities Engineer-Univ. of Washington; Seattle, WA.
- 1980 -1986 Field Engineer-General Electric Co., Seattle, WA.
- 1977 -1980 Engineer's Assistant-Madison Gas & Electric Co., Madison, WI.
- 1976 -1977 Coop Student-Tennessee Valley Authority, Knoxville, TN.

### EDUCATION & PROFESSIONAL CREDENTIALS

- B.S., Electrical Engineering - University of Wisconsin, Madison, WI.
- Professional Engineer Licenses - Washington-1986, Alaska-1992, Oregon-1994, California-1996, Arizona- 2003, Nevada- 2005, Colorado- 2005, New Mexico – 2008, Idaho-2008, British Columbia- 2008, Florida 2010
- State of Washington Approve Electrical Continuing Education Course Instructor - 2005
- IEEE - Protective Relaying Principles & Applications – 1988
- IEEE 1584 Committee Member 2010
- General Electric Co. - Industrial Power Systems Coordination - 1985
- SEL - Directional and Reclosing Relays - 2006