



SPECIALIZED EXPERIENCE

- ❑ Remote Water and Sewer Facilities
- ❑ Industrial Control Panel Design
- ❑ Supervisory Control and Data Acquisition (SCADA) systems
- ❑ Airport Lighting and Navigational Aides
- ❑ Electrical Heat Trace Systems
- ❑ Hazardous Location Facilities

EDUCATION

- ❑ BSEE, 1986, Electrical Engineering, Rutgers University

PROFESSIONAL LICENSE

- ❑ Registered Professional Engineer, State of Alaska (EE-8286)

AFFILIATIONS

- ❑ NFPA, National Fire Protection Agency
- ❑ IAEE, International Association of Electrical Inspectors

PROFESSIONAL QUALIFICATIONS

John Faschan, P.E., President of EDC, Inc., John Faschan is a principal of EDC, Inc., and the engineer of record for the majority of the electrical projects designed by the firm. He has been with the company since 1994 and has over 18 years experience in the design of lighting, power and control systems for federal, state, municipal, commercial, industrial and educational facilities. He has worked on projects throughout the State of Alaska and has extensive experience in remote communities and locations.

John's work history has included projects for numerous governmental agencies including the Corp of Engineers, Village Safe Water, Alaska Native Tribal Health Consortium (ANTHC), Alaska Industrial Development and Export Authority (AIDEA), the State of Alaska Department of Transportation, the Municipality of Anchorage and many other city and local municipalities. He has helped design several complex, multi-million dollar facilities including the new Anchorage International Airport bulk fuel farm, the Red Dog Mine Containment building, two aircraft hangars for Elmendorf Air Force Base and a Modified Urban Assault Training (MOUT) course for Fort Richardson.

Additional project experience has included the design of:

- WATER - booster stations, reservoirs, wellhouses, valve vaults washeterias and treatment facilities
- WASTEWATER - lift stations and treatment plants
- FUEL – bulk tank farms, transfer facilities, commercial dispensing stations
- AIRPORTS – runway and approach lighting, PAPI/REIL, AWOS, NDB and other navigational systems
- TRANSPORTATION – roadway lighting and signalization systems, trail lighting
- SOLID WASTE – transfer stations and landfills
- COMMERCIAL BUILDINGS – remodels and new construction
- SCHOOL – remodels and new construction
- POWER - line extensions, standby and emergency generators, alternate energy sources

John has a broad base of technical knowledge. His experience with power distribution systems includes load flow analysis; short circuit calculations, coordination studies and arc flash requirements. He has integrated wind turbines,

JOHN FASCHAN, P.E.
LEAD ELECTRICAL ENGINEER, PRINCIPAL-IN-CHARGE

- ❑ NSPE, National Society of Professional Engineers

REFERENCES

- ❑ Brian Miskill, MWH, (907) 248-8883
- ❑ Jon Hermon, CRW Engineers, (907) 562-3252
- ❑ Greg Magee, MWH, (907) 248-8883

solar arrays, standby generators, motor control centers, step-down transformers, variable speed drives, solid-state motor starters, panelboards and motors in a variety of distribution systems. The majority has been low voltage systems, but he has worked with medium voltage distribution and power line extensions.

John is also knowledgeable in control systems and control panel design. He has developed control panel layouts and ladder logic schematics, Process and Instrumentation Diagrams (P&ID's), programmable logic controller (PLC) interfaces, I/O & programs and complete Supervisory Control and Data Acquisition (SCADA) systems. He has assisted in the start-up, testing, troubleshooting and acceptance of many complex control and instrumentation processes.

John is very familiar with lighting designs and standards. He has performed illumination and uniformity studies for roadways, trails and parking lots. He has also designed numerous facility interior and exterior lighting systems in many different environments including hazardous, marine and arctic.

John's background also includes an extensive list of electric heat trace projects including arctic pipelines, tanks, roof de-icing, culverts, sewage manholes and trails. He is also well versed in the unique electrical requirements of classified (hazardous) locations, as well as, the unique aspects of arctic and 'bush' Alaska environments.

Prior to joining EDC, Inc., John was Lead Electrical Engineer for Raytheon Support Services Company, where he designed and managed electrical and electronic construction projects for numerous Federal Aviation Administration facilities under a nationwide consulting engineering contract. Projects included radio communication facilities, airport approach lighting systems and aircraft navigational aide systems. His duties included preparing bid documents for construction subcontracts; supervising electrical engineers and technicians; coordinating field crews, estimating and tracking project costs, and acting as site construction engineer.

John began his engineering career as a Project Engineer for Hercules Incorporated, Aerospace Division, where he designed power, control and instrumentation systems for the automation of industrial plant processes in hazardous locations using programmable logic controllers (PLC's).