



Daniel L. Purzycki, P.E.
Americas Energy Services
dpurzycki@AmericasEnergyServices.com
715-218-6200 Mobile

OVERVIEW

I have an extensive background in new hydroelectric power plant electrical, controls, and hydraulic designs, as well as rehabilitation of existing facilities. My experience has been in project management, as well as technical project engineering and support functions. Some of these engineering functions include, but are not limited to SCADA, programmable logic controllers (PLC), human machine interfaces (HMI), networks, excitation systems, switchgear, generators, governors, hydraulic power units (HPU), protective relaying, controls and machine monitoring. I have also been responsible for equipment and operational analysis of hydroelectric facilities for life cycle, optimization, and economics, in addition to performing feasibility analysis. My field experience has taken me on numerous start-up and commissioning of domestic and international projects. I have been responsible for the overall business operations and development of several companies including special engineering design projects and research and development of new products and processes.

PROFESSIONAL EXPERIENCE

Engineering Consultant and member of Americas Energy Services

506 Oriole Lane, Wausau, WI 54401

Specializing in Electrical Engineering, Control Systems, Governors, Protection (Relaying), Fluid Power, Project Management, and Asset Analysis

2017 - Present

Alstom Power Inc. / Alstom Renewable US LLC / GE

8310 Technology Dr., Schofield, WI 54476

Director of Controls & Governors, North America

The assets of North American Phoenix Energy Services, Inc. were acquired by Alstom in March, 2010 and in November, 2015 GE and Alstom entered into a joint venture.

In this role as Director the responsibilities mimic that of the former company of North American Phoenix Energy Services, except it is embedded in a large organization with offices in Quebec, Canada, Washington, and Wisconsin.

2010 – 2016

Company Overview: **Alstom is a global leader in power generation** with a portfolio of products covering all fuel types. Close to 25% of the world's power production capacity depends on Alstom technology and services.

North American Phoenix Energy Services, Inc.

8310 Technology Dr., Schofield, WI 54476

President / Co-Owner

North American Phoenix Energy Services was formed by the merger of North American Hydro, Wisconsin and Phoenix Power Control, Washington. I was elected by the board of directors to the position of President. Accountable for overseeing quality, engineering, manufacturing in addition to P&L responsibility. Have worked on special projects, such as transmission line protection upgrades for the Army Corps of Engineers through INCA Engineers (Tetra Tech), hydroelectric feasibility studies, and excitation system development projects as examples.

2008 – 2010

Company Overview: Hydro Electric Products and Engineering Services

North American Hydro LLC.

8310 Technology Dr., Schofield, WI 54476

Vice President of Engineering / Co-Owner

Responsible for growing and developing power and control engineering business. During my tenure the company expanded more than 600% and developed new lines of products and services for the



hydroelectric power industry. I was directly involved in supervision, engineering, and commissioning large (>100 MW) to small (<1 MW) facilities. This involved SCADA, protection, control, communication networks, governors, excitation, substations, switchgear, and balance of plant.

1997 - 2008

Company Overview: Electric Power Producer / Hydro Electric Products and Engineering Services

L&S Electric Inc.

5101 Mesker St., Schofield, WI 54476

Engineering Manager to General Manager / President of Engineering / Co-Owner

Expanded business into power and control engineering market segment. Grew business domestically and internationally to provide power system services and products such as SCADA, protection, measurement, and PLC based control systems. Designed digital PID governors and later used PLC technology in this application. Developed electronic and mechanical field service department, which consistently exceed customer and profit expectations.

1983 - 1996

Company Overview: Design / Consulting Engineering, Motor / Generator Repair and Design, Panel Fabrication, Field Services, and New Product Sales

North Central Technical College

1000 W. Campus Dr., Wausau, WI 54401

Instructor

Courses taught: AC/DC Analysis, Measurement, and Distribution; Programmable Logic Controllers(PLCs) and associated labs. Recipient of two State of Wisconsin grants to develop courses in Programmable Logic Controllers.

1983 - 1986

Weyerhaeuser Paper Company

(Domtar) 200 Grand Ave., Rothschild, WI 54474

Electrical Project Engineer; Senior Electrical Engineer

Responsible for electrical capital projects from inception, economic justification, design, and commissioning. Integrated new process control scheme with oxygen analyzers for three boilers with a payback of less than two years. Successfully designed and managed paper machine and folio drive system projects.

1980 - 1983

Company Overview: Pulp and Paper Manufacturing Facility with hydroelectric and steam turbine generating facilities.

National Steel Company

Dissolved in 2003 - Detroit, MI

Supervisor – Electronic and Electrical Maintenance

Supervised up to 25 electronic technicians and electricians within an 80" hot strip mill. Automated a slab reheat furnace control system and wrote an in-depth manual on the process and system operation. Gained experience on union labor relations, large AC/DC machines and controls, cranes, x-ray measurement systems, and process control.

1977 - 1980

Company Overview: [14,000+ employees] Comprehensive Steel Manufacturing Facility

EDUCATION

University of Wisconsin, Madison/Wausau, WI - Engineering and Business Courses

Wayne State University, Detroit, MI - Graduate Industrial Management Courses

Eastern Michigan University, Ypsilanti, MI - Graduate Business Courses

Gannon University, Erie, PA – BS, Electrical Engineering



CONTINUING EDUCATION

Coordination of Industrial and Commercial Electric Power Distribution Systems [University of Wisconsin – Madison]
National Electric Code [University of Wisconsin – Madison]
Systematic Problem Solving [Weyerhaeuser]
ISO 9000 – Quality Standards [University of Wisconsin – Madison]
Finance [University of Wisconsin – Marathon County]
Engineering Refresher [University of Wisconsin – Marathon County]
Finance and Accounting for the Executive [University of Wisconsin – Madison]
Systems Protection [Basler Electric]
Power Control [Basler Electric]
Human Resources [University of Wisconsin – Madison]
Programmable Logic Controllers [Allen Bradley]
Man-Machine Interface [Intellution]
Geothermal Systems for Water Source Heat Pumps and Central Systems [University of Wisconsin – Madison]

CERTIFICATION

Professional Engineer - Wisconsin
Wisconsin Teacher by the Board of Vocational, Technical, and Adult Education

MEMBERSHIP

Institute of Electrical and Electronic Engineers

ABRIDGED PUBLICATIONS AND PAPERS

Hydro Review, Avoided Cost Analysis Justifies Control Upgrade
Hydro Review, Small Turbine Control Systems (Author's Award)
Hydro Review, Automating a 1900's Vintage Hydro Plant
Hydro Review, Small Hydro, Facts and Fictions of Hydraulic Turbine Speed and Load Control Systems
Hydro Review, Enhancing Powerhouse Security
Hidroenergija, Automation of the World's Largest Horizontal Hydro Electric Facility
Munich, Commission of the European Communities
International Society for Measurement and Control, Selection of Operator Interface Systems
Water Power Conference, Montreal, Canada – Practical Rewind Specifications for 0.6 to 5kV Class Hydro generators (co-author)
Hydrovision Conference, Why the Adaptive Power System Stabilizer in Hydro Plants is becoming increasing important (co-author)
HydroVision Conference, Grid Stability and Cyber Security (2014 Attendees' Choice Award Winner)

CIVIC ACTIVITIES

Junior Achievement Advisor
Project Business Teacher – 9th Grade
Big Brother / Big Sister Program