

**David L. Kornegay, P.E.**

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**Summary:**

Strong control system design skills, specializing in hydraulic turbine controls  
Chair of IEEE working group on hydroelectric unit governing systems applications  
Licensed Professional Engineer in Illinois, Wisconsin, and New York  
Good technical writing skills  
Enjoys devising creative solutions to challenging problems  
Extensive experience working with customers to identify needs and to create solutions  
Broad-based expertise including analog & digital electronics, hydraulics, generator excitation, and electrohydraulic interfaces

**Experience:**

**Innovative Automation, Inc.** York, PA  
Senior Project Engineer October, 2010 to present  
Prepared equipment specifications and technical descriptions. Established engineering standards for control system design and fabrication. Supervised the design process of governing and other control systems. Provided consulting and forensic engineering services for hydroelectric generating facilities.

**North American Hydro, LLC** (acquired by **Alstom Power** in March, 2010) Schofield WI  
Senior Project Engineer June, 2002 to October, 2010  
Supervised the design, fabrication, testing, and commissioning of hydroelectric unit controls and governors. Contributed to a repertoire of standard control system designs. Contributed to a system of engineering standards and practices.

**L&S Electric** Mosinee, WI  
Senior Application Engineer November, 2000 to June, 2002  
Responsible for establishing system design standards. Implemented improved speed measurement methodologies. Participated in the implementation of ISO 9001 certification.

**Voith Hydro** York, PA  
Product Engineer September, 1997 to October 2000  
Responsible for the development of the WaterView Plant Condition Monitoring software product line. Full project responsibility for implementation of a digital governor conversion for a Kaplan turbine at the Safe Harbor Hydro Plant. Responsible for the design integrity of digital control system applications. Developed a cavitation monitor multiplexing system for use at the XLD Hydro Project in China.

**Engineered Systems International** Plover, WI  
Senior Electrical/Controls Engineer July, 1995 to September, 1997  
Control system design for process and bulk handling systems used in the pulp & paper industry. Responsible for developing a profit center for providing engineering services to the hydroelectric generating industry.

**Woodward Governor Company** Stevens Point, WI  
Senior Staff Engineer August, 1994 to June, 1995  
Acted as liaison between Marketing and Development departments. Conducted training seminars both for in-house personnel and customer training. Technical support for sales staff and customer service departments.

**Woodward Governor Company**

Stevens Point, WI

Engineering Manager

June, 1993 to August, 1994

Supervised a department comprising 7 engineers, 14 drafter/designers, and 2 clerical personnel. Responsible for development and productionizing of electronic and hydraulic controls for hydroelectric generating stations.

**Woodward Governor Company**

Stevens Point, WI

Marketing Manager

May, 1992 to June, 1993

Supervised a staff of 4 people responsible for pricing, advertising, technical publications, seminar presentations, market research, and marketing strategy for the hydroelectric turbine controls business unit (\$12 Million annual sales).

**Woodward Governor Company**

Rockford, IL &amp; Stevens Point, WI

Design/Project/Senior Staff Engineer

October, 1971 to May, 1992

Responsible for equipment and system design for analog and digital electronic controls for hydroelectric generating units. Some hydraulic system design was also involved. Implemented the company's first programmable digital control for a hydroelectric turbine.

**Education:****Illinois Institute of Technology**

Chicago, IL

BSEE

June, 1970

Graduated with honors. GPA=3.53/4.00

**Additional Education:****Illinois Institute of Technology**

Chicago, IL

Graduate Level Study

September, 1970 to June, 1971

Additional courses concentrating on digital controls

**Publications:**

**"Governor upgrading at the Roanoke Rapids hydro plant,"** *Water Power & Dam Construction*, 1989 October

**"Recent developments in the control of hydroelectric units,"** *The International Journal on Hydropower & Dams*, 1994 January

**"Improving the Efficiency of a Four-Unit Generating Station,"** *HCI Publications, WaterPower'95*, 1995 July

**"The Evolution of Speed Governing for Hydro Turbines,"** *HCI Publications, WaterPower XIV*, 2005 July

**"Upgrade or Replace? Considerations for Improvement to Hydroelectric Governor and Unit Controls,"** *HCI Publications, WaterPower XV*, 2007 July

**"Approaching the Governor,"** *International Waterpower & Dam Construction*, 2008 February

**"Online Governor Tuning and Grid Stability,"** *HCI Publications, WaterPower XVI*, 2009 July