

SUMMARY VITA- William B. Hopf, III, P.E
Adjunct Faculty of Electrical Engineering

Education

M.B.A., Finance, University of Tennessee, 2000

M.E., Electric Machinery and Power Systems, University of Tennessee, 1983

B.S.E.E., General Electrical Engineering, University of Massachusetts, 1976

Academic Experience

Adjunct Professor

Fall 2010- Current

University of Tennessee Chattanooga, TN

- Serving part time as an adjunct professor for the following courses:
 - Spring 2013: ENEE 3800 Electric Machinery; ENEE 5520 Power System Operations
 - Fall 2012: ENEE 5640 Transients in Power Systems
 - Spring 2011: ENEE 3800 Electric Machinery; ENEE 3800L Electric Machinery Laboratory
 - Fall 2010: ENEE 5520 Power System Operations

Non-Academic Experience

Supervising Electrical Engineer

2007- Present

WorleyParsons, Chattanooga, Tennessee

- Responsible for performing duties of a power system analyst. Duties include developing mathematical models for a power system and performing load-flow, short circuit, and dynamic studies of the power system. Other responsibilities include the review of electrical auxiliary system calculations at nuclear, fossil, and cogeneration plants; and training junior electrical power system engineers. Specific assignments include:
 - **Suncor - Fort McMurray, Alberta, Canada – Arc Flash and Protection.** Review, analyze, and recommend protection scheme to ensure adequate coordination to minimize arc flash energies for facilities
 - **Suncor – Fort McMurray, Alberta, Canada.** Electromagnetic Transient Program switching and transient recovery voltage study for a current limiting reactor installation for facilities. This study also included a frequency sweep and harmonic analysis to identify resonance problems
 - **Louisville Gas and Electric, Kentucky Utilities – Black Start/System Restoration.** Developed design basis for black start study and system restoration. Developed dynamic models for the electric induction machines used to start the recovering fossil plants.
 - **TransCanadian Pipeline.** Developed electromagnetic transient model for the back EMF study of 6500 Hp pumping motor for three pumping stations along the pipeline.
 - **New York State Electric and Gas, Binghamton, New York.** Performed transmission system studies for the proposed compressed air energy storage plant and its interaction with various wind farms in western New York.

- **Alberta Electric System Operator– Transmission System Studies, Fort McMurray Area of Alberta, Canada.** Advised and directed principal engineer in system expansion studies for oil field exploration.
- **Southern California Edison, Rosemead, California.** Completed and presented a whitepaper on the concept of reactive power for non-electrical engineers.
- **BP Wind Farm Studies, Colorado.** Developed aggregate model for 120 wind turbines to be included in an interconnection request.
- **Aramco Refinery Power System in Saudi Arabia.** Advised and directed dynamic electric system study to determine adequacy of system under various contingency scenarios.
- **Santee Cooper Power Station, Cross Units 3 and 4, South Carolina.** Completed review of arc flash calculation.
- **Tennessee Valley Authority (TVA), Browns Ferry Nuclear Plant.** Completed review of quality assurance (QA) transmission system study. Study included N-1 contingency analysis to demonstrate system capability during a design basis event. Also included multi-contingency analysis and transient stability analysis. These studies also demonstrated compliance with North American Electric Reliability Council (NERC) TPL categories A, B, C, and D requirements.
- **CPS Energy, Braunig Peaking Turbines Station.** Reviewed and commented on an electrical auxiliary system study including adequacy of equipment ratings.

Professional Affiliation

- Professional Engineer, Tennessee, No. 15182
Life Senior Member, IEEE (Past Standards Board Member, Past Member New Standards

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