

**LI Pun Sang, Benson (李本生)**  
**Curriculum Vitae**

**Education**

Master of Engineering Degree	University of Toronto, 1986
Bachelor of Applied Science Degree	University of Toronto (First Honour), 1980
Higher National Certificate	Hong Kong Polytechnic, 1974

**Citizenship:** Canadian

**Age:** 50

**Language:** English, Chinese (Cantonese and Putonghua)

**Key Expertise and Experience**

- 28 years of experience in electric power industry, of which 21 years in power system planning, operations, analysis, control and deregulation
- managing power system reliability and security in a deregulated industry (since 1993)
- electric market rule development, infrastructure design and project implementation
- development of power system reliability and security standard, policy and criteria
- development of tools and methods for determining transmission usage in wholesale open access, transaction and congestion management
- power system analysis in the domain of system security, transient and dynamic stability, voltage performance, frequency response, equipment loading, system control and short circuit levels
- interconnected power system operation and control
- experience in power system simulation software and its application
- experience in high voltage and low voltage equipment design, installation and maintenance

**Work History** (from most recent)

**1999 – 2001** Director – Market Operations, Independent Electricity Market Operator (IMO), Ontario, Canada

Led a group of technical and management staff in managing the reliable and efficient operation of the Ontario electric marketplace and bulk power system; led the commissioning of the infrastructure needed for the reliable and effective management of the competitive electric energy market in Ontario and its interconnected systems.

**1998 – 1999** Acting Chief Operating Officer, IMO, Ontario, Canada

Led a group of technical and management staff in managing all aspects of the reliable and efficient operation of the Ontario electric energy supply system; participated in the design of market rules, infrastructure and processes for a competitive electric energy market.

**1995 – 1998** Manager - System Capability, Ontario Hydro, Ontario, Canada

Led a Department of technical staff in assessing operating reliability and security in all aspects of power system performance, determining transmission transfer capability and congestion management methodology, stipulating operating security policies, standards and criteria, and developing system models for operating study; involved in provision of various consultancy services as assigned; participated in deregulation proposals and market rule development.

**1993 - 1994** Section Manager - Interconnections Planning & Operations, Ontario Hydro, Ontario, Canada

Led a section of technical staff in planning and assessing operating security of the bulk transmission system in the northeastern US and Canada interconnection in the domains of transient and dynamic stability, voltage stability and steady state profile, equipment loading, short-circuit levels and interconnected system operation controls; internally, assessed application of such control aids as capacitors, reactors, phase shifters, special protection system (generation and load rejection) and Frequency Trend Relays; developed operating security policy, criteria, guideline and procedure; involved in provision of various consultancy services as assigned; led and participated in joint operating studies with the interconnected systems, and in Northeast Power Coordinating Council (NPCC) and interregional reliability study groups and task forces; represented Ontario Hydro in NPCC activities and North American Electric Reliability Council (NERC) activities, and on the General Agreement on Parallel Paths (GAPP) Committee to address the parallel flow issue and congestion management in the Northeast interconnection.

**1987 - 1992** Supervising Engineer (equivalent to Chief Engineer) - System Performance Studies, Ontario Hydro, Ontario, Canada

Led a technical unit in study activities similar to the above.

**1984 - 1987** Engineer/Senior Engineer - System Security, Ontario Hydro, Ontario, Canada

Supported the secure operation of the Bulk Electricity System by preparing system control operating limits and instructions, specifying operating requirements and conducting acceptance testing of power system security monitoring programs and other security application programs.

**1981 - 1984** Engineer/Assistant Engineer - System Performance Studies, Ontario Hydro, Ontario, Canada

Conducted power system analyses for system stability, voltage performance, equipment loading, switching surge and short circuit restrictions and recommended operating limits for the secure operation of the Ontario Hydro and its interconnected systems; developed power system simulation models for special studies such as islanding reparallel and automatic reclosure; designed and tested power system security monitoring programs for operations.

**1976 - 1977** Electrician - Canada Bread Company, Toronto, Ontario, Canada

Installed and maintained electrical and electrical equipment associated with the production of bread products. Attended electrical equipment breakdowns during production process.

**1969 - 1975** Apprentice (5 years), Technician/Class I Foreman (1 year), Hong Kong Water Works

Trained, then supervised a crew of about 100 in the installation, maintenance and testing of electrical and electronic equipment associated with water supply and processing such as motors, switchgear, transformers, control panels, protection relays, telemetry network, wiring, cable installation, motor winding, etc. Conducted high voltage insulation tests and calibrated protection relay settings.

### **Professional Membership**

Association of Professional Engineers of Ontario (APEO)

Institution of Electrical and Electronic Engineers (IEEE)

Ontario Association of Certified Engineering Technicians and Technologists (OACETT)