

Association of Professional Engineers

of the

Province of Manitoba

Merit Award

to

CLARENCE V. THIO

B.Sc. E.E., M.Sc., P.Eng.

Clarence Victor Thio attended high school in Boissevain, Manitoba, where he was born. He graduated from the University of Manitoba with a Bachelor of Science degree in Electrical Engineering in 1961 and a Master of Science degree in 1964.

He has been employed with Manitoba Hydro since 1964 and is presently Manager of Major Transmission Planning. Since that time, he has been engaged in the planning and development of Manitoba's major high voltage power transmission system. He was involved in the original feasibility studies for the Nelson River hydro-electric development. This led to the decision to apply the relatively new high voltage direct current (dc) transmission technology for which Manitoba Hydro has become world renowned.

During the continuing Nelson River development, Clarence was instrumental in the recommendations and decisions to adopt thyristor technology for the second stage transmission addition; for the paralleling capability of the two dc lines, to raise the design and operating voltage level to 500 kV; and other innovative concepts. All these concepts subsequently proved to be feasible, economic and basic to Manitoba's present, efficient power system.

Clarence has acted as a consultant and advisor on numerous power transmission projects throughout the world. He has made pioneering contributions to a number of mathematical and theoretical concepts applied to dc systems involving such topics as overvoltages and insulation coordination, power stability in weak systems, system reliability analysis and power failure phenomena. He is the author and co-author of more than 40 technical papers and publications presented throughout the world. He is also the co-receiver of two Recognition Awards from the international Institute of Electrical and Electronics Engineers (IEEE).

Clarence is a member of the Association of Professional Engineers of Manitoba, a Senior Member of the IEEE, and is a Manitoba Hydro representative to CIGRE, an international technical organization headquartered in Paris for the study and advancement of large high voltage electric systems. He serves on several of its Working Group Committees.

Beyond his engineering work, Clarence has been active throughout his life in amateur sports. He continues to play hockey and baseball. He is a Sports Canada National Certified Coach in both hockey and ringette. He has held positions as hockey chairman and registrar for his local Community Club and Minor Hockey Associations. He has also received Order of Sports Excellence awards from the City of Winnipeg and the Province of Manitoba.

Clarence maintains a lifelong interest in wildlife and conservation. He is presently President of the Winnipeg Game and Fish Association, an affiliate club for the Manitoba Wildlife Federation.

Clarence and his wife, Laraine have two children, Andrea, a teacher at Lord Selkirk school in Winnipeg, and Geoffrey, in 4th year Civil Engineering at the University of Manitoba.

In awarding the Engineering Merit Award to Clarence V. Thio, P.Eng., the Association recognizes his outstanding contributions to the engineering profession, to the community and to the Province of Manitoba.

March 7, 1995