



# **THE ENGINEERING INSTITUTE OF CANADA**

and its member societies

## **L'INSTITUT CANADIEN DES INGÉNIEURS**

et ses sociétés membres

November 18<sup>th</sup>, 2021.

Dr. John Vardalas,  
IEEE Milestone Advocate

Re: Recognition of the Completion of the Trans Canada Microwave System as an IEEE Milestone

Dear Dr. Vardalas,

On behalf of the History and Archives Committee of the Engineering Institute of Canada, I am delighted to offer our full support for IEEE Canada's proposal to recognize completion of the Trans-Canada Microwave System in 1958 as an IEEE Milestone, including the possibility of mounting Milestone plaques at multiple sites across Canada with simultaneous dedication on Canada Day 2022.

As part of the Canadian Engineering Centennial in 1987, an eight-member jury appointed by the Engineering Institute of Canada selected the ten most exceptional and representative feats of Canadian Engineering's First Century (1887-1987) from a pool of 110 projects. The selection criteria were very stringent. Besides demonstrating the obvious engineering advance, each project had to have catalyzed major economic and social change within its own era. Each must have posed "extraordinary demands in organization and administration" and, within the context, "be identified by its original character, ingenuity, creativity and true uniqueness."

The EIC jury recognized the Trans-Canada Microwave System as one of the ten most exceptional and representative feats with the following citation:

*The Trans-Canada Microwave System - The largest microwave transmission network in the world*

*This network of microwave transmission is the backbone of our system of telecommunication from sea to sea. Sponsored by the Canadian Broadcasting Corporation and executed by the seven members of the Trans-Canada telephone system, this network was constructed in three years involving 139 towers (ranging in height from 9.14 m to 106.68 m) over a 6,276.27 km track from Sydney, Nova Scotia to Victoria, British Columbia. Newfoundland was linked later. The system is designed to provide distortion-free images in telecasting. Site marking, construction of access routes, trials, and the feed back to the final erection of the galvanized steel towers developed a Canadian engineering know-how that is recognized internationally and resulted in Canadian involvement in the PANAFTEL network linking French Africa with Paris.*



# **THE ENGINEERING INSTITUTE OF CANADA**

*and its member societies*

## **L'INSTITUT CANADIEN DES INGÉNIEURS**

*et ses sociétés membres*

---

The proposed citation for the IEEE Milestone plaque

*On 1 July 1958, the Trans-Canada Microwave System introduced both live network television and direct-dialled long distance telephone service to Canadians from coast to coast. Comprising 139 microwave relay towers spanning more than 6275 kilometres, it was, at time of completion, the longest such network in the world. Its impact on Canada, its society and its economy was immense.*

is both accurate and concise, and consistent with EIC's own citation.

The evidence presented in the Milestone proposal is of sufficient substance and accuracy to support the citation.

The proposed recognition from IEEE will do much to raise awareness of this important achievement amongst both the public and the profession. We would be more than happy to provide more information and be of any assistance to contribute to this major project.

Suzelle Barrington, ing., agr.  
Chair, History and Archive Committee  
Engineering Institute of Canada

Copy: Ali Dolatabadi, EIC President  
Guy Gosselin, EIC Executive Director