The Southern Ontario System developed through a series of consolidations of various smaller systems. The establishment of the original Niagara System was followed in 1911 by the formation of the Severn System. Subsequently, the establishment of other systems to serve groups of municipalities in various sections of the Province had brought, by 1919, the number of systems to eleven. In 1924, the Severn and two other systems were consolidated to form the Georgian Bay System and in 1929 and 1930 a consolidation of four systems created the Eastern Ontario System. In 1944, the Southern Ontario System came into being through the consolidation of the Niagara, Georgian Bay and Eastern Ontario Systems.

In the northern part of the Province the Commission continued to operate the Thunder Bay System. In addition, it undertook during the 1930's to operate, in trust for the Provincial Government, a group of unconnected systems serving mainly mining and pulp and paper industries and known as the Northern Ontario Properties. On Jan. 1, 1952, the Northern Ontario Properties and the Thunder Bay System were merged for financial and administrative purposes and the consolidation continues to be known as the Northern Ontario Properties.

In each of the Southern Ontario System and the Northern Ontario Properties, as at present constituted, the Commission's customers include municipal electrical utilities, certain large industrial users, and retail customers in a small group of local municipal systems and in rural municipalities.

The Southern Ontario System serves the older and more populous part of Ontario lying south of a line drawn from Mattawa on the upper Ottawa River approximately west to Georgian Bay. Primarily it serves a group of 312 municipalities receiving power at cost under contracts established according to the provisions of the Power Commission Act. It is, therefore, referred to as a cooperative system.

The Northern Ontario Properties is not a co-operative system in the same sense, though it continues to serve the municipalities that were formerly members of the Thunder Bay co-operative system. It also continues to operate, in trust for the Province, a large part of the facilities serving the industrial and mining areas of northern Ontario. The territory served by the Northern Ontario Properties extends in the northern part of the Province from the Quebec boundary to the boundary of Manitoba. Though it is not a wholly integrated power system, the Northern Ontario Properties comprises two Divisions which in themselves are integrated operational and administrative units, the Northeastern and the Northwestern Divisions. No power-line connection exists between these two divisions but the Northeastern Division has been interconnected since 1950 with the Southern Ontario System.

The growth of Ontario Hydro's resources, both physical and financial, reflects the remarkable industrial and social development of the Province. In 1914, the Commission purchased its first generating station, Big Chute on the Severn River. Later in the same year, the first Commission-built generating station at Wasdell Falls, also on the Severn River, was placed in service. The program of purchase and construction of generating stations thus launched reached a climax between 1917 and 1925 in the construction of the great Queenston-Chippawa development, later renamed Sir Adam Beck-Niagara Generating Station No. 1 in honour of the first Chairman. This station first delivered power in 1922. Yet, commencing four years later, the Commission found it necessary to negotiate for the extensive purchase of power from large Quebec suppliers in order to satisfy Ontario's steadily growing power demands.