

In Section I of this Chapter will be found a special article describing the planning and execution of the change-over from 25 cycles to 60 cycles. The following statements show the existing power resources of the Commission as at Oct. 31, 1949, and a summary of the post-war development program, 1945-1952.

I.—TOTAL POWER GENERATED AND PURCHASED—ALL SYSTEMS, YEAR ENDED OCT. 31, 1949

System	Generated				Purchased	
	Maximum Normal Plant Capacity				Contract Amount	
	Hydraulic		Steam and Diesel		kw.	h.p.
	kw.	h.p.	kw.	h.p.	kw.	h.p.
Southern Ontario System.....	1,046,100	1,402,278	2,000	2,681	734,706	984,861
Thunder Bay System.....	175,700	235,523	—	—	—	—
Northern Ontario Properties.....	270,850	363,071	550	737	—	—
Total available capacity— Generated and purchased—all systems.....					2,229,906	2,989,150

II.—SUMMARY OF HYDRO-ELECTRIC POWER COMMISSION POST-WAR DEVELOPMENT PROGRAM AS AT OCT. 31, 1949

CONSTRUCTION OF GENERATING PLANTS

System and Development	In Service	Kilowatts	Approximate Horsepower
<i>In Operation—</i>			
Southern Ontario System—			
DeCew Falls (Extension)—Niagara district.....	September, 1947	57,000	76,400
Stewartville—Madawaska River.....	September, 1948	63,000	84,500
Additional power purchase contract—Polymer Corporation.....	November, 1948	22,500	30,200
Thunder Bay System—			
Aguasabon—Aguasabon River.....	October, 1948	40,000	53,600
Northern Ontario Properties—			
Ear Falls (Extension)—English River.....	June, 1948	6,000	8,000
TOTAL IN SERVICE.....		188,500	252,700
<i>Authorized and Under Construction—</i>			
Estimated in Service			
Southern Ontario System—			
Des Joachims—Ottawa River.....	6 units in 1950, 2 units in 1951	358,000	480,000
Chenau—Ottawa River.....	2 units in 1950, 6 units in 1951	120,000	160,000
La Cave—Ottawa River.....	1952	144,000 ¹	192,000
J. Clark Keith (Steam)—Windsor.....	Autumn, 1951	120,000	160,000
Richard L. Hearn (Steam)—Toronto.....	Autumn, 1951	200,000	268,000
Emergency steam and diesel-electric units.....	November, 1949 to April, 1950	63,000	84,000
Thunder Bay System—			
Pine Portage—Nipigon River.....	July, 1950	60,000 ²	80,000
Northern Ontario Properties—			
Tunnel—Mississagi River.....	July, 1950	42,000	56,000
TOTAL UNDER CONSTRUCTION.....		1,107,000	1,480,000
TOTAL (IN SERVICE AND UNDER CONSTRUCTION).....		1,295,500	1,732,700

¹ Ultimate capacity planned—192,000 kilowatts, 257,000 horsepower.

² Ultimate capacity planned—