

installation is 30,000 k.w. and the power house has been constructed with provisions for future extensions up to 100,000 horse-power. The peak load now carried exceeds 20,000 k.w., the pondage 7 square miles in extent immediately above the plant greatly increases the ability of the plant to carry peak loads. The power is transmitted 75 miles to Winnipeg over a double three-phase line supported upon steel towers.

Four miles below the municipal plant is Slave Falls, where 26 feet is available, equivalent to 36,480 continuous horse-power at ordinary minimum flow and 47,270 with complete regulation. The natural conditions render this a very attractive site for development, both from engineering and economic considerations.

The Power Sites of the Seven Sisters

The next point of interest is where the river divides into two channels, the right or Pinawa carrying 8,000 c.f.s. into the east end of Lac du Bonnet. On this channel is situated the hydro-electric station of the Winnipeg Electric Railway, which, operating under an average



WINNIPEG RIVER—SEVEN SISTERS, SECOND FALL

head of 40 feet, has an installed turbine capacity of 35,600 horse-power and 14,000 k.w. generator equipment. This power is transmitted 58 miles to Winnipeg and district for power, lighting and street railway purposes.

Three miles above this plant is what is known as the Upper Pinawa site, where a head of 18 feet could be secured and 13,100 horse power developed at a cost that would render it attractive as an auxiliary to the present Winnipeg Electric Railway Company development.

The left channel of the Winnipeg River also enters Lac du Bonnet, and on this reach there are two sites. The Upper Seven Sisters, where 29 feet head is available, could, after allowing for the flow down the Pinawa channel, develop 19,560 continuous horse-power at ordinary minimum and 31,635 horse-power with regulated flow.

The Lower Seven Sisters would provide a 37-foot head, yielding 25,000 horse-power and 40,400 horse-power respectively. Neither of these two sites will be particularly attractive economically until the river is fully regulated.