

have been developed in the Province is 2.6 million kilowatts of capacity. There are, in addition, existing thermal power installations totalling about 0.8 million kilowatts.

Between the years 1945 and 1954, the annual energy requirements of the Province increased from approximately 3 billion kilowatt hours to about 7 billion kilowatt hours, with a growth rate of 9 per cent annually. At that time the ALCAN smelter at Kitimat came into operation and between 1954 and 1962 the energy requirements again doubled, from 7 billion kilowatt hours to 15 billion kilowatt hours, for an average load growth of almost 10 per cent annually. Without considering the ALCAN load, the growth in this period would be 6.2 per cent per annum. At this rate the energy requirements of British Columbia are likely to double every ten to twelve years.

With the possible exception of the Bridge River development situated about 100 miles north of Vancouver, where installed capacity is over 400,000 kilowatts, all of the hydro plants serving the major load areas of the lower mainland and Vancouver are relatively small. Nearly all of these smaller sites in the vicinity of the load centres have now been developed, and load increases of the area are presently being met through additions to a 300 megawatt (300,000 kilowatt) thermal-electric plant situated at Vancouver.

In the Central Interior of the Province, where there has been little industrialization, the communities have been supplied from isolated diesel plants. Wherever feasible, these communities are being integrated into the main hydroelectric system of the British Columbia Hydro and Power Authority through extended transmission interconnections.

The ever expanding load in British Columbia can only be met successfully and economically from large power developments. As these large hydro installations take up to 10 years for completion of their engineering and construction, the Province has to plan its power development programme well in advance. Power from the Peace River development which is now underway in the northeastern part of the Province will be capable of meeting forecast loads from 1968 until the mid 1970's. At that time the development of the Columbia River Treaty dams will be completed and paid for through the sale of downstream power benefits to the United States and the generation of power in Canada from these projects will be available at very low cost. This development could start with the "machining" of the Mica project to its ultimate capacity of 1.8 million kilowatts, and then proceed with construction of plants at Downie Creek, Revelstoke Canyon and other sites until a total of about 4 million kilowatts of new capacity has been installed in the Columbia River basin in Canada.

Such a programme has not only provincial and regional significance, but importance for the whole of Canadian economic development and for the evolution of an effective regional and national energy policy.