# ELECTRIC-POWER DEVELOPMENT - 1962

In 1962, Canada's total electric-power producing capability was increased by the installation of 415,468 horsepower of hydro-electric turbine capacity and 713,210 kilowatts of thermal-electric generating capacity, Resources Minister Walter Dinsdale said recently in the annual review of electric-power development.

For the second consecutive year, the amount of thermal-electric capacity installed exceeded hydro-electric capacity. New hydro capacity was installed in Quebec, New Brunswick and Newfoundland, and thermal capacity added in British Columbia, Alberta, Manitoba, Ontario, Quebec, New Brunswick, Prince Edward Island, Newfoundland, and the Northwest Territories. In 1963 the position will be reversed, with the installation of hydro-electric facilities predominating and construction expected to yield about 1,203,600 hp., considerably more than the scheduled 660,500 kw. of new thermal installations.

# FEDERAL-PROVINCIAL POWER CONFERENCE

An important event in 1962 was the federalprovincial conference in Ottawa on March 19, called by Prime Minister Diefenbaker to study Canada's problems in the transmission of electric energy over great distances and the possible formation of a national power-grid to increase industrial development throughout Canada. The terms of reference to cover the programme of preliminary studies are currently being reviewed by the federal-provincial working committee.

Power developments scheduled for completion after 1963, according to the most recent information available, will produce almost 7.7 million hp. of hydro-electric, and nearly 2.1 million kw. of thermal

electric, capacity. Development of Quebec's Manicouagan and Outardes Rivers is expected to increase the province's hydro capacity by over 5 million hp. and accounts for the major part of the proposed 7.7 million hp.

Plans, and initial preparatory work, are in hand for a number of developments that will eventually add a further 5 million hp. to Canada's developed hydro capacity. Most of this would become available with development of two sites on the Peace River in British Columbia.

## MORE THERMAL PLANTS

The installation of 415,468 hp. of hydro-electric capacity in 1962 raised the total of Canada's hydraulic-turbine capacity to 27,100,000 hp. During the same period, total thermal-electric capacity was raised to over 5,660,000 kw. by the net addition of 713.210 kw.

The recent trend to increased development of thermal-electric power is reflected by the preponderance of thermal over hydro installations in 1961 and 1962. This reversal of practice stems partly from the fact that many of the hydro-electric sites considered economic have been developed, and in part from the increasing recognition of the benefits to be derived from the integrated operation of hydroelectric and themal-electric power plants.

Recent rapid advances in the techniques of extrahigh-voltage transmission have provided a means of transmitting hydro-electric power from relatively remote sites to demand areas at costs competitive with thermal-electric power. As a result, decisions . have been made to develop a number of hydro-electric power sites which had previously been considered outside the economic transmission range.

## MINERAL PRODUCTION, 1962

Canada's mineral production in 1962 was valued at a record \$2,844,164,000, larger by 10.1 per cent than 1961's previous high total of \$2,582,300,000, according to preliminary estimates by the Dominion Bureau of Statistics. Among leading minerals, values Were higher in 1962, compared to those of the preceding year, for copper, iron ore, nickel, silver, zinc, asbestos, crude petroleum, cement, and sand and gravel, and lower for gold, lead, uranium, and coal.

Metals as a group were valued at \$1,481,462,000 in 1962, an increase of 6.8 per cent over the preceding year's total of \$1,387,159,000. Nickel headed the list of metals with a rise in value to \$385,-225,000 from \$251,262,000 in 1961. Copper was next, its value rising to \$283,133,000 from \$255,-158,000, followed by iron ore, which rose to \$264,-608,000 compared to \$187,950,000. The value of gold Production dropped to \$155,446,000 from \$158,-637,000. The value of other metals included: uranium, \$151,425,000 (\$195,692,000 in the preceding year); zinc, \$110,629,000 (\$104,750,000); lead, \$37,817,000 (\$47,055,000); and silver, \$36,078,000 (\$29,581,000). in a nuclear reactor and produced

NON-METALS The value of non-metals as a group rose 2.4 per cent in 1962 to \$215,584,000 from \$210,468,000 in 1961. Asbestos was the leading non-metal, its value rising to a record \$132,061,000 from 1961's preceding peak of \$128,956,000. Next in order were salt, at \$23,185,000 compared to \$19,552,000 in the previous year, gypsum at \$9,033,000 (\$7,751,000 in 1961), elemental sulphur at \$8,903,000 (\$7,-288,000), titanium dioxide at \$7,779,000 (\$16,724,000), and peat moss at \$7,669,000 (\$7,295,000).

### MINERAL FUELS

The output of mineral fuels climbed sharply (22 per cent) to \$796,851,000 in 1962 from \$653,-323,000 in 1961, with all fuels except coal contributing to the total gain. The year's totals were: natural gas, \$97,913,000 (\$68,422,000 in 1961); natural-gas by products, \$46,818,000 (\$27,293,000); crude petroleum, \$583,593,000 (\$487,560,000); and coal, \$68,527,000 (\$70,053,000).