Water Power Resources Conference at Ottawa

Dominion and Provincial Officials In Charge of Water Power Administration Meet With Members of Dominion Power Board and Discuss Co-ordination of Investigations and Administration—Water Resources Index-Inventory Scheme Adopted

TO effect co-ordination of effort and standardization of method in the investigation of water-power resources in Canada, the Dominion Power Board last Thursday and Friday, convened at Ottawa a meeting of representatives of all the Dominion and provincial organizations concerned with the administration of those resources.

Among those who participated in the conference were: R. J. Burley, engineer, Reclamation Service of Canada; E. F. Drake, director, Reclamation Service of Canada; C. O. Foss, chairman, New Brunswick Water Power Commission; T. W. Gibson, Deputy Minister of Crown Lands, Ontario; H. W. Grunsky, legal adviser, Dominion Water Power Branch; J. T. Johnston, assistant superintendent, Dominion Water Power Branch; E. B. Jost, engineer, Department of Railways and Canals; R. S. Kelsch, consulting engineer, Montreal; O. Lefebvre, chief engineer, Quebec Streams Commission; K. H. Smith, engineer, Nova Scotia Water Power Commission; R. G. Swan, chief engineer, British Columbia Hydrometric Survey; Wm. Young, comptroller of Water Rights, British Columbia; and also the following members of the Dominion Power Board:—

Arthur St. Laurent (vice-chairman), Assistant Deputy Minister, Public Works Department; John B. Challies (secretary), superintendent, Dominion Water Power Branch, Department of Interior; H. G. Acres, hydraulic engineer, Hydro-Electric Power Commission of Ontario; Arthur Amos, chief of the Hydraulic Service, Quebec; W. A. Bowden, chief engineer, Department of Railways and Canals; D. B. Dowling, Geological Survey of Canada; B. F. Haanel, chief of Division of Fuels and Testing, Department of Mines; C. N. Monsarrat, consulting engineer, Department of Railways and Canals; and John Murphy, electrical engineer, Department of Railways and Canals.

In the absence of Hon. Arthur Meighen, Minister of Interior and chairman of the Dominion Power Board, the conference was presided over by Arthur St. Laurent, the vicechairman. A. B. Lambe acted as secretary.

Industry Dependent Upon Power

In opening the conference, Mr. St. Laurent referred to the tremendous efforts of other countries in an endeavor to ensure the production of power in sufficient quantities to meet all needs and upon conditions which would realize the maximum advantageous use of all available sources of energy, especially water power. It was pointed out that industrial activity is dependent upon an available supply of power, and Canada must continue to make the best use of her unique and unrivalled "white coal." The Dominion Power Board hoped to be the medium whereby the experience of the Dominion and provincial organizations concerned with power problems would be consolidated and co-ordinated, and their activities concentrated upon such action as would be necessary to assure Canada her proper place in the reconstruction period.

Future Prosperity Ensured

The great fuel reserves of Canada and her fortunately located water-power resources, if thoroughly investigated, properly exploited and adequately developed, form an industrial asset which, probably more than any other, will ensure for the Dominion a full measure of future prosperity.

As indicative of the extent and availability of the waterpower resources of the Dominion and of the remarkable degree to which their adaptability for central electric station work has been appreciated in principle and realized in practice, Mr. St. Laurent referred to the following important facts disclosed within the last few days by the completion of a census of the central electric-power station industry in the Dominion, the census having been undertaken by the Dominion Bureau of Statistics in co-operation with the Dominion Water Power Branch:---

Census of Central Stations

Out of a total installed primary capacity of 1,844,571 h.p., 1,652,661 h.p., or practically 90 per cent., is derived from water.

The capital actually invested in the central electric stations industry total \$356,004,168, of which 79.5 per cent. is invested in commercial stations and 20.5 per cent. in municipal or publicly-owned stations.

The total employees connected with the industry, including officers and wage earners, numbers 8,847, of which 58 per cent. are connected with commercial, and 42 per cent. with municipal stations. The salaries and wages paid to these employees totals \$7,777,715 per annum.

The total revenue received from the sale of electrical energy is \$44,536,848, of which \$29,135,399 was secured by commercial and \$15,401,449 by municipal plants.

The water power used in central station work in Canada averages 198 installed horse-power per thousand population. In the United States in 1912, water power installation in central station work averaged 24.7 h.p. per capita.

The above figures have reference solely to the central stations themselves and wholly exclude all allied or dependent industries such as electric railways, electro-chemical industry, pulp and paper plants and all other industries of interests using electric energy directly or indirectly.

Subjects Discussed

The subject matters of the conference, which were of the greatest general interest, included a "Water Resources Index-Inventory" system for all of Canada; co-ordination of investigating efforts; the prompt publication of the results of hydrometric surveys; extension of the Meteorological Service to secure all the data necessary for reclamation, irrigation and drainage, and for the consideration of water-power problems; co-ordination of water-power administration in the various Dominion and provincial jurisdictions.

Water Resources Index-Inventory

Owing to the great area of the Dominion and the fact that both Dominion and provincial authorities have for years been concentrating their efforts upon the solution of various and frequently conflicting phases of water resources problems, a lack of uniformity exists in the method of recording and analysing essential pertinent data.

The need is therefore apparent for a uniform and coordinated system of recording, filing and analysing water resources data—a system that will be equally adaptable to Dominion and provincial requirements. The conference adopted a system known as the "Water Resources Index-Inventory," perfected by the Dominion Water Power Branch and recommended by the Dominion Power Board.

The scheme is said to be flexible and simple and well suited for general adaptation, not only by governmental organizations and interested corporations, but by all engineers who are concerned with the collation and consideration of water resources information. *The Canadian Engineer* has arranged to have a full explanation of the scheme appear in an early issue.

Hydrometric Surveys

All the members of the conference were in thorough accord with the Dominion Power Board as to the necessity for co-ordination of effort and the standardization of methods in hydrometric survey work generally. There are now over twelve Dominion and provincial organizations concerned with