

Extension of the field of use opened by the perfection of the art of electric transmission of power from great distances, has been marvellous. As a result, rapid and revolutionary changes are constantly taking place in the use of power. As the circle of electrical application circumscribes new fields, the opportunities for power development grow proportionately. The tremendous advance to date in the practicable application of the use of electric power in industry and the further accomplishments that are assured, have rendered the conservation and utilization of our power resources, (more especially our water powers), one of the most important problems in Canadian political economy.

The solution of this problem involves complex questions of law and regulation relating to various uses of water for domestic supply, irrigation, power, logging and navigation; of adequate administration under such legislation; of essential engineering and economic investigation of water resources to meet the necessities of administration, and to determine the most efficient and effective method of power development, so that the permanent public interest will be best served; and probably most difficult of all, determinations of economic questions relating to adequate rentals, and reasonable rates.

Canadian water power laws are in the main quite adequate, encouraging to development, with due regard to the public interest, present and future. While in some parts of the Dominion former conditions have been outgrown, and in such parts the evolution of governmental machinery and laws with respect to water powers has not advanced as fast as might be desired, it must be remembered that there is but a short distance in time from the 50 h.p. overshot mill wheel of small efficiency, crude apparatus, local use and of little general importance to the community at large, to the 20,000 h.p. turbine of over 90% efficiency and 200 mile transmission radius of to-day, of such widespread importance owing to the present universality of the electrical industry and the consequent infinite ramifications of power use in respect of the body politic.

So far as the prairie provinces of Manitoba, Saskatchewan and Alberta are concerned, the problems above referred to have been given fairly adequate consideration and the regulations, administration and investigations which have been evolved by the Department of the Interior in the short space of seven or eight years, have marked a creditable achievement. The existing water power regulations (see appendix IV) are admittedly, in some respects, imperfect. At the same time the imperfections and undesirable features are thoroughly well realized, and it is only a matter of time and opportunity when they will be corrected. The regulations now in force afford every reasonable protection to the public in the way of limited grants, rentals and control of rates, both subject to periodic revision, continuous and beneficial use of the power privileges, and at the same time provide sufficiently attractive opportunities for investment to actively interest the capitalist. The departmental administration, is as progressive as the regulations and the Parliamentary appropriations will permit.

The two most important water power situations within the three prairie provinces, that on the Winnipeg river in Manitoba, and that on the Bow river in Alberta, important on account of their strategic location close to important