

man, other members. A feature of the report is a voluminous appendix by Mr. Cecil B. Smith, the engineer, on the operation, transmission, and distribution of electric power; showing by means of an exhaustive series of maps and tables a plan for the distribution of power from Niagara through the southern and western parts of the Province. For this purpose it is proposed to divide it into five sections, with centres respectively at Hamilton, Toronto, Guelph, London, and Windsor. It is calculated that a market for 50,000 horse-power can be obtained as soon as the transmission lines could be constructed, and for 100,000 horse-power within five years afterwards. The suggestion is made that a right of way be purchased for a transmission line over the entire Niagara power district, between Toronto and Sarnia. The commissioners state that recent sales of large blocks of power at Niagara at \$12 per twenty-four hour horse-power, determined them to accept that figure as a basis of calculation for the cost of transmitting power from that point.

Cost prices of power delivered to consumers at four typical points are calculated, including 25 per cent. allowance for future growth with annual charges of operation, repairs, replacement fund and interest at 4½ per cent., and power lost on lines and transformers. These figures are for 24-hour power per horse-power per annum to the consumer: At St. Thomas, for a full load of 2,000 horse-power \$26.03; three-quarters load, 1,500 horse-power, \$29.06; half load, 1,000 horse-power, \$35.08. Berlin, full load, 3,150 horse-power, \$18.48; three-quarters load, \$19.52; half load, \$22.91. Galt, full load, 1,750 horse-power, \$22.56; three-quarters load, 1,312 horse-power, \$24.74; half load, 875 horse-power, \$29.56. Toronto, full load, 50,250 horse-power, \$16.53; three-quarters load, 37,687 horse-power, \$16.91; half load, 25,125 horse-power, \$17.15.

A saving to Toronto of no less than \$684,000 a year is calculated including \$53,000 on the pumping station, \$217,200 on the street railway, \$144,800 on the Electric Light Company, \$100,000 from steam power displaced, and \$169,000 by taking over the electric light plant at \$2,000,000 valuation. For the installation of a new power house an intake site is proposed immediately above that of the Ontario Power Company at Niagara, with an alternative site eighteen miles west of the Falls, where double the head can be obtained and only half the water required for the same power.

For the sake of fairness, however, it must be said that the conclusions of the Commission have not been allowed to go unchallenged. For example, Mr. J. Stanley Richmond, an electrical expert, staying in Toronto, writes to the "Globe" of Wednesday last an interesting letter, analyzing the figures of the report and the conclusions drawn from them. He declares that even on the showing of the figures presented by the Commissioners, their conclusions as to the cost of delivering power to the consumer in Toronto are not warranted. The report, for instance, states that power from a 50,000 horse-power plant could be sold in that city at \$16.53 per horse-power per year. Mr. Richmond, however, contends that, allowing for the greater length of the tail or head race which would be required for a new venture, also for the cost of step-down transformer plants, or low tension cables, necessary for distributing the power, also for the waste of efficiency in generators on the transmission line, the cost price would be \$27.73 per horse-power per year delivered in Toronto, and this does not take into account the fixed annual charges incurred for the initial cost of above-mentioned distribution apparatus. A reply from Mr. Cecil Smith on these points, which would seem to exercise a very modifying influence over the tempting proposition held out as a result of the commission's labors will be awaited with more

than usual interest, for Mr. Richmond was one of the experts who collected the facts on which the report of the Power Commission was based. What appears clear thus far is a serious difference in the conclusions of different electrical engineers drawn from the same data.

MANITOBA HARD WHEAT AT A PREMIUM.

A circumstance which marks the enterprise of the Winnipeg Exhibition board in addition to their sense of the importance of preserving the quality of Canadian hard wheat as the best in the world, is the enlargement of the amount offered in prizes for wheat at the coming exhibition in the present year. Indeed we are told that the sum of them is trebled as compared with last year. The amount to be devoted to wheat prizes is five hundred dollars, a very liberal sum. The principal premium, and one which is likely to attract a great many competitors is that of \$200 for the best twenty-five bushels of red Fife wheat, \$100 for the second best, \$75 for the third, and \$35 as the fourth prize. There are also minor prizes of \$20, \$10, \$6 and \$4 for five-bushel lots of red Fife, Preston, Stanley, or Huron, and \$20 and \$10 for five-bushel samples of Alberta red winter wheat. It will be observed that no prizes are offered for white wheats, not even for white Fife. The prize list of the Winnipeg Summer Fair has other praiseworthy features which mark the management as liberal in their ideas. The aggregate amount offered in prizes for Short-horn cattle is not less than two thousand dollars, while a sum of seven hundred dollars represents what will be given to the winners of prizes for Glydesdale horses.

THE "VALENCIA" WRECK DISCUSSED IN PARLIAMENT.

The terrible loss of life in the wreck of the steamship "Valencia," off the British Columbia coast in January last, is a subject which still stirs discussion, not only in the vicinity of the disaster, but in the House of Commons at Ottawa. An animated debate took place last week in which the Dominion Government was the recipient of not a little censure on the ground that proper measures had not been taken for the better preservation of life in case of shipwreck, though it must be confessed the Opposition scarcely proved that the former was not doing its best to remedy the most serious defects. One speaker, Mr. Ralph Smith, of Nanaimo, pointed out that the crew of the "Valencia" had been obtained haphazard in San Francisco, and were largely inexperienced sailors, and that the captain knew but little of the intricacies of navigation on the British Columbia coast. He suggested, that while the Canadian authorities were not exactly to blame for this, yet they should exercise a better supervision over the character of the men who sailed ships in Canadian waters. He considered that the acceptance of merely an American certificate of an American vessel was not sufficient, but that the latter should be carefully inspected by Canadian officials.

It is satisfactory to learn that Hon. Mr. Brodeur, Minister of Marine, intends inaugurating a new and stringent system of aids to navigation and protection of life on the Pacific coast, which, it may be said, is not nearly so well protected as that on the Atlantic side. One thing under proposal is the compulsory pilotage