

Public Meetings in United States.—In August last, the War Department issued notice of public hearings to be held at Niagara Falls, N.Y., for the purpose of ascertaining what industries dependent upon power generated from the waters of the Niagara River at Niagara Falls, have been, or are likely to be adversely affected by a reduction of power obtained by them from that source. Blank forms for supplying information were also distributed to various companies. The report has not yet been made public.

The Water Power Investigating Committee appointed by the New York State Legislature, has held hearings at Niagara Falls, N.Y., and elsewhere and it is understood that this committee is about to issue a report.

The Hydro-Electric Association of Buffalo, N.Y., an organization seeking to carry out a plan for power distribution fashioned along the lines upon which the Hydro-Electric Power Commission of Ontario operates, has been urging before the Committee on Foreign Affairs their claim to the unappropriated 4,400 c.f.s.

United States Committee on Foreign Affairs.—At a meeting of the committee in July, it was addressed by prominent persons utilizing Niagara power, such as the managers, superintendents and consulting engineers of concerns like the Graphite Company, the Union Carbide Company and the chlorine industries. All speakers emphasized the fact that they were experiencing acute shortage of power. There were present about one hundred representatives.

Directing attention to the effects of the dye shortage, speakers emphasized that the United States was many times more dependent,—even though they did not know it,—upon products resulting from the use of Niagara power, than they ever were on the dye-producing industries of Germany. Speakers went on to demonstrate that it was utterly futile for the United States to devise and attempt to carry out any policy of war-preparedness, without at the same time augmenting the power available for the use of United States industries now located at Niagara. It was emphasized that this applies specially to plants manufacturing such products as chromium, utilized for the steel for battleships, and for high-speed cutting tools, which latter have so materially increased the output of metal-working establishments. There was also pointed out the need for increasing the output of the abrasive industries which supply carborundum and other products now so generally employed in the modern grinding processes which to a large extent have superseded, for many purposes, the work previously performed by lathes and other machine tools. Much attention was directed to the graphite products without the supply of which it would be simply impossible to produce the materials from which to manufacture many of the modern munitions of war.

Statements were made to show that the United States, in order to conserve and advance her industrial position in the world markets, could not afford to permit industries to locate in other countries where cheap power was being offered. Instances were mentioned, such as that of the Union Carbide Company locating in Norway and having available 100,000 h.p.; also a case in Canada where the American Cyanamid Co. had been forced to move out of the United States and locate in Canada at Niagara Falls in order to obtain a block of some 25,000 or 30,000 h.p. Such instances were cited in order to show that it would be extremely unfortunate to the upbuilding of the United States if industries had thus to expatriate themselves because the additional power necessary for their growth could only be obtained abroad.

After another meeting, in August, the committee announced that the hearings had furnished all information it required in order to proceed to "report out" the Cline Bill. Since the Presidential election, no further action has been taken.

In order to relieve the situation, the United States War Department has issued provisional and temporary permits, both to the Hydraulic Power Co. and to the Niagara Falls Power Co., to utilize during the winter months the full 4,400 c.f.s. remaining unappropriated under the Boundary Waters Treaty.

The Power Shortage in Canada.—All the power-producing resources of the Niagara power companies in Canada are taxed to their respective limits. There is no doubt that the use of electricity in Ontario has been greatly stimulated by reason of the activities of the Hydro-Electric Power Commission of Ontario. Rates have been lowered. The commission at present is directing the Niagara, Severn, Wasdell's Falls, St. Lawrence, Ottawa, Port Arthur, Eugenia, Muskoka, Northern Ontario, and Central Ontario systems.

It may be mentioned that during 1916 the Ontario Government purchased, for the sum of \$8,350,000, the Central Ontario system. This comprised the entire holdings of the Electric Power Co., which embraced twenty-two subsidiary companies, including transmission lines of 285 miles at 44,000 volts.

In order to show the increasingly great demand for power in Canada, it may be stated that during 1916, for industrial purposes, in the Niagara District alone, the commission received *bona fide* applications for over 70,000 h.p. These applications came from companies like the American Dyest & Chemical Co., Electro-Chemical Co., Canadian Carbide Co., Norton Emery Co., Carborundum Co., Riordan Pulp & Paper Co., Beaver Paper & Wood Co., etc. For the most part it has been simply impossible to supply such demands. The commission has exclusively furnished electric power to approximately 300 plants making munitions of war.

It may be commented that of the power which the Hydro-Electric Commission has been receiving from the Niagara companies, only about 10,000 h.p. has been derived from energy which was formerly exported. In other words, the additional supply of power from Canadian companies to the commission has been met by the installation of additional units.

This great demand for power in Canada will be met, chiefly, in two ways: First, the more immediate needs will be supplied from the existing power plants at Niagara on the Canadian side; second, by means of the proposed Chippewa development of the Hydro-Electric Power Commission, which is to provide about 200,000 h.p. under a head of 300 to 305 feet.

Canadian Power Plants at Niagara Falls.—The information respecting the three large power plants in Canada at Niagara Falls may briefly be summarized as follows:—

CANADIAN NIAGARA POWER COMPANY.

3 generators rated at 10,000 h.p. each	30,000 h.p.
7 generators rated at 12,500 h.p. each	87,500 h.p.

This makes a total rated capacity of 117,500 h.p. Space has been provided for an eleventh or spare unit. Up to November 1st, last, with eight machines installed having a rating capacity of 105,000 h.p., the company showed a maximum generation of approximately 93,000 horse-power.