

Week's Events

Additional Horsepower to be Developed by Niagara Power Merger—Manufacturers Discuss Substitutes for Brass

NIAGARA POWER MERGER EXPECTED TO INCREASE EFFICIENCY.

100,000 Additional Horsepower to Be Developed for War Work.

At the request of the Government, the New York State Public Service Commission recently approved the application of the Hydraulic Power Co. and the Niagara Falls Power Co. to merge these two companies into a \$62,000,000 corporation. By changing the present diversion of the water from two channels into one and thus securing greater concentrated efficiency, it is hoped to add 100,000 hp. to the present capacity of the plants without diverting any additional water from the Falls. This was decided upon after considerable investigation, carried out under the direction of Col. J. G. Warren of the Engineer Corps, as the quickest and most suitable method of securing the additional power needed for war work in this vicinity.

This will be accomplished by diverting the entire flow for both companies, 19,500 cu. ft. per second, into the new channel of the Hydraulic Power Co. It will, however, require the construction of about one mile of canal or tunnel raceway to complete the combination. This work will be started at once. It is expected that 30,000 hp. will be ready for delivery 12 months from the starting date and 30,000 hp. additional every three months thereafter until the development is completed.

This plan secures the full efficiency of 20 hp. per cu. ft. per second from the pool above the Falls to the pool below the Falls. Although the full efficiency from the Falls to Lewiston is 29 hp. per cu. ft. per second, to obtain this efficiency would entail about five times the expense and labor and considerably more time than the present plan does. Furthermore, the present plan will fit in with any later scheme which will utilize the power to its maximum efficiency.

PROGRESS OF C., M. & ST. P. ELECTRIFICATION IN WASHINGTON.

Substations and Lines Completed and Locomotives Ordered—Expect to Operate by July 1, 1919.

In noting the progress of the electrification work on the Chicago, Milwaukee & St. Paul Railway from Othello, Wash., to Seattle and Tacoma, it may be stated that the 8 substation buildings are practically completed, and the work of installing transformers and other electrical equipment at those substations is well under way.

The General Electric Co. is equipping 5 and Westinghouse Electric & Manufacturing Co. is equipping 3 of those substations. Of the 15 electric locomotives ordered for the new electrified line, 10 are being built by the Westinghouse company and 5 by the General Electric.

The pole line covering this route of over 200 miles has been completed and the stringing of the trolley

line will be accomplished, to be ready in time for the completion of the other work.

In the main, electric power for operating this line is to be supplied by the Washington Water Power Co., Spokane, whose power lines are being extended to Othello; but the system will be tied in with the Stone & Webster power system by the extension of a 100,000-volt line from the latter's generating station at Snoqualmie Falls, Wash., to constitute a standby or reserve power.

It is generally understood in Seattle that electric locomotives will be hauling passenger and freight trains over the Othello-Seattle-Tacoma division by July 1, 1919.

JOVIANS PROVE THEIR PATRIOTISM IN BOND BUYING.

New York League at Recent Convention Oversubscribes for Plus Bonds.

The New York Jovian League held the first meeting of the season on Oct. 16. The proceedings were opened by a luncheon at the Hotel McAlpin, after which addresses were made by Charles Pope Caldwell, member of the Committee on Military Matters at Washington; Lieut. John Quinney, of the Canadian Army, who fought at Vimy Ridge and Messines. Theodore Beran, chairman of the Electrical Division of the Liberty Loan Committee, and T. C. Martin, chairman of the Electrical Societies Division, also spoke briefly upon the Liberty Loan. J. M. Wakeman, president of the League, who presided at the meeting, called for subscriptions to the loan. Although everyone present had already subscribed through various other channels, the 150 men present responded with subscriptions for \$35,000, and James H. McGraw promptly matched the amount already raised, making a total subscription of \$70,000 to the loan. The next largest subscriber was Harry B. Logan.

A number of men prominent in the industry were present, and Thomas A. Edison sent in a \$500 subscription by mail. Major Cleveland M. Hall, of the Canadian service, and George B. Muldaur, Jr., of the Rainbow Division, one of the heroes of Chateau Thierry, were among the military men at the head table.

HEATING THE HOME ELECTRICALLY.

W. F. Pease Equips Home with Installation as Experiment—Wide Variation in Temperature Possible.

To further assist the Government in the conservation of fuel, W. F. Pease, manager of the Lowell Light & Power Co., of Lowell, Wis., has worked out a plan for heating buildings electrically. Mr. Pease has installed a system in his new home whereby he expects to heat it to the same temperature as with coal, and with less money and have the system entirely automatic. From all present appearances it