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and

been invited on the initiative of the Electric Works of Gothenburg.

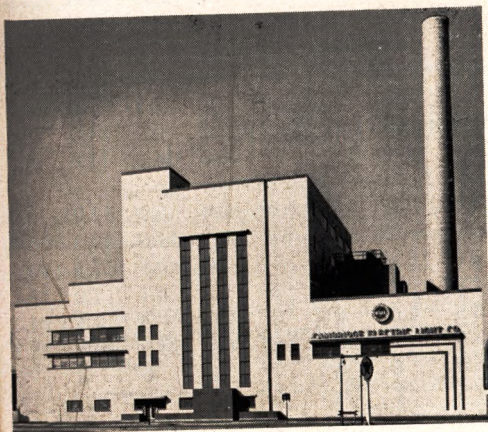
At the conference in question several lectures were given, some of which treated the possible importance of power-heat stations to future supply of electric power of the country. From these lectures could be concluded that out of Sweden's estimated developable water-power, which is at present calculated at 50 billion kwh/year, 15 billion kwh/year are now working. The greater part of the total electric demand of our country is covered by water-power, and only a minor part, about 5 per cent, by steam-power plants. The steam plants are utilized only in peak-load periods and constitute a power reserve in years with insufficient water in the rivers. It is reckoned that in case the present big raise in the electric consumption continues, the developable water power will be fully utilized within two or three decennia. A production of 50 billion

kwh/year equals, for 5,000 hours working time, an effect of 10,000 MW. This value should be compared with the effect of the power-heat stations. It is calculated that in case of power-heat plants being erected in the 20 Swedish towns of more than 20,000 inhabitants, and about 60 per cent of the heat demand being covered by district heating, the corresponding power production would be 700 MW and 1.6 billion kwh/year. Consequently power-heat stations could cover only a minor part of the power demand of the country. Furthermore it was pointed out that these stations could not replace such condensing generating plants as are required as power reserves during periods with shortage of water. On the other hand power-heat stations might to a certain extent contribute to cover the peak-loads, as on the whole the periods of maximum production of the power-heat plants correspond to those of maximum power consumption.

KENDALL SQUARE STATION

Cambridge Electric Light Company

George K. Saurwein*



corrugated aluminum housing of the coal handling equipment and crusher house, not visible in the picture, adds a good deal to the "new look" of the station.

This is a combination steam-electric station designed for 1500 psi and 910 F in which the turbines are bled at 200 psi for steam sendout.

This first section of the station contains 2—200,000 lb/hr steam generators and 1—18,750 kw turbine-generator. The ultimate plant will have 3 turbines and 5 or 6 boilers.

A 16 in. main leaves the station in a tunnel built for an additional 16 in. line and with its branches supplies steam to a number of industries in East Cambridge, some as far as 3,000 ft. from the plant. Included in the industries served is the Cambridge Gas Works, whose boilers have been supplying a limited number of steam customers. These will be taken over by the new plant when it goes into operation.

The Kendall Square Station of the Cambridge Electric Light Company is located in a highly industrialized area in East Cambridge overlooking the Charles River Basin. Its buff tile walls with terra cotta trim, make a fine appearance on the much travelled parkway. The

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