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THE DESIGN OF MEDIUM SIZED COAL GAS PLANTS

THE CONDITIONS GOVERNING THE SELECTION OF GAS PLANT—DESCRIPTION OF DESIGN AND OPERATION OF THE COAL GAS PLANT AT NORTH YAKIMA, WASH.

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GAS plants for supplying towns and cities with illuminating gas may be divided into three classes according to the type of gas they are designed to manufacture. (1) Coal gas plants; (2) water gas plants, and (3) oil gas plants. In deciding on the type of gas plant to be used in any particular locality, several

5. Likelihood of competition with natural gas.

Let us examine these points in the order in which they come.

Raw Materials.—The location of the source of fuel supply and other raw material and the cost of getting same to the point where they are to be used has an im-

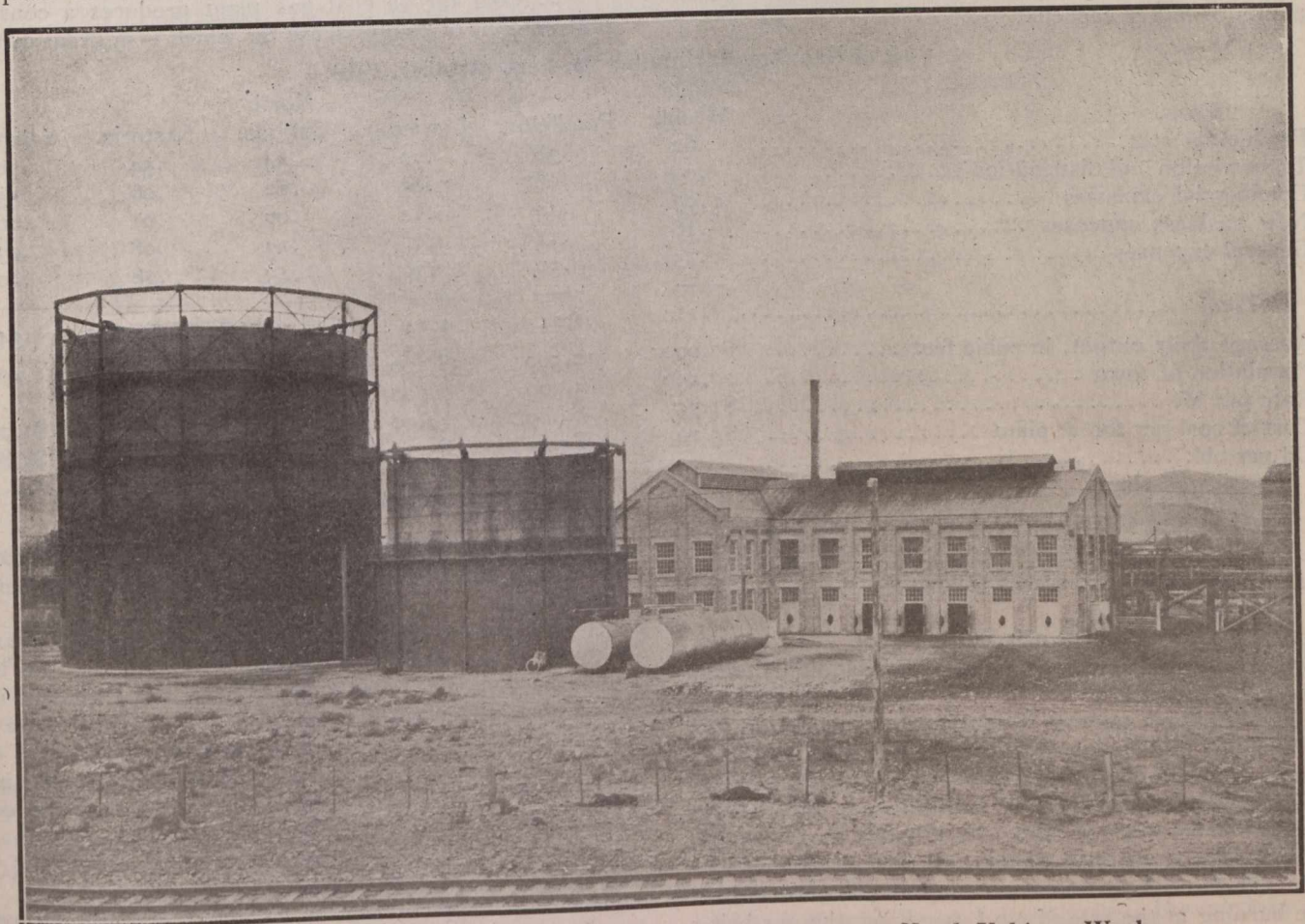


Fig. 1.—Gas Plant of Pacific Power and Light Company at North Yakima, Wash.

points should be considered, the main ones being as follows:—

1. Location as to source of fuel and gas-making materials.
2. Cost to manufacture.
3. Physical and chemical properties of gas desired.
4. Market for residuals.

portant bearing on the type of gas plant to be used, as it is of prime importance in figuring the cost of manufacture.

For example, at North Yakima, Wash., it was decided to install a coal gas plant for the reason that good gas coal can be procured in the mountains at Rosslyn, about sixty miles away. The haul is short and down