General Report No. 1786.

Individual Report No. 8.

Risk: Power House. Class: 1 and 2-B.

Risk No. 18.

Location: Cleveland Ave., Milo, Ohio.

Owner and Occupant: The Columbus Railway & Light Co.

Date: May, 1909. See Map No. 6.

## SUMMARY.

A power house and sub-station of non combustible construction except the roof structure. Hazards are rather well guarded and the property well cared for in general. The risk is exposed to the Milo car barns at a distance of 10 feet and is without fire protection either private or public, except night watch service.

# PROMINENTLY DESIRABLE FEATURES.

Semi-fireproof construction, good care and maintenance, and hazards well guarded, are the most prominent of the desirable features.

# PROMINENTLY UNDESIRABLE FEATURES.

Features undesirable are; the area, which is somewhat over standard, boiler room not cut off, wooden roof structure, exposure to the car barn and the absence of fire protection.

#### CONSTRUCTION.

A r story brick building 25 feet to the eaves. Area is in the form of a square of 10,000 square feet with a division wall, having unprotected openings and extending to the roof only, between the engine room and the boiler room. Walls are 12 inch pilastered to 16 inch under roof trusses. Roof is of slate on 7-8 inch wooden sheathing supported by Fink metal trusses set on walls. Floors are of concrete. Boilers discharge gases through a metal stack extending up through a metal cupola in the center of the building.

#### EXPOSURE.

Exposure is from the component car house wash room and office at a distance of 10 feet.

# OCCUPANCY.

Occupancy is that of power house generating electric power from coal combustion and as sub-station with motor generator receiving alternating current from the Spring Street station and generating direct current for railway service. The following is a list of the machinery: eight Sterling boilers of 190 H. P. each in batteries of two and supplemented by mechanical stokers, Green economizers, and Hoppes feed water heater, two Westinghouse 125 K. W. 500 volt D. C. generators direct connected to upright engines and one 340 K. W. generator of the same type and manufacture, one 13 K. W. steam driven exciter set, and one 15 K. W. motor driven exciter set, one Westinghouse 15 H. P. 208 volt A. C. motor, one 15 K. W. oil insulated step down transformer, one National Brake and Electric Co.'s 500 K. W. 4100 volt A. C. to 550 volt D. C. motor generator, a 100 amp. booster, two old bipolar generators in storage, three large armatures in storage, one 10 H. P. G. E. motor, one 8 ton crane, one 10 H. P. air motor and pump, one panel high tension switchboard and 14 panels 550 volt switchboard and two 8 by 6 by 12 Worthington

duplex boiler feed pumps.

## HAZARDS.

Heating is incidental. Lighting is electric with wiring not in the best condition but fair. Boilers are brick arched and have economizer and stack so constructed as to be well clear of combustible material, but boiler room is not cut off from the remainder of the risk by a standard fire wall. Power wires from the generators to the switchboards are run in ducts under the concrete floors and from the switchboard to the outside are well spaced and supported on insulators. Switchboard is of marble on angle iron frame with resistances well mounted on non-combustible supports. Trolley feeder lines each have two lightning arresters, one on the switchboard and one on the pole outside, while the high tension lines have G. E. arresters and oil insulated static interrupters. The Westinghouse vertical engines have cranks immersed in oil with supply tank in floor and pump for circulation. Oily waste is well cleaned up and the main supply of oils kept in an oil house on the outside, not more than a barrel being kept inside the risk.

# ADMINISTRATION.

There are five men on duty days and the same number at night. Employes appear careful and competent and the premises are kept in good condition. Insurance is carried under general form. (SEE VALUE SHEET).

## PROTECTION.

There is no private or public fire protection except nightwatch service with watchman reporting by the A. D. T. system.

## RECOMMENDATIONS.

Provide at least two hand chemical fire extinguishers and locate a frost proof yard hydrant within reach of the risk on the outside with supply from gravity tank and fire pump, which latter can be used to furnish a water supply for the component car barns.