OFFICIAL PROCEEDINGS

THIRTY-FOURTH ANNUAL MEETING

OF THE

National District Heating Association

HELD AT

HOTEL SCHENLEY
PITTSBURGH, PENNSYLVANIA

June 9 and 10, 1943

VOLUME XXXIV

Price, $5.00

PUBLISHED BY THE NATIONAL
DISTRICT HEATING ASSOCIATION
827 NORTH EUCLID AVENUE, PITTSBURGH, PA.

consumption. These are indicated in Table II. The fact that they did not provide the intended decrease, however, is no fault of the installation because, in all cases, either better heating conditions resulted or more space was heated.

Results of Control Installations

The steam saving which has been effected by the thirty-six installations in which a comparison was possible is analyzed as follows:

Average saving from all controls	14 per cent
Average saving from outdoor actuated controls	12 per cent
Average saving from indoor unit thermostats	18 per cent
Average number of years required to pay off investment	4.7 years

Mr. P. A. Hyde has a discussion.

. . . Mr. Hyde presented his prepared discussion . . .

CONTROLLING STEAM CONSUMPTION AT ELIZABETH PARK HOUSING PROJECT AKRON, OHIO

P. A. Hyde*

This project was built and is operated by the Metropolitan Housing Authority, and is owned by the United States Government. It contains 276 apartments with a total volume of 1,700,000 cu ft. There are no basements except equipment rooms and "crawl" space.

Equipment

The buildings contain 45,000 sq ft E.D.R. The steam pressure at the service valve is approximately 100 lbs and is reduced to 30 lbs. The system is divided into two sections, necessitating two sets of vacuum pumps. The temperature control system is a Dunham Differential three zone installation. All radiators are orificed at the valve with a key lock for each. Condensate from the vacuum pumps passes thru a common line and an economizer into an overhead receiving tank, and thence by gravity thru the meters to the sewer.

There are two water heaters operating under 5 lbs steam pressure, served by a separate main so that the space heating system can be entirely shut off. The hot water in the tanks is maintained at 140 F. Two circulating pumps are used on the hot water returns, which are controlled by aquastats. Condensate from the heaters passes thru a separate economizer and meter.

*Superintendent of Steam Sales, Ohio Edison Company, Akron, Ohio.

Estimated and Actual Steam Consumption

The government engineers estimated the total annual steam use for space and water heating at 29,000 M lbs. The estimate of the steam heating department was for space heating, 8 months, 17,500 M lbs, and for water heating, 12 months, 3950 M lbs; a total of 21,450 M lbs. Actual steam consumption has been as follows:

From November 1940 thru September 1941 while the project was under construction and for drying out	14,988 M lbs
In 1941 four months, water heating	1,162 M lbs
From October 1941 thru September 1942, space heating	12,237 M lbs
From October 1941 thru September 1942, water heating	4,224 M lbs
Total	16,461 M lbs

	Lbs/D.D./ sq ft E.D.R.
Government engineers estimate	0.1245
Ohio Edison Company estimate	0.0753
Actual operation	0.0524

Members of the steam heating department are especially proud of the showing of this project on steam consumption. No complaints from any source on service or costs have been received, and there have been no trouble calls.

Chairman Tuttle: Is there any additional discussion? If not, we will proceed to the next paper.

Mr. Henry Kucera, Vice-President of the Marsh Tritrol Company, and formerly a member of this Committee, until he graduated to the Advisory Committee, is a member of the War Production Board Advisory Committee on Combustion and Temperature Control.

This group has worked very close to the W.P.B. and other governmental agencies, and has done a very complete job. First of all, it has obtained blanket priorities by means of which it is possible to install temperature control equipment on a heat saving basis. This alone has been a great help to many of us.

There are other agencies besides the W.P.B. operating to effect greater fuel economy for the war effort. Mr. Kucera, in his travels in Washington, has become acquainted with several of these agencies and he will tell us about some of their fuel saving activities.

. . . Mr. Kucera presented his prepared paper . . .