HALF OF SOFT COAL MINED WILL BE LOADED WITH MACHINES WITHIN TEN YEARS, WPA REPORT ESTIMATES

Within another decade as much as half of the country's soft coal mined will be loaded underground by machine, according to a Work Projects Administration research report released today by Colonel F. C. Harrington, WPA Commissioner.

Mechanical loading can displace from 10 to 40 percent of the labor used in hand loading, according to the detailed two-volume publication, "Mechanization, Employment and Output Per Man in Bituminous Coal Mining," which is one of a series of studies by the WPA National Research Project.

"If the cost of coal is reduced, new uses found, and former markets recovered, mechanical loading will result in the elimination of much of the backbreaking work of coal mining without exacting too great a price in terms of unemployment and reduced income," Corrington Gill, Assistant WPA Commissioner in charge of research, writes in transmitting the report. "However, such a price has already been and is now being paid in some localities. Some mines and mining communities which by virtue of natural conditions or other factors have been unable to adopt mechanical loaders are being placed in unfavorable competitive positions and are finding their employment opportunities restricted. Some of the older miners, accustomed to the tempo of hand-loading mines, are finding themselves displaced and unable to gain a foothold in the
mechanized mines. To many of these communities and for many of these older miners emergency relief measures of one type or another are the only alternative to destitution as long, at least, as mass unemployment remains a problem in the United States.

"Technical progress has been a factor in aiding coal to meet its competitors in the market and offers one means of maintaining adequate wage rates and working conditions," Mr. Gill stated. "No student of the coal industry, however, foresees a revival of demand such as will enable the industry to absorb any of the unemployed from other fields of labor. In fact, the most that can well be hoped for is to maintain the working force now employed at the mines."

Calling attention to the fact that the industry still employs as many workers as all other mineral industries combined, the report shows the peak employment of bituminous coal as 705,000 in 1923, which was followed by a steady decline to a low point of 406,000 in 1932. Since then the number of workers has increased gradually to 492,000 in 1937.

"The fact that coal mining was one of our sick industries even during the prosperous Twenties is attributable partly to war-time inflation of capacity and partly to changes in demand," Mr. Gill says. "The high prices of the war led to the opening of new mines and further expansion of an already over-developed industry. At the same time oil, gas and hydro-electric power made inroads in the market for coal and consumers turned to economies in the use of fuel. The former upward trend in coal demand flattened out. The combination of arrested demand and surplus capacity produced an inevitable readjustment and as early as 1924 the bituminous-coal
industry experienced acute depression."

"When the coal industry ceased to expand its production, technological improvements had to result in a reduction of labor requirements, although failure to take advantage of economies which could be effected by mechanization of loading might itself have resulted in further loss of markets and jobs," the report said.

"... As long as production did not expand, the total number of jobs available in the industry as a whole would have declined much more sharply than it did had not employment policies been adopted which involved both temporary and permanent reductions of standard working hours per day and per week."

Between 1929 and 1935 output per man-hour in underground mines increased by 5 percent and production declined by 32 percent, but the average number of men employed declined by only 9 percent, it is pointed out.

Union labor has been "conspicuously successful" in maintaining labor standards and recently extending them over the entire industry, the report continues. These achievements, however, have not yet been translated into satisfactory annual earnings.

The 436-page report is published in two volumes containing numerous charts and photographs and a statistical appendix. It was prepared by Willard E. Hotchkiss, F. G. Tryon, and a group of collaborators as one in a series of studies conducted in cooperation with the U. S. Bureau of Mines by the National Research Project on Reemployment Opportunities and Recent Changes in Industrial Techniques, directed by David Weintraub.