

• 83 years of

# A Century of Progress

the GAS INDUSTRY  
in Metropolitan Chicago



*The*  
Peoples Gas  
Light and Coke  
Company





## THE CITY THAT HAD TO BE

IN THE RECORD of history are the stories of many cities. Some of them have continued to live and grow. Others are in ruins.

The city is the focal point for the life of its surrounding country, the means of realization of the country's resources. The cities that have continued to flourish are the cities that have been necessary to the growth of civilization.

Suppose that North America were uninhabited. Suppose that it were possible for a party of explorers to know all we know today about the continent—its natural trade routes, the fertility of its land, and its mineral resources.

Suppose, then, that they applied this knowledge to choosing a location for the central city—the city that would have to be, if the country were developed.

There could be no disagreement. They would point to one spot, on the western shore of Lake Michigan, almost at its southern shore.

"There is the center," they would say. "There is the place where the roads will cross, by land and water. A city there is a necessity to the continent."

Chicago—the city that grew because it was in the basic scheme of the nation's development—is a city that had to be. Trading post, frontier town, city, and metropolis within the lifetime of men still living, its growth came with the growth of the nation. Today, a world city, destined soon to be a world port, it is host to the world at its Century of Progress Exposition.



● This scene and the one on the opposite page, looking north across the Chicago River, were taken 72 years apart—within the span of a life time.



## CHICAGO— IN THE GAS-LIT ERA

CHICAGO WAS JUST a month and 25 days more than seventeen years old on September 4, 1850, when its inhabitants deserted their homes and places of business to see the miracle of gas light for the first time. The first gas light here shone on "California ware" in a store on Lake Street that sold supplies to prospectors on their way overland in the gold rush of 1849 and 1850.

Chicago had been incorporated as a village on August 10, 1833, when the census showed less than two hundred inhabitants living in forty-three houses. Covered wagons drew up in a circle around the frontier town in those days, and in that year the citizens formed a posse to kill a bear out in the wilds where travelers now arrive on the Twentieth Century Limited.

By 1840, the population had grown to 4,470—but the previous three years had witnessed an increase of only three hundred. Everything was at a standstill. The hotels were empty, and in 1840 a newspaper in Jackson, Michigan, said: "The population of Chicago is said to be principally composed of dogs and loafers." The weaker-hearted citizens were going back East, leaving the "mushroom town" in the mud.

But by 1850 the town was looking up again. The Galena and Chicago Union Railway was being pushed to completion. Twenty Great Lakes steamers were docking in Chicago regularly. The Illinois and Michigan Canal was bringing cargoes from New Orleans, and three million bushels of wheat were coming up the Illinois River each year. The population had jumped to 29,630. Chicago was beginning to fulfill its manifest destiny as trading-post for the Middle West, and for the nation.

A group of leading citizens decided that the town needed a gas company. Between them, they subscribed \$80,000, and secured \$50,000 more on first mortgage bonds. They built a coal gas plant at Market and Monroe Streets, at the edge of town, and laid 24,000 feet of gas main in the downtown section.

## FROM LIGHT TO HEAT

IN 1900, WHEN the population of Chicago had grown to 1,698,575, and the flow of the Chicago River had been reversed through the Sanitary District Canal, the new electric light was coming into use in upper-class Chicago homes.

The gas-lit era was drawing to a close. For some years to come, gas would be used for home and factory lighting, but the new thing was electricity. By 1904, the electric company had 32,000 customers.

Predictions were that gas service was on its way to the limboes.

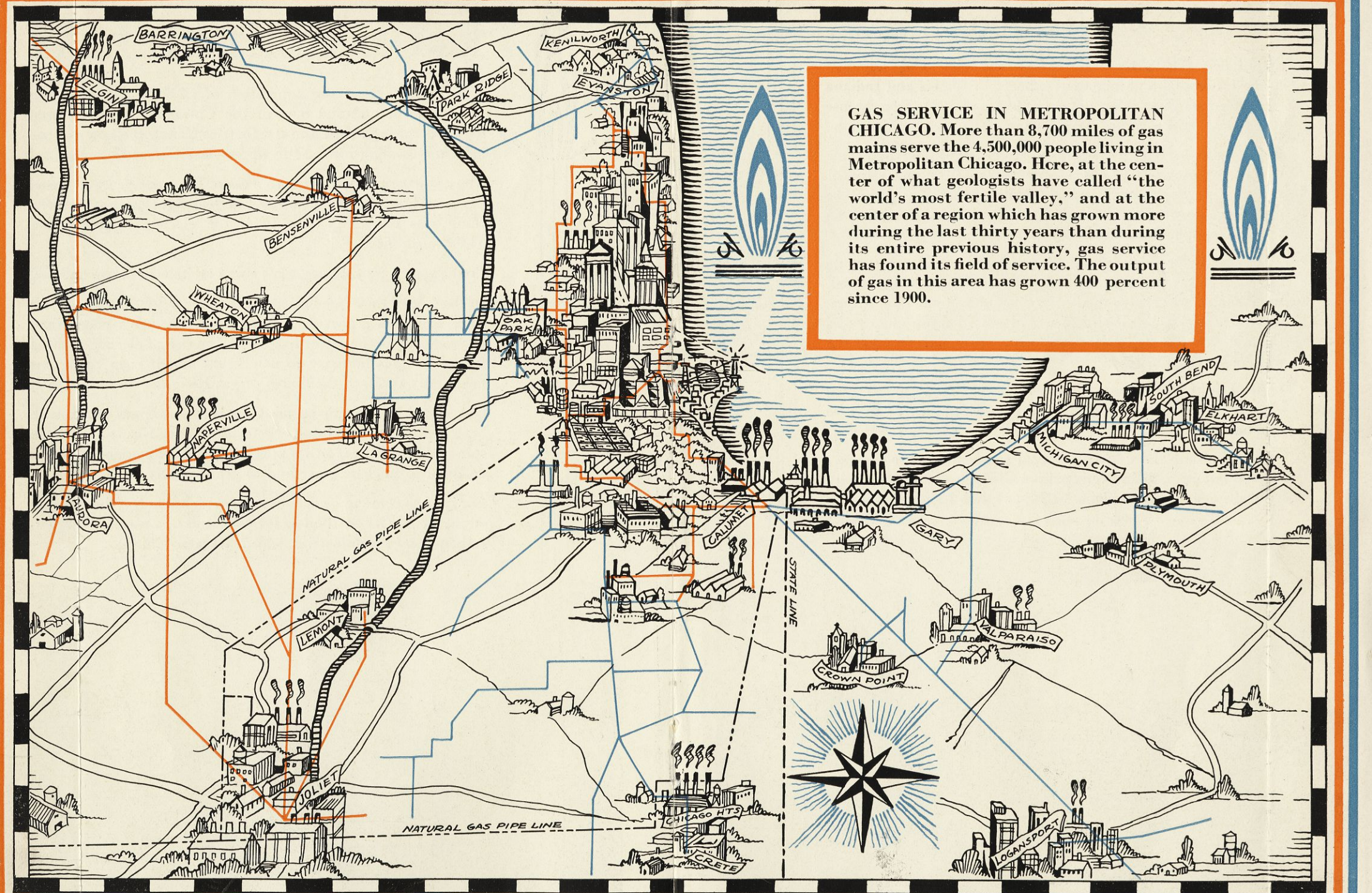
In the face of those predictions, it is noteworthy that gas service since 1900 has grown even faster than Chicago's population, phenomenal as the latter has been. The rise of electric lighting turned the gas industry to new fields, and it is in these new fields that the true usefulness of gas has come to be realized.

Gas would henceforth be used for heat—and gas can furnish heat better than anything else in use today. Gas is truly "the spirit of heat," heat in its purest form. In this field, it seems destined to hold its place and to grow greatly.

For gas has come to be synonymous with heat. Day by day it is strengthening its position as it grows into new uses, in the constantly growing industrial field of Greater Chicago.







**GAS SERVICE IN METROPOLITAN CHICAGO.** More than 8,700 miles of gas mains serve the 4,500,000 people living in Metropolitan Chicago. Here, at the center of what geologists have called "the world's most fertile valley," and at the center of a region which has grown more during the last thirty years than during its entire previous history, gas service has found its field of service. The output of gas in this area has grown 400 percent since 1900.

IN ORANGE:—The gas lines of The Western United Gas and Electric Company

IN BLUE:—The gas lines of Public Service Company of Northern Illinois

IN ORANGE:—The gas lines of The Peoples Gas Light and Coke Company

IN BLUE:—The gas lines of Northern Indiana Public Service Company



# GROWING 400% . . . . .

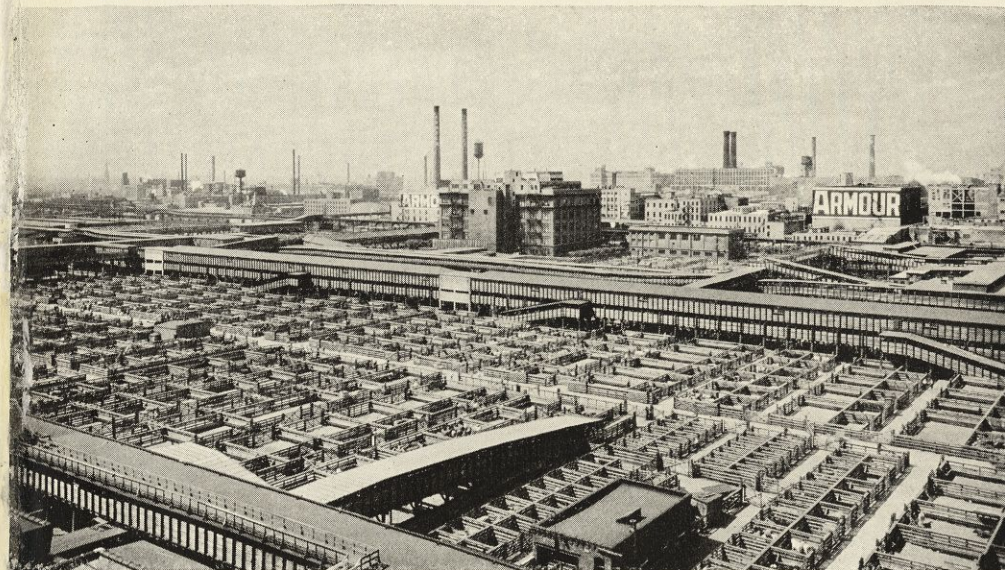
**M**ETROPOLITAN CHICAGO—the city and adjacent residential and industrial suburbs in Illinois and Indiana—doubled its population between 1903 and 1933. But the use of gas in this area grew twice as fast.

More people came to live in this area after 1903 than had come during the previous 70 years. The value of the area's manufactured products increased six times in this period. The annual value of the city's wholesale business increased from two billion dollars to nine billion dollars.

The reasons for this striking growth had been in the making for some time. Industry was rapidly becoming mechanized; human labor was being replaced by machines. A new civilization, with newly discovered needs, would record more changes in the first thirty years in the twentieth century than in all of the world's previous history.

Instead of human energy, the world was beginning to use fossil energy, in the form of coal. To use this energy, it had to have iron and steel.

Nowhere else in the world could coal and iron meet so cheaply, in such quantity, as in Metropolitan Chicago. Coal came easily by train over the flat plains of Illinois and Indiana. Iron ore



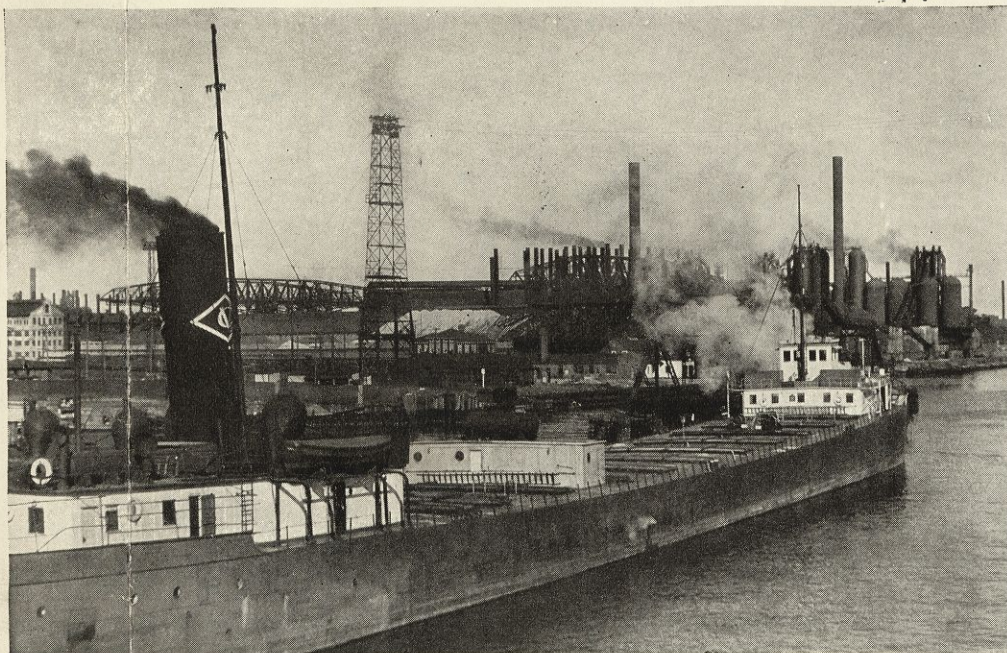
came through the Great Lakes on huge freighters, marvels of shipping efficiency, carrying 12,000 tons of ore on each voyage.

This development has come within the last generation. The steel mills in Metropolitan Chicago were built by men who still work in them. Within this handful of years, iron and steel have become the city's most valuable products.

It was during this period of growth that gas service found for itself a multiplicity of new tasks to perform. In the household, it enjoyed greatly increased use for cooking, water heating, refrigeration, and finally, for heating the home.

In commercial and industrial use, it has found a constantly growing field. Restaurants and bakeries were quick to see the advantage of clean, economical, perfectly controlled or automatic heat. In industry, gas furnishes heat for manufacturing processes, from melting solder to heat-treating steel. The many operations involved in meat packing are made quicker, easier, and more sanitary with gas heat. Gas helps to seal tin cans, and to forge the heavy metal parts used in tractors and farm implements. Gas roasts coffee and glazes pottery.

Striking as this growth in usefulness has been, it is safe to predict that an even greater growth in applications of gas heat will take place within the next generation. All of the energies of gas utility companies in Metropolitan Chicago are directed toward this end, as the two following chapters will show.





# THE SUPER-GAS SYSTEM IN METROPOLITAN CHICAGO

THE COUNTRYSIDE AROUND CHICAGO, in the center of "the world's most fertile and prosperous valley," as geologists term it, was beginning to be populated when Chicago was known only as Fort Dearborn. In 1833, for instance, Michigan City, Indiana, had a population of over 3,000 as compared to Chicago's 350. Downstate, in Ottawa, a small settlement had been established in 1825, at the junction of the Fox and Illinois Rivers.

It was the sudden activity in railroad building, beginning in 1850, that opened up the territory to settlers and made transportation of hogs and grain feasible. Five years later, in 1855, northern Illinois had a population of 117,620; the fertile valley was fast being fenced off into farm land, and small towns were growing up as way-stations for goods and people on their way to Chicago.

The growth of this territory to the present day has closely paralleled the development of Chicago. And since 1900, when Chicago's most rapid population growth began, the Metropolitan area has been growing much faster than the city itself, as the network of utility services and the lines of transportation have been strengthened.

It was in this territory that the interconnection of isolated public utility properties to form a strong, flexible, operating unit able to give much better service to each community than the individual plant, was first established. Other utility companies were quick to see the advantages to the public and the utility of this interconnection, and to follow suit.

Today the territory of Metropolitan Chicago is underlaid with a vast system of interconnected gas mains, supplying gas service to small communities which otherwise could not have it, as well as to the larger towns and Chicago itself. Failure of service is almost an impossibility, since the facilities of the entire system can be rushed to the aid of a disabled part in case of any emergency.

The importance to homes and industries of this interconnection is hard to over-emphasize. The economies in distribution and



production made possible by large-scale methods have resulted in substantially lower gas rates for domestic and industrial purposes. Industries which located in Metropolitan Chicago because of its other advantages are finding that the low industrial gas rates are helping to solve the problem of heating in industrial processes.

A policy of rate making that has for its purpose the extension of gas use into all possible fields of heating is helping to make these domestic and commercial and industrial uses possible. This policy, proved successful in the past, will be followed and developed further in the future.



● The greatness of Chicago expressed in stone and steel, in a skyline that has become world-famous. And the aerial view, taken from an airplane circling above the grounds of the Century of Progress Exposition, shows that the skyline is not just a "front." Taller and bigger buildings than any on Michigan Avenue are in the background—the Board of Trade building, where the nation's food is bought and sold, is in the left background, and in the center, almost hidden, is the Merchandise Mart—the world's largest building, where the city's nine-billion-dollar wholesale trade is centered.



# NATURAL GAS AND THE FUTURE

THE YEAR 1931 saw the completion of the world's largest and longest pipeline, which is now bringing natural gas from the Texas Panhandle and putting it to work in the homes and industries of Chicago.

Natural gas had long been recognized as one of the nation's great natural resources, but the difficulty of utilizing it adequately had seemed too great to be overcome. The chief difficulty had been in transporting it from the sparsely settled and undeveloped regions in which it was found, to the populous industrial centers where it could be used.

Two factors contributed to overcoming this difficulty. The first was the development of engineering and construction improvements which reduced the cost of building the pipeline. The second was the growth of the Chicago area, and its increasing potential demand for a larger supply of gas than could be produced in Chicago without great additional investment in gas producing equipment.

Finally, the gas utilities in the Chicago area (not including the Indiana companies, which are not now distributing natural gas to their customers), joined with other companies owning gas-producing acreage in Texas in the construction of the 1,000-mile pipeline.

The total investment in the project was \$75,000,000, making the pipeline one of the world's largest private enterprises. Steel pipe—418,000,000 pounds of it, laid six feet beneath the surface of the ground—carries the gas at pressures as high as 600 pounds per square inch, a pressure thought impossible a few years ago. The daily capacity of the pipeline is 1,800,000 therms of gas.

The reserves from which gas is taken—500,000 acres of gas-producing land—are sufficient to serve Metropolitan Chicago for many years to come, even with the anticipated increased use of gas for new heating applications, already being realized.



But the story of this pipeline has not yet unfolded itself. The benefits to the Chicago area of having one of the world's largest gas reserves brought "within the city limits" by the pipeline are too many and too complex, too involved with the future economic and social development of the region, to be possible of prediction at this time.

We can reasonably envision a lightening of household burdens as more and more homes are heated automatically with gas. We can predict definite advantage to the manufacturer to whom gas is cheaply available for his heating needs, advantage of lower cost and of improved process.

Because heat is essential to civilization, even to life. As we master the use of heat, whether to keep us warm or to cook our food or to generate electricity, we find the circumstances of daily living made more pleasant and secure.

The service of Metropolitan Chicago's gas utilities in making available to the city the great resource of natural gas will gain steadily in value as gas heat grows into new fields of usefulness to the homes and industries of this region.



Across the farmland of five states between Texas and Chicago—through forests and swamps, under rivers and railroad lines—the natural gas pipeline was pushed toward Chicago, to help supply the city's heating needs for many years to come.



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