

OPEN HOUSE  
SATURDAY AND SUNDAY, JULY 30-31, 1977  
PRESENTATION  
RESEARCH

## Welcome to Rush Island!

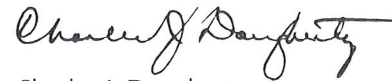
It is a pleasure to welcome you to the Rush Island Plant—Union Electric's newest generating plant.

The first Rush Island unit began commercial operation on March 31, 1976, and the second unit went into service on March 16, 1977.

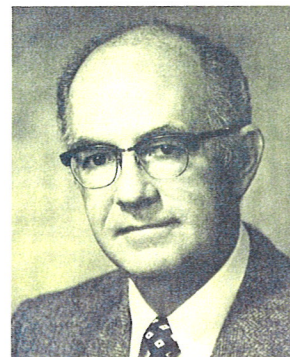
The 1,200,000 kilowatts of generating capacity provided by the plant's two 600,000 kilowatt units represent a significant addition to the Company's ability to serve the electric needs of our customers. Stated in another way, Rush Island today is almost one-fifth of our total generating capacity of 6,500,000 kilowatts.

While this is a large plant, its complexity is even more striking than its size. Many years of research and experience are represented in the design and operation of the Rush Island Plant. It is a modern and efficient plant. Moreover, it reflects the energies and efforts of all Union Electric employees, either directly or indirectly.

Deservedly, therefore, all of us can be proud of the Rush Island Plant and the service it provides.



Charles J. Dougherty



# Rush Island Power Plant...Helping Serve America's Heartland Energy Needs

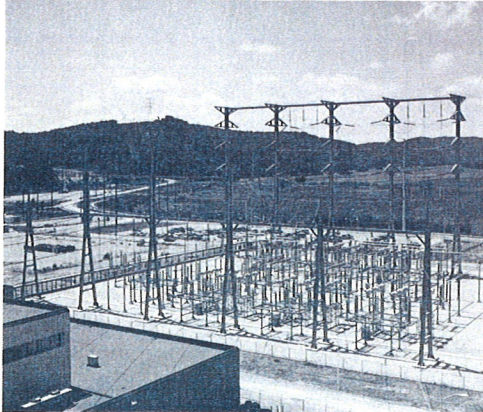
Union Electric Company and its subsidiaries, Missouri Power & Light Company, Missouri Edison Company and Missouri Utilities

Company, provide power for a 24,000 square mile area. Rush Island Power Plant, Union Electric's newest power plant, is located on the western bank of the Mississippi River some 35 miles south of St. Louis. The entire project, including the switchyard, represents an investment of some \$356,000,000. Total plant capacity is 1,200,000 kilowatts. Power generated at Rush Island is tied into the system at three points,

to be sent wherever needed. The Load Dispatching Office in St. Louis is the master control center of all power operations. By means of electronic equipment, the amount of power needed by our customers can be determined, the amount of electricity generated at each of our nine plants can be controlled, and the route the power will take to reach the customer can be established. The amount of power

to be exported or imported through interconnections with other utilities can also be determined. Rush Island's two unit, central control room gives the operators complete control of the units for start up, on load and shut down operations, in addition to water conditioning, ash handling, coal handling and precipitators.

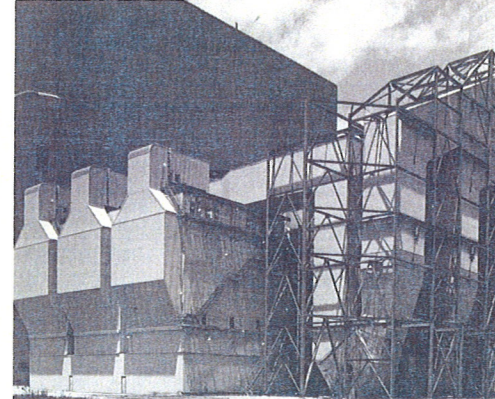
switchyard



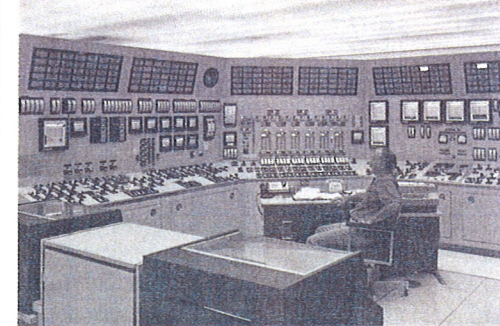
coal stacker tower & coal pile



electrostatic precipitators

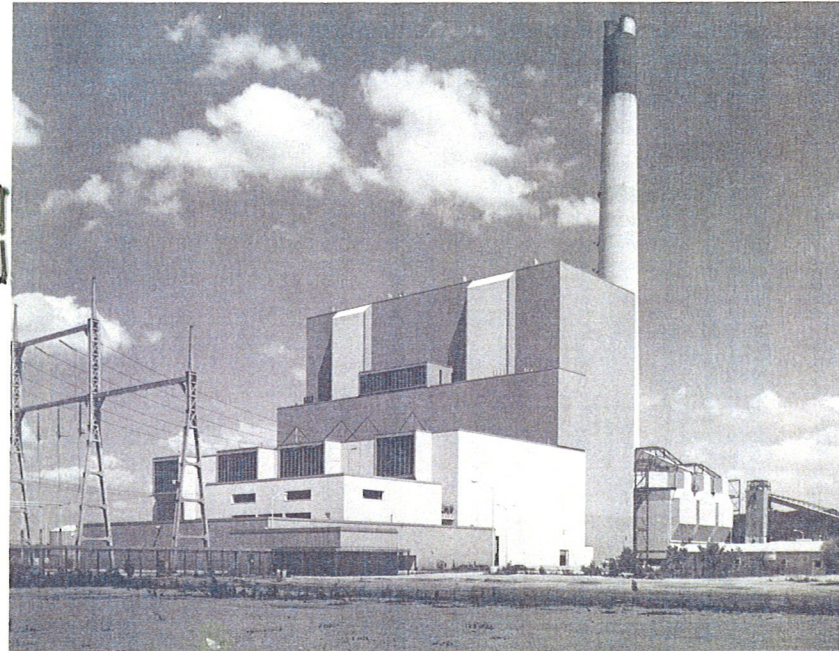
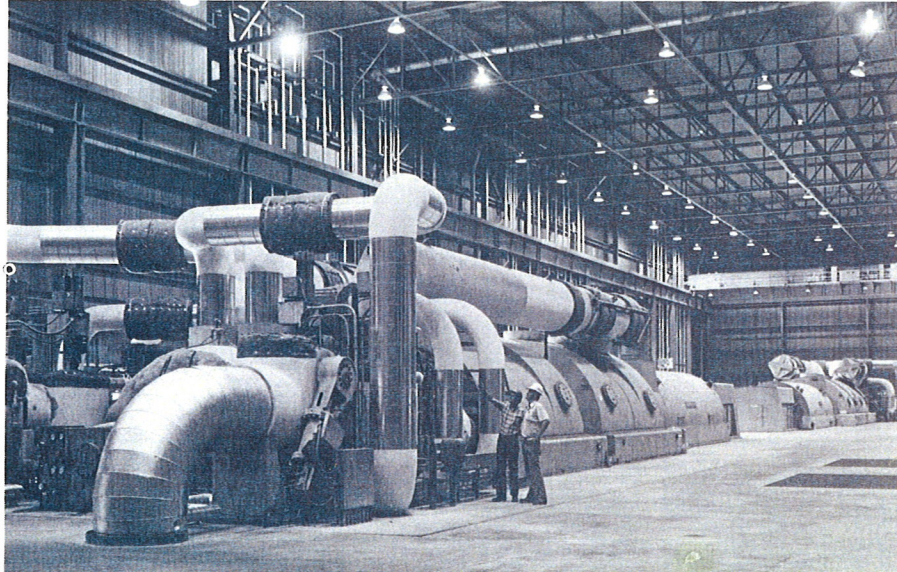


control room



Rush Island Power Plant

turbine generator (1 & 2)



# Rush Island Plant Information

With the completion of Rush Island Plant, Union Electric has in operation six steam power plants, two hydro-electric plants, a pumped-storage hydro plant, and several combustion turbine generators, bringing the system's total generating capability to about 6,500,000 kilowatts.

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Rush Island Plant is located on the Mississippi River, 35 miles south of St. Louis, Missouri, in Jefferson County, Missouri, 8.5 miles southeast of Festus-Crystal City, Missouri.

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The plant site covers approximately 500 acres.

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The plant has two units, each capable of generating 600,000 kilowatts of electricity.

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The generators connect through step-up transformers to a 345 kv switchyard on the site. This switchyard connects to the Union Electric 345 kv transmission system through three transmission lines.

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Total cost of the two-unit plant and switchyard is \$356,000,000.

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The plant will require approximately 2.5 million tons of coal per year, which will be delivered by unitrain from mine to plant.

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Units 1 and 2 have a single 700 foot high concrete stack with a double steel liner—one for each unit.

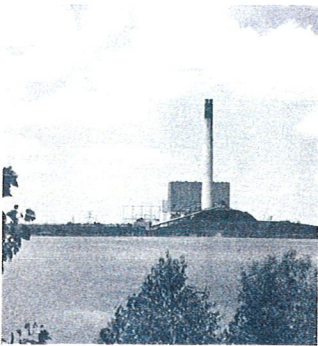
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Electrostatic precipitators are designed to collect 99.65% of the fly ash.

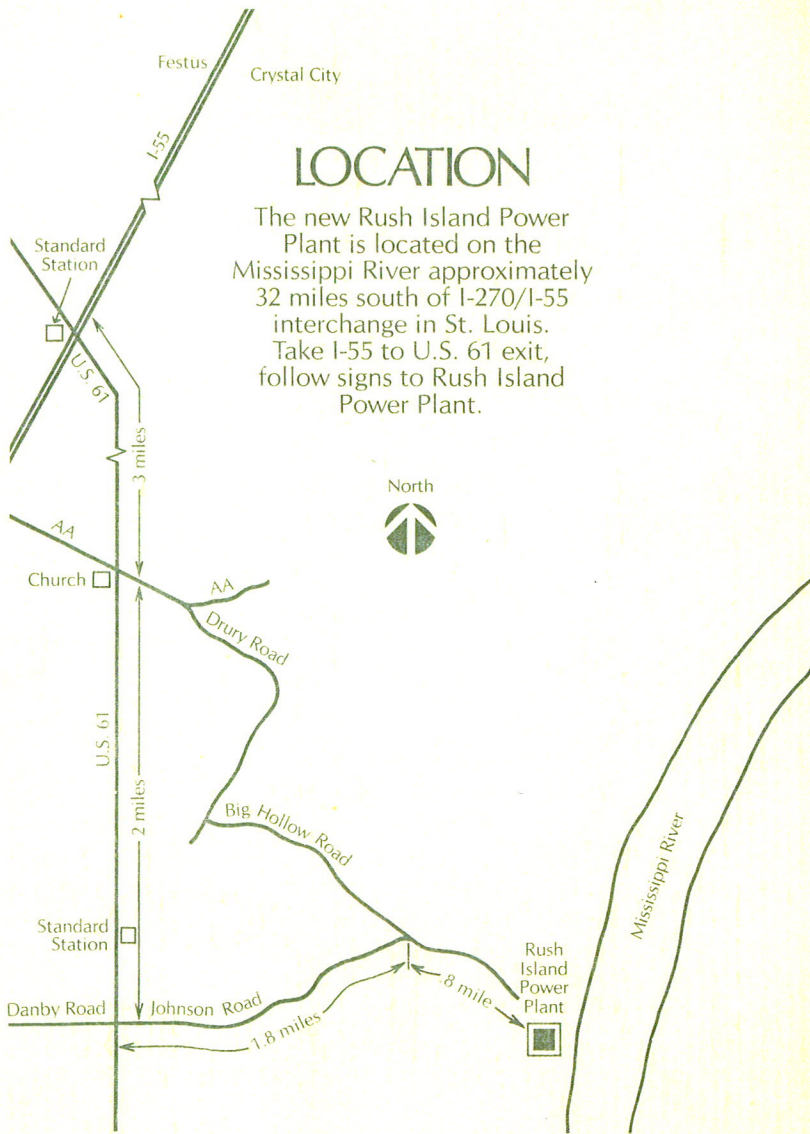
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Unit 1 went into commercial operation on March 31, 1976, and Unit 2 on March 16, 1977.

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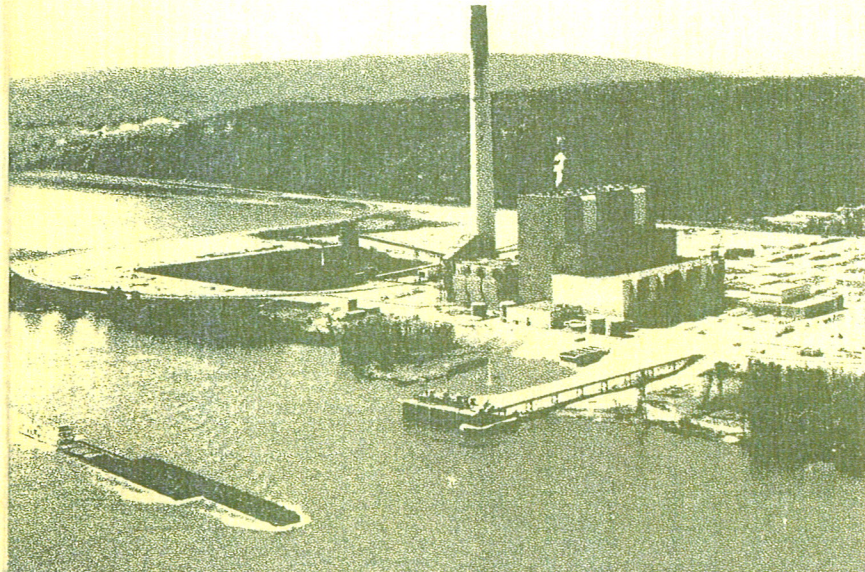
Union Electric Company · Saint Louis, Mo.



## LOCATION

The new Rush Island Power Plant is located on the Mississippi River approximately 32 miles south of I-270/I-55 interchange in St. Louis. Take I-55 to U.S. 61 exit, follow signs to Rush Island Power Plant.

# OPEN HOUSE RUSH ISLAND POWER PLANT FOR ALL UNION ELECTRIC EMPLOYEES





You and your family  
are invited to  
an Open House  
at

## RUSH ISLAND POWER PLANT

on  
Sunday, July 31, 1977  
from 2 to 6 p.m.

Tours and refreshments

please return card  
by July 12, 1977