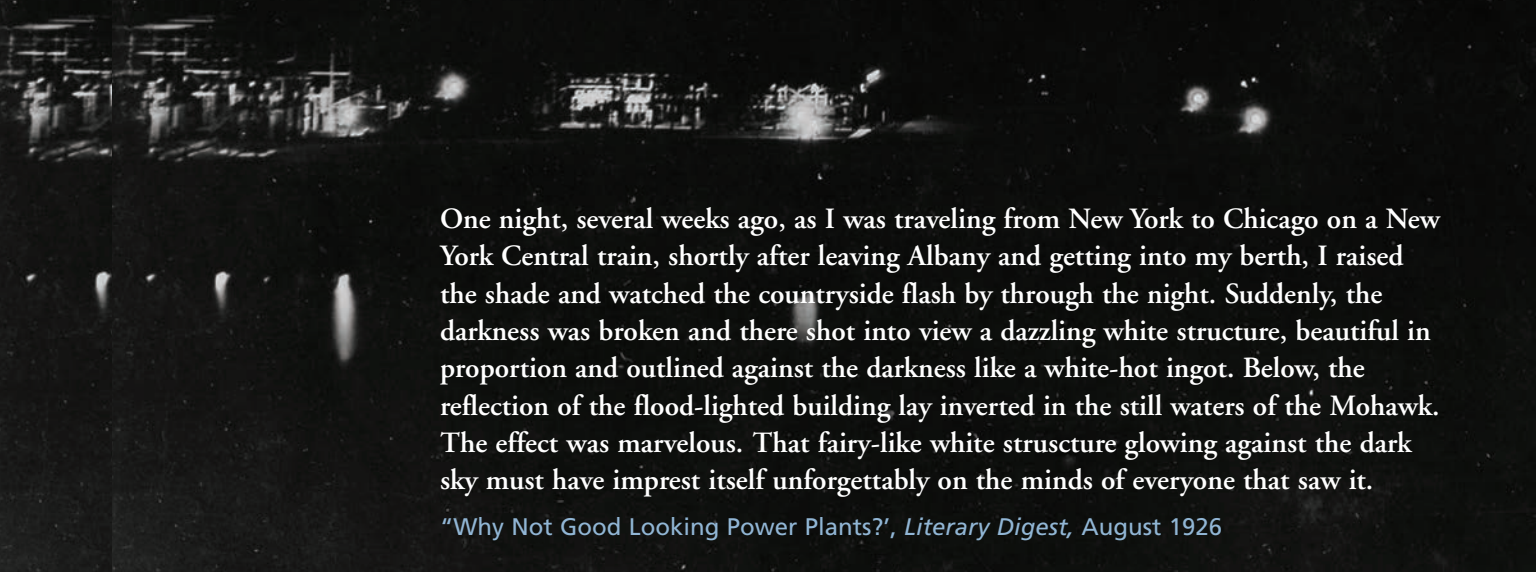


# DAZZLING

BY DAVE NORTHRUP

A powerfully built glowing beacon of industry.



One night, several weeks ago, as I was traveling from New York to Chicago on a New York Central train, shortly after leaving Albany and getting into my berth, I raised the shade and watched the countryside flash by through the night. Suddenly, the darkness was broken and there shot into view a dazzling white structure, beautiful in proportion and outlined against the darkness like a white-hot ingot. Below, the reflection of the flood-lighted building lay inverted in the still waters of the Mohawk. The effect was marvelous. That fairy-like white structure glowing against the dark sky must have impressed itself unforgettably on the minds of everyone that saw it.

*"Why Not Good Looking Power Plants?", Literary Digest, August 1926*

These lines, penned by an anonymous traveler heading west through the Mohawk Valley in the summer of 1926, read like a celebration of some imposing architectural monument to the authority of church or state. But the mill towns that had slowly crept their way over the low hills bordering the Mohawk River

in the years following the Civil War could boast of no such edifices. In the early twentieth century, the buildings vital to community life were factories, drab brick and fieldstone structures often smoke-shrouded during the day and darkly silhouetted against the starlit night sky.

With one exception. For nearly a century, the Amsterdam Steam Generating Station of

the Adirondack Power and Light Corporation (ADPL) has stood on the south bank of the Mohawk River opposite the hamlet of Cranesville. By the mid-twentieth century, the company that erected the building had passed into history, its demise the result of corporate mergers and a technology that made possible the growth of much cheaper hydroelectric power generation.

# WHITE



*The Amsterdam Steam Generating Station glows with dazzling whiteness against the night sky.*

However, the steam station that was the showpiece of Adirondack Power and Light in the early 1920s, remains to impress the viewer in terms of its color and design.

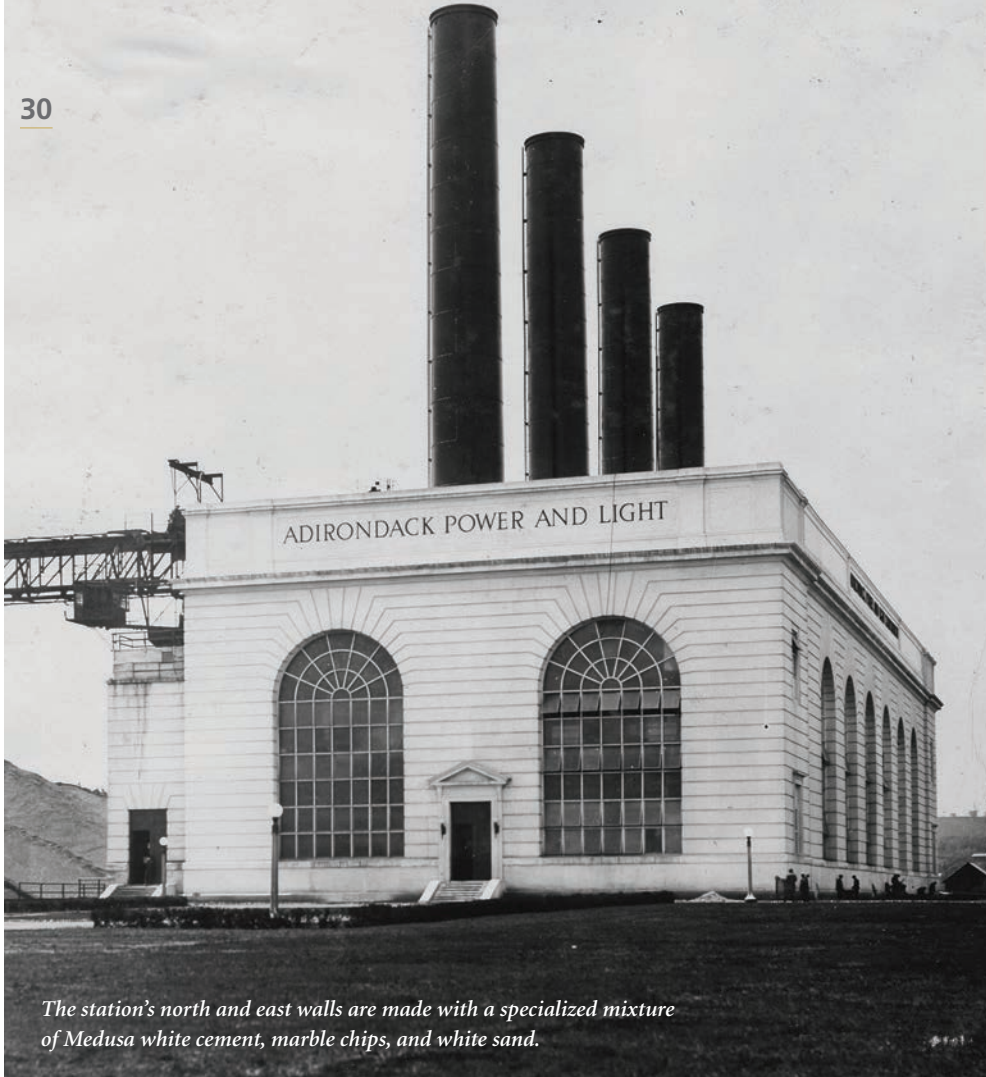
### **Specialized Brilliance**

The brilliance of the Amsterdam Steam Generating Station's north and east walls that captured the imagination in the 1920s and does so even

today is due to a specialized mixture of Medusa white cement, marble chips, and white sand. Medusa white cement was an innovation of the Sandusky Portland Cement Company of Ohio patented in 1903 for its pure white color and resistance to staining. It was widely used for heavy construction, architectural ornamentation, and the casting of statuary throughout the Art

Deco period. That combination still gives the plant its glow evoking a "fairy-like" image demonstrating the builder's intent to make the utilitarian beautiful. The choice of a specialized mixture of concrete noted for its "dazzling whiteness" signaled the ADPL's desire to make the building a monument on the landscape that would symbolize the optimism of the region

and the time. The building would also serve as a marker for the rapid growth of the company as a major provider of electricity to the eastern Mohawk Valley as well as points north and east. In fewer than fifty years, the ADPL had grown from a small generating plant serving only Amsterdam to an electric utility serving an area whose boundaries stretched from Lake



*The station's north and east walls are made with a specialized mixture of Medusa white cement, marble chips, and white sand.*

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Four massive black stacks rise above the white outer wall of the turbine room facing the river.

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George to Lake Champlain on the North; Watervliet, Troy, and Albany on the east; and Oneida on the west. It had become the principal supplier of electricity to rural areas as well as cities in the region.

Architects of the plant were the well-known New York firm of McKee, Kim, and White, designers of the original Madison Square Garden and the old Pennsylvania Station. That Adirondack Power and Light had the resources to hire such a prestigious firm was a testament to the company's financial success. It had begun in the 1880s as Edison Electric Power and Light with a three hundred kilowatt steam plant in Amsterdam and grew through a series of mergers with other local electric and

gas utilities to become Adirondack Power and Light in 1920. At the time of the river station's construction, the Corporation retained its headquarters in Amsterdam.

#### **Urgent Need**

Construction of the station began in late August of 1920, with engineers surveying the flat farmland on the south shore of the Mohawk across from the hamlet of Cranesville. By early October, the dredge *General Herkimer* was at work excavating the foundation for a concrete mat varying from two to over six feet in thickness on which the building sits. Evidence of the urgency the project held for Adirondack Power was that outside contractors were not used in its

construction. No time was to be lost to the uncertainties of travel to and from the surrounding communities, or possible delays due to a contractor's other projects. The company employed its own men and erected a boarding house at the construction site to accommodate the workers. The facility held seventy men, as well as a commissary capable of providing over four hundred meals a day.

First to be erected was the "crib house," which sits right at the river's edge and holds the intake gates for the boilers. Construction of that small building took place over the winter of 1920-21, when the water level was low. Concrete was poured, then allowed to cure, and underwater soil was scooped out, allowing the finished walls to sink below the level of the river. Despite the problems that the weather posed for such an endeavor at that time of year, only one complication occurred. On February 28, 1921, the level of the river rose at the rate of twelve feet in twelve minutes owing to an ice jam. However, the coffer dam protecting the work held against the rising water, and construction continued unabated. Fifteen months later, the first version of the station, housing one turbine with two imposing black stacks rising above the glistening white building, stood at the edge of the Mohawk, producing electric power for the eastern part of the valley.

In mid-1923, owing to problems in the anticipated



The building still stands and is used to store concrete building products.

development of less costly hydroelectric power and the increase in the area's industrial development, Adirondack Power and Light announced plans to add another steam turbine to the generating station. In an *Amsterdam Recorder* article for September 27, the company stated the expansion was necessitated by an increase in demand for electrical power in the Valley of "nearly 40 percent over the previous year." Such an increase in demand reflected the substantial rise in electrification in the Mohawk Valley region and throughout New York State in the decade following World War I. This demand resulted in the corporation retaining the John G. Turner Company of Amsterdam to double the size of the building to the west. The generating capacity of two turbines would total more than twenty-five million kilowatt hours a year by burning 200,000 tons of coal annually.

#### Esthetic Balance

By October of 1925, the plant as it exists today was a reality.

Four massive black stacks rise above the white outer wall of the turbine room facing the river. Into that wall are set six evenly spaced arched windows of the same design as those of New York City's old Pennsylvania Station. Those windows, nearly five stories high, break the monotony of the long east to west expanse of the north facade. Two windows of the same style are set into the wall to the east, facing the river. The narrower wings that cap the east and west ends of the building are set back from the long run of the wall of the turbine room. Visually, the architecture communicates the idea of esthetic balance, demonstrating that the building is an example of the ability of industry to harness the forces of nature in a harmoniously beautiful way. The company was proud of what it had accomplished in the design of the station. Its newsletter, the *Synchronizer*, noted in late 1923 the national praise the station had received as "one of the most striking power plant buildings in the country."

#### Still Standing

Despite the ADPL's pride in the plant's architecture and operating efficiency, its contribution to the electrical needs of the Mohawk Valley would be neither consistent nor long-lived. Hydroelectric generation, much cheaper than steam generation, began to grow in importance during the 1920s and 1930s. According to the *Synchronizer*, as early as 1926, the Amsterdam plant experienced a shutdown of ten months, owing to "favorable stream flow at hydro stations" owned by Adirondack Power and Light. In the late 1920s, the plant began being used to supplement the cheaper supply of power provided by the hydro stations. It was never expanded to the full potential envisioned by its creators, and by 1950 as a result of further advances in hydroelectric generation and corporate mergers its working life came to an end. The building was sold to the Cranesville Block Company in 1964 to store concrete building products, a role it still has today. ■

## THE ARCHIVES CONNECTION

Most of the papers of the Adirondack Power and Light Corporation are held in the archives of The Museum of Science and Innovation in Schenectady. This collection has bound copies of the *Synchronizer*, a company newsletter. It is the primary source for information on the design and construction of the power station, as well as the effect the company had on the growth of industry in the area. The archives also hold the photographic record of the plant's construction. Additionally, issues of the *Amsterdam Recorder* for the years 1920 to 1926 recount the power station's economic impact.

More information on the history of electric and gas production in the eastern Mohawk Valley at the end of the nineteenth century can be found in Earl O. Stowitts's booklet, "Little Journeys into Industrial Establishments of Amsterdam," held in the collection of the Walter Elwood Museum in Amsterdam.