



## STATE AND ADAMS STREET - DISTRICT COOLING PLANT

DISTRICT COOLING PLANT IN THE HEART OF DOWNTOWN CHICAGO

**CLIENT** Exelon Thermal Technologies | **LOCATION** Chicago, Illinois (Loop) | **SIZE** 3-story, 95,000 sf | **RECOGNITION** AIA Chicago Honor Award, 1997

### PROJECT SCOPE

Originally owned and operated by Exelon Thermal Technologies, the State and Adams District Cooling Plant houses 60 ice tanks and chillers capable of producing 25,000 tons of cooling. Directly above the first floor lies an ice water “factory” on four vertically stacked floors. Two floors contain nothing but floor-to-ceiling ice and water tanks.

Another story houses pumps and compressors and a series of color-coded pipes with coolant, condenser water, chilled water, and water to be chilled. On the roof, massive fans and cooling towers - mechanical equipment to remove heat - are hidden from street view. The current owner, Enwave, uses compressors to make ice at night when electrical rates are cheap (and power sources tend to be wind and nuclear). During the day, the ice melts to make frigid water, which it pumps around the loop. Client buildings have heat exchangers that allow them to cool their buildings by “giving” their heat back to Enwave.

The original design included transparent glass walls, allowing passersby to see the plant’s brightly colored pipes and compressors. However, due to the plant’s location on State Street, a prominent downtown Chicago retail district, Eckenhoff Saunders needed to design a building that would enhance the street’s retail character and provide for 10,000 sf of retail space on the first floor.