



## Robert A Young Federal Building





U.S. General Services Administration

## Project:

The Robert A. Young Federal Building, sometimes referred to as the "RAY" building, stands 20 stories tall and provides functional office space for many federal agencies. Built in 1931, the building was originally a warehouse for the Terminal Railroad Association of St. Louis before the federal government acquired it in 1941. Over the years, the building cooling towers had deteriorated and required replacement. The GSA has a sustainability program in place and subsequently sought out innovative green technologies in support of the cooling tower replacement project. SFS worked with the project engineers and architects in support of specifying non-chemical water treatment for the new towers.

## Application:

As part of the Cooling Tower Replacement Project (No. RMO00538), GSA awarded Scale Free Systems a new contract to install our non-chemical water treatment system in support of that project. The GSA replaced two cooling towers and retained one which made the total HVAC condenser water cooling tower capacity 3,900 tons. Scale Free Systems was installed on all of the condenser water equipment to protect the equipment from scale, corrosion and biological contamination. The equipment in the system includes three cooling towers (6,850 GPM), three chillers (1,200 tons each), one multi-stack chiller (300 tons) and one plate and frame heat exchanger. The installation was completed in April of 2014.

## Results/Benefits:

It is too soon for actual data to be assessed, but based on initial statistical analysis of past water and energy consumption data, Scale Free will optimize the building's operational efficiency and reduce its total water and energy consumption over what the chemical water treatment program previously in place achieved.

"Our company is delighted to help raise the bar for superior energy efficiency in all commercial buildings across the country. We really appreciate the opportunity from GSA and look forward to continued collaboration to support sustainable efforts at the federal level."

Bob Hanneken, Vice-President of Scale Free Systems

