CLIENT PROFILE
A leading supplier of energy products and services to wholesale and retail electric and natural gas customers, and a major generator of electricity with a diversified fleet of generating units strategically located throughout the United States and Canada, totaling approximately 9,000 megawatts of generating capacity.

OPERATIONAL CHALLENGE
Once consumed in a boiler, coal that is used as an energy source at the facility is cooled in a sluicing process to form a byproduct called black beauty, a material used as a sandblasting medium or concrete additive.

If the water is not at the right temperature during the sluicing process, then the coal does not properly form black beauty, and operators need to shut down and clean the tank. This costs in maintenance and downtime. Ultimately, the company needed to eliminate solids carryover where solids fouled the cooling tower, causing structural damage and lost cooling efficiency.

CHEMICAL SOLUTION
Kroff Chemical Company, Inc. engineered a chemical treatment program to remove fines and solids from the process that did not settle out in the dewatering bins as the black beauty did. By treating and cleaning the water, the cooling tower is more efficient.

BOTTOM-LINE RESULTS
As a direct result of Kroff’s chemical treatment program, the plant will save an estimated $200,000 a year in labor, tower replacement, sludge hauling and lost production.