

RMT, Inc.

CASE
SUMMARY

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RMT, INC.

Clinton, Iowa, Clinton County
Madison, Wisc., Dane County

Intern: Sathish Sathyamurthy
Major: Masters in Industrial Engineering
School: Iowa State University



The Company

Alliant Energy provides electric, natural gas, water and steam services to more than 1.2 million customers in Iowa, Illinois, Minnesota and Wisconsin. RMT, Inc., an Alliant Energy company, is an Integrated Environmental Solution provider, helping their clients sustain the environment while meeting their business objectives.

Project Background

The project was aimed at the control and reduction of nitrogen oxide (NO_x) and other combustion by-products at the coal-fired boiler of Alliant Energy's M.L.Kapp Power Plant in Clinton, Iowa.

Incentives for Change

Alliant Energy is committed to promoting a clean, safe and healthy environment. Alliant Energy is utilizing the SmartBurn technology, supplied by RMT, Inc., to successfully reduce the NO_x emissions at several of its power plants.



Results

The P2 summer intern project is part of a long-term venture aimed at decreasing the NO_x emissions at the M.L.Kapp Power Plant in Clinton. The project focused on accurately and continuously determining the coal flow rate in pipes using sensors. Results indicated that significant deviations in the coal flow existed. The sensor data was employed to equally distribute the coal flow in some of the coal pipes through the use of new technology balancing equipment.

The equal distribution of the coal flow in each of the pipes, achieved by installing new coal balancing equipment and using the sensor coal flow data to fine-tune air-to-coal flow ratios, will potentially lead to NO_x emission reduction and improved combustion and boiler control.

GOVERNMENT

BUSINESS

ACADEMIA