

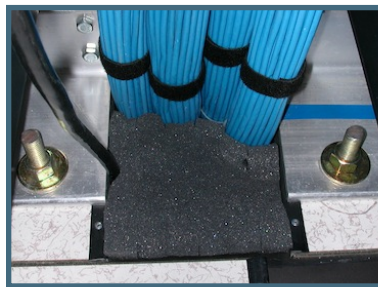
Verizon Saves Over \$1.6 Million Annually with Polargy

Project Background

Verizon executives set aggressive energy conservation goals for the corporation. Reaching those goals necessitated measures that achieved significant and rapid savings. Airflow controls proved to be a low cost, easy-to-deploy energy conservation measure that assured Verizon could meet its energy reduction goals. Polargy was selected to manage a rapid deployment of Cold Aisle Containment across twelve of Verizon's major data centers. Polargy successfully completed the project on schedule with impressive results.



Cold Aisle Containment



Air Dam Foam
to Seal Floor



CRAC Extensions
to Increase Delta-T

Annual Energy Savings	\$1,621,000
Energy Savings	18,885,000 kWh
Net Project Costs	\$3,286,000
Utility Rebates	\$301,000
Payback Period	24 Months

Data Centers At-A-Glance

- 850,000 total square feet
- 12 sites
- Colocation and Corporate Data Centers
- Mix of Chilled Water and DX Cooling
- PUE before 2.2
- PUE after 2.0

Project Drivers

- Meet corporate goals to reduce greenhouse gas emissions
- Quickly capture energy savings
- Improve customer satisfaction and better meet airflow service level agreements
- Create cooling redundancy by shutting down excess CRAC units

Polargy Project Management Scope

- Design
- Savings analysis
- Fire marshal review
- Utility rebates
- Training
- Installation
- Commissioning