



ADTRAN

Retro and Continuous Commissioning Services

About the Facility:

ADTRAN is a global supplier of innovative network access products that enables a wealth of applications ranging from Internet access and corporate connectivity to telecommuting and distance learning. ADTRAN is headquartered in Huntsville, Alabama and the campus consists of three towers serving more than 1,700 personnel. The facility is used for research, development, manufacturing, distribution, administration and food services. The corporate headquarters also has a large conference center and electronic labs.

Scope of Work

In 2012, SEA was hired to perform an ASHRAE Level 1 Energy Audit and commissioning services. Since then, the partnership has flourished to identify and implement multiple energy savings strategies through retro commissioning (RCx) services. SEA has implemented 30 Energy Conservation Measures (ECMs) and the simple payback across all five phases highlighted below is 1.34 years.

The scope of work was conducted over five phases and included RCx of:

- **Phase I:** Ventilation, exhaust systems for North and South tower heat rejection loops saving \$84k and 1.1M kWh
- **Phase II:** Variable Air Volume (VAV) boxes and programming modifications to relocate pressure transducers, saving \$33k and 448k kWh
- **Phase III:** Self-contained direct expansion units and programming modifications, saving \$106k annually and 1.3M kWh
- **Phase IV:** Increased business continuity from changes that make it unnecessary for ADTRAN to run more than two chillers, cost avoidance equal to approximately \$1M from not having to buy a fourth chiller, since only two chillers were required; reduced mechanical cooling cost by further utilizing the airside economizer on all air handling units
- **Phase V:** Proposed changes resulting in savings ranking from \$22k-\$37.5k equating to a simple pay-back between 2.1 and 3.6 years; implementing changes saving ADTRAN 420,491 kWh.

SEA has helped ADTRAN reduce 4.5M kWh and 15% off of a \$2.4M utility bill - a \$350k savings. SEA also helped ADTRAN with \$1M in cost avoidance of capital equipment.

4.5M
kWh

Reduced Energy
Consumption

\$350k

Reduced Energy Costs

1M

Square Feet
Commissioned

\$1M

Cost Avoidance of
Capital Equipment

