



Service/Product Provider

The Dome-Tech Group

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Dome-Tech's retro commissioning efforts lead to Merck's implementing an HVAC control strategy resulting in annual savings of over \$230,000.

Project Scope

Dome-Tech used a rigorous retro commissioning process to identify variances between the design energy baseline and the actual performance of one of Merck's newly constructed laboratory facilities. Dome-Tech recommended solutions for minimizing energy consumption.

Project Summary

The retro commissioning of the laboratory facility highlighted that once-through air exchange (that ensures that all fumes are safely vented) was in effect at all times. Dome-Tech recommended programming the existing Building Automation Systems (BAS) control technology to automatically lower the temperature in 150 laboratory suites between the hours of 8 p.m. and 6 a.m. from 72 °F to 64 °F. Individual lab suites that wanted to revert to normal operating temperatures during these hours could override the system by simply turning on the light switch in their lab.

- **Energy Savings**
\$230,000/year or 31,200MM BTU's
- **Investment**
\$135,000 initial – no recurring
- **Financial Return**
Payback was achieved in 7 months
- **Other Benefits**
This has been identified as a Best Practice and a site standard for all laboratories at the Rahway Facility. Turning on a light switch overrides the system without Maintenance involvement during off-peak hours.

Monitoring & Verifying Energy Savings

By reprogramming the BAS, Dome-Tech and Merck were able to see immediate results in reduced energy consumption during the off hours. Lower utility bills confirmed the savings.

Distinguishing Value

Dome-Tech develops good customer relationships. Because of their good faith history, innovative solutions are expected and welcomed, rather than challenged, during project discovery. In this way both parties are benefited.