

case study

National Retailer

Retro-Commissioning Success

17% Energy Savings With 7-Month Payback

Burton Energy Group worked with a national retailer that operates over 800 stores in all 50 states and other US territories to drive energy reductions through retro-commissioning for the systems at various stores.

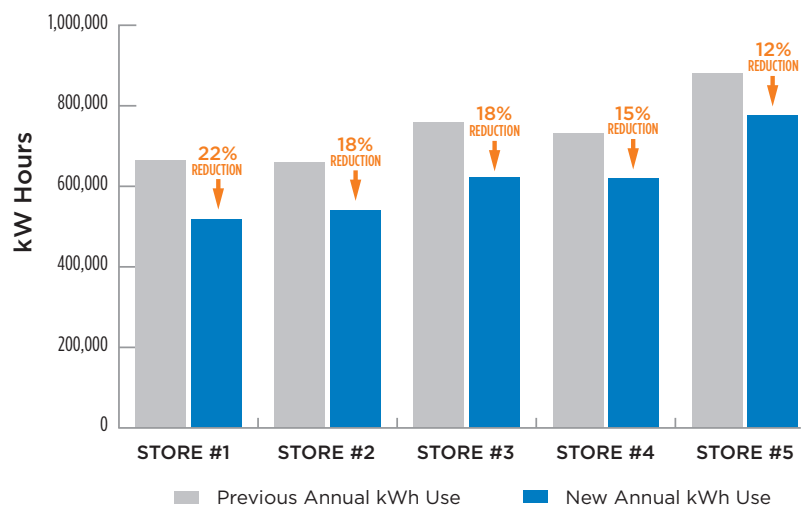
Burton Energy Group implemented energy reduction initiatives for five of their stores in the Chicago, IL area on a pilot basis. Electricity is provided to these stores by Commonwealth Edison (ComEd), which also offers utility-sponsored incentive programs to help customers reduce energy usage. These stores participated in the ComEd Retro-commissioning (RCx) Tune-Up program, which provides incentives for small commercial customers that include both a fully-funded RCx study and performance incentives for customers based on the verified electricity savings. Due to the high-energy usage of these facilities, which have HVAC and lighting systems that often operate for extended periods of time, Burton was selected to identify energy projects and drive project implementation.



**FIVE PILOT STORES
ANNUAL USAGE SAVINGS**

Annual Electricity Savings	Over 600,000 kWh/year
Annual Cost Savings	\$50,000/year
Simple Payback	7 Months

PILOT PROGRAM VERIFIED
ANNUAL SAVINGS OF \$50,000
AND OVER 600,000 KWH



Retro-Commissioning Success


Burton worked as a strategic planner, auditor, project manager and M&V consultant for the five stores as part of this pilot project, working closely with the corporate energy management team, local store personnel, Novar, and other key vendors. Upon completion, the retailer realized verified electric savings of approximately 17% and \$50,000 per year across the five pilot stores with a simple payback period of less than one year with utility incentives, without negatively impacting comfort or productivity.

TOTAL EXPECTED ANNUAL SAVINGS ACROSS ALL COMED STORES

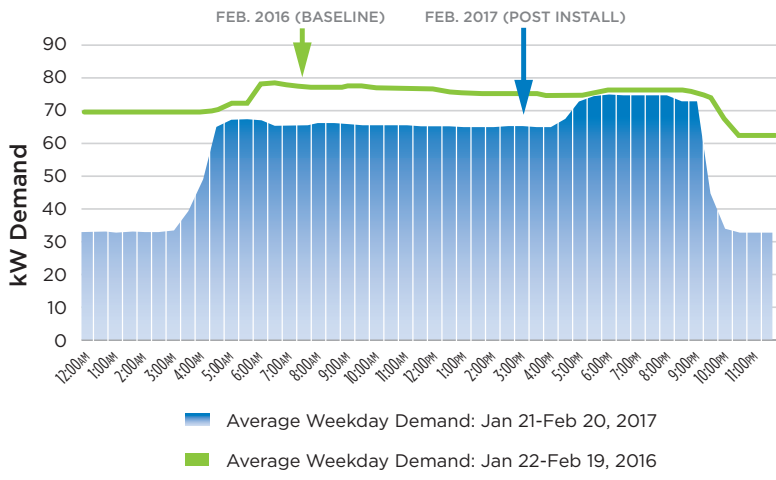
2 MILLION KWH
ANNUAL ELECTRICITY SAVINGS

\$160,000
ANNUAL COST SAVINGS

- ### TYPICAL ENERGY PROJECTS
- Lighting circuiting repair; repair of malfunctioning controls
 - Optimization of lighting splits/re-wiring for Sales, Pre-Sales, and Unoccupied lighting circuits
 - Installation of Novar timed override panel with cover installed over manual override switches or new controller with integral touch-screen timed overrides
 - Repair of malfunctioning outside air economizer modules for rooftop units
 - Optimization of HVAC operating schedules

After successful pilot results, Burton rolled out the program to remaining portfolio of stores in ComEd. Results across the rest of the portfolio were similar, with approximately 15% savings achieved. Total savings for all stores expected to provide 2 million kWh and over \$160,000 annual savings with no negative impact to operations. 

AVERAGE KW DEMAND PROFILE BEFORE AND AFTER IMPLEMENTATION



- ### COMED RCX BUILDING TUNE-UP INCENTIVES
- FACILITIES < 150,000 SQUARE FEET AND ANNUAL ENERGY USE 0.5 – 3 GWH
 - FULLY-FUNDED RCX STUDY UP TO \$15,000
 - PERFORMANCE-BASED INCENTIVES OF UP TO \$0.04 PER KWH FOR VERIFIED SAVINGS (UP TO \$10,000)
 - NO CUSTOMER FINANCIAL COMMITMENT