

Eger Health Care & Rehabilitation Center, Staten Island, NY

378-bed Eger Health Care & Rehabilitation Center in Staten Island, NY, is a great example of how both arms of Crothall Facilities Management can work together to conserve energy and save money. In 2002, CFO Nate Falanga hired the Crothall Special Projects Group to assess the infrastructure of Eger's physical plant. The group designed and constructed, with a guaranteed maximum price (GMP), major upgrades to the central heating and cooling plant equipment systems. "That was money well spent," commented Falanga. "We had to spend a little on capital improvements, but we made it up on the operating side. The new boiler and chiller are much more efficient."

The upgrades cost \$1M less than the client's budgeted investment. "That is one of the major advantages to working with Crothall rather than the equipment providers, utility companies that offer energy services, or other subcontractors. We have no

vested interest regarding products, technologies, or service providers," Norton explained. Crothall attempts to competitively bid all major trade and subcontractor work and material procurements to ensure the client pays no more for the work than necessary. The Special Projects Group also guarantees what the client will pay for a specific scope of work.

Norton points out that project ROI is greatly dependent on both timing and regional location, and not just because of the weather. "Some states have better grants and utility incentive programs than others," he explained. In 2002, the group was successful in reaping \$1.3M in utility incentives to offset Boston Medical Center's multi-million dollar capital infrastructure upgrade designed and installed by Crothall.

Conserving with POM

Despite Eger's investment in new infrastructure in 2002 and the subsequent savings for the facility, Eger's energy costs continued to rise in 2006. Nate Falanga turned to Crothall's other energy savings solution—Plant Operations & Maintenance—for answers. Director John Barton, a Certified Energy Manager (CEM) and Certified Testing & Balancing Professional (CTAB), led the staff through a retrocommissioning process of all plant systems. While environmental measurement necessary to test and balance the equipment properly took a full year, the results in 2007 were far beyond the facility's expectations.

The facility experienced cash savings of close to \$200,000. Again, Falanga was very pleased with his Crothall team: "John definitely saved us money just by tinkering with what we had in our existing plant. Crothall has saved us money in both gas and electric."

UP IN SMOKE...

EGER HEALTH CARE ADDRESSES ENERGY BUDGET CHALLENGES



A Member of the Compass Group

Solution: Crothall On-Site POM Department

1. Carefully document current energy consumption on daily basis to determine system energy usage based on outdoor conditions.

- Daily consumption
 - Daily equipment runtime (boilers & chillers)
 - Daily Heating & Cooling degree days
2. Restore each system to original operating conditions.
3. Balance all systems on water and air side.
- Adjust all setpoints to provide minimum energy and temperatures to produce desired heating and cooling
 - Balance flow rates and pumps and heat exchangers
 - Reset supply temperatures based on outdoor conditions
 - Employ load management or existing equipment running smaller boilers and chillers when conditions allowed

Outcome

2006 to 2007

-23% reduction MBTU/square foot

Solution: Crothall Special Projects Group

Consists of a team of experts in the identification, design, and implementation of building infrastructure upgrades.

Outcomes include:

- Reduced energy & maintenance costs
- Improved reliability of existing energy equipment and systems
- Adequate levels of electric power, heating, and cooling
- Extended useful life of plant assets
- Application of new state-of-the-art technologies
- Improved levels of code compliance

Consulting

Provide independent critical analysis and input to the physical plant decision-making process and include:

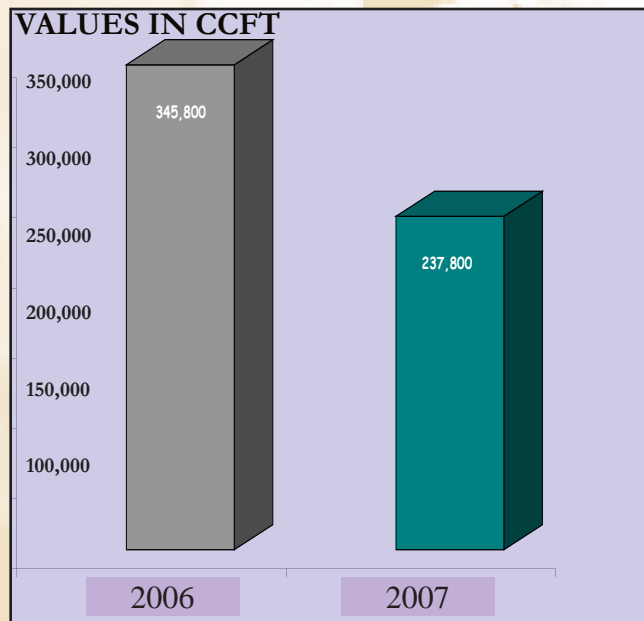
- Facility & infrastructure assessments
- Strategic planning for utilities & infrastructure
- Energy audits
- Capital planning and budgeting
- Risk analysis of the physical plant
- Building automation system evaluation & optimization
- Ongoing performance measurement & management

Construction and Project Management

Provide a wide variety of construction management services, which are tailored to our clients' individual needs and objectives.

- Pre-construction design services
- Project management
- Owner's agent
- Turnkey construction
 - Design, Bid, and Build
 - Design-Build
 - Performance Contracting with guarantees

Eger Health Care Weather-Adjusted Gas Consumption 2006 vs. 2007



❖ Energy consumption continues to lower at Eger Health Care as Crothall Special Projects Group and the onsite POM team work on efficiencies.

“ That was money well spent. We had to spend a little on capital improvements, but we made it up on the operating side. ”

--Nate Falanga, CFO