



Baxter Regional Medical Center



The Opportunity

Baxter Regional Medical Center (BRMC) in Mountain Home, Arkansas had been consuming excessive amounts of electricity and natural gas, due largely to the lack of a plate and frame heat exchanger for the chilled water system, standardized center-wide energy management control system, and some outdated lighting and water systems.

BRMC proactively pursued a means to contain costs. Much of the existing equipment was beyond its useful, functional life, so BRMC worked with OpTerra Energy Services to quickly and efficiently make the necessary replacements and upgrades.

The Program

OpTerra enabled BRMC to make these improvements at one time through performance contracting. BRMC will utilize energy savings in addition to a favorable interest rate to help fund the replacements. It truly modernized the infrastructure by replacing antiquated equipment that was unable to be addressed due to limited capital funds.

OpTerra's staff evaluated the energy consumption (gas, electric, and water), the existing building control strategies, the condition of the existing HVAC and mechanical equipment, the existing lighting technology, and the water consuming devices. In addition, building envelope issues were evaluated as well as various ongoing operational and maintenance issues.

The Impact

The \$5.3 million project included improvements in the Main Hospital and Medical Arts building affecting the Surgery Suites, Nuclear Medicine, Radiology/X-Ray, Cath Lab, Dietary, and Continuity of Care areas. One of BRMC's major concerns was to assure the Surgery Suites would have uninterrupted cool space temperatures. This concern was addressed by installing a standalone chilled water system for these suites with automatic change over to the Main Hospital in the case that the standalone system fails. In addition, the installation of a new backup generator for this standalone chilled water system protects against failure in the case of a power outage. The many upgrades prepared BRMC for growth and expansion, and resulted in an enhanced working and caring environment for staff and patients.

Program Highlights

- Improved comfort for staff and patients
- Enhanced the working and caring environment for staff and patients
- Upgraded BRMC infrastructure to extend the life of equipment
- Provided BRMC staff with ability to control facilities
- Prepared BRMC to better handle and plan for growth, renovation, and expansion
- Enhanced BRMC staff's ability to deal with maintenance issues
- Implemented the recommended improvements from the existing budget

Technical Scope

- Replaced existing chillers
- Installed variable speed CHW pumping
- Replaced existing cooling tower
- Installed new premium efficiency motors
- Revised building HVAC operating schedules
- Installed boiler stack economizer and boiler burner controls
- Installed partition walls at existing Physical Plant to separate chillers from boilers and water conservation
- Converted 3-way valves to 2-way valves
- Major lighting retrofits