



HEA is a registered Program Ally of the Act On Energy® Efficiency Programs

Horizon Engineering
Associates LLP

ActOnEnergy®

Horizon Engineering Associates, LLP (HEA) offers building performance improvement services such as commissioning and retro commissioning, sustainable consulting and engineering services to assist healthcare institutions save money and reach their energy efficiency goals.

How We Can Help

Working as a Retro Commissioning Service Provider, HEA will guide you through the Healthcare Retro Commissioning Program, starting with the application until Act On Energy provides the incentive reimbursement. Throughout the process, HEA will identify measures and associated costs savings.

Retro commissioning has become a popular tool to identify potential problems and rectify ongoing problems within buildings. Other purposes include:

- Improve building performance to save on energy costs,
- Reduce operational costs,
- Eliminate building hot and cold spots,
- Minimize operational risk and increase asset value,
- Optimize equipment operation (extend equipment life),
- Adjust and correct equipment operating schedules, and
- Reduce liability associated with poor environmental quality.

Retro commissioning will result in reduced operations and maintenance costs and provide your tenants and employees with a more comfortable environment.

Why Choose HEA?

- Approved Act on Energy Healthcare Retro Commissioning Provider
- Extensive experience in healthcare facilities
- Dedicated to saving you money
- Proven success with projects of similar importance, magnitude and scope
- Team members have extensive experience in all phases of system analysis
- Key staff certified by BCA, USGBC, NEBB and Professional Engineers

**HEA will provide an added value resource as your
healthcare retro commissioning expert.**



Congratulations on taking the initiative towards greater energy efficiency and reduced operational costs.

We are here to help you through the Healthcare Retro Commissioning program to reach your goals.

Contact Us Today

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Healthcare facilities represent the largest population of commercial buildings over 100,000 sf in the Ameren Illinois Utilities service territory (approximately 50 facilities).



Is your facility eligible for the program?

- ✓ Ameren Illinois Utilities electric service customer
- ✓ Hospital, skilled nursing, or medical office building
- ✓ Facility size of 100,000 sf or larger
- ✓ Minimum facility age of 5 years
- ✓ Energy Management Control System (EMCS) installed
- ✓ Energy Utilization Index (EUI) and Energy State™ rating considered in selection process

What does the Act On Energy program provide?

- Incentive funds to pay 50-80% of the cost of the retro commissioning survey
- Project delivery through a pool of selected Retro Commissioning Service Providers (RSPs)
- Practical Energy Management© training session and binder
- Act On Energy program overview
- Facility walkthrough and energy efficiency opportunities report
- Incentive funds for new construction, compressed air, and other measures through our Custom Program
- Incentive funds for lighting, HVAC, motors, and refrigeration retrofits through our Standard Program

What energy efficiency measures are typically implemented on this program?

- EMCS optimization
- Lighting controls optimization
- Repair of inoperable controls

How does the process work?

- Application Phase
- Technical Review
- Survey Phase
- Program Commitment Form
- Implementation Phase
- Verification Phase
- Approval for Payment



Energy savings of 15-30% is typically achievable through the implementation of retro commissioning measures in healthcare facilities.

Implementation of no cost/low cost energy efficiency measures is attractive when capital funds are limited.



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Commissioning is one of the most compelling, and yet least understood, strategies for managing building energy consumption, costs and greenhouse gas emissions.

A USGBC study found that buildings account for 72% of electricity consumption and 39% of energy use and many of them were constructed over 25 years ago. Times change quickly and the way we conduct business now is completely different from five years ago, let alone 25 years ago. Technological advances in electronics, computers, servers and data centers have changed the entire paradigm for building operations. In addition, transfers in building owners and tenants dramatically alter the intended purpose of building space; so much so that lighting systems, HVAC systems and sequencing no longer match the needs of the space.

Cost-Benefits of Commissioning

A recent Department of Energy sponsored study conducted by Evan Mills, Ph.D. of Lawrence Berkeley National Labs highlighted the cost-benefits of commissioning in new and existing buildings.

- Mills found that existing building commissioning projects cost \$0.30/ft² and have a payback time of 1.1 years.
- High cost effectiveness was prevalent across the board, even in smaller facilities, which are often perceived to have low rates of return.
- Of the existing buildings analyzed in this study, over 6,000 energy-related problems, including duct leakage, HVAC and lighting systems running while the space is unoccupied, were found through commissioning resulting in 16% whole building energy savings.

Owners and facility directors are often inundated with the day-to-day demands of managing and operating a building that they have little time left to focus on ways to improve their buildings' efficiency, as well as ways to accommodate their occupants changing priorities and preferences. **Let HEA serve as your Healthcare Retro Commissioning expert in the Act on Energy Program to optimize the performance of your building systems.**

Example of Savings using the Retro Commissioning Healthcare Program:
Sample: Healthcare facility, 330,000 sf

WITHOUT Ameren funding:	
Cost of Retro Cx	\$100,000
Cost of Savings from Retro Cx	\$80,000/year
Payback	1.1 years
Costs Using Act on Energy Retro-Cx Program	
Cost of Retro Cx	\$20,000 (80% reimbursed)
Cost of Savings from Retro Cx	\$80,000/year
Payback	.25 years
SAVINGS IN 5 YEARS: \$380,000	

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