Improve the performance of your HVAC systems through retro-commissioning

Significant savings at minimal cost

Retro-commissioning (RCx) is a systematic process for identifying less-than-optimal performance in your facility’s Heating, Ventilation, and Air Conditioning (HVAC) systems and making the necessary adjustments. It can often resolve problems that occurred during design or construction, or address problems that have developed throughout the building’s life as equipment has aged, or as building usage has changed.

Through simple improvisation of what’s already in place and minor retrofitting, RCx focuses on improving the efficiency of the existing HVAC systems such as:

- Pumps capacity controls / resizing
- Cooling towers re-conditioning
- Variable air volume systems
- Controls algorithm fine-tuning
- Chiller gear resizing*
- Evaporator / condenser tube de-scaling
- Air handlers re-conditioning
- Control actuators

Many of these small operations and control improvements cost little to implement, yet some can have big effects. For example, controls algorithm fine-tuning not only improves current operations but also increases the effectiveness of diagnostic monitoring and testing.

Why is retro-commissioning important?

Over time, equipment ages and building use changes. In addition, buildings frequently undergo operational and occupancy changes that challenge the mechanical, electrical and control systems, hindering optimal performance. So your facilities may become increasingly inefficient.

Diagram 1 illustrates the deterioration of the chiller plant due to normal wear and tear over time. Retro-commissioning is therefore important to extend the service life of your chiller.

Diagram 1 - Deterioration of chiller plant over time
Benefits of retro-commissioning

Retro-commissioning benefits everyone in a building. Building owners see reduced operating costs from the energy savings and better equipment performance, leading to an increase in net operating income. Building occupants are more comfortable because the adjustments lead to more consistent temperature control and better indoor air quality. Building managers, meanwhile, face fewer occupant complaints and are better able to manage building systems.

Johnson Controls RCx Program provides potential energy savings incentive and connects you with experts to make sure your facilities — and the HVAC equipment and systems within them — are running in peak condition for optimal energy savings. RCx projects can improve your facility’s work environment and extend the service life of your equipment to stretch your dollar to maximize your core focus area. As the world’s leader in building systems and equipment has the unequaled expertise to manage the entire retro-commissioning process.

Benefits of retro-commissioning include:
- Improved system operation: beyond preventive maintenance
- Improved equipment performance
- Increased asset value
- Energy savings
- Improved Occupant Comfort
- Improved indoor environmental quality
- Improved building documentation

Contact our Johnson Controls sales representative about retro-commissioning your chiller plant:

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