RECENT BUILD RETRO-COMMISSIONING

ENVINITY
BUILDING ENERGY SOLUTIONS

WELLSPAN HEALTH

PROJECT HIGHLIGHTS:

Year constructed:	2012
Facility size:	146,000 SF
2015-2016 Savings:	$82,391
Utility Rebate:	$52,940
Project Cost:	$27,000
Simple Payback (without rebate):	4 months

energy to care AWARDS

WELLSPAN SURGERY AND REHABILITATION HOSPITAL

RETRO-COMMISSIONING

Retro-Commissioning (RCx) is the process of identifying and correcting building systems that are operating inefficiently. RCx encompasses air handlers, chillers, cooling towers, boilers, lighting, and any other building system which consumes energy. The goal of RCx is to restore system performance to better-than-new conditions.

Although Wellspan Surgery and Rehabilitation Hospital (WSRH) was recently constructed and commissioned, RCx yielded more than 10% in energy savings. Even newer buildings often operate at sub-optimal efficiency, and can benefit from RCx services.

Envinity's technical expertise allowed for the effective delivery of the work scope for WSRH. Our engineers provided objective attention and analysis at each stage of the RCx process, and continue to do so throughout ongoing work at the facility.

ACTIONS TAKEN

Envinity engineers worked closely with Wellspan staff and controls vendors to make energy and functional improvements to the facility. Irregularities were observed and critical equipment was reviewed via the Building Automation System. Several opportunities for improvement have been identified and will be addressed in the ongoing RCx of the facility.

- **CORRECTED** airflow set points in operating rooms
- **DIAGNOSED** problems through remote access
- **IMPLEMENTED** advanced control sequences for kitchen and office areas
- **IMPROVED** dehumidification and humidity control in ORs
- **PROCURED** over $52,000 in utility rebates
- **OPTIMIZED** chiller and improved part-load performance
- **REDUCED** minimum airflows for fan and reheat savings

RCx OUTCOMES

2015-2016 Energy Savings		
Source	*Savings Amount*	*% Savings*
Electricity	396,211 kWh	10%
Natural Gas	30,500 therm	14%

The changes implemented by Envinity resulted in measurable energy and cost reductions from 2015 to 2016. Electric usage decreased by 396,211 kWh or 10%, and resulted in $72,734 in cost savings.

Year to year natural gas consumption was reduced by 30,500 therms, a 14% reduction. The annual cost of natural gas was reduced by $9,657, a savings of 6%.

CONCLUSIONS

Envinity helped WSRH save $82,391 between 2015 and 2016. Not including the rebate, the simple payback for this project was 4 months. Although the building was constructed recently, Envinity continues to augment operational compliance and identify opportunities for improvement.