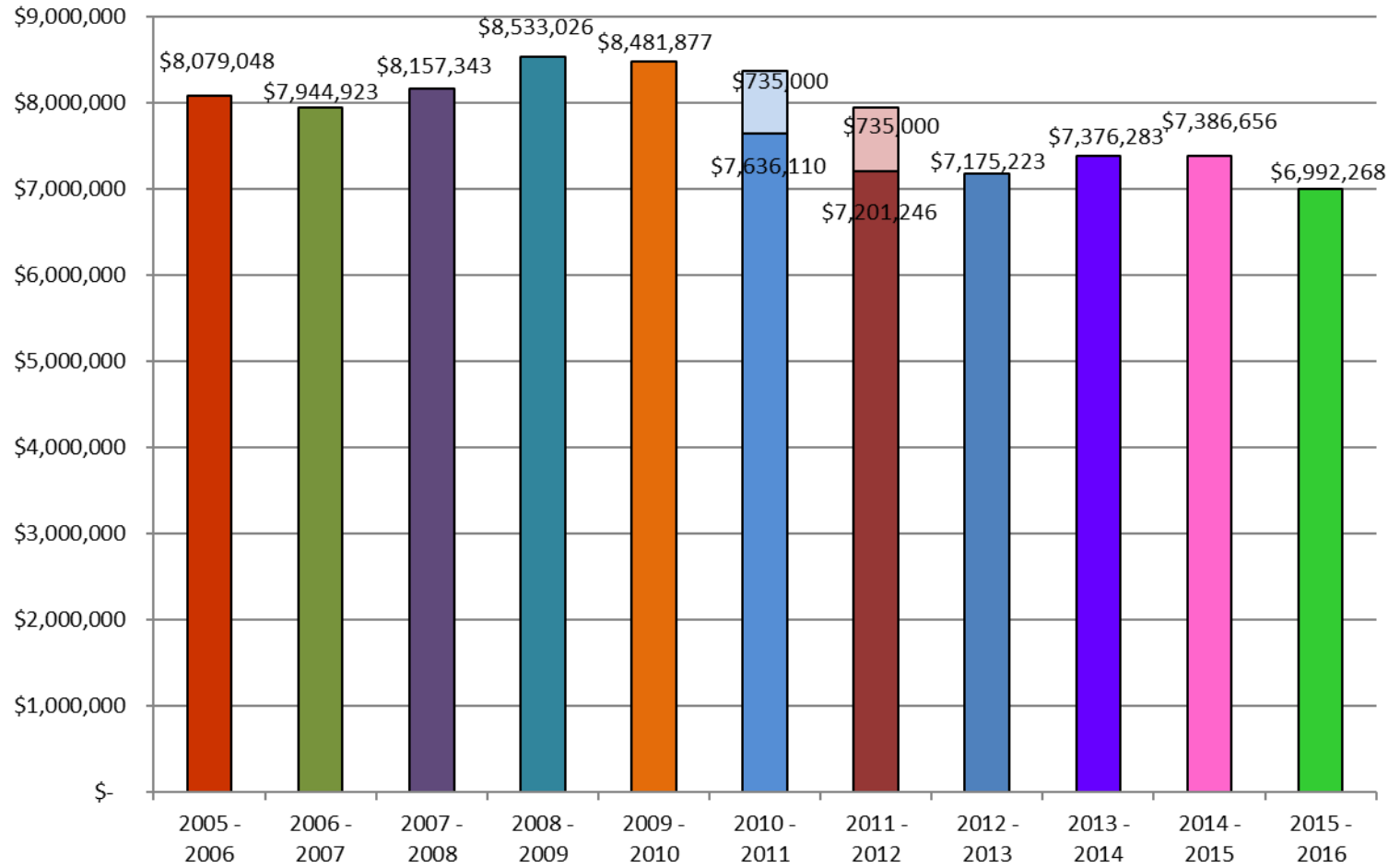


# IFAS Utility Expenditures



# Energy Savings Performance Contracting

- Encouraged by Legislation (F.S. 1013.23 & F.S. 489.145)
- Means of Infrastructure Renewal
- Self Funding Process – Cash Flow Positive
- Strategically Partner with an Energy Services Contractor (ESCO)
- ESCO Collaborates with University on Scope to Meet Needs
- ESCO Takes Design, Construction, and Performance Risk
- ESCO Guarantees Savings
- Savings Pays Some or All of Debt Service
- ESCO Writes Check if there is Savings Shortfall

# SIEMENS ESCO Project at UF IFAS – Entomology Building 970

- Designed to Improve Lab/Research Facilities on Campus
- Construction Completed June 2015
- Scope of Work and Construction Cost - \$5,748,884
  - Extensive Replacement of End of Life Air Handling Units
  - Conversion of Constant Volume Air Distribution System to Variable Volume
  - Building Automation Upgrades to Accomplish Energy Savings Control
  - Occupancy Sensors Installed Throughout Facility to Set Back Lighting & Ventilation Rates
  - Water Conservation Project
  - Chilled Water Plant Optimization (Demand Flow)
- Total Guaranteed Utility Savings Over 20 Year Term - \$8,297,522
- Construction Period Savings Measured - \$358,840
- First Year Guaranteed Savings - \$349,426
- First Year of Savings Measured - \$356,412
- First Year Excess Savings Above Guaranteed Amount - \$6,986

# SIEMENS ESCO Project at UF IFAS – Entomology Building 970



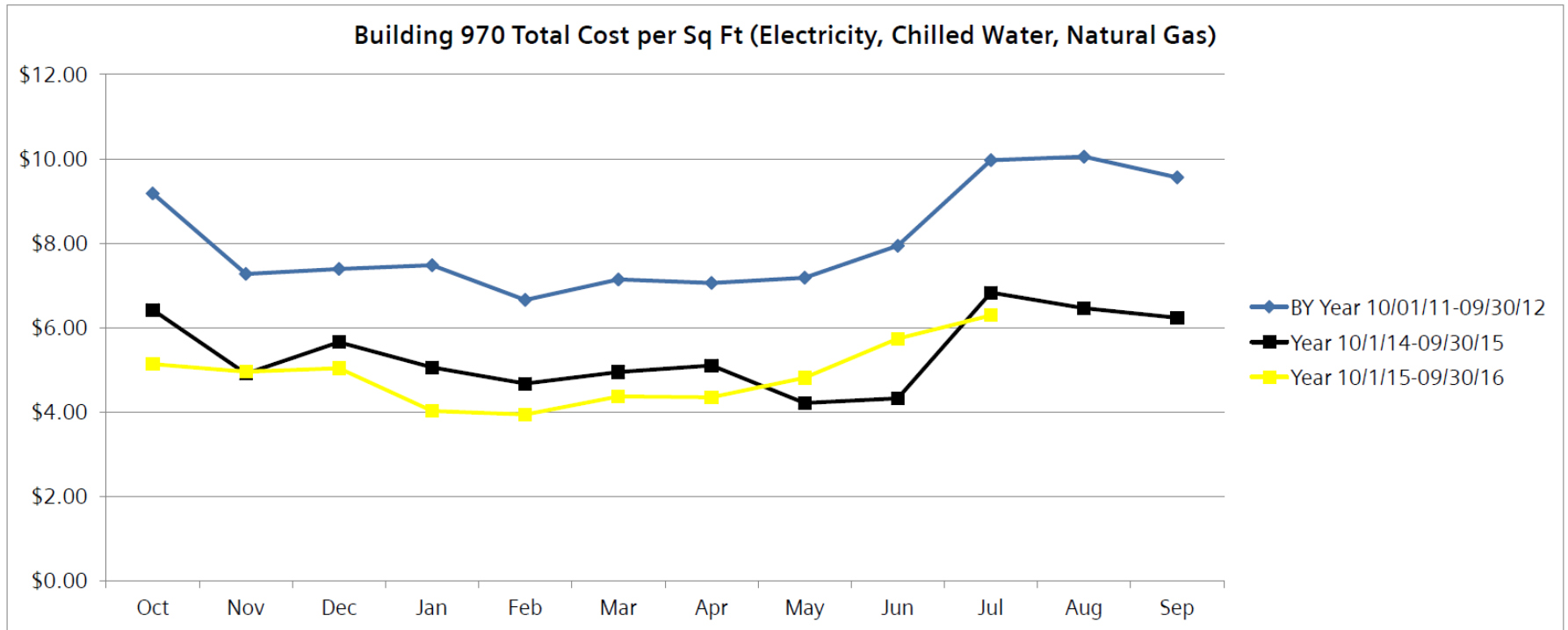
← Old Exhaust



New Exhaust →

# SIEMENS ESCO Project at UF IFAS – Entomology Building 970

## Graph of Performance

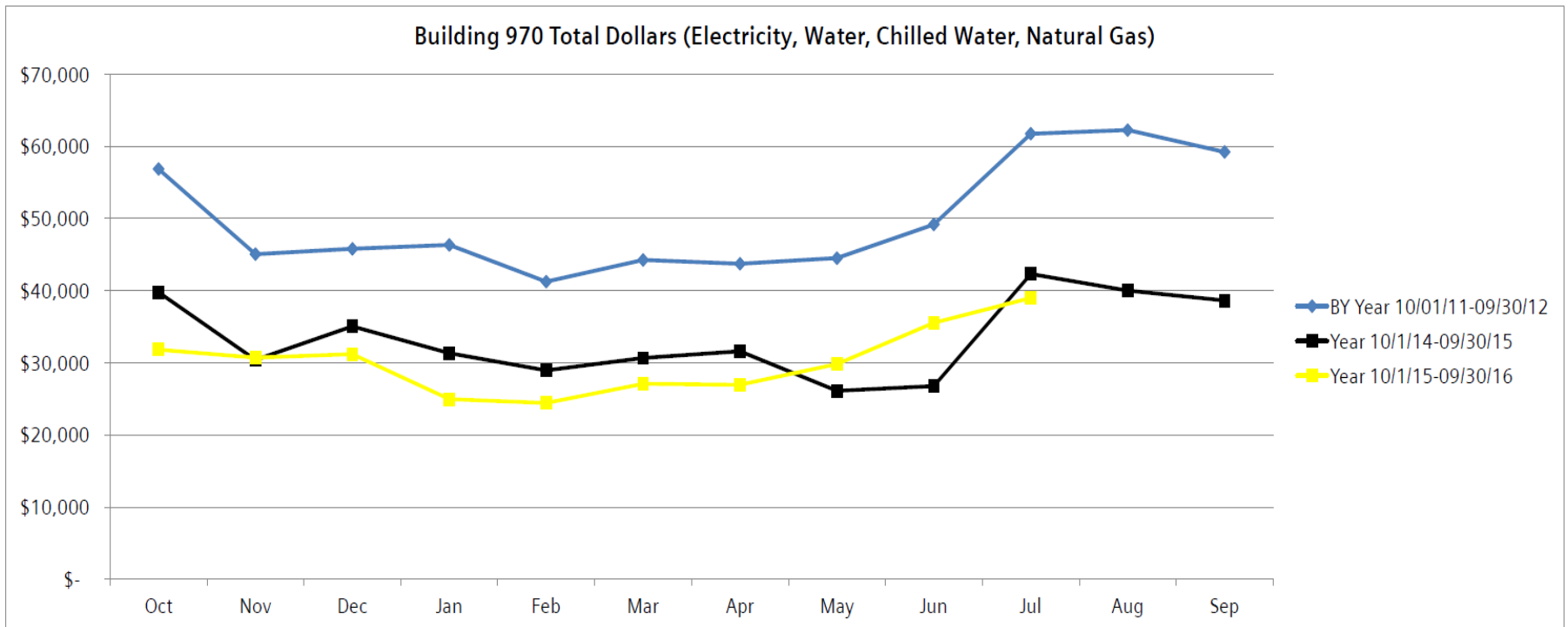


| Date                      | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug     | Sep    | Annual Average | Average Jul-Dec |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|----------------|-----------------|
| BY Year 10/01/11-09/30/12 | \$9.18 | \$7.27 | \$7.39 | \$7.48 | \$6.66 | \$7.14 | \$7.06 | \$7.18 | \$7.94 | \$9.97 | \$10.05 | \$9.56 | \$8.07         |                 |
| Year 10/1/14-09/30/15     | \$6.42 | \$4.91 | \$5.65 | \$5.05 | \$4.67 | \$4.95 | \$5.10 | \$4.21 | \$4.32 | \$6.83 | \$6.46  | \$6.23 | \$5.40         | \$5.70          |
| Year 10/1/15-09/30/16     | \$5.14 | \$4.95 | \$5.04 | \$4.02 | \$3.94 | \$4.37 | \$4.35 | \$4.81 | \$5.73 | \$6.29 |         |        | \$4.86         | \$5.16          |

Base Year period is October 2011 to September 2012

# SIEMENS ESCO Project at UF IFAS – Entomology Building 970

## Graph of Performance

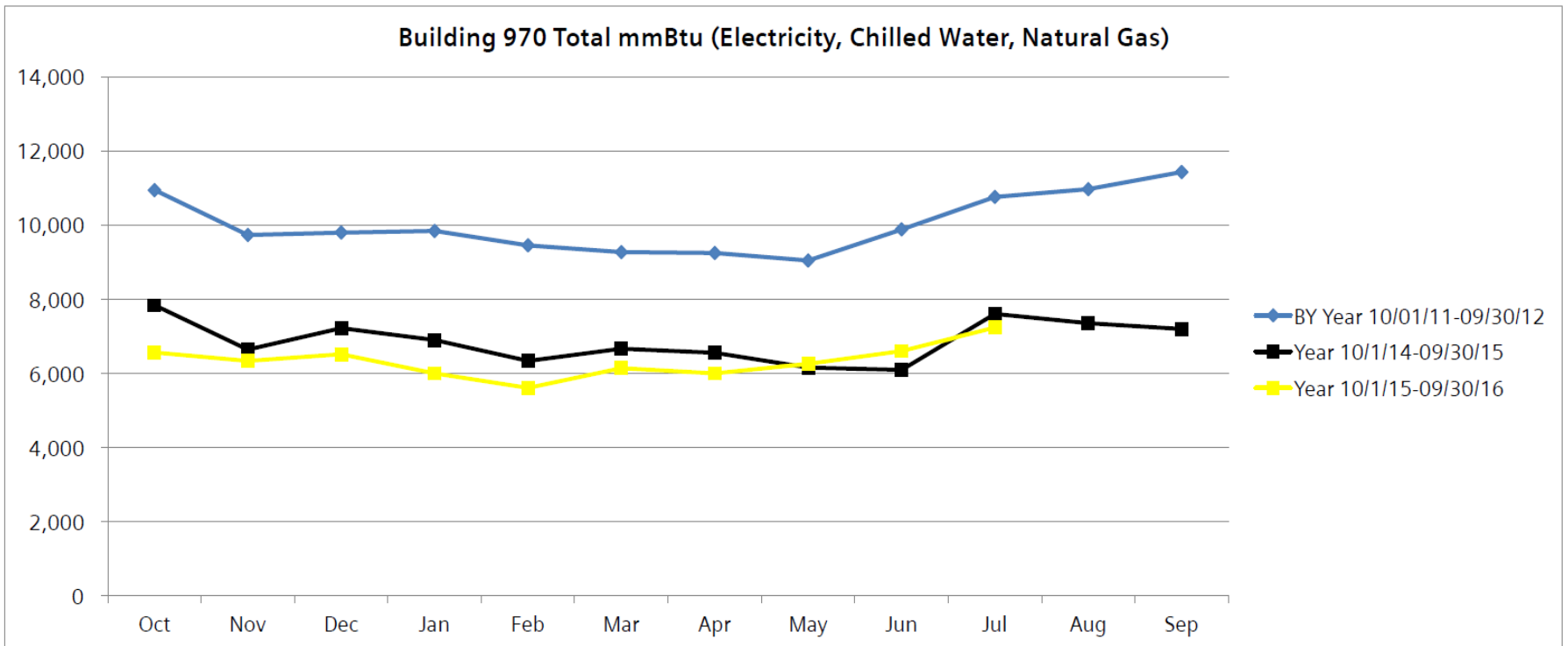


| Date                      | Oct       | Nov       | Dec       | Jan       | Feb       | Mar       | Apr       | May       | Jun       | Jul       | Aug       | Sep       | Total     | Jul-Dec    |
|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| BY Year 10/01/11-09/30/12 | \$ 56,879 | \$ 45,064 | \$ 45,797 | \$ 46,345 | \$ 41,249 | \$ 44,252 | \$ 43,736 | \$ 44,509 | \$ 49,192 | \$ 61,771 | \$ 62,273 | \$ 59,240 | \$600,308 |            |
| Year 10/1/14-09/30/15     | \$ 39,780 | \$ 30,420 | \$ 35,041 | \$ 31,326 | \$ 28,948 | \$ 30,654 | \$ 31,615 | \$ 26,114 | \$ 26,771 | \$ 42,321 | \$ 40,015 | \$ 38,623 | \$401,630 | \$ 424,091 |
| Year 10/1/15-09/30/16     | \$ 31,827 | \$ 30,694 | \$ 31,218 | \$ 24,937 | \$ 24,409 | \$ 27,074 | \$ 26,956 | \$ 29,823 | \$ 35,543 | \$ 39,002 |           |           | \$301,483 | \$ 383,441 |

Base Year period is October 2011 to September 2012

# SIEMENS ESCO Project at UF IFAS – Entomology Building 970

## Graph of Performance

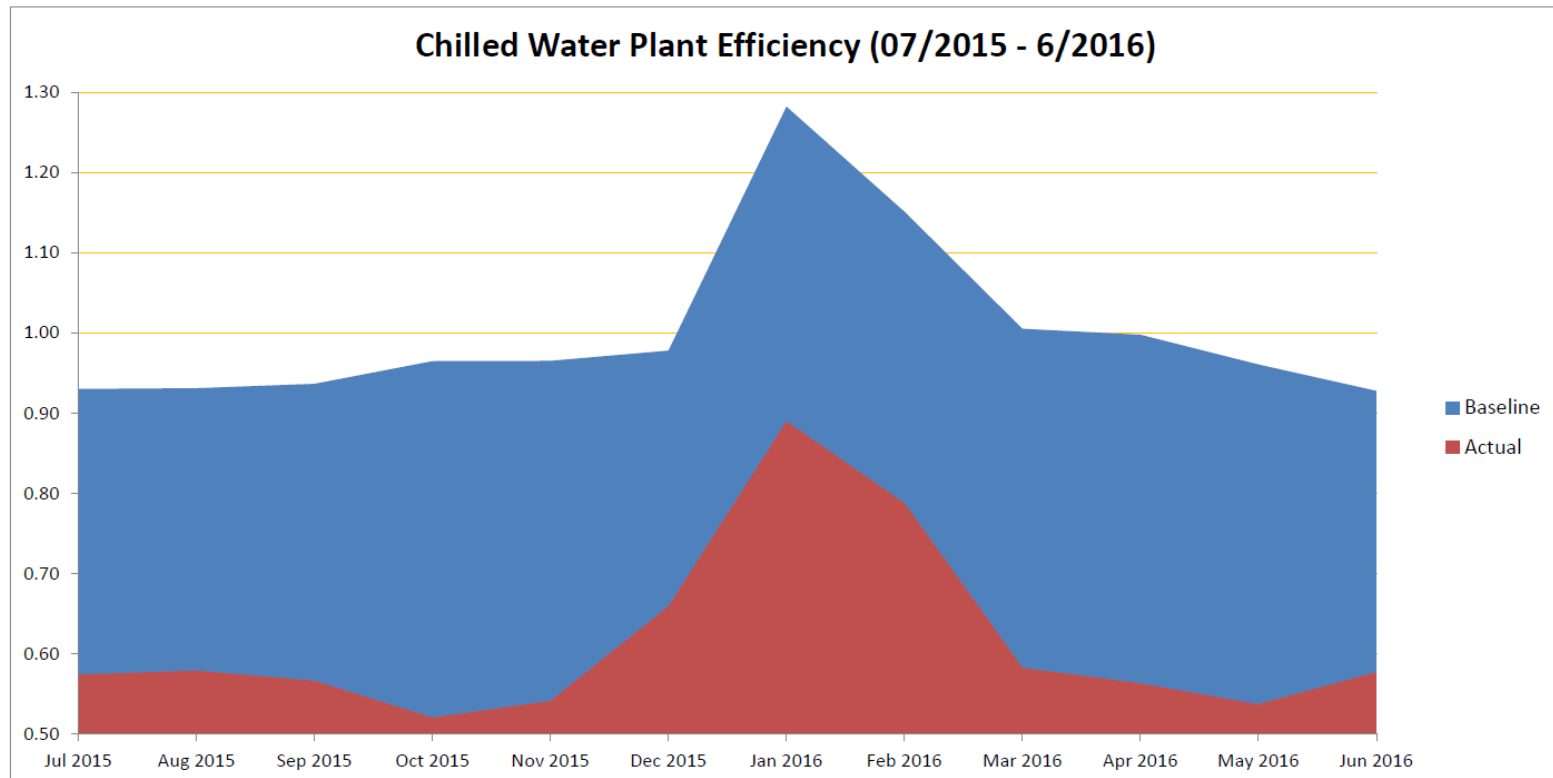


| Date                      | Oct    | Nov   | Dec   | Jan   | Feb   | Mar   | Apr   | May   | Jun   | Jul    | Aug    | Sep    | Total   | Jul-Dec |
|---------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|---------|---------|
| BY Year 10/01/11-09/30/12 | 10,957 | 9,745 | 9,813 | 9,854 | 9,466 | 9,282 | 9,260 | 9,057 | 9,898 | 10,774 | 10,983 | 11,446 | 120,536 |         |
| Year 10/1/14-09/30/15     | 7,847  | 6,652 | 7,233 | 6,911 | 6,343 | 6,675 | 6,566 | 6,168 | 6,103 | 7,612  | 7,361  | 7,206  | 82,679  | 87,110  |
| Year 10/1/15-09/30/16     | 6,571  | 6,345 | 6,526 | 6,010 | 5,620 | 6,150 | 6,011 | 6,269 | 6,614 | 7,247  |        |        | 63,363  | 78,295  |

Base Year period is October 2011 to September 2012

# SIEMENS ESCO Project at UF IFAS – Entomology Building 970

## Graph of Performance



| Period Average |      |     |
|----------------|------|-----|
| Baseline       | 0.96 | KwT |
| Actual         | 0.58 | KwT |
| Change         | 40%  |     |