

Annual Savings Report

State of Ohio Standard Forms and Documents

Project Name Belmont-Harrison Career Centers Date 10/31/2016
 Project Number 1293

| Project Summary | |
|------------------------------------|---|
| School District Name | Belmont-Harrison Career Centers |
| State Project Number (SN) | 1293 |
| School Building Name(s) | Belmont Career and Technical Center Harrison Career and Technical Center |
| Total Project Cost (\$) | \$726,606 (682,575 +3% interest) |
| Length of Contract Term (years) | 15 Submittal p11 \$64,970 |
| Projected Avg. Annual Savings (\$) | \$64,969 =52,341+O&M (12,628) |
| Construction Started/Completed | Start Date: 2/18/2013 Completion Date: 10/22/2013 |
| Reporting Year (1, 2 or 3) | 2 |
| ESCO Name | Constellation NewEnergy, Inc. |
| ESCO Address | 100 Constellation Way, Suite 1000C Baltimore, MD 21202 |
| ESCO Phone Number | (412) 489-9434 |
| ESCO Contact Person | Adam Campbell |
| ESCO E-mail Address | Adam.Campbell@constellation.com |

At a minimum, the following items must be included in the annual report in order to support the summary table above. Additional information may be included and the items below are in no particular order within your report. Please check that the following are included in the report:

- Baseline utility tables (gas, electric, water/sewage, etc.) including rates
- Actual monthly utility data for the current year
- List of adjustments from baseline to current year and the supporting documentation
- Adjusted utility tables for the current reporting year
- Conclusion as to whether the project has met its savings projection
- Conclusion as to whether the project has met its guarantee (for projects approved after September 2013)
- In case of shortfall, what measures are proposed to remedy the shortfall (if applicable)

Prepared by: 
 Adam Campbell, PAE
 Constellation NewEnergy, Inc.

10/31/16
 Date

Certified by: Mark Lucas <mark.lucas@omeres.net>

 Mark Lucas, Treasurer
 Belmont-Harrison Vocational School District

11/8/16
 Date

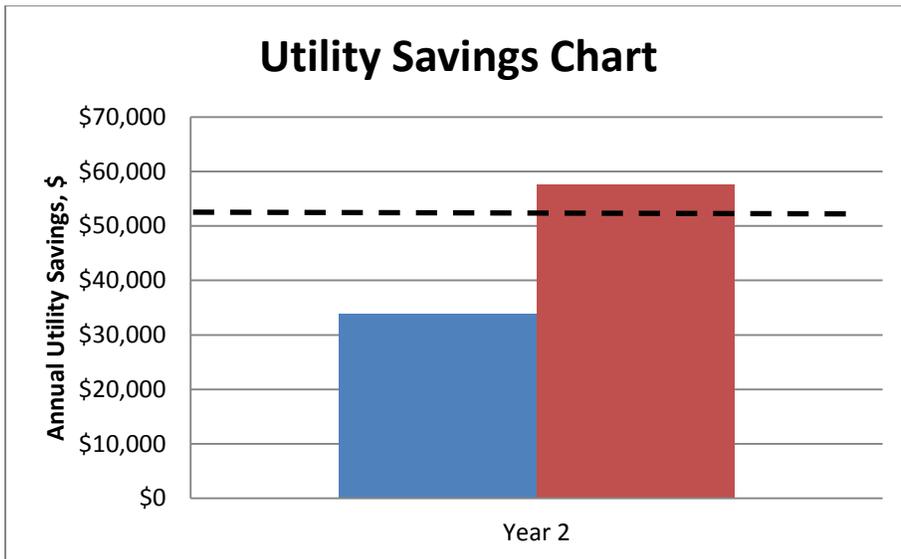
Annual Savings Report

Utility Table

| Electricity | Baseline | Proposed | Actual | Adjusted Baseline year | Adjusted Current year |
|--------------------------------------|--|------------------|--------------|------------------------|-----------------------|
| Submittal p79 | 1,239,309-438,861(p79)= | | | | |
| Annual Usage, kWh | 1,239,909 | 803,448 | 1,068,545 | N/A | 758,494 |
| Annual Cost, \$ | \$107,574 | \$69,579 | \$92,628 | \$N/A | \$65,645 |
| CDD | 564 | | 846 | N/A | N/A |
| Saving | | 434,461 | 171,364 | | 481,415 |
| Fuel (if applicable) | Baseline | Proposed | Actual | Adjusted Baseline year | Adjusted Current year |
| Annual Usage, _____ Units | 4,360 -722= | 3,638 | 3,263 | N/A | 3,554 |
| Annual Cost, \$ | \$57,967 | \$48,368 | \$43,378 | \$N/A | \$47,254 |
| HDD | 5,533 | | 4,474 | N/A | N/A |
| Saving | | 722 | 1,097 | | 806 |
| Water/Sewage (if applicable) | Sub p79 936+111=1,047 -454=523 | | | How? | |
| Annual Usage _____ Units | 936 | =482 +454, S p79 | 524 | N/A | 470 |
| Annual Cost, \$ | \$9,793 -4,746= | \$5,047 | \$5,482 | \$N/A | \$4,920 |
| Saving | Submittal p11 \$2,796 water conservation savings | | | | 466 |
| Total Annual Utility Cost, \$ | \$175,335(A) | \$122,994(B) | \$141,488(C) | \$N/A(D) | \$117,819(E) |
| O&M 21% | Saving | \$52,341 | \$33,737 | | \$57,516 |

Note: Adjustments can be to baseline year or current (measured) year, or both if baselines are adjusted to a historical average. Adjustments include weather, occupancy, utility rate, over-rides, additions, etc. Please justify these adjustments in the body of the report.

Utility Savings Chart



■ Actual Savings
■ Adjusted Savings
- - - - Proposed Savings
 S p83 \$54,608 S p79 \$50,767
 Proposed Savings = A-B = \$52,341
 Actual Savings = A-C
 Adjusted Savings = A-E, or D-C, or D-E = \$57,516

Belmont Utility Data Comparison
Baseline vs Second Performance Year

| Baseline Belmont Utility Usage | | | | | | | | | | | | | |
|--------------------------------|---------------------------------|----------------------------|-----------------------------------|----------------------------|-----------------------------------|----------------------------|-----------------------------------|----------------------------|--------------------------------|-------------------------|---------------------------------|-------------------------|------------------|
| Month | 075-530-300-1 Metered Usage kWh | 075-530-300-1-1 Total Cost | 074-696-725-1-8 Metered Usage kWh | 074-696-725-1-8 Total Cost | 070-764-078-0-3 Metered Usage kWh | 070-764-078-0-3 Total Cost | 078-164-078-0-8 Metered Usage kWh | 078-164-078-0-8 Total Cost | 11125841-001 Metered Usage MCF | 11125841-001 Total Cost | 501-02001-00 Metered Usage kgal | 501-02001-00 Total Cost | Grand Total Cost |
| Mar-11 | 89,000 | \$7,856 | 25 | \$2 | 127 | \$11 | 396 | \$35 | 689 | \$9,159 | 47 | \$492 | \$17,556 |
| Apr-11 | 68,000 | \$6,003 | 24 | \$2 | 150 | \$13 | 336 | \$30 | 374 | \$4,970 | 65 | \$680 | \$11,698 |
| May-11 | 62,000 | \$5,473 | 24 | \$2 | 165 | \$15 | 300 | \$26 | 49 | \$646 | 78 | \$816 | \$6,978 |
| Jun-11 | 53,000 | \$4,678 | 1 | \$0 | 86 | \$8 | 270 | \$24 | 28 | \$374 | 37 | \$387 | \$5,471 |
| Jul-11 | 47,000 | \$4,149 | 0 | \$0 | 88 | \$8 | 288 | \$25 | 26 | \$342 | 137 | \$1,433 | \$5,957 |
| Aug-11 | 54,000 | \$4,767 | 1 | \$0 | 102 | \$9 | 327 | \$29 | 26 | \$342 | 47 | \$492 | \$5,638 |
| Sep-11 | 88,000 | \$7,768 | 25 | \$2 | 109 | \$10 | 360 | \$32 | 44 | \$590 | 104 | \$1,088 | \$9,490 |
| Oct-11 | 66,000 | \$5,826 | 27 | \$2 | 124 | \$11 | 420 | \$37 | 120 | \$1,590 | 115 | \$1,203 | \$8,670 |
| Nov-11 | 75,000 | \$6,621 | 23 | \$2 | 161 | \$14 | 444 | \$39 | 493 | \$6,556 | 71 | \$743 | \$13,975 |
| Dec-11 | 78,000 | \$6,885 | 17 | \$2 | 217 | \$19 | 480 | \$42 | 776 | \$10,323 | 58 | \$607 | \$17,878 |
| Jan-12 | 79,000 | \$6,974 | 26 | \$2 | 156 | \$14 | 471 | \$42 | 913 | \$12,135 | 118 | \$1,235 | \$20,401 |
| Feb-12 | 82,000 | \$7,238 | 25 | \$2 | 214 | \$19 | 396 | \$35 | 823 | \$10,941 | 59 | \$617 | \$18,853 |
| Total | 841,000 | \$74,238 | 218 | \$19 | 1,699 | \$150 | 4,488 | \$396 | 4,360 | \$57,967 | 936 | \$9,793 | \$142,564 |

+32,771.01
 =-\$175,335

| Baseline Contract Energy Rates | | | |
|--------------------------------|------------------------|---------------------------|------------------------------|
| Building | Electric Rate (\$/kWh) | Natural Gas Rate (\$/MCF) | Water & Sewer Rate (\$/kgal) |
| Belmont | \$0.0883 | \$13.30 | \$10.46 |

| Total Baseline Consumption | | | |
|----------------------------|----------------|-------------------|----------------------|
| Total | Electric (kWh) | Natural Gas (MCF) | Water & Sewer (kGal) |
| Total | 847,405 | 4,360 | 936 |
| Total, \$ | \$74,803 | \$57,967 | \$9,793 |

| Year 2 Belmont Utility Usage | | | | | | | | | | | | | |
|------------------------------|-----------------------------------|----------------------------|-----------------------------------|----------------------------|-----------------------------------|----------------------------|-----------------------------------|----------------------------|--------------------------------|-------------------------|---------------------------------|-------------------------|------------------|
| Month | 075-530-300-1-1 Metered Usage kWh | 075-530-300-1-1 Total Cost | 074-696-725-1-8 Metered Usage kWh | 074-696-725-1-8 Total Cost | 070-764-078-0-3 Metered Usage kWh | 070-764-078-0-3 Total Cost | 078-164-078-0-8 Metered Usage kWh | 078-164-078-0-8 Total Cost | 11125841-001 Metered Usage MCF | 11125841-001 Total Cost | 501-02001-00 Metered Usage kgal | 501-02001-00 Total Cost | Grand Total Cost |
| Jul-15 | 39,000 | \$3,443 | 1 | \$0 | 33 | \$3 | 288 | \$25 | 11 | \$146 | 25 | \$262 | \$3,879 |
| Aug-15 | 40,000 | \$3,531 | 1 | \$0 | 28 | \$2 | 327 | \$29 | 10 | \$133 | 35 | \$366 | \$4,061 |
| Sep-15 | 66,000 | \$5,826 | 4 | \$0 | 117 | \$10 | 360 | \$32 | 18 | \$239 | 53 | \$555 | \$6,662 |
| Oct-15 | 55,000 | \$4,855 | 3 | \$0 | 57 | \$5 | 420 | \$37 | 20 | \$266 | 41 | \$429 | \$5,592 |
| Nov-15 | 67,000 | \$5,914 | 3 | \$0 | 85 | \$8 | 444 | \$39 | 214 | \$2,845 | 31 | \$324 | \$9,131 |
| Dec-15 | 79,000 | \$6,973 | 2 | \$0 | 113 | \$10 | 480 | \$42 | 404 | \$5,371 | 34 | \$356 | \$12,753 |
| Jan-16 | 71,000 | \$6,267 | 2 | \$0 | 148 | \$13 | 471 | \$42 | 683 | \$9,081 | 24 | \$251 | \$15,654 |
| Feb-16 | 69,000 | \$6,091 | 2 | \$0 | 128 | \$11 | 396 | \$35 | 849 | \$11,288 | 28 | \$293 | \$17,718 |
| Mar-16 | 62,000 | \$5,473 | 3 | \$0 | 110 | \$10 | 396 | \$35 | 514 | \$6,834 | 69 | \$722 | \$13,073 |
| Apr-16 | 59,000 | \$5,208 | 3 | \$0 | 76 | \$7 | 336 | \$30 | 466 | \$6,196 | 114 | \$1,193 | \$12,633 |
| May-16 | 48,000 | \$4,237 | 3 | \$0 | 68 | \$6 | 300 | \$26 | 55 | \$731 | 70 | \$732 | \$5,733 |
| Jun-16 | 44,000 | \$3,884 | 2 | \$0 | 61 | \$5 | 270 | \$24 | 19 | \$247 | 0 | \$0 | \$4,161 |
| Total | 699,000 | \$61,701 | 29 | \$3 | 1,024 | \$90 | 4,488 | \$396 | 3,263 | \$43,378 | 524 | \$5,482 | \$111,050 |

| Year 2 Contract Energy Rates | | | |
|------------------------------|------------------------|---------------------------|------------------------------|
| Building | Electric Rate (\$/kWh) | Natural Gas Rate (\$/MCF) | Water & Sewer Rate (\$/kgal) |
| Belmont | \$0.08827 | \$13.30 | \$10.46 |

| Total Year 2 Consumption | | | |
|--------------------------|----------------|-------------------|----------------------|
| | Electric (kWh) | Natural Gas (MCF) | Water & Sewer (kGal) |
| Total | 704,541 | 3,263 | 524 |
| Total, \$ | \$62,190 | \$43,378 | \$5,482 |

| Belmont Proposed Savings | | | | |
|--------------------------|----------------------|------------------|----------------------|------------|
| Utility | Baseline Consumption | Proposed Savings | Proposed Consumption | Total Cost |
| Electric | 847,405 | 332,315 | 515,090 | \$45,467 |
| Fuel NG | 4,360 | 722 | 3,638 | \$48,368 |
| Water | 936 | 454 | 482 | \$5,047 |

| Belmont Adjusted Consumption | | | | |
|------------------------------|----------------------|------------------|----------------------|------------|
| Utility | Baseline Consumption | Achieved Savings | Adjusted Consumption | Total Cost |
| Electric | 847,405 | 370,015 | 477,390 | \$42,139 |
| Fuel NG | 4,360 | 806 | 3,554 | \$47,254 |
| Water | 936 | 466 | 470 | \$4,920 |

*Note - Adjustments are based upon utilization of IPMVP Option A. The retrofit was isolated and Pre/Post Measurements were completed.

**Harrison Utility Data Comparison
Baseline vs Second Performance Year**

| Baseline Harrison Utility Usage | | | | | |
|--|--|--|---|--|-----------------------------|
| Month | 075-629-996-0 2 Metered Usage kWh | 075-629- 996-0-2 Total Cost | 078-729-996-0- 7 Metered Usage kWh | 078-729- 996-0-7 Total Cost | Grand Total Cost |
| Mar-11 | 1,013 | \$84.71 | 46,500 | \$3,888.33 | \$3,973.04 |
| Apr-11 | 862 | \$72.08 | 37,500 | \$3,135.75 | \$3,207.83 |
| May-11 | 771 | \$64.47 | 25,500 | \$2,132.31 | \$2,196.78 |
| Jun-11 | 692 | \$57.87 | 14,700 | \$1,229.21 | \$1,287.08 |
| Jul-11 | 735 | \$61.46 | 11,400 | \$953.27 | \$1,014.73 |
| Aug-11 | 838 | \$70.07 | 23,400 | \$1,956.71 | \$2,026.78 |
| Sep-11 | 922 | \$77.10 | 10,800 | \$903.10 | \$980.19 |
| Oct-11 | 1,080 | \$90.31 | 27,600 | \$2,307.91 | \$2,398.22 |
| Nov-11 | 1,140 | \$95.33 | 19,200 | \$1,605.50 | \$1,700.83 |
| Dec-11 | 1,231 | \$102.94 | 21,900 | \$1,831.28 | \$1,934.21 |
| Jan-12 | 1,207 | \$100.93 | 80,700 | \$6,748.13 | \$6,849.06 |
| Feb-12 | 1,013 | \$84.71 | 61,200 | \$5,117.54 | \$5,202.25 |
| Total | 11,504 | \$961.96 | 380,400 | \$31,809.05 | \$32,771.01 |

| Baseline Contract Energy Rates | | | |
|---------------------------------------|-----------------------------------|--|---|
| Building | Electric Rate (\$/kWh) | Natural Gas Rate (\$/MCF) | Water & Sewer Rate (\$/kgal) |
| Harrison | \$0.0836 | N/A | N/A |

| Total Baseline Consumption | |
|-----------------------------------|-------------|
| Electric (kWh) | |
| Total | 391,904 |
| Total, \$ | \$32,771.01 |

| Year 2 Harrison Utility Usage | | | | | |
|-------------------------------|---|-----------------------------------|--|-----------------------------------|---------------------|
| Month | 075-629-996-0 2 Metered Usage kWh | 075-629- 996-0-2 Total Cost | 078-729-996-0- 7 Metered Usage kWh | 078-729- 996-0-7 Total Cost | Grand Total Cost |
| Jul-15 | 735 | \$61.46 | 8,100 | \$677.32 | \$738.78 |
| Aug-15 | 838 | \$70.07 | 9,000 | \$752.58 | \$822.65 |
| Sep-15 | 922 | \$77.10 | 17,400 | \$1,454.99 | \$1,532.09 |
| Oct-15 | 1,080 | \$90.31 | 18,000 | \$1,505.16 | \$1,595.47 |
| Nov-15 | 1,140 | \$95.33 | 27,600 | \$2,307.91 | \$2,403.24 |
| Dec-15 | 1,231 | \$102.94 | 40,800 | \$3,411.70 | \$3,514.63 |
| Jan-16 | 1,207 | \$100.93 | 53,100 | \$4,440.22 | \$4,541.15 |
| Feb-16 | 1,013 | \$84.71 | 62,100 | \$5,192.80 | \$5,277.51 |
| Mar-16 | 1,013 | \$84.71 | 44,700 | \$3,737.81 | \$3,822.52 |
| Apr-16 | 862 | \$72.08 | 37,500 | \$3,135.75 | \$3,207.83 |
| May-16 | 771 | \$64.47 | 20,700 | \$1,730.93 | \$1,795.41 |
| Jun-16 | 692 | \$57.87 | 13,500 | \$1,128.87 | \$1,186.74 |
| Total | 11,504 | \$961.96 | 352,500 | \$29,476.05 | \$30,438.01 |

**Harrison Utility Data Comparison
Baseline vs Second Performance Year (Continued)**

| Year 2 Contract Energy Rates | | | |
|------------------------------|---------------------------|---------------------------------|------------------------------------|
| Building | Electric Rate (\$/kWh) | Natural Gas Rate (\$/MCF) | Water & Sewer Rate (\$/kgal) |
| Harrison | \$0.0836 | N/A | N/A |

| Total Year 2 Consumption | |
|--------------------------|----------------|
| | Electric (kWh) |
| Total | 364,004 |
| Total, \$ | \$30,438.01 |

| Harrison Proposed Savings | | | | |
|----------------------------------|-----------------------|-------------------------|-----------------------|-------------------|
| Utility | Baseline Cons. | Proposed Savings | Proposed Cons. | Total Cost |
| Electric | 391,904 | 103,546 | 288,358 | \$24,112 |

| Harrison Adjusted Consumption | | | | |
|--------------------------------------|-----------------------------|-------------------------|-----------------------------|-------------------|
| Utility | Baseline Consumption | Achieved Savings | Adjusted Consumption | Total Cost |
| Electric | 391,904 | 110,800 | 281,104 | \$23,506 |

*Note - Adjustments are based upon utilization of IPMVP Option A.
The retrofit was isolated and Pre/Post Measurements were completed.

PERFORMANCE PERIOD OF
JULY 1, 2015 - JUNE 30, 2016

**BELMONT-HARRISON VOCATIONAL SCHOOL DISTRICT
ANNUAL MEASUREMENT AND VERIFICATION REPORT**

QUICK VIEW

- ⏏ Excellent project health
- ⏏ Verified savings exceed guaranteed dollar amounts for the second measurement year
- ⏏ Total overachieved savings throughout performance period to-date equates to \$13,504

KEY ACTION ITEMS

- ⏏ Sign and submit annual report to the state of Ohio

KEY DATES

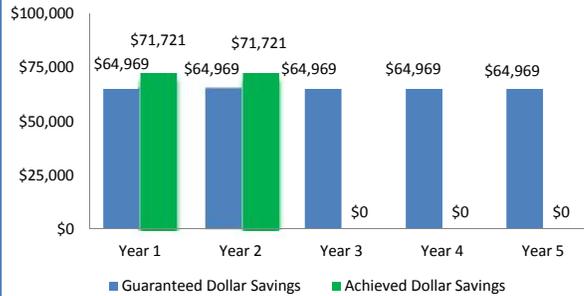
- ⏏ Construction completion July 2014
- ⏏ Second annual site visit performed September 20, 2016

PERFORMANCE PERIOD COSTING

| Year | Total Annual Cost |
|--------|-------------------|
| Year 1 | \$3,500 |
| Year 2 | \$3,623 |
| Year 3 | \$3,749 |

Grayed blocks denote future years.

Constellation NewEnergy, Inc.
24 Summit Park Drive
Suite 103
Pittsburgh, Pennsylvania
(412) 489-9425
www.constellation.com



October 31, 2016

State of Ohio

To whom it may concern,

Constellation NewEnergy, Inc. is pleased to present the enclosed annual Measurement & Verification report to the state of Ohio on behalf of Belmont-Harrison Vocational School District. Construction for this project was officially completed and accepted by the customer in July 2014. The enclosed report summarizes the savings achieved throughout the second year of operation.

Under the requirements of the Guaranteed Energy Savings Contract(GESC), Constellation has provided and installed the Energy Conservation Measures (ECMs) as proposed through the Investment Grade Audit (IGA) report and the Guaranteed Energy Savings Contract.

Since the projected energy savings for each ECM is dependent upon its design and performance, any variation to those parameters need to be documented. Changes to the original design may adversely affect the guaranteed energy savings.

The intent of the enclosed report is to identify, verify, and document the critical parameters for energy savings and establish their compliance with the approved designs set forth in the IGA and GESC documents for all Energy Conservation Measures involved.

We would be happy to arrange a convenient time to review this information with you. Should you have any questions about this report or any specific ECM, please contact me utilizing the information listed below.

Sincerely,

Performance Assurance Engineer
(412) 489-9434
adam.campbell@exeloncorp.com



UTILITY RATE DATA

The following table lists the current utility rates that are utilized in savings calculations to determine the annual savings achieved for measurement year one. These utility rates were derived upon the base utility rates and escalation rates as outlined in Schedule A and Schedule D, Exhibit 1 of the Guaranteed Energy Services Contract (GESC), respectively.

| Location | Electricity (\$/kWh) | Natural Gas (\$/MCF) | Water & Sewer (\$/kgal) |
|------------------------|----------------------|----------------------|-------------------------|
| Belmont Career Center | \$0.08827 | \$13.29552 | \$10.46271 |
| Harrison Career Center | \$0.08362 | - | \$5.84000 |

ENVIRONMENTAL IMPACT

By utilizing the electric and natural gas energy savings values contained in the enclosed M&V report, Constellation is able to calculate the positive annual environmental impact of the energy conservation measures implemented.



| Annual Electricity Saved | Annual Fuel Saved | | Annual Tons of CO ₂ Avoided |
|--------------------------|-------------------|---|--|
| 480,815 kWh | 806 MCF | = | 421 |

Avoiding 421 tons of CO₂ is equivalent to the following:

| | | |
|---|--------|--------------------------------|
|  | 884 | Barrels of oil consumed |
|  | 42,983 | Gallons of Gasoline |
|  | 40 | A Home's energy use for a year |
|  | 81 | Passenger Vehicles |

Source: <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

RECOMMENDATIONS

Based upon the observations while performing the annual measurement and verification requirements for Belmont-Harrison Vocational School District, Constellation would like to provide recommendations on a few aspects of the systems utilized, to help maximize the overall efficiency of the project.

| Energy Conservation Measure | Savings Indicator | Recommendation |
|--|---|--|
| Belmont Lighting Upgrade / Occupancy Sensor |  | Constellation recommends continuing to maintain the system at its current level for the lighting upgrades. Maximum achievable energy savings for this ECM are dependent upon proper maintenance of the lamps and fixtures. BHVSD is currently maintaining the ECM well. |
| Belmont Water Conservation |  | No recommendation. The equipment for this ECM remains installed and properly maintained. |
| Belmont Boiler Replacement |  | Constellation recommends continuing to maintain the boiler system at its current level. The boilers continue to be inspected annually and maintained properly as preventative maintenance procedures, which allows for sustainability of the maximum savings potential associated with this ECM. |
| Belmont ED Pack Replacement |  | No M&V associated with this ECM. |
| Belmont Air Compressor Retro-Commission |  | No M&V associated with this ECM. |
| Belmont Fridge/Freezer Air Cooled Condenser Conversion |  | No M&V associated with this ECM. |
| Belmont DHW System Replacement |  | No M&V associated with this ECM. |
| Harrison Lighting Upgrade / Occupancy Sensor |  | Constellation recommends continuing to maintain the system at its current level for the lighting upgrades. Maximum achievable energy savings for this ECM are dependent upon proper maintenance of the lamps and fixtures. BHVSD is currently maintaining the ECM well. |
| Harrison Air Compressor Retro-Commission |  | No M&V associated with this ECM. |



Constellation.[®]

An Exelon Company

Belmont-Harrison Vocational School District

**Annual Measurement and Verification Report
Year Two**

Submitted: October 31, 2016

Submitted to: Belmont-Harrison Vocational
School District
68090 Hammond Road
St. Clairsville, OH 43950

Prepared by: Constellation NewEnergy, Inc.
24 Summit Park Drive
Suite 103
Pittsburgh, PA 15275

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Introduction

Constellation NewEnergy, Inc. (CNE) is pleased to present this annual Measurement & Verification Report to the Belmont-Harrison Career Center.

Under the requirements of the guaranteed energy service agreement, Constellation has provided and installed the Energy Conservation Measures (ECMs) as proposed through the IGA report and the Guaranteed Energy Savings Contract.

Since the projected energy savings for each ECM is dependent upon its design and performance, any variation to those parameters need to be documented. Any changes to the original design may adversely affect the proposed energy savings.

The intent of this report is to identify, verify, and document the critical parameters for energy savings and establish their compliance with the approved designs set forth in the IGA Report for all of the ECMs involved.

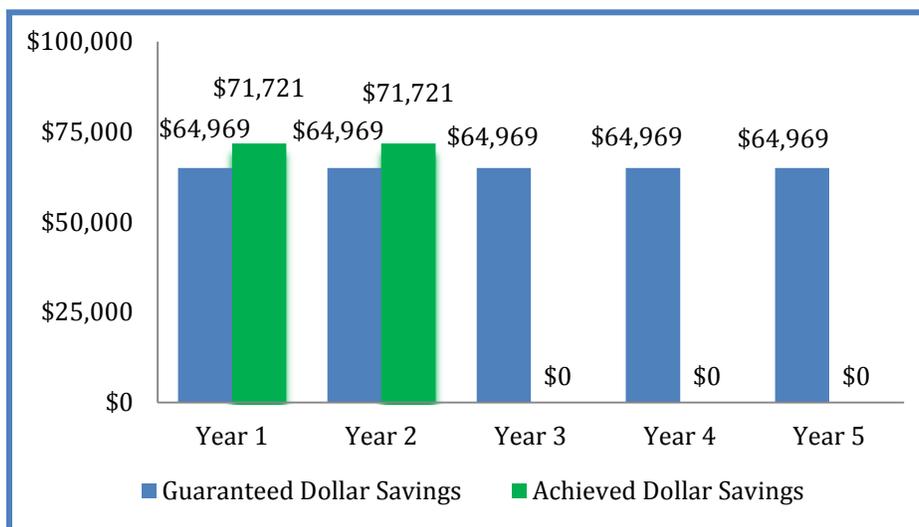
This report is structured such that the core topics and adjoining savings of the project are summarized in sections titled Guarantee Comparison, Savings Summary, and Measurement and Verification Findings. More detailed information about the annual measurement and verification results follow in the Supplemental Information section of the report.

Guarantee Comparison

The purpose of this section is to visualize the comparison between the actual achieved savings amount annually versus the guaranteed annual values, as specified in Schedule D, Exhibit 1 of the Guaranteed Energy Services Agreement (GESA).

Performance Year Two Annual Guaranteed vs. Achieved Savings

| Current Year | Projected | Guaranteed | Actual | Actual / Guaranteed |
|--------------|-----------|------------|----------|---------------------|
| Year Two | \$64,969 | \$64,969 | \$71,721 | 110% |



Savings Summary

Below are the savings summarized for the second year of the performance period that represent the total energy unit and dollar savings generated for each ECM.

Performance Year Two Annual Achieved Savings

| Energy Conservation Measure | Electric Energy (kWh) | Fuel Savings (MCF) | Water Savings (kGal) | Utility Cost Savings (\$) |
|---|-----------------------|--------------------|----------------------|---------------------------|
| ECM 1.0 – Belmont: Lighting Upgrade/Occupancy Sensors | 324,924 | 0 | 0 | \$28,681 |
| ECM 2.0 – Belmont: Water Conservation | 0 | 9 | 264 | \$2,882 |
| ECM 3.0 – Belmont: Boiler Replacement | 0 | 757 | 0 | \$10,065 |
| ECM 4.0 – Belmont: ED Pack Replacement | 21,663 | 0 | 0 | \$1,912 |
| ECM 5.0 – Belmont: Air Compressor Retro-Commission | 22,711 | 0 | 0 | \$2,005 |
| ECM 6.0 – Belmont: Fridge/Freezer Air Cooled Condenser Conversion | 717 | 0 | 202 | \$2,177 |
| ECM 7.0 – Belmont: DHW System Replacement | 0 | 40 | 0 | \$532 |
| ECM 8.0 – Harrison: Lighting Upgrade/Occupancy Sensors | 93,663 | 0 | 0 | \$7,832 |
| ECM 9.0 – Harrison: Air Compressor Retro-Commission | 17,137 | 0 | 0 | \$1,433 |
| Total | 480,815 | 806 | 465 | \$57,518 |
| | | | O&M Savings | \$14,203 <i>25%</i> |
| | | | Project Total | \$71,721 |

Measurement and Verification Findings

The following information provides the measurement and verification findings for the current measurement year, along with any CNE recommendations for capturing the greatest savings potential for each ECM implemented at the Belmont-Harrison Career Centers.

ECM 1.0: Belmont: Lighting Upgrade/Occupancy Sensors

Annual Measurement and Verification Plan

Savings for this ECM are based upon IPMVP Volume I, EVO 10000-1:2012, Option “A” (Retrofit Isolation: Key Parameter Measurement) where the retrofitted fixture circuits are isolated, wattages are measured, and the operating hours are estimated.

Savings from this ECM are directly related to the lighting retrofit and therefore the measurement boundary is drawn around the retrofitted fixtures and their corresponding circuits. A statistically determined sample size of the representative fixture wattages was measured during the baseline and the post installation periods. Upon completion of the measurements in the baseline and post installation phases, the measurements are utilized to recalculate the actual energy savings. These energy savings are confirmed annually by visiting the ECM and its components, to verify the fixtures remain in place and are being replaced with the equal or less wattage-consuming lamp/ballast combinations as needed.

Refer to the Post Installation Measurement and Verification report, published October 6, 2014, for equations and supporting data utilized to calculate the achieved savings for the measurement year.

Annual Findings

On September 20, 2016, a representative from Constellation NewEnergy, Inc. (CNE) inspected the lighting upgrades to ensure proper operation. Upon inspection it was determined that the interior lighting and light sensors remained installed and were operating as intended.

Additionally, the maintenance staff verified that Belmont-Harrison has sufficient inventory in the event of a lamp or ballast failure. In fact, it was noted that there have been so few failures that less than one full box of lamps in the replacement inventory was required since the implementation of this ECM.



Upgraded Lighting Fixtures Installed in Mechanical Room 123B at BCC



Upgraded Lighting Fixtures Shown in Hallway of BCC



Lamp Verification in Carpentry Shop near Water Closet

Every morning a walkthrough is performed by facilities personnel to check for burnouts, along with any other visible issues associated with the lighting, and very little are found. The same may be said for the associated occupancy sensors. Recently, there has been an issue with one specific sensor in the Belmont Career Center. Erb Electric, the installing sub-contractor, was said to be arriving on site September 21, 2016 to repair the issue.

With equipment remaining installed and operating as intended for ECM #1, the savings for the measurement year may be captured. The associated savings are summarized within the table below. Other than utility savings, the project generates additional operations and maintenance savings in the amount of \$14,203, as specified within the IGA and GESC.

| Year Two Annual Achieved Savings | | | | |
|--|-----------------------|------------|----------------------|----------------------|
| ECM 1 | Electric Energy (kWh) | Fuel (MCF) | Water & Sewer (kgal) | Utility Cost Savings |
| Lighting Upgrade/ Occupancy Sensors BCC | 324,924 | 0 | 0 | \$28,681 |

ECM 2.0: Belmont: Water Conservation

Annual Measurement and Verification Plan

The proposed M&V approach is based on IPMVP Volume I, EVO 10000-1:2012, Option “A” (Retrofit Isolation: Key Parameter Measurement) where the retrofitted water fixtures are isolated, flow rate is measured, and the usage/demographics are estimated. Savings from this ECM are directly related to the water conservation ECM, and therefore the measurement boundary is drawn around the water fixtures. A statistically determined sample size of the representative fixtures were measured during the baseline and the post installation periods. Upon completion of the measurements in the baseline and post installation phases, the measurements were utilized to recalculate the actual energy savings. These measures are visually inspected annually to verify that the Constellation-installed fixtures remain in place or are replaced with the same or better flowrate fixtures as needed.

Refer to the Post Installation Measurement and Verification report submitted October 6, 2014 for equations and supporting data utilized to calculate the achieved savings for the measurement year, as detailed in the Savings Summary section of this report.

Annual Findings

On September 20, 2016, a representative from CNE inspected the water fixture upgrades to the Belmont Career Center. These water fixtures remain installed and operating as intended. The maintenance staff verified that there were no current issues with the water fixtures within past performance period.

Flush valves on toilet and urinals, along with the faucet aerators for the sinks, all remain installed in locations spot-checked throughout the Belmont Career Center.



Toilet and Urinal Upgraded Flush Valves Remaining Installed

With equipment remaining installed and operating as intended for ECM #2, the savings for the measurement year may be captured. The associated savings are summarized within the table below.

| Year Two Annual Achieved Savings | | | | |
|----------------------------------|-----------------------|------------|----------------------|----------------------|
| ECM 2 | Electric Energy (kWh) | Fuel (MCF) | Water & Sewer (kgal) | Utility Cost Savings |
| Water Conservation BCC | 0 | 9 | 264 | \$2,882 |

ECM 3.0: Belmont: Boiler Replacement

Annual Measurement and Verification Plan

The proposed M&V approach is based on IPMVP Volume I, EVO 10000-1:2012, Option “A” (Retrofit Isolation: Key Parameter Measurement) where the retrofitted boiler(s) are isolated, combustion efficiency is measured, and the heating load is estimated. Savings from this ECM are directly related to the boiler retrofit and therefore the measurement boundary is drawn around the retrofitted boiler.

The baseline combustion efficiency of the existing boilers was measured before removal of pre-existing boilers during normal operating conditions. After completion of the retrofit, combustion efficiency tests were performed on the installed boilers during the post installation period under similar operating conditions that were in effect during the baseline measurement.

The baseline fuel consumption was estimated based on the building heating load. The value was mutually agreed upon by the Belmont-Harrison Vocational School District and CNE to be utilized within the savings calculations during the post-installation phase.

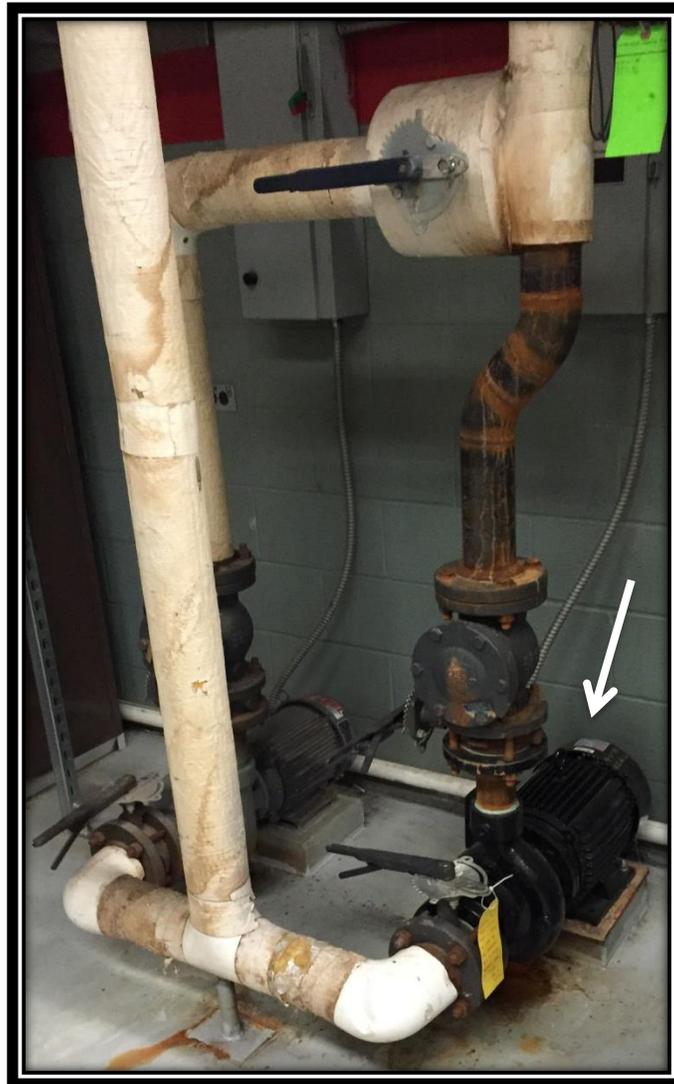
Refer to the Post Installation Measurement and Verification report, published on October 6, 2014, for equations and supporting data utilized to calculate the achieved savings for the current measurement year as detailed in the Savings Summary section of this report.

Annual Findings

On September 20, 2016, a representative from CNE inspected the installed boilers to confirm that they remain in place. The maintenance staff verified that there were no operational issues with the boiler(s) this past heating season; however, a pump motor supplying the hot water loop #1 was replaced during the first annual performance period. This does not affect the energy savings associated with the Boiler Replacement ECM.



Upgraded Boilers Installed for ECM#3 at Belmont Career Center



New HW-1 Circulator Pump Installed on April 11, 2014

In addition, a new pump motor was installed on Boiler #1, as shown in the following figure. All boilers are inspected annually by certified technicians. Boilers #1 through #4, including the domestic water boiler, were inspected and approved on November 30, 2015. Attached to each boiler is a signed approval tag once the boiler passes inspection.



Boiler #1 with New Pump Motor and Certificate of Inspection



Year 2 Boiler Certificate of Inspection

With the confirmation of continued proper operation of the installed boilers, this ECM captures the corresponding savings for the annual measurement period. The savings associated with this ECM are summarized within the table below.

| Year Two Annual Achieved Savings | | | | |
|----------------------------------|-----------------------|------------|----------------------|----------------------|
| ECM 3 | Electric Energy (kWh) | Fuel (MCF) | Water & Sewer (kgal) | Utility Cost Savings |
| Boiler Replacement BCC | 0 | 757 | 0 | \$10,065 |

ECM 4.0: Belmont: ED Pack Replacement

Annual Measurement and Verification Plan

There is no measurement and verification plan associated with this ECM as detailed in the GESC. Savings are calculated based on engineering calculations and assumptions. The energy savings model was updated with as-built nameplate information where appropriate to determine the annual energy savings. The energy savings model yielded 21,633 kWh in annual energy savings. These savings will be mutually agreed upon throughout the duration of the performance period and shall remain constant as long as the installed equipment is properly maintained and/or operated.

Refer to the Post Installation Measurement and Verification report submitted to Belmont-Harrison on October 6, 2014 for equations and supporting data utilized to calculate the achieved savings for the measurement year, as detailed in the Savings Summary section of this report.

Annual Findings

Annual savings associated with this ECM are summarized within the following table.

| ECM 4 | Year Two Annual Achieved Savings | | | |
|---------------------|----------------------------------|------------|----------------------|----------------------|
| | Electric Energy (kWh) | Fuel (MCF) | Water & Sewer (kgal) | Utility Cost Savings |
| ED Pack Replacement | 21,663 | 0 | 0 | \$1,912 |

ECM 5.0: Belmont: Air Compressor Retro-Commission

Annual Measurement and Verification Plan

There is no measurement and verification plan associated with this ECM as detailed in the GESC. Savings are calculated based on engineering calculations and assumptions. The energy savings model was updated with as-built nameplate information where appropriate to determine the annual energy savings. The energy savings model yielded 22,711 kWh in annual electric savings. These savings will be mutually agreed upon throughout the duration of the performance period and shall remain constant as long as the installed equipment is properly maintained and/or operated.

Refer to the Post Installation Measurement and Verification report published on October 6, 2014 for equations and supporting data utilized to calculate the achieved savings for the measurement year, as detailed in the Savings Summary section of this report.

Annual Findings

Annual savings associated with this ECM are summarized within the following table.

| ECM 5 | Year Two Annual Achieved Savings | | | |
|-------------------------------------|----------------------------------|------------|----------------------|----------------------|
| | Electric Energy (kWh) | Fuel (MCF) | Water & Sewer (kgal) | Utility Cost Savings |
| Air Compressor Retro-Commission BCC | 22,711 | 0 | 0 | \$2,005 |

ECM 6.0: Belmont: Fridge/Freezer Air-Cooled Condenser Conversion

Annual Measurement and Verification Plan

There is no measurement and verification plan associated with this ECM as detailed in the GESC. Savings are calculated based on engineering calculations and assumptions. The energy savings model was updated with as-built nameplate information where appropriate to determine the annual energy savings. The updated energy savings model yielded 717 kWh in annual electric savings and 202 kgal in annual water savings. These savings will be mutually agreed upon throughout the duration of the performance period and shall remain constant as long as the installed equipment is properly maintained and/or operated.

Refer to the Post Installation Measurement and Verification report dated October 6, 2014 for equations and supporting data utilized to calculate the achieved savings for the measurement year.

Annual Findings

Annual savings associated with this ECM are summarized within the following table.

| ECM 6 | Year Two Annual Achieved Savings | | | |
|--|----------------------------------|------------|----------------------|----------------------|
| | Electric Energy (kWh) | Fuel (MCF) | Water & Sewer (kgal) | Utility Cost Savings |
| Fridge/Freezer Air-Cooled Condenser Conversion | 717 | 0 | 202 | \$2,177 |

ECM 7.0: Belmont: DHW System Replacement

Annual Measurement and Verification Plan

There is no measurement and verification plan associated with this ECM as detailed in the GESC. Savings are calculated based on engineering calculations and assumptions. The energy savings model was updated with as-built nameplate information where appropriate to determine the annual energy savings. The updated energy savings model yielded 40 MCF in annual natural gas savings. These savings will be mutually agreed upon throughout the duration of the performance period and shall remain constant as long as the installed equipment is properly maintained and/or operated.

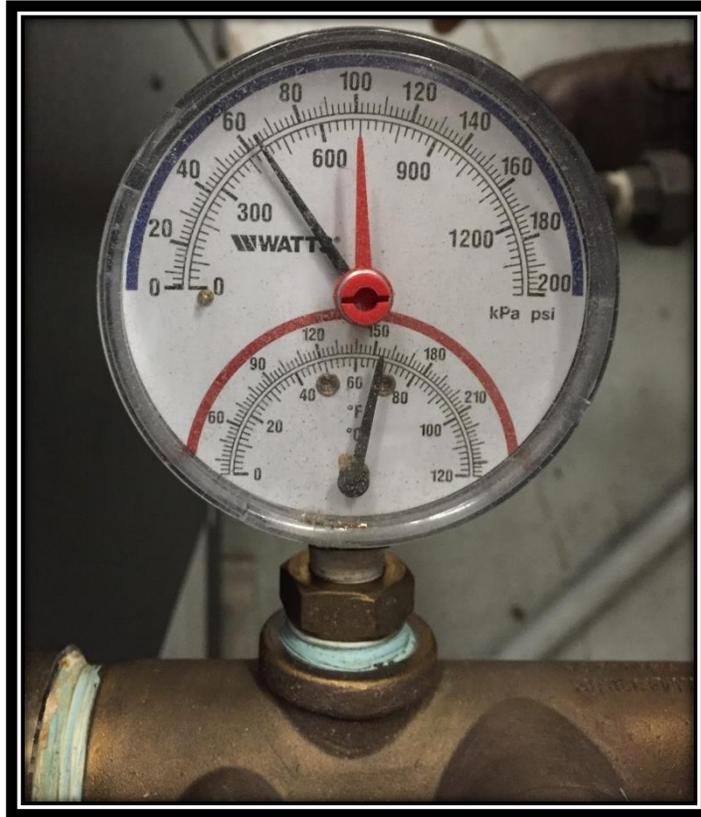
Refer to the Post Installation Measurement and Verification report for equations and supporting data utilized to calculate the achieved savings for the measurement year, as detailed in the Savings Summary section of this report.

Annual Findings

The new domestic hot water system remains installed at Belmont Career Center and operating flawlessly. During the site visit on September 20, 2016, it was visually inspected and the operational characteristics were discussed with maintenance personnel. The following snapshots were taken during the inspection.



BCC Domestic Hot Water System



Domestic Hot Water Supply Gauge

The savings captured for the measurement year associated with this ECM are summarized within the following table.

| ECM 7 | Year Two Annual Achieved Savings | | | |
|------------------------|----------------------------------|------------|----------------------|----------------------|
| | Electric Energy (kWh) | Fuel (MCF) | Water & Sewer (kgal) | Utility Cost Savings |
| DHW System Replacement | 0 | 40 | 0 | \$532 |

ECM 8.0: Harrison: Lighting Upgrade/Occupancy Sensors

Annual Measurement and Verification Plan

Savings for this ECM are based upon IPMVP Volume I, EVO 10000-1:2012, Option “A” (Retrofit Isolation: Key Parameter Measurement) where the retrofitted fixture circuits are isolated, wattages are measured, and the operating hours are estimated.

Savings from this ECM are directly related to the lighting retrofit and therefore the measurement boundary is drawn around the retrofitted fixtures and their corresponding circuits. A statistically determined sample size of the representative fixture wattages was measured during the baseline and the post installation periods. Upon completion of the measurements in the baseline and post installation phases, the measurements are utilized to recalculate the actual energy savings. These energy savings are confirmed annually by visiting the ECM and its components, to verify the fixtures remain in place and are being replaced with the equal or less wattage-consuming lamp/ballast combinations as needed.

Refer to the Post Installation Measurement and Verification report, published October 6, 2014, for equations and supporting data utilized to calculate the achieved savings for the measurement year.

Annual Findings

On September 20, 2016, a representative from Constellation NewEnergy, Inc. (CNE) inspected the lighting upgrades at the Harrison Career Center to ensure proper operation. Upon inspection it was determined that the interior lighting and light sensors remained installed and were operating as intended.

Additionally, the maintenance staff verified that the Belmont-Harrison facilities have sufficient inventory in the event of a lamp or ballast failure. The Career Centers rarely experience failures with the equipment installed under this ECM.



HCC Cafeteria/Hallway Upgraded Lighting



HCC Upgraded Exterior Lighting

With equipment remaining installed and operating as intended for this ECM, the savings for the measurement year may be captured. The associated savings are summarized within the table below.

| ECM 8 | Year Two Annual Achieved Savings | | | |
|--|----------------------------------|------------|----------------------|----------------------|
| | Electric Energy (kWh) | Fuel (MCF) | Water & Sewer (kgal) | Utility Cost Savings |
| Lighting Upgrade/ Occupancy Sensors HCC | 93,663 | 0 | 0 | \$7,832 |

ECM 9.0: Harrison: Air Compressor Retro-Commission

Annual Measurement and Verification Plan

There is no measurement and verification plan associated with this ECM as detailed in the GESC. Savings are calculated based upon engineering calculations and assumptions. The energy savings model was updated with as-built nameplate information where appropriate to determine the annual energy savings. The updated energy savings model yielded 17,137 kWh in annual electric savings. These savings are mutually agreed upon throughout the duration of the performance period and shall remain constant as long as the installed equipment is properly maintained and operated.

Refer to the Post Installation Measurement and Verification report for equations and supporting data utilized to calculate the achieved savings for the measurement year.

Annual Findings

The annual savings associated with this ECM are summarized within the following table.

| ECM 9 | Year Two Annual Achieved Savings | | | |
|-------------------------------------|----------------------------------|------------|----------------------|----------------------|
| | Electric Energy (kWh) | Fuel (MCF) | Water & Sewer (kgal) | Utility Cost Savings |
| Air Compressor Retro-Commission HCC | 17,137 | 0 | 0 | \$1,433 |

Conclusion

The cover letter of this report designates the total captured savings throughout measurement year two for the Belmont-Harrison Vocational School District, which exceed the guaranteed savings amount by \$6,752. Maintenance crews at the Belmont-Harrison Vocational School District continue to adequately address any issues regarding installed equipment through this project as they arise. As long as this effort remains, the district shall realize the guaranteed savings annually.

The lighting upgrade energy conservation measure installed at the Belmont Career Center, as well as the Harrison Career Center, delivers the majority of the energy savings. This ECM accounts for 64% of the overall savings for the project, before consideration of operation and maintenance savings. The boiler replacement ECM accounts for another 18% of the overall project savings. With the combination of the two ECMs, this equates to 82% of the overall project savings.

The lighting is inspected daily and the boilers receive at least annual inspections, conducted by a third party professional. Belmont-Harrison has performed phenomenally in regards to continuing preventative maintenance for the implemented ECMs thus far, which produces the greatest savings in return.

The standard State of Ohio Annual Savings Report follows. Second performance period meter data was attained by the Belmont-Harrison Vocational School District, analyzed, and results summarized within the corresponding updated utility table. Supporting data is included with the report.