

2017 Performance Contracting Annual Report

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Receiving Entities:

The Joint Legislative Commission on Governmental Operations
Department of State Treasurer Local Government Commission
The Joint Legislative Oversight Committee on Natural Resources & Economic Resources
Fiscal Research Division

Submitting Entity:

Department of Environmental Quality,
Utility Savings Initiative (USI)

2017 Performance Contracting Annual Report

Executive Summary:

North Carolina law allows state agencies and universities to utilize the Performance Contracting process to implement and finance major facility upgrades that save energy and reduce utility expenditures. A Performance Contract or Guaranteed Energy Savings Contract is a design-build procurement process with a single point of responsibility. An Energy Service Company (ESCO), pre-qualified by the state's Utility Savings Initiative, designs and proposes a package of utility cost reduction measures, installs or implements those cost reduction measures, provides measurement and verification of the savings annually for the duration of the contract, and guarantees the dollar savings of the cost reductions. The facility's owner pays for the package over time using the stream of revenue provided by the guaranteed energy reduction measures.

Since the legislative approved Performance Contracting for North Carolina state governmental units, construction has been completed on seventeen performance contracts. An overview of these contracts is presented in the table below.

| Summary: Performance Contracts with State Agencies and Universities | | |
|---|--|--------------------------|
| Number of Contracts | Status | Project Investment |
| 17 | Construction complete/ guarantee phase | \$214 Million |
| 2 | Construction phase | \$23 Million |
| 1 | Energy Services Agreement phase | \$30 Million (estimated) |
| 1 | Investment Grade Audit phase | TBD |
| 1 | Negotiating scope | TBD |
| 1 | Self-performed NCSU | \$6 Million |
| Total 23 | | \$273 Million |

The actual utility savings achieved to date by these projects exceeds that of \$81 million which will meet the debt retirement schedule, pay the annual fees, and exceeds the ESCO guaranteed amount by \$4.8 million. As noted in the table above, the 23 contracts, either in process or completed, represent an estimated project investment of approximately \$273 million. The current legislative cap on performance contracts is \$500 million.

In sum, projects that have been completed, or are in progress, have employed more than 2,300 people. The Utility Savings Initiative (USI) staff provides technical assistance and guidance to public facilities throughout the Performance Contracting process. USI provides technical reviews during contract development and approval processes and requests final project approval from the Council of State for state agency and university projects.

This report addresses only Performance Contracting activities in state agencies and universities. In North Carolina, energy saving performance contracting is also authorized for use in units of local government, community colleges, and K-12 schools.

The table below shows the status of all performance contracts with state governmental units in process or complete as of June 30, 2017.

| | | | | |
|---|----------------------|---------------|---------------------------|-----------|
| UNC Greensboro | | \$5,808,994 | Year 8 of 12 complete | Trane |
| Appalachian State University 1 | | \$5,430,596 | Year 6 of 12 complete | Pepco |
| UNC Wilmington 1 | | \$4,542,387 | Year 6 of 20 complete | Trane |
| NC State University 1 | | \$19,700,703 | Year 5 of 19 complete | Schnieder |
| NC State University 2 (Cogen) | | \$56,060,010 | Year 5 of 16 complete | Ameresco |
| NC Central University | | \$6,532,959 | Year 4 of 15 complete | Chevron |
| UNC Pembroke | | \$4,671,851 | Year 4 of 17 complete | Siemens |
| Elizabeth City State University | | \$5,397,647 | Year 4 of 17 complete | Honeywell |
| Winston Salem State University | | \$6,517,358 | Year 3 of 15 complete | Siemens |
| UNC Charlotte | | \$8,443,099 | Year 3 of 16 complete | Ameresco |
| NC A&T | | \$4,183,985 | Year 1 of 17 complete | Noresco |
| Fayetteville State University | | \$10,400,044 | Year 1 of 17 complete | Trane |
| UNC GA lighting | | \$26,575,725 | Year 1 of 7 complete | JCI |
| Department of Transportation | | \$6,703,727 | guarantee start 7/29/2016 | Trane |
| Department of Public Safety | | \$15,801,217 | Year 1 of 15 complete | Noresco |
| Appalachian State University 2 | | \$16,499,917 | Year 1 of 13 complete | Pepco |
| UNC Wilmington 2 | | \$6,846,011 | Under construction | Ameresco |
| DOT lighting | \$30,000,000 | | ESA phase | Trane |
| DEQ Reedy Creek Lab | TBD | | Negotiating scope | |
| NC School Science & Math | TBD | | 90% IGA | |
| Sub-Totals | \$30,000,000 | \$236,519,000 | | |
| Total potential investment | \$266,519,000 | | | |
| IGA = Investment Grade Audit | | | | |
| ESA = Energy Services Agreement | | | | |
| NCSU 3 Phytotron (self performed) | | \$6,200,000 | Year 2 of 15 complete | self |
| self performed projects included in report but not in cap | | | | |

Details for Approved Projects:

PC_ID 0-0001

| | | | | |
|-----------------|-------------------|-----------------|-------------------------|------------------------------|
| Government Unit | DOA Museum of Art | ESCO | Trane Comfort Solutions | |
| Bank | Sun Trust Bank | Rate | 3.6% | |
| | | Term | 12.00 | |
| Project \$ | \$4,966,763 | Financed \$ | \$4,966,763 | |
| | | Total Savings | \$5,000,000 | |
| Bldg_count | 2 | Bldg_sf | 164,670 | |
| | | Guarantee start | 2/1/2007 | |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 1 | \$578,389 | \$592,848 | \$14,459 | Industrial Extension Service |
| 2 | \$608,020 | \$620,707 | \$12,687 | SCO |
| 3 | \$580,338 | \$598,697 | \$18,359 | SCO |
| 4 | \$570,759 | \$599,242 | \$28,483 | SCO |
| 5 | \$566,624 | \$584,055 | \$17,431 | SCO |
| 6 | \$560,298 | \$582,224 | \$21,926 | SCO |
| 7 | \$575,944 | \$587,275 | \$11,331 | SCO |
| 8 | \$526,622 | \$549,732 | \$23,110 | |
| 9 | \$528,890 | \$554,866 | \$25,976 | |
| 10 | \$575,190 | \$608,059 | \$32,869 | |
| TOTAL | \$5,671,074 | \$5,877,705 | \$206,631 | |

PC_ID 0-0002

| | | | | |
|-----------------|-----------------|-----------------|-----------------------|--------------|
| Government Unit | DOA Downtown | ESCO | Pepco Energy Services | |
| Bank | Bank of America | Rate | 3.6% | |
| | | Term | 12.00 | |
| Project \$ | \$21,436,007 | Financed \$ | \$21,436,007 | |
| | | Total Savings | \$25,000,000 | |
| Bldg_count | 20 | Bldg_sf | 3,060,482 | |
| | | Guarantee start | 5/1/2008 | |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 1 | \$2,190,293 | \$2,238,191 | \$47,898 | EMC |
| 2 | \$2,250,527 | \$2,349,168 | \$98,641 | EMC |
| 3 | \$2,312,416 | \$2,348,275 | \$35,859 | EMC |
| 4 | \$2,376,008 | \$2,404,746 | \$28,738 | EMC |
| 5 | \$2,441,348 | \$2,462,902 | \$21,554 | EMC |
| 6 | \$2,508,485 | \$2,802,085 | \$293,600 | |
| 7 | \$2,577,468 | \$2,675,570 | \$98,102 | |
| 8 | \$2,648,349 | \$2,868,327 | \$219,978 | |
| TOTAL | \$19,304,894 | \$20,149,264 | \$844,370 | |

PC_ID 0-0003

Government Unit Department of Public Safety ESCO Noresco LLC
 Bank Bank of America Rate 2.5% Term 13.50
 Project \$ \$15,801,217 Financed \$ \$15,801,217 Total Savings \$22,254,155
 Bldg_count 83 Bldg_sf 820,897 Guarantee start 3/28/2017
 Year Guarantee \$ Actual \$ Difference Validated_by
 Data not available at time of report
 TOTAL

PC_ID 0-0004

Government Unit Department of Transportation ESCO Trane US
 Bank US Bancorp Rate 2.4% Term 16.00
 Project \$ \$6,703,727 Financed \$ \$6,703,727 Total Savings \$7,500,000
 Bldg_count 4 Bldg_sf 524,570 Guarantee start 7/29/2016
 Year Guarantee \$ Actual \$ Difference Validated_by
 Data not available at time of report
 TOTAL

PC_ID 0-0005

Government Unit Department of Transportation 2 ESCO Trsne US Inc.
 Bank Bank of America Rate 2.1% Term 15.00
 Project \$ \$33,836,721 Financed \$ \$32,303,412 Total Savings \$34,000,000
 Bldg_count Bldg_sf Guarantee start
 Year Guarantee \$ Actual \$ Difference Validated_by
 TOTAL

PC_ID 1-0001

Government Unit UNC Greensboro

ESCO Trane Comfort Solutions

Bank Bank of America

Rate 3.6%

Term 12.00

Project \$ \$5,808,994

Financed \$ \$5,808,994

Total Savings \$7,200,000

Bldg_count 6

Bldg_sf 446,000

Guarantee start 9/1/2008

| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
|-------|--------------|-------------|------------|----------------------------|
| 1 | \$548,474 | \$565,088 | \$16,614 | Engineering Economics Inc. |
| 2 | \$548,474 | \$557,632 | \$9,158 | Engineering Economics Inc. |
| 3 | \$548,474 | \$604,799 | \$56,325 | Engineering Economics Inc. |
| 4 | \$548,474 | \$597,590 | \$49,116 | Engineering Economics Inc. |
| 5 | \$548,474 | \$569,847 | \$21,373 | Engineering Economics Inc. |
| 6 | \$548,474 | \$549,916 | \$1,442 | Engineering Economics Inc. |
| 7 | \$759,239 | \$825,044 | \$65,805 | Engineering Economics Inc. |
| 8 | \$766,548 | \$826,083 | \$59,535 | Engineering Economics Inc. |
| TOTAL | \$4,816,631 | \$5,095,999 | \$279,368 | |

PC_ID 1-0002

Government Unit Appalachian State University 1

ESCO Pepco Energy Services

Bank Sun Trust Bank

Rate 5.1%

Term 12.00

Project \$ \$5,430,596

Financed \$ \$5,430,596

Total Savings \$7,000,000

Bldg_count 12

Bldg_sf 1,100,000

Guarantee start 3/31/2011

| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
|-------|--------------|-------------|------------|--------------|
| 1 | \$628,816 | \$652,803 | \$23,987 | Sud & Assoc |
| 2 | \$649,216 | \$656,509 | \$7,293 | Sud & Assoc |
| 3 | \$670,285 | \$682,262 | \$11,977 | Sud & Assoc |
| 4 | \$692,044 | \$723,002 | \$30,958 | Sud & Assoc |
| 5 | \$714,518 | \$742,694 | \$28,176 | |
| 6 | \$737,729 | \$763,088 | \$25,359 | |
| TOTAL | \$4,092,608 | \$4,220,358 | \$127,750 | |

PC_ID 1-0003

| | | | | | |
|-----------------|--------------------------------------|-------------|--------------|------------------------------|--------------|
| Government Unit | NC State University 1 | | ESCO | Schneider Electric Buildings | |
| Bank | BB&T | | Rate | 5.0% | |
| | | | Term | 19.00 | |
| Project \$ | \$19,700,703 | Financed \$ | \$19,700,703 | Total Savings | \$25,000,000 |
| Bldg_count | 13 | Bldg_sf | 1,619,574 | Guarantee start | 8/1/2012 |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by | |
| 1 | \$1,560,110 | \$1,638,479 | \$78,369 | Eaton corporation | |
| 2 | \$1,591,312 | \$1,830,812 | \$239,500 | Celtic Energy | |
| 3 | \$1,623,138 | \$1,765,568 | \$142,430 | Celtic Energy | |
| 4 | \$1,655,601 | \$1,900,514 | \$244,913 | Celtic Energy | |
| 5 | Data not available at time of report | | | | |
| TOTAL | \$6,430,161 | \$7,135,373 | \$705,212 | | |

PC_ID 1-0004

| | | | | | |
|-----------------|------------------|-------------|-------------|-------------------------|-------------|
| Government Unit | UNC Wilmington 1 | | ESCO | Trane Comfort Solutions | |
| Bank | BB&T | | Rate | 4.0% | |
| | | | Term | 20.00 | |
| Project \$ | \$4,542,387 | Financed \$ | \$4,542,387 | Total Savings | \$6,000,000 |
| Bldg_count | 10 | Bldg_sf | 285,501 | Guarantee start | 10/1/2011 |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by | |
| 1 | \$333,566 | \$343,620 | \$10,054 | Celtic Energy | |
| 2 | \$342,572 | \$358,080 | \$15,508 | Celtic Energy | |
| 3 | \$351,822 | \$358,473 | \$6,651 | Celtic Energy | |
| 4 | \$361,321 | \$358,569 | (\$2,752) | Celtic Energy | |
| 5 | \$371,077 | \$370,486 | (\$591) | Celtic Energy | |
| TOTAL | \$1,760,358 | \$1,789,228 | \$28,870 | | |

PC_ID 1-0005

| | | | | | |
|-----------------|--------------------------------------|-------------|-------------|-------------------------|-------------|
| Government Unit | NC Central University | | ESCO | OpTerra Energy Services | |
| Bank | Fifth Third Bank | | Rate | 3.1% | |
| | | | Term | 15.00 | |
| Project \$ | \$6,532,959 | Financed \$ | \$6,532,959 | Total Savings | \$7,500,000 |
| Bldg_count | 11 | Bldg_sf | 385,950 | Guarantee start | 4/1/2013 |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by | |
| 1 | \$576,924 | \$576,924 | \$0 | Sud & Associates | |
| 2 | \$589,432 | \$589,432 | \$0 | Sud & Associates | |
| 3 | \$602,219 | \$618,793 | \$16,574 | Sud & Associates | |
| 4 | Data not available at time of report | | | | |
| TOTAL | \$1,768,575 | \$1,785,149 | \$16,574 | | |

PC_ID 1-0006

| | | | | |
|-----------------|--------------------------------------|--------------------------|----------------------------|--------------|
| Government Unit | NC State University 2 | | ESCO Ameresco | |
| Bank | Bank of America | Rate 4.1% | Term 16.20 | |
| Project \$ | \$56,060,010 | Financed \$ \$56,060,010 | Total Savings \$60,000,000 | |
| Bldg_count | 2 | Bldg_sf 26,491 | Guarantee start 8/17/2012 | |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 1 | \$4,275,774 | \$5,342,935 | \$1,067,161 | Sebesta |
| 2 | \$4,588,550 | \$5,527,040 | \$938,490 | Sebesta |
| 3 | \$4,779,797 | \$5,030,111 | \$250,314 | Sebesta |
| 4 | \$4,970,490 | \$6,195,507 | \$1,225,017 | Sebesta |
| 5 | Data not available at time of report | | | |
| TOTAL | \$18,614,611 | \$22,095,593 | \$3,480,982 | |

PC_ID 1-0007

| | | | | |
|-----------------|--------------------------------------|-------------------------|---------------------------|--------------|
| Government Unit | UNC Pembroke | | ESCO Siemens Industry | |
| Bank | Siemens Public | Rate 3.9% | Term 17.00 | |
| Project \$ | \$4,671,851 | Financed \$ \$4,671,851 | Total Savings \$6,000,000 | |
| Bldg_count | 4 | Bldg_sf 304,810 | Guarantee start 6/1/2013 | |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 1 | \$380,308 | \$406,759 | \$26,451 | |
| 2 | \$387,914 | \$415,060 | \$27,146 | |
| 3 | \$395,672 | \$423,361 | \$27,689 | |
| 4 | Data not available at time of report | | | |
| TOTAL | \$1,163,894 | \$1,245,180 | \$81,286 | |

PC_ID 1-0008

| | | | | |
|-----------------|--------------------------------|-------------------------|---------------------------|--------------|
| Government Unit | Winston-Salem State University | | ESCO Siemens Industry | |
| Bank | Siemens Public | Rate 3.8% | Term 15.00 | |
| Project \$ | \$6,517,358 | Financed \$ \$6,517,358 | Total Savings \$7,500,000 | |
| Bldg_count | 10 | Bldg_sf 551,630 | Guarantee start 5/15/2014 | |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 1 | \$614,889 | \$676,412 | \$61,523 | Celtic |
| 2 | \$665,627 | | | |
| 3 | \$678,940 | | | |
| TOTAL | \$1,959,456 | \$676,412 | (\$1,283,044) | |

PC_ID 1-0009

| | | | | | |
|-----------------|--------------------------------------|-------------|-------------|-------------------------|-------------|
| Government Unit | Elizabeth City State University | | ESCO | Honeywell International | |
| Bank | Bank of America | Rate | 4.1% | Term | 17.00 |
| Project \$ | \$5,397,647 | Financed \$ | \$5,397,647 | Total Savings | \$6,500,000 |
| Bldg_count | 6 | Bldg_sf | 274,700 | Guarantee start | 12/10/2012 |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by | |
| 1 | \$436,768 | \$494,011 | \$57,243 | | |
| 2 | \$445,503 | \$505,053 | \$59,550 | | |
| 3 | \$454,413 | \$515,789 | \$61,376 | | |
| 4 | Data not available at time of report | | | | |
| TOTAL | \$1,336,684 | \$1,514,853 | \$178,169 | | |

PC_ID 1-0010

| | | | | | |
|-----------------|---------------|-------------|-------------|-----------------|--------------|
| Government Unit | UNC Charlotte | | ESCO | Ameresco | |
| Bank | Ameresco | Rate | 1.8% | Term | 15.75 |
| Project \$ | \$8,443,099 | Financed \$ | \$8,443,099 | Total Savings | \$16,000,000 |
| Bldg_count | 8 | Bldg_sf | 675,666 | Guarantee start | 4/23/2014 |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by | |
| 1 | \$667,589 | \$978,633 | \$311,044 | Celtic | |
| 2 | \$701,196 | \$774,356 | \$73,160 | Celtic | |
| 3 | \$705,014 | \$746,981 | \$41,967 | Celtic | |
| TOTAL | \$2,073,799 | \$2,499,970 | \$426,171 | | |

PC_ID 1-0011

| | | | | | |
|-----------------|--------------------------------|-------------|--------------|-----------------------|--------------|
| Government Unit | Appalachian State University 2 | | ESCO | Pepco Energy Services | |
| Bank | TD Equipment Finance | Rate | 2.0% | Term | 13.00 |
| Project \$ | \$16,499,917 | Financed \$ | \$16,499,917 | Total Savings | \$25,000,000 |
| Bldg_count | 23 | Bldg_sf | 1,800,000 | Guarantee start | 9/1/2015 |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by | |
| 1 | \$1,679,959 | \$1,845,979 | \$166,020 | Celtic | |
| TOTAL | \$1,679,959 | \$1,845,979 | \$166,020 | | |

PC_ID 1-0012

| | | | | | |
|-----------------|-------------------------------|-------------|--------------|-----------------|--------------|
| Government Unit | Fayetteville State University | | ESCO | Trane US | |
| Bank | Bank of America | Rate | 3.6% | Term | 17.00 |
| Project \$ | \$10,400,044 | Financed \$ | \$10,400,044 | Total Savings | \$20,000,000 |
| Bldg_count | 22 | Bldg_sf | 929,886 | Guarantee start | 4/1/2016 |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by | |
| 1 | \$941,504 | \$1,087,622 | \$146,118 | Jon Parsons | |
| TOTAL | \$941,504 | \$1,087,622 | \$146,118 | | |

PC_ID 1-0013

| | | | | |
|-----------------|--------------------------------------|-------------|-------------|---------------------------|
| Government Unit | NC Agricultural & Technical State | | ESCO | Noresco LLC |
| Bank | Bank of America | Rate | 3.7% | Term 17.25 |
| Project \$ | \$4,183,985 | Financed \$ | \$4,183,985 | Total Savings \$6,000,000 |
| Bldg_count | 17 | Bldg_sf | 1,068,379 | Guarantee start 12/9/2015 |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 1 | \$323,253 | \$329,357 | \$6,104 | |
| 2 | Data not available at time of report | | | |
| TOTAL | \$323,253 | \$329,357 | \$6,104 | |

PC_ID 1-0014

| | | | | |
|-----------------|--------------------------------|-------------|--------------|----------------------------|
| Government Unit | UNC General Administration | | ESCO | JCI |
| Bank | Banc of America Public Capital | Rate | 1.8% | Term 7.00 |
| Project \$ | \$26,575,725 | Financed \$ | \$26,575,725 | Total Savings \$29,208,802 |
| Bldg_count | 364 | Bldg_sf | 15,000,000 | Guarantee start 4/1/2016 |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 1 | \$3,923,923 | \$3,916,597 | (\$7,326) | NCSU Dr. Terry |
| TOTAL | \$3,923,923 | \$3,916,597 | (\$7,326) | |

PC_ID 1-0015

| | | | | |
|-----------------|----------------------------|--------------|-------------|---------------------------|
| Government Unit | UNC Wilmington 2 | | ESCO | Ameresco |
| Bank | PNC Equipment Finance, LLC | Rate | 3.4% | Term 16.00 |
| Project \$ | \$6,846,011 | Financed \$ | \$6,846,011 | Total Savings \$6,846,011 |
| Bldg_count | 19 | Bldg_sf | 933,000 | Guarantee start |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 0 | \$119,673 | \$117,066 | (\$2,607) | Celtic Energy |
| 1 | \$577,484 | | | |
| TOTAL | \$697,157 | \$117,066 | (\$580,091) | |
| REPORT TOTAL | \$76,558,541 | \$81,381,705 | \$4,823,164 | |