North Carolina Department of Environmental Quality

Pat McCrory Governor Donald R. van der Vaart Secretary

January 7, 2016

MEMORANDUM

TO: JOINT LEGISLATIVE COMMISSION ON GOVERNMENTAL OPERATIONS

The Honorable Tim Moore, Co-Chair The Honorable Phil Berger, Co-Chair

DEPARTMENT OF STATE TREASURER LOCAL GOVERNMENT COMMISSION

Treasurer Janet Cowell, Chairman

FROM: Matthew Dockham, Director of Legislative Affairs

SUBJECT: Performance Contracting Annual Report

DATE: January 7, 2016

Pursuant to G.S. 143-64.17H, the State Energy Office shall compile the information for each fiscal year and report it to the Joint Legislative Commission on Governmental Operations and to the Local Government Commission annually. Please consider the attached as the formal submission this report.

If you have any questions or need additional information, please contact me by phone at (919) 707-8618 or via e-mail at matthew.dockham@ncdenr.gov.

cc: Ted Bush, Director, DEACS, NCDEQ
Jenny Kelvington, Senior Energy Policy Advisor, NCDEQ
Donald van der Vaart, Secretary, NCDEQ
State Construction Office, NCDOA

recycled paper

2015 Performance Contracting Annual Report

Citation of Law or Resolution: GS: 143-64.17H

Section Number:

Receiving Entities:

The Joint Legislative Commission on Governmental Operations Department of State Treasurer Local Government Commission

Submitting Entity:

Department of Environment and Natural Resources, Division of Environmental Assistance and Customer Service Utility Savings Initiative (USI)

2015 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 which 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 legislative approval of Performance Contracting for North Carolina state governmental units, construction has been completed on twelve performance contracts. An overview of these contracts is presented in the below table.

| Summary: Performance Contracts with State Agencies and Universities | | | |
|---|--|--------------------------|--|
| Number of Contracts | Status | Project Investment | |
| 12 | Construction complete/ guarantee phase | \$150 Million | |
| 6 | Construction phase | \$80 Million | |
| 2 | Investment grade audit phase | \$44 Million (estimated) | |
| 2 | RFP selection process phase | TBD | |
| Total 22 | | \$274 Million | |

The actual utility savings to date achieved by these projects is greater than \$47 million which will meet the debt retirement schedule, pay the annual fees and have exceeded the ESCO guaranteed amount by \$3.8 million. As noted in the table above the 22 contracts, in process or complete, represent an estimated project investment of just less than \$274 million. The current legislative cap on performance contracts is \$500 million.

The projects that completed construction or are in construction now have provided employment for in excess of 2,000 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 process and requests final project approval from the Council of State for agency and university projects.

The table below shows the status of all performance contracts with state governmental units in process and complete as of June 30, 2015.

| Sui | mmary of All St | ate Performa | ance Contracts | |
|---------------------------------|----------------------|----------------------|---------------------------|-----------|
| Agency | Estimated Project \$ | Actual Project \$ | Project Status | ESCO |
| DOA Museum of Art | · | \$4,966,763 | Year 8 of 12 complete | Trane |
| | | | | |
| DOA Downtown Complex | | \$21,436,007 | Year 7 of 12 complete | Pepco |
| | | | | |
| UNC Greensboro | | \$5,808,994 | Year 6 of 12 complete | Trane |
| | | | | |
| Appalachian State University | | | Year 4 of 12 complete | Pepco |
| UNC Wilmington | | \$4,542,387 | Year 4 of 20 complete | Trane |
| | | | | |
| NC State University | | | Year 3 of 19 complete | Schnieder |
| NC State University (Cogen) | | | Year 3 of 16 complete | Ameresco |
| NC Central University | | | Year 2 of 15 complete | Chevron |
| UNC Pembroke | | | Year 2 of 17 complete | Siemens |
| Elizabeth City State University | | \$5,397,647 | Year 2 of 17 complete | Honeywell |
| | | | | |
| Winston Salem State University | | | Year 1 of 15 complete | Siemens |
| UNC Charlotte | | \$8,443,099 | Year 1 of 16 complete | Ameresco |
| | | | | |
| Department of Public Safety | | | Construction 99% complete | Noresco |
| Appalachian State University 2 | | | Construction 90% complete | Pepco |
| Depatment of Transportation | | | Construction 99% complete | Trane |
| Fayetteville State University | | | Construction90% complete | Trane |
| NC A&T | | | Construction 90% complete | Noresco |
| UNC GA lighting | | \$26,575,725 | Construction 60% complete | JCI |
| | | | | |
| UNC Wilmington 2 | \$13,927,408 | | IGA in progress | Ameresco |
| DOT lighting | \$30,000,000 | | IGA in progress | Trane |
| DEQ Reedy Creek Lab | TBD | | RFP in progress | |
| NC Ports Authority | TBD | | RFP in progress | |
| 0.1.7.1.1 | 0.40.007.400 | #000 070 000 | | |
| Sub-Totals | \$43,927,408 | \$229,672,989 | <u> </u> | |
| Total potential investment | \$273,600,397 | | | |
| IGA = Investment Grade Audit | | | | |
| ESA = Energy Services Agreement | | | | |

Details for Approved Projects:

| | | | | PC ID 0-0001 |
|--------------------------|-------------------------|------------------------|-----------------------|---|
| Government Unit | DOA Museum of Art | | ESCO Trane C | omfort Solutions |
| Bank Sun Trus | | Rate 3.6% | Term 12.00 | |
| Project \$ \$4,96 | | \$ \$4,966,763 | Total Savings \$5,0 | 00 000 |
| Bldg_count 2 | Bldg_sf 164,67 0 | | art 2/1/2007 | 00,000 |
| Year | Guarantee \$ | | Difference | Validated by |
| rear 1 | \$578,389 | Actual \$ \$592,848 | \$14,459 | Validated_by Industrial Extension Service |
| 2 | \$608,020 | \$620,707 | \$14,459 \$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 | 366 |
| TOTAL | | \$4,714,780 | \$147,786 | |
| | φ 1,500,55 1 | ψ 1,7 ± 1,7 00 | Ψ117,700 | |
| | | | | PC_ID 0-0002 |
| Government Unit | DOA Downtown | | ESCO Pepco E | nergy Services |
| Bank Bank of | America | Rate 3.6% | Term 12.00 | |
| Project \$ \$21,4 | 36,007 Financed | \$ \$21,436,007 | Total Savings \$25, | 000.000 |
| Bldg_count 20 | Bldg_sf 3,060,4 | | art 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 | |
| TOTAL | \$16,656,545 | \$17,280,937 | \$624,392 | |
| | | | | PC_ID 0-0003 |
| Government Unit | Department of Public | Safety | ESCO Noresco | _ |
| | America | Rate 2.5% | Term 13.50 | , |
| | | | | 254.455 |
| | | \$ \$15,801,217 | Total Savings \$22, | |
| Bldg_count 83 | Bldg_sf 820,89 7 | Guarante | e start - When constr | uction complete |

Construction 95% complete

PC_ID 0-0004

ASU

Government Unit Department of Transportation ESCO Trane US
Bank US Bancorp Rate 2.4% Term 16.00

3

TOTAL

\$670,285

\$692,044

\$2,640,361

Project \$ \$6,703,727 Financed \$ \$6,703,727 Total Savings \$7,500,000

Bldg_count 4 Bldg_sf 524,570 Guarantee start - When construction complete

Construction 99% complete

| | | | | PC_ID 1-0001 |
|------------------|----------------|-------------------------|------------------------------|----------------------------|
| Government Unit | UNC Greensbo | oro | ESCO TI | rane Comfort Solutions |
| Bank Bank c | of America | Rate | 3.6% Term 1 | 12.00 |
| Project \$ \$5,8 | 808,994 | Financed \$ \$5,808,994 | Total Saving | \$ \$7,200,000 |
| Bldg_count 6 | Bldg_sf | 446,000 Guar | rantee 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 | |
| ТОТ | AL \$3,290,844 | \$3,444,872 | \$154,028 | |
| | | | | PC_ID 1-0002 |
| Government Unit | Appalachian S | tate University 1 | ESCO P | epco Energy Services |
| Bank Sun Tr | ust Bank | Rate | 5.1% Term 1 | 12.00 |
| Project \$ \$5,4 | 130,596 | Financed \$ \$5,430,596 | Total Saving | s \$7,000,000 |
| Bldg_count 12 | Bldg_sf | 1,100,000 Guar | rantee start 3/31/2011 | |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 1 | \$628,816 | \$652,803 | \$23,987 | ASU |
| 2 | \$649,216 | \$656,509 | \$7,293 | ASU |

\$682,262

\$723,002

\$2,714,576

\$11,977

\$30,958

\$74,215

PC_ID 1-0003

| | | | | PC_ID 1-0003 |
|--------------------|---------------------------|------------------|-----------------------|----------------------|
| Government Unit | NC State University 1 | | ESCO Schneider | · Electric Buildings |
| Bank BB&T | | Rate 5.0% | Term 19.00 | |
| Project \$ \$19,70 | 0,703 Financed | \$ \$19,700,703 | Total Savings \$25,00 | 0,000 |
| Bldg_count 13 | Bldg_sf 1,619, 5 | Guarantee s | 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 | Data not due at time of r | eport | | |
| TOTAL | \$3,151,422 | \$3,469,291 | \$317,869 | |
| | | | | PC_ID 1-0004 |
| Government Unit | UNC Wilmington 1 | | ESCO Trane Cor | nfort Solutions |
| Bank BB&T | Ü | Rate 4.0% | Term 20.00 | |
| Project \$ \$4,542 | ,387 Financed | \$ \$4,542,387 | Total Savings \$6,000 | ,000 |
| Bldg_count 10 | Bldg_sf 285,50 | 1 Guarantee s | 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 | |
| TOTAL | \$1,027,960 | \$1,060,173 | \$32,213 | |
| | | | | PC_ID 1-0005 |
| Government Unit | NC Central University | | ESCO OpTerra E | nergy Services |
| Bank Fifth Third | d 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 385,95 | O Guarantee s | start 4/1/2013 | |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 1 | \$576,924 | \$576,924 | \$0 | |
| 2 | \$589,432 | \$590,355 | \$923 | |
| TOTAL | \$1,166,356 | \$1,167,279 | \$923 | |
| | | | | |

PC_ID 1-0006

| | | | | _ |
|--------------------|---------------------------------------|------------------------|------------------------|---------------------|
| Government Unit | NC State University 2 | | ESCO Ameresco | |
| Bank of A | merica | Rate 4.1% | Term 16.20 | |
| Project \$ \$56.06 | 0.010 Financed | \$ \$56.060.010 | Total Savings \$60,00 | 0.000 |
| | Bldg_sf 26,491 | | | -, |
| | Guarantee \$ | | | Validated_by |
| 1 | · · · · · · · · · · · · · · · · · · · | \$5,342,935 | | Sebesta |
| 2 | \$4,588,550 | | \$938,490 | Sebesta |
| | Data no due at time of rep | | ψ300, 130 | 200000 |
| TOTAL | • | | \$2,005,651 | |
| | , , , | . , , | , , | |
| | | | | PC_ID 1-0007 |
| Government Unit | UNC Pembroke | | ESCO Siemens Ir | ndustry |
| Bank Siemens | Public | Rate 3.9% | Term 17.00 | |
| Project \$ \$4,671 | ,851 Financed | \$ \$4,671,851 | Total Savings \$6,000 | ,000 |
| | Bldg_sf 304,81 0 | | | • |
| | | | Difference | Validated by |
| 1 | · | \$400,090 | | |
| 2 | Data not available at time | | | |
| TOTAL | \$380,308 | \$400,090 | \$19,782 | |
| | | | | |
| | | | | PC_ID 1-0008 |
| | | | ESCO Siemens Ir | ndustry |
| 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 551,63 0 | Guarantee s | start 5/15/2014 | |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| 1 | Data not available at time | of report | | |
| TOTAL | | | | |
| | | | | DC ID 1 0000 |
| | | .t | ssee Hanainial | PC_ID 1-0009 |
| | Elizabeth City State Ur | • | ESCO Honeywel | i international |
| Bank of A | imerica | Rate 4.1% | Term 17.00 | |
| Project \$ \$5,397 | ,647 Financed | \$ \$5,397,647 | Total Savings \$6,500 | ,000 |
| DI | Bldg_sf 274,70 0 | Guarantee s | start 12/10/2012 | |
| Bldg_count 6 | | | | \ |
| Year | Guarantee \$ | Actual \$ | Difference | Validated_by |
| | Guarantee \$ \$436,768 | Actual \$ \$494,011 | Difference \$57,243 | validated_by |
| Year 1 2 | \$436,768 \$445,503 | \$494,011 \$505,053 | \$57,243 \$59,550 | validated_by |
| Year 1 | \$436,768 | \$494,011 | \$57,243 | validated_by |

PC ID 1-0010

Government Unit **UNC Charlotte**

ESCO Ameresco Bank Ameresco Rate 1.8% Term 15.75

Total Savings \$16,000,000 Project \$ \$8,443,099 Financed \$ \$8,443,099

Guarantee start 4/23/2014 Bldg_count 8 Bldg sf **675,666**

Year Guarantee \$ Actual \$ Difference Validated by \$667,589 \$311,044 \$978,633 TOTAL \$667,589 \$978,633 \$311,044

PC ID 1-0011

Government Unit Appalachian State University 2 **ESCO Pepco Energy Services**

Bank TD Equipment Finance Rate 2.0% Term 13.00

Financed \$ \$16,499,917 Project \$ \$16,499,917 Total Savings \$25,000,000

Bldg sf **1,800,000** Guarantee start - When construction complete Bldg count 23

Construction 99% complete

PC ID 1-0012

Fayetteville State University ESCO Trane US Government Unit Bank of America Term 17.00 Bank Rate 3.6%

Proiect \$ \$10,400,044 Financed \$ \$10,400,044 Total Savings \$20,000,000

Bldg count 22 Bldg sf **929,886** Guarantee start - When construction complete

Construction 98% complete

PC_ID 1-0013

Government Unit NC Agricultural & Technical State **ESCO Noresco LLC**

Rate **3.7%** Bank of America Term 17.25 Bank

\$4,183,985 Financed \$ \$4,183,985 Total Savings \$6,000,000 Project \$

Bldg count 17 Bldg sf **1,068,379** Guarantee start - When construction complete

Construction 95% complete

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 Bldg_sf 15,000,000 Guarantee start - When construction complete

Construction 81% complete

Guarantee \$ Actual \$ Difference REPORT TOTAL \$43,294,974 \$47,099,670 \$3,804,696

Pursuant to G.S. 143-64.17L. North Carolina State University is permitted "to implement an energy conservation measure without entering into a guaranteed energy savings contract". G.S. 143-64-17H requires the status of these projects to be included in this report.

PC_ID 1-0015

Government Unit NC State University 3 ESCO self

Bank Rate 4.5% Term 15.00

Project \$ \$6,200,000 Financed \$ \$6,200,000 Total Savings \$6,200,000

Bldg_count 1 Bldg_sf Guarantee start 10/1/2014

Year Guarantee \$ Actual \$ Difference Validated_by

Project reconciliation not due at the time of this report