

2021 Guaranteed Energy Savings Contracts Annual Report

A Report to the
Joint Legislative Oversight Committee on
Agriculture and Natural and Economic Resources;
Fiscal Research Division; and
Local Government Commission

Pursuant to §143-64.17H



December 1, 2021

Prepared by:

North Carolina Department of Environmental Quality
State Energy Office
Utility Savings Initiative

(This page intentionally left blank)

Preface:

This report contains the Department of Environmental Quality's annual status update to the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources; Fiscal Research Division; and Local Government Commission for guaranteed energy savings contracts pursuant to G.S. §143-64.17H. As required, this report contains information pertaining to Guaranteed Energy Savings Contracts that are executed for state-owned buildings. The contracts evaluate, recommend, or implement energy conservation measures that result in guaranteed monetary savings exceeding the costs of designing, installing, repairing, or replacing equipment.

Table of Contents

I. Executive Summary.....	1
II. Purpose & Background	2
A. Roles and Responsibilities of Key Entities	3
III. Annual Reporting Requirements	5
A. G.S. §143-64.17G, <i>Report on guaranteed energy savings contracts entered into by local governmental units.</i>	5
B. G.S. §143-64.17H, <i>Report on guaranteed energy savings contracts entered into by State governmental units.</i>	5
IV. Program Effectiveness Update	9
V. Local Governmental GESC Update.....	11

List of Tables

Table 1. Roles and Responsibilities for Key Entities	3
Table 2. GESC Summary of Terms and Reporting Status of Current Projects	7
Table 3. GESC Summary of Terms and Reporting Status of Completed Projects.....	8

List of Acronyms

Acronym	Definition
DEQ	Department of Environmental Quality
DOA	Department of Administration
DNCR	Department of Natural and Cultural Resources
DPS	Department of Public Safety
ECM	Energy Conservation Measure
EO80	Executive Order Number 80
ePX	eProject Express
ESA	Energy Service Agreement
ESC	NC Chapter of the Energy Services Coalition
ESCO	Energy Services Company
G.S.	North Carolina General Statute
GESC	Guaranteed Energy Savings Contract
IAQ	Indoor Air Quality
IGA	Investment Grade Audit
LED	Light Emitting Diode
LGC	Local Government Commission
M&V	Measurement and Verification
NC	North Carolina
NCAC	North Carolina Administrative Code
OSBM	Office of State Budget and Management
RFP	Request for Proposal
SCO	State Construction Office
SEO	State Energy Office
UNC	University of North Carolina
USI	Utility Savings Initiative

Definitions

Qualified Provider means a person or business experienced in the design, implementation, and installation of energy conservation measures who has been prequalified by the State Energy Office according to the prequalification criteria established under the Department of Administration rules contained in North Carolina Administrative Code (NCAC), Title 01, Subchapter 41B, *Guaranteed Energy Savings Contracts*.

Qualified Reviewer means an architect or engineer who is (i) licensed in this state and (ii) experienced in the design, implementation, and installation of energy efficiency measures.

List of Appendices

- Appendix A: Guaranteed Energy Savings Contract Process
- Appendix B: General Statute Chapter 143, Article 3B, *Conservation of Energy, Water, and Other Utilities in Government Facilities.*
- Appendix C: North Carolina Administrative Code, Title 01, Subchapter 41B, *Guaranteed Energy Savings Contracts*
- Appendix D: General Statute Chapter 142, Article 8, *State Energy Conservation Finance Act*
- Appendix E: Executive Order Number 80, *North Carolina's Commitment to Address Climate Change and Transition to a Clean Energy Economy*
- Appendix F: List of Recertified Qualified Providers in North Carolina

I. Executive Summary

Since 2002, General Statute (G.S.) §143-64 allows for state agencies and universities to utilize the Guaranteed Energy Savings Contract (GESC) process to implement and to finance major facility upgrades that reduce utility consumption and costs. Under the law, energy savings resulting from the performance of the contract must equal or exceed the total cost of the contract. Furthermore, the contracts are not to exceed a term of 20 years from the date of the installation and acceptance by the state governmental unit (i.e., state agencies and the University of North Carolina (UNC) System). This legislative authority has resulted in 23 total GESCs executed between governmental agencies and private energy service providers since 2005. Of those, three were successfully completed between FY2019 to FY2021 and exceeded the total guaranteed project savings by over \$1.90 million. The remaining 20 projects are in progress and will represent approximately \$409 million in avoided utility expenditures over the term of their contracts. During the first quarter of FY2021-22, two separate GESCs were initiated with the Department of Natural and Cultural Resources and the Department of Public Safety that are in the “request for proposal” (RFP) phase.

State governmental units with executed GESCs are required to report annual summaries of guaranteed savings to the Department of Environmental Quality (DEQ), State Energy Office (SEO). For the 2021 calendar year, data for all 23 projects were reported by state governmental units in accordance with G.S. §143-64.17H. The SEO estimates that of the projected \$409 million in avoided utility expenses for currently executed GESCs,¹ over \$158 million was saved to date. Moreover, approximately 98% of the savings were verified by third-party reviewers. The SEO continues to engage with participating entities and Qualified Providers to facilitate reporting and to ensure independent verifications by third-party reviewers are completed as required by law.

To date, performance contracts within state-owned buildings have improved less than 16% of all state-owned square footage within 681 buildings. This highlights that there is a significant amount of state-owned square footage that could reduce utility consumption and costs through GESCs. The three completed projects above achieved almost \$2 million dollars above guaranteed savings and current projects have totaled over \$21 million in above guaranteed savings to date. Given this demonstrated success, performance contracting should garner increased attention as a cost-effective method for driving energy efficiency, and the SEO continues to provide education about the GESC process and promotes their use for improving energy efficiency within state-owned buildings.

New GESCs were most prevalent in North Carolina’s public schools (K-12) during 2021. This is most likely due to the amount of infrastructure upgrades needed as compared to the total funding provided for those schools. In addition, these schools are typically the largest utility consumers within local governments. Currently, four K-12 schools are completing construction and moving into the first year of the guarantee. Two additional K-12 schools are in the Investment Grade Audit (IGA) phase and will proceed to the Local Government Commission (LGC) for review and approval by the first quarter of 2022. For these six projects, which are mostly located in economically distressed counties², the total estimated savings is expected to be \$44 million dollars. This emphasizes the importance of GESCs since they reduce the energy burden for low-income communities while supporting local contractors and businesses.

¹ Excludes one project in the first year of the guarantee.

² The North Carolina Department of Commerce provides annual county rankings (Tiers 1, 2, or 3) based on economic prosperity. <https://www.nccommerce.com/grants-incentives/county-distress-rankings-tiers>

The coronavirus disease (COVID-19) has affected the GESC process to some extent since 2020. The pandemic has slowed the education and outreach that is performed by the Energy Service Companies (ESCOs) and Utility Savings Initiative (USI) by severely limiting onsite meetings and interactions with facility staff. Overall, there continues to be limited travel and site visit restrictions as the pandemic lingers for both the USI team and the ESCOs. Despite challenges during these unprecedented times, state agencies initiated new GESCs in the response to Governor Cooper's Executive Order No. 80 (EO80) energy reduction goals for state-owned buildings. The SEO anticipates that GESC activity will continue for all governmental units through the assistance and partnership between multiple state and local government organizations and service providers in response to increased interest in energy efficiency.

II. Purpose & Background

In 2002, North Carolina (NC) codified in G.S. §143-64.17 allowed for all local and state governmental units, including state agencies and universities, to utilize the GESC process to implement and to finance major facility upgrades which save energy and reduce utility expenditures. A GESC is a design-build procurement process with a single point of responsibility held by an ESCO. ESCOs are prequalified by the SEO under the Department of Administration (DOA) rules contained in North Carolina Administrative Code (NCAC), Title 01, Subchapter 41B, *Guaranteed Energy Savings Contracts*. Based on the rules in Subchapter 41B, an ESCO, in collaboration with the governmental unit, works to design and to propose a package of energy conservation measures (ECMs), installs the selected ECMs, provides measurement and verification (M&V) of the annual savings for the duration of the contract, and guarantees the dollar savings of the energy savings. Utility budget savings resulting from the implementation of the guaranteed ECMs provide repayment of the multi-year loans executed by governmental units to finance the energy upgrades.

State governmental units conduct open solicitations for proposals and establish the final contract terms with ESCOs. Once the contracted ECM projects have been implemented, ESCOs are further required to provide annual reconciliation statements based on measurement and verification of actual energy savings. These reconciliation statements must be submitted annually within 60 days of the annual project acceptance anniversary. State governmental units are then required to engage a qualified third-party reviewer to verify and report the ESCO calculations prior to sending a summary to the SEO along with the third-party review documents. This required annual report is based on annual savings guaranteed in the Energy Service Agreement (ESA) between the state governmental unit and the ESCO prior to construction and is verified in the post-implementation summary reports.

The SEO staff provides technical assistance and guidance to governmental units throughout the GESC process. In addition, the SEO conducts reviews during the contract development, approval process, and construction phases of each project. These reviews include recommendations to the Council of State, the Department of State Treasurer, and the Office of State Budget and Management (OSBM) for GESCs being considered by agencies and universities. For GESC projects undertaken by local governmental units, these reviews include recommendations to local school boards and county commissioners, then finally to the Local Government Commission (LGC), who is the final approving authority for all local government GESCs. SEO staff continue to provide support and technical assistance for all local and state governmental units and ESCOs throughout the terms of each agreement. This guidance is designed to streamline the GESC process to identify and resolve issues prior to the approving authorities receiving a proposed project.

A. Roles and Responsibilities of Key Entities

Table 1 provides a detailed breakdown of responsibilities that entities involved with GESC are required to perform throughout the process with reference to the corresponding legislation or rule. Appendices B, C, and D provide text corresponding to the general statutes and DOA regulations cited in the table.

Table 1. Roles and Responsibilities for Key Entities

Entity	Responsibility	Reference
SEO	Review Request for Proposal (RFP), proposal, cost benefit analysis and other documents prior to award.	G.S. §143- 64.17A(d1)
	Report annually on GESCs by state governmental units, including expected savings evaluation, to the Local Government Commission, the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources, and Fiscal Research Division.	G.S. §143-64.17H
	Provide template for RFP solicitation documents.	01 NCAC 41B .0302
	Conduct precertification of providers for three-year intervals.	01 NCAC 41B .0400
SEO, DOA	May provide recommendations to Council of State on contracts under consideration.	G.S. §143-64.17F(c)
DOA, with SEO, State Treasurer	Adopt rules in consultation with SEO, with approval from State Treasurer.	G.S. §143-64.17F(b)
DOA State Construction Office (SCO)	Provide inspection and compliance certification if requested by state government units and community colleges.	G.S. §143-64.17K
Local Governmental Unit and LGC	Report biennially on GESC by local government to the Joint Legislative Commission on Government Operations, and evaluate savings realized with assistance from SCO and SEO.	G.S. §143-64.17G
State Treasurer	Approve local government GESC financing contracts, including community colleges, K-12 schools, cities, and counties.	G.S. §142, Article 8, State Energy Conservation Finance Act
	Approve security instrument from Qualified Providers.	G.S. §143-64.17B(c)
	Approve financing option.	01 NCAC 41B .0701
	Monitor \$500 million cap on aggregate outstanding amount.	G.S. §142-63
	Approve changes to Rules.	G.S. §143-64.17F(b)

Entity	Responsibility	Reference
OSBM	Approve and certify funds for state contracts.	G.S. §142-64; 01 NCAC 41B .0511 and .0701
Council of State, with OSBM, State Treasurer	Approve GESC financing contracts for state government agencies and universities.	G.S. §142, Article 8, State Energy Conservation Finance Act
Governmental Unit (local, state agency, university)	Issue RFP, evaluate proposals, select Qualified Provider, retain Qualified Reviewer, advertise, award RFP and award, and approve contract terms and conditions.	G.S. §143-64.17A(a)
	Post advertisements for RFP and subsequent award.	G.S. §143-64.17A(a)
	Conduct vendor conferences and site visits.	01 NCAC 41B .0307
	Report contract terms to LGC and SEO.	G.S. §143-64.17G
	Report either (i) the contract and the terms of the contract or (ii) the implementation of the measure to the SEO within 30 days of the date the contract is entered into or the measure is implemented. In addition, within 60 days' after each annual anniversary date of a GESC, the state governmental unit must report the status of the contract to the SEO, including any details required by the SEO.	G.S. §143-64.17H
Qualified Provider/ESCO	Provide cost savings analysis compared to project costs for term to the state governmental unit.	G.S. §143-64.17A(d1)
	Provide security to State Treasurer.	G.S. §143-64.17B(c)
	Provide IGA when feasible including life cycle cost analysis.	G.S. §143-64.17B(f)
	Determine guaranteed savings using acceptable M&V methodology and provide annual reconciliation statements including actual, not stipulated, energy and operational savings during guarantee year.	G.S. §143-64.17B(g)
Qualified Reviewer/ Third Party Reviewer	Evaluate proposals, provide letter with qualitative and quantitative evaluation.	G.S. §143-64.17A(b)
	Provide analysis of energy conservation measures (ECMs) prior to and post implementation.	G.S. §143-64.17M; 01 NCAC 41B .0507;
UNC Board of Governors	Authorize GESCs for constituent institutions, and ECMs without GESC at NC State University and UNC Chapel Hill.	G.S. §143-64.17L

III. Annual Reporting Requirements

A. G.S. §143-64.17G, *Report on guaranteed energy savings contracts entered into by local governmental units.*

A local governmental unit that enters into a guaranteed energy savings contract must report the contract and the terms of the contract to the Local Government Commission and the State Energy Office of the Department of Environmental Quality. The Commission shall compile the information and report it biennially to the Joint Commission on Governmental Operations. In compiling the information, the Local Government Commission shall include information on the energy savings expected to be realized from a contract and, with the assistance of the Office of State Construction and the State Energy Office, shall evaluate whether expected savings have in fact been realized.

This provision requires the LGC to report on GESCs entered into by local governmental units. Therefore, minimal information regarding local government GESCs is included in this report.

B. G.S. §143-64.17H, *Report on guaranteed energy savings contracts entered into by State governmental units.*

A State governmental unit that enters into a guaranteed energy savings contract or implements an energy conservation measure pursuant to G.S. 143-64.17L must report either (i) the contract and the terms of the contract or (ii) the implementation of the measure to the State Energy Office of the Department of Environmental Quality within 30 days of the date the contract is entered into or the measure is implemented. In addition, within 60 days after each annual anniversary date of a guaranteed energy savings contract, the State governmental unit must report the status of the contract to the State Energy Office, including any details required by the State Energy Office. 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 by December 1. In compiling the information, the State Energy Office shall include information on the energy savings expected to be realized from a contract or implementation and shall evaluate whether expected savings have in fact been realized.

This provision requires the SEO to report on GESCs entered into by state governmental units. This report shall include the energy savings expected to be realized along with an evaluation whether the savings have in fact been realized. Currently, a total of 20 active GESC contracts exist for state governmental units. One of these contracts is still in the first year of the guarantee. For the remaining contracts, approximately \$158 million in energy savings has been realized to date from a total expected savings of \$409 million through the life of the contracts. The SEO can confirm 98% of the actual savings to date based on validation performed by third party qualified reviewers. The unconfirmed savings belong to Elizabeth City State University (ECSU) since the SEO received an unofficial report from an ESCO instead of ECSU. The ESCO and USI are working diligently with ECSU to resolve this issue and could provide an update in the next report.

During FY2020-21, the DOA's Downtown Complex along with UNC Greensboro completed their respective contract terms and achieved \$1.68 million dollars above guaranteed savings. By adding these savings to the DOA's Museum of Art project completed in FY2019-20, this brings the total of exceeded guaranteed savings to almost \$2 million dollars for these three completed projects. Collectively as shown in Table 2, state projects have achieved over \$21 million dollars in above guaranteed savings which further proves the effectiveness and success of performance contracting.

Table 2 (*on page 7*) provides a list of state governmental units' contract terms, reporting status, and energy savings achieved from their corresponding GESCs. Table 3 (*on page 8*) shows the number of completed projects and the actual savings achieved through the contract term.

Table 2. GESC Summary of Terms and Reporting Status of Current Projects

#	State-Owned Unit	Project Term Status (year)	Report Received	Validated	Total Guaranteed Savings for Contract Term	Total Guarantee to Date	Total Savings to Date	Above Guaranteed Savings to Date	ESCO
1	Appalachian State University 1	10 of 12	Yes	Yes	\$9,050,908	\$7,291,261	\$7,588,410	\$297,149	Pepco/Constellation
2	Appalachian State University 2	6 of 13	Yes	Yes	\$28,229,891	\$8,614,314	\$9,697,973	\$1,083,659	Pepco/Constellation
3	Department of Public Safety	5 of 14	Yes	Yes	\$21,180,286	\$5,663,510	\$6,481,124	\$817,614	Noresco
4	Department of Transportation 1	5 of 15	Yes	Yes	\$8,897,860	\$2,388,719	\$2,605,843	\$217,124	Trane
5	Department of Transportation 2	1 of 15	Yes	Yes	\$34,489,076	\$3,213,779	\$3,765,874	\$552,095	Trane
6	Elizabeth City State University	9 of 17	No	No	\$8,740,637	\$3,758,766	\$4,159,022	\$400,256	Honeywell
7	Fayetteville State University	6 of 17	Yes	Yes	\$16,167,881	\$4,715,323	\$5,376,014	\$660,691	Trane
8	NC Ag and Tech State University	6 of 17	Yes	Yes	\$6,174,110	\$1,651,200	\$1,678,827	\$27,627	Trane
9	NC Central University	9 of 15	Yes	Yes	\$10,077,478	\$3,695,841	\$4,172,619	\$476,778	ENGIE
10	NC School of Science and Math	In First Guarantee Year	N/A	N/A	\$3,919,020	N/A	N/A	N/A	Trane
11	NC State University 1	9 of 19	Yes	Yes	\$35,633,779	\$13,390,374	\$15,421,176	\$2,030,802	Schneider
12	NC State University 2 (Cogen)	9 of 16	Yes	Yes	\$103,005,060	\$41,311,603	\$52,206,086	\$10,894,483	Ameresco
13	NC State University 3 Phytotron (Self-Performed)	7 of 15	Yes	Yes	\$9,012,635	\$3,361,747	\$3,918,262	\$556,515	NCSU
14	NC State University 4 (Cogen) Centennial CCUP (Self-Performed)	2 of 18	Yes	Yes	\$36,669,402	\$3,296,747	\$3,345,999	\$49,252	NCSU
15	UNC Charlotte	8 of 16	Yes	Yes	\$11,468,220	\$4,932,463	\$5,624,245	\$691,782	Ameresco
16	UNC System Office	6 of 7	Yes	Yes	\$29,208,802	\$19,966,823	\$20,569,831	\$603,008	JCI
17	UNC Pembroke	8 of 15	Yes	Yes	\$7,491,431	\$2,862,259	\$2,996,606	\$134,347	Siemens
18	UNC Wilmington 1	10 of 20	Yes	Yes	\$8,694,471	\$3,347,604	\$3,390,589	\$42,985	Trane
19	UNC Wilmington 2	4 of 16	Yes	Yes	\$9,533,977	\$1,856,442	\$2,110,445	\$254,003	Ameresco
20	Winston Salem State University	5 of 15	Yes	Yes	\$11,512,711	\$2,097,143	\$3,599,304	\$1,502,161	Siemens
Totals					\$409,157,635	\$137,415,918	\$158,708,249	\$21,292,331	

Table 3. GESC Summary of Terms and Reporting Status of Completed Projects

Completed Projects							
State-Owned Unit	Project Completed (year)	Report Received	Validated	Total Guaranteed Savings for Contract Term	Total Savings to Date	Above Guarantee Savings to Date	ESCO
DOA Museum of Art	FY20	Yes	Yes	\$6,498,888	\$6,779,096	\$280,208	Trane
DOA Downtown Complex	FY21	Yes	Yes	\$30,646,888	\$31,824,818	\$1,177,930	Pepco/Constellation
UNC Greensboro	FY21	Yes	Yes	\$7,200,000	\$7,646,320	\$446,320	Trane
Totals				\$44,345,776	\$46,250,234	\$1,904,458	

IV. Program Effectiveness Update

EO80 set a goal to reduce energy consumption in all state-owned buildings by at least 40 percent from fiscal year 2002-2003 levels by 2025 and established a comprehensive energy conservation program to achieve this goal. As such, state governmental units are increasingly evaluating GESCs as a financing option to fund the replacement of inefficient equipment and to reduce energy costs. While governmental units directly implement improvements when funding is available, they continue to face a long list of deferred maintenance items that need to be addressed. This creates competition among energy efficiency, deferred maintenance, and life safety projects due to limited repair and renovation funding for state-owned buildings. However, performance contracting provides a unique mechanism to finance energy efficiency improvements without competing for repair and renovation funds.

The SEO continues to have discussions with active qualified ESCOs on how to improve the NC GESC process. For example, prior to 2017 SEO routinely changed GESC contract language which inadvertently caused the ESCOs and governmental units to question consistency of the contracting process. These changes addressed issues regarding the placement of risk between the Owner and the ESCO. As a result, the SEO established standardized template contract documents in 2018 for all GESC projects. Standardizing template documents has provided positive feedback from the ESCOs and governmental units. When government units and ESCOs adopt the SEO's template documents, the process to review and approve the GESC becomes transparent and streamlined.

As required every three years by 01 NCAC 41B, Section .0400, *Precertification of Providers*, the SEO completed this process of recertifying all the Qualified Providers on the North Carolina list. During the pandemic, the SEO observed several new ESCOs apply to be on the SEO's precertification list. This continues to prove that North Carolina contains many opportunities for ESCOs to accomplish energy savings for governmental units. Part of this year's recertification was a group of questions directed towards the ESCOs that have never attended a pre-bid meeting or responded to an RFP. This questionnaire was intended for ESCOs to communicate reasons for not actively working to promote performance contracting in this state or identifying potential energy savings measures for state governmental units. As hoped, this drove internal ESCO discussions and stimulated them to pursue more opportunities in NC, while at the same time several ESCOs have chosen not to remain Qualified Providers in NC. Having this feedback is also helpful as SEO looks for ways to increase market penetration for disadvantaged communities in Tier 1 and Tier 2 counties. The goal is to increase activity along with making the GESC process more effective and successful.

Below are testimonials received from ESCOs during the SEO's recertification process:

- **Ameresco** “*appreciates the work and growth of the State Energy Office over the years, and we are willing to assist in any efforts that will help bring more value to the customers in North Carolina.*”
- **ConEdison** “*feels that the Energy Office does a very good job in identifying good opportunities and moving projects along.*”
- **Energy Systems Group** states “*the working relationship and communication between the ESCO-community and the State Energy Office has improved greatly. Working collectively to improve the image of ESPC with the public sector will help our cause to achieve our energy efficiency goals.*”

- **Schneider** states “frankly, the State Energy Office has been essential to the recent success of the GESC marketplace in NC. Maintaining consistent template documents makes the process very easy for customers. The guidance that is provided throughout the process by SEO to keep things on schedule helps all parties. Most importantly, the positivity regarding the program by sharing successes has led to tens of millions of taxpayer dollars saved, a drastic reduction in GHG emissions, and the elimination of tens of millions of dollars of deferred maintenance across the state.”
- **Siemens** states “PC in NC is building momentum in SGU (state governmental unit) segment where there has not been decreased activity in recent years.”
- **Trane US** states “that the State Energy Office does a great job.”

Collectively, 23 GESCs achieved approximately \$25 million above guaranteed savings since the program’s implementation in 2002. Of those, three projects achieved \$2 million above guaranteed savings between FY 2008 and FY2020, while the remaining 20 projects achieved \$23 million above guaranteed savings between FY 2008 to the present. If state agencies had a mechanism to credit these savings into the next fiscal year to fund energy efficiency (i.e., similar to Session Law 2010-196), they could directly finance energy efficiency projects. However, such funds compete with other agency expenses and most likely will not be used for continuing energy efficiency improvements. Within state-owned buildings, DNCR and DPS currently have active solicitations for performance contracts to help them meet the requirements of EO80. The DNCR project includes the North Carolina Zoo, all three aquariums, and five museums. The DPS project will upgrade six 1000 cell correctional facilities across the state. The DPS project had seven ESCOs at the mandatory pre-bid meeting. Of those seven, six ESCOs and a total of 43 people including DPS and USI staff participated in the Scotland Correctional Facility building walk through. This shows the type of competition that GESC and generate for good projects with large expected energy savings.

To date, GESCs affected approximately 16% of state-owned buildings. This data highlights that there are many continued opportunities that could benefit from GESCs as a potential financing mechanism to implement energy efficiency projects for state-owned infrastructure. The GESCs maximize savings and help eliminate inefficiency by working within the utility budget thereby allowing systematic use of limited capital dollars. In addition, these allow multiple and current upgrades to be completed at one time. While many state-owned buildings may prefer financing projects as funding is available, GESCs allow the flexibility for state-owned infrastructure to leverage “time and use” of existing capital from the General Fund for other priorities.

The SEO continues to work with the NC ESC, ESCO’s, LGC, and others to streamline the GESC process. The SEO’s timely review and on-site technical assistance is key to ensuring efficiencies within the GESC process. During the COVID-19 pandemic, the SEO was dedicated to providing transparent communication and efficient review of all GESC projects. Furthermore, the office continues to find ways to promote GESCs along with their value to governmental units. GESCs compare favorably to other financing methods and should continue to be one of the primary financial options for major capital improvements for governmental units.

While the SEO is not a signatory entity for GESCs, the office is often viewed as the repository for items such as contract documents, construction schedules, and measurement and verification reports. As such, the SEO desires an improved data collection system for GESCs. Due to years of

possessing a successful and nationally recognized GESC program, the Department of Energy (DOE) and Lawrence Berkley National Lab (LBNL) requested the SEO's assistance with the creation of eProjectExpress (ePX). This tool is designed to streamline and to standardize a pathway for energy performance contracting project data collection and reporting. During FY2020-21, the SEO worked as a beta tester to ensure that the DOE tool is meaningful for state governmental units. The DOE's ePX was released in July 2021 and allows for the streamlined capture of GESC data. With widespread utilization of the tool, data collection would likely shift to the ESCOs and governmental units. The ePX tool will allow for efficient tracking of greenhouse gas emissions reductions and the number of jobs created by each project across the state. In addition, ePX will provide governmental units a streamlined method to assemble and to report project information.

Moving forward, ePX will be required for all GESCs in North Carolina. Through a grant with LBNL, North Carolina will likely have legacy projects uploaded into ePX by the second quarter of 2022. The SEO updated its GESC template documents to specify that ePX will be utilized for GESCs that were implemented on or after October 1, 2021. By working together with the North Carolina Chapter of the Energy Services Coalition, the SEO obtained a version of ePX that will work best for all GESC projects. ESC provided training on ePX as part of the October monthly meeting. Several ESCOs have reached out to ESC for additional training.

Meetings with participating government entities and ESCOs have provided an awareness to all parties involved in GESC that a strong partnership needs to be maintained throughout the duration of the project. The partnership throughout the term of a long contract between the ESCO and the governmental unit can lose consistency and collaborative efforts after the construction period. SEO continues to work with both parties to make sure communication channels are productive. The SEO acknowledges that there are educational barriers regarding the complex GESC process for governmental units. As such, the SEO continues outreach and education to promote GESCs as an efficient and effective means of financing major capital improvements for energy efficiency measures. The office delivers training and education to GESC participants within governmental units. As such, on-site technical assistance includes an extensive review and training of the contracting documents to assist governmental units with understanding its risks and responsibilities. As new SEO staff come on board to replace vacancies, senior staff provides training and education on all aspects of GESC. The training is an ongoing process due to the unique nature of GESC that makes each one unique others. The SEO's involvement from project identification through construction and into the guaranteed period provides continuity and promotes communication with both the ESCO and the governmental unit.

V. Local Governmental GESC Update

The most active market for GESCs is with North Carolina's K-12 Schools. While part of the local government, K-12 schools are often the biggest utility user within any county in the state. Utilities and maintenance for the K-12 schools are funded from the county budget, therefore using GESC to make needed capital improvements reduces the burden on the county taxpayers. However, the influx of Elementary and Secondary School Emergency Relief (ESSER) funds in response to the COVID-19 pandemic allowed many school systems to address air quality and system issues without partaking in the GESC process. Learning environments require optimal levels of humidity, oxygen, air circulation, lighting, and ventilation. The non-monetary benefits for completing energy efficiency projects in schools that crosscut with needs of the learning environment are often

overlooked. The replacement of mechanical equipment and the addition of building automation helps to improve the indoor air quality (IAQ) of the school. With enhanced IAQ, students and staff have healthier air which can enhance classroom productivity and assist with achieving higher test scores³. During the COVID-19 pandemic, projects that address IAQ and the air change requirements within buildings were critical. However, it is important to note that schools are likely focused on health and safety initiatives (*such as increasing outside air into facilities*) during the pandemic over implementing energy efficiency measures.

Since the LGC is the final part of the GESC contract approval process for local governmental units, SEO continues to work with them to obtain an understanding of the roles and responsibilities involved with the GESC review and approval processes. With the help of the NC Chapter of the Energy Services Coalition, a list of NC specific LGC requirements and additional administrative criterion were developed. This list highlights the top areas that LGC considers while reviewing and approving GESC projects. Compliance with this list assists with providing guidance and consistency with all projects prior to submission LGC approval and should also streamline the LGC approval process.

Currently, SEO is working with four K-12 schools that are finishing construction and moving into the first full year of the guarantee. Two other K-12 schools are in the IGA phase, and these two projects will be going before the LGC for approval in between now and the first quarter of 2022. Currently, this work is primarily conducted in counties ranked as Tier 1 and Tier 2 by the North Carolina Department of Commerce. With projects in Alleghany County Schools, Caldwell County Schools, Clinton City Schools, Harnett County Schools, Lexington City Schools, Rockingham County Schools, and others, SEO is working with the ESCOs to make sure all sectors are served by this program. These distressed counties need programs like GESC to make the needed improvements to energy consuming devices and the ability to replace outdated equipment. GESC is the design and financing tool needed to help improve the learning environments of schools while also bringing much-needed economic development to local contractors and businesses. In addition, GESC provide distressed counties with the tools to effectively reduce energy consumption and costs.

³ <https://www.epa.gov/iaq-schools>

Appendix A

Guaranteed Energy Savings Contract Process

(This page intentionally left blank)

Guaranteed Energy Savings Contract Process

The list below provides a walkthrough of the GESC process from the RFP phase to legislative reporting phase, and where each entity's responsibility fits into the overall process.

1) Template RFP

- G.S. §143-64.17A(d1)
- SEO sends template for RFP to Governmental Unit

2) RFP Review

- G.S. §143-64.17A(a)
- Governmental Unit submits RFP to SEO for review
- Governmental Unit submits RFP for a qualified reviewer or select one from staff

3) RFP Public Notice

- G.S. §143-64.17A(a)
- Governmental Unit publishes RFP notice in local newspaper

4) Pre-Bid

- G.S. §143-4.17A(a) & 01 NCAC 41B .0307
- Governmental Unit schedules pre-bid meeting & site visits with qualified provider

5) Proposal

- G.S. §143-64.17A(a)
- Qualified Provider/ESCO evaluates and creates proposal and submits to Governmental Unit

6) Review Proposals

- G.S. §143-64.17A(b)
- Governmental Unit receives & evaluates proposals along with their Qualified Reviewer

7) Cost Savings Analysis

- G.S. §143-64.17A(d1)
- Governmental Unit requires top ranked qualified provider provides a cost savings analysis

8) Review Proposals

- G.S. §143-64.17A(d1)
- SEO reviews selected proposal, cost-savings analysis, and other relevant documents

9) Publish NOI

- G.S. §143-64.17A(d1) & G.S. §143-64.17B(b)
- Governmental Unit publishes notice of intent to award

10) IGA & LCCA

- G.S. §143-64.17B(f)
- Qualified Provider/ESCO selected performs, when feasible, an IGA and LCCA

11) Energy Savings Analysis

- G.S. §143-64.17M(a)
- A third-party Qualified Reviewer performs an energy savings analysis to validate savings prior to implementation of an ECM

12) Review IGA

- G.S. §143-64.17B(f)
- Governmental Unit reviews the IGA and determines to move forward or terminate process

13) Financial Approval

- G.S. §142, Article 8, State Energy Conservation Finance Act
- Qualified Provider/ESCO financial approval at the Council of State for State Governmental Units or Treasurer for Local Governmental Units

14) Report to Treasurer's Office

- G.S. §143-64.17G & G.S. §143-64.17H
- Governmental Units must report the contract, the terms of the contract and implemented measures to the Treasurer's Office and SEO after entering into a contract

15) Performance Verification

- G.S. §143-64.17M(b)
- Post implementation of all ECMs verified annually by a third party Qualified Reviewer

16) Program Reporting

- G.S. §143-64.17G & G.S. §143-64.17H
- Governmental Units report annually following the implementation of the contract the status and savings realized to the Treasurer's Office and SEO
- LGC reports biennially on local governments expected savings with assistance from SCO and SEO evaluating whether savings have been realized
- SEO compiles the information for all GESCs each fiscal year in a report to the LGC, the Joint Legislative Oversight Committee on Agriculture & Natural & Economic Resources, and Fiscal Research Division

Appendix B

General Statute Chapter 143, Article 3B,
*Conservation of Energy, Water, and
Other Utilities in Government Facilities.*

(This page intentionally left blank)

Article 3B.

Conservation of Energy, Water, and Other Utilities in Government Facilities.

Part 1. Energy Policy and Life-Cycle Cost Analysis.

§ 143-64.10. Findings; policy.

(a) The General Assembly finds all of the following:

- (1) That the State shall take a leadership role in aggressively undertaking the conservation of energy, water, and other utilities in North Carolina.
- (2) That State facilities and facilities of State institutions of higher learning have a significant impact on the State's consumption of energy, water, and other utilities.
- (3) That practices to conserve energy, water, and other utilities that are adopted for the design, construction, operation, maintenance, and renovation of these facilities and for the purchase, operation, and maintenance of equipment for these facilities will have a beneficial effect on the State's overall supply of energy, water, and other utilities.
- (4) That the cost of the energy, water, and other utilities consumed by these facilities and the equipment for these facilities over the life of the facilities shall be considered, in addition to the initial cost.
- (5) That the cost of energy, water, and other utilities is significant and facility designs shall take into consideration the total life-cycle cost, including the initial construction cost, and the cost, over the economic life of the facility, of the energy, water, and other utilities consumed, and of operation and maintenance of the facility as it affects the consumption of energy, water, or other utilities.
- (6) That State government shall undertake a program to reduce the use of energy, water, and other utilities in State facilities and facilities of the State institutions of higher learning and equipment in those facilities in order to provide its citizens with an example of energy-use, water-use, and utility-use efficiency.

(b) It is the policy of the State of North Carolina to ensure that practices to conserve energy, water, and other utilities are employed in the design, construction, operation, maintenance, and renovation of State facilities and facilities of the State institutions of higher learning and in the purchase, operation, and maintenance of equipment for these facilities. (1975, c. 434, s. 1; 1993, c. 334, s. 2; 2001-415, s. 1; 2006-190, s. 8; 2007-546, s. 3.1(b).)

§ 143-64.11. Definitions.

For purposes of this Article:

- (1) "Economic life" means the projected or anticipated useful life of a facility.
- (2) "Energy-consumption analysis" means the evaluation of all energy-consuming systems, including systems that consume water or other utilities, and components of these systems by demand and type of energy or other utility use, including the internal energy load imposed on a facility by its occupants, equipment and components, and the external energy load imposed on the facility by climatic conditions.

- (2a) "Energy Office" means the State Energy Office of the Department of Environmental Quality.
- (2b) "Energy-consuming system" includes but is not limited to any of the following equipment or measures:
 - a. Equipment used to heat, cool, or ventilate the facility;
 - b. Equipment used to heat water in the facility;
 - c. Lighting systems;
 - d. On-site equipment used to generate electricity for the facility;
 - e. On-site equipment that uses the sun, wind, oil, natural gas, liquid propane gas, coal, or electricity as a power source; and
 - f. Energy conservation measures, as defined in G.S. 143-64.17, in the facility design and construction that decrease the energy, water, or other utility requirements of the facility.
- (3) "Facility" means a building or a group of buildings served by a central distribution system for energy, water, or other utility or components of a central distribution system.
- (4) "Initial cost" means the required cost necessary to construct or renovate a facility.
- (5) "Life-cycle cost analysis" means an analytical technique that considers certain costs of owning, using, and operating a facility over its economic life, including but not limited to:
 - a. Initial costs;
 - b. System repair and replacement costs;
 - c. Maintenance costs;
 - d. Operating costs, including energy costs; and
 - e. Salvage value.
- (6) Repealed by Session Laws 1993, c. 334, s. 3, effective July 13, 1993.
- (7) "State agency" means the State of North Carolina or any board, bureau, commission, department, institution, or agency of the State.
- (8) "State-assisted facility" means a facility constructed or renovated in whole or in part with State funds or with funds guaranteed or insured by a State agency.
- (9) "State facility" means a facility constructed or renovated, by a State agency.
- (10) "State institution of higher learning" means any constituent institution of The University of North Carolina. (1975, c. 434, s. 2; 1989, c. 23, s. 1; 1993, c. 334, s. 3; 2001-415, s. 2; 2006-190, ss. 9, 10, 11; 2007-546, s. 3.1(c); 2009-446, s. 1(f); 2013-360, s. 15.22(o); 2015-241, s. 14.30(u).)

§ 143-64.12. Authority and duties of the Department; State agencies and State institutions of higher learning.

(a) The Department of Environmental Quality through the State Energy Office shall develop a comprehensive program to manage energy, water, and other utility use for State agencies and State institutions of higher learning and shall update this program annually.

Each State agency and State institution of higher learning shall develop and implement a management plan that is consistent with the State's comprehensive program under this subsection to manage energy, water, and other utility use, and that addresses any findings or recommendations resulting from the energy audit required by subsection (b1) of this section. The energy consumption per gross square foot for all State buildings in total shall be reduced by twenty percent (20%) by 2010 and thirty percent (30%) by 2015 based on energy consumption for the 2002-2003 fiscal year. Each State agency and State institution of higher learning shall update its management plan biennially and include strategies for supporting the energy consumption reduction requirements under this subsection. Each community college shall submit to the State Energy Office a biennial written report of utility consumption and costs. Management plans submitted biennially by State institutions of higher learning shall include all of the following:

- (1) Estimates of all costs associated with implementing energy conservation measures, including pre-installation and post-installation costs.
- (2) The cost of analyzing the projected energy savings.
- (3) Design costs, engineering costs, pre-installation costs, post-installation costs, debt service, and any costs for converting to an alternative energy source.
- (4) An analysis that identifies projected annual energy savings and estimated payback periods.

(a1) State agencies and State institutions of higher learning shall carry out the construction and renovation of facilities in such a manner as to further the policy set forth under this section and to ensure the use of life-cycle cost analyses and practices to conserve energy, water, and other utilities.

(b) The Department of Administration shall develop and implement policies, procedures, and standards to ensure that State purchasing practices improve efficiency regarding energy, water, and other utility use and take the cost of the product over the economic life of the product into consideration. The Department of Administration shall adopt and implement Building Energy Design Guidelines. These guidelines shall include energy-use goals and standards, economic assumptions for life-cycle cost analysis, and other criteria on building systems and technologies. The Department of Administration shall modify the design criteria for construction and renovation of facilities of State buildings and State institutions of higher learning buildings to require that a life-cycle cost analysis be conducted pursuant to G.S. 143-64.15.

(b1) The Department of Administration, as part of the Facilities Condition and Assessment Program, shall identify and recommend energy conservation maintenance and operating procedures that are designed to reduce energy consumption within the facility of a State agency or a State institution of higher learning and that require no significant expenditure of funds. Every State agency or State institution of higher learning shall implement these recommendations. Where energy management equipment is proposed for any facility of a State agency or of a State institution of higher learning, the maximum interchangeability and compatibility of equipment components shall be required. As part of the Facilities Condition and Assessment Program under this section, the Department of

Administration, in consultation with the State Energy Office, shall develop an energy audit and a procedure for conducting energy audits. Every five years the Department shall conduct an energy audit for each State agency or State institution of higher learning, and the energy audits conducted shall serve as a preliminary energy survey. The State Energy Office shall be responsible for system-level detailed surveys.

(b2) The Department of Administration shall submit a report of the energy audit required by subsection (b1) of this section to the affected State agency or State institution of higher learning and to the State Energy Office. The State Energy Office shall review each audit and, in consultation with the affected State agency or State institution of higher learning, incorporate the audit findings and recommendations into the management plan required by subsection (a) of this section.

(c) through (g) Repealed by Session Laws 1993, c. 334, s. 4.

(h) When conducting a facilities condition and assessment under this section, the Department of Administration shall identify and recommend to the State Energy Office any facility of a State agency or State institution of higher learning as suitable for building commissioning to reduce energy consumption within the facility or as suitable for installing an energy savings measure pursuant to a guaranteed energy savings contract under Part 2 of this Article.

(i) Consistent with G.S. 150B-2(8a)h., the Department of Administration may adopt architectural and engineering standards to implement this section.

(j) The State Energy Office shall submit a report by December 1 of every odd-numbered year to the Joint Legislative Energy Policy Commission, the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources, and the Fiscal Research Division describing the comprehensive program to manage energy, water, and other utility use for State agencies and State institutions of higher learning required by subsection (a) of this section. The report shall also contain the following:

- (1) A comprehensive overview of how State agencies and State institutions of higher learning are managing energy, water, and other utility use and achieving efficiency gains.
- (2) Any new measures that could be taken by State agencies and State institutions of higher learning to achieve greater efficiency gains, including any changes in general law that might be needed.
- (3) A summary of the State agency and State institutions of higher learning management plans required by subsection (a) of this section and the energy audits required by subsection (b1) of this section.
- (4) A list of the State agencies and State institutions of higher learning that did and did not submit management plans required by subsection (a) of this section and a list of the State agencies and State institutions of higher learning that received an energy audit.
- (5) Any recommendations on how management plans can be better managed and implemented. (1975, c. 434, s. 3; 1993, c. 334, s. 4; 2000-140, s. 76(f); 2001-415, s. 3; 2006-190, s. 12; 2007-546, s. 3.1(a); 2008-198, s.

11.1; 2009-446, s. 1(e); 2010-31, s. 14.3; 2010-196, s. 2; 2013-360, s. 15.22(p); 2014-120, s. 55; 2015-241, s. 14.30(u); 2017-57, s. 14.1(f).)

§ 143-64.13: Repealed by Session Laws 1993, c. 334, s. 5.

§ 143-64.14: Recodified as § 143-64.16 by Session Laws 1993, c. 334, s. 7.

§ 143-64.15. Life-cycle cost analysis.

(a) A life-cycle cost analysis shall be commenced at the schematic design phase of the construction or renovation project, shall be updated or amended as needed at the design development phase, and shall be updated or amended again as needed at the construction document phase. A life-cycle cost analysis shall include, but not be limited to, all of the following elements:

- (1) The coordination, orientation, and positioning of the facility on its physical site.
- (2) The amount and type of fenestration and the potential for daylighting employed in the facility.
- (3) Thermal characteristics of materials and the amount of insulation incorporated into the facility design.
- (4) The variable occupancy and operating conditions of the facility, including illumination levels.
- (5) Architectural features that affect the consumption of energy, water, and other utilities.

(b) The life-cycle cost analysis performed for any State facility shall, in addition to the requirements set forth in subsection (a) of this section, include, but not be limited to, all of the following:

- (1) An energy-consumption analysis of the facility's energy-consuming systems in accordance with the provisions of subsection (g) of this section.
- (2) The initial estimated cost of each energy-consuming system being compared and evaluated.
- (3) The estimated annual operating cost of all utility requirements.
- (4) The estimated annual cost of maintaining each energy-consuming system.
- (5) The average estimated replacement cost for each system expressed in annual terms for the economic life of the facility.

(c) Each entity shall conduct a life-cycle cost analysis pursuant to this section for the construction or the renovation of any State facility or State-assisted facility of 20,000 or more gross square feet. For the replacement of heating, ventilation, and air-conditioning equipment in any State facility or State-assisted facility of 20,000 or more gross square feet, the entity shall conduct a life-cycle cost analysis of the replacement equipment pursuant to this section when the replacement is financed under a guaranteed energy savings contract or financed using repair and renovation funds.

(d) The life-cycle cost analysis shall be certified by a registered professional engineer or bear the seal of a North Carolina registered architect, or both. The engineer or architect shall be particularly qualified by training and experience for the type of work involved, but shall not be employed directly or indirectly by a fuel provider, utility company, or group supported by fuel providers or utility funds. Plans and specifications for facilities involving public funds shall be designed in conformance with the provisions of G.S. 133-1.1.

(e) In order to protect the integrity of historic buildings, no provision of this Article shall be interpreted to require the implementation of measures to conserve energy, water, or other utility use that conflict with respect to any property eligible for, nominated to, or entered on the National Register of Historic Places, pursuant to the National Historic Preservation Act of 1966, P.L. 89-665; any historic building located within an historic district as provided in Chapters 160A or 153A of the General Statutes; any historic building listed, owned, or under the jurisdiction of an historic properties commission as provided in Chapter 160A or 153A; nor any historic property owned by the State or assisted by the State.

(f) Each State agency shall use the life-cycle cost analysis over the economic life of the facility in selecting the optimum system or combination of systems to be incorporated into the design of the facility.

(g) The energy-consumption analysis of the operation of energy-consuming systems utilities in a facility shall include, but not be limited to, all of the following:

- (1) The comparison of two or more system alternatives.
- (2) The simulation or engineering evaluation of each system over the entire range of operation of the facility for a year's operating period.
- (3) The engineering evaluation of the consumption of energy, water, and other utilities of component equipment in each system considering the operation of such components at other than full or rated outputs. (1993, c. 334, s. 6; 2001-415, ss. 4, 5; 2006-190, s. 13; 2007-546, s. 4.1.)

§ 143-64.15A. Certification of life-cycle cost analysis.

Each State agency and each State institution of higher learning performing a life-cycle cost analysis for the purpose of constructing or renovating any facility shall, prior to selecting a design option or advertising for bids for construction, submit the life-cycle cost analysis to the Department for certification at the schematic design phase and again when it is updated or amended as needed in accordance with G.S. 143-64.15. The Department shall review the material submitted by the State agency or State institution of higher learning, reserve the right to require an agency or institution to complete additional analysis to comply with certification, perform any additional analysis, as necessary, to comply with G.S. 143-341(11), and require that all construction or renovation conducted by the State agency or State institution of higher learning comply with the certification issued by the Department. (2001-415, s. 6; 2007-546, s. 4.2.)

§ 143-64.16. Application of Part.

The provisions of this Part shall not apply to municipalities or counties, nor to any agency or department of any municipality or county; provided, however, this Part shall apply to any board of a community college. Community college is defined in G.S. 115D-2(2). (1975, c. 434, s. 5; 1989, c. 23, s. 2; 1993, c. 334, s. 7; 1993 (Reg. Sess., 1994), c. 775, s. 2.)

Part 2. Energy Saving Measures for Governmental Units.

§ 143-64.17. Definitions.

As used in this Part:

- (1) "Energy conservation measure" means a facility or meter alteration, training, or services related to the operation of the facility or meter, when the alteration, training, or services provide anticipated energy savings or

capture lost revenue. Energy conservation measure includes any of the following:

- a. Insulation of the building structure and systems within the building.
 - b. Storm windows or doors, caulking, weatherstripping, multiglazed windows or doors, heat-absorbing or heat-reflective glazed or coated window or door systems, additional glazing, reductions in glass area, or other window or door system modifications that reduce energy consumption.
 - c. Automatic energy control systems.
 - d. Heating, ventilating, or air-conditioning system modifications or replacements.
 - e. Replacement or modification of lighting fixtures to increase the energy efficiency of a lighting system without increasing the overall illumination of a facility, unless an increase in illumination is necessary to conform to the applicable State or local building code or is required by the light system after the proposed modifications are made.
 - f. Energy recovery systems.
 - g. Cogeneration systems that produce steam or forms of energy such as heat, as well as electricity, for use primarily within a building or complex of buildings.
 - h. Repealed by Session Laws 2006-190, s. 2, effective August 3, 2006, and applicable to contracts entered into or renewed on or after that date.
 - i. Faucets with automatic or metered shut-off valves, leak detection equipment, water meters, water recycling equipment, and wastewater recovery systems.
 - j. Other energy conservation measures that conserve energy, water, or other utilities.
- (2) "Energy savings" means a measured reduction in fuel costs, energy costs, water costs, stormwater fees, other utility costs, or operating costs, including environmental discharge fees, water and sewer maintenance fees, and increased meter accuracy, created from the implementation of one or more energy conservation measures when compared with an established baseline of previous costs, including captured lost revenues, developed by the governmental unit.
- (2a) "Governmental unit" means either a local governmental unit or a State governmental unit.
- (3) "Guaranteed energy savings contract" means a contract for the evaluation, recommendation, or implementation of energy conservation measures, including the design and installation of equipment or the repair or replacement of existing equipment or meters, in which all payments, except obligations on termination of the contract before its expiration, are to be made over time, and in which energy savings are guaranteed to exceed costs.
- (4) "Local governmental unit" means any board or governing body of a political subdivision of the State, including any board of a community

- college, any school board, or an agency, commission, or authority of a political subdivision of the State.
- (5) "Qualified provider" means a person or business experienced in the design, implementation, and installation of energy conservation measures who has been prequalified by the State Energy Office according to the prequalification criteria established by that Office.
- (5a) "Qualified reviewer" means an architect or engineer who is (i) licensed in this State and (ii) experienced in the design, implementation, and installation of energy efficiency measures.
- (6) "Request for proposals" means a negotiated procurement initiated by a governmental unit by way of a published notice that includes the following:
- a. The name and address of the governmental unit.
 - b. The name, address, title, and telephone number of a contact person in the governmental unit.
 - c. Notice indicating that the governmental unit is requesting qualified providers to propose energy conservation measures through a guaranteed energy savings contract.
 - d. The date, time, and place where proposals must be received.
 - e. The evaluation criteria for assessing the proposals.
 - f. A statement reserving the right of the governmental unit to reject any or all the proposals.
 - g. Any other stipulations and clarifications the governmental unit may require.
- (7) "State governmental unit" means the State or a department, an agency, a board, or a commission of the State, including the Board of Governors of The University of North Carolina and its constituent institutions. (1993 (Reg. Sess., 1994), c. 775, s. 3; 1995, c. 295, s. 1; 1999-235, ss. 1, 2; 2002-161, s. 2; 2006-190, s. 2; 2013-396, s. 1.)

§ 143-64.17A. Solicitation of guaranteed energy savings contracts.

(a) RFP Issuance. – Before entering into a guaranteed energy savings contract, a governmental unit shall issue a request for proposals. Notice of the request shall be published at least 15 days in advance of the time specified for opening of the proposals in at least one newspaper of general circulation in the geographic area for which the local governmental unit is responsible or, in the case of a State governmental unit, in which the facility or facilities are located. No guaranteed energy savings contract shall be awarded by any governmental unit unless at least two proposals have been received from qualified providers. Provided that if after the publication of the notice of the request for proposals, fewer than two proposals have been received from qualified providers, or fewer than two qualified providers attend the mandatory prebid meeting, the governmental unit may then open the proposals and select a qualified provider even if only one proposal is received.

(b) Preliminary Proposal Evaluation. – The governmental unit shall evaluate a sealed proposal from any qualified provider. A qualified reviewer shall be required to

evaluate the proposals and will provide the governmental unit with a letter report containing both qualitative and quantitative evaluation of the proposals. The report may include a recommendation for selection, but the governmental unit is not obligated to follow it.

(c) Receipt of Proposals for Unit of Local Government. – In the case of a local governmental unit, proposals received pursuant to this section shall be opened by a member or an employee of the governing body of the local governmental unit at a public opening at which the contents of the proposals shall be announced and recorded in the minutes of the governing body. Proposals shall be evaluated for the local governmental unit by a qualified reviewer on the basis of:

- (1) The information required in subsection (b) of this section; and
- (2) The criteria stated in the request for proposals.

The local governmental unit may require a qualified provider to include in calculating the cost of a proposal for a guaranteed energy savings contract any reasonable fee payable by the local governmental unit for the evaluation of the proposal by a qualified reviewer not employed as a member of the staff of the local governmental unit or the qualified provider.

(c1) Receipt of Proposals for Unit of State Government. – In the case of a State governmental unit, proposals received pursuant to this section shall be opened by a member or an employee of the State governmental unit at a public opening and the contents of the proposals shall be announced at this opening. Proposals shall be evaluated for the State governmental unit by a qualified reviewer who is either privately retained, employed with the Department of Administration, or employed as a member of the staff of the State governmental unit. The proposal shall be evaluated on the basis of the information and report required in subsection (b) of this section and the criteria stated in the request for proposals.

The State governmental unit shall require a qualified provider to include in calculating the cost of a proposal for a guaranteed energy savings contract any reasonable fee payable by the State governmental unit for evaluation of the proposal by a qualified reviewer not employed as a member of the staff of the State governmental unit or the qualified provider. The Department of Administration may charge the State governmental unit a reasonable fee for the evaluation of the proposal if the Department's services are used for the evaluation and the cost paid by the State governmental unit to the Department of Administration shall be calculated in the cost of the proposal under this subsection.

(d) Criteria for Selection of Provider. – The governmental unit shall select the qualified provider that it determines to best meet the needs of the governmental unit by evaluating all of the following and following the procedures set forth in subsection (d1) of this section:

- (1), (2) Repealed by Session Laws 2013-396, s. 2, effective August 23, 2013.
- (3) Quality of the products and energy conservation measures proposed.
- (4) Repealed by Session Laws 2013-396, s. 2, effective August 23, 2013.
- (5) General reputation and performance capabilities of the qualified providers.

- (6) Substantial conformity with the specifications and other conditions set forth in the request for proposals.
- (7) Time specified in the proposals for the performance of the contract.
- (8) Any other factors the governmental unit deems necessary, which factors shall be made a matter of record.

(d1) Process for Selection of Provider. – The governmental unit shall select a short list of finalists on the basis of its rankings of the written proposals under the criteria set forth in subsection (d) of this section as well as references from past clients. The governmental unit shall have the highest ranked qualified provider prepare a cost-savings analysis for the proposed contract showing at a minimum a comparison of the total estimated project savings to the total estimated project costs for the proposed term. If the governmental unit and the qualified provider cannot negotiate acceptable terms, pricing, and savings estimates, the governmental unit may terminate the process and begin negotiations with the second highest ranked qualified provider. The State Energy Office shall review the selected qualified provider's proposal, cost-benefit analysis, and other relevant documents prior to the governmental unit announcing the award.

(e) Nothing in this section shall limit the authority of governmental units as set forth in Article 3D of this Chapter. (1993 (Reg. Sess., 1994), c. 775, s. 3; 2002-161, s. 3; 2013-396, s. 2.)

§ 143-64.17B. Guaranteed energy savings contracts.

(a) A governmental unit may enter into a guaranteed energy savings contract with a qualified provider if all of the following apply:

- (1) The term of the contract does not exceed 20 years from the date of the installation and acceptance by the governmental unit of the energy conservation measures provided for under the contract.
- (2) The governmental unit finds that the energy savings resulting from the performance of the contract will equal or exceed the total cost of the contract.
- (3) The energy conservation measures to be installed under the contract are for an existing building or utility system, or utility consuming device or equipment when the utility cost is paid by the governmental unit.

(b) Before entering into a guaranteed energy savings contract, the governmental unit shall provide published notice of the time and place or of the meeting at which it proposes to award the contract, the names of the parties to the proposed contract, and the contract's purpose. The notice must be published at least 15 days before the date of the proposed award or meeting.

(c) A qualified provider entering into a guaranteed energy savings contract under this Part shall provide security to the governmental unit in the form acceptable to the Office of the State Treasurer and in an amount equal to one hundred percent (100%) of the guaranteed savings for the term of the guaranteed energy savings contract to assure the provider's faithful performance. Any bonds required by this subsection shall be subject to the provisions of Article 3 of Chapter 44A of the General Statutes. If the savings resulting

from a guaranteed energy savings contract are not as great as projected under the contract and all required shortfall payments to the governmental unit have not been made, the governmental unit may terminate the contract without incurring any additional obligation to the qualified provider.

(d) As used in this section, "total cost" shall include, but not be limited to, costs of construction, costs of financing, and costs of maintenance and training during the term of the contract less the application of the utility company, State, or federal incentives, grants, or rebates. "Total cost" does not include any obligations on termination of the contract before its expiration, provided that those obligations are disclosed when the contract is executed.

(e) A guaranteed energy savings contract may not require the governmental unit to purchase a maintenance contract or other maintenance agreement from the qualified provider who installs energy conservation measures under the contract if the unit of government takes appropriate action to budget for its own forces or another provider to maintain new systems installed and existing systems affected by the guaranteed energy savings contract.

(f) In the case of a State governmental unit, a qualified provider shall, when feasible, after the acceptance of the proposal of the qualified provider by the State governmental unit, conduct an investment grade audit. During this investment grade audit, the qualified provider shall perform in accordance with Part 1 of this Article a life cycle cost analysis of each energy conservation measure in the final proposal. If the results of the audit are not within ten percent (10%) of both the guaranteed savings contained in the proposal and the total proposal amount, either the State governmental unit or the qualified provider may terminate the project without incurring any additional obligation to the other party. However, if the State governmental unit terminates the project after the audit is conducted and the results of the audit are within ten percent (10%) of both the guaranteed savings contained in the proposal and the total proposal amount, the State governmental unit shall reimburse the qualified provider the reasonable cost incurred in conducting the audit, and the results of the audit shall become the property of the State governmental unit.

(g) A qualified provider shall provide an annual reconciliation statement based upon the results of the measurement and verification review. The statement shall disclose any shortfalls or surplus between guaranteed energy and operational savings specified in the guaranteed energy savings contract and actual, not stipulated, energy and operational savings incurred during a given guarantee year. Any guaranteed energy and operational savings shall be determined by using one of the measurement and verification methodologies listed in the United States Department of Energy's Measurement and Verification Guidelines for Energy Savings Performance Contracting, the International Performance Measurement and Verification Protocol (IPMVP) maintained by the Efficiency Valuation Organization, or Guideline 14-2002 of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers. If due to existing data limitations or the nonconformance of specific project characteristics, none of the three methodologies listed in this subsection is sufficient for measuring guaranteed savings, the qualified provider shall develop an alternate method that is compatible with one of the three

methodologies and mutually agreeable to the governmental unit. The guarantee year shall consist of a 12-month term commencing from the time that the energy conservation measures become fully operational. A qualified provider shall pay the governmental unit or its assignee any shortfall in the guaranteed energy and operational savings after the total year savings have been determined. In the case of a governmental unit, a surplus in any one year shall not be carried forward or applied to a shortfall in any other year. (1993 (Reg. Sess., 1994), c. 775, s. 3; 1995, c. 295, s. 2; 1999-235, s. 3; 2002-161, s. 4; 2003-138, s. 1; 2006-190, s. 3; 2009-375, s. 2; 2013-396, s. 3; 2014-115, s. 56.7.)

§ **143-64.17C**: Repealed by Session Laws 2002, ch. 161, s. 5, effective January 1, 2003, and applicable to contracts entered into on or after that date.

§ **143-64.17D. Contract continuance.**

A guaranteed energy savings contract may extend beyond the fiscal year in which it becomes effective. Such a contract shall stipulate that it does not constitute a direct or indirect pledge of the taxing power or full faith and credit of any governmental unit. (1993 (Reg. Sess., 1994), c. 775, s. 3; 2002-161, s. 6.)

§ **143-64.17E. Payments under contract.**

A local governmental unit may use any funds, whether operating or capital, that are not otherwise restricted by law for the payment of a guaranteed energy savings contract. State appropriations to any local governmental unit shall not be reduced as a result of energy savings occurring as a result of a guaranteed energy savings contract. (1993 (Reg. Sess., 1994), c. 775, s. 3.)

§ **143-64.17F. State agencies to use contracts when feasible; rules; recommendations.**

(a) State governmental units shall evaluate the use of guaranteed energy savings contracts in reducing energy costs and may use those contracts when feasible and practical.

(b) The Department of Administration, in consultation with the Department of Environmental Quality, through the State Energy Office, shall adopt rules for: (i) agency evaluation of guaranteed energy savings contracts; (ii) establishing time periods for consideration of guaranteed energy savings contracts by the Office of State Budget and Management, the Office of the State Treasurer, and the Council of State, and (iii) setting measurements and verification criteria, including review, audit, and precertification. Prior to adopting any rules pursuant to this section, the Department shall consult with and obtain approval of those rules from the State Treasurer. The rules adopted pursuant to this subsection shall not apply to energy conservation measures implemented pursuant to G.S. 143-64.17L.

(c) The Department of Administration, and the Department of Environmental Quality through the State Energy Office, may provide to the Council of State its recommendations concerning any energy savings contracts being considered. (2002-161, s. 7; 2003-138, s. 2; 2009-446, s. 1(d); 2011-145, s. 9.6D(d); 2013-360, s. 15.22(d); 2015-241, s. 14.30(u).)

§ 143-64.17G. Report on guaranteed energy savings contracts entered into by local governmental units.

A local governmental unit that enters into a guaranteed energy savings contract must report the contract and the terms of the contract to the Local Government Commission and the State Energy Office of the Department of Environmental Quality. The Commission shall compile the information and report it biennially to the Joint Commission on Governmental Operations. In compiling the information, the Local Government Commission shall include information on the energy savings expected to be realized from a contract and, with the assistance of the Office of State Construction and the State Energy Office, shall evaluate whether expected savings have in fact been realized. (1993 (Reg. Sess., 1994), c. 775, s. 9; 2006-190, s. 4; 2009-375, s. 3; 2013-360, s. 15.22(e); 2015-241, s. 14.30(u).)

§ 143-64.17H. Report on guaranteed energy savings contracts entered into by State governmental units.

A State governmental unit that enters into a guaranteed energy savings contract or implements an energy conservation measure pursuant to G.S. 143-64.17L must report either (i) the contract and the terms of the contract or (ii) the implementation of the measure to the State Energy Office of the Department of Environmental Quality within 30 days of the date the contract is entered into or the measure is implemented. In addition, within 60 days after each annual anniversary date of a guaranteed energy savings contract, the State governmental unit must report the status of the contract to the State Energy Office, including any details required by the State Energy Office. The State Energy Office shall compile the information for each fiscal year and report it to the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources, the Fiscal Research Division, and the Local Government Commission annually by December 1. In compiling the information, the State Energy Office shall include information on the energy savings expected to be realized from a contract or implementation and shall evaluate whether expected savings have in fact been realized. (2002-161, s. 8; 2006-190, s. 5; 2009-446, s. 1(c); 2011-145, s. 9.6D(e); 2013-360, s. 15.22(f); 2015-241, s. 14.30(u); 2017-57, s. 14.1(g).)

§ 143-64.17I. Installment and lease purchase contracts.

A local governmental unit may provide for the acquisition, installation, or maintenance of energy conservation measures acquired pursuant to this Part by installment or lease purchase contracts in accordance with and subject to the provisions of G.S. 160A-20 and G.S. 160A-19, as applicable. (2002-161, s. 8.)

§ 143-64.17J. Financing by State governmental units.

State governmental units may finance the acquisition, installation, or maintenance of energy conservation measures acquired pursuant to this Part in the manner and to the extent set forth in Article 8 of Chapter 142 of the General Statutes or as otherwise authorized by law. (2002-161, s. 8.)

§ 143-64.17K. Inspection and compliance certification for State governmental units.

The provisions of G.S. 143-341(3) shall not apply to any energy conservation measure for State governmental units provided pursuant to this Part, except as specifically set forth in this section. Except as otherwise exempt under G.S. 116-31.11, the following shall apply to all energy conservation measures provided to State governmental units pursuant to this Part:

- (1) The provisions of G.S. 133-1.1.
- (2) Inspection and certification by:
 - a. The applicable local building inspector under Part 4 of Article 18 of Chapter 153A of the General Statutes or Part 5 of Article 19 of Chapter 160A of the General Statutes; or
 - b. At the election of the State governmental unit, the Department of Administration under G.S. 143-341(3)d.

The cost of compliance with this section may be included in the cost of the project in accordance with G.S. 143-64.17A(c1) and may be included in the cost financed under Article 8 of Chapter 142 of the General Statutes. (2002-161, s. 8.)

§ 143-64.17L. Board of Governors may authorize energy conservation measures at constituent institutions.

(a) Authority. – Notwithstanding the provisions of this Part to the contrary, the Board of Governors of The University of North Carolina may authorize any constituent institution listed in subsection (e) of this section to implement an energy conservation measure without entering into a guaranteed energy savings contract if both of the following conditions are met:

- (1) The Board of Governors finds that the energy savings resulting from the implementation of the energy conservation measure shall, according to the energy savings analysis received pursuant to G.S. 143-64.17M(a), equal or exceed the total cost of implementing the measure. If the proposed implementation will be financed with debt, then the energy savings analysis must project sufficient energy savings to pay the debt service on any bonds to be issued. As used in this subdivision, the term "total cost" shall have the same meaning as it does in G.S. 143-64.17B(d).
- (2) The energy conservation measure is for an existing building or utility system.

(b) Scope of Authority. – In implementing an energy conservation measure pursuant to subsection (a) of this section, the Board of Governors may undertake or authorize any constituent institution listed in subsection (e) of this section to undertake any action that (i) could be required of a qualified provider under a guaranteed energy savings contract or (ii) is otherwise permissible under this Part.

(c) Projects Consisting of Multiple Energy Conservation Measures. – The Board of Governors may authorize the implementation of multiple energy conservation measures simultaneously as part of a single project. When doing so, the findings required by subsection (a) of this section may be made with respect to the project as a whole and need not be made with respect to individual energy conservation measures. Similarly, the

analyses required by G.S. 143-64.17M may be conducted for the project as a whole instead of for individual energy conservation measures.

(d) Continuing Applicability of Part to Contracts. – If the Board of Governors or a constituent institution implements an energy conservation measure through a guaranteed energy savings contract, that contract shall accord in all respects with the requirements of this Part.

(e) The Board of Governors may authorize North Carolina State University and the University of North Carolina at Charlotte to implement an energy conservation measure without entering into a guaranteed energy savings contract pursuant to this section. (2011-145, s. 9.6D(a); 2013-396, s. 4(a).)

§ 143-64.17M. Energy savings analysis required prior to implementation; post-implementation analyses required.

(a) Energy Savings Analysis Required Prior to Implementation. – Prior to implementing an energy conservation measure pursuant to G.S. 143-64.17L, an energy savings analysis shall be performed to validate the economic assumptions that purportedly support the implementation of the measure. This analysis shall be performed by a third party selected by the constituent institution and shall include an energy consumption analysis to develop a baseline of previous costs of all utilities' energy consumption for the institution on the assumption that the energy conservation measure was not undertaken. The completed analysis shall be submitted to The University of North Carolina System Office and to the State Energy Office.

(b) Post-Implementation Analyses Required. – A constituent institution that implements an energy conservation measure pursuant to G.S. 143-64.17L shall retain a third party to perform an annual measurement and verification of energy savings resulting from the energy conservation measure as compared to the baseline of previous costs set forth in the energy savings analysis required by subsection (a) of this section. The third party shall annually provide a reconciliation statement based upon the results of a preagreed upon measurement, monitoring, and verification protocol which shall disclose any shortfall or surplus between the estimated energy usage and operational savings set forth in the energy savings analysis required by subsection (a) of this section and actual, not stipulated, energy usage and operational savings incurred during a given year.

If a reconciliation statement reveals a shortfall in energy savings for a particular year, the constituent institution shall be responsible for and shall pay the shortfall. However, the institution shall not be held responsible for losses due to natural disasters or other emergencies. Any surplus shall be retained by the institution and may be used in the same manner as any other energy savings. (2011-145, s. 9.6D(b); 2018-12, s. 17.)

§§ 143-64.17N through 143-64.19: Reserved for future codification purposes.

(This page intentionally left blank)

Appendix C

North Carolina Administrative Code,
Title 01, Subchapter 41B,
Guaranteed Energy Savings Contracts

(This page intentionally left blank)

SUBCHAPTER 41B – GUARANTEED ENERGY SAVINGS CONTRACTS**SECTION .0100 – GENERAL PROVISIONS****01 NCAC 41B .0101 RESPONSIBILITY**

History Note: Authority G.S. 143-64.17A(c1); 143-64.17F; 143-64.17H;
 Temporary Adoption Eff. August 1, 2003;
 Temporary Adoption Expired April 27, 2004.

01 NCAC 41B .0102 SCOPE

This Subchapter shall apply to State governmental units engaging in guaranteed energy savings contracts.

History Note: Authority G.S. 143-64.17F; 143-64.17H; 143-64.17A (c1);
 Temporary Adoption Eff. August 1, 2003;
 Temporary Adoption Expired April 27, 2004;
 Eff. July 1, 2004;
 Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0103 RULE MAKING AUTHORITY

History Note: Authority G.S. 143-64.17A(c1); 143-64.17F; 143-64.17H;
 Temporary Adoption Eff. August 1, 2003;
 Temporary Adoption Expired April 27, 2004.

01 NCAC 41B .0104 DEFINITIONS

For the purposes of this Chapter, the following definitions apply:

- (1) Terms used herein that are defined in G.S. 143-64.17 shall have the same definitions as in G.S. 143-64.17.
- (2) "Agency." A North Carolina State governmental unit that is soliciting, through a Request for Proposals (RFP), to enter into a guaranteed energy savings contract.
- (3) "Annual reconciliation statement." A report disclosing shortfalls or surplus between guaranteed energy and operational savings specified in the guaranteed energy savings contract and actual energy and operational savings incurred during each 12 month term commencing from the time that the energy conservation measures became fully operational.
- (4) "Contract." A guaranteed energy savings contract.
- (5) "Offer." The response to an RFP means the same as "bid" or "proposal."
- (6) "Investment grade audit" or "investment grade analysis." A cost-benefit analysis of energy efficiency investments including a review of potential cost savings through operation and maintenance changes.
- (7) "Life-cycle cost analysis." A method for estimating the total cost of an energy-using component or building over its useful life, including cost factors such as purchase price, or construction, renovation, or leasing costs, energy use, maintenance, interest, and inflation.
- (8) "Measurement and verification review." An examination of energy measures installed under each contract, using methodology to measure the operation of energy-using systems before and after change, to verify the performance and savings of the installed equipment.
- (9) "Qualified provider." A person, business, or organization experienced in the design, implementation, and installation of energy conservation measures and determined by the administering and contracting agencies to have the capability in all respects to fully perform the contract requirements.

History Note: Authority G.S. 143-64.17F; 143-64.17H; 143-64.17A(c1);
 Temporary Adoption Eff. August 1, 2003;
 Temporary Adoption Expired April 27, 2004;
 Eff. July 1, 2004;
 Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

SECTION .0200 – RESERVED FOR FUTURE CODIFICATION

SECTION .0300 – SOLICITATIONS**01 NCAC 41B .0301 NORTH CAROLINA PRODUCTS**

A preference for North Carolina products and services provided by North Carolina residents pursuant to G.S. 143-59 shall apply to Guaranteed Energy Savings Contracts.

*History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expires April 27, 2004;
Eff. August 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.*

01 NCAC 41B .0302 SOLICITATION DOCUMENTS

- (a) Agencies shall solicit for guaranteed energy savings contracts through a Request for Proposal (RFP).
- (b) Agencies may use the RFP template available from the State Energy Office at MSC 1340, Raleigh, NC 27699-1340.
- (c) Solicitation documents shall include a Treasurer's estimated cost of financing.
- (d) Solicitation documents may allow for qualified provider or third party financing.
- (e) Solicitation documents may include a copy of the Facilities Condition Assessment Program (FCAP) report covering part or all of the facilities subject to the solicitation.
- (f) Solicitation documents shall state the evaluation criteria specified by G.S. 143-64.17A (b) and (d) as well as those in this Chapter. The documents shall also state the criteria weighting defined by the agency for each particular project. Weighting may change from one RFP to another RFP from an agency based upon the particular needs of that agency.
- (g) Solicitation documents shall stipulate that employee or time savings cannot be included in the offer unless a position is eliminated as a result of contract implementation.
- (h) Solicitation documents shall stipulate that the qualified provider is responsible for all costs incurred in preparing the initial proposal.
- (i) Solicitation documents shall stipulate that the contractor cannot include costs or allowances for contingencies in the contract.
- (j) Solicitation documents may include a three-year history of usage and billing for all utilities for the facilities subject to the proposal.

*History Note: Authority G.S. 143-64.17F; 143-64.17H;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.*

01 NCAC 41B .0303 TREASURER'S COST ESTIMATE OF FINANCING

Agencies shall obtain an estimate of financing cost from the Director of Debt Management, Office of the Treasurer. This estimate shall not be binding upon the State and is subject to change by the Office of the Treasurer. The Office of the Treasurer may reject any potential contract if the actual cost of financing has exceeded the estimated cost of financing when the contract is submitted to the Office of the Treasurer for approval.

*History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.*

01 NCAC 41B .0304 GENERAL FUND PREFERENCE

- (a) The agency shall give preference to projects where the energy costs are paid through General Fund appropriations as compared to receipts, or federal funds, or other sources. This preference shall be stipulated in the solicitation documents.

(b) Solicitation documents shall include, when feasible, a breakdown of the source of funds for energy costs and shall direct the vendors to break down savings by source of funds if the aforementioned information is included in the solicitation document.

(c) The Council of State may give preference to projects where the energy costs are paid through General Fund appropriations as compared to receipts, or federal funds, or other sources.

History Note: Authority G.S. 143-64.17F; 143-64.17H;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0305 PROHIBITION ON FEDERAL FUNDS

The agency shall not solicit proposals for projects that include payment from federal funds unless the agency has obtained, and includes in both the solicitation and contract, documentation from the Federal Government or the Office of State Controller stating that the use of federal funds for payment of the contract is authorized.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0306 ADVERTISEMENT REQUIREMENTS

In addition to advertising requirements stated in G.S. 143-64.17A(a), agencies shall send a copy to the State Energy Office at MSC 1340, Raleigh, NC 27699 and shall include in the notification instructions on how to obtain the complete solicitation.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expires April 27, 2004;
Eff. August 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0307 CONFERENCES/SITE VISITS

Agencies may conduct vendor conferences and site visits before the Request for Proposals closing date.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expires April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

SECTION .0400 - PRECERTIFICATION OF PROVIDERS

01 NCAC 41B .0401 INFORMATION REQUIRED FOR PRECERTIFICATION

Organizations may establish capability to provide services under performance contracts with state agencies by providing the following information to the State Energy Office:

- (1) past experience with energy performance contracting with a minimum of three years operation and completed installation of a minimum of three projects;
- (2) performance contracting experience and resumes of individuals expected to work on North Carolina projects including a minimum of one professional engineer licensed in North Carolina;
- (3) summary information, with client contact information, on all performance contracting projects in North Carolina during the previous five years listing only completed projects with at least one year in repayment;

- (4) summary information, with client contact information, on all performance contracts with any state government agencies in the United States with a maximum of five projects for each of the previous five years;
- (5) summary information, with client contact information, on any performance contracting projects which resulted in the company paying energy costs to clients;
- (6) summary of the history and operation of the business and organization, including volume, bonding capacity and type of clients; and
- (7) financial statements of the performance contracting organization and (if applicable) parent company for the previous two years.

*History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expires April 27, 2004;
Eff. August 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.*

01 NCAC 41B .0402 PRECERTIFICATION EVALUATION

Organizations shall present information required for precertification to the State Energy Office with a request for consideration for inclusion as a precertified entity. The State Energy Office shall offer a precertification period for providers at three-year intervals.

*History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expires April 27, 2004;
Eff. August 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.*

01 NCAC 41B .0403 CONTESTING PRECERTIFICATION

(a) If the State Energy Office denies an organization's request for precertification, a written appeal from the organization may be provided by the organization within 60 days after date of notification of the denial. A letter appealing the decision may be filed with:

Director, State Energy Office
North Carolina Department of Administration
1830A Tillery Place MSC 1340
Raleigh, North Carolina 27699-1340

(b) In the event that an organization wishes to contest the case further, contested case hearings are available as provided in G.S. 150B, and petitions for contested case hearings shall be filed in accordance with the provisions of that Chapter.

*History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.*

01 NCAC 41B .0404 PUBLISHED LIST OF PRECERTIFIED ENTITIES

Organizations precertified by the State Energy Office to provide services under performance contracts may be included on a list available on the Website of the State Energy Office at <http://www.energync.net>.

*History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.*

01 NCAC 41B .0405 PRECERTIFIED ENTITY RESTRICTION

Only precertified organizations may enter into a performance contract with a state governmental agency.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

SECTION .0500 - EVALUATION, SELECTION, AND AWARD

01 NCAC 41B .0501 LATE OFFERS, MODIFICATIONS, OR WITHDRAWALS

No late offer, late modification, or late withdrawal shall be considered unless received before contract award, and the offer, modification, or withdrawal would have been timely but for the action or inaction of agency personnel. The offeror shall have his offer delivered on time, regardless of the mode of delivery used, including the U.S. Postal Service or any other delivery services available.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0502 EXTENSION OF ACCEPTANCE TIME

Companies may be requested to extend the time offered for the acceptance of offers.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expires April 27, 2004;
Eff. August 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0503 ERROR/CLARIFICATION

When an offer contains an obvious error or otherwise where an error is suspected, the circumstances may be investigated and then may be considered and acted upon. Any action taken shall not prejudice the rights of the public or other offering companies. Where offers are submitted substantially in accordance with the request for response document but are not entirely clear as to intent or to some particular fact or where there are other ambiguities, clarification may be sought and accepted provided that, in doing so, no change is permitted in prices.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0504 BASIS FOR REJECTION

In soliciting offers, any and all offers received may be rejected. Bases for rejection shall include, but are not limited to, the offer being deemed unsatisfactory as to the quantity, quality, delivery, price or service offered; the offer not complying with conditions in the RFP or with the intent of the proposed contract; lack of competitiveness by reason of collusion; error(s) in specifications or indication that revision(s) would be to the state's advantage; cancellation of or changes in the intended project or other determination that the proposed requirement is no longer needed; limitation or lack of available funds; circumstances which prevent determination of the lowest responsible or most advantageous offer; or any determination that rejection would be to the best interest of the state.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;

Temporary Adoption Expires April 27, 2004;
Eff. August 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0505 PUBLIC RECORD

Action in rejecting offers shall be made a matter of record.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0506 RECIPROCAL PREFERENCE

(a) 01 NCAC 05B .1522(a), (b), (c), (d), and (g) shall apply to this Subchapter.

(b) If the use of the reciprocal preference changes which bidder is the low bidder, the agency may waive the use of the reciprocal preference, after consultation with the Council of State, and after taking into consideration such factors as, competition, price, product origination, and available resources.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0507 PROPOSAL EVALUATION

(a) Evaluation criteria shall include those specified by G.S. 143-64.17A(b) and (d).

(b) Evaluation criteria for the proposal shall also include the following:

- (1) Life cycle cost analysis as defined in G.S. 143-64.15.
- (2) Certification by a registered engineer that the measurement and verification protocol presented in the proposal is capable of measuring actual or projected savings.
- (3) A process of annual third party measurement and verification of savings in accordance with the pre-defined and certified protocol found in 01 NCAC 41B .0510. The cost of this process shall be included in the total cost of the contract.
- (4) The total cost based on Office of Treasurer cost of financing estimate and cost based on Qualified Provider or third party financing in the response.

History Note: Authority G.S. 143-64.17F; 143-64.17H;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0508 PRE-AWARD REPORTS

Before the award of a guaranteed energy savings contract, the qualified provider shall provide a report, as part of its proposal, which shall be available for public inspection, summarizing estimates of all costs of installation, maintenance, repairs and debt service and estimates of the amounts by which energy or operating costs will be reduced.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0509 TABULATIONS AND ABSTRACTS

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004.

01 NCAC 41B .0510 MEASUREMENT AND VERIFICATION

Any guaranteed energy and operational savings shall be determined by using one of the measurement and verification methodologies listed in the United States Department of Energy's "Measurement and Verification Guideline for Energy Savings Performance Contracting," the "International Performance Measurement and Verification Protocol," or "ASHRAE 14-2002." If due to existing data limitations or the nonconformance of specific project characteristics, none of the measurement and verification methodologies listed above is sufficient for measuring guaranteed savings, the qualified provider shall develop an alternate method that is compatible with one of the three and mutually agreeable with the agency.

History Note: Authority G.S. 143-64.17F; 143-64.17H;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0511 CONTRACT EXECUTION

Contract execution by the successful companies shall occur upon contract award and before the agency sends the documents to the Office of State Budget and Management. Contracts shall stipulate that the execution is contingent upon approval and financing. Upon execution, the agency shall forward the documents to the Capital Improvement Section of the Office of State Budget and Management with a copy to the Director of the State Energy Office.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

SECTION .0600 – RESERVED FOR FUTURE CODIFICATION

SECTION .0700 – APPROVAL

01 NCAC 41B .0701 OFFICE OF STATE BUDGET AND MANAGEMENT CERTIFICATION

The Office of State Budget and Management (OSBM) shall certify, within 10 business days of receipt, expected availability of resources and set up appropriate reserve accounts or other accounting procedures to transfer funds from the agency to the Office of the Treasurer for payment. Upon certification, the OSBM shall forward the documentation to the Office of the Treasurer's Director of Debt Management.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

01 NCAC 41B .0702 OFFICE OF THE TREASURER APPROVAL

The Office of the Treasurer shall, within 10 business days of receipt, review the documentation and select the desired financing option. Upon review and selection, the Treasurer shall forward the documentation to the Secretary of the Department of Administration.

History Note: Authority G.S. 143-64.17F;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;

Eff. July 1, 2004;

Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

SECTION .0800 – RESERVED FOR FUTURE CODIFICATION

SECTION .0900 - POST-APPROVAL PROCEDURES

01 NCAC 41B .0901 ANNUAL REPORTS AND INSPECTIONS

(a) The State Energy Office may inspect any and all documentation and facilities it deems appropriate at the agency to determine the effectiveness of the guaranteed energy savings contract and to provide information to the Council of State and the General Assembly on the effectiveness of the contract.

(b) Agencies failing to provide documentation to the State Energy Office as requested, shall be reported to the Council of State and shall be prohibited from engaging in further energy savings contracts until the deficient documentation is provided to the State Energy Office.

(c) Requested information, by definition, includes timely submission of the "Annual Report of Savings Report" available from the State Energy Office at 1340 MSC, Raleigh, NC 27699-1340.

*History Note: Authority G.S. 143-64.17F; 143-64.17H;
Temporary Adoption Eff. August 1, 2003;
Temporary Adoption Expired April 27, 2004;
Eff. July 1, 2004;*

Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. March 6, 2018.

Appendix D

General Statute Chapter 142, Article 8,
State Energy Conservation Finance Act

(This page intentionally left blank)

Article 8.

State Energy Conservation Finance Act.

§ 142-60. Short title.

This Article is the State Energy Conservation Finance Act. (2002-161, s. 9.)

§ 142-61. Definitions.

The following definitions apply in this Article:

- (1) Certificates of participation. – Certificates or other instruments delivered by a special corporation as provided in this Article evidencing the assignment of proportionate and undivided interests in the rights to receive payments to be made by the State pursuant to one or more financing contracts.
- (2) Cost. – The term includes:
 - a. The cost of construction, modification, rehabilitation, renovation, improvement, acquisition, or installation in connection with an energy conservation measure.
 - b. The cost of engineering, architectural, and other consulting services as may be required, including the cost of performing the technical analysis in accordance with G.S. 143-64.17A and inspection and certification in accordance with G.S. 143-64.17K.
 - c. Finance charges, reserves for debt service and other types of reserves required pursuant to a financing contract or any other related documentation, and interest prior to and during construction, and, if deemed advisable by the State Treasurer, for a period not exceeding two years after the estimated date of completion of construction.
 - d. Administrative expenses and charges.
 - e. The cost of bond insurance, investment contracts, credit and liquidity facilities, interest rate swap agreements and other derivative products, financial and legal consultants, and related costs of the incurrence or issuance of the financing contract to the extent and as determined by the State Treasurer.
 - f. The cost of reimbursing the State for payments made for any costs described in this subdivision.
 - g. Any other costs and expenses necessary or incidental to implementing the purposes of this Article.
- (3) Credit facility. – An agreement that:
 - a. Is entered into by the State with a bank, savings and loan association, or other banking institution, an insurance company, reinsurance company, surety company or other insurance institution, a corporation, investment banking firm or other investment institution, or any financial institution or other similar provider of a credit facility, which provider may be located within or without the United States of America; and
 - b. Provides for prompt payment of all or any part of the principal or purchase price (whether at maturity, presentment or tender for purchase, redemption, or acceleration), redemption premium, if any, and interest with respect to any financing contract payable on demand or tender by

the owner in consideration of the State agreeing to repay the provider of the credit facility in accordance with the terms and provisions of the agreement.

- (4) Energy conservation measure. – Defined in G.S. 143-64.17.
- (5) Energy conservation property. – Buildings, equipment, or other property with respect to which an energy conservation measure is undertaken.
- (6) Financing contract. – An installment financing contract entered into pursuant to the provisions of this Article to finance the cost of an energy conservation measure.
- (7) Person. – An individual, a firm, a partnership, an association, a corporation, a limited liability company, or any other organization or group acting as a unit.
- (8) Special corporation. – A nonprofit corporation created under Chapter 55A of the General Statutes for the purpose of facilitating the incurrence of certificates of participation indebtedness by the State under this Article.
- (9) State governmental unit. – Defined in G.S. 143-64.17.
- (10) State Treasurer. – The incumbent Treasurer, from time to time, of the State. (2002-161, s. 9.)

§ 142-62: Reserved for future codification purposes.

§ 142-63. Authorization of financing contract.

Subject to the terms and conditions set forth in this Article, (i) a State governmental unit that is implementing an energy conservation measure pursuant to G.S. 143-64.17L and financing it pursuant to this Article, (ii) a State governmental unit that has solicited a guaranteed energy conservation measure pursuant to G.S. 143-64.17A or G.S. 143-64.17B, or (iii) the State Treasurer, as designated by the Council of State, is authorized to execute and deliver, for and on behalf of the State of North Carolina, a financing contract to finance the costs of the energy conservation measure. The aggregate outstanding amount payable by the State under financing contracts entered pursuant to this Article shall not exceed five hundred million dollars (\$500,000,000) at any one time. (2002-161, s. 9; 2006-190, s. 6; 2009-375, s. 1; 2011-145, s. 9.6D(f); 2013-396, s. 4(b).)

§ 142-64. Procedure for incurrence or issuance of financing contract.

(a) When a State governmental unit (i) is implementing an energy conservation measure pursuant to G.S. 143-64.17L and financing it pursuant to this Article or (ii) has solicited a guaranteed energy conservation measure, the State governmental unit shall request that the State Treasurer approve the State governmental unit's entering into a financing contract to finance the cost of the energy conservation measure. In connection with the request, the State governmental unit shall provide to the State Treasurer any information the State Treasurer requests in order to evaluate the request. In the event that the State Treasurer determines that financing efficiencies will be realized through the combining of financing contracts, then the State Treasurer is authorized to execute and deliver, for and on behalf of the State of North Carolina, subject to the terms and conditions

set forth in this Article, a financing contract for the purpose of financing the cost of the multiple energy conservation measures.

(b) A financing contract may be entered into pursuant to this Article only after all of the following conditions are met:

- (1) The Office of State Budget and Management has certified that resources are expected to be available to the State to pay the payments to fall due under the financing contract as they become due and payable.
- (2) The Council of State has approved the execution and delivery of the financing contract by resolution that sets forth all of the following:
 - a. The not-to-exceed term or final maturity of the financing contract, which shall be no later than 20 years from the date of acceptance of the project.
 - b. The not-to-exceed interest rate or rates (or the equivalent thereof), which may be fixed or vary over a period of time, with respect to the financing contract.
 - c. The appropriate officers of the State to execute and deliver the financing contract and all other documentation relating to it.
- (3) The State Treasurer has approved the financing contract and all other documentation related to it, including any deed of trust, security agreement, trust agreement or any credit facility.

The resolution of the Council of State shall include any other matters the Council of State considers appropriate.

(c) In determining whether to approve a financing contract under subdivision (b)(3) of this section, the State Treasurer may consider the factors the State Treasurer considers relevant in order to find and determine all of the following:

- (1) The principal amount to be advanced to the State under the financing contract is adequate and not excessive for the purpose of paying the cost of the energy conservation measure.
- (2) The increase, if any, in State revenues necessary to pay the sums to become due under the financing contract are not excessive.
- (3) The financing contract can be entered into on terms desirable to the State.
- (4) In the case of delivery of certificates of participation, the sale of certificates of participation will not have an adverse effect upon any scheduled or proposed sale of obligations of the State or any State agency.

(d) The Office of State Budget and Management is authorized to certify that funds are expected to be available to the State to make the payments due under a financing contract entered into under the provisions of this section as the payments become due and payable. In so certifying, the Office of State Budget and Management may take into account expected decreases in appropriations to the State governmental unit that will offset payments expected to be made under the financing contract. (2002-161, s. 9; 2006-190, s. 7; 2011-145, s. 9.6D(g).)

§ 142-65. Security; other requirements.

(a) In order to secure the performance by the State of its obligations under a financing contract or any other related documentation, the State may grant a lien on, or security interest in, all or any part of the energy conservation property or the land upon which the energy conservation property is or will be located.

(b) No deficiency judgment may be rendered against the State or any State governmental unit in any action for breach of any obligation contained in a financing contract or any other related documentation, and the taxing power of the State is not and may not be pledged directly or indirectly to secure any moneys due under a financing contract or any other related documentation. In the event that the General Assembly does not appropriate funds sufficient to make payments required under a financing contract or any other related documentation, the net proceeds received from the sale, lease, or other disposition of the property subject to the lien or security interest created pursuant to subsection (a) of this section shall be applied to satisfy these payment obligations in accordance with the deed of trust, security agreement, or other documentation creating the lien or security interest. These net proceeds are hereby appropriated for the purpose of making these payments. Any net proceeds in excess of the amount required to satisfy the obligations of the State under the financing contract or any other related documentation shall be paid to the State Treasurer for deposit to the General Fund of the State.

(c) Neither a financing contract nor any other related documentation shall contain a nonsubstitution clause that restricts the right of the State to (i) continue to provide a service or conduct an activity or (ii) replace or provide a substitute for any State property that is the subject of an energy conservation measure.

(d) A financing contract may include provisions requesting the Governor to submit in the Governor's budget proposal, or any amendments or supplements to it, appropriations necessary to make the payments required under the financing contract.

(e) A financing contract may contain any provisions for protecting and enforcing the rights and remedies of the person advancing moneys or providing funds under the financing contract that are reasonable and not in violation of law, including covenants setting forth the duties of the State in respect of the purposes to which the funds advanced under a financing contract may be applied, and the duties of the State with respect to the property subject to the lien or security interest created pursuant to subsection (a) of this section, including, without limitation, provisions relating to insuring and maintaining any property and the custody, safeguarding, investment, and application of moneys.

(f) The interest component of the installment payments to be made under a financing contract may be calculated based upon a fixed or variable interest rate or rates as determined by the State Treasurer.

(g) If the State Treasurer determines that it is in the best interest of the State, the State may enter into, or arrange for the delivery of, a credit facility to secure payment of the payments due under a financing contract or to secure payment of the purchase price of any certificates of participation delivered as provided in this Article. (2002-161, s. 9.)

§ 142-66. Payment provisions.

The payment of amounts payable by the State under a financing contract and any other related documentation during any fiscal biennium or fiscal year shall be limited to funds appropriated for that purpose by the General Assembly in its discretion. No provision of this Article and no financing contract or any other related documentation shall be construed or interpreted as creating

a pledge of the faith and credit of the State or any agency, department, or commission of the State within the meaning of any constitutional debt limitation. (2002-161, s. 9.)

§ 142-67. Certificates of participation.

(a) If the State Treasurer determines that the State would realize debt service savings under one or more financing contracts if certificates of participation are issued with respect to the rights to receive payments under the financing contract, then the State Treasurer is authorized to take actions, with the consent of the Council of State, that will effectuate the delivery of certificates of participation for that purpose.

(b) Terms; Interest. – Certificates of participation may be sold by the State Treasurer in the manner, either at public or private sale, and for any price or prices that the State Treasurer determines to be in the best interest of the State and to effect the purposes of this Article, except that the terms of the sale must also be approved by the special corporation. Interest payable with respect to certificates of participation shall accrue at the rate or rates determined by the State Treasurer with the approval of the special corporation.

(c) Trust Agreement. – Certificates of participation may be delivered pursuant to a trust agreement or similar instrument with a corporate trustee approved by the State Treasurer. (2002-161, s. 9.)

§ 142-68. Tax exemption.

Any financing contract entered pursuant to this Article, and any certificates of participation relating to it, shall at all times be free from taxation by the State or any political subdivision or any of their agencies, excepting income taxes on the gain from the transfer of the financing contract or certificates of participation; and franchise taxes. The interest component of the installment payments made by the State under the financing contract, including the interest component of any certificates of participation, is not subject to taxation as income. (2002-161, s. 9; 2015-264, s. 16(g).)

§ 142-69. Other agreements.

The State Treasurer may authorize, execute, obtain, or otherwise provide for bond insurance, investment contracts, credit and liquidity facilities, credit enhancement facilities, interest rate swap agreements and other derivative products, and any other related instruments and matters the State Treasurer determines are desirable in connection with entering into financing contracts and issuing certificates of participation pursuant to this Article. The State Treasurer is authorized to employ and designate any financial consultants, underwriters, fiduciaries, and bond attorneys to be associated with any financing contracts or certificates of participation under this Article as the State Treasurer considers appropriate. (2002-161, s. 9.)

§ 142-70. Investment eligibility.

Financing contracts entered into pursuant to this Article, and any certificates of participation relating to them, are securities or obligations in which all of the following may invest, including capital in their control or belonging to them: public officers, agencies, and public bodies of the State and its political subdivisions; insurance companies, trust companies, investment companies,

banks, savings banks, savings and loan associations, credit unions, pension or retirement funds, and other financial institutions engaged in business in the State; and executors, administrators, trustees, and other fiduciaries. Financing contracts entered pursuant to this Article, and any certificates of participation relating to them, are securities or obligations that may properly and legally be deposited with and received by any officer or agency of the State or any political subdivision of the State for any purpose for which the deposit of bonds, notes, or obligations of the State or any political subdivision is now or may later be authorized by law. (2002-161, s. 9.)

§ 142-71: Reserved for future codification purposes.

§ 142-72: Reserved for future codification purposes.

§ 142-73: Reserved for future codification purposes.

§ 142-74: Reserved for future codification purposes.

§ 142-75: Reserved for future codification purposes.

§ 142-76: Reserved for future codification purposes.

§ 142-77: Reserved for future codification purposes.

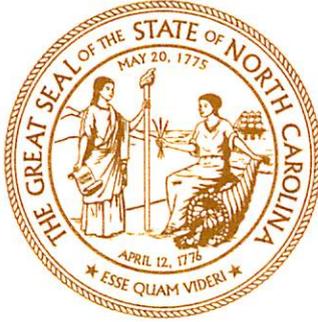
§ 142-78: Reserved for future codification purposes.

§ 142-79: Reserved for future codification purposes.

Appendix E

Executive Order Number 80,
*North Carolina's Commitment to Address
Climate Change and Transition to a Clean
Energy Economy*

(This page intentionally left blank)



State of North Carolina

ROY COOPER
GOVERNOR

October 29, 2018

EXECUTIVE ORDER NO. 80

NORTH CAROLINA'S COMMITMENT TO ADDRESS CLIMATE CHANGE AND TRANSITION TO A CLEAN ENERGY ECONOMY

WHEREAS, North Carolina residents deserve to be better educated, healthier, and more financially secure so that they may live purposeful and abundant lives; and

WHEREAS, N.C. Const. art. XIV, § 5 requires the conservation, protection, and preservation of state lands and waters in public trust; and

WHEREAS, North Carolina is well positioned to take advantage of its technology and research and development sectors, along with its skilled workforce, to promote clean energy technology solutions and a modernized electric grid; and

WHEREAS, public-private partnerships in North Carolina foster market innovations and develop clean energy technology solutions that grow the state's economy; and

WHEREAS, the effects of more frequent and intense hurricanes, flooding, extreme temperatures, droughts, saltwater intrusion, and beach erosion have already impacted and will continue to impact North Carolina's economy; and

WHEREAS, climate-related environmental disruptions pose significant health risks to North Carolinians, including waterborne disease outbreaks, compromised drinking water, increases in disease-spreading organisms, and exposure to air pollution, among other issues; and

WHEREAS, to maintain economic growth and development and to provide responsible environmental stewardship, we must build resilient communities and develop strategies to mitigate and prepare for climate-related impacts in North Carolina.

NOW, THEREFORE, by the authority vested in me as Governor by the Constitution and the laws of the State of North Carolina, **IT IS ORDERED**:

1. The State of North Carolina will support the 2015 Paris Agreement goals and honor the state's commitments to the United States Climate Alliance.

The State of North Carolina will strive to accomplish the following by 2025:

- a. Reduce statewide greenhouse gas emissions to 40% below 2005 levels;
- b. Increase the number of registered, zero-emission vehicles ("ZEVs"; individually, "ZEV") to at least 80,000;
- c. Reduce energy consumption per square foot in state-owned buildings by at least 40% from fiscal year 2002-2003 levels.

2. Cabinet agencies shall evaluate the impacts of climate change on their programs and operations and integrate climate change mitigation and adaptation practices into their programs and operations. Council of State members, higher education institutions, local governments, private businesses, and other North Carolina entities are encouraged to address climate change and provide input on climate change mitigation and adaptation measures developed through the implementation of this Executive Order. Consistent with applicable law, cabinet agencies shall actively support such actions.
3. The Secretary or designee of each cabinet agency and a representative from the Governor's Office shall serve on the North Carolina Climate Change Interagency Council ("Council"), which is hereby established. The Secretary of the North Carolina Department of Environmental Quality, or the Secretary's designee, shall serve as the Council Chair. The North Carolina Department of Environmental Quality shall lead the Council by providing strategic direction, scheduling and planning Council meetings, determining the prioritization of activities, facilitating stakeholder engagement, and assisting in the implementation of pathways to achieve the goals provided in Section 1 of this Executive Order.

The duties of the Council shall include the following:

- a. Recommend new and updated goals and actions to meaningfully address climate change;
 - b. Develop, implement, and evaluate programs and activities that support statewide climate mitigation and adaptation practices;
 - c. Establish workgroups, as appropriate, to assist the Council in its duties;
 - d. Consider stakeholder input when developing recommendations, programs, and other actions and activities;
 - e. Schedule, monitor, and provide input on the preparation and development of the plans and assessments required by this Executive Order;
 - f. Review and submit to the Governor the plans and assessments required by this Executive Order.
4. The North Carolina Department of Environmental Quality ("DEQ") shall develop a North Carolina Clean Energy Plan ("Clean Energy Plan") that fosters and encourages the utilization of clean energy resources, including energy efficiency, solar, wind, energy storage, and other innovative technologies in the public and private sectors, and the integration of those resources to facilitate the development of a modern and resilient electric grid. DEQ shall collaborate with businesses, industries, power providers, technology developers, North Carolina residents, local governments, and other interested stakeholders to increase the utilization of clean energy technologies, energy efficiency measures, and clean transportation solutions. DEQ shall complete the Clean Energy Plan for the Council to submit to the Governor by October 1, 2019.
 5. The North Carolina Department of Transportation ("DOT"), in coordination with DEQ, shall develop a North Carolina ZEV Plan ("ZEV Plan") designed to increase the number of registered ZEVs in the state to at least 80,000 by 2025. The ZEV Plan shall help establish interstate and intrastate ZEV corridors, coordinate and increase the installation of ZEV infrastructure, and incorporate, where appropriate, additional best practices for increasing ZEV adoption. DOT shall complete the ZEV Plan for the Council to submit to the Governor by October 1, 2019.
 6. The North Carolina Department of Commerce ("DOC") and other cabinet agencies shall take actions supporting the expansion of clean energy businesses and service providers, clean technology investment, and companies with a commitment to procuring renewable energy. In addition, DOC shall develop clean energy and clean transportation workforce assessments for the Council to submit to the Governor by October 1, 2019. These assessments shall evaluate the current and projected workforce demands in North Carolina's clean energy and clean transportation sectors, assess the skills and education required for employment in those sectors, and recommend actions to help North Carolinians develop such skills and education.
 7. Cabinet agencies shall prioritize ZEVs in the purchase or lease of new vehicles and shall use ZEVs for agency business travel when feasible. When ZEV use is not feasible, cabinet agencies shall prioritize cost-effective, low-emission alternatives. To support implementation of this directive, the North Carolina Department of Administration ("DOA") shall develop a North

Carolina Motor Fleet ZEV Plan (“Motor Fleet ZEV Plan”) that identifies the types of trips for which a ZEV is feasible, recommends infrastructure necessary to support ZEV use, develops procurement options and strategies to increase the purchase and utilization of ZEVs, and addresses other key topics. DOA shall complete the Motor Fleet ZEV Plan and provide an accounting of each agency’s ZEVs and miles driven by vehicle type for the Council to submit to the Governor by October 1, 2019, and annually thereafter.

8. Building on the energy, water, and utility use conservation measures taken pursuant to N.C. Gen. Stat. § 143-64.12(a), DEQ shall update and amend, where applicable, a Comprehensive Energy, Water, and Utility Use Conservation Program (“Comprehensive Program”) by February 1, 2019, and biennially beginning December 1, 2019, to further reduce energy consumption per gross square foot in state buildings consistent with Section 1 of this Executive Order. The Comprehensive Program shall include best practices for state government building energy efficiency, training for agency staff, cost estimation methodologies, financing options, and reporting requirements for cabinet agencies. DEQ and cabinet agencies shall encourage and assist, as requested, higher education institutions, K-12 schools, and local governments in reducing energy consumption. To achieve the required energy consumption reductions:
 - a. By January 15, 2019, each cabinet agency shall designate an Agency Energy Manager, who shall serve as the agency point of contact.
 - b. Each cabinet agency shall develop and submit an Agency Utility Management Plan to DEQ by March 1, 2019, and biennially thereafter, and implement strategies to support the energy consumption reduction goal set forth in Section 1 of this Executive Order. DEQ shall assess the adequacy of these plans and their compliance with this Executive Order.
 - c. By September 1, 2019, and annually thereafter, each cabinet agency shall submit to DEQ an Agency Utility Report detailing its utility consumption, utility costs, and progress in reducing energy consumption.
 - d. DEQ shall develop an annual report that describes the Comprehensive Program and summarizes each cabinet agency’s utility consumption, utility costs, and achieved reductions in energy consumption. DEQ shall complete this report for publication on its website and for the Council to submit to the Governor by February 1, 2019, and annually thereafter beginning December 1, 2019.
9. Cabinet agencies shall integrate climate adaptation and resiliency planning into their policies, programs, and operations (i) to support communities and sectors of the economy that are vulnerable to the effects of climate change and (ii) to enhance the agencies’ ability to protect human life and health, property, natural and built infrastructure, cultural resources, and other public and private assets of value to North Carolinians.
 - a. DEQ, with the support of cabinet agencies and informed by stakeholder engagement, shall prepare a North Carolina Climate Risk Assessment and Resiliency Plan for the Council to submit to the Governor by March 1, 2020.
 - b. The Council shall support communities that are interested in assessing risks and vulnerabilities to natural and built infrastructure and in developing community-level adaptation and resiliency plans.
10. DEQ shall prepare and manage a publicly accessible Web-based portal detailing the Council’s actions and the steps taken to address climate-related impacts in North Carolina. Cabinet agencies shall submit data, information, and status reports as specified by the Council to be published on the portal. In addition, DEQ shall develop, publish on the portal, and periodically update an inventory of the state’s greenhouse gas emissions that, among other things, tracks emissions trends statewide by sector and identifies opportunities for additional emissions reductions.
11. By October 15, 2019, and annually thereafter, the Council shall provide to the Governor a status report on the implementation of this Executive Order.
12. This Executive Order is consistent with and does not otherwise abrogate existing state law.

13. This Order is effective October 29, 2018 and shall remain in effect until rescinded or superseded by another applicable Executive Order.

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the Great Seal of the State of North Carolina at the Capitol in the City of Raleigh, this the 29th day of October, in the year of our Lord two thousand eighteen.



Roy Cooper
Governor

ATTEST:



Rodney S. Maddox
Chief Deputy Secretary of State



Appendix F

List of Recertified Qualified Providers in North Carolina

(This page intentionally left blank)

NC Qualified Providers List Updated 10/2021

#	ESCO	Contact Person	Title	Email	Address	State	Office	Mobile
1 Ameresco								
		Robbie Williams	Senior Account Executive	rwilliams@ameresco.com	5550 77 Center Drive Suite 380	Charlotte NC 28217		919-760-7837
		Garrett Raper	Director Project Development	graper@ameresco.com	5550 77 Center Drive Suite 380	Charlotte NC 28217	704-916-3514	704-798-0943
		Jim Josephson	Manager Business Development	jjosephson@ameresco.com	5550 77 Center Drive Suite 380	Charlotte NC 28217		704-916-3524
2 Brady Trane								
		Raynor Smith	Vice President	raynor.smith@bradyservices.com	1460 Diggs Drive #A	Raleigh, NC 27603		919-745-0513
		Kevin Lynn	Account Executive	kevin.lynn@bradyservices.com	1460 Diggs Drive #A	Raleigh, NC 27603		984-867-7653
		Rob Morrow	Senior Account Executive	rob.morrow@bradyservices.com	1460 Diggs Drive #A	Raleigh, NC 27603		919-750-6947
3 CMTA								
		Jeremy Smith	Vice-President	jsmith@cmta.com	9519 Civic Way	Prospect, KY 40059	502-409-4062	859-421-9603
		John Bradshaw	Business Development	jbradshaw@cmta.com	7 Forest Hills Drive	Wheeling, WV 26003	304-551-3882	304-551-3882
		Roger Maybrier	Partner In Charge	rmaybrier@cmta.com	9519 Civic Way	Prospect, KY 40059	502-409-4062	859-361-0997
		Bill Powell	Project Manager	bpowell@cmta.com	11213 Crestmont Drive	Raleigh, NC 27613	919-724-5439	919-724-5439
4 Con Edison								
		John Cain	Sales Executive	cainj@conedceb.com	100 Summit Lake Drive Suite 210	Valhalla, NY 10595		914-400-6504
		Peter Keating	Dir. Of EE and Renewables	keatingp@conedceb.com	7777 Leesburg Pike Suite 307 S	Falls Church, VA		703-346-9839
		James Dixon	Executive Officer	dixonj@conedceb.com	100 Summit Lake Drive Suite 210	Valhalla, NY 10595	914-266-7000	
5 Energy Systems Group								
		Hank Henning	Account Executive	hhenning@energysystemsgroup.com	525 N. Tryon St.	Charlotte, NC 28202	910-939-6339	336-708-6913
		Chad Armstrong	Sales Manger Southeast Region	carmstrong@energysystemsgroup.com	One Alhambra Plaza, Floor PH	Coral Gables, FL 33134	954-995-0008	954-995-0008
6 Honeywell								
		John Richardson	Senior Account Executive	john.richardson@honeywell.com	201 S. Rogers Lane	Raleigh, NC 27610	919-412-5026	919-412-5026
		Dan Powel	South East Energy Sales Mgr.	daniel.powel@honeywell.com	300 S. Tryon Street Suite 500	Charlotte, NC 28202	980-315-9767	980-315-9767
7 Johnson Controls Inc.								
		Kim Smith	Account Executive	kimberly.l.smith@jci.com	14 Woodcross Drive	Columbia, SC 29212		803-403-3719
		Michael Wilson	Account Executive	michael.samuel.wilson@jci.com	131 Kingsland Way	Piedmont, SC 29673		864-276-8222
		John Poggi	Account Executive	john.j.poggi@jci.com	60 Loveton Circle	Sparks, MD 21152		410-382-4882
8 Noresco								
		Brian Stone	Account Executive	bstone@noresco.com	200 Perimeter Park Drive Suite A	Morrisville, NC 27560	919-653-7564	615-428-5118
		Trey Crayford	National Sales Director	tcrayford@noresco.com	200 Perimeter Park Drive Suite A	Morrisville, NC 27560	678-553-4864	770-519-6584
		Jim Williams	Vice Pres. General Mgr.	jwilliams@noresco.com	5555 Glenridge Connector Suite 375	Atlanta, GA	678-553-4860	404-805-6726
9 Piedmont Service Group								
		Dale Cranford	Energy Engineer	dcranford@piedmontsg.com	1031 Nowell Road	Raleigh, NC 27607	336-553-7768	336-553-7768
		Gary Hill	Division Manager	ghill@piedmontsg.com	1031 Nowell Road	Raleigh, NC 27607	919-654-5136	
		Jerry Spaulding	Vice President	jspaulding@piedmontsg.com	1031 Nowell Road	Raleigh, NC 27607	919-645-5148	
10 Schneider Electric								
		Alysa Watkins	Senior Account Executive	alysa.watkins@se.com	1630 Gores Landing Road SW	Ocean Isle Beach, NC 28469		919-612-2432
		Graham Lewis	Account Executive	graham.lewis@se.com	2600 Perimeter Park Dr., Ste 150	Morrisville, NC 27560		919-758-6093
		Ken Broach	East Region Director	ken.broach@se.com	1650 W. Crosby Road	Carrollton, TX 75006		972-489-6327
		Barry Wilhelm	Sales Team Leader	barry.wilhelm@se.com	6800 Paragon Place Suite 470	Richmond, Virginia 23230		540-798-3220
		Donna Byrd	Regional Client Coordinator	donna.byrd@se.com	4329 Cushendale Court	Leland, NC 28451		919-612-2654
11 Siemens								
		Gregg Eaton	Zone Sales Manager	gregg.eaton@siemens.com	8403 Benjamin Rd	Tampa, FL 33634		813-261-8745
		Keith Byrom	Account Executive	keith.byrom@siemens.com	14 Stonewall Court	Irmo, SC 29063		803-960-2222
		Tim Gasper	Energy Solutions Team Leader - NC	timothy.gasper@siemens.com	215 Southport Drive	Morrisville, NC 27560		919-946-2513
12 Trane US								
		Rich Penner	Senior Account Manager	rlpenner@trane.com	4501 South Tryon Street	Charlotte, NC 28217		704-564-0433
		Larry Cummings	Southern Atlantic Manager	larry.cummings@trane.com	10408 Lakeridge Parkway Suite 100	Ashland, VA 23005		804-836-7513
		John Anderson	Senior Account Manager	john.anderson@trane.com	4501 South Tryon Street	Charlotte, NC 28217		704-218-0213

(This page intentionally left blank)