Alleghany County Schools

Re-issue
REQUEST FOR PROPOSAL

FOR GUARANTEED ENERGY SAVINGS PERFORMANCE CONTRACTING

December 11, 2019

RFP 121119

REQUEST FOR PROPOSALS FOR

Alleghany County Schools

STATE OF NORTH CAROLINA

GUARANTEED ENERGY SAVINGS PERFORMANCE CONTRACT

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Alleghany County Schools
STANDARD REQUEST FOR PROPOSAL
GUARANTEED ENERGY SAVING PERFORMANCE CONTRACT

1. GENERAL INFORMATION

1.1. **Issuing Office:** This RFP is issued by ***Alleghany County Schools*** (hereinafter referred to as "ISSUER"). **The following Issuing Officer is the sole point of contact for this RFP:** *Brent Long, Associate Superintendent. All emails will be received at brent.long@alleghany.k12.nc.us*

1.2. **Purpose.** This Request for Proposals (RFP) contains the information provided by ISSUER and requirements for Qualified Providers, as defined in Chapter 143 Article 3B Part 2 of the General Statutes (hereinafter referred to as "ESCO") to submit to the ISSUER a Preliminary Technical Proposal for a Guaranteed Energy Savings Contract (referred to herein as the "GESC"). The ESCO's response to this RFP (the "Proposal") must be based on the ESCO's assessment of the facilities selected by the ISSUER and listed in Appendix I. The ISSUER reserves the right to consider additional Energy Conservation Measures (ECMs), as that term is defined in Chapter 143 Article 3B Part 2 of the General Statutes identified during the subsequent Investment Grade Audit (IGA) for evaluation and inclusion in the project. This RFP, including any amendments, contains the only instructions governing the proposals and material to be included therein; a description of the services to be provided by the successful applicant; general evaluation criteria; and other proposal requirements.

1.3. **Mandatory pre-proposal meeting: A mandatory pre-proposal Meeting will be conducted by *Alleghany County Schools* on 12/20/2019, at the Central Office 85 Peachtree St., Sparta, NC 28675 at 10 a.m. Any questions should be directed to the Issuing Officer identified in 1.1.**

Proposals from ESCOs who fail to attend the pre-proposal meeting will receive no consideration.

ALL PROPOSALS WILL BE RECEIVED and OPENED and ANNOUNCED on January 27, 2020 at 10 a.m. in the Alleghany County Schools Board Room 85 Peachtree St., Sparta, NC 28675

REQUIRED INFORMATION MUST BE DELIVERED TO THE FOLLOWING ADDRESS: *85 Peachtree St., Sparta, NC 28675, Brent Long, Associate Superintendent***. Mark on the lower right corner of the submittal: RFP 112519**

1.4. **Objective:** The objective of the ISSUER in issuing this RFP is to maximize energy and operational cost savings to pay for upgrades to the facilities listed in Appendix I and services that will be financed through a GESC. The services may include but are not limited to: (1) A preliminary audit to be performed on the project sites identified in Appendix I in accordance with § 143-64.17A, (2) The highest ranked qualified provider will prepare a cost benefit analysis conducted in accordance with Attachments A, B and C on the potential ECMs identified in the preliminary audit, (3) An IGA to be conducted on all project sites to identify appropriate ECMs, (4) The design, acquisition, installation, modification, commissioning and maintenance of the ECMs, (5) The training of staff in the operation of existing equipment and new ECMs, (6) Identifying and recommending energy and

operational cost savings, such as fuel switching, demand reductions, on-site generation, utility bill auditing, utility rate changes, distribution upgrades. **Any stipulated energy and/or operational cost savings that may be attributed to this project will be rigorously reviewed and, if agreed to, will be limited to those that can be thoroughly documented and approved by the ISSUER.**

No GESC shall exceed **20** years in duration from the date of the installation and acceptance of the project, as defined in § 143-64.17B, and must comply with all other applicable statutes, regulations, and procurement laws. **Proposals for this RFP shall not exceed the preferred term stated in Paragraph 1.7**. The cost savings achieved by the installed ECMs must be sufficient to cover all project costs including debt retirement and service fees on an annual basis for the duration of the term of the GESC**.**

The ESCO shall guarantee sufficient energy cost savings, as defined in § 143-64.17, to enable the ISSUER to meet its payment obligations including the entity financing the "GESC". ESCOs will be required to guarantee energy savings on an annual basis. No credit for the achievement of energy savings above and beyond the annual guarantee will be credited to satisfy performance guarantees in other years of the contract. Annual reconciliation of the achieved energy savings shall be required.

1.5. **Security Requirements:** The Department of State Treasurer has determined that the following general types of security for the guaranteed energy savings would be acceptable, however specific instruments of security as part of a financing contract for energy conservation measures will need to be approved by the Department of the State Treasurer as per N.C.G.S. § 143-64.17B.(c) for each guaranteed energy savings performance contract. These general types are:

1.5.1. ***A corporate guarantee*** by the ESCO provided that the ESCO has a long-term investment grade corporate rating from one or more of the national credit rating agencies. Currently, this would be a minimum rating of BBB from Standard and Poor's, Baa from Moody's Investors Service, or BBB from Fitch Ratings.

1.5.2. ***A corporate guarantee*** from the parent company of an ESCO which is owned as a subsidiary of the parent. The parent company would be required to maintain a long-term investment grade rating from one or more of the national credit rating agencies (see above.)

1.5.3. ***An irrevocable letter of credit*** from a financial institution which covers the entire term of the contract, without need of renewal.

1.5.4. ***A surety bond*** which covers the entire term of the contract, without need of renewal.

1.5.5. ***Financing by the ESCO*** in which the ESCO provides all financing required for the entire term of the contract. Financing may only be transferred or assigned to the extent that energy savings are realized, and State property may not be encumbered in any form as part of the financing.

All forms of security would be required to be in place at the initiation of the guaranteed energy savings performance contract covering (100%) of the guaranteed energy savings for the term of the guaranteed energy savings performance contract.

1.6. **Description of the Procurement Process:** The process for the procurement of these guaranteed energy savings services will proceed as follows:

1.6.1. **Solicitation of proposals.** The ISSUER will issue a request for proposals that is open to all ESCOs who have been prequalified by The NC Department of Environmental Quality Utility Savings Initiative (USI). **Notice of the request must 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 in which the facility or facilities are located**. In addition, the ISSUER will request USI to place a notice regarding the solicitation on the USI Performance Contracting web page with instructions on how to obtain the solicitation.

1.6.2. **Opening of proposals.** Proposals are to be opened in accordance with the instructions in Paragraph 1.3. All proposals received by the specified time will be opened, provided more than one proposal is received, by a member or employee of the ISSUER at a public opening who will announce the name of the ESCO submitting the Proposal and verify the execution of the signature page by the ESCO. **Unsigned proposals will be rejected.** If only one proposal from an ESCO is received, then the ISSUER may re-issue this RFP unless this is the second release at which time a single response may be accepted.

1.6.3. **Evaluation of proposals**. Responding ESCOs shall conduct a preliminary audit of the facilities listed in Appendix I. This preliminary audit will form the basis of the ESCOs' written Preliminary Proposal. The Proposals must be in substantial conformity with Article 4 (Submission of Proposals) and other conditions set forth in the RFP. The ISSUER will evaluate or cause its designated representatives to evaluate the ESCOs' Preliminary Proposals. The proposal shall be evaluated by a Qualified Reviewer as defined in Chapter 143 Article 3B Part 2 of the General Statutes ("Qualified Reviewer"). The Qualified Reviewer may be selected from the ISSUER's staff or a third-party engineer or architect may be engaged by the ISSUER. The evaluation shall be based on the criteria listed in Article 3 of this RFP. The Qualified Reviewer shall also review Attachments A, B, and C to determine if project scope, costs and savings are reasonable and achievable.

1.6.4. **Client reference checks.** The ISSUER shall review and evaluate the ESCO client references provided in the Proposal in accordance with the evaluation criteria identified in Article 3.

1.6.5. **Shortlist.** The ISSUER shall shortlist ESCOs on the basis of the rankings of evaluating the written proposal and the client references.

1.6.6. **Oral interview**. Each shortlisted ESCO may be required to participate in an oral interview. The purpose of this session is to clarify specific aspects of the technical proposal and to answer questions posed by the evaluation team. These oral interviews may be recorded. ESCO responses given in the oral interview will be part of the overall evaluation, but the ESCO shall not be allowed to vary the written Proposal or improve the competitive position of the ESCO.

1.6.7. **Selection of ESCO to develop the project**. The ISSUER shall have the highest ranked ESCO prepare Attachments A, B, and C for the proposed contract. Only the potential ECMs identified in Article 4 Section 5.1 of the proposal may be included in the attachments. The ISSUER may require that the ESCO competitively bid any of

the products or contractors required to implement the project. Copies of all such bids shall be sent to the ISSUER. Time and access to facilities to submit Attachments A, B, and C will be negotiated by the selected ESCO and the ISSUER.

1.6.8. **Negotiate with Highest Ranking ESCO**. The ISSUER and ESCO shall negotiate acceptable terms, pricing, savings estimates, percentages and approve terms for an Investment Grade Energy Audit Agreement and Energy Services Agreement. If the Parties cannot agree to the above, the ISSUER or ESCO may terminate the process at which time the ISSUER may begin negotiations with the second highest ranked ESCO. Once the second highest ranked ESCO is engaged the ISSUER may not return to the highest ranked ESCO.

1.6.9. **Qualified Reviewer and USI Review**. The ISSUER'S Qualified Reviewer, shall also review Attachments A, B, and C to determine if project scope, costs and savings are reasonable and achievable. **The ISSUER shall provide and USI shall review and comment on the selected ESCO's proposal, all Attachments, the approved IGA and ESA as developed in 1.6.8 above and other relevant documents prior to the ISSUER announcing the award**.

1.6.10. **Award Announcement**. The **ISSUER** shall provide published notice of the time and place of the meeting at which it proposes to award the IGA contract, the names of the parties to the proposed contract, and the contract's purpose. This announcement shall be published 15 days prior to award or meeting**.**

1.7. **Type of Contracts:** The successful applicant will be required to enter an IGA Agreement and where the ISSUER elects, enter an Energy Services Agreement (ESA) as negotiated under 1.6.8. The ISSUER may, at its sole discretion, allow certain elements of the contracts to be negotiated. The approved versions of above documents shall be in place prior to the award of the IGA Agreement. The preferred term of the GESC shall be for a maximum of 15 years from the date of acceptance of the project, as defined in § 143-64.17B. During the Investment Grade Audit, the ISSUER reserves the right to adjust the term based on final cost and interest rate. The ISSUER shall own all installed equipment which shall be free and clear of all liens and encumbrances upon transfer of ownership to the ISSUER.

1.8. **Rejection of Proposals:** The ISSUER reserves the right to reject any and all proposals received. If the ISSUER decides to terminate this process the ISSUER shall notify all responders of such decision within 30 days.

1.9. **Incurring Costs:** The ISSUER is not liable for any costs or expenses incurred by ESCOs in the preparation of their Proposals or for attendance at any conferences and meetings related to this RFP.

1.10. **Amendments to the RFP**: If it becomes necessary to revise any part of this RFP, an addendum will be issued to all ESCOs who attended the mandatory pre-proposal meeting. If any ESCO has questions prior to opening the proposal, those questions shall be submitted and answered in writing in accordance with the schedule listed in Article 2. A copy of all questions and answers submitted will be sent to all ESCOs that attended the mandatory pre-proposal meeting.

1.11. **Error / Clarification:** When a proposal 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 proposals are submitted substantially in accordance with this RFP but are not entirely clear as to the intent or to some particular fact where there are other ambiguities, clarification may be sought and accepted.

1.12. **Restriction of Contact:** From the date this RFP is issued until a determination is made regarding the final selection of an ESCO for the Project, all contacts with the ISSUER concerning this RFP shall be made in writing through the Issuing Officer, identified in Paragraph 1.1, only. This includes any questions that may arise during or after the site visits in preparation of the response. **Failure to comply with this provision shall subject the ESCO to disqualification**.

1.13. **Debriefing:** As a courtesy, the ISSUER will notify in writing ESCOs who are not awarded within a reasonable period following the ISSUER's selection of an ESCO pursuant to this RFP. The ESCO may request a debriefing with the ISSUER at this time which shall be granted in a reasonable time.

1.14. **Proposals:** To be considered, Proposals must include responses to all requests for information in this RFP. Proposals must be straightforward and concise without extraneous material. Font size may be no smaller than 10 point. The ESCO shall make no other use of the proposal. An official authorized to bind the ESCO must sign the proposal. The proposal shall constitute a valid firm offer **for 90 days** after the opening of proposals submitted pursuant to this RFP. **The contents of the proposal of the selected ESCO will become part of the ESCO's contractual obligations to the extent that the proposal does not conflict with provisions of this RFP. Any alterations to this document by the ESCO shall subject the ESCO's response to disqualification.**

1.15. **Site Visits:** The Issuing Officer or their designated representative will arrange inspection tours of the buildings to be audited. Site representatives will be available to escort ESCOs and their representatives through the facilities. Questions arising during and out of these tours shall be submitted in writing to the Issuing Officer. Technical information supplemental to material contained in this RFP will be made available for review and inspection onsite. Only ESCOs who were represented at the pre-proposal meeting are eligible to participate in these site visits.

1.16. **Late Offers, Modifications or Withdrawals:** No late offer, modification, or withdrawal shall be considered unless received before Proposal Opening Date, and the offer, modification, or withdrawal would have been timely but for the action or inaction of one of the ISSUER's employees or agents. The ESCO shall bear the sole responsibility of having its proposal delivered on time, regardless of the mode of delivery used, including the U.S. Postal Service or any other delivery services available. The time allowed for the acceptance of offers may be extended by the ISSUER.

1.17. **Minority Business Participation:** In accordance with N.C.G.S. § 143-128, State agencies and universities have adopted a policy to achieve verifiable goals of participation by minority businesses in each renovation project. A copy of ISSUER's guidelines is included in Appendix III. All applicants shall comply with the policy and guidelines.

1.18. **ESCO Responsibility:** The selected ESCO will be required to assume total responsibility for all services and/or equipment offered in the Proposal. The selected ESCO is responsible for obtaining all applicable permits, reviews and meeting all licensing requirements. The selected ESCO will be considered the Prime Contractor and the sole point of contact with regard to the Project.

1.19. **Payment and Performance Bond:** The selected ESCO shall be required to provide construction payment and performance bonds in conformance with NCGS § 44-A, Article 3 and in the amount of 100% of the total financed project cost as shown on Attachment B. The ESCO's proposal must include the form of two payment and performance security instruments as follows:

1.) The first security instrument, a payment and construction performance bond, is to be conditioned for the faithful performance and fulfillment of the installation of the Energy Conservation Measures and which shall be valid until the completion of the installation work, with construction approved by the ISSUER and the Authority Having Jurisdiction.
2.) The second security instrument shall be a written guarantee, which will be contained in the contract, which states that the annual energy or operational costs savings will meet or exceed the total cost of the contract, including (without limitation) financing, installed equipment costs, contract security instruments required by the Department of State Treasurer, an annual fee for a third-party engineer, and measurement and verification for the entire length of the contract period. This security instrument must be in a form and amount acceptable to the Department of State Treasurer as listed in Paragraph 1.5.

1.20. **References and Proprietary Information:** Submission of a Proposal grants permission to the ISSUER to make inquiries concerning the respondent and its officers to any persons or firms deemed appropriate by ISSUER. Any proprietary information will be treated as provided for in N.C. Public Records Act. Data or information so identified will be used by the ISSUER solely for the purpose of evaluation and contract negotiations.

1.21. **North Carolina Products:** Where quality and availability allow, specifications shall be based on products manufactured by and services provided by North Carolina businesses. This special interest in North Carolina products is intended to encourage and promote their use, but shall not be exercised to the exclusion of other products or to prevent fair and open competition.

1.22. **Proposal Funding:** 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 Department of the Treasurer for approval. The ESCO receiving the contract award shall submit a total contract cost option and cash flow analysis based on ESCO or third-party financing at best available rate. This is the basis for Attachment "B" and Attachment "C".

1.23. **Annual Reconciliation:** The energy savings shall be monitored and reported in accordance with the measurement and verification plan created in Schedule F of the IGA commencing with the date of the Certification of Final Acceptance to be signed by the ISSUER. The reconciliation report is due no more than 60 days from the anniversary of the Certification of Final Acceptance. In the event that the actual savings are less than the guaranteed savings, the ESCO shall provide cash reconciliation of the difference

within thirty (30) calendar days of written demand by the ISSUER. **A surplus in any one year shall not be carried forward or applied to a shortfall in any other year**.

1.24. **Qualified Reviewer:** The ISSUER may engage a Qualified Reviewer who may act as the ISSUER's representative. This professional shall provide services in the review of the RFP and Attachments A,B, & C.

2. **ANTICIPATED PROJECT SCHEDULE**

Alleghany County Schools

Activity	**Date**
Issue RFP and have posted on USI website	12/11/19
Mandatory pre-proposal meeting	12/20/19
Site Visits (to be arranged)	12/20/19
Questions due	1/6/2020
Answers distributed	1/13/20
Proposals Due	1/27/20
Proposals Reviewed, Evaluated and Ranked	2/3/20
Oral Interviews and selection of ESCO	2/10/20
Highest ranked ESCO completes Attachments A, B and C	2/17/20
IGAA and ESA Negotiated and approved	3/10/20
Advertise award per Paragraph 1.6.7	TBD
IGA Conducted	TBD
USI IGA Report review	TBD
For state government units conduct All Hands Meeting	TBD
For UNC institutions and affiliates BOG approval	TBD
Financial RFP issued	TBD
Contract Preparation and review Local Board approval Financial RFP and contract For local government units County Commission approval For local government units Treasurer & LGC approval For state government units Treasurer & OSBM approval For state government units COS approval	TBD
Contract Presented and Signed	TBD

3. EVALUATION PROCESS AND CRITERIA

Each proposal will be reviewed for completeness and scored pursuant to the evaluation criteria as described in this Article.

3.1. **Completeness.** Responses will be initially evaluated based on the completeness and quality of the information provided in Article 4, ESCO Proposal: Sections 1 through 19, and **when requested** Attachment A ECM Matrices, Attachment B Preliminary Cost Proposal, Attachment C Preliminary Cash Flow Analysis. A Proposal will be considered complete if all requested sections are included in the proper order and properly completed. An incomplete Proposal may be disqualified.

3.2. **Evaluation Criteria.** The ISSUER will utilize the following criteria in its evaluation of proposals:

Proposal and ESCO Appraisal

Criterion	**Point Value**
Clarity, organization, and level of detail in written proposal	5
Substantial conformity with RFP requirements	5
Potential ECMs included meet ISSUER's expectations as expressed in Appendix I	10
Qualifications of proposed project staff to be assigned	5
General reputation, experience, reliability, working relationship and performance capability of the ESCO (quality of references)	10
Proposed training meets ISSUER's requirements	5
All previous GESC Projects are in good standing with no outstanding delinquencies or Compliance Issues	10
Total:	**50**

Technical Approach

Criterion	**Point Value**
ESCO identified additional issues not referenced in this RFP	5
Quality of proposed potential ECMs in response	10
Quality of proposed project delivery approach	10
Implementation schedule achievable	5
Quality of proposed project-specific Maintenance Approach as proposed in Section 10 and Section 6 responses	5
Quality of proposed project-specific Measurement and Verification Approach as proposed in Section 9 and Section 6 responses	5
Understanding of customer's operation, challenges and needs	5

As expressed in Section 6 ESCOs approach to assure the performance of the project/equipment as well as the project savings for project term.	20
Additional benefits to ISSUER identified in proposal	5
Quality of approach to use Local Contractors	10
Quality of approach to encourage HUB Contractor Participation	10
Total:	**90**

Oral Interview

Criterion	**Point Value**
Quality of communication skill exhibited by ESCO representatives	5
Demonstrated clear understanding of the ISSUER's needs	5
Answered questions in concise manner staying on topic	5
Presenters were knowledgeable and professional	5
Appropriate project specific employees participated in interview	3
Total:	**23**

Grand Total: 163

3.3. **Review of RFP Responses**

The ISSUER, or their designees, will evaluate each Proposal to this RFP pursuant to criteria listed in Paragraph **3.2** above. The evaluators will grade the Proposals on their merit and responsiveness to the needs of the ISSUER. Responses will be evaluated in light of the material and substantiating evidence presented in the Proposal. The evaluation process may include verification of references, confirmation of financial information, and may also include interviews, site visits, or other information as directed by the ISSUER.

In accordance with **§ 143-64.17A** sections (c) and (c1) the Proposals shall be evaluated by a Qualified Reviewer (to be designated by the ISSUER). This cost may be included in the total cost of the contract.

3.4. **Final Selection and Notification**

The ISSUER shall have USI and the qualified reviewer review the selected ESCO's proposal, cost-benefit analysis, and other relevant documents for comments after which the ISSUER may announce the award. Award announcement shall be made in accordance with the provisions in 1.6.10. The ISSUER reserves the right to reject any and all proposals received and is not required to furnish a statement of the reason why a particular proposal was not deemed to be the most advantageous. The ISSUER will reasonably notify each responder of the successful ESCO.

4. SUBMISSION OF PROPOSALS

4.1. **Form of Proposal.**

All Proposals shall be submitted on “8 ½ x 11" sheets of paper (unless specifically exempted from this requirement below) that are numbered sequentially by section (example: 1-1) and use labeled tabs to separate sections. Font size must be no smaller than 10 point, utilizing the front and back of pages. Applicants shall also include a Table of Contents that indicates the section and page numbers corresponding to the information included. The Applicant shall submit to the ISSUER one original, two hard copies and one electronic copy. When requested by the ISSUER Attachments A, B, and C will be submitted electronically in MS Excel format.

4.2. **Content of Proposal.**

Each Applicant is required to complete all sections listed below.

Section 1: Company Profile and History. The ESCO shall comply with proper contractor licensing requirements to perform construction if selected. **Indicate on page one of this section the license under which work will be performed**. Include an actual template of the form of security to be provided. **The security must be one of the five forms accepted by the Department of State Treasurer (see Paragraph 1.5)**. (4 page limit two double sided sheets the security template may be additional pages)

Section 2: Project Summary (4 page limit two double sided sheets).

Section 3: Project Team including resumes

Name of Project Team Member:	
Current Job Title: **Job responsibilities:** **Number of years with ESCO:** **Primary Office Location:**	
Employment History **Company Name:** **Primary job responsibilities:** **Number of years with firm:**	
Educational Background **List all academic degrees, certifications, licenses, professional affiliations, relevant publications and technical training.**	
List all energy performance contracting projects this individual has been involved with during past 5 years. Include project location, type of facilities, year implemented and dollar value of installed project costs.	
Describe the specific role and responsibilities this individual had for each listed project.	
Provide a detailed description of the role and responsibilities this individual will have for the duration of this project.	
Describe any other relevant technical experience.	

Indicate the total years of relevant energy-related experience for this individual.	

Section 4: Existing Conditions.

Section 5: Potential ECMs to issues for buildings listed in Appendix 1.

Section 5.1: It is not the ISSUERS intention to have the ESCO perform a full engineering evaluation of the buildings at this point. Based on experience and observation of existing conditions the ESCO should provide a brief description of proposed potential ECMs to the issues identified by the ISSUER in Appendix 1. The ESCO may also include information on issues noticed but not identified by ISSUER.

ESCO may group potential ECMs by building or ECM type. ESCO should provide a summary table showing buildings and potential measures for easy reference. A single, two sided page should be used for either each building or potential ECM. Narrative may also include specific product recommendations

Cost and savings estimates shall not be provided with this written response or during oral interviews.

Section 5.2: Details of work that will be performed outside of the United States.

Section 6: Risk responsibility matrix: The Risk Responsibility Matrix gives the ESCO the opportunity to differentiate themselves from the competition through their responses in how they will deliver services to the ISSUER using the Performance Contracting Model. Responsibilities may be assigned to the ISSUER but all risk must remain with the ESCO. This matrix is available in table format in MS Word upon request.

1. RESPONSIBILITY/DESCRIPTION
1. Financial
a. GESC is marketed as a method for the ISSUER to contract for energy efficiency measures at no or little cost. What will be required of the ISSUER and ESCO for there to be sufficient funds in the utility budget year over year to pay the total costs of the project (Debt retirement and annual fees) as well as remaining utility costs?
ESCO PROPOSED APPROACH:
b. Neither the ESCO nor the ISSUER has significant control over prevailing interest rates. During all phases of the project, interest rates will change with market conditions. Higher interest rates will increase project cost, financing/project term, or both. Please state your approach to mitigate fluctuating interest rates.

ESCO PROPOSED APPROACH:
c. Energy prices are dynamic usually increasing over time but at times decreasing. Describe how future energy costs will be treated and their impact on project cashflow specifically guaranteed savings.
ESCO PROPOSED APPROACH:
d. During construction material and labor costs may increase and overrun the fixed budget. Explain how the project might be brought back on target with the approved budget and cash flow and who bears the responsibility for any overage if it can't.
ESCO PROPOSED APPROACH:
e. Explain the relationship between M&V cost and savings accuracy calculations**.** What will be the ESCOs approach to provide adequate assurance to the ISSUER that actual savings are being achieved while not significantly impacting project scope?
ESCO PROPOSED APPROACH:
f. NC requires a security instrument to be in place to back the ESCO guarantee. What method does the ESCO use to provide this security and what will the cost to the ISSUER be for this security?
ESCO PROPOSED APPROACH:
g. Both the ESCO and the ISSUER may cause delays. Failure to implement a viable project in a timely manner costs the ISSUER in the form of lost savings, and can add cost to the project (e.g. construction interest, re-mobilization). **Explain how delays will be minimized?**
ESCO PROPOSED APPROACH:
h. Material changes in facility use, including closure may occur during the term of the contract. **Describe responsibilities and potential adjustments in the event of a premature facility closure, loss of funding, or other material changes.**
ESCO PROPOSED APPROACH:

2. Operational
a. The ISSUER generally has control over operating hours. Increases and decreases in operating hours can show up as increases or decreases in "savings" depending on the M&V method (e.g., operating hours multiplied by improved efficiency of equipment vs. whole-building/utility bill analysis). **Clarify whether operating hours are to be measured or stipulated and what the impact will be if they change.** If the operating hours are stipulated, what is the ESCOs responsibility to verify year over year the value stipulated is still accurate.
ESCO PROPOSED APPROACH:

b. Equipment loads can change over time. Explain how the ESCO will detect and identify changes in load that may impact the savings guarantee and how you will accommodate these.
ESCO PROPOSED APPROACH:
c. Many energy efficiency measures are affected by weather. Neither the ESCO nor the ISSUER has control over the weather. Changes in weather can increase or decrease "savings". If weather is "normalized," actual savings could be less than payments for a given year, but will average out over the long run. **Clearly specify how weather corrections will be performed.**
ESCO PROPOSED APPROACH:
d. Many ECMs require user participation to generate savings (e.g., maintaining control settings). The savings can be variable and the ESCO may be unwilling to invest in these measures. **Clarify what degree of user participation is needed and how monitoring and training will be utilized to mitigate risk and assure savings are achieved.**
ESCO PROPOSED APPROACH:
e. Explain the difference between actual and adjusted savings during the guarantee period. Explain why adjusted savings may be the appropriate value to use and why adjustments may be needed.
ESCO PROPOSED APPROACH:

3. Performance
a. The ESCO is responsible for equipment selection, proper installation, commissioning, and performance of equipment. Beyond achieving the guaranteed energy savings, the ESCO has responsibility to demonstrate that the new improvements meet expected performance levels including specified equipment capacity, standards of service, and efficiency. **Describe who is responsible for initial and long-term performance, how it will be verified, and what will be done if performance does not meet expectations.**
ESCO PROPOSED APPROACH:
b. Responsibility for operations is negotiable, and it can impact performance. **Explain responsibility for operations, the implications of equipment control, how changes in operating procedures will be handled, and how proper operations will be assured.**
ESCO PROPOSED APPROACH:
c. If actual space standards of comfort and environmental quality cannot be maintained using the desired new equipment, set points or operating parameters; and operations must be altered which creates a short fall in savings describe the ESCOs approach to resolving this problem.
ESCO PROPOSED APPROACH:

d. Responsibility for maintenance is negotiable, and it can impact performance. Clarify how long-term preventive maintenance will be assured, especially if the party responsible for long-term performance (ESCO) is not responsible for maintenance (ISSUER). **Clarify what will be done if inadequate preventive maintenance impacts performance.**
ESCO PROPOSED APPROACH:
e. Since many ECMs are possible because of deferred maintenance explain how the contract can provide the necessary resources to properly maintain all equipment and assure savings are achieved for duration of contract.
ESCO PROPOSED APPROACH:
f. ISSUER personnel turn over with some regularity. What is the ESCO's responsibility to ensure qualified personnel are always available for ECM maintenance?
ESCO PROPOSED APPROACH:
g. What will be the ESCOs role and responsibility during the term of the contract if an ECM fails even though the ISSUER has maintained and operated all equipment in accordance with the manufacturer's specifications and terms of the ESA? **Who is responsible for replacement of failed components or equipment throughout the term of the Contract?** Specifically address impacts on performance and your ability to claim savings on a failed ECM.
ESCO PROPOSED APPROACH:

4. Compliance
a. Despite best efforts projects may not achieve the guaranteed savings. Has the ESCO had any experiences where one of your projects failed to achieve the savings, if so what actions did you take to correct the problem? Based on this experience what actions can be taken to prevent a similar situation with this project.
ESCO PROPOSED APPROACH:
b. Certain GESC reporting requirements are established in statute. Specifically, with M&V reports have you been delinquent or delayed in delivering the required report, if so what actions did the ESCO take to correct the situation and what steps were taken to get back on schedule. Should the ISSUER stop paying for the reports and request they no longer be generated what actions would the ESCO take to make sure your statutory responsibility to submit said reports would continue to be met in a timely fashion.
ESCO PROPOSED APPROACH:

c. Turnover in ESCO and ISSUER personnel is highly likely during the term of a GESC. What will be the ESCO's responsibility to the ISSUER be to maintain proper communication year over year to ensure optimum performance and understanding of the project and contract terms?
ESCO PROPOSED APPROACH:
d. As mentioned above turn over in personnel is to be expected. How will the ESCO make sure that technical responsibilities (possible maintenance, M&V reporting etc.) are continued through the term of the contract.
ESCO PROPOSED APPROACH:

Section 7: Operational Savings: ISSUER labor savings may be considered in cost savings only if an occupied position is eliminated as a result of the Project. Operational and maintenance savings will have to be substantiated through invoices showing the expenses claimed are real. Include the number of years savings may be realized.

Section 8: Project Commissioning Approach. Provide general outline for this project.

Section 9: Project M&V Approach, provide general outline. 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 measurement and verification methodologies listed above is sufficient for measuring guaranteed savings, the ESCO shall develop an alternate method that is compatible with one of the three and mutually agreeable with the ISSUER. In all cases M&V shall be performed in accordance with the M&V Guidelines located on the DEQ USI website.

Section 10: Project Maintenance Approach for proposed equipment. The plan should describe how ECMs will be maintained over the duration of the contract period. The plan should identify who is responsible for maintaining and repairing equipment installed. In particular it should address how building automation or other electronic systems will be kept updated and current.

Section 11: Hazardous Material Handling Approach - describe your firm's plans for the disposal and recycling of any equipment or materials removed from the premises as part of an ECM. Be sure to include proper tracking of hazardous materials such as lamps and ballasts.

Section 12: Implementation Approach and Schedule - provide proposed implementation schedule with milestones. The "8 ½ x 11" sheet size limitation does not apply to this section.

Section 13: ISSUER Training - describe your approach to training both during implementation and during guarantee period. Provide details on number of participants expected, topics and location for training.

Section 14: Project Financing - provide your proposed approach to project financing and assistance.

Section 15: Other Project Impacts - provide information on positive and/or negative impacts that the installation of recommended ECMs may have on air quality emissions, waste reduction, health, occupant comfort or other items not specifically requested. This can refer to non-tangible benefits such as improvements to the learning environment, teaching opportunities, green building considerations, greenhouse gas reductions, anti-drought measures.

Section 16: **Open Book Pricing** - describe your firm's approach and experience in providing open-book pricing. The ESCO will fully disclose all costs, including all costs of subcontractors and sub-tier vendors. The ESCO will maintain cost accounting records on authorized work performed showing actual costs for labor and materials, or other basis requiring accounting records. The ESCO will provide access to records and preserve them for a minimum of three years and if any federal funds are used to support the Contract, for five years. The retention period runs from the date of payment for the relevant goods or services by the ISSUER or from the date of termination of the Contract, whichever is later. Retention time shall be extended when an audit is scheduled or in progress for a period reasonably necessary to complete an audit and/or to complete any litigation in any forum which may arise.

Section 17: References - using the forms included below, list at least 3 energy performance contracting projects in repayment by and currently under contract with your firm. Limit your Proposal to ONLY those projects that have been managed directly by the specific branch, division, office or any individual in such branch, division or office who will be specifically assigned to this project. Attach additional sheets as necessary. Please put an asterisk by any project references involving buildings similar to the building(s) described in Appendix I. **Make sure all contact information is current. All information requested is required.**

References Project Table:

Project Name and Location; Number of Buildings; Primary Use; Total square footage	
Project Dollar Amount (installed project costs); Source of Project Financing	
Primary ECMs Installed; ESCO Services Provided	
Construction Start & End Dates	

Contract Start & End Dates	
Dollar Value and Type of Annual Operational Cost Savings (if applicable) (e.g., outside maintenance contracts, material savings, etc.)	
Method(s) of Savings Measurement and Verification	
Provide CURRENT and ACCURATE telephone and email address or FAX numbers of the owner(s)' representatives with whom your firm did business on this project. You should ensure that all representatives are familiar with this project.	
Describe the specific roles and responsibilities of ESCO personnel associated with the identified project. Limit your Proposal to only those personnel who will be directly involved in Customer's project.	
ESCO Notes or Comments	

References Annual Energy Savings Data Form (Energy Units)

Name of Project:_____ Name of ESCO: _____

	Projected	Guaranteed	Achieved					Comments
			Year 1	Year 2	Year 3	Year 4	Year 5	
KWH								
KW Demand								
Nat Gas Therms								
Water Gallons								
Other (Specify)								
Other (Specify)								

Information for each of the headings listed above MUST be completed using the above format. DO NOT provide savings data in terms of BTU's or dollars. Data should be given in the form of fuel units which appear in the utility bills. Additional forms should be reproduced as needed.

References Annual Energy Savings Data Form (Energy Dollars)

	Projected	Guaranteed	Achieved					Comments
			Year 1	Year 2	Year 3	Year 4	Year 5	
KWH								
KW Demand								
Nat Gas Therms								
Water Gallons								
Other (Specify)								
Other (Specify)								

Information for each of the headings listed above MUST be completed using the above format. Provide savings data in terms of dollars for the units saved. Additional forms should be reproduced as needed.

Section 18: Submit SEC Form 10-K for the two most recent years in this section. If Form 10-K is not filed then submit the ESCO's two most recent years audited financial statements. This section may be submitted in electronic form only.

Section 19: The designated ESCO will utilize this section in the proposal to place attachments: A, B and C.

Instructions:

- **Only the highest ranked ESCO shall complete this part when requested by the ISSUER**
- The time allowed for preparation of the attachments shall be negotiated based on the scope of work anticipated
- The cost and availability of equipment, materials, and supplies associated with the performing of the services described herein will allow the ESCO to meet the proposed timeline.
- At this point the selected ESCO will be expected to perform basic engineering calculations for both cost and savings for the potential ECMs provided in Section 5.1.
- The terms negotiated within the attachments shall form the basis for the IGA and final project pricing

.

PROPOSAL SIGNATURE PAGE (this page should be the first page of the proposal)

By submitting this proposal, the Applicant certifies the following:

This proposal is signed by an authorized representative of the firm.

It can obtain the bonds and insurance certificates as required.

The Applicant has attended the mandatory Pre-Proposal Meeting and is aware of prevailing conditions associated with performing these services.

The potential ESCO has read and understands the conditions set forth in this RFP and agrees to them with no exceptions.

The applicant has read, understands, and response complies with all Amendments.

All information provided in this application has been gathered based on diligent inquiry and is true, accurate, and complete in all respects, and does not contain any material misstatement of fact or omit to state a material fact or any fact necessary to make the statements contained herein not materially misleading, to its best knowledge and belief.

Therefore, in compliance with this Request for Proposals, and subject to all conditions set forth herein, the undersigned offers and agrees.

ESCO: _____

ADDRESS: _____

CITY, STATE, ZIP: _____

TELEPHONE NUMBER: _____ FAX: _____

FEDERAL EMPLOYER INDENTIFICATION NUMBER: _____

E-MAIL: _____

Principal Place of Business if different from above:

_____

Will any of the work under this contract be performed outside of the United States?
Yes No (If yes, describe in Paragraph 4.2 Section 5.3)

BY: _____ TITLE: _____ DATE: _____

_____
(Signature)

_____
(Typed or printed name)

ATTACHMENT A

Preliminary ECM Cost / Annual Savings Matrix

ECM Description	Bldg. 1 ID		Bldg. 2 ID		Bldg. 3 ID		TOTALS	
	Cost	Savings	Cost	Savings	Cost	Savings	Cost	Savings
Lighting	25,000	5,000	55,000	12,000	15,000	3,500	SUM	SUM
Lighting controls	49,000	7,000	0	0	22,000	6,000	SUM	SUM
AHU VFDs								
TOTALS	SUM	SUM						

Values in dollars = ECM included in project
Cell Blank (or zeroes) = ECM not included for that building

Note:

- The purpose of this Matrix is to summarize the project by ECM by building.
- The above is a sample. Please add columns and rows as necessary to include all buildings and potential ECMs addressed in Section 5.
- ECMs included in this matrix should be based on the potential ECMs proposed in Section 5.1.
- As the project is developed if an ECM cannot be included so that the project has a positive cash flow the ECM shall be separated out in an additional table.
- The “8 ½ x 11" sheet size does not apply to this Attachment.
- The cost column does NOT include ESCO overhead, mark-up, or profit. **The sum of all costs shall equal the Estimated Project Cost in Attachment B**.
- Electronic copy should be in EXCEL spreadsheet form blank form available upon request.
- Enter zero amount for ECM’s not performed.

To be completed only at the request of the ISSUER after all written responses have been evaluated and ranked

ATTACHMENT B

ESCO's Preliminary Cost Proposal (see form next page)
Attachment B is available in Excel format.

To be completed only at the request of the ISSUER after all written responses have been evaluated and ranked

Attachment B: ESCO'S PRELIMINARY COST PROPOSAL				
AGENCY NAME:		Department XYZ		
BANK QUOTED INTEREST RATE:		2.400%		
ESCO NAME:		ESCO ABC		
TOTAL PROJECT COST:		$43		
TOTAL FINANCED COST:		$48		
TOTAL GUARANTEED FIRST YEAR SAVINGS:		$8		
	% of Total Project Costs	Financed Costs	Other Costs Paid from Savings (not financed)	Other Benefits to Owner and Notes
Project Cost Breakdown				
Total ECM material & labor and subcontracts	46.51%	$20		
Investment Grade Audit	4.65%	$2		
Engineering and Design	4.65%	$2		
General Conditions	4.65%	$2		
Contractor's Insurance (i.e. performance bond)	4.65%	$2		
Project Management	4.65%	$2		
Commissioning	4.65%	$2		
First Year Training Fees	4.65%	$2		
M&V set-up	4.65%	$2		
Cost of Guarantee Security Instrument	4.65%	$2		
Overhead (cost of running the business)	4.65%	$2		
ESCO net profit	4.65%	$2		
[Other Contractor Costs - list specifics]	2.33%	$1		
Subtotal A (equals Schedule A Total)		$43		
Other costs				
Bond Council Fees		$3		
Loan Issuance Fees		$3		
Third Party Engineering Fees			$3	Paid by XYZ
Subtotal B (financed)		$6		
Subtotal C (not financed)			$3	
Adjustments to Project Costs				
Rebates, incentives, grants) (Will be negative number)		$ (3)		
Other				
Subtotal D		-$3		
Construction Period Interest		$2		
Annual Service Fees	% of First Year's Savings		Dollar ($) Value of 1st Year Service Fees	
Measurement and Verification (ESCO)	0.20%		$1	
Third Party review of reconciliation report	0.20%		$1	
Maintenance	0.20%		$1	
Equipment Performance Monitoring	0.20%		$1	
Yearly Training Services	0.20%		$1	
Subtotal E			$5	
Summaries				
Project Cost = Subtotal A			$43	
Total Financed Costs = Subtotals A+B+D+ possibly Const. Period Int.			$48	
Costs Covered by Energy Savings = Subtotals A+B+C+D+E+ possibly Const Period Interest. If construction period interest is capitalized in loan, this will be zero.			$56	
Owners payments made to ESCO = Subtotals A+D			$40	
[1] Other fees must be explained				
[2] Source of incentives must be explained				

ATTACHMENT C

ESCO's PRELIMINARY ANNUAL CASH FLOW ANALYSIS USING ESCO'S PROPOSED INTEREST RATE

Financed Amount: _____
Finance Term: _____
Annual Interest Rate: _____
Construction Months _____
Annual Payment _____
Principal _____
Interest _____

Escalation Rate by Utility/Fuel
Electric: 0.0%
Natural Gas: 0.0%
Steam: 0.0%
Water: 0.0%
other (specify): 0.0%
Escalation Rate for Annual Fees: 0.0%

Yr.	Calculated Electric Dollar Savings	Calculated Natural Gas Dollar Savings	Other Calculated purchased fuel Dollar Savings	Calculated Water Dollar Savings	Other Please Specify	Calculated Operational Dollar Savings	Total Calculated Dollar Savings	Guaranteed Dollar Savings (a)	Annual Service Fees (b)	Financing Cost (P&I) (c)	Net Savings = a-b-c
1											
2											
3											
4											
5	To be completed only at the request of the ISSUER after all written responses have been evaluated and ranked										
6											
7											
8											
Total											

NOTES: Net savings must never be negative.
A surplus in one year cannot be carried forward to create positive cash flow in a subsequent year.
Electronic copy should be in EXCEL spreadsheet form.

APPENDIX I

FACILITIES TO BE ANALYZED

Each building to be included in the project shall be identified and described in the following form.

Date: __12/2/19_____

Building/Campus Name	Address	City	Built	Renovation Year	# of Floors	Estimated Sq. Footage	Type of Facility	Electric Meter	Water Meter	Fuel Oil	Propane
Alleghany High School	404 Trojan Avenue	Sparta	1960	2002	2	113,415	School	YES	YES	NO	YES
Glade Creek School	32 Glade Creek School Road	Ennice	1956	2000 & 2010	1	60,107	School	YES	NO	NO	NO
Piney Creek School	559 Piney Creek School Road	Piney Creek	1976	2000	1	41,304	School	YES	NO	YES	NO
Sparta School	450 North Main Street	Sparta	1955	1997, 2005, 2017-18	1	120,667	School	YES	YES	YES	NO
Central Office	85 Peachtree Street	Sparta			2	4,293	Office	YES	YES	NO	NO
Maintenance Shop	173 Roe Street	Sparta			1	4,476	Office	YES	YES	YES	NO
Bus Garage	139 Roe Street	Sparta			1	9,434	Office	YES	YES	YES	NO

Issues to be Evaluated by Performance Contract at All Sites:

- Interior/Exterior Lighting
- HVAC
- Building Automation Systems
- Building Envelope
- Water Conservation
- Any additional conservation measures

APPENDIX II

Selected ESCO will need to provide Proof of Insurance

APPENDIX III

ISSUER insert minority business participation guidelines here

APPENDIX IV

ISSUER insert design requirements
(state guidelines provided below)

Appendix IV DESIGN REQUIREMENTS		
State of North Carolina		
Guaranteed Energy Performance Contracting Program		
Investment Grade Energy Audit Agreement between		
[Agency / University] and **[ESCO]**		
ECM	**Measure Type**	**Design Requirement**
All ECMs	All ECMs	All ECMs will include a detailed description of the measure proposed for implementation, manufacturer data and/or specification sheets, and warranty information. ECM write ups will also include proposed demolition and implementation plan/schedule, anticipated interface with any other existing or proposed systems, and O&M impacts/requirements. Existing drawings will be included as provided from Agency / University.
Lighting	One-for-one retrofit/replacement	Detailed inventory schedule (in Excel spreadsheet format) to include room-by-room existing and proposed fixture types, lamp/ballast type(s), control/switching type(s), existing light levels, and any other relevant information. Illumination levels to be consistent with IES recommendations. As Cautionary note, ESCO to verify if any ECM exists that would affect the fixture replacement.
Lighting	Lighting system replacement	Same as above, plus preliminary design layout/rendering from a standard lighting design package (such as AGI32, Visual, LightCalc, etc.) to show projected light levels. Illumination levels to be consistent with IES recommendations. A reflected ceiling plan will be provided via hardcopy to SCO. Any required modifications to non-lighting systems shall also be shown on the drawings.
Lighting	Lighting controls	Detail of lighting control and equipment specification to be provided for review. Lighting control shall be multi-level switching or occupancy sensors as required by current NC Energy Conservation Code.

Envelope	Weather stripping, sealant, window glaze and film	Modified floor plans with envelope façades numbered and a corresponding spreadsheet detailing the scope of work associated with each façade.
Penetrations	Affected by various ECM's	Seal all penetrations with tested assembly equal to fire rating of the wall or floor that it penetrates.
HVAC	Heat recovery system installation	Design drawing package, including: Existing drawing marked up to show proposed demolition work; New plan view drawing depicting equipment placement and piping arrangement; One-line electrical drawing. Reference will be provided to the HVAC Controls package for any specific heat recovery system that impacts HVAC Controls including updated sequence of operations. Heat recovery systems are not allowable on fume hood exhaust. Clearly indicate in the design documents what exhaust and outside air requirements are being met. As Cautionary note, ESCO to verify if any ECM exists that would affect the equipment replacement/installation.
HVAC	Motor/fan/pump replacement	Detailed inventory schedule (spreadsheet) denoting location, existing/proposed equipment, and other relevant information. Existing drawings will be marked up or highlighted to show equipment location.
		If replacement constitutes a change in system functionality, then a design drawing package will be provided, including: Existing drawing marked up to show proposed demolition work; New plan view drawing depicting equipment placement and piping arrangement; One-line electrical drawing.
		Reference will be provided to the HVAC controls package for any specific motor/fan/pump replacement that impacts HVAC controls including an updated sequence of operations. Breaker/disconnect information will be provided as required by code.
		Existing equipment (such as isolation valves) will be tested during the course of the IGA. The process for handling existing system deficiencies shall be mutually agreed upon by Agency / University and ESCO and clearly delineated in the Risk and Responsibility Matrix.

HVAC	Reconfigure boiler equipment	
HVAC	Reconfigure air handling unit	
	VFD installation	Detailed inventory schedule (spreadsheet) denoting location, existing/proposed equipment, modifications to dampers and other relevant information. Existing drawings will be marked up or highlighted to show equipment location.
		Reference will be provided to the HVAC controls package for any specific VFD installation that impacts HVAC controls including an updated sequence of operations. Breaker/disconnect information will be provided as required by code.
Energy Management Controls	One-for-one retrofit/replacement and/or significant changes	Shop drawings to include (but not be limited to): Network riser diagram, points list, sequence of operations, equipment replacements and controllers, controller input/outputs, specifications sheets for controllers. Include life safety and smoke controls.
	Addition of Building Automation Systems (including dashboards)	
	Changing pneumatic controls to direct digital controls	
Water Conservation	One-for-one retrofit/replacement (aerators, urinals, water closets, showerheads)	Detailed spreadsheet including room-by-room existing and proposed fixture types, flow rates, control type (std flush valve or automatic, etc). For water closet and urinal retrofits/replacements, the submittal shall indicate whether or not each measure includes china replacement or only valve replacement.
Water Conservation	Irrigation system modifications	Design drawing package, including: Existing site plan marked up to show proposed demolition work; New plan view drawing depicting equipment placement and piping arrangement; One-line electrical drawing, as applicable.

Chiller Upgrade	Chiller replacement	Design drawing package, including: Existing drawing marked up to show proposed demolition work; New plan view drawing depicting equipment placement and piping arrangement; One-line electrical drawing.
		Refrigerant safeties will be provided per code. If an open drive chiller is installed (e.g. York) means and methods will be employed to effectively and efficiently remove heat from enclosed space to a sufficient level recommended by manufacturer. All demolished equipment will be removed from the site.
		Reference will be provided to the HVAC controls package for any specific chiller replacement that impacts HVAC controls, including an updated sequence of operations. Breaker/disconnect information will be provided as required by code.
Sustainability	PV Solar awning	Design drawing package, including: Existing drawing marked up to show proposed demolition work; New plan view drawing depicting equipment placement and piping arrangement; One-line electrical drawing. If proposed for roof placement, a structural analysis will be provided.
		Based on the age and useful life of the existing roof, ESCO and Agency / University will provide appropriate accommodation and an escrow mutually agreed upon to remove and replace the installed PV solar awning for eventual roof replacement during the useful life of the PV solar awning one time.
		All demolished equipment will be removed from the site
		Reference will be provided to the HVAC controls package for any specific solar awning project that impacts HVAC controls including an updated sequence of operations. Breaker/disconnect information will be provided as required by code. Note: Verify HVAC controls are required to interface with the PV system. This design requirement may not apply.

Sustainability	Solar DHW system	Design drawing package, including: Existing drawing marked up to show proposed demolition work; New plan view drawing depicting equipment placement and piping arrangement; One-line electrical drawing. If proposed for roof placement, a structural analysis will be provided.
		Based on the age and useful life of the existing roof, ESCO and Agency / University will provide appropriate accommodation and an escrow mutually agreed upon to remove and replace the installed solar DHW system for eventual roof replacement during the useful life of the solar DHW system one time.
		All demolished equipment will be removed from the site. Reference will be provided to the HVAC controls package for any specific solar DHW system that impacts HVAC controls including an updated sequence of operations. Breaker/disconnect information will be provided as required by code. Note: Verify HVAC controls interface with plumbing systems. This design requirement may not apply.
Plug load Controls	Computer power save software	Detailed software specifications, implementation plan and schedule, and description of interface with Agency / University's network.
		Agency / University will confirm that the IT department is aware/approves of the proposed system.
SHPO review required for alterations to exterior of buildings that are subject to SHPO review. Common items that trigger SHPO: windows, doors, exterior lighting, roofing.		
	NC SHPO contact:	
	Renee Gledhill-Earley	
	NC State Histroric Preservation Office	
	Environmental Review Coordinator	
	energy.projects@ncdcr.gov	
	(919) 807-6579	