

**GUARANTEED ENERGY SAVINGS  
PERFORMANCE CONTRACT**

THIS CONTRACT (herein the or this "Contract"), made this 14<sup>th</sup> day of December, 2012, by and between Glenville State College (hereinafter called "Owner" or "GSC") and Energy Systems Group, LLC, an Indiana limited liability company (hereinafter called "Contractor" or "ESG"),

WITNESSETH, That:

WHEREAS, Contractor has submitted to Owner a proposal for the installation of energy related upgrades at facilities owned by Owner and located in Gilmer County, West Virginia (herein the "Facilities"); and

WHEREAS, the Owner wishes to accept the Contractor's proposal as outlined in Exhibit A Scope of Work (hereinafter "Project"), and the Owner and Contractor desire to enter into this Contract in order to memorialize their respective agreements and undertakings with respect to the Project.

NOW, THEREFORE, in consideration of the mutual covenants, promises, and agreements herein contained, the parties hereto agree as follows:

1. Contract Documents. The parties hereby incorporate by reference the same as if fully set forth herein, the following documents and instruments, all of which together with this Contract are herein referred to as the "Contract Documents":

- Schedule 1 - Final Acceptance Certificate
- Schedule 2 - Anticipated Payment Request Draw Schedule
- Exhibit A - Scope of Work
- Exhibit B - Energy Savings Guarantee and Measurement and Verification Plan
- Exhibit C - Support Services Agreement
- Exhibit D - Opinion of Owner's Counsel
- Exhibit E - Prevailing Wage Determination

The Contract Documents also shall include any permissible change orders issued pursuant to this Contract.

In the event there is a conflict between the provisions of this Contract and the other Contract Documents, the provisions of this Contract shall be controlling with respect to the subject matter hereof.

2. Scope of Project. For purposes hereof, the term "Project" shall mean and include the installation of the energy conservation measures and related upgrades ("ECMs" or "Measures"), which are defined in Exhibit A Scope of Work, at the Owner's Facilities, for a fee in the amount of \$4,138,201, and annual support services fees as outlined in Exhibit B Energy Savings Guarantee and Measurement and Verification Plan. Payment of the fees will be made on time in accordance with the Schedule 2.

The Contractor represents and warrants (i) that the Project constitutes the installation of "energy-conservation measures" as defined in West Virginia Code §5A-3B-1 et.seq. (herein the "Act"), and (ii) that this Contract is an "energy-savings contract" as defined in the Act. The Contractor further represents and warrants that it is a "qualified provider" of energy-conservation measures, as defined in the Act.

The Contractor represents and warrants that the Project will result in energy savings in the total amount of \$2,495,970 and operational savings as outlined in Exhibit B Energy Savings Guarantee and Measurement and Verification Plan. The Contractor represents and warrants that project cost includes the costs of design, engineering, installation, maintenance, repairs and debt service; and, total project savings exceed five percent of the current operating costs of the subject equipment, and total project savings is sufficient to cover the debt services required. The Contractor hereby guarantees that it will reimburse the Owner the difference between such energy and operational savings and the actual savings realized by virtue of the Project. The parties stipulate and agree that the operational savings shall be considered fully satisfied upon the Owner's Final Acceptance of the Project (as defined hereinafter). The energy savings and operational savings will be realized over a period of fifteen (15) years following completion of the Project, which term of years the Contractor represents and warrants is less than the average life expectancy of the Measures. The term of this Contract shall extend from the date of this Contract and shall conclude fifteen (15) years after Owner's Final Acceptance of all Measures.

3. General Obligations and Rights of Contractor. Contractor shall do all acts and provide all things necessary to perform and complete the Project properly, in a good and workmanlike manner, and in compliance with all laws and regulations. Contractor shall apply for, secure, and obtain all necessary permits and licenses which may be required in connection with the Project.

3.1 Warranty. Contractor hereby warrants to Owner that all materials furnished by Contractor, if any, and all workmanship performed by Contractor in connection with the Project, shall be in accordance with the general industry standards of the mechanical and electrical construction industry; shall be performed in a competent, good and workmanlike manner and in compliance with the Contract Documents, and all pertinent laws, rules and regulations; and shall be free from any and all faults or defects in material and workmanship. Contractor shall promptly remedy any and all defective materials or workmanship furnished by Contractor or any subcontractor upon receipt of written notice thereof from Owner. If required by Owner, Contractor shall furnish satisfactory evidence as to kind and quality of materials and equipment used in connection with the Project.

The warranty set forth herein shall continue to be effective for a period of one (1) year, or such longer period as to materials or equipment as may be provided by any manufacturer or supplier warranty, following Owner's acceptance or beneficial use of each ECM, acceptance of a particular Facility, or acceptance of the Project, whichever comes first. Owner shall give Contractor written notice of all defective work, specifically detailing the deficiencies to be corrected, and Contractor shall repair or otherwise remedy such defective work in an expeditious manner.

CONTRACTOR MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Contractor shall assign to Owner all warranties that Contractor receives from its vendors and/or subcontractors for any materials or equipment, which are or are to become permanent features of the Project, which shall be in addition to the other warranties provided herein.

3.2 Approvals. Upon completion of the Project, the Contractor shall obtain all approvals of the installation of the Measures constituting the Project as required by West Virginia statute or regulation.

3.3 Indemnification. Contractor shall indemnify, defend, and hold harmless Owner, the agents, officers, employees, and representatives of the Owner (herein the "Indemnified Parties") against all liability and loss including reasonable attorney's fees and expenses to the extent resulting from the negligence or willful misconduct in connection with the Project by

Contractor, any subcontractor, or the agents, employees, or representatives of Contractor or any subcontractor, including any injury (including death) sustained by or any damage to the property of, any person; provided however, that Contractor shall not be responsible for any injury (including death), damage, or loss (including reasonable attorneys fees and expenses) which is caused by the sole negligence of an Indemnified Party, nor shall Contractor be held responsible for the concurrent negligence of an Indemnified Party.

Contractor shall be liable for, and agrees to indemnify, save and hold Owner, its successors and assigns, and any assignee of the Contractor, harmless from the payment of any sum of money whatsoever (including reasonable attorneys fees and expenses) on account of any laborer's, mechanic's, materialmen's or any other lien against Owner's property related to Contractor's performance of the Project, unless the lien is caused by some fault of Owner or some person or entity acting on Owner's behalf. Contractor shall indemnify, defend and hold harmless the Owner from any claim, liability, assessment or other liability of any nature arising out of or related to Contractor's violation of law, local, state or federal.

Owner shall be responsible for all liability and loss including reasonable attorney's fees and expenses, if assessed by a court of competent jurisdiction, to the extent resulting from the negligence or willful misconduct in connection with the Project by Owner and agents, employees or representatives of Owner, including any injury (including death) sustained by or any damage to the property of, any person; provided, however, that Owner shall not be responsible for any injury (including death), damage or loss (including reasonable attorneys fees and expenses) which is caused by the sole negligence of an Indemnified Party, nor shall Owner be held responsible for the concurrent negligence of an Indemnified Party.

3.4 Bonds. Before entering upon the performance of this Contract, the Contractor shall execute for the benefit of Owner, a good and sufficient Performance Bond and Payment Bond, in form acceptable to Owner. Each bond shall be in an amount equal to the Contract Price (as defined below in Section 5 of this Contract), and the provisions of the Act, as amended, if applicable to this Project, shall become a part of the terms of such bonds.

The Performance Bond shall also be a guarantee for the repair or replacement of any portion of the Project found by the Owner to be defective to and including the date of Owner's Final Acceptance of the Project. The Payment Bond shall be a guarantee for the payment for

labor, materials and equipment furnished for use in the performance of Contractor's obligations hereunder. The Performance and Payment Bond will cease effective the date of the Owner's Final Acceptance of the Project. Effective immediately after, a Maintenance Bond will be provided for the one-year period commencing on the date of the Owner's Final Acceptance of the Project in the amount of 10% of the total Contract Price. The surety which executes the Performance Bond and Payment Bond shall waive any right to independent notice under this Contract if the Contractor receives such notice, and consents to any extensions of time, modification, waiver, forbearance, or change which may be made in any of the terms and conditions of the Contract by the parties or by their successors or assigns. Notwithstanding any other provision of this Contract or the bonds, in no event and in no manner shall coverage under the Performance Bond and Payment Bond extend to Section 3.5, Energy Savings Guarantee, as set forth in Exhibit B Energy Savings Guarantee and Measurement and Verification Plan, or any related provisions.

3.5 Energy Savings Guarantee. The Contractor hereby agrees to annually reimburse the Owner for the difference between the annual guaranteed energy savings in the amount indicated in Exhibit B Energy Savings Guarantee and Measurement and Verification Plan and the actual annual energy savings realized by Owner in that year, as calculated in accordance with Exhibit B. The Energy Savings Guarantee shall extend for the fifteen (15) year period following Owner's Final Acceptance of the Project. As a condition precedent to commencement of the Project, Contractor shall execute and deliver the Energy Savings Guarantee in the form set forth as Exhibit B to this Contract. The parties agree that Exhibit B Energy Savings Guarantee and Measurement and Verification Plan shall control the rights and responsibilities of each party with respect to the Energy Savings Guarantee.

It is agreed that the operational savings are considered fully satisfied upon Owner's Final Acceptance of the Project based on the documentation and data approved by the Owner and included herein.

3.6 Limitation of Liability. NOTWITHSTANDING ANY OTHER PROVISION HEREIN TO THE CONTRARY, IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR INDIRECT, CONSEQUENTIAL, SPECIAL, SPECULATIVE, PUNITIVE, OR REMOTE

DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR REVENUE, COST OF CAPITAL, AND DOWN TIME COST.

3.7 Insurance.

3.7.1 Obtaining Proper Insurance. Contractor shall not commence performance hereunder until (i) it has obtained and Owner has approved all insurance coverage required by this Section 3.7; and (ii) Owner has been furnished with a certificate of insurance properly evidencing and confirming that (a) Owner is an additional insured on Contractor's public liability and automobile liability policies, and (b) such insurance coverage is in effect and will not be canceled until the insurer endeavors to provide at least thirty (30) days prior written notice to Owner, unless the cancellation is due to non-payment of premium, in which event the Contractor and the insurer will endeavor to provide ten (10) days prior written notice to the Owner. The failure of the Contractor to provide substitute insurance in the required amounts prior to the effective date of any notice of cancellation shall be a default under this Contract. In the event that subcontractors are not covered by the Contractor's policies of insurance, each subcontractor shall secure policies of insurance which meet the requirements of this Section 3.7.

3.7.2 Amount of Insurance. Contractor shall take out and maintain, at its sole cost and expense, the following insurance coverage during the term of this Contract and all other times during which Contractor, its employees, agents, or subcontractors shall be present at the Facilities, whether performing or correcting any portion of the Project:

(A) Worker's Compensation, Employer's Liability, and Occupational Disease Insurance. Statutorily required worker's compensation insurance, including employer's liability and occupational disease coverage, to the extent mandated by applicable state law, on all of Contractor's employees engaged in the Project;

(B) Public Liability. Commercial general liability insurance (including contractual, independent contractors, explosion, and product/completed operations coverages) against damage because of bodily injury, including death, or damage to property of others, such insurance to afford protection to the limit of not less than One Million Dollars (\$1,000,000.00) in one occurrence, and to the limit of not less than Two Million Dollars (\$2,000,000.00) annual aggregate;

(C) Automobile Liability. Automobile liability insurance against damage because of bodily injury, including death, or damage to property of others as the result of the operation of any automobile owned or hired by Contractor, with such insurance to afford protection to the limit of not less than Five Hundred Thousand Dollars (\$500,000.00) for any one person, not less than One Million Dollars (\$1,000,000.00) in respect to any one accident, and not less than One Hundred Thousand Dollars (\$100,000.00) for property damage.

4. All Risk Insurance. Prior to Contractor's commencement of performance, Owner shall provide Contractor a certificate of insurance evidencing that Owner has in place an "All Risk" insurance policy on all its Facilities that will provide coverage for all installed Measures. If any of the Measures are damaged or destroyed after they are installed to Owner's Facilities, but prior to Final Acceptance of the Project, the proceeds of such insurance shall be provided to Contractor, and Contractor shall repair or replace such equipment, materials or Measures. If the proceeds of such insurance are insufficient to fully pay Contractor for its costs incurred to repair or replace such equipment, materials, or Measures, Owner shall promptly pay to Contractor such shortfall.

In addition, if any of the Measures are damaged or destroyed after Final Acceptance of the Project and during the Energy Savings Guarantee period, the Owner shall be obligated to promptly repair or replace the damaged or destroyed Measures.

The certificates of insurance provided by Owner shall specify that such insurance coverages shall not be cancelled until the insurer endeavors to provide at least thirty (30) days prior written notice to Contractor, unless the cancellation is due to non-payment of premium, in which event the insurer will

endeavor to provide ten (10) days prior written notice to the Contractor. Owner agrees to maintain in full force and affect the All Risk policy during the entire term of this Contract.

4.1. Title and Risk of Loss. Risk of Loss for all equipment and materials provided by Contractor or any subcontractor shall transfer to Owner upon installation of such equipment and materials to Owner's Facilities. Title to a Measure shall vest with the Owner upon installation and approving payment to the Contractor. It is the intent of all parties that any transfer of title to Owner pursuant to this Contract shall occur automatically without the necessity of any bill of sale, certificate of title, or other instrument of conveyance.

The Owner shall be responsible for operating and maintaining all Measures that are installed.

5. Contract Price and Payments.

5.1 Contract Price. In consideration of Contractor's performance of the work necessary for the completion of the Project, Contractor shall be paid the sum of Four Million One Hundred Thirty-Eight Thousand, Two Hundred One Dollars (\$4,138,201) (herein the "Contract Price"), and in accordance with this Section 5.1.

5.2 Concerning Payment of the Contract Price. The following provisions shall apply to payment of the Contract Price:

5.2.1. Applications for Payment. Payment of the Contract Price shall be made in monthly installments based upon the Contractor's progress in completing the installation of the ECMs (as defined in Section 2 of this Contract), except that Contractor shall be paid for pre-contract development, design, engineering, mobilization, submittals and project kickoff in respect to the Contract Price in the amount of 15% of the Contract Price as the first payment, the request for which shall be submitted to the Owner upon the execution and delivery of this Agreement. The monthly progress payments to Contractor shall submit to Owner each month, an application for payment on a form



mutually agreeable to Contractor and Owner. Owner shall pay or cause to be paid such invoice within thirty (30) days of receipt.

5.2.2. Completion and Inspection; Acceptance. When Contractor reasonably believes that an ECM, a Facility or the entire Project is complete, it shall notify the Authorized Representative that such ECM, Facility or the entire Project, as the case may be, is ready for inspection and acceptance. Within five (5) business days following such notification, Owner shall commence to conduct such inspections as it deems necessary or appropriate in order to determine that the ECM, Facility, or the entire Project, as the case may be, is free from defects and that the installation of the ECM, Facility, or the entire Project, as the case may be, has been completed in conformity with the Contract Documents. If any aspect of the ECM, Facility, or the entire Project, as the case may be, shall be incomplete as of the date of such inspection, the Authorized Representative shall notify Contractor in writing as to the items which render the ECM, Facility, or the entire Project, as the case may be, incomplete (such writing herein referred to as the "Punch List").

Contractor shall, at its expense and without further cost to Owner, undertake to perform such work as will complete the Punch List in compliance with the Contract Documents as soon as practicable. Contractor retains the right to dispute that an item or items on the Punch List is required by the Contract Documents. If Contractor does not satisfactorily complete the Punch List by a date thirty (30) days following Owner's submission of the Punch List (herein the "Completion Date"), Owner shall have the right to order Contractor to stop any further work in respect of the particular ECM, Facility, or the entire Project, as the case may be, and Owner shall be entitled to complete the Punch List. In such event, Contractor shall be responsible for all costs incurred by Owner in completing the Punch List and Owner shall have the right to deduct all costs from any payment then or thereafter due to Contractor. If such cost exceeds the balance of the Contract Price then or thereafter due Contractor, Contractor shall pay such excess to Owner within ten (10) days following Owner's demand therefor.

Owner will give Contractor prompt written notice of acceptance of a particular ECM, Facility, or the entire Project, as the case may be, in the form of Schedule 1 (herein the "Final Acceptance Certificate"), when the following conditions have been met:

- A. Contractor shall have completed the Punch List to Owner's reasonable satisfaction and Contractor shall have corrected any other non-conforming items or condition, if any, reported to it by Owner;
- B. Contractor shall have furnished to Owner's reasonable satisfaction, evidence that all equipment and labor costs incurred or accrued in connection with a particular ECM or Facility have been paid; and
- C. Contractor shall have delivered to Owner all drawings and documents required to be furnished by Contractor pursuant to the Contract Documents.

If Owner is required to complete the Punch List, the date of Final Acceptance shall be extended to the date upon which the Project is completed by Owner, or any person retained by Owner, in accordance with the Contract Documents.

5.2.3. Final Payment. Any sums due and owing in respect of the Contract Price shall be payable to Contractor within ten (10) calendar days after the date Owner gives written notice of its Final Acceptance of the entire Project.

6. Independent Contractor. It is understood and agreed by the parties hereto that Contractor shall perform the Project according to its own means and methods and shall for all purposes be an independent contractor. All persons employed by Contractor in connection with the Project shall be paid directly by Contractor, and shall be subject to Contractor's orders and supervision.

7. Inspection; Defective Work. The Contractor shall provide sufficient, safe, and proper facilities at all times for the inspection of the work by the Authorized Representative. It shall, within forty-eight (48) hours after receiving written notice from the Authorized Representative to that effect, proceed to remove from the Facilities all materials which fail to conform to the Contract Documents.

8. Termination.

8.1 Owner's Right to Terminate. Should the Contractor fail to perform any material term or condition of the Contract Documents, the Owner shall be at liberty, after thirty (30) days written notice to the Contractor and Contractor's failure to remedy the problem within that time period, to terminate this Contract and to enter upon the Facilities and take possession of the equipment and materials for the purpose of completing the work to be done under this Contract, to use all materials of the Contractor available for such work, and to employ any other person or persons to finish the work and to provide such additional materials therefor as may be necessary; and in case of such termination of the employment of the Contractor, the Contractor shall not be entitled to receive any further payment under this Contract until the work shall be wholly finished, at which time if the unpaid balance of the amount to be paid under the Contract shall exceed the expense incurred by the Owner in finishing the work, such excess shall be paid by the Owner to the Contractor, but if such expense shall exceed such unpaid balance, the Contractor shall pay the excess to the Owner. The expenses incurred by the Owner as herein provided, either for the furnishing of materials or for finishing the work, and any damage incurred through such fault of the Contractor shall be certified by the Owner, and payment shall be made upon such certification. Further, in accordance with §5A-3B-2, the Owner shall have the right to terminate this Contract. Upon such termination, Owner shall pay all balances due under this Contract that are due pursuant to the terms of this Contract for work completed.

8.2 Contractor's Right to Terminate or Stop Work. Should the Owner fail to perform any material term or condition of the Contract Documents, the Contractor shall be at liberty, after thirty (30) days written notice to the Owner and Owner's failure to remedy the problem within that time period, to terminate this Contract or stop work. If Contractor elects to stop work, Contractor shall not be required to recommence work until such time as Owner has completely remedied its breach.

9. Delays. Should the Contractor be obstructed or delayed in the prosecution or completion of the Project by the act, negligence, delay, or default of the Owner or by any other damage or act beyond the reasonable control of Contractor or any subcontractor, then the time herein fixed for the completion of the work shall be extended for a period equivalent to the time lost by reason of such

event. If Contractor is delayed by actions or inactions of the Owner or its agents or employees, Owner shall be required to reimburse Contractor for its additional costs incurred as a result of such delay.

10. Contractor to Furnish Required Statements. The Contractor shall provide all statements, affidavits, waivers, and other instruments required by state or federal law or regulation or by local ordinances or rules, at such times and in the form required by said laws, regulations, ordinances, or rules, and the Contractor hereby acknowledges receipt of notice from the Owner to furnish same.

11. Nondiscrimination in Hiring Employees. The Contractor shall comply with the following:

A. The Contractor, any subcontractor, any supplier or any sub-supplier of a party to this Contract shall not discriminate against any employee or applicant for employment to be employed in the performance of this Contract with respect to his or her hire, tenure, terms, conditions, or privileges of employment or any matter directly or indirectly related to employment, because of his race, color, religion, sex, disability, national origin, or ancestry. Breach of this provision may be regarded as a material breach of this Contract.

B. Since this Contract involves the construction, alteration, or repair of a public building or public work, then the Contractor further agrees:

(1) That in the hiring of employees for the performance of work under this Contract or any subcontract hereunder, the Contractor, subcontractor or any person acting on behalf of the Contractor or subcontractor shall not, by reason of race, religion, color, sex, national origin, or ancestry, discriminate against any citizen of the State of West Virginia who is qualified and available to perform the work to which the employment relates;

(2) That the Contractor, a subcontractor, or any person on his or their behalf shall not, in any manner, discriminate against or intimidate any employee hired for the performance of work under this



If to Contractor: Gregory F. Collins, President  
Energy Systems Group LLC  
4655 Rosebud Lane  
Newburgh, Indiana 47630

Either party may change its address or its designated representative for receipt of notices by submitting a notice in compliance with this Section.

If Owner has questions about billing, invoices or any other accounting or related administrative issues, it can make contact (which will not constitute Notice) with:

Dennis Perrey, Vice President / Chief Accounting Officer  
Energy Systems Group, LLC  
4655 Rosebud Lane  
Newburgh, IN 47630  
(812) 492-3726  
dperrey@energysystemsgroup.com

13.3 Claims for Damages. Any claims by either party hereto for bodily injury or damage to personal property caused by any act or omission of the other party hereto or by any of such party's employees or agents or others for whose acts it is legally liable shall be made in writing to such other party within a reasonable time after the occurrence or first knowledge of such injury or damage.

13.4 Assignment. Neither party may assign this Contract without the prior written consent of the other party. Subject to the foregoing, this Contract shall inure to the benefit of and is binding upon the successors and assigns of the parties hereto.

13.5 Waivers. The failure of either party hereto to insist upon strict performance of any of the provisions of this Contract or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provision or the relinquishment of any such rights unless such waiver is in writing and signed by both parties.

13.6 Remedies Cumulative. Each remedy provided for by the Contract Documents shall be cumulative and in addition to every other remedy provided for herein, by law or in equity. Upon the occurrence of a default hereunder, either party, or its assignee, may, at its option, exercise any right, remedy, or privilege which may be available to it under applicable

law, including the right to (i) proceed by appropriate court action to enforce the terms of this Contract, and (ii) recover damage for breach of this Contract. Notwithstanding the exercise of any right, remedy or privilege, the parties shall remain liable for all covenants and indemnities under this Contract.

13.7 Tests. If the Contract Documents or the laws, ordinances, rules, or regulations of any public authority having appropriate jurisdiction require inspection, testing, or approval of any of the work, Contractor shall give the Authorized Representative timely notice of Contractor's readiness for such inspection, testing, or approval and of the date thereof so that the Authorized Representative may be present to observe such inspection, testing, or approval by such public authority. Contractor shall be responsible for and pay all costs for any such inspection, testing, or approval unless otherwise provided for herein. All required licenses, permits, or certificates applicable to any such inspection, testing, or approval shall be obtained by Contractor and promptly delivered to the Authorized Representative.

13.8 Hazardous Materials. ESG will not provide any abatement and testing except for the limited abatement and testing for the limited areas set forth in the scope of work as described in Exhibit A. In the event Contractor encounters on the Project any other material reasonably believed to be hazardous materials above and beyond the scope of work in Exhibit A or any mutually agreed upon amendments to the scope of work included in Exhibit A, Contractor shall immediately stop work in the affected area, and immediately notify the Owner, detailing the particulars of the substance encountered. Contractor shall not take further action in the affected area until instructions from the Owner are received. Work in unaffected areas shall not be interrupted. Owner shall promptly investigate the hazardous material encountered, and Owner shall be obligated to remedy the situation before allowing Contractor to recommence work in the affected area.

If encountering such hazardous material causes an increase in Contractor's cost and time of performance, Contractor shall be entitled to an extension of time and an increase in the Contract Price.

If, without negligence on the part of the Contractor, the Contractor is held liable for the cost of remediation of a hazardous material substance solely by reason of performing work as

required by this Agreement, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

13.9 Amendments. No amendment, supplement, or modification hereof shall be effective for any purpose unless the same is in writing and signed by both parties hereto.

13.10 Headings. The headings of sections and subsections of this Contract are for convenience of reference only and shall not affect the meaning or construction of any provision hereof.

13.11 Entire Contract. This Contract, together with the Contract Documents, represents the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior negotiations, representations and agreements whether written or oral.

13.12 Severability. If any provision of this Contract shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof.



13.13 Authority to Execute Contract. This Contract is executed by the Owner pursuant to a resolution of the Owner duly adopted at its regular meeting called and held on the 20th day of June, 2012.

**GLENVILLE STATE COLLEGE**

By \_\_\_\_\_  
Dr. Peter B. Barr

Its \_\_\_\_\_  
President

**ENERGY SYSTEMS GROUP, LLC**

By \_\_\_\_\_  
Gregory F. Collins

Its \_\_\_\_\_  
President

ATTEST:

By \_\_\_\_\_

Its \_\_\_\_\_

**SCHEDULE 1**

**ACCEPTANCE CERTIFICATE OR FINAL ACCEPTANCE CERTIFICATE**

(This is a sample form and will be modified, completed and signed after installation of an ECM, Facility or the entire Project, as the case may be)

Energy Systems Group, LLC  
4655 Rosebud Lane  
Newburgh, IN 47630

Re: Guaranteed Energy Savings Performance Contract, dated as of December 14, 2012 (the "Contract"), between Energy Systems Group, LLC (the "Contractor") and Glenville State College (the "Owner").

Ladies and Gentleman:

In accordance with the Contract, the Owner hereby certifies and represents to, and agrees with, Energy Systems Group, LLC as follows:

The ECM (or ECMs), Facility (or Facilities), or the entire Project, as the case may be, (as defined in the Contract) have been delivered, installed, and accepted as of \_\_\_\_\_ (the "Acceptance Date").

Owner has conducted such inspection and/or testing of the ECM (or ECMs), Facility or the entire Project, as the case may be, as it deems necessary and appropriate and hereby acknowledges that it accepts the ECM (or ECMs), Facility, or the entire Project, as the case may be, for all purposes.

No event or condition that constitutes, or with notice or lapse of time, or both, would constitute, an Event of Default (as defined in the Contract) exists at the date hereof.

Sincerely,

**GLENVILLE STATE COLLEGE**

By: \_\_\_\_\_  
Dr. Peter B. Barr

Its: \_\_\_\_\_  
President  
Title

Date: \_\_\_\_\_

## SCHEDULE 2

### ANTICIPATED PAYMENT REQUEST DRAW SCHEDULE

After the Escrow Account is established and funded pursuant to the Lease Agreement, the following payments will be made by PNC Equipment Finance, LLC:

Date	Amount
Contract Signing	15%
Month 1	5%
Month 2	5%
Month 3	10%
Month 4	15%
Month 5	15%
Month 6	10%
Month 7	5%
Month 8	5%
Month 9	5%
Month 10	5%
Month 11	5%

**EXHIBIT A  
SCOPE OF WORK**

**SCIENCE HALL**

**1. CONTROLS / ENERGY MANAGEMENT**

- Upgrade existing building controls web interface from R2 to Webs\_AX:  
Furnish & install new "Open" JACE-600 controller to replace the existing JACE-403  
Reuse existing 120V power feed  
Reuse existing LAN drop  
Reuse existing LON cable that currently communicates with the Invensys DDC controllers  
Upgrade the existing dynamic color graphics
- Boiler Control Panel:  
Retrofit the existing boiler control panel with new Honeywell-Tridium Remote I-O modules as required for the point count.  
Provide a new UPS power supply for the Remote I-O modules.  
Reuse the existing enclosure.  
Reuse the existing 120V power feed.  
Reuse the existing conduits & cables to each boiler.  
Provide the following Points:
  - Boiler #1 Enable-Disable (control relay RIB)
  - Boiler #1 Steam Pressure (new pressure transmitter with siphon pigtail)
  - Boiler #2 Enable-Disable (control relay RIB)
  - Boiler #2 Steam Pressure (new pressure transmitter with siphon pigtail)
  - Boiler #3 Enable-Disable (control relay RIB)
  - Boiler #3 Steam Pressure (new pressure transmitter with siphon pigtail)
  - Boiler #3 Flame Failure Alarm (control relay parallel to alarm light)
  - Boiler #3 LO Water Alarm (control relay parallel to alarm light)
  - Steam Header Pressure (new pressure transmitter with siphon pigtail)
- Building Electrical Meter:  
Interface to the existing GE electrical meter with a Modbus communication cable.  
Provide point mapping for all point registers (approximately 20 points).  
Furnish & install Modbus RS-485 RTU driver in JACE panel.  
Furnish & install communication cable from the JACE to the GE power meter in the main electrical room (basement level).
- WEATHER STATION  
Furnish and install outside air temperature and humidity sensor with back up sensors at the Science Building location.  
Re-program all (up to 10) campus buildings to use weather station for outside air temperature and humidity reference for sequencing system.

- Outside Air Re-programming Work:  
Note-1: The Invensys programming software tool is needed to access the programming inside each of the existing controllers. Glenville State College to provide software tool to controls contractor.

Create alarm messages and send out via email to lab managers informing them of any fume hoods that are still open during unoccupied periods.

Create a Lab HVAC Dashboard

Provide "at-a-glance" view of all the fume hoods

- Sash Open % (i.e. 100% open).
- Air volume per lab room (i.e. 8,500 CFM exhaust air).
- Lab HVAC Alarms (Green Check, Red X).

ESG will work with the lab managers, supervisors, and professors, to develop a change in behavior to store chemicals in 1 or 2 fume hoods and close all the other hoods at the end of each day. They currently turn off all the lights in the labs, but leave the fume hoods fully open. Most of the hoods are VAV and can still operate properly with the sash at minimum position which reduces the air-flow by 90%.

## 2. RETRO-COMMISSIONING

- Validate inputs for accuracy (temperature, pressure, humidity, flow, ON-OFF status).
- Validate outputs are fully functional and properly scaled.
- Verify the equipment is associated with the correct time schedules.
- Verify the control loops are maintaining setpoint and the output is not swinging wildly.
- Set up trend files for each setpoint, each controlled output, and each controlled point.
- Review 24-hours of trend for each control loop, look for stable control.

## 3. STEAM TRAP REPAIR

- Furnish and install repair parts for steam traps per Exhibit A-Attachment 2.

## MOLLOHAN

### 1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.

### 2. CONTROLS / ENERGY MANAGEMENT

- Upgrade existing building controls web interface from R2 to Webs\_AX:  
Furnish & install new "Open" JACE-600 controller to replace the existing JACE-403  
Reuse existing 120V power feed  
Reuse existing LAN drop  
Reuse existing LON cable that currently communicates with the Invensys DDC controllers  
Upgrade the existing dynamic color graphics
- Hot Water Temperature Control  
Program an aggressive reset schedule based on OA temperature  
Disable HW above OA setpoint (65 degrees - Adjustable)  
Enable HW below OA setpoint (60 degrees - Adjustable)
- Steam Valve  
Replace line-sized steam control valve to HW converter with properly sized 1/3 and 2/3 valves.
- Electric Usage  
Furnish & install a "smart KW meter" on each of the electrical services.
  - A smart meter is an electrical meter that records consumption of electric energy in 15 minutes or hourly intervals. Smart meter lets you review your buildings energy consumption daily, weekly, or on a monthly basis. The information a smart meter provides will help you more closely monitor your energy use and will allow you to implement energy-saving techniques.

One (1) 1600 AMP, 208V service, One (1) 800 AMP, 480V service

Provide point mapping for all point registers (approximately 20 points per meter).

Furnish & install Modbus driver in JACE panel

Furnish & install communication cable from the JACE to the power meters in the main mechanical room.

- Hot Water Variable Flow  
Furnish & install a VFD on each HW pump, typical of 2. Variable frequency drives will not have bypass contactors and is not required. Provide a Diff Press Transmitter near the last AHU. Run control wiring from DP Transmitter back to Mechanical Room, connect to JACE. Convert all AHUs (quantity of 8) from 3-way to 2-way control valves by cutting and capping or closing the bypass port's hand valve.
- AHU-1 (Weight Room) HW & CW Valves  
Provide four (4) new control valves (2-way) to replace the existing 3-way HW & CW valves.  
Replace the existing AHU controller with new "Open" controller.
- AHU-4 (Kitchen) HW Valve  
Furnish & install a repair kit for the existing Belimo HW control valve.

Note: the existing valve actuator rotates freely because the mounting bracket is broken

3. RETRO-COMMISSIONING

- Validate inputs for accuracy (temperature, pressure, humidity, flow, ON-OFF status).
- Validate outputs are fully functional and properly scaled.
- Verify the equipment is associated with the correct time schedules.
- Verify the control loops are maintaining setpoint and the output is not swinging wildly.
- Set up trend files for each setpoint, each controlled output, and each controlled point.
- Review 24-hours of trend for each control loop, look for stable control.

4. WATER CONSERVATION UPGRADES

Furnish and replace fixture aerators and sprayers as indicated below:

Mollohan Center	
Water Upgrades	Count of fixtures
Faucets	
0.5 Gpm Aerator	2
1.0 Gpm Aerator	5
1.28 Hand Held Sprayer	2

PRESIDENTS HOUSE

1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.



## GOODWIN HALL

### 2. CONTROLS / ENERGY MANAGEMENT

- Electric Usage

Furnish & install a "smart KW meter" on each of the electrical services.

- A smart meter is an electrical meter that records consumption of electric energy in 15 minutes or hourly intervals. Smart meter lets you review your buildings energy consumption daily, weekly, or on a monthly basis. The information a smart meter provides will help you more closely monitor your energy use and will allow you to implement energy-saving techniques.

One (1) 2000 AMP, 480 V service

Provide point mapping for all point registers (approximately 20 points per meter).

Furnish & install Modbus driver in JACE panel

Furnish & install communication cable from the JACE to the power meter.

## LIBRARY

### 1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.

### 2. CONTROLS / ENERGY MANAGEMENT

- Upgrade existing building controls web interface from R2 to Webs\_AX:  
Furnish & install new "Open" JACE-600 controller to replace the existing JACE-403  
Reuse existing 120V power feed  
Reuse existing LAN drop  
Reuse existing RS-485 cable that currently communicates with the BC N-8000 DDC controllers  
Upgrade the existing dynamic color graphics  
\* Provide new Barber-Colman Network-8000 driver (communicate with existing DDC system)
- Electric Usage  
Furnish & install a "smart KW meter" on the electrical service.
  - A smart meter is an electrical meter that records consumption of electric energy in 15 minutes or hourly intervals. Smart meter lets you review your buildings energy consumption daily, weekly, or on a monthly basis. The information a smart meter provides will help you more closely monitor your energy use and will allow you to implement energy-saving techniques.One (1) 2500 AMP, 208V service  
Provide point mapping for all point registers (approximately 20 points per meter).  
Furnish & install Modbus driver in JACE panel  
Furnish & install communication cable from the JACE to the power meter.
- Demand Ventilation  
Furnish and install three (3) CO<sub>2</sub> sensors per floor in return ducts  
Furnish & install one (1) new DDC controller on each floor, provide 24V power supply from local 120V  
Run cables from each sensor to new DDC controller on each floor  
Provide programming changes to the OA damper control for demand ventilation  
Update the dynamic color graphics
- Humidity Control  
Furnish and install one (1) Duct humidity sensor per floor in return duct  
Run cables from each sensor to new DDC controller on each floor  
Provide programming changes to the AHU to drive down the Supply Air Temp and CW Temp whenever the humidity is above setpoint.

### 3. RETRO-COMMISSIONING

- Validate inputs for accuracy (temperature, pressure, humidity, flow, ON-OFF status).
- Validate outputs are fully functional and properly scaled.
- Verify the equipment is associated with the correct time schedules.
- Verify the control loops are maintaining setpoint and the output is not swinging wildly.
- Set up trend files for each setpoint, each controlled output, and each controlled point.
- Review 24-hours of trend for each control loop, look for stable control.

## ADMINISTRATION BUILDING

### 1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.

### 2. CONTROLS / ENERGY MANAGEMENT

- Upgrade existing building controls web interface from R2 to Webs\_AX:  
Furnish & install new "Open" JACE-600 controller to replace the existing JACE-403  
Reuse existing 120V power feed  
Reuse existing LAN drop  
Reuse existing LON cable that currently communicates with the Invensys DDC controllers  
Upgrade the existing dynamic color graphics
- Electric Usage  
Furnish & install a "smart KW meter" on the electrical service.
  - A smart meter is an electrical meter that records consumption of electric energy in 15 minutes or hourly intervals. Smart meter lets you review your buildings energy consumption daily, weekly, or on a monthly basis. The information a smart meter provides will help you more closely monitor your energy use and will allow you to implement energy-saving techniques.One (1) 800 AMP, 208V service  
Furnish & install Modbus driver in JACE panel  
Furnish & install communication cable from the JACE to the power meter.  
Provide point mapping for all point registers (approx. 20 points per meter).
- Gas Usage  
Provide a 2-1/2" gas meter (Insertion Style) on the main gas piping in the mechanical room.  
Furnish & install communication cable from the JACE to the Gas meter.  
Provide point mapping for all point registers (approx. 5 points per meter).
- Boiler Control  
The existing Invensys DDC system provides boiler control & monitoring  
Sequences will be revised to disable the boiler above OA temp setpoint, operate only the amount of boilers necessary to maintain steam pressure, and rotate boilers based on run-time.

### 3. RETRO-COMMISSIONING

- Validate inputs for accuracy (temperature, pressure, humidity, flow, ON-OFF status).
- Validate outputs are fully functional and properly scaled.
- Verify the equipment is associated with the correct time schedules.
- Verify the control loops are maintaining setpoint and the output is not swinging wildly.
- Set up trend files for each setpoint, each controlled output, and each controlled point.
- Review 24-hours of trend for each control loop, look for stable control.

### 4. STEAM TRAP REPAIR

- Furnish and install repair parts for steam traps per Exhibit A-Attachment 2.

5. WINDOWS REPLACEMENT

The existing single pane windows will be replaced with new premium commercial windows.

Windows:

- Supply and install Traco commercial grade aluminum thermally broken windows

Administration Building		
Traco Windows: NX5400, NX7400, and T400		
Opening	Size	Quantity
A	96" x 101"	14
AL	96" x 101"	2
B	6' x 3'	2
C	40" x 48"	2
D	132" x 101"	7
DL	132" x 101"	1
E	72" x 64"	1
FL	120" x 101"	1
G	90" x 101"	8
G1	90" x 84"	1
G2	90" x 32"	3
G3	90" x 48"	1
H	40" x 48"	2

Exclusions:

- Removal and replacement of window treatments, furniture etc.
- Moving or relocating any electrical, mechanical, telephone, cable, data or alarm system wiring, and equipment or supply lines.
- Glass block windows on back side of building
- Single Window next to glass blocks on back side of building
- Windows that are part of an un-conditioned space
- Doors

Note:

- Windows shall be delivered to site in CWC supplied 48'-53' road trailers and to be set within 50' of building.
- Window warrantee starts final day of delivery.
- Any structural upgrades necessary to install windows is excluded.
- Any future movement of buildings that damages windows voids window warranty.
- ESG will perform a pre-inspection of the existing conditions with the Owner prior to the start of installation. All interior finished deterioration will be documented as an existing condition and the repairs shall be the responsibility of the Owner.
- Air and material testing for lead and asbestos is included.

## LOUIS BENNETT HALL

### 1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.

### 2. CONTROLS / ENERGY MANAGEMENT

- Upgrade existing building controls web interface from R2 to Webs\_AX:  
Furnish & install new "Open" JACE-600 controller to replace the existing JACE-403  
Reuse existing 120V power feed  
Reuse existing LAN drop  
Reuse existing LON cable that currently communicates with the Invensys DDC controllers  
Upgrade the existing dynamic color graphics
- Electric Usage  
Furnish & install a "smart KW meter" on the electrical service.
  - A smart meter is an electrical meter that records consumption of electric energy in 15 minutes or hourly intervals. Smart meter lets you review your buildings energy consumption daily, weekly, or on a monthly basis. The information a smart meter provides will help you more closely monitor your energy use and will allow you to implement energy-saving techniques.One (1) 1200 AMP, 208V service  
Furnish & install Modbus driver in JACE panel  
Furnish & install communication cable from the JACE to the power meter.  
Provide point mapping for all point registers (approximately 20 points per meter).
- Gas Usage  
Provide a 4" gas meter (Insertion Style) on the main gas piping in the mechanical room.  
Furnish & install communication cable from the JACE to the Gas meter.  
Provide point mapping for all point registers (approximately 5 points per meter).
- Boiler Control  
Furnish & install DDC control for the three (3) steam boilers, I-O module attached to JACE  
Provide the following Points for Boiler #1 thru Boiler #3
  - Enable-Disable (control relay RIB)
  - Flame ON status (control relay RIB)
  - Alarm status (control relay RIB)
  - Main Steam Header Pressure
- HEAT EXCHANGER (Main Mechanical Room / Boiler Room)  
Provide two (2) new steam control valves for HEX  
Note: existing valves are old and have older generation actuators (unreliable)  
Furnish & install one (1) new HW Supply Temp Sensor  
Furnish & install one (1) new HW Return Temp Sensor  
Furnish & install new cables from the HEX devices to the JACE controller  
Furnish & install new cables from the existing HW Pump devices to the JACE controller

Provide programming for the HEX and include an aggressive reset schedule based on OA temperature

- HEAT EXCHANGER (Second Mechanical Room)  
Program an aggressive reset schedule based on OA temperature (Existing Invensys DDC)

### 3. STEAM TRAP REPAIR

- Furnish and install repair parts for steam traps per Exhibit A-Attachment 2.

### 4. RETRO-COMMISSIONING

- Validate inputs for accuracy (temperature, pressure, humidity, flow, ON-OFF status).
- Validate outputs are fully functional and properly scaled.
- Verify the equipment is associated with the correct time schedules.
- Verify the control loops are maintaining setpoint and the output is not swinging wildly.
- Set up trend files for each setpoint, each controlled output, and each controlled point.
- Review 24-hours of trend for each control loop, look for stable control.

## PHYSICAL EDUCATION BUILDING

### 1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.

### 2. CONTROLS / ENERGY MANAGEMENT

- Upgrade existing building controls web interface from R2 to Webs\_AX:  
Furnish & install new "Open" JACE-600 controller to replace the existing JACE-403  
Reuse existing 120V power feed  
Reuse existing LAN drop  
Reuse existing LON cable that currently communicates with the Invensys DDC controllers  
Upgrade the existing dynamic color graphics
- Electric Usage  
Furnish & install a "smart KW meter" on the electrical service.
  - A smart meter is an electrical meter that records consumption of electric energy in 15 minutes or hourly intervals. Smart meter lets you review your buildings energy consumption daily, weekly, or on a monthly basis. The information a smart meter provides will help you more closely monitor your energy use and will allow you to implement energy-saving techniques.One (1) 1000 AMP, 208V service  
Furnish & install Modbus driver in JACE panel  
Furnish & install communication cable from the JACE to the power meter.  
Provide point mapping for all point registers (approximately 20 points per meter).
- Gas Usage  
Provide a 4" gas meter (Insertion Style) on the main gas piping in the mechanical room.  
Furnish & install communication cable from the JACE to the Gas meter.  
Provide point mapping for all point registers (approximately 5 points per meter).
- Locker Room AHU  
Implement a Time-of-Day schedule to shut-down the unit & exhaust fan during unoccupied hours.  
Existing equipment is controlled by the Invensys DDC system.

### 3. RETRO-COMMISSIONING

- Validate inputs for accuracy (temperature, pressure, humidity, flow, ON-OFF status).
- Validate outputs are fully functional and properly scaled.
- Verify the equipment is associated with the correct time schedules.
- Verify the control loops are maintaining setpoint and the output is not swinging wildly.
- Set up trend files for each setpoint, each controlled output, and each controlled point.
- Review 24-hours of trend for each control loop, look for stable control.

#### 4. WINDOW REPLACEMENTS

The existing single pane windows will be replaced with new premium commercial windows.

Windows:

- Supply and install commercial grade aluminum thermally broken windows, thermal store front, and curtain walls.

Physical Education		
Traco Windows: TR9100		
Opening	Size	Quantity
1	6' 8" x 6' 9"	4
7	4' x 6' 9"	20
8	3' 4" x 6' 9"	2
9	21' 5" x 6' 9"	3
9A	12' 10" x 6' 9"	1
12	3' 8" x 4'	13
13	5' x 4'	1
15	6' 8" x 8'	4
17	20" x 32"	1

Physical Education		
Vistawall 3000 Thermal Store Front, white laminated insulated glass and glazing.		
Size		Quantity
9' 1/2"	8' 1"	6
11' 9"	5' 5"	4
19' 9"	5' 5"	4
7' 4"	9' 5"	2

Physical Education		
Vistawall CW-250 thermal curtain wall, white laminated insulated glass and glazing.		
Size		Quantity
17' 4.5" x	9' 1/2"	6
13' 4.5" x	6' 8.875"	1
16' 5.5" x	7' 4"	1



Exclusions:

- Removal and replacement of window treatments, furniture etc.
- Moving or relocating any electrical, mechanical, telephone, cable, data or alarm system wiring, and equipment or supply lines.
- Stain Glass Windows and windows surrounding decorative glass
- Side lights for doors
- Doors
- Decorative glass
- Existing louvers
- Breezeway between buildings
- Existing double pane glass windows with dark bronze finish
- Windows that are part of an un-conditioned space

Note:

- Windows shall be delivered to site in CWC supplied 48'-53' road trailers and to be set within 50' of building.
- Window warrantee starts final day of delivery.
- Any structural upgrades necessary to install windows is excluded.
- Any future movement of buildings that damages windows voids window warranty.
- ESG will perform a pre-inspection of the existing conditions with the Owner prior to the start of installation. All interior finished deterioration will be documented as an existing condition and the repairs shall be the responsibility of the Owner.
- Air and material testing for lead and asbestos is included.
- Existing gym window exhaust fans must be removed and replaced by owner
- Awnings at gym will be removed by Contractor and NOT reinstalled

## 5. POOL AREA

- Pool pump system upgrades
  - Provide and install a variable frequency drive system on the pool circulating pump to match circulating requirements with pump output and to reduce energy consumption
    - One Eco-Flow-C Variable Frequency Drive (VFD) with lightning arrestor, or equal
    - Installation of the Eco-Flow-C VFD and lightning arrestor, or equal
    - Training of the operation and settings for the Eco-Flow-C for pertinent personnel
    - One Pentair EQK1000 10 Hp pool pump, or equal
    - Installation of the pool pump and strainer basket
- Pool Saver liquid pool cover system installation
  - Provide and install an automatic chemical metering system to supply the pool water with the appropriate amount of "Heatsaver" additive. This system will save heat loss due to evaporation of water from the pool and improve the ability to provide humidity control in the space.

- 5 year supply of HeatSaver Liquid Pool Cover (LPC) @ 1.25 ounces per day. (1 full pallet consisting of (36) 5 gallon pails of the solution) will be supplied as part of this project.
- One Automatic Metering Pump
- Installation of the feeder system and all appropriate sensors and training of personnel

#### 6. STEAM TRAP REPAIR

Furnish and install repair parts for steam traps per Exhibit A-Attachment 2.

## CLARK HALL

### 1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.

### 2. CONTROLS/ENERGY MANAGEMENT

The existing Invensys DDC panel in the boiler room will be replaced.

- Upgrade existing building controls web interface from R2 to Webs\_AX:  
Furnish & install new "Open" JACE-600 controller to replace the existing JACE-403  
Reuse existing 120V power feed  
Reuse existing LAN drop  
Reuse existing LON cable that currently communicates with the Invensys DDC controllers  
Upgrade the existing dynamic color graphics
- Electric Usage  
Furnish & install a "smart KW meter" on the electrical service.
  - A smart meter is an electrical meter that records consumption of electric energy in 15 minutes or hourly intervals. Smart meter lets you review your buildings energy consumption daily, weekly, or on a monthly basis. The information a smart meter provides will help you more closely monitor your energy use and will allow you to implement energy-saving techniques.One (1) 600 AMP, 208V service  
Furnish & install Modbus driver in JACE panel  
Furnish & install communication cable from the JACE to the power meter.  
Provide point mapping for all point registers (approximately 20 points per meter).
- Gas Usage  
Provide a 1-1/2" or 2.0" gas meter (Insertion Style) on the main gas piping in the mechanical room.  
Furnish & install communication cable from the JACE to the gas meter.  
Provide point mapping for all point registers (approximately 5 points per meter).
- New AHU-1 (Serves Second Floor)
  - Furnish & install a new DDC AHU controller
  - Provide HW Control Valve (installed by Mechanical Contractor)
  - Provide Relief Air Damper (installed by Mechanical Contractor)
  - Furnish & install new damper actuators (Mixed Air, Relief Air)
  - Furnish & install new control cables to each device
  - Furnish & install new control cable between AHU and Condenser
  - Provide devices and control for the following points:
    - Fan VFD On-Off
    - Fan VFD Status (Current Sensing Relay)
    - Fan VFD Speed Control
    - DX Cooling Stage-1 On-Off
    - DX Cooling Stage-1 On-Off
    - Hot Water Coil Control Valve (Modulating Signal)
    - Economizer Dampers (Modulating Signal)
    - Supply Air Temp
    - Mixed Air Temp
    - Return Air Temp

- Return Air CO2
    - Freeze Protection Stat (interlocked w/ AHU Fan and Input to DDC System)
  - Zone Control Dampers (Typical of 4)
    - Furnish and install a DDC Zone Controller for each classroom
    - Provide zone dampers
    - Furnish & install new damper actuators (one per zone damper)
    - Furnish and install a space temp sensor w/ setpoint adjustment in each classroom
    - Occupancy Sensor Output from the Lighting System
    - Furnish and install control cables from each device to each respective Zone Controller
    - Provide programming for Min Airflow (software damper limit)
- New AHU-2 Heat Pump (Serves both Mezzanine Levels)
  - Furnish & install a new DDC AHU controller
  - Provide HW Control Valve
  - Provide Relief Air Damper
  - Furnish & install new damper actuators (Mixed Air, Relief Air)
  - Furnish & install new control cables to each device
  - Furnish & install new control cable between AHU and Condenser
  - Provide devices and control for the following points;
    - Fan On-Off
    - Fan Status (Current Sensing Relay)
    - DX Cooling On-Off
    - Hot Water Coil Control Valve (Modulating Signal)
    - Economizer Dampers (Modulating Signal)
    - Space Temp (Lower Mezz)
    - Space Temp (Upper Mezz)
    - Supply Air Temp
    - Mixed Air Temp
    - Return Air Temp
    - Return Air CO2
    - Freeze Protection Stat (interlocked w/ AHU Fan and Input to DDC System)
    - Four (4) averaging room thermostats
- First Floor Heat Pump (Typical of 2)
  - Replace existing T-stat with new Communicating Stat
    - Points to include:
    - Unit On-Off
    - Heating – Cooling Control
    - Local Setpoint Limits
    - Scheduled Control
    - Supply Air Temp
    - Occupancy Sensor Outputs from the Lighting System
- Cabinet Unit Heaters (typical of 7)
  - Furnish and install a Control Relay (RIB) to Enable-Disable the CUHs based on OA temp.
  - Furnish & install control cables from the RIBs to the JACE.

- Bard Units – Basement Classrooms (typical of 4)  
Furnish & install new Communicating Stats for each classroom, located near the interior door  
Points to include:
  - Unit On-Off
  - Heating – Cooling Control
  - Local Setpoint Limits
  - Scheduled Control
  - Supply Air Temp
  - Occupancy Sensor Input from the Lighting System
  
- New Hot Water System
  - Provide DDC control from the JACE using I-O modules.
  - Provide HW Supply & Return Temp Sensors (installed by Mechanical Contractor)
  - Provide HW 3-way Mixing Valve (installed by Mechanical Contractor)
  - Provide Boiler Interface Control Points:
    - Enable-Disable
    - Run Status
    - Fault Status
    - Setpoint Adjustment
  - Provide HW Pump Control Points:
    - On-Off (Control relay at each starter)
    - Status (Current Sensing Relay)
  - Furnish and install Control Cable from each device & boiler to JACE.
  - Program an aggressive reset schedule based on OA temperature
  
- DDC System Communication
  - Furnish & install LON communication cable from the JACE to each DDC controller, wired in continuous loop (daisy chain).

### 3. HVAC SYSTEM

- Second Floor: Furnish and install new AHU-1 with 12.5 ton DX cooling with hot water coil and associated ductwork, dampers, grilles and registers serving second floor classrooms. The AHU-1 will be installed on the mezzanine level in the room containing the duct chase or other agreed upon location.
  
- Mezzanine New System: Provide and install (quantity of 1) 2.5 ton heat pump condensing unit and AHU-2. The AHU-2 will be installed on the mezzanine level in the room containing the duct chase. Modify existing ductwork to accommodate new unit. The existing AHU located in the stairwell will be abandon in place. Condensing unit will be located on the back side of the building at ground level. Back up heat will be provided by the hall perimeter radiant heaters.
  
- Basement New Systems: Provide and install (quantity of 4) high efficiency Bard hot water unit with DX cooling (or approved equal) with two speed compressors, dehumidification control, energy recovery for fresh air and BACnet DDC controls tied into the energy management system. New units will tie into the existing hot water heating piping. Radiators will be abandoning in place or removed as necessary to facilitate installation. Occupancy sensors will be installed in these classrooms to control both the lighting and the HVAC unit.

- New Boilers (Typical of 2)
  - Remove existing boiler and replace with 2-300 Mbtu high efficiency condensing boilers complete with boiler circulating pumps.
- Hot Water Pumps (Typical of 2)
  - Remove and replace existing distribution pump with new inline pumps to match new boilers configuration.

*Construction drawings mutually approved by Owner and ESG will serve as the specific scope of work. New equipment and model sizing listed is preliminary and may change based on final engineering drawings*

Note:

A portion of the existing boiler stack containing asbestos will be abated as part of this contract.

## FINE ARTS

### 1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.

### 2. CONTROLS/ENERGY MANAGEMENT

- Upgrade existing building controls web interface from R2 to Webs\_AX:  
Furnish & install new "Open" JACE-600 controller to replace the existing JACE-403  
Reuse existing 120V power feed  
Reuse existing LAN drop  
Reuse existing LON cable that currently communicates with the Invensys DDC controllers  
Upgrade the existing dynamic color graphics
- Electric Usage  
Furnish & install a "smart KW meter" on the electrical service.
  - A smart meter is an electrical meter that records consumption of electric energy in 15 minutes or hourly intervals. Smart meter lets you review your buildings energy consumption daily, weekly, or on a monthly basis. The information a smart meter provides will help you more closely monitor your energy use and will allow you to implement energy-saving techniques.One (1) 800 AMP, 480V service  
Furnish & install Modbus driver in JACE panel  
Furnish & install communication cable from the JACE to the power meter.  
Provide point mapping for all point registers (approximately 20 points per meter).

### 3. RETRO-COMMISSIONING

- Validate inputs for accuracy (temperature, pressure, humidity, flow, ON-OFF status).
- Validate outputs are fully functional and properly scaled.
- Verify the equipment is associated with the correct time schedules.
- Verify the control loops are maintaining setpoint and the output is not swinging wildly.
- Set up trend files for each setpoint, each controlled output, and each controlled point.
- Review 24-hours of trend for each control loop, look for stable control.

## PICKENS HALL

### 1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.
- Note: Pickens Hall is currently primarily unoccupied however GSC has the intention of occupying and using in the future.

### 2. CONTROLS/ ENERGY MANAGEMENT

- Upgrade existing building controls web interface from R2 to Webs\_AX:  
Furnish & install new "Open" JACE-600 controller to replace the existing JACE-403  
Reuse existing 120V power feed  
Reuse existing LAN drop  
Reuse existing LON cable that currently communicates with the Invensys DDC controllers  
Upgrade the existing dynamic color graphics
- Electric Usage  
Furnish & install a "smart KW meter" on the electrical service.  
  
One (1) 1200 AMP, 208V service  
Furnish & install Modbus driver in JACE panel  
Furnish & install communication cable from the JACE to the power meter.  
Provide point mapping for all point registers (approximately 20 points per meter).
- Electric Usage (Scott)  
Furnish & install a "smart KW meter" on the electrical service.  
One (1) 2000 AMP, 208V service  
Furnish & install Modbus driver in JACE panel  
Furnish & install communication cable from the JACE to the power meter.  
Provide point mapping for all point registers (approx. 20 points per meter).
- Domestic Hot Water Heat Exchanger (Scott Hall)
  - Provide new steam control valves for 1/3, 2/3 operation
  - Reconnect the Control Cables to the new steam control valves.
  - Verify proper operation of the heat exchanger

### 3. STEAM TRAP REPAIR

- Furnish and install repair parts or replacement of steam traps per Exhibit A-Attachment 2.



#### 4. FIRE SUPPRESSION SYSTEM

- Provide and install new wet and dry sprinkler and standpipe fire suppression system in the existing six story building excluding Wagner Wing.
- Overhead system will be based on NFPA 13 standards as per the specifications, water supply is based on water supply of:
  - Static pressure        70 PSI
  - Residual Pressure    44 PS
  - Rated Flow            905 GPM
- Sprinkler head in areas with suspended ceiling will be chrome or white semi-recessed type not necessarily located in the center of the ceiling tiles, all others will be exposed.
- Install electric fire pump to support standpipe and sprinkler system, to meet code.
- Furnish and install New 6 inch water service to the building. Final location will be located during design phase of the project.
- New fire pump room – A new fire pump room is required to house the new fire protection equipment. Existing room will be converted to a 2 hour fire rated classification to meet local and state code.
- Excluded
  - All electrical wiring including, but not limited to, devices and alarms
  - Fire Alarm System
  - Fire Extinguishers
  - Painting of Piping
  - Landscaping

*Construction drawings mutually approved by Owner and ESG will serve as the specific scope of work. New equipment and model sizing listed is preliminary and may change based on final engineering drawings*

#### 5. HAZARDOUS MATERIALS

- Testing and abatement of ceilings and floors for the new fire suppression system is included only in areas where there are pipe penetrations. Exact locations of piping penetrations through walls, ceilings and floors will be coordinated with GSC during the design phase.

## 6. RETRO-COMMISSIONING

- Validate inputs for accuracy (temperature, pressure, humidity, flow, ON-OFF status).
- Validate outputs are fully functional and properly scaled.
- Verify the equipment is associated with the correct time schedules.
- Verify the control loops are maintaining setpoint and the output is not swinging wildly.
- Set up trend files for each setpoint, each controlled output, and each controlled point.
- Review 24-hours of trend for each control loop, look for stable control.

## 7. BUILDING ENERGY MANAGEMENT

- ESG will work with GSC to develop an energy management strategy for Pickens hall which may require Wagner and Williams Wings to be unoccupied until renovations are completed and student housing demands are such that the wings are needed. This will contemplate shutting down or aggressively setting back the heating and other systems in sections of the building that are not being used.

## FIELD HOUSE

### 1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.

### 2. CONTROLS/ ENERGY MANAGEMENT

- Furnish and install non-communicating programmable thermostat and associated occupancy sensor(s).

ALUMNI CENTER

1. LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.

## CAMPUS WIDE

### 1. OUTDOOR LIGHTING

- Furnish and install new fixtures and/ or retrofits per Exhibit A-Attachment 1.

### 2. COMPUTER PC POWER MANAGEMENT – VERDIEM SOFTWARE

- Furnish and install VERDIEM™ software and associated maintenance to control up to 550 PC's. GSC shall assist in the measurement and verification by having a software computer labeling system allowing for the PC computers to be distinguished by building to be used as part of the measurement and verification process.
- Computer Power Source - It is assumed that all computers receiving the power management software received their electrical power from the main 3 campus master electric meters. Adjustments will be made as necessary if the computers are determined to not be powered from the main 3 campus master electric meters.
- GSC agrees their software and hardware systems meet at the following requirements
  - Surveyor Server
    - Microsoft Windows Server 2008 R2 (recommended)
    - Windows Server 2008 (32-bit and 64-bit)
    - Microsoft Windows Server 2003 SP2 or later (32-bit)
  - Surveyor Database
    - Microsoft SQL Server 2008 R2
    - Microsoft SQL Server 2008 R2 Express Edition (for evaluation only)
    - Microsoft SQL Server 2005 SP3
  - Surveyor GSC
    - Windows 7 Operating System (32-bit and 64-bit)
    - Windows Vista operating system SP1 or later (32-bit and 64-bit)
    - Windows XP operating system SP3 or later
    - Mac OXS 10.5, 10.6, or 10.7 operating system on Intel-based hardware
- Minimum Hardware Requirements
  - Application Server
    - 2.8 GHz Dual-core processor
    - 4 GB or RAM (8GB recommended)
    - 40GB of hard drive storage for applications
  - Data Base Server
    - 5GB of database storage space per 1,000 GSCs per year
  - Single-server configuration (application and database on same computer)
    - 2.8 GHz Quad-core processor
    - 16 GB of RAM
    - 40 GB of hard drive storage for applications
    - 5 GB of database storage space per 1,000 clients per year
  - Other Requirements
    - Cisco EnergyWise Phase 2.5 for EnergyWise domain integration in Surveyor.

Note:

- After the 5 year period GSC may need to do software, server and hardware upgrades

### 3. DEMAND RESPONSE PROGRAM

- Demand response programs are designed to enable GSC to contribute to energy load reduction during times of peak demand. As part of the demand response program GSC will receive financial incentives for load reduction during times of peak demand as set forth in the demand response contract. The cost savings and or financial gain will be attributed to the project financial savings.

### 4. GAS WELL TO PE BUILDING & CLARK HALL

- Furnish and install gas piping and associated controls & metering devices as required to supply natural gas to P.E. building and Clark Hall. Work to include trenching and backfill to areas affected by new gas piping system.

NOTE: OPERATION AND MAINTENANCE OF GAS WELL IS TO BE PERFORMED BY GSC STAFF TO MAINTAIN AT LEAST 90% OF THE GAS NEEDS FOR THE P.E. BUILDING AND CLARK HALL FOR THE DURATION OF THE CONTRACT. GSC AGREES THAT THERE IS SUFFICIENT GAS AVAILABLE TO SUPPLY AT LEAST 90% OF THE BASELINE AND OR GAS NEEDS OF THE P.E. BUILDING AND CLARK HALL FOR THE DURATION OF THE CONTRACT. ESG DOES NOT GUARANTEE AVAILABILITY AND/OR QUANTITY OF GAS FROM THE GAS WELL TO P.E. BUILDING AND CLARK HALL. GSC FROM TIME TO TIME WILL REQUIRE PURCHASING OF NATURAL GAS FROM CERTIFIED PROVIDER TO SUPPLY FUEL TO THE PREMISES MENTIONED ABOVE.

See paragraph 13.8 of the AGREEMENT for exclusions to hazardous materials.

### 5. WEATHER STATION:

See Science Hall scope of work

**EXHIBIT B**  
**ENERGY SAVINGS GUARANTEE AND M&V PLAN**

**1.0 DEFINITIONS**

When used in this Agreement, the following capitalized words shall have the meanings ascribed to them below:

**"Acceptance of Installation"** means an authorized representative of the Owner has inspected and accepted that ESG installed Energy Conservation Measures are operational and comply with contract performance requirements and specifications. The Owner's acceptance shall not relieve ESG from responsibility for continued compliance with contract requirements during the contract term. The Acceptance of Installation shall occur after Substantial Completion.

**"Approval"** means the Owner has completed review of submittals, deliverables or administrative documents (e.g., insurance certificates, installation schedules, planned utility interruptions, etc.) and has determined that the documents conform to contract requirements. The Owner's approval shall not relieve ESG from responsibility for complying with contract requirements.

**"Baseline Period"** is defined as the twelve month period as indicated in Section 5.0 Table D.1 of this exhibit.

**"Energy Baseline"** shall be the energy consumption and costs prior to the installation of the energy conservation measures at the facilities. The baseline will consist of all base year energy bills applicable to the meters in the project. It may also consist of any estimated usage for unmetered energy consumption.

**"Energy Conservation Measure (ECM)"** is defined as the installation of new equipment/facilities, modification and/or alteration of existing equipment/facilities or rate structures or revised operations and maintenance procedures intended to reduce energy consumption of facilities/energy systems, improve equipment efficiency or provide equipment that complies with existing standards.

**"Energy and Operational Savings"** is the sum of the Energy Savings and Operational Savings as defined herein.

**"Energy Costs"** shall mean charges for fuel adjustments, base services, transmission, tariffs, and distributions. The Energy Costs will normally be derived or imputed from the Facilities' utility bills. This method allows for updating savings calculations with changing rate schedules. In the event of a utility rate decrease, the utility rate(s) used to assign dollar cost will not drop below that of the base year.

**"Facilities"** shall mean those buildings and equipment from which the energy and operational cost savings will be realized.

**"Final Acceptance Date"** shall mean the date all of the ECMs or Measures comprising the Project (as defined in the Agreement) have been delivered, installed, and accepted by the Owner.

**"First Guarantee Year"** is defined as the period beginning on the first (1st) day of the month following the Final Acceptance Date and ending on the day prior to the first (1st) anniversary thereof.

**"Guarantee Period"** is defined as the period beginning on the first (1st) day of the First Guarantee Year and ending on the last day of the Term.

**"Guarantee Year"** is defined as each of the successive twelve (12) month periods commencing on the anniversary of the commencement of the First Guarantee Year throughout the Term of this Agreement.

**"Guaranteed Savings"** is defined as the amount of Energy and Operational Cost Savings.

**"Installation Period"** is from the date of award to Substantial Completion.

**"Operational Costs"** shall include the costs associated with operating and maintaining the Facilities. Examples include the cost of inside and outside labor to repair and maintain systems and equipment, the cost of replacement parts, the cost of deferred maintenance, the cost of lamp and ballast disposal, and the cost of new capital equipment.

**"Retrofit Isolation Method"** (if applicable to this Project) refers to energy audit methodologies that require pre-retrofit and post-retrofit measurements to isolate energy consumption and costs of specific facility equipment and systems impacted exclusively by this Agreement.

**"Term"** shall be fifteen (15) years.

**"Total Guarantee Year Savings"** is defined as the amount of Energy and Operational Savings realized by Facilities in each Guarantee Year as a result of the Work.

## 2.0 TERM AND TERMINATION

The Term of this Guarantee shall commence on the first (1st) day of the first month following the date of Substantial Completion of the Work installed pursuant to this Agreement, unless terminated earlier as provided for herein.

## 3.0 SAVINGS GUARANTEE

3.1 **Guarantee.** ESG guarantees to the Owner that the Facilities will realize in each Guarantee Year savings in Energy and Operational Costs (the "Energy and Operational Savings") collectively equal to the amounts shown in Section 4.0 - Table B. At the end of each year ESG will present the Owner with an Energy Savings Audit Report within ninety (90) days. If there is a



shortfall of the Energy Savings in any year, ESG shall provide settlement within sixty (60) days of the acceptance of the report by the Owner.

- 3.2 **Savings Report.** Within ninety (90) days following the end of each of the Guarantee Years, ESG will provide the Owner with an annual report ("Energy Services Guarantee Report"). The Owner will assist ESG in generating the Energy Services Guarantee Report by authorizing ESG to contact utility companies directly for true copies of all bills pertaining to Energy Costs and Consumption together with access to the Owner's relevant accounting records, and facilities to monitor any installed equipment relating to such Energy Costs, Consumptions, and Savings pertaining to the Energy Guarantee. Data and calculations utilized by ESG in the preparation of its Cost Savings Energy Services Guarantee Report will be made available to the Owner, along with such explanations and clarifications as the Owner may reasonably request. In the event that ESG is not provided immediate access to utility bills from the Utility, ESG will contact a Representative from the Owner to obtain this information. If there is a delay in receiving the information the ninety (90) day period will be reasonably extended to gain said access.
- 3.3 **Operational Savings.** Operational savings have been reviewed and accepted by the Owner and are described in Section 9.0 of this exhibit. Operational savings will begin to accrue on the date of completion and acceptance of each ECM.
- 3.4 **Additional Savings.** ESG may identify other Energy and Operational Savings opportunities during the construction period or during any Guarantee Year. Additional Energy and Operational Savings that can be demonstrated as a result of ESG efforts that result in no additional costs to the Owner beyond the costs identified in this Agreement will be included in the annual Energy Services Guarantee Report for the applicable Guarantee Year(s).
- 3.5 **Savings Prior to Final Acceptance Date.** All Energy and Operational Savings realized by the Owner that result from activities undertaken by ESG prior to Final Acceptance Date, including any utility rebates or other incentives earned as a direct result of the installed energy conservation measures provided by ESG, will be applied toward all savings shortfalls before payment is made. Energy savings that are achieved by the upgrades and modifications in the Agreement prior to completion of the entire retrofit project (or construction savings) will be added to the first year actual energy savings amount.

ESG and the Owner also agree that if the actual annual energy savings amount exceeds the energy guarantee amount, such excess energy savings amounts will be either:

- Added to the savings for any future year before calculating the savings amount; or,
- Billed back to the Owner up to any amounts paid by ESG for savings shortfalls in a previous year.

- 3.6 **Cumulation of Savings.** The Guaranteed Savings in each Guarantee Year are considered satisfied if the Total Guarantee Year Savings for such Guarantee Year equals or exceeds the

amount identified and determined as set forth in Section 4.0 – Table B. Energy savings that are achieved by the upgrades and modifications in the Agreement prior to completion of the entire retrofit project (or construction savings) will be added to the first year actual energy savings amount. ESG and the Owner also agree that if the actual annual energy savings amount exceeds the energy guarantee amount, such excess energy savings amounts will be either:

- Added to the savings for any future year before calculating the savings amount; or,
- Billed back to the Owner up to any amounts paid by ESG for savings shortfalls in a previous year.

3.7 **Hours and Practices.** To achieve these energy savings, ESG and the Owner agree upon the building operating hours as listed in Table A below. In addition to the primary hours indicated below, ESG recognizes the facilities will be used for normal after school activities.

**Table A - Hours of Occupancy**

Hours of Occupancy	Primary Hours
Science Building	7:30 AM – 8:00 PM Mon - Fri
Mollohan Community Center	6:00 AM – 11:00 PM Daily
President's House	Occupancy Varies
Goodwin Hall	Continuous
Robert F. Kidd Library	7:30 AM – 12:00 AM Daily
Harry B. Heflin Administration Building	7:30 AM – 8:00 PM Mon - Fri
Louis Bennett Hall	7:30 AM – 8:00 PM Mon - Fri (Note 2)
Physical Education Building	7:30 AM - 8:00 PM, Mon - Fri - for normal school operations, various days and hours - other scheduled events
Clark Hall	7:30 AM – 7:00 PM Mon - Fri
Fine Arts	7:30 AM – 8:00 PM Mon - Fri
Pickens Hall	Note 1
Field House	7:00 AM - 10:00 PM, Mon - Fri - Occupancy Varies
Alumni Hall	7:30 AM – 6:00 PM Mon - Fri

Note 1: Pickens Hall is student housing and is primarily unoccupied. A limited number of students are housed in the Scott Wing. GSC intends to further occupy the building in the future at which time it would be occupied 24/7.

Note 2: A portion of Louis Bennett Hall is used for student housing and is occupied continuously.

3.8 **Activities and Events Adversely Impacting Savings.** The Owner shall promptly notify ESG of any activities known to the Owner, which adversely impact ESG's ability to realize the Guaranteed Savings. If this type of situation occurs over the Guarantee Period ESG shall be entitled to reduce its Guaranteed Savings, or make necessary adjustments to the energy baseline in order to quantify the changes in the facility. This will allow ESG and the Owner to recognize and document any such adverse impact to the extent that such adverse impact is beyond ESG's reasonable control.

#### 4.0 SAVINGS GUARANTEE

ESG guarantees that the Work will result in the following sum of Total Guaranteed Year Savings over the Term as outlined in Table B:

**Table B - Guaranteed Savings**

Year	Energy Savings			Operational Savings		Total Annual Savings
	Option A	Option C	Agreed Upon	Lighting Maint Savings	Maint Savings	
1	\$24,097	\$113,036	\$33,006	\$5,576	\$1,963	\$177,678
2	\$24,097	\$113,036	\$35,406	\$5,815	\$2,047	\$180,401
3	\$24,097	\$113,036	\$52,206	\$6,065	\$2,136	\$197,540
4	\$24,097	\$113,036	\$30,606	\$3,353	\$2,227	\$173,319
5	\$24,097	\$113,036	\$30,606	\$3,497	\$2,323	\$173,559
6	\$24,097	\$111,673	\$30,606	\$2,736	\$2,423	\$171,535
7	\$24,097	\$109,116	\$30,606	\$2,853	\$2,527	\$169,199
8	\$24,097	\$107,582	\$30,606	\$2,976	\$2,636	\$167,897
9	\$24,097	\$107,582	\$30,606	\$3,104	\$2,749	\$168,138
10	\$24,097	\$107,582	\$30,606	\$3,237	\$2,867	\$168,389
11	\$24,097	\$107,582	\$30,606	\$3,377	\$2,991	\$168,653
12	\$24,097	\$107,582	\$30,606	\$3,522	\$3,119	\$168,926
13	\$24,097	\$107,582	\$30,606	\$3,673	\$3,253	\$169,211
14	\$24,097	\$107,582	\$30,606	\$3,831	\$3,393	\$169,509
15	\$24,097	\$107,582	\$30,606	\$3,996	\$3,539	\$169,820
<b>Totals</b>	<b>\$361,455</b>	<b>\$1,646,625</b>	<b>\$487,890</b>	<b>\$57,611</b>	<b>\$40,193</b>	<b>\$2,593,774</b>

Notes:

1) The Guaranteed Energy Savings is for total dollars saved not by Option or fuel type.

2) Computer PC Power Management Software by VERDIEM™ - The distribution of computers is an estimate based on the available information at the time of the contract. Due to the mobility of computers, the software allows for the savings to occur regardless of location. If necessary, the most recent and updated computer inventory counts will be used to calculate the measurement and verification, and saving guarantee for that year. It is currently assumed there are no computers in the Fine Arts Building or Pickens Hall and all computers receiving the software will be on the main master electric meters (58-060-492 & 58-060-542). This will be updated and Option A savings for computers in these buildings will be calculated as necessary, if they are not powered from master electric meters (58-060-492 & 58-060-542).

Maintenance and repair cost for equipment installed under this project will not be higher than that required for proper operation of existing equipment and in some cases will be lower.

4.1 **Adjustments To The Guarantee.** The Guaranteed Savings will be adjusted to account for material changes, where material is defined as any change or changes that may increase or decrease the energy consumption of the Facilities by more than 1% annually, including, but not limited to the following:

- a. Changes in the hours of operation of any buildings constituting any part of the Facilities.
- b. Changes in the occupancy of the buildings constituting any part of the Facilities.
- c. Changes in the structure of buildings constituting any part of the Facilities, such as architectural features or building components.
- d. Modifications or renovations to the buildings constituting any part of the Facilities, which may or may not change the conditioned space.
- e. Changes to the ECMs.
- f. Changes in utility prices and/or rate structure.
- g. Change in utility suppliers
- h. Change in the method of utility billing or purchasing with respect to the Facilities.
- i. Addition or deletion of energy consuming equipment at the site.
- j. Weather variance from base year to current year.
- k. Owner's failure to adhere to operating and maintenance responsibilities as defined by the equipment manufacturer.
- l. Adjustments necessary to account for lighting burnouts as documented before retrofit.
- m. New outside air ventilation needed to bring any buildings constituting any part of the Facilities up to state government code.
- n. Required increases in light levels to bring any buildings constituting any part of the Facilities up to state government code.
- o. Any condition, which affects the energy demand or consumption of Facilities, caused by Owner or its agents.

Owner will be responsible for providing ESG notice of actual or proposed material changes to the site and its anticipated effect on energy usage and consumption. Owner must notify ESG no less than thirty (30) days before a planned material change occurs, or within seventy-two (72) hours of an emergency or unplanned material change.

Owner agrees to:

- a. Not make any substantial changes to the initial building control system's program without prior notice to ESG.
- b. Provide access for the Company to adjust ECMs to ensure optimal operation and maximum energy savings.
- c. Not place the building control system in a permanent 'on' status, nor will Owner manually operate or override any part of the building control system except upon equipment failure or emergency conditions except for after-hours meetings or programs as necessary.
- d. Maintain the space temperature settings between 68°F to 72°F for heating and 72°F to 76°F for cooling during occupied hours, with a heating setback temperature of 60°F and a cooling setup of 80°F during non-occupied hours (except for day of graduation or any special events necessary to alleviate comfort issues).

## 5.0 BASELINE UNIT ENERGY COSTS & UTILITY INFORMATION

Utility information pertinent to Facilities is indicated in Table C below.

**Table C - Utility Information**

	M&V Option	Utility Type	Meter #	Account #	Units	Service Provider
Science Building	C	Electric	58-060-492	3-72-22-910-97051-1	kWh	First Energy
		Gas	75433890771	52777	DT	Dominion Hope
Mollohan Community Center	C	Electric	58-060-492	3-72-22-910-97051-1	kWh	First Energy
		Gas	59037180025	52777	DT	Dominion Hope
	A	Water	P60415277 (2 inch)	5451	kgal	Glenville Utility
President's House	C	Electric	58-060-492	3-72-22-910-97051-1	kWh	First Energy
Goodwin Hall	C	Electric	58-060-492	3-72-22-910-97051-1	kWh	First Energy
		Gas	752 0969515	52777	DT	Dominion Hope
Robert F. Kidd Library	C	Electric	58-060-542	372-22-910-97051-1	kWh	First Energy
		Gas	56839889070	52777	DT	Dominion Hope
Harry B. Heflin Administration Building	C	Electric	58-060-542	372-22-910-97051-1	kWh	First Energy
		Gas	77537480028	52777	DT	Dominion Hope
Louis Bennett Hall	C	Electric	58-060-542	372-22-910-97051-1	kWh	First Energy
		Gas	77537480028	52777	DT	Dominion Hope
Physical Education Building	C	Electric	58-060-542	372-22-910-97051-1	kWh	First Energy
		Gas	33237680026	52777	DT	Dominion Hope
Clark Hall	C	Electric	58-060-542	372-22-910-97051-1	kWh	First Energy
		Gas	33237680026	52777	DT	Dominion Hope
Fine Arts	A & Agreed Upon	Electric	56-623-480	3-72-22-910-97057-1	kWh	First Energy
		Gas	7500137974	52777	DT	Dominion Hope
Pickens Hall	A & Agreed Upon	Electric	56-623-480	3-72-22-910-97057-1	kWh	First Energy
		Gas	77537380027	52777	DT	Dominion Hope
Field House	A & Agreed Upon	Electric	24-599-279	3-72-06-160-08262-1	kWh	First Energy
		Gas	565-7382433	52777	DT	Dominion Hope
Alumni Hall	A	Electric	43-267-731	3-72-21-678-01330-2	kWh	First Energy

Baseline unit energy costs are outlined in Table D.1 herein and were used for all calculations made under this Exhibit.

**Table D.1 - Baseline Information**

	Square Footage	Utility Type	Baseline Consumption		Base Unit Cost (\$ / Unit)	Base Year			
			Units	Dollars (Note 2)		Jan-11	To:	Dec-11	
Science Hall (Note 5)	30,109	Gas	8,961	DT	\$80,881.91	\$9.03	Jan-11	To:	Dec-11
Mollohan Community Center (Note 4,5)	58,837	Water	1,005	kgal	\$6,010.19	\$5.98	Jan-11	To:	Dec-11
Goodwin Hall	120,556	Gas	3,279	DT	\$29,593.52	\$9.03	Jan-11	To:	Dec-11
Robert F. Kidd Library	28,981	Gas	1,778	DT	\$16,050.02	\$9.03	Jan-11	To:	Dec-11
Harry B. Heflin Admin Bldg.	47,742	Gas	5,087	DT	\$45,911.61	\$9.03	Jan-11	To:	Dec-11
Louis Bennett Hall	62,770								
Physical Education Building (Note 6)	52,013								
Clark Hall (Note 6)	13,376	Gas	3,749	DT	\$33,834.83	\$9.03	Jan-11	To:	Dec-11
<b>Total of Above Buildings (Note 8)</b>	<b>420,282</b>	Electric	<b>5,575,748</b>	<b>kWh</b>	<b>\$409,721.04</b>	<b>\$0.073</b>	Jan-11	To:	Dec-11
Fine Arts	53,078	Gas	2,099	DT	\$18,945.56	\$9.03	Jan-11	To:	Dec-11
Pickens Hall	125,035	Gas	5,109	DT	\$46,110.18	\$9.03	Jan-11	To:	Dec-11
Fine Arts / Pickens (Note 7)	178,113	Electric	1,073,496	kWh	\$85,055.55	\$0.079	Jan-11	To:	Dec-11
Field House	7,102	Electric	55,520	kWh	\$7,529.49	\$0.136	Jan-11	To:	Dec-11
		Gas	637	DT	\$6,077.20	\$9.03	Jan-11	To:	Dec-11
<b>Total of Above Buildings Excluding Presidents House (Note 1,9,)</b>	<b>599,599</b>	Gas	<b>30,734</b>	<b>DT</b>	<b>\$277,404.83</b>	<b>\$9.03</b>	Jan-11	To:	Dec-11
Alumni Hall	Note 3	Electric	18,894	kWh	\$1,883.84	\$0.100	Jan-11	To:	Dec-11

Note 1: The gas meter usage is combined and billed as one master transport account with the exception of the President's House. The cost per DT is the portion of the bill that varies with gas usage and does not include fixed costs that are independent of usage. See Table D.2 - Incremental Gas Cost for further details. The base year transport company is Dominion Hope and the gas Purchase Company is Dominion Hope.

Note 2: The gas dollar cost for the building on the master gas account is based on the metered gas usage multiplied by calculated average gas rate.

Note 3: The actual square footage of Alumni Hall is unknown but is estimated to be less than 5,000 square feet.

Note 4: The Mollohan Community Center has a separate gas meter that serves gas to the building's domestic hot water boilers and kitchen which is not included as part of the baseline.

Note 5: Steam from the boilers in Science Hall is the heating source for Mollohan. Science Hall gas meter serves the space heating needs of the Mollohan Community Center.

Note 6: The Physical Education Building and Clark Hall share a common gas meter.

Note 7: Pickens Hall and Fine Arts share a common electric meter.

Note 8: Science Hall, Mollohan, President's House, Goodwin, Library, Administration, Louis Bennett, Physical Education, and Clark Hall share two common electric meters that are billed as one master account.

Note 9: Total gas usage shown in the table does not include all gas meters that are part of the master gas account.

**Table D.2 - Incremental Gas Cost**

<b>2011 ANNUAL GAS USAGE (Master Gas Bill Acct# 52777)</b>			
Month	Cost (\$)	Decatherm (DT)	Admin Charge
JAN	\$ 45,954.53	5,296	\$1,617.30
FEB	\$ 45,489.49	5,235	\$1,617.30
MAR	\$ 35,044.19	4,209	\$1,617.30
APR	\$ 15,436.96	2,079	\$1,617.30
MAY	\$ 9,917.16	1,340	\$1,617.30
JUN	\$ 5,712.03	817	\$1,617.30
JUL	\$ 3,586.31	667	\$1,617.30
AUG	\$ 6,272.28	755	\$1,617.30
SEP	\$ 31,935.66	1,009	\$1,797.00
OCT	\$ 21,792.58	1,836	\$1,797.00
NOV	\$ 39,654.75	3,570	\$1,797.00
DEC	\$ 51,418.39	5,477	\$1,797.00
2011 TOTAL	\$ 312,214.33	32,289	\$20,126.40
	\$ (20,126.40)	Admin Charge Total 2011	
	\$ (651.29)	Admin Muni Tax Rate 3.23600%	
	\$ 291,436.64	2011 Total less Fixed Costs	
	<b>\$ 9.03</b>	<b>Average Incremental Cost per DT</b>	

Note: The Administration Charge is a fixed cost for having the gas service and does not vary with gas usage. The Administration Muni (Municipal) charge is the portion of municipal taxes attributed to the fixed administration costs and does not vary with the gas usage. No cost savings would be realized on these two portions of the bill by reducing gas usage and is therefore not used in calculating the average incremental gas cost used in the savings determination.

## 6.0 HOURS OF USE

The hours of operation for the Guarantee are set forth at the end of Exhibit A – Attachment 1 Lighting Scope of Work.

## 7.0 M&V APPROACH

The International Performance Measurement and Verification Protocol (IPMVP) provides an overview of current best practice techniques available for verifying results of energy efficiency, water efficiency, and renewable energy projects. The IPMVP is maintained with the sponsorship of the U.S. Department of Energy by a broad coalition of facility Owners/operators, financiers, contractors, or Energy Service Companies (ESCOs) and other stakeholders.

IPMVP Option A & C and Agreed Upon Savings are the approaches used in the M&V process for verifying savings related to this project. These approaches are being used with consideration of the characteristics of the specific ECMs, acceptable accuracy, and reasonable cost.

Due to the relatively low impact of the ECMs with respect to the entire load of the facilities, coupled with the potentially high degree of variability of usage of the facilities, the savings associated with: the retrocommissioning at Fine Arts and Pickens Halls; the steam trap repairs at Pickens Hall; the programmable thermostats at the Field House; and, the Demand Response Program will be determined by specific calculations and agreed upon by Owner and ESG for

the duration of this agreement. Operational savings related to the energy conservation measures have been discussed and agreed upon between the Owner and ESG. The annual operational savings are agreed upon and outlined in Section 4 – Table B. The maintenance and repair savings and capital cost avoidance savings will not be measured in accordance with any of the options listed in IPMVP.

### **Option A**

The verification techniques for Option A, “Partially Measured Retrofit Isolation” savings are determined by partial field measurement related to the energy use of the system(s) to which an ECM was applied, separated from the energy use of the rest of the facility. Measurement may be either short term or “continuous”. In this approach, some but not all parameters may be agreed upon by Owner and ESG to represent the probable actual value. This approach is the least expensive with acceptable accuracy. All Option A savings will be based on a one time pre and post measurement. Those annualized savings will be carried forward throughout the term of the guarantee.

Option A will be used in the verification of: water savings at Mollohan Community Center; and, lighting improvements in Pickens Hall, Fine Arts, the Field House and Alumni Center.



The verification of savings will be done by the measurement and verification plan as listed in Table E below:

Table E – Option A Savings Calculations

ECM	Calculations
Lighting Retrofit	<p>ESG shall take watt readings on sample fixtures before and after upgrade to validate savings. Hours of operations for the facilities were agreed upon between Owner and ESG based on discussions with the facilities team and typical operating schedules. Savings calculations will be reviewed and accepted by both parties and will be validated as required. The calculations for lighting are as follows:</p> <p style="padding-left: 40px;">Pre-Retrofit Kilowatt Hours (<math>kWh_{pre}</math>) = Pre-Retrofit kW * Number of Fixtures * Pre-Retrofit Hours per Year</p> <p style="padding-left: 40px;">Post-Retrofit Kilowatt Hours (<math>kWh_{post}</math>) = Post-Retrofit kW * Number of Fixtures * Post-Retrofit Hours per Year</p> <p style="padding-left: 40px;">Kilowatt hours (<math>kWh_{total}</math>) Saved = <math>kWh_{pre}</math> - <math>kWh_{post}</math></p> <p style="padding-left: 40px;">\$ Saved = <math>kWh_{total}</math> * Cost per kWh</p> <p style="padding-left: 40px;">In areas where occupancy sensors have not been installed, pre- and post-retrofit hours are as indicated at the end of Exhibit A, Attachment 1. For areas where occupancy sensors have been installed, it is agreed that pre-retrofit hours are as indicated at the end of Exhibit A, Attachment 1 and the post-retrofit hours will be 30% less than the pre-retrofit hours.</p>

### Option C

The purpose of Option C is to provide systematic savings analysis for utility consumption, comparing a base year to a current year that has similar operational and environmental parameters. The required information is taken directly from a given facility's utility bills and regional weather data. The software system utilized in this tracking will be EnergyCap™, which is the preferred audit software.

Option C will be utilized for the appropriate buildings and accounts listed in Table Section 5.0 Table C. The following outlines the steps for measuring savings using Option C.

#### STEP 1: ESTABLISH A BASELINE

##### A) PRORATE BILLING PERIODS

The number of days in the billing month being audited is compared to the base month billing period. Base year energy bills are prorated to obtain calendar month consumption. This is done to smooth out varying billing periods and to match bills to weather data.

## **B) DETERMINE WEATHER SENSITIVE CONSUMPTION**

How warm or cool it is determines the load requirements of HVAC related equipment. It is, therefore, essential that weather be tracked so variances can be determined. Any variances from the base to current year will be adjusted so a true “apples to apples” comparison is provided.

A certain portion of each month’s energy consumption is due to base load not related to weather such as lighting, computers, and office equipment. This non-weather sensitive consumption will be present no matter what the weather conditions are; therefore, they will be separated from the weather-sensitive consumption. Using standard logic and the assumption that the energy consumption-to-weather relationship is linear, ESG along with the ENERGYCAP™ software, is able to statistically determine the weather and non-weather sensitive consumption.

### **STEP 2: APPLY CURRENT YEAR CONDITIONS**

The base year is adjusted to reflect current year environmental and operational conditions. Energy consumption savings are then calculated by comparing current year consumption to adjusted base year consumption. These are as follows:

- Billing Period Length
- Weather
- Changes In Facility Occupancy Or Use
- Additions Or Deletions Of Energy Using Equipment
- Additions Or Deletions Of Building Square Footage
- Changes In Energy Prices and or Rate Structures

### **STEP 3: GUARANTEED SAVINGS**

Utility bill cost avoidance is how energy conservation measures are measured after project completion. By subtracting the Current Year Energy Cost from the Adjusted Base Year Energy Cost, the overall cost avoidance associated with that energy type is calculated. Cost avoidance is directly associated to the Energy Savings Guarantee.

Energy Audits will be based upon the environmental and operating conditions for the facility during the time periods specified in the Baseline.

Each billing period during the term will be compared to a Base Period. The actual energy use and savings will be analyzed and compared to the guaranteed energy savings amount using the IPMVP, along with the acceptable energy monitoring equipment and an industry standard energy accounting software program. The results of this analysis will be presented to Owner on an annual basis.

## METHODOLOGY FOR ASSIGNING DOLLAR VALUES TO SAVINGS

An average cost per unit will be used. Charges for fuel adjustments, base services, transmission, tariffs, and distributions will be included. In the event of a utility rate decrease, the utility rate(s) used to assign dollar cost will not drop below that of the base year.

### APPLY CURRENT YEAR CONDITIONS

The measurement of energy consumption and the cost savings associated with installed energy management equipment is a comparison between the energy consumed during the current calendar period and the respective baseline calendar period.

The first step in cost avoidance calculations is the creation of a baseline. The baseline reflects the facility's energy use and energy costs before the installation of the energy conservation measures. The baseline calendar period will typically be a consecutive twelve month period for which reliable data exists before contract execution. The baseline will consist of all energy bills applicable to the meters in the Project. Once the program is in place, actual energy use is recorded from current utility bills. The costs the facility incurs after implementation of the measures are compared to the baseline in order to determine if savings projections--and guarantees--have been met.

### BASELINE ADJUSTMENTS

Proper analysis and comparison can only be achieved if the environmental and facility parameters are equal to those of the base year. Examples of factors that affect the environment and facility parameters are weather, energy rates, facility schedules, and changes in equipment. The baseline may need to be adjusted to equalize the parameters of the current year so that an accurate analysis can be performed and valid savings can be measured. In essence, the adjustment process shows what the costs and usage would have been in the base year, under the current conditions, for an 'apples to apples' comparison. These adjustments typically cover:

- Standardize for the Number of Days in a Billing Period
- Normalize the Differences in Outdoor Temperature Through Degree Days
  - Changes In Facility Occupancy and Use
  - Additions or Deletions of Energy Using Equipment
  - Additions or Deletions of Square Footage
- Changes in Energy Prices and / or Rate Structures

Savings calculations may also be adjusted for new outside air ventilation requirements; changes in operational modes (i.e. – addition of air conditioning); and changes to comfort levels. Owner shall notify ESG within thirty (30) business days of any significant changes in facility operations, occupancy levels, hours of operation, structure, equipment or any other changes that are reasonably expected to affect energy use by more than 1%. The impact of such changes on the guaranteed energy savings amount will be monitored through the energy monitoring systems and savings calculated through engineering analysis by ESG.

The consumption energy unit cost for each specific energy type is the total consumption related cost found on the respective utility bill, including charges for consumption, service, power factor, fuel adjustment, etc., divided by total consumption OR the energy cost given in Table D.1 – Baseline Information. Late payment charges will not be included in this calculation.

**8.0 GLOBAL ASSUMPTIONS**

**8.1 Energy Prices.**

Either the base period utility unit cost or the current period utility unit cost, whichever is greater, will be used in determining the adjusted base period utility cost. In no case, however, shall the rate used to calculate the Guaranteed Energy Savings be lower than base year utility rate.

**8.2 Performance Period Utility Rate Adjustment Factors, if applicable.**

Generally ESG is not responsible for any utility rate changes other than those defined in the post-installation energy policy. A rate adjustment factor will be applied to calculate actual savings regarding the changes of the utility rates. The actual energy cost savings will be the product of the calculated energy savings from defined rates and the utility adjustment factor when applicable. In no case, however, shall the rate used to calculate the Guaranteed Energy Savings be lower than base year utility rate.

**8.3 Schedule of Verification Reporting Activities.**

Item	Time for Submission	Owner's Review & Acceptance Period
Annual Report	90 days after annual performance period	* 30 days

\* Owner's Acceptance becomes automatic if not provided by the end of the Owner's Review & Acceptance Period.

**8.3.1 Content and Format of Reports.**

ESG is responsible for the periodic Energy Services Guarantee Report as outlined in Section 3.2 of this Exhibit.

**9.0 OPERATIONAL SAVINGS**

The following cost savings impacts have been estimated and agreed upon between Owner and ESG to result from the implementation of the Exhibit A, Scope of Work. These savings are difficult to audit and are considered satisfied upon Final Acceptance of the improvements.

Lighting Maintenance Savings \$ 4,801 / year\*

Maintenance Savings \$ 3,349 / year\*

\* Note: approximate average per year over 15 years.

**Capital Avoidance Savings:**

A significant portion of the total project cost is related to facility improvements that Owner needs to complete in the near term to address equipment well past its useful life, significant

comfort concerns and other capital related needs. These savings have not been quantified nor included in the overall savings attributable to the project.

**Maintenance / Repair Savings:**

Lamp and ballast replacement from the lighting improvements will generate material savings in three and five years respectively due to warranty coverage for new equipment. Additionally, savings will be realized due to less lamps and ballasts being put into service during the project. Other maintenance savings are associated with the replacement of the boilers in Clark Hall.

**10.0 DOCUMENTATION FOR SECTION 179D TAX DEDUCTION**

As a result of the implementation of this Project, certain tax deductions under Section 179D of the Internal Revenue Code may be available because of the energy efficient improvements to the Owner's buildings. The Owner agrees to allocate these Section 179D tax deductions to ESG to the extent such deduction arises from the technical specifications developed by ESG and the implementation of this Project.

Upon job completion, the Owner agrees to execute the required written allocation including the declaration related to this tax code provision. ESG will be responsible for preparing the declaration and all accompanying documentation for Owner's signature. ESG will be designated the Section 179D beneficiary.

**11.0 ASSIGNMENT OF ENVIRONMENTAL ATTRIBUTES**

As a result of the implementation of this Project, certain Environmental Attributes may be available, either now or in the future. This section specifies the process whereby the Owner will assign such Environmental Attributes to ESG.

"Environmental Attributes" means any and all credits, deductions, benefits, emission reductions, incentives, offsets, and allowances, howsoever entitled, attributable to and arising from the implementation of this Project, whether such Environmental Attributes now exist or are developed in the future. Environmental Attributes include but are not limited to: (1) Any avoided emissions of pollutants to the air, soil, or water; (2) Any avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and other greenhouse gases (GHGs); (3) Section 45 credits; (4) green tags; (5) renewable energy credits; and (6) The reporting rights to these avoided emissions such as White Tag Reporting Rights. Environmental Attributes also include any energy, capacity, reliability, or other energy reduction attributes that result from the implementation of this Project.

All Environmental Attributes arising from the implementation of this Project shall be owned by ESG. Owner agrees to execute all required documentation to assign all Environmental Attributes to ESG. If any filings are required with the Internal Revenue Service or some other governmental entity to obtain the benefits of the Environmental Attributes, Owner hereby instructs ESG to prepare and file such documents.

12.0 PROJECT INFORMATION:

ESCO Name: *Energy Systems Group (ESG)*

**ESG Contact Person for M&V:** Donna Wicks

**Street Address:** 4655 Rosebud Lane, Newburgh, IN 47630

**Phone:** (812) 492-3714 **Fax:** (812) 475-2544 **E-mail:** Dwicks@EnergySystemsGroup.com

**Owner Name:** Glenville State College

**Name of Owner Contact Person:** Thomas R. Ratliff, Executive Director of Physical Plant

**Address of Owner:** 200 High Street, Glenville, WV 26351

**Phone:** (304) 462-6241 **E-mail:** thomas.ratliff@ glenville.edu

**13.0 DISPUTE RESOLUTION**

The M&V plan has been reviewed and accepted by Owner. It is the primary document for the M&V process. If a dispute arises under this M&V agreement, the parties shall promptly attempt in good faith to resolve the dispute by negotiation. If not settled by negotiation, this M&V plan will be referred to as the means to solve related disputes.

**14.0 POST-INSTALLATION DATA COLLECTED**

Owner will provide access to site locations at reasonable times to perform on-site tests to verify performance, changes in use, and to verify modification of facilities as necessary. ESG will not unreasonably interfere with Owner’s operation on the site.

ESG will collect before and after construction measurements for applicable Option A ECMs. In the case of lighting, pre and post measurements will be taken on fixture kW for 5% to 10% of the total number of fixtures retrofit. This data will be used to calculate energy savings, based on agreed upon hours of operation and baseline utility rates.

All devices employed to meter electric power use shall be capable of metering continuous RMS power at accuracy of +/-1.0% actual value, over the entire load range; Metering of polyphase loads shall include independent measurement of each phase.

**15.0 COST OF M&V ACTIVITIES**

Cost for M&V activities is as indicated in Exhibit C – Support Services Agreement.

**GLENVILLE STATE COLLEGE**

By \_\_\_\_\_  
Dr. Peter B. Barr

Its \_\_\_\_\_  
President

**ENERGY SYSTEMS GROUP, LLC**

By \_\_\_\_\_  
Gregory F. Collins

Its \_\_\_\_\_  
President

## EXHIBIT C

### SUPPORT SERVICES AGREEMENT

As part of the Energy Guarantee, Energy Systems Group, LLC (ESG) will provide annual savings Measurement and Verification (M&V) and other support services as defined herein.

The M&V services will begin with construction in order to track construction term savings and build the baseline from which all future savings will be measured. Support Services fees will be progress billed during the construction period and then annually in advance once Final Acceptance of the Project has been achieved throughout the term of this Agreement. The cost of these services is defined below with the cost of M&V Services escalated 3.0% per year.

#### SUPPORT SERVICES FEE

Year	M&V Services
Construction Period	\$15,648
Year 1-15	\$13,040*

\* Escalated at 3.0% per year after year 1.

During the term of the Agreement, Owner may cancel the annual energy audits by providing written notice to ESG at least thirty (30) days prior to the beginning of the next annual guarantee period. If Owner makes such request to cancel the annual energy audits, the parties stipulate and agree that ESG will no longer be obligated to perform the remaining annual M&V services, and the energy savings guaranteed by ESG during the term of the Agreement shall be considered fully satisfied and the Agreement will be terminated.

Additionally, if Owner fails to pay the annual M&V services fee within sixty (60) days of receipt of the annual M&V services fee invoice, ESG has the right to terminate this Support Services Agreement. In this event, both parties stipulate and agree that the energy savings guaranteed by ESG during the term of the Agreement shall be considered fully satisfied. Both parties further agree that upon this occurrence ESG will no longer be obligated to perform the remaining M&V services, and the energy savings guarantee contained in the Agreement will be considered satisfied in full and the Agreement will be terminated.

#### Guarantee Reporting/ Audit Services

##### 1) Utility Bill Monitoring

ESG will be accountable to input monthly utility data for appropriate buildings as well as related weather data and adjustment factors. Owner will be accountable to ESG to provide the utility data on a timely basis upon receiving the bill from the utility. A system to simplify this process of ESG receiving the utility data will be developed and an effort made to utilize data directly from the utility providers via the internet.



2) Reports to the Administration

ESG will then provide Owner with an annual guarantee reconciliation report.

3) Control System Inspection

Through internet access technology and on-site visits, ESG's engineers will be authorized to utilize Owner's building automation system to:

- Inspect temperatures, equipment status and electric meter data
- Inspect scheduling and holiday programming
- Inspect all other HVAC system set points
- Recommend new control strategies/ set points as applicable

4) Energy Use and Management Policy

ESG will provide an energy policy template to help Owner define an overall energy policy for all facilities and staff. This policy will help Owner better manage energy use by defining:

- Use of air conditioning
- Use of heating
- Temperature standards
- Cleaning patterns and use of lights
- Proper operating practices that effect utility consumption

Approval of a final version of this policy is the responsibility of Owner along with its implementation. ESG's audit report will measure the effects that the policy is having and where/when possible we will make suggestions on how to enhance it.

Agreed to by the Owner and Contractor this 14<sup>th</sup> day of December, 2012.

**GLENVILLE STATE COLLEGE**

**ENERGY SYSTEMS GROUP, LLC**

By \_\_\_\_\_  
Dr. Peter B. Barr

By \_\_\_\_\_  
Gregory F. Collins

Its \_\_\_\_\_  
President

Its \_\_\_\_\_  
President

EXHIBIT D

OPINION OF OWNER'S COUNSEL  
(TO BE TYPED ON COUNSEL'S LETTERHEAD)

Energy Systems Group, LLC  
4655 Rosebud Lane  
Newburgh, IN 47630

Re: Glenville State College  
Guaranteed Energy Savings Performance Contract

Ladies and Gentlemen:

We have acted as special counsel for Glenville State College in Glenville, West Virginia (the "Owner") in connection with its Guaranteed Energy Savings Performance Contract, dated December 14, 2012 (together with all schedules and exhibits between the Owner and Energy Systems Group, LLC (the "Contractor")). We have examined such other documents and instruments related to the Contract, as well as applicable law and such certified proceedings as we have deemed necessary to render this opinion.

The \_\_\_\_\_ is authorized to enter into the Contract pursuant to \_\_\_\_\_ of the Code of West Virginia, and pursuant to resolutions of the Board of the \_\_\_\_\_ adopted at open meeting of the \_\_\_\_\_.

Capitalized terms not otherwise defined herein shall have the meanings ascribed to them in the Contract.

Based upon the foregoing, it is our opinion that:

1. The Board is a duly organized and validly existing \_\_\_\_\_ under and pursuant to the Constitution and laws of the State of West Virginia, with full legal right, power and authority to adopt the resolutions, to enter into and deliver the Contract to the Contractor, to own and operate the \_\_\_\_\_ facilities of the \_\_\_\_\_ and conduct the business thereof and to carry out, give effect to and consummate the transactions contemplated by the Contract and the resolutions.
2. The Contract has been duly authorized, executed and delivered by, and constitutes a legal, valid and binding agreement and obligation of the Board, enforceable in accordance with its terms, except as enforcement may be limited by bankruptcy, reorganization, insolvency, moratorium or other laws affecting the enforcement of creditors' rights from time to time.

3. The Board is not, to the best of our knowledge after reasonable investigation, in breach of or in default under any constitutional provision, applicable law or administrative rule or regulation of the State of West Virginia, the United States, or of any department, division, agency or instrumentality of either thereof, or any applicable court or administrative decree or order, or note, ordinance, resolution, indenture, contract, agreement or other instrument to which the Board is a party or to which the Board or any of the properties or assets of the \_\_\_\_\_ facilities of the \_\_\_\_\_ are otherwise subject or bound, which breach or default, in any material way, directly or indirectly, would affect operation thereof, the execution or delivery of the Contract or the other documents to which the Board is a party; and no event has occurred and is continuing which, with the passage of time or the giving of notice or both, would constitute such a breach or default.
4. All approvals, consents, authorizations, elections and orders of or filings or registrations with any governmental authority, legislative body, board, agency or commission having jurisdiction, which would constitute conditions precedent to, or the absence of which would materially adversely affect the due performance by the Board of its obligations under the Contract have been duly obtained and are in full force and effect.
5. No action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, regulatory agency, public board or body, is pending or, to our knowledge, threatened in any way questioning or affecting the existence of the Board, or the titles of the officers and members of the Board to their respective offices, or seeking to prohibit, restrain or enjoin the delivery of the Contract, or in any way contesting or affecting the validity or enforceability of the Contract, or contesting the powers or authority of the Board, with respect to the delivery of the Contract, nor to our knowledge is there any basis therefore.

Very Truly Yours,

By: \_\_\_\_\_

Dawn E. Warfield  
Deputy Attorney General

EXHIBIT E

PREVAILING WAGE DETERMINATION

WEST VIRGINIA DIVISION OF LABOR  
Building Construction Wage Rates

FILED  
2012 JAN 20 AM 10:43  
OFFICE WEST VIRGINIA  
SECRETARY OF STATE

Gilmer County  
2012

CLASSIFICATION	BASIC HOURLY RATE	FRINGE BENEFITS
ASBESTOS & LEAD ABATEMENT WORKER	21.00	10.82
ASBESTOS/FIRE STOP TECHNICIAN	30.00	17.30
BOILERMAKER	36.91	19.89
BRICKLAYER	28.16	15.95
BRICKLAYER - POINTER/CAULKER/CLEANER	28.16	15.95
CARPENTER	27.41	14.34
CARPET LAYER	27.41	14.34
CEMENT MASON	26.26	12.31
DRYWALL HANGER	27.41	14.34
ELECTRICIAN	34.44	15.25
ELEVATOR HELPER	27.85	25.18
ELEVATOR MECHANIC	39.78	25.18
GLAZIER	28.50	6.91
INSULATOR	30.00	17.28
IRON WORKER ERECTOR *	29.08	17.73
IRON WORKER FENCE ERECTOR *	29.08	17.73
IRON WORKER JOURNEYMAN *	29.08	17.73
IRON WORKER REINFORCING *	29.08	17.73
IRON WORKER STRUCTURAL *	29.08	17.73
LABORER CLASS I *	21.22	12.50
LABORER CLASS II *	20.79	12.50
LABORER CLASS III *	20.43	12.50
LABORER FLAGMAN	18.08	12.50
LATHER	27.41	14.34
MARBLE FINISHER	21.01	14.39
MARBLE SETTER	28.16	15.95
MILLWRIGHT	32.06	16.64
OPERATING ENGINEER I *	33.26	17.73
OPERATING ENGINEER II *	32.91	17.73
OPERATING ENGINEER III *	31.91	17.73
OPERATING ENGINEER IV *	21.41	17.73
PAINTER	23.29	13.26
PILEDRIVER	27.91	14.34
PLASTERER	25.53	11.60
PLUMBER/FITTER	30.78	24.90
ROOFER/HEATED COAL TAR PRODUCTS	24.93	10.73
ROOFER/WATER DAMP PROOFER	24.93	10.73
SHEET METAL WORKER	28.34	19.53
SOFT FLOOR LAYER	27.41	14.34
SPRINKLER FITTER	29.60	17.75
STONE MASON	28.16	15.95
TEAMSTER A	24.83	13.54
TEAMSTER B	24.93	13.54
TEAMSTER C	25.08	13.54
TEAMSTER D	25.23	13.54

WEST VIRGINIA DIVISION OF LABOR  
Building Construction Wage Rates

Gilmer County  
2012

CLASSIFICATION	BASIC HOURLY RATE	FRINGE BENEFITS
TEAMSTER E	25.48	13.54
TEAMSTER F	25.58	13.54
TEAMSTER G	25.73	13.54
TERRAZZO - TILE FINISHER	21.01	14.39
TERRAZZO - TILE SETTER	28.16	15.95

NOTE: The allowable ratio of apprentice to journeyman employed in any craft shall not be greater than the prevailing ratio of the locality. The allowable ratio is applied on a daily basis. Contact the Federal Bureau of Apprenticeship and Training for additional information at (304) 347-5794.

\* To apply the wage rates properly use Building Construction Rate Appendix I, II, III, & IV

APPRENTICE SCHEDULE

Gilmer County  
2012

CRAFT	INTERVAL	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
ASBESTOS/FIRE STOP	Yearly	50	60	70	80						
BOILERMAKER	6 months	70	75	80	85	87.5	90	92.5	95		
BRICKLAYER	1000 hrs	50	60	70	80	90	90				
CARPENTER	Yearly	60	70	80	90						
CEMENT MASON	500 hrs	60	65	70	75	80	85	90			
ELECTRICIAN	Percent	40	45	50	55	70	85				
ELECTRICIAN	Hours to	1000	2000	3500	5000	6500	8000				
ELEVATOR MECHANIC	Yearly	50	55	65	70	80					
GLAZIER **	1000 hrs	50	55	60	70	80	90				
INSULATOR	Yearly	50	60	70	80						
IRONWORKER	6 months	50	60	65	70	75	80	85	85		
LABORER	1000 hrs	60	70	80	90						
MARBLE SETTER	1000 hrs	50	60	70	80	90	90				
OPERATING ENGINEER	Yearly	75	80	85							
PAINTER **	1000 hrs	55	60	70	80	85	90				
PILEDRIVER	Yearly	60	70	80	90						
PLASTERER	500 hrs	50	50	55	60	65	70	75	80	85	90
PLUMBER & FITTER **	850 hrs	50	55	60	65	70	75	80	85	90	95
ROOFER	1000 hrs	50	65	70	75	80	90				
SHEET METAL WKR. **	Yearly	45	50	60	70	80					
SPRINKLER FITTER **	6 months	50	50	55	60	65	70	75	80	85	90
STONE MASON	1000 hrs	50	60	70	80	90	90				
TERRAZZO SETTER	1000 hrs	50	60	70	80	90	90				
TILE SETTER	1000 hrs	50	60	70	80	90	90				

\*\* For appropriate apprentice fringe rates, see Apprentice Fringe Rate Sheets

**NOTE:** For Carpet Layer, Drywall Hanger, Soft Floor Layer and Lather use Carpenter Schedule

**APPRENTICE RATIO:** Contact Federal Bureau of Apprenticeship and Training at (304) 347-5794.