

Request for Qualifications Response for the Arkansas Energy Performance Contracting (AEPC) Program

October 19, 2020



PREPARED FOR:

Arkansas Department of
Environmental Quality (ADEQ)
5301 Northshore Drive
North Little Rock, AR 72118

ATTN:

Mr. Chet Howland
Financial Programs Manager

SUBMITTED BY:



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List of Acronyms

ADEQ	Arkansas Department of Environmental Quality
AEE	Association of Energy Engineers
AEO	Arkansas Energy Office
AEPC	Arkansas Energy Performance Contracting
AES	All Energy Solutions
AFV	Alternate Fuel Vehicle
AHU	Air Handling Unit
ANSI	American National Standards Institute
AR	Arkansas
ASHRAE	American Society of Heating, Refrigeration, and Air-Conditioning Engineers
BAS	Building Automation System
BG	The Brewer-Garrett Company
BOMA	Building Owners and Management Association
Btu/hr	British Thermal Units per Hour
CBCP	Certified Building Commissioning Professional
CDSM	Certified Demand Side Management Professional
CEA	Council of Economic Advisors
CEM	Certified Energy Manager
CHP	Combined Heat and Power
CW	Chilled Water
CLEP	Certified Lighting Efficiency Professional
CMVP	Certified Measurement and Verification Professional
CPA	Certified Public Accountant
CSDP	Certified Sustainable Development Professional
DDC	Direct Digital Control
DGCP	Distributed Generation Certified Professional
DOE	Department of Energy
ECM	Energy Conservation Measure
EERC	Energy Escalation Rate Calculator
EMCS	Energy Management Control System
EOS	Enterprise Optimization Solution
EPC	Energy Performance Contract
ESC	Energy Services Coalition
ESCO	Energy Service Company
ESPC	Energy Savings Performance Contract
FEMP	Federal Energy Management Program
Ft ²	Square Feet
GMP	Guaranteed Maximum Price
GSA	General Services Administration
HP	Horsepower
HVAC	Heating, Ventilation, and Air Conditioning
Hz	Hertz
ICC	International Code Council

IDIQ	Indefinite-Delivery Indefinite-Quantity
IECC	International Energy Conservation Code
IES	Illuminating Engineering Society
IESNA	Illuminating Engineering Society of North America
IFMA	International Facilities Management Association
IGA	Investment Grade Audit
IGV	Inlet Guide Vanes
IPMVP	International Performance Measurement and Verification Protocol
kGal	Kilogallon
[REDACTED]	[REDACTED]
kVA	Kilovolt-Ampere
kW	Kilowatt
kWh	Kilowatthour
lbs/hr	Pounds per Hour
[REDACTED]	[REDACTED]
LED	Light Emitting Diode
LEED AP BD+C	Leadership in Energy and Environmental Design Accredited Professional Building Design and Construction
LEED GA	Leadership in Energy and Environmental Design Green Associate
MAS	Multiple Award Schedule
MBA	Master of Business Administration
MBH	Thousand British Thermal Units per Hour
MEC	Manufacturer's Education Council
MCA	Mechanical Contractors of America
Mcf	Thousand Cubic Feet
MMBtu	Million British Thermal Units
MW	Megawatt
MWOB	Minority and Women-Owned Business
M&V	Measurement and Verification
NABCEP PVA	North American Board of Certified Energy Practitioners Photovoltaic Associate
NAESCO	National Association of Energy Service Companies
NAWIC	National Association of Women in Construction
NCEES	National Council of Examiners for Engineering and Surveying
NIST	National Institute of Standards and Technology
OAQDA	Ohio Air Quality Development Authority
OFCC	Ohio Facilities Construction Commission
OH	Ohio
[REDACTED]	[REDACTED]
OSHA	Occupational Safety and Health Administration
O&M	Operations and Maintenance
PE	Professional Engineer
[REDACTED]	[REDACTED]
PMP	Project Management Professional
PPA	Power Purchase Agreement
PV	Photovoltaic
QA/QC	Quality Assurance Quality Control
RFI	Request for Information

RFP	Request for Proposal
RFQ	Request for Qualifications
SOQ	Statement of Qualifications
█	█
SZVAV	Single Zone Variable Air Volume
█	█
UV	Ultraviolet
VA	Veterans Affairs
VFD	Variable Flow Drive
VOC	Volatile Organic Compounds



1. Executive Summary

*Arkansas Department of
Environmental Quality (ADEQ)
RFQ response for the Arkansas
Energy Performance (AEP)
Program*

1. Executive Summary

1. Summarize your firm's commitment to comply with the policies, procedures and rules as outlined in the AEPC Program Rules Manual. (If changes are made to the manual, AEO will articulate those changes to all pre-qualified providers and require a receipt that they have been received.)

The Brewer-Garrett Company (BG) is excited for the opportunity to partner with public entities in the State of Arkansas, alongside the Arkansas Energy Office, to support Energy Performance Contracts (EPC). BG provides EPC services nationally and is qualified by the Department of Energy (DOE) to provide guaranteed energy savings performance contracts (ESPC) to federal agency facilities located anywhere in the world (via the DOE ESPC IDIQ III). BG is well-versed at complying with state-specific or agency-specific EPC legislation. Likewise, BG has thoroughly reviewed the policies, procedures, and rules outlined in the Arkansas Energy Performance Contracting (*AEPC Program Rules Manual (Version 2.1)*) and is confident in BG's ability to comply and exceed all expectations of the Arkansas Energy Office (AEO).

2. Summarize how your firm meets the minimum qualifications, stated in Part 1, Section 5.
(A) Is properly licensed in the State of Arkansas;

BG currently holds a temporary Arkansas Contractor's license (#48210), valid for 90 days (Jan 9, 2021), and is in the process of receiving approval from the Arkansas Contractors Licensing Board for an official contractor's license. Please see Attachment 1 for BG's signed affidavit verifying the status of our temporary contractor's license for the State of Arkansas.

(B) Has been reviewed and certified by the Arkansas Energy Office as a qualified provider under this subchapter;

BG is currently undergoing review and certification by the AEO.

(C) Is experienced in the design, implementation, measurement, verification, and installation of energy cost savings measures;

BG has been designing, implementing, measuring, and verifying energy cost savings measures for over 25 years. This experience includes a wide range of energy conservation measures from boilers and chillers to combined heat and power (CHP) and renewable energy.

(D) Has at least five (5) years of experience in the analysis, design, implementation, installation, measurement, and verification of energy efficiency and facility improvements;

BG has been providing analysis, design, implementation, installation, measurement, and verification of energy efficiency and facility improvements since 1959 and has been guaranteeing savings since 1996.

(E) Has the ability to arrange or provide the necessary financing to support a guaranteed energy cost savings contract; and

BG has helped EPC clients secure project financing since 1996 and retains Master Purchase Agreements with industry leading financing firms.

(F) Has the ability to perform under a contract that requires the person or business to guarantee the work performed by one (1) or more subcontractors;

BG always guarantees the work performed by its subcontractors on EPCs. In-house energy engineers conduct detailed analysis of the energy impact of subcontracted work and ensure subcontracted energy conservation measures meet guaranteed savings estimates. In 25 years of providing EPC projects, BG has never missed a guarantee.

3. Summarize how your firm's expertise and approach will enhance the effectiveness and reputation of the AEPC Program.

As an independent American-owned Energy Service Company (ESCO), Brewer-Garrett is fully dedicated to EPC services. Our approach of integrating all the key design, construction, and operations and maintenance (O&M) aspects of an EPC into an in-house team provides unparalleled energy services. As a result, BG offers a robust set of capabilities:

In-House Engineering Capabilities: Our in-house team possesses engineering analysis and design capabilities in a wide range of EPC energy conservation measure (ECM) technology categories, including PE-stamped drawings, commissioning services, and complete controls integration, without the need to use third-party engineering firms. This provides a streamlined project which eliminates unnecessary markup from third-party engineering firms

Technology/Vendor Neutral: BG is not affiliated with or represent any utility, technology vendor, or manufacturer. As a truly technology-neutral contractor, BG can flexibly design solutions that exclusively support the client's project goals.

Reliable Design-Build Experience: BG offers over 60 years of in-house design, construction, operations, and maintenance expertise in mechanical and electrical services, including design-build delivery options that provide a single point of ownership paired with speed, flexibility, and guaranteed maximum pricing.

BG's capabilities and approach will provide the AEPC Program an ESCO that is able to compete and bring creative solutions to any given EPC. This includes all types of desired ECM technology categories and facility profiles, providing all Arkansas public entities the opportunity to participate in the AEPC Program.

4. State your permission for AEO to share your SOQ publicly (online, electronically, print) and acknowledge that your SOQ may be used by public entities to help select which ESCOs to interview for EPC projects.

Brewer-Garrett grants AEO permission to publicly share (online, electronically, print) our redacted Statement of Qualifications (SOQ) and also acknowledges that our SOQ may be used by public entities to help select which ESCOs to interview for EPC projects.



2. Company Overview

*Arkansas Department of
Environmental Quality (ADEQ)
RFQ response for the Arkansas
Energy Performance (AEPC)
Program*

2. Company Overview

2a. History and Focus of Company

Describe the history and focus of the company, including:

a) Structure and evolution of the firm

The Brewer-Garrett Company is a privately-owned ESCO that was founded in Cleveland, Ohio in 1959. BG was established as a design-build mechanical contractor and quickly brought innovative ideas and solutions to the mechanical contracting marketplace. As the company grew, BG continually expanded its in-house resources to offer turn-key solutions that comprehensively addressed energy solutions while simplifying the design-build process for clients.

BG started offering EPCs in 1996 as an Energy Services division was established. Since then, BG has guaranteed well over \$600 million in energy savings and has been recognized as a national leader in energy services. This long and consistent track record of successful and guaranteed energy performance contracts contributed to BG's selection to the DOE's ESPC IDIQ in 2017. BG is one of 21 companies in the world with this contract vehicle. Further, BG is one of the few American-owned nationally operating ESCOs.

BG's in-house team now consists of over 280 associates which includes energy, mechanical, and electrical engineers, project managers, estimators, controls experts, operations and maintenance specialists, data analytics team, measurement and verification (M&V) team, commissioning agents, and finance specialists. These resources have enabled BG to provide world-class EPC services, energy solutions, design-build contracting, integrated facility services, and commissioning to customers across the country.

Lastly, in addition to our headquarters in Cleveland, BG has several branch offices across Ohio. Branch offices are located in Columbus, Akron, and Dayton. BG also has a strong network of partner firms, and most recently has been expanding our services in Arkansas through our partnership with All Energy Solutions (AES), which has been headquartered in Little Rock since 1957. AES has a deep understanding of the Arkansas utility and energy services markets and maintains 8(a) and Minority and Women-Owned Business Enterprise (MWOBE) certifications from the Small Business Administration and State of Arkansas, respectively.

b) Number of years in energy-efficiency related business

BG has been providing energy related services as a mechanical contractor since its inception in 1959. For the past 25 years, BG has been providing Energy Performance Contracts and has successfully guaranteed over \$600 million in savings to both public and private customers.

c) Number of public energy-efficiency projects completed by your firm or key members of your firm over the past five years: number under \$1 million in project cost; number over \$1 million in project cost.

Completed Public Energy Efficiency Projects

Total under \$1 million: 17 Projects
Total over \$1 million: 9 Projects
Total energy efficiency projects 26 Projects

	Customer/Project	Project Cost
1		\$19,798,982
2		\$16,165,560
3		\$16,821,754
4		\$12,100,000
5		\$10,556,320
6		\$7,639,227
7		\$6,379,124
8		\$6,534,438
9		\$4,942,000
10		\$4,640,031
11		\$2,818,803
12		\$2,437,140
13		\$2,376,167
14		\$1,856,454
15		\$1,448,223
16		\$1,131,398
17		\$1,129,453
18		\$959,220
19		\$897,193
20		\$620,144
21		\$412,751
22		\$247,040
23		\$173,527
24		\$79,377
25		\$34,580
26		\$34,333

Table 1 - Completed Public Energy Efficiency Projects (past 5 years)

2b. Industry Accreditations and Memberships

Provide information on any accreditations and/or memberships in any industry organizations.

Accreditations

BG has been awarded a variety of pre-qualifiers and accreditations over the years. The following includes a list of BG's pre-qualifiers along with the agency or industry organization that spearheaded the evaluation.

DOE Qualified ESCO: As a qualified ESCO, BG's technical and financial capabilities have been reviewed and accepted by the Department of Energy to perform energy savings performance contracts.

DOE IDIQ ESPC Energy Service Company: In April 2017, BG was one of 21 companies in the nation to be awarded the DOE's 3rd generation IDIQ ESPC with a \$55 billion maximum ordering capacity over the next five years. ESPCs on this contract average over \$20 million per award, with recent individual projects reaching \$100-\$300 million.

Federal Energy Management Program (FEMP) ENABLE Contract Holder: As a DOE Qualified ESCO and a General Services Administration (GSA) Multiple Award Schedule (MAS) holder, BG is one of 24 companies approved to install, for any Federal agency, targeted ECMs such as lighting, water fixtures, heating, ventilation, and air conditioning (HVAC) controls, HVAC system replacement and solar photovoltaic (PV).

NAESCO Accredited ESCO: In July of 2018, BG was recognized by the National Association of Energy Service Companies (NAESCO) as one of 21 accredited ESCOs. This process included a rigorous and confidential examination of BG's technical competence, project economics, business practices, and customer references.

Memberships

In addition to the above-mentioned accreditations, Brewer-Garrett is an active member of numerous other industry organizations. Some of the highlights are shown below:

Brewer-Garrett Associations/Memberships	
Association of Energy Engineers	AEE
American Society of Heating, Refrigeration and Air-conditioning Engineers	ASHRAE
Building Owners and Management Association	BOMA
Energy Services Coalition	ESC
International Facilities Management Association	IFMA
Manufacturer's Education Council	MEC
Mechanical Contractors of America	MCA
National Association of Energy Service Companies – Board member	NAESCO
National Association of Women in Construction	NAWIC
National Council of Examiners for Engineering and Surveying	NCCES

Table 2 - BG Associations and Memberships



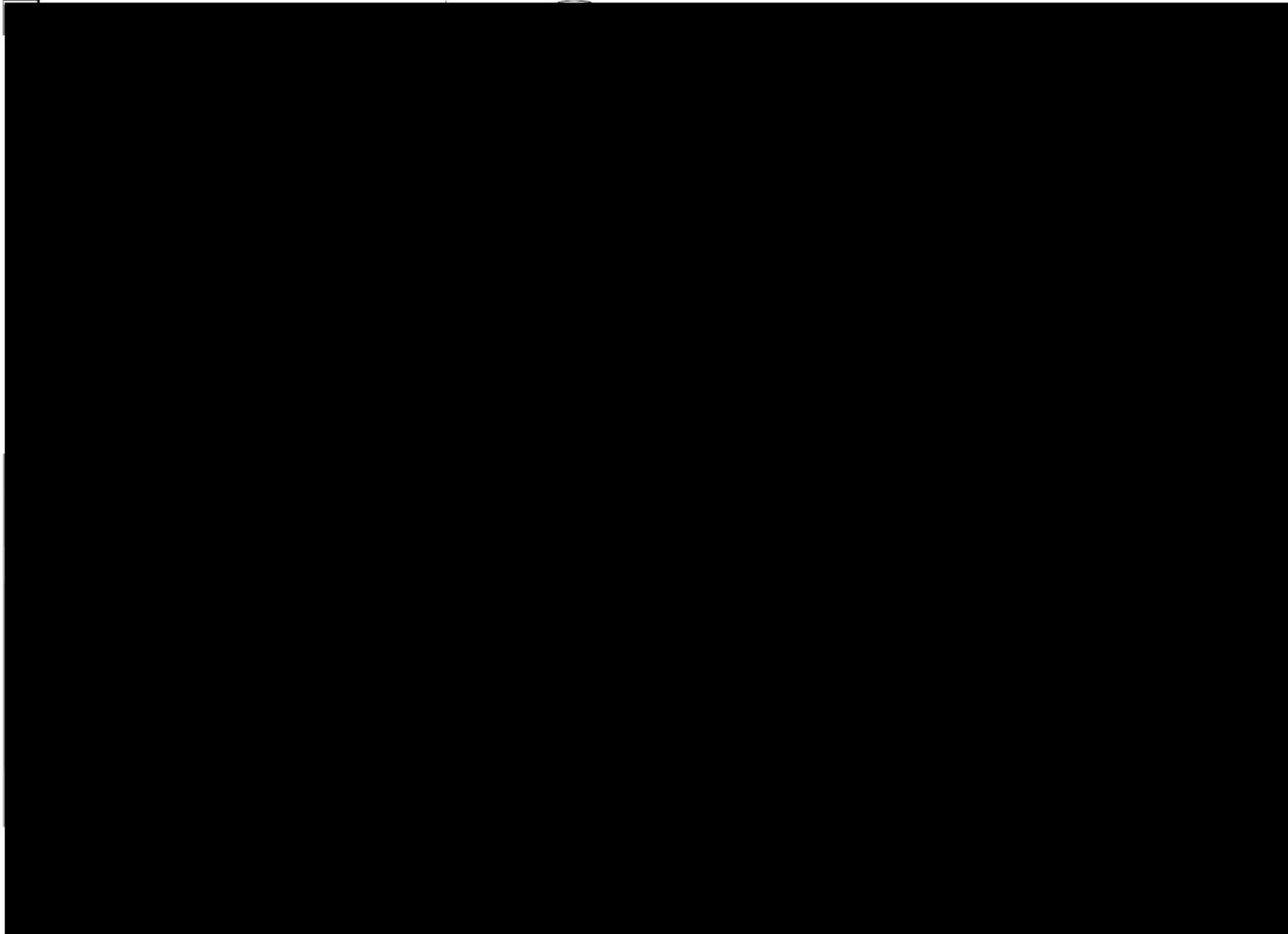
3. Management and Staffing

*Arkansas Department of
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3. Management and Staffing

3a. Project Management and Staffing

a) Organizational Structure. Show a typical/generic organization chart for implementing and managing a project.



Continuity Team



b) Project Responsibility. In a single table, list your personnel pool of individuals who will potentially be assigned responsibility for each task and phase of a project under the AEPC Program. Also include any added expertise and capability of staff available through other branch offices, subcontracts, etc., that can provide back-up strengths to your firm. Include the office location for each individual, branch office or subcontractor.

	 Cleveland, OH (all phases)	39 years
	<ul style="list-style-type: none"> • Ultimate authority for contract negotiations and project resources • Assembles a team of in-house professionals best suited for each project • Actively involved in developing the most cost-effective solution for customers • Maintains involvement with project from development to final customer acceptance and implementation 	
	 Cleveland, OH (all phases)	37 years
	<ul style="list-style-type: none"> • Oversees the development phase of the project • Ensures the customer's goals and vision are achieved • Oversees the development of a customer-driven program that will conserve energy, reduce costs, and increase resiliency 	
	 Cleveland, OH (all phases)	29 years
	<ul style="list-style-type: none"> • Provides project/construction management support • Oversees the management of subcontractors • Oversees project execution to ensure the project stays on schedule and budget 	
	 Cleveland, OH (IGA & construction phases)	22 years
	<ul style="list-style-type: none"> • Leads in-house Engineering Team • Remains actively involved in project development, estimating, design, and commissioning of any electrical/mechanical projects included in our solution • Creates and maintains engineering standards and procedures for quality electrical and mechanical design work 	
	 Cleveland, OH (IGA & construction phases)	23 years
	<ul style="list-style-type: none"> • Manages all construction phases of the project • Provides risk assessment and monitors the design during implementation, coordinates the schedule/personnel, and manages construction equipment • Full decision-making authority for project-related items during construction • Oversees the staff that provides cost-effective/maintenance-friendly solutions 	

		Cleveland, OH (all phases)	34 years
		<ul style="list-style-type: none"> Manages all aspects of pre-construction and project performance (M&V) Leads development of energy conservation measures Reviews the savings estimates and projections for attainability and accuracy Manages verification of energy savings and calculation process 	
		Cleveland, OH (IGA & construction phases)	10 years
		<ul style="list-style-type: none"> Spearheads the development of energy conservation measures Calculates and reviews the savings estimates for attainability and accuracy Collaborates with the design/construction team to meet project schedules and budgets 	
		Cleveland, OH (IGA & construction phases)	33 years
		<ul style="list-style-type: none"> Leads mechanical design process Ensures compliance with the Owner's scope of work Provides mechanical design review 	
		Cleveland, OH (IGA & construction phases)	21 years
		<ul style="list-style-type: none"> Leads electrical design process Ensures compliance with the Owner's scope of work Design review 	
		Cleveland, OH (IGA & construction phases)	17 years
		<ul style="list-style-type: none"> Leads in-house estimating team Collaborates with Energy Engineers, vendors, and subcontractors to identify cost-effective means and methods for each project Guarantees realistic cost estimates based upon BG's 20+ years of performance contracting experience 	
		Cleveland, OH (IGA & construction phases)	9 years
		<ul style="list-style-type: none"> Audits jobsite for compliance with OSHA, Federal, State, and local regulations Will develop and implement a site-specific safety plan Oversees administration of the site-specific safety plan 	
		Cleveland, OH (IGA & construction phases)	12 years
		<ul style="list-style-type: none"> Oversees Controls Department Manages all aspects of energy management and temperature control systems integration Engages early in the project development process to drive cost-effective and energy efficient solutions 	

		Cleveland, OH (all phases)	31 years
	<ul style="list-style-type: none"> Leads all Retrocommissioning and commissioning efforts Creates and oversees QA/QC plan Designs, implements, and improves control and monitoring systems to meet quality assurance standards 		
		Cleveland, OH (all phases)	25 years
	<ul style="list-style-type: none"> Leads on-going M&V and auditing effort Manages energy engineering resources Collaborates with the design/construction team to meet schedule / budget 		
		Cleveland, OH (IGA & construction phases)	13 years
	<ul style="list-style-type: none"> Leads lighting design process Ensures compliance with the customer's scope of work and the TIL Provides lighting design review Develops realistic energy savings calculations 		
		Cleveland, OH (all phases)	8 years
	<ul style="list-style-type: none"> Develops energy conservation measures Calculates and reviews the savings estimates for attainability and accuracy Collaborates with the design/construction team to meet schedule / budget 		
		Cleveland, OH (IGA & construction phases)	4 years
	<ul style="list-style-type: none"> Ensures the customer's goals and vision are being met Oversees the development of a customer-driven program that will conserve energy, reduce costs, and improve bottom line results Oversees project execution and on-going performance 		
		Cleveland, OH (performance phase)	4 years
	<ul style="list-style-type: none"> Creates a customized behavioral energy savings program Works closely with customer to implement the program and train the staff Continuously monitors the program to ensure maximum savings 		
		Cleveland, OH (all phases)	16 years
	<ul style="list-style-type: none"> Manages the project budget Manages the project schedule Coordinates subcontractors 		
		Cleveland, OH (performance phase)	32 years
	<ul style="list-style-type: none"> Develops maintenance program for the customer Generates solutions for clients that reduces facility operating costs Oversees service operations effort 		

[REDACTED]	[REDACTED] Cleveland, OH (performance phase)	40 years
[REDACTED]	<ul style="list-style-type: none"> • Develops maintenance program for the customer • Inspects equipment and job sites to ensure quality performance • Provides recommendations to the customer based on annual performance 	
[REDACTED]	[REDACTED] Little Rock, AR (all phases)	20 years
[REDACTED]	<ul style="list-style-type: none"> • Ultimate authority for contract negotiations and project resources • Assembles a team of in-house professionals best suited for each project • Actively involved in developing cost-effective solutions for customers • Maintains involvement with project from development to final customer acceptance and implementation 	
[REDACTED]	[REDACTED] Little Rock, AR (all phases)	20 years
[REDACTED]	<ul style="list-style-type: none"> • Provides project/construction management support • Oversees the management of subcontractors • Oversees project execution to ensure the project stays on schedule and on budget 	
[REDACTED]	[REDACTED] Little Rock, AR (construction phase)	6 years
[REDACTED]	<ul style="list-style-type: none"> • Manages the project budget • Manages the project schedule • Coordinates subcontractors 	
[REDACTED]	[REDACTED] Little Rock, AR (IGA phase)	18 years
[REDACTED]	<ul style="list-style-type: none"> • Spearheads the development of energy conservation measures • Calculates and reviews the savings estimates for attainability and accuracy • Collaborates with the design/construction team to meet project schedules and budgets 	

c) **Approach to Subcontracting.** Describe the types of services (both professional and construction services) that your company offers in-house and the services typically offered through subcontractors.

BG utilizes its in-house resources to provide our customers first-tier service to ensure the optimal solution and the best design are chosen to directly address the client's project goals. We provide direct engineering and construction project control to ensure quality and remove the "middleman effect" to keep our project costs down and maximize the return on investment to our customers. The organizational chart and key personnel above (section 3a and 3b respectively) shows the depth of in-house resources dedicated to developing and implementing any EPC.

BG's in-house team of project managers, estimators, design engineers, energy engineers, and controls experts provides effective communication to streamline project development and implementation. These in-house resources allow BG to collaborate effectively and provide seamless project integration. Our energy engineers collaborate directly with estimators and design engineers to identify any implementation challenges, so they can be accurately captured in pricing assumptions early in the process. Our design engineers integrate directly with energy engineers to ensure that the project that was developed is the project that is implemented, which results in BG's ability to guarantee zero change orders.

In-House Capabilities Include:

- Mechanical and electrical systems
- Energy services
- Lighting services
- Sheet metal, piping, and plumbing
- Energy audits (i.e. preliminary audit, comprehensive investment grade audit)
- Combined heat and power
- Project management/construction services
- Renewable energy systems
- Advanced metering
- Commissioning/recommissioning
- Building automation systems
- Geothermal installation
- Preventative maintenance programs
- Facilities O&M
- Building envelope upgrades
- Stamping plans/permitting

Our **Energy Services Team** maintains a staff of Certified Energy Managers, energy, mechanical and electrical engineers, and Certified Lighting Professionals who have developed and engineered energy conservation programs for over 25 years. This team also has experienced auditors, comprised of Certified Measurement and Verification Professionals, with capabilities utilizing Metrix™ software to measure and ensure energy cost savings.

Our **Construction and Design-Build Team** includes in-house engineering, piping, sheet metal and plumbing. These capabilities allow us to coordinate scheduling, provide a simple line of communication during project installation, and provide direct engineering and construction project control to ensure quality, contain costs, and maximize the return on investment to our customers.

Our Controls Division is staffed with engineers experienced in the highly specialized field of building automation system design. Our experience includes the design and installation of pneumatic, electronic, and direct digital computerized controls systems. In addition, our team is versed on virtually all controls platforms and communication protocols allowing us to act in the role of Master Systems Integrator. Proper design, installation, start-up, and on-going service and maintenance are essential elements of a quality building automation system.

Our Commissioning Division is a complete building performance advocate with the ability to self-perform basic and enhanced commissioning services from the design phase through warranty commencement. Beyond initial occupancy, BG can self-perform advanced, continuous building monitoring of new construction and renovations as well as decades old legacy systems to ensure the owner maintains a diligent long-term focus on building performance. BG has continuously exemplified professional commissioning services since being selected as the first approved commissioning authority for the Ohio Facilities Construction Commission (OFCC) in 2004. Over the last decade, BG has commissioned well over 200 buildings.

Our HVAC Service and Integrated Facility Service Team serves over 700 customized maintenance programs. We provide our customers with quality and responsive system maintenance to keep their facilities operating reliably and cost effectively. BG's maintenance services include HVAC systems, chillers, boilers, electrical systems, lighting systems, fire and security systems, and plumbing systems.

Our Behavior-Based Energy Conservation Training Program is a proven process where BG utilizes both behavioral science and system optimization to change a culture and obtain significant energy savings. BG has developed custom training solutions to help achieve sustainability goals and obtain significant energy savings for variety of markets including K-12, higher education, healthcare, municipalities, and commercial buildings. Overall, this behavior-based training program creatively identifies and addresses additional energy savings opportunities often overlooked by ESCOs.

Subcontracted Services Include:

The services that BG typically subcontracts may vary from project to project depending on details such as the size and location of the facility. However, they typically include the following strategic partners:

- Asbestos Auditing
- Asbestos Abatement
- Financing Firm
- Cybersecurity Firm
- Architectural Services
- General Construction Services

3b. Arkansas State Construction Requirements

Describe your firm's approach to complying with the Arkansas State licensing and labor requirements.

Debbie Lesar, BG's Contracting Administrator, is responsible for compliance and active monitoring of updates to all Arkansas-specific licensing and labor requirements. Mrs. Lesar is the former President of the National Association of Women in Construction and utilizes over 20 years of national contracting experience to consistently navigate BG through state-specific requirements. Likewise, our partner firm, All Energy Solutions, has been headquartered in Little Rock since 1957. Our close relationship has kept BG consistently apprised of Arkansas licensing and labor compliance efforts, alongside best practices in the Arkansas energy and construction markets.

Brewer-Garrett will maintain the required licensing as directed by the associated boards. Furthermore, we will follow labor guidelines as required by the state and as specified in any contracts we enter into with the State.



4. Company Financial Status

*Arkansas Department of
Environmental Quality (ADEQ)
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Program*

4. Company Financial Status

4a. Financial Soundness and Profitability

a) Financial soundness. Provide a description of the financial soundness and expected stability of the company.

Brewer-Garrett has been successfully in business for over 60 years. Our financial strength is evidenced by on-going year over year solid operating results, strong liquidity, and capital adequacy. Our team of experts have worked together for more than 25 years, and we have successfully guaranteed over \$600 million in savings. Additionally, Brewer-Garrett, in over 60 years of providing premier energy services, engineering, and design-build construction, has never been denied a bond or had a bond invoked.

As requested, we have also provided a copy of our most recent financial statements in the front pocket of the Original binder. If you would like to speak to our bank or bonding company about our financial soundness and stability let us know and we can provide you with their contact information.

b) Profitability. Provide a description of the company's profitability with supporting documentation covering the past three calendar years.

Brewer-Garrett has a steady track record of profitability. BG is a privately held company and therefore we prefer to keep our financial statements confidential. If you would like to speak to our bank about our profitability over the last three years feel free to contact [REDACTED]

c) Financial report. Attach a financial report summary as an appendix, showing the company's most recent 12-month audited financials including, at a minimum: Balance Sheet, Income Statement, Statement of Cash Flow, and Statement of Financial Conditions. Include the name, address, and telephone number of the preparer.

Brewer-Garrett is a privately held company and as such is very circumspect regarding its financial information. Included with this proposal, in the front pocket of the Original binder, is a sealed packet containing summarized data prepared by a certified public accounting firm. If more detailed information is required, the Arkansas Department of Environmental Quality may contact our [REDACTED]

Contact information for the preparer of the report is included below.

[REDACTED]

4b. Bonding

Please see the following pages for a letter from Brewer-Garrett's surety, the Cincinnati Insurance Company, along with our certificate of insurance. Answers to questions d-j, from Section 4b of the solicitation, are not only addressed below but are also included in the attached surety letter.

d) Current bonding rating (maximum project size firm can bond)

[REDACTED]

e) Current bonding capacity

[REDACTED]

f) Amount or percentage of bonding capacity currently obligated

[REDACTED]

g) Current bonding rate

[REDACTED]

h) Confirmation that the company is bondable for 100% of a payment bond on a project

[REDACTED]

i) Confirmation that the company is bondable for 100% of a performance bond on a project

[REDACTED]

j) Letter from a licensed surety as evidence of ability to bond for payment and performance

[REDACTED]



October 6, 2020

Mr. Chet Howland
Department of Energy & Environment
Arkansas Department of Environmental Quality – Arkansas Energy Office
5301 Northshore Drive
North Little Rock, AR 72118-5317

Re: Contractor: *The Brewer-Garrett Company*
Owner: *State of Arkansas*
Project: *Arkansas Energy Performance Contracting Program*
Surety: *The Cincinnati Insurance Company*
2020 A. M. Best Rating: A+ XV

Dear Mr. Howland:

By way of introduction, the associates of Hotaling & Associates Agency, Inc. have been servicing the Risk Management and Surety requirements of The Brewer-Garrett Company for the past 29 years. We have genuinely enjoyed an excellent relationship over that period and we highly recommend our contractor/client for your favorable consideration of any project that you may propose.

The Brewer-Garrett Company has successfully completed numerous multi-million-dollar projects and we are both impressed and confident in the scope of their expertise. The Brewer-Garrett Company's Surety, The Cincinnati Insurance Company, (2020 A.M. Best Rating A+, XV) has been providing surety bonds for The Brewer-Garrett Company since 1991. The Cincinnati Insurance Company has written various Performance & Payment/Contract Bonds and Energy Savings Guaranty Bonds for The Brewer-Garrett Company covering specific projects [REDACTED]

[REDACTED] As of this writing, the client/principal remains in excellent standing with Cincinnati Insurance Company.

We offer the following specific responses to the questions raised in the RFQ:

1) Current bonding rating (maximum project size firm can bond): [REDACTED]
[REDACTED]

2) Current bonding capacity: [REDACTED]

3) Amount or percentage of bonding capacity currently obligated: [REDACTED]
[REDACTED]

4) Current bonding rate: [REDACTED]
[REDACTED]

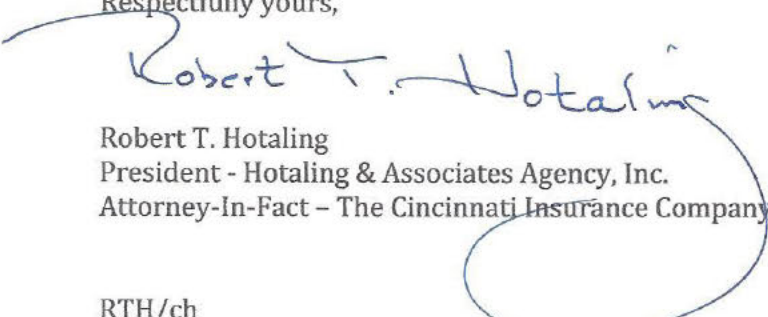
5) Confirmation that the company is bondable for 100% of a payment bond on a project:
[REDACTED]

- 6) Confirmation that the company is bondable for 100% of a performance bond on a project:
[REDACTED]
- 7) Letter from a licensed surety as evidence of ability to bond for payment & performance:
[REDACTED]

Should a Performance & Payment Bond and/or Energy Savings Guaranty Bond be required on any projects, The Cincinnati Insurance Company would be more than willing to consider same. Any specific request for bonds is between The Brewer-Garrett Company and their Surety and will be underwritten on its own merit, subject to review and satisfaction of the construction contract as well as evidence of complete financing. That being said, Cincinnati Insurance Company has approved and written surety bonds like the ones required in this scope/RFQ.

Should you have any questions, please feel free to contact the undersigned individual.

Respectfully yours,


Robert T. Hotaling
President - Hotaling & Associates Agency, Inc.
Attorney-In-Fact - The Cincinnati Insurance Company

RTH/ch

cc: Mr. Robert W. Edgerton, Field Director - Surety, The Cincinnati Insurance Company

SPECIMEN

THE CINCINNATI INSURANCE COMPANY

Fairfield, Ohio

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That THE CINCINNATI INSURANCE COMPANY, a corporation organized under the laws of the State of Ohio, and having its principal office in the City of Fairfield, Ohio, does hereby constitute and appoint

Robert T. Hotaling and/or Carrie A. Hotaling

of Brecksville, Ohio

its true and lawful Attorney(s)-in-Fact to sign, execute, seal and deliver on its behalf as Surety, and as its act and deed, any and all bonds, policies, undertakings, or other like instruments, as follows:

Any such obligations in the United States, up to
Fifty Million and No/100 Dollars (\$50,000,000.00)

This appointment is made under and by authority of the following resolution passed by the Board of Directors of said Company at a meeting held in the principal office of the Company, a quorum being present and voting, on the 6th day of December, 1958, which resolution is still in effect:

“RESOLVED, that the President or any Vice President be hereby authorized, and empowered to appoint Attorneys-in-Fact of the Company to execute any and all bonds, policies, undertakings, or other like instruments on behalf of the Corporation, and may authorize any officer or any such Attorney-in-Fact to affix the corporate seal; and may with or without cause modify or revoke any such appointment or authority. Any such writings so executed by such Attorneys-in-Fact shall be binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company.”

This Power of Attorney is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company at a meeting duly called and held on the 7th day of December, 1973.

“RESOLVED, that the signature of the President or a Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Secretary or Assistant Secretary and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power of certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certified by certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company.”

IN WITNESS WHEREOF, THE CINCINNATI INSURANCE COMPANY has caused these presents to be sealed with its corporate seal, duly attested by its Vice President this 19th day of December, 2018.



STATE OF OHIO) ss:
COUNTY OF BUTLER)

THE CINCINNATI INSURANCE COMPANY

Stephen A. Ventre

Vice President

On this 19th day of December, 2018, before me came the above-named Vice President of THE CINCINNATI INSURANCE COMPANY, to me personally known to be the officer described herein, and acknowledged that the seal affixed to the preceding instrument is the corporate seal of said Company and the corporate seal and the signature of the officer were duly affixed and subscribed to said instrument by the authority and direction of said corporation.



Keith Collett

KEITH COLLETT, Attorney at Law
NOTARY PUBLIC - STATE OF OHIO
My commission has no expiration
date. Section 147.03 O.R.C.

I, the undersigned Secretary or Assistant Secretary of THE CINCINNATI INSURANCE COMPANY, hereby certify that the above is a true and correct copy of the Original Power of Attorney issued by said Company, and do hereby further certify that the said Power of Attorney is still in full force and effect.

GIVEN under my hand and seal of said Company at Fairfield, Ohio.
this N/A day of N/A



Scott R. Bolen

Secretary



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
10/06/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS **WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Hotaling & Associates Agency, Inc. 8803 Brecksville Road, Suite 7-211 Brecksville, OH 44141		CONTACT NAME Robert Hotaling PHONE (A/C, No. Ext) 216 447-1004 FAX (A/C, No) E-MAIL ADDRESS hotaling_r@hotmailingassoc.com	
		INSURER(S) AFFORDING COVERAGE	
		INSURER A Liberty Insurance Corporation	NAIC # 42404
		INSURER B First Liberty Insurance Corporation	NAIC # 33588
		INSURER C Liberty Mutual Fire Insurance Company	NAIC # 23035
		INSURER D Ironshore Specialty Insurance Company	NAIC # 25445
		INSURER E Navigators Specialty Insurance Company	NAIC # 36056
		INSURER F	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Underground <input type="checkbox"/> incl. XCU GEN'L AGGREGATE L MIT APPL ES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC <input type="checkbox"/> OTHER:			TB7-Z51-291519-020	01/01/20	01/01/21	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COMP/OP AGG \$ 4,000,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			AS6-Z51-291519-010	01/01/20	01/01/21	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$			TH7-Z51-291519-040	01/01/20	01/01/21	EACH OCCURRENCE \$ 15,000,000 AGGREGATE \$ 15,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y / N <input checked="" type="checkbox"/> N / A (Mandatory in NH) If yes, describe under DESCR PTION OF OPERATIONS below			WC2-Z51-291519-030 (Ohio-Employers Liab) All States Workers Comp- incl AR	01/01/20	01/01/21	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACC DENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
D	Contractor's Professional Liability Cov.			DCP-7NABXBIS-001	01/01/20	01/01/21	\$5,000,000 per claim/\$5,000,000 aggregate/\$25,000 S R
E	Contractor's Pollution Liability Cov.			CH19ECP8320061C	01/01/19	01/01/21	\$5,000,000 per claim/\$5,000,000 aggregate/\$5,000 SIR

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

With respect to: Standing Request for Qualifications for the Arkansas Energy Performance Contracting Program

Additional Insured status can be designated upon award of contract

30 Days Written Notice of Cancellation/10 days Written Notice of Cancellation for Non Payment

CERTIFICATE HOLDER

Department of Energy & Environment
 Arkansas Dept of Environmental Quality -
 Arkansas Energy Office
 5301 Northshore Drive
 North Little Rock, AR 72118-5317

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Carrie A. Hotaling

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5. Marketing Approach

*Arkansas Department of
Environmental Quality (ADEQ)
RFQ response for the Arkansas
Energy Performance (AEP)
Program*

5. Marketing Approach

Briefly describe your firm's proposed approach to promoting and marketing the AEPC Program both in concert with AEO and in your individual marketing efforts for EPC.

Brewer-Garrett has an unwavering commitment to all our clients. This often extends into marketing efforts to support EPC programs and individual projects. As a result, BG's in-house marketing team has been involved with numerous marketing programs for public and private sector clients.

Our commitment and support of energy efficiency programs is shown in a variety of ways and can be directly applied to the AEPC Program. Some examples of this commitment and support include:

- Presenting at seminars on current energy issues and new technologies
- Participating on Business Advisory Councils within client districts
- Volunteering in school classrooms within client districts
- Sharing professional skills to enhance educational curriculums
- Assisting with energy procurement issues
- Performing an at-risk energy opportunity analysis at client facilities
- Participating in the fundraising efforts of our educational clients
- Participating in levy promotions
- Educational materials and presentations for board meetings of public clients

Our commitment to our clients extends beyond our energy savings programs. We often help educate the public on successful energy saving initiatives, such as the AEPC. Additionally, our team has partnered with clients in various speaking engagements and provided information for social media posts, news releases, and video marketing. Below are several examples of the marketing efforts BG is committed to making to support and promote the AEPC Program and its participants.

Industry/Trade Events (Energy Exchange Presentation)

In 2018, BG successfully nominated and ultimately featured Kent State University's (KSU) power plant optimization project at an "Energy Resilience" seminar for the Energy Exchange. The Energy Exchange, hosted by the U.S. Department of Energy, is attended by over 3,000 public and private stakeholders from around the country. The conference focuses on ways to design, operate, and integrate federal and private sector facilities, fleets, and resources, in the most efficient, sustainable, resilient, secure, and cost-effective manner.

Sponsoring Client Events

BG is often a sponsor for client events such as university-hosted Earth Day themed events. We use these opportunities to educate the community about the university's commitment to saving energy and the environmental impacts of reducing energy use.

Engineering Day

Between 2018 and 2019, Brewer-Garrett provided mechanical upgrades to 13 schools in the Columbus City School District. As a part of the *Brewer-Garrett Gives Back* program, BG volunteered significant time and resources to hold “*Engineering and Construction Days*” for nearly 1,000 students across 11 schools. BG awarded three scholarships at high schools and presented thousands of dollars in prizes to 34 exceptional students in the District. The day kicks off with a brief presentation on engineering and construction and careers within the industry. This is followed by an activity for the students where one team wins prizes. The goal is to raise awareness for the School District’s investment in their infrastructure alongside inspiring future engineers and construction professionals.

Board Meetings and Local Presence

Along with technical service, the BG team often attends and/or participates in board meetings to answer any questions, assist in explaining the project scope or financial terms, or provide a breakdown of the project schedule. Our team is more than willing to sit down with client stakeholders to walk through the project schedule and scope. Along with this engagement, we are willing to facilitate community presentations which highlight the progress of select projects, clarify where the funding will be allocated, and project future plans for the client.



6. Reporting Approach

*Arkansas Department of
Environmental Quality (ADEQ)
RFQ response for the Arkansas
Energy Performance (AEP)
Program*

6. Reporting Approach

Describe your firm's approach to providing signed copies of contracts and measurement and verification reports to AEO in a timely manner.

Brewer-Garrett routinely provides copies of signed contracts through scans, fax, sealed mail, DocuSign, and Procore (project management software). This process is managed by Debbie Lesar, BG's Contracting Administrator. Typically, this process is formalized on a per-contract basis to best suit the Participating Owner and AEO.

Continuing, measurement and verification reports are delivered within 30 days of annual reconciliation. This timing allows for all relevant data (i.e. utility bills) to be collected and incorporated into the report. These reports can be provided through hard copies or electronic distribution, and BG routinely pairs the reports with in-person presentations with questions and answers. Lastly, consistent with the AEPC Program, this reporting period can be tailored to the individual needs of a Participating Owner and AEO.

In addition, describe how you will meet the requirements for providing project performance metrics, described in detail in the Program Manual.

BG's in-house energy engineering and M&V team's reporting process aligns well with the Program Manual's Project Performance Monitoring guidelines. This team will follow and support the AEO's expectation of one mandatory year of M&V post-Final Completion and three years of M&V services for complex EPCs. BG's M&V team provides written and annual in-person reports for EPCs in any year of the performance period guarantee. The reporting frequency and method can be tailored to fit the Participating Owner's preferred program. In concurrence with the Program Manual, these M&V reports will address the following priorities at a minimum:

- Develop plans with Owner to address deviations from energy savings guarantee
- Submit annual M&V reports to both Owner and AEO within 30 days of annual reconciliation
- If necessary, compensate Owner for underperformance of ECMs within 30 days of annual reconciliation

Lastly, as a best practice, Brewer-Garrett encourages the FEMP Guidelines for Government Witnessing and Review of Measurement and Verification Activities. Witnessing of M&V activities is a part of the process of reviewing and approving M&V deliverables and the on-site inspections, spot measurements, short-term monitoring, and performance tests described in the M&V plan. We encourage a high-level of collaboration between the client's stakeholders with BG's M&V team for this process. This frequently helps the client better understand the EPC's success and overall operation of their facilities.



7. Technical Approach

*Arkansas Department of
Environmental Quality (ADEQ)
RFQ response for the Arkansas
Energy Performance (AEP)
Program*

7. Technical Approach

7a. Investment Grade Audit

Provide a description of the process your company uses to develop a typical audit in the types of facilities that will participate in the AEPC Program. Note any changes that will be made to comply with requirements of the AEPC Program.

Upon selection by the Participating Owner, the BG team will perform an IGA to develop a comprehensive energy savings performance plan with contract ready scope and pricing. We provide 30%, 60%, and 90% deliverables through a collaborative process with the client's stakeholders.

The IGA will begin with a kick-off scope charette in which BG will meet with stakeholders of the Participating Owner. The initial meeting will allow project scope and expectations to be clearly defined, combining the input of all stakeholders. We will work to co-author this program. Wide participation is key to a smooth process, and it is at this time we will develop key parameters of the IGA including items such as:

- Timelines
- Lines of communication
- Deliverables
- Team responsibilities
- Data collection
- Drawing review
- Calculation review
- M&V review
- Schedule of primary visits
- High level review of subcontracting plan
- Subcontractors needed
- Participating Owner's preferred vendors
- Safety expectations
- Safety procedures
- Security measures

Once the team has established the plan, BG will begin collecting data, performing field verification, and completing staff interviews to establish a solid baseline condition and the best solutions for the Participating Owner. BG may incorporate testing procedures such as core samples for roofing or temporary electrical metering for motors and chillers. These efforts will be discussed and coordinated during the scope charette. Next, bi-weekly meetings will be held with BG and all project stakeholders to address IGA items such as site access, new ECM developments, requests for information (RFIs), etc. Additionally, formal detailed review meetings will be scheduled for key milestones, such as the 30%, 60%, and 90% IGA reviews (example process chart below), to review progress and assure that up-to-date results are in line with the Participating Owner's expectations.

30% IGA Deliverables		
Task	Deliverable	Review
ECM Development	<ul style="list-style-type: none">• Preliminary ECM list with budget cost/savings• Develop subcontracting plan	<ul style="list-style-type: none">• Stakeholders to evaluate and provide direction for further effort• Share information on facility activities affecting potential projects
M&V Options Developed	<ul style="list-style-type: none">• Potential ECMs coupled with M&V method• Draft baseline plan created	
60% IGA Deliverables		
Task	Deliverable	Review
ECM Development	<ul style="list-style-type: none">• ECM list refined with preliminary cost/savings based upon customer identified criteria• Finalize subcontracting plan	<ul style="list-style-type: none">• Project stakeholders to evaluate• Begin review of risk, responsibility, and performance criteria
M&V Options Developed	<ul style="list-style-type: none">• Present options for M&V• Further detail baseline	<ul style="list-style-type: none">• Project stakeholders to review• Provide access or assistance for plan implementation
Operations & Maintenance Evaluation	<ul style="list-style-type: none">• Present options for operations and maintenance• Training curriculum developed	<ul style="list-style-type: none">• Project stakeholders to review• Evaluate what level of maintenance service required
90%–100% IGA Deliverables		
Task	Deliverable	Review
ECM Development	<ul style="list-style-type: none">• Investment grade audit demonstrating implementation cost and guaranteed savings that meet the criteria developed over the course of the IGA process• Financing solicited (if needed)	<ul style="list-style-type: none">• Project stakeholders to review• Proceed to contract
M&V Options Developed	<ul style="list-style-type: none">• Measurement and verification plan developed• Final baseline submission	
Operations & Maintenance Evaluation	<ul style="list-style-type: none">• Operations and maintenance scope of work with associated costs• Commissioning plan and training curriculum finalized	

Table 3 - Example IGA Process

Provide a recent sample investment grade audit as an electronic attachment. The audit should be representative of a recent energy efficiency project in a government facility. Provide verification that the sample audit was conducted by the members of the company's team who will be participating in the AEPC Program.

Per the Request for Qualification's (RFQ) direction, we have included a copy of the comprehensive investment grade audit report from one of our completed projects with Lorain County Community College (LCCC). This multi-phase project targeted rundown mechanical systems and inefficiencies across three separate campuses encompassing 1,350,943 ft². Please see the separate submittal attachment titled "LCCC IGA" for a copy of this report.

7b. Standards of Comfort and Construction Specifications

Provide a brief description of the standards of comfort the company generally uses for light levels, space temperatures, ventilation rates, etc. in the facilities intended for the AEPC Program and any flexibility for specific needs of the public entity.

BG employs Professional Engineers and Lighting Certified Designers who have extensive experience designing solutions to meet standards of comfort for a broad variety of spaces.

The Standards used are as follows:

International Energy Conservation Code (IECC) 2009 is a model code produced by the International Code Council (ICC).

American National Standards Institute (ANSI)/ASHRAE Standard 55-2017 gives thermal comfort values at selected conditions in the building environment and the Systems and Applications volume for specific recommendations for indoor design conditions for specialty applications such as hospitals.

ANSI/ASHRAE/ Illuminating Engineering Society of North America (IESNA) Standard 90.1 - 2010, Energy Efficient Design of New Buildings, is utilized for its recommendations for indoor design temperature and humidity conditions be in accordance with criteria established in ANSI/ASHRAE Standard 55.

ANSI/ASHRAE Standard 62.1-2016 for ventilation rates of spaces. Demand Control Ventilation and occupancy-based ventilation strategies are used in compliance with this Standard.

Illuminating Engineering Society (IES) Lighting Handbook 10th Edition gives best practices for illumination of areas being designed or retrofit. We design to best implement recommended illuminance and uniformity standards set forth by the handbook and its other associated recommended practices.

7c. Baseline Calculation Methodology

Provide a brief description of the methodology normally used by the company to compute the baseline of energy and water use for a facility. Include a discussion of how the public entity is engaged for development of an agreement on the baseline.

Brewer-Garrett's method for developing baseline energy use begins with actual meter data. We will examine all meter information available including utility meters, permanent sub-meters, or temporary metering. Building automation system trending reports and boiler logs are also collected. The base year conditions are memorialized in the measurement and verification plan.

Once the actual data is confirmed, we typically utilize Metrix™ software to generate a statistical regression for each utility meter affected by the project. Metrix™ is a nonproprietary software that calculates a statistical regression based upon the relationship between past utility performance and weather or other variables to accurately determine what the Participating Owner's utility bill would have been if no changes had been made to the facility.

All the existing meters will be evaluated for operation/accuracy and the data used for developing the baseline during the energy auditing phase. We can install meters in strategic areas to gather data if the need arises.

For example, water and sewer data are generally taken from utility meters where available. When more discreet data is required, we will deploy ultrasonic flow meters to validate base use of systems or buildings.

The simple equation for baseline computation is as follows:

$$\text{Baseline Consumption} = \text{Base Year Use} \pm \text{Changes for Time, Weather, and Events}$$

Where:

Base Year Use is meter data

Time is billing period length

Weather is heating/cooling/humidification

Events are changes in use, equipment, emergencies, or ECMs outside the AEPC scope

Discussions on the baselining and ECM M&V methodology (Options A, B, C, & D) is initially addressed at the kick-off scope charrette and revisited at 30%, 60%, 90%, IGA milestones for detailed review. Consistent communication and stakeholder participation in the baselining efforts is key to the EPC's success.

Lastly, Option D (building modeling) is the least applied option, although BG has the in-house technical resources to provide the required skills to ensure stakeholders of an accurately calibrated simulation. BG strongly encourages increased "ESCO-stakeholder collaboration" when modeling to ensure all necessary inputs are both captured and thoroughly understood.

7d. Adjustments to Baseline

Provide a brief discussion of typical factors that can impact the calculated baseline and the company's general approach to adjusting the calculated baseline if one or more factors are present. Include how the public entity is involved for agreement on any adjustments.

EPCs often take place at facilities with dynamic environments. On-going energy auditing tasks require a method for accounting for changes to the facility, systems, and equipment. Changes in the operating practices of the facility may have a direct effect on the amount of energy savings realized. Material changes include significant changes in the use, structure, or operating conditions of the facility, additions, deletions, or material alterations of equipment, or restrictions upon BG that affect our ability to render services, cancellation of the BG energy auditing services contract, or untimely receipt of utility information. BG will calculate and send the Participating Owner a notice of adjustment to the baseline amount to reflect such changes. The adjustment shall become effective as of the date of occurrence of the significant change.

BG accounts for these changes in a very transparent manner. The keys to accounting for changes are communication and information. Our auditing team performs routine site visits, reviews of building automation system (BAS) trending data, and facility staff interviews to identify changes. Sometimes the changes are not evident until they show up in a utility bill. This is most common on the water meters when leaks occur. Essentially, there are two types of changes that occur: temporary or permanent.

An example of a temporary change would be a water leak. We may see the increased usage and contact the facility staff to find out why the increase could have occurred. In this case, we would proactively alert the Participating Owner to a problem and could potentially help diagnose the problem and develop a solution. In this scenario, we can potentially measure the actual flow of the leak and use that flow in a calculation to adjust the baseline as seen below.

$$\text{Savings Consumption} = \text{Baseline Consumption} - \text{Actual Consumption}$$

Where:

Baseline Consumption = **Base Year Use** + Changes for **Time**, **Weather**, and **Events**

Base Year Use is meter data

Time is billing period length

Weather is heating/cooling/humidification

Events are changes in use, equipment, emergencies, or ECMs outside the AEPC scope

Actual Consumption is the utility bill value

Neither BG nor the Participating Owner is responsible for this additional use so we would increase the baseline to account for the excess use so there would be no penalty or gain for BG.

A permanent change might occur when the Participating Owner takes on an energy conservation measure outside of the BG scope of work or uses a building significantly more (or less) than it did in the base year. We want to be sure that the savings are being accounted for appropriately. In the case of an energy project outside the scope of the BG program, we would use the engineered drawings and data provided to calculate the savings for that scope and decrease the baseline to account for the savings generated by the additional ECM.

Whether the change is temporary or permanent, or whether it increases or decreases the baseline we will provide a transparent calculation with all assumptions used to account for the adjustment. Over the period of on-going auditing, these adjustments are tracked and reviewed on an annual basis.



8. Company Scope of Services

*Arkansas Department of
Environmental Quality (ADEQ)
RFQ response for the Arkansas
Energy Performance (AEPC)
Program*

8. Company Scope of Services

Provide a brief description that highlights your firm's capabilities to provide services for the following items. Include as many as possible to validate firm's capabilities.

Having developed EPCs for 25 years, BG has designed and implemented countless solutions incorporating each of the items listed in Section 8 of the Arkansas Department of Environmental Quality's (ADEQ) "Standing RFQ" document. Our ability to successfully develop projects that incorporate each of these items is enabled by our in-house team that consists of electrical/mechanical engineers, energy engineers, project managers, estimators, and controls experts.

The benefit of each in-house team is summarized below.

- I [REDACTED]
- I [REDACTED]
- I [REDACTED]
- I [REDACTED]

8a. Energy Systems in Buildings:

• Central plants

Designing and installing central plant upgrades have been a core service offered by Brewer-Garrett since our founding in 1959.

The BG team eliminated [REDACTED] need for local district steam by providing on-site steam and hot water generation. All controls points associated with the operation of the boiler plant were extended to the existing building automation system. All boilers at the four (4) boiler plants offered duty-cycling capabilities and N+1 redundancy. Listed below are the specifics of the boiler installation.

- [REDACTED] Hot Water Boiler Plant: four (4) 3,000 MBH input gas-fired boilers
- [REDACTED] and Theatre Steam Boiler Plant: four (4) 110 hp gas-fired steam boilers
- [REDACTED] Steam Boiler Plant: two (2) 80 hp gas-fired steam boilers
- [REDACTED] and Theatres Steam Boiler Plant: three (3) 200 hp gas-fired steam boilers

At the time of these projects, the local district steam utility was operating at 60.5% efficiency. The new boiler plants were estimated to perform at 82- 85%. Reductions achieved were 19.5% and 29,230 MMBtu. BG guaranteed energy cost savings for all steam consumption.

• Control and building automation systems

BG's in-house controls team has been designing and installing direct digital control (DDC) systems for over 25 years. This team completed an upgrade at [REDACTED] from a legacy Trane Summit Control system to a completely integrated Tridium system. This 200,000-point integration involved verifying, updating, and standardizing each graphic for each piece of mechanical equipment on the 2.7 million ft² campus. As a result of the Tridium integration, [REDACTED] is now able to perform high level comfort and operational analyses from anywhere on any device using BG's real-time, user-friendly data analytics software. As a result of BG's controls upgrades, significant energy savings were generated allowing [REDACTED] to add considerable building envelope improvements. These improvements included replacement of 50,000 ft² of windows/window wall, 15,000 lineal feet of joint sealant, and over 1,200 ft² of tuckpointing.

• Daylighting

Our lighting specialists and energy engineers always evaluate daylighting opportunities in an EPC. In an EPC at [REDACTED], BG replaced over 38,000 ft² of windows and curtain walls across 11 different buildings. Additionally, skylights were installed at the administrative services building, the staff offices building, the health center, the stadium, the museum, and the library.

• Distributed generation

At [REDACTED], BG implemented a comprehensive EPC which reduced [REDACTED] MMBtu per square foot by 30%, affected all [REDACTED] classroom, laboratory and auxiliary buildings, [REDACTED], and utilities infrastructure. CHP, Advanced Boilers, and Resilience were thoroughly addressed in this project. This EPC included the development and deployment of Enterprise Optimization Solution (EOS) at [REDACTED] including system and software upgrades, East Campus Chilled Water Plant, and several chillers across campus capable of feeding into the various chilled water loops. These enhancements automate decision making at the [REDACTED], standardizing operations of the turbines, boilers, and chillers to allow for complex decision making on the purchase and production of utilities for the campus in order to maximize revenue generation in the energy market. Additional benefits of the enhancements will be increased participation options in grid incentive programs to maximize revenue (through real time data collection of market

conditions, site conditions, and time of day campus loads), as well as an advanced planning tool for future campus expansion. All these upgrades were made in conjunction with [REDACTED] ability to black start, island, and shed non-critical loads. Physical upgrades to the plant included: aquatherm piping for deaerator makeup, ASCO switchgear automation repairs, condensing economizer installation, electric generator oil cool upgrades, forced draft fan inlet guide vanes (IGV) to variable flow drive (VFD) conversion.

Another example of BG's experience designing and installing distributed generation including a 128 kW Cogeneration system at [REDACTED]. BG installed a gas-fired internal combustion engine designed to consume 1,317 Mcf of natural gas and generate 128 KW of power at 480 volt, 60 Hz, 3 phase. The engine also included a heat exchanger system to recover heat from its exhaust and jacket water cooling system. The heat recovered 747,000 Btu/hr, which is being used to offset the facility's building and pool heating costs. The electrical installation included a tie into the facility's main switchgear and an electrical feed to the heat recovery system's booster pump.

The CHP unit offset 1,105,920 kWh annually of purchased electricity while providing 6,435 MMBtu waste heat annually.

- **Fuel switching**

At [REDACTED], a minimum/medium security facility that opened in 1954, BG developed an energy conservation project that significantly reduced energy consumption and operating costs. BG converted steam air handling units, rooftop units, makeup air units and unit heaters to natural gas or hot water. Additionally, new gas fired laundry equipment was installed including dryers and flat irons. As a result of BG's solution, [REDACTED] was able to reduce losses from traps, pipe insulation, and condensate return systems. They were also able to shut down the steam system during summer months allowing them to perform normal maintenance during summer shutdowns.

- **Heating systems**

BG has been designing and installing boiler plants since our company's inception in 1959. BG has upgraded many boilers in EPC programs including the design and installation of an 86,000 lbs/hr steam boiler system for [REDACTED]. The new boiler plant has significant energy and operational savings that fit within the financial goals of the program.

In addition to replacing the boilers at [REDACTED], BG replaced the existing deaerator tank and steam driven feedwater pumps with a new deaerator tank, electric feedwater pumps, and modern controls that interlock with the boiler system. Tank corrosion and excessive steam usage by the existing pumps was alleviated offering a reliable water delivery system for the boilers. The existing blow-down heat recovery unit was removed and replaced to save additional energy. The new blow-down heat recovery unit takes full advantage of available heat in the discharge water which further increased fuel savings.

The boiler plant improvements saved 34,745 Mcf annually and were part of a large EPC that saved \$954,400 the first year and has a total guaranteed savings of \$10,874,713 over the life of the program. The total Mcf reduction was 21.8% for all ECMs and 14.7% was associated with boiler plant improvements.

- **Indoor air quality**

BG places importance on indoor air quality on every project we implement by upgrading outdated mechanical systems to highly efficient systems that provide enhanced ventilation. In addition to upgrading the mechanical systems to highly efficient systems, we can take indoor air quality one step further by providing Bipolar Ionization Technology.

At multiple school districts, including [REDACTED], we upgraded their mechanical systems with Bipolar Ionization. Non-Ozone generating Bi-Polar Ionization technology was installed in each indoor unit ventilator. This technology drastically improves indoor air quality and not only significantly reduces the outdoor ventilation air required for each space, but it has the added advantage of reducing airborne particles and eliminating airborne pathogens and allergens. The benefits of this technology are multifaceted as it provides exceptionally high indoor air quality by reducing pollutants and significantly improves occupant comfort by neutralizing allergens, common viruses, and volatile organic compounds (VOCs).

Additionally, eliminating the VOCs within a space not only improves the indoor air quality, this reduces the amount of required ventilation required. This technology can drastically reduce the capacity required to cool a building and therefore save significant installation costs.

- **Kitchens**

BG has worked in numerous kitchens over the years implementing upgrades such as low flow fixtures, hood controls, and VFDs. At [REDACTED], BG implemented kitchen hood controls and demand control ventilation. The hood controls sense heat and particulates that relate to the amount of cooking at the four kitchen hoods. Meanwhile, the demand control strategy that was developed reduces the amount of exhaust and outside supply air that enters and conditions the space therefore reducing the amount of conditioned air during un-occupied and reduced usage periods of operation.

- **Laboratories**

BG implemented over \$28 million of energy conservation measures in laboratory facilities across four fully occupied buildings at the [REDACTED]. To eliminate impact to the building occupants, BG met with the building directors to review the occupancy schedules of each individual lab and developed a detailed floor by floor phasing plan that utilized "swing labs." Complex phasing plans and consistent communication with lab occupants both played critical roles in the project's success.

BG designed and installed new lab hoods with Phoenix controls supply, general exhaust, and hood exhaust air valves at all four laboratory facilities. This allowed the labs to become variable air volume systems. The lab control systems were designed to maintain strict life-safety ventilation while automatically adjusting the ventilation based upon zone presence sensors and sash positions at each hood.

[REDACTED]: BG designed and installed over 120 lab hoods with associated Phoenix control valves and case work. The lab control system was designed to maintain strict life-safety ventilation and space pressure relationships while automatically adjusting ventilation based upon zone presence sensors and sash positions at each hood.

[REDACTED] BG connected the facility to the existing central plant located at the [REDACTED]. Chilled water piping was installed below grade between the OLRC and PFOC buildings. BG designed and executed the conversion of the entire building from a heat pump system with a cooling tower to a chilled water system. In addition to this work, BG was also responsible for modifications to the electrical system.

████████████████████ BG converted the existing constant volume lab supply and exhaust system serving level C, level E, and the first floor of the biology labs to a variable air volume system. A new shoulder-month air-cooled chiller was designed and installed to serve the Animal Lab makeup air handling unit, allowing the system to operate independent of the main chilled water plant during shoulder periods. Heat recovery was also added to the Animal Lab makeup air handling unit.

████████████████████ BG redesigned the entire exhaust system to include four 45,000 CFM variable speed high plume exhaust fans rather than the 82 fume exhaust fans that originally served the building. Additionally, the BG team modified the acid waste, compressed air, nitrogen, natural gas, and domestic water systems throughout the building.

• Laundry

In hospitals and prisons, one of the largest consumers of energy and water resources is the laundry. Improving the laundry process has a significant impact on the resources consumed. At ██████████

████████████████████ BG developed and installed new natural gas fired dryers to replace steam dryers and allowed for summer shutdown of their boilers. The laundry process was further improved by designing and installing an ozone laundry system, which injects ozone into the incoming wash water which provided significant fuel savings by eliminating the need for hot water during the washing cycle. Ozone provides a very powerful oxidizing and cleaning agent, which works best in cold water applications. This allows for enhanced soil removal and disinfection simultaneously with reduced garment wear-and-tear and reduced chemical usage. In addition, ozone is completely biodegradable, reverting rapidly back to oxygen with no chemical residue.

BG provided and installed a complete ozone laundry system capable of handling the full capacity of the prison laundry needs. In addition, full training in the operation of this new system was provided to all staff members. The laundry process improvement saved 11,651 Mcf of gas annually and 116,510 Mcf over the life of the program. The laundry process improvement reduced natural gas consumption 7.8%.

• Lighting systems (indoor and outdoor)

BG has been designing and installing lighting improvements for over 30 years including an interior and exterior LED retrofit for ██████████. The new LED lamps use nearly 50% less energy than the fluorescent lamps that were being used in the facility. In addition to the LED retrofit, BG installed occupancy controls to reduce run hours in meeting rooms, office space, office hallways, storage, and restrooms. These upgrades were made without disruption to on-going hospital operations.

Additionally, BG conducted an extensive survey of the parking lot, walkway, and building exterior lighting systems. The Hospital was using a combination of 250 and 400-watt Metal Halide and High-Pressure Sodium technology to light the majority of its exterior spaces. BG took detailed nighttime light measurements to determine current conditions and utilized 3D computer modeling to redesign these spaces with the proper light output and distributions. By properly redesigning these spaces prior to specification and installation, BG was able to greatly increase visibility in the illuminated environment. The resulting new design not only saved a considerable amount of energy, but also greatly increased the safety and security for this facility at night.

Lighting improvements saved 324,086 kWh annually which represented 50% of the electricity associated with the lighting systems.

- **Renewables (geothermal solar-electric/thermal, wind, biomass)**

[REDACTED]

[REDACTED]

- **Swimming pools and recreational facilities**

In recent years, BG has implemented multiple solutions for recreational facility swimming pools. At [REDACTED], BG determined that a large source of energy loss was a result of water evaporation in the pool. To combat this issue, BG installed an automatic pool cover system resulting in energy savings over 50%. Additionally, BG employed an additional filtration system upgrade with the addition of ultraviolet (UV) treatment. This system reduces the need for chlorine treatment and is also effective against all micro-organisms, including chlorine resistant pathogens.

At [REDACTED], it was determined that the turnover rates for the lap pool, recreation pool, and spa pool were all much higher than needed. BG installed VFDs on three (3) pool pumps, two (2) 10 hp and one (1) 3 hp, in the Recreation and Wellness Center. As a result, the flow rate and energy consumption of the pumps were reduced while still achieving the necessary filtering turnover rates.

- **Transportation (fleet fuel management, etc.)**

[REDACTED] owns 146 and leases 31 fleet vehicles. BG conducted a fleet fuel management study and provided the University an ECM option which provided fleet retrofits, dual fuel capabilities, and the ability to capture federal Alternative Fuel Vehicle (AFV) Standard Compliance credits (valued at \$900 per credit). This ECM was ultimately not implemented, but the audit provided the [REDACTED] with valuable information for future fleet management decisions.

- **Utility management**

For over 25 years, BG has investigated and implemented sophisticated systems to save our clients' money on their utility bills. Shifting peak electric loads reduces electrical fees in areas with significant demand components in the electric rates. BG recently developed and installed a sophisticated micro-processor-based controller to integrate and optimize the operation of the chilled water plant to shift electrical peak usage by using steam turbine chillers during critical times as part of an EPC program at [REDACTED]. Large educational campuses have diverse loads. At [REDACTED], the chilled water plant consisted of 6,300 tons of cooling capacity from a combination of centrifugal chillers and steam turbine driven centrifugal chillers. The total cooling required for the multiple building campus was 5,600 peak tons and 6,419,487 ton-hrs. Due to the abundance of steam from the combined heat and power plant, the steam driven chiller is used to produce about 35% of the cooling requirements.

BG always works with customers to procure the lowest rates and most favorable terms to reduce operational costs. BG has worked with past customers to ensure accurate and efficient consumption and unit costs through advising customers in rate negotiations with local utilities. This often results in lower rates and even higher payouts for excess power produced by in-house power plants. For this project, BG evaluated the best way to operate the campus's CHP plant, and served as an advisor in negotiations to lower the cost of power delivery and power back-up costs. BG also monitored utility and operating costs, assisted [REDACTED] in the review of bidders for the electrical supply agreement, and acted as an advisor during [REDACTED] negotiations of an agreement for power generation, delivery, and back-up power. BG also advised [REDACTED] during negotiations for an agreement to sell available power capacity during times of peak electric demand.

The rate negotiation project resulted in a 39% reduction in unit costs for natural gas and a 68% reduction in unit costs for electricity.

Lastly, BG has experience designing and implementing energy/utility distribution systems including transformer replacements. BG replaced the existing dry-type 300 KVA transformers at [REDACTED]. The transformers were over 25 years old and at the end of their useful life. BG installed new ultra-energy efficient transformers that are greater than 98% efficient. This also provided increased reliability to the electrical system, while improving energy efficiency and reducing carbon footprint.

The transformer replacement improved equipment efficiency 6.6% equivalent to 54,636 kWh annually.

• Ventilation systems

[REDACTED] included the renovation of three [REDACTED]. BG designed and implemented a solution that included the replacement of heating and ventilation units across seven different spaces with packaged single zone variable air volume (SZVAV) gas fired rooftop units. These spaces consisted of [REDACTED].

[REDACTED] is another great example of BG's EPC capabilities with HVAC systems in hospitals. Fourteen (14) air handling units (AHU) were identified as having critical operational issues and generated a significant number of staff, patient, and visitor complaints. Detailed inspections, along with a thorough review of each unit's operational characteristics, confirmed that these units needed replacement.

The air handling units had become a maintenance and operational problem for the staff, leading to complaints and excessive energy use. The new units were provided with full economizer capability, high efficiency motors, and variable frequency drives. All units were provided with complete DDC system and all necessary programming to provide full control and monitoring of each unit from the building automation system. This allows the maintenance staff to monitor conditions remotely and allow any patient/staff complaints to be addressed more quickly.

The air handling unit improvements saved 1,161,886 kWh annually. The project was part of a large EPC that saved \$954,400 the first year and has a total guaranteed savings of \$10,874,713 over the life of the program.

- **Water-consuming systems**

The [REDACTED] used millions of gallons of water per year for quenching purposes while operating their heat treat furnaces and age ovens. There are five heat treat furnaces located in “A building” with each having a quench tank (total capacity of 170,000 gallons). Each of these tanks drained water required for quenching to the sewer after each quench and were refilled with city water for the next quench. The quench water then had to be reheated to the desired quench temperature (77, 100, or 144 degrees F).

BG designed a solution that pumps the water to two holding tanks so the water will not have to be continually sent down the drain. The system was designed to keep the cooler quench water (approximately 77 degrees F) separated from the warmer quench water (approximately 143 degrees F). This minimizes the need for additional cooling or heating, allows the operators to fill the quench pits more effectively, and reduces the use of expensive once-through city water.

As a result of BG’s solution, [REDACTED] saves 67,798 KGal (\$992,500) of water annually.

8b. Project Development and Implementation:

• Investment Grade Energy Auditing

BG's approach to all Investment Grade Audits is founded in its in-house capabilities. Our process is based on best practices published by ASHRAE, AEE, and FEMP. Our intent is to identify energy savings opportunities and develop realistic cost and savings estimates. The ultimate goal is to provide the customer with a facility improvement program solely funded through guaranteed energy savings.

BG's IGA services (ASHRAE Level 3 Detailed Analysis of Capital-Intensive Modifications) are conducted by a diverse skillset of BG development professionals. These professionals hold a range of the below certifications:

- Certified Building Commissioning Professional (CBCP)
- Certified Demand Side Management Professional (CDSM)
- Certified Energy Manager (CEM)
- Certified Lighting Efficiency Professional (CLEP)
- Certified Sustainable Development Professional (CSDP)
- Distributed Generation Certified Professional (DGCP)
- Certified Measurement and Verification Professional (CMVP)
- Leadership in Energy and Environmental Design (LEED AP)
- Leadership in Energy and Environmental Design (LEED AP BD+C)
- Leadership in Energy and Environmental Design – Green Associate (LEED GA)
- North American Board of Certified Energy Practitioners PV Associate (NABCEP PV)
- Professional Engineer (PE)
- Project Management Professional (PMP)

These resources are organized into a development team which best suits the client's facility characteristics and overall project goals. They then conduct all the necessary energy auditing, data gathering, utility analysis, multiple site-visits, metering activities, ECM development, etc. to provide the Participating Owner a thorough whole facility IGA that identifies the best possible solutions for their facilities.

• Financing Knowledge: Municipal-tax-exempt lease purchase, Bonds, Self-Financed, other

BG understands the unique procurement aspects of the EPC process when it comes to securing financing, and in response, we actively work with financiers and the Participating Owner throughout the IGA to explore ways to secure low financing rates for the project.

BG has creatively worked with customers in the past to fund energy projects and will work collaboratively with the stakeholders to fully understand their financial goals. For example, BG has utilized methods such as vendor financing, direct negotiations with lenders, issued RFPs to banks, worked with financing consultants who issue RFP's for bond offerings, utilized state agencies that provide incentives to save energy via reduced interest rates, and several other strategies. Lastly, BG most recently self-financed a solar PPA as a part of an EPC with Kent State University.

We have helped our EPC customers secure project financing for over 25 years and will leverage this experience throughout the financing effort to successfully achieve this crucial aspect of the project.

• Identification of and application for utility rebates

BG, as a service to any EPC customer, always studies, investigates, and provides all documentation required for the Participating Owner to participate in any utility program that is offered in its service area.

- **Commissioning of projects and retro-commissioning of existing buildings**

BG has extensive experience in commissioning, retro commissioning, and continuous commissioning. At [REDACTED], BG retro-commissioned the existing Delta EMCS system by evaluating whether all components were operating mechanically, being controlled properly, and setpoints/schedules were in place. Our retro-commissioning investigation resulted in a comprehensive report detailing all findings on system operations including recommendations for modifications to help optimize and meet the facility's needs.

Once the existing Delta EMCS was fully integrated with HVAC equipment, our retro-commissioning team was able to identify multiple overridden temperature and humidity setpoints. Also, faulty chilled and hot water valve operation on air handling units and inoperable exhaust fans were identified for correction. The retro-commissioning contributed to the EMCS savings of 1,500 Mcf of natural gas and 199,000 kWh annually and were part of an EPC that saved \$213,174 the first year and is on track to meet the total savings guarantee of \$2,431,632 earlier than the projected 15 year life of the program.

Commissioning: Utilizing our in-house Building Solutions team, BG provides commissioning as a standard with all our projects to ensure that the systems are performing efficiently and as designed. This team is staffed with highly experienced and accredited professionals who have a deep understanding of the building commissioning process. They implement all commissioning and retro-commissioning efforts for BG on EPCs and design-build projects. For all EPC work, BG's Building Solutions team is required to meet the highest commissioning standards, often including LEED certification requirements.

Our team is experienced on a variety of controls systems architecture, programming, and installation. They are highly skilled instructors on controls and energy management systems and have developed procedures for customer's staff. The expertise of our controls engineers is utilized to assist in functional testing, as well as the evaluation of scheduling and sequencing of building automation systems.

Planning for the proper level of commissioning of the various systems begins in the IGA. During this stage the system will be reviewed for complexity and planning before the required commissioning activities will begin. A Commissioning Plan will be developed which details each team member's roles and responsibilities, procedures for verification of functional performance testing, project organization, staffing, and the commissioning schedule.

Retro-Commissioning: Often, deviations from the original system and control settings occur over the life of the building, whether it is because of equipment problems or changes made to the system with the best intentions from building operators. All of these incremental system changes lead to the decline in performance and effectiveness.

To correct or identify these deficiencies we use the process of Retro-commissioning. Retro-commissioning is the systematic process of optimizing existing building systems for the first time so that they operate efficiently and effectively. This process also provides a benchmark for future comparisons and documentation to perform another commissioning process in the years to follow.

The BG Retro-commissioning approach is one that utilizes a "question and answer" process for controlled systems. This system is neither product nor approach biased—it merely evaluates the design intent of the system and how successful it is in achieving its goal. The actual operation is then scrutinized to develop the most optimal system given the current building characteristics. For this program to be successful, it cannot be deployed with a broad brush and by merely printing trends and providing "canned" recommendations. Buildings need to be selected based upon their energy intensity and the capability of the system to truly operate better.

The Retro-commissioning effort can be broken down into the following main sections:

1. **Investigation and framing of the program** – This is the process where all major and most minor systems are quantified in every building and a schedule is developed for program execution.
2. **Field Testing** – This is the process where every output is evaluated as a cause and effect reaction to relevant inputs.
3. **Documentation and Analysis** – This is the process where all findings from the field test migrate to formulaic documentation that not only identifies problems, but also acts as a valuable training tool for any new employee responsible for the mechanical systems.
4. **Action Item List Development** – This is the process where a list of problems and potential solutions is developed. Along with each solution, it will be indicated where this fix saves energy, is a neutral energy solution, or could result in incurring additional energy, due to a mechanical deficiency.
5. **Implementation** – This is the process where the Participating Owner and BG jointly determine the best approach to all action items and how they can be rectified.

• **Identification of asbestos and other hazardous materials / abatement, recycling, or disposal**

BG has extensive experience in working with the disposal of hazardous waste materials through both EPCs and a long history of design-build renovation projects. Our project managers, estimators, and construction professionals routinely manage and contract with certified abatement contractors and recycling facilities for the removal of any type of hazardous waste. Further, all designed and specified equipment follows applicable material sourcing requirements. For example, all of our lighting retrofits include EPA approved lamp and ballast recycling.

• **Construction**

For all projects, BG's Project Executive and project managers are involved early in the design process to assist with the design, pricing, and constructability and to also become acquainted with the Participating Owner's needs and facilities. This ensures that the project is completed with a seamless transition between the Design Team and the Project Management Team. From there, BG has a large construction operations team that handles all aspects of the construction phase for every EPC. This team has managed multi-phase EPCs that included over 25 different ECMs, facilities in multiple cities, and 20 different subcontractors.

• **Project Constructability**

Each of our projects includes a comprehensive Constructability Review. Concurrent to the design review, the project management team thoroughly reviews the documents from a constructability, schedule, and budget perspective. This constructability review not only includes the BG project managers but also will be reviewed by site personnel and selected subcontractor team. The design engineer continues to be involved with the project through construction and final commissioning of the installation.

• **System design engineering (mechanical, electrical, etc.)**

BG has an in-house engineering team that designs mechanical, electrical, controls, plumbing, and fire protection systems. As a result, BG does not require design consultants or engineering subcontractors, allowing a more coordinated delivery and seamless transition from the IGA to final design documents.

• Project/construction management

Our construction management team includes in-house project managers, engineering, piping, sheet metal, and automation. These capabilities allow us to coordinate scheduling, provide a simple line of communication during project installation, and provide direct engineering and construction project control to ensure quality, minimize project costs, and maximize the return on investment to our clients. This high level of coordination by our design-build professionals has made BG the experts in 24/7 occupied construction, constrained delivery timeframes, and complex construction environments (such as healthcare facilities, labs, and prisons).

• Procurement, Bidding, Cost estimating

Cost Estimating

For more than 60 years, BG has designed, engineered, and constructed major mechanical systems. Throughout this time, we have developed advanced estimating methods and procedures that have proven to be extremely accurate on past projects. Our estimating team has decades of combined experience. We regularly develop conceptual estimates for design-build energy conservation projects. Utilizing a unit-price estimating methodology, we test our estimates in real-world applications on a daily basis. BG estimates with a quantity take-off method using estimating software that enables us to develop more accurate scheduling and manpower planning.

Procurement

For projects that have significant amounts of materials and equipment and stringent time constraints, the inherent risks associated with procurement are heightened. BG minimizes and controls these risks first by being in a position to place an order for long lead items immediately upon contract award. We will first expedite major electrical/mechanical items and related materials. Securing the delivery dates for success starts upon award and is secured only through daily monitoring and communication with suppliers, assuring that all requests for information are processed upon receipt.

Bidding

BG regularly executes design-build projects and has built a strong network of subcontractors. BG's expertise is not only in managing projects but also in self-performing the execution. With BG as your design-build contractor, we provide the Participating Owner with an additional level of protection to complete the project on time and on budget within the guaranteed maximum price (GMP). With our self-performing abilities, we can step in if needed and complete the project, should any subcontractor not perform or provide a bid that is not under budget.

BG maximizes and facilitates subcontractor involvement through the following activities:

- Project Manager searches database consisting of companies that we have worked with in the past, have proven to be reliable, and provide the high level of quality expected for any project our company undertakes.
- Seek out all Arkansas certified Minority and Women-Owned Business Enterprises and provide them equal access to subcontracts while exceeding any small business requirements the Participating Owner may request.
- Vet any companies that are new to us to ensure they have the financial strength, certifications, expertise, and staff to execute the work required and eliminating the risk of claims and litigation.
- Engage EPC Stakeholders in the selection process to ensure that the subcontractors we engage on this project will be satisfactory. This approach gives the Participating Owner the opportunity to draw on their experience by recommending contractors they have had success with and restricting contractors that they deem not qualified to perform the work.

8c. Support Services:

a) Measurement and verification of savings

Each of our EPC projects include an annual M&V audit report. Over the past 25 years, BG has successfully guaranteed over \$600 million in energy savings and has never missed a guarantee. A separate M&V plan is developed for each individual energy conservation measure included in the project. Depending on the size, complexity, and availability of data, we employ different M&V techniques within the International Performance Measurement and Verification Protocol (IPMVP). We use a straight-forward M&V reporting formats with clearly articulated assumptions and savings calculations. These M&V plans are drafted by BG's in-house energy engineers and Certified Measurement and Verification Professionals.

b) Equipment warranties

After installation, a qualified BG representative will start, test, and provide instructions on the operation and maintenance of the equipment. All equipment, material, and labor furnished by us will bear a one-year warranty from the date of "beneficial use" against defects in workmanship and material. Additionally, BG will ensure that the lighting warranty is activated and provide to the Participating Owner's staff all of the information necessary to be assured the warranty remains valid. Lastly, any extended warranty requirements identified on a per contract basis can be tailored to meet stakeholders' expectations. This is a routine process for BG's preconstruction professionals.

c) Calculation and reporting of emissions reductions

As part of each project's annual M&V report, BG not only provides validation of energy savings, but we also calculate and report reduction of greenhouse gas emissions. For example, many of BG's EPC projects in Ohio utilize funding from Ohio Air Quality Development Authority (OAQDA) which requires emissions reductions to be reported throughout the financing term of the project.

d) Marketing and promotion of a State or Federal EPC Program

By utilizing the many strengths of BG's marketing team, promotion of the EPC program can include the following:

- 1) Community-based initiatives
- 2) Organization recognition through achievement of third-party awards
- 3) Rate analyses and competitive bidding and negotiations in de-regulated utility environment
- 4) Application and attainment of utility-based incentive programs
- 5) Launch of videography programs with "proof of performance" via web access, Facebook, and YouTube
- 6) Development of employee involvement programs
- 7) Utilization of emerging energy technologies and building dashboards

Further, as a DoE ESPC IDIQ contract holder, BG is actively engaged with promoting the FEMP's Federal EPC Program. Many of the marketing efforts used on this federal program can be directly applied to the AEPC Program.

e) Performance guarantee for every year of the financing term

BG understands that the AEPC Program has a project maximum term of twenty (20) years unless the installed ECMs on a project have either an active warranty or weighted useful life exceeding twenty (20) years in accordance with A.C.A. §19-11-1256(b). Under these circumstances, such extensions require the approval of AEO. BG has been providing energy saving performance contracts with performance guarantees for every year of the financing term for up to 25 years. Unless otherwise requested by the client, all our EPC projects include a guarantee for every year of the financing term along with an annual M&V audit report.

f) Insurance per contract requirements

Over the years, BG has been required to meet numerous different insurance requirements. BG always maintains the flexibility to review and address any per contract insurance requirement. As a result, we have been able to meet all insurance requirements of any perspective EPC contract.

g) Application for an Energy Star Label Application for LEED certification

Our customers often request our assistance with obtaining energy certifications. As a result, BG has provided numerous customers with assistance in obtaining both LEED and Energy Star building certifications. Additionally, 11 of BG's employees hold a LEED certification (i.e. LEED AP, LEED AP BD+C, or LEED GA). This has enabled BG to successfully achieve LEED certification for over 50 projects.

h) Training of maintenance staff and occupants

Employee training and skill development for the Participating Owner's maintenance staff are an integral part of BG's approach to providing a quality service program and is included in each of our projects. Our training will ingrain a strong customer orientation based upon the principles of flexibility, superior quality, and rapid-response service. Experience has demonstrated that productivity and morale remain high when employees are well equipped, in terms of skills and tools, to perform their jobs. The following training will be made available to stakeholders:

- On-site sessions utilizing internal staff and subject matter experts from BG
- Informal "brown-bag" sessions conducted by staff members of BG
- Suppliers or vendor training specific to Participating Owner's systems

In addition, we will provide your choice of any two of the following training programs during each year of the service program:

- The Art of Service Training
- HVAC 101
- The Art of Customer Service
- Facilitating Front Line Communication
- Positive Impact I
- Positive Impact II

i) Hazardous material handling

BG's safety, design, and preconstruction professionals review all hazardous material reports for every project. If none are available, our team will utilize its experience in working with the disposal of hazardous waste materials. We rely on certified abatement contractors and recycling facilities for the removal of any type of hazardous waste. Lastly, our safety manager will draft and maintain a site-specific Hazardous Materials Emergency Response Plan.

j) Long-term maintenance services of energy systems

BG's HVAC Service and Integrated Facility Service Division can customize a service program that meets the specific and unique requirements of the final project scope. In collaboration with the Participating Owner, BG can deliver a program for service of all technical systems in accordance with project design specifications, manufacturer's recommendations, and the public entity's maintenance and operating goals, objectives, policies, procedures, practices, and resources. BG's in-house service team is made up of service managers, electricians, mechanics, controls technicians, and general technicians. They service over 700 locations and have a 24/7 centralized help desk and dispatch. Each technician has an iPad with an electronic reporting system, which allows the technician to provide paperless reporting and tracking.



9. Project History

*Arkansas Department of
Environmental Quality (ADEQ)
RFQ response for the Arkansas
Energy Performance (AEPC)
Program*

9. Project History

In a single table, list ALL public energy efficiency projects developed and implemented by your locally represented firm or its key members within the past five (5) years; Indicate whether project was through your firm or a key member's previous firm. For the Project Timeline entry, include key milestone dates, such as year IGA signed, IGA completed, contract signed and/or construction completed.

Owner / Project Name	Facility Type	Prime Contractor	City & State	Project Size (Dollars)	Total Energy Savings (Dollars)	Total Energy Savings (MMBtu)	Project Timeline (Project Start - Construction Completion)	Assigned Staff
[REDACTED]	Higher Education	BG	Kent, OH	\$19,798,982	\$7,149,924	231,561	11/2012 - 12/2014	[REDACTED]
[REDACTED]	Higher Education	BG	Wilberforce, OH	\$16,165,560	\$1,155,270	89,168	07/2013 - 3/2015	[REDACTED]
[REDACTED]	Higher Education	BG	Elyria, OH	\$16,821,754	\$2,243,352	\$91,410	8/2019 - 8/2020	[REDACTED]
[REDACTED]	K-12 School	BG	Euclid, OH	\$12,100,000	\$388,205	11,767	5/2020 – 9/2020	[REDACTED]
[REDACTED]	Correctional Facility	BG	Marion, OH	\$10,556,320	\$4,243,171	167,961	9/2015 - 11/2017	[REDACTED]
[REDACTED]	Higher Education	BG	Cleveland, OH	\$7,639,227	\$8,177,188	214,888	4/2015 - 6/2016	[REDACTED]
[REDACTED]	Correctional Facility	BG	Chillicothe, OH	\$6,379,124	\$911,113	88,896	1/2016 - 5/2018	[REDACTED]
[REDACTED]	Correctional Facility	BG	London, OH	\$6,534,438	\$1,241,715	\$59,350	4/2020 – 8/2020	[REDACTED]
[REDACTED]	City	BG	Brook Park, OH	\$4,942,000	\$470,203	9,932	4/2017 - 8/2018	[REDACTED]
[REDACTED]	Higher Education	BG	Westerville, OH	\$4,640,031	\$1,327,982	63,107	4/2017 - 7/2016	[REDACTED]

[REDACTED]	K-12 School	BG	North Ridgeville, OH	\$2,818,803	\$386,281	13,434	12/2015 - 1/2017	[REDACTED]
[REDACTED]	Correctional Facility	BG	Lancaster, OH	\$2,437,140	\$237,674	34,417	2/2018 - 2/2019	[REDACTED]
[REDACTED]	Sewer District	BG	Cleveland, OH	\$2,376,167	\$203,934	6,700	8/2018 - 8/2019	[REDACTED]
[REDACTED]	Hospital	BG	Logan, OH	\$1,856,454	\$394,504	14,678	7/2016 - 10/2017	[REDACTED]
[REDACTED]	K-12 School	BG	Garfield Heights, OH	\$1,448,223	\$160,697	3,181	4/2019 - 6/2020	[REDACTED]
[REDACTED]	Higher Education	BG	Canton, OH	\$1,131,398	\$121,860	2,964	6/2015 - 5/2016	[REDACTED]
[REDACTED]	Higher Education	BG	Mansfield, OH	\$1,129,453	\$522,029	9,852	2/2015 - 1/2016	[REDACTED]
[REDACTED]	K-12 School	BG	Lakewood, OH	\$959,220	\$1,118,465	2,512	8/2017 - 4/2018	[REDACTED]
[REDACTED]	Higher Education	BG	Kent, OH	\$897,193	\$20,660	1,021	8/2015 - 4/2016	[REDACTED]
[REDACTED]	K-12 School	BG	Cleveland Heights, OH	\$620,144	\$492,673	13,448	9/2016 - 8/2017	[REDACTED]
[REDACTED]	K-12 School	BG	Matamoras, OH	\$412,751	\$152,010	9,617	6/2017 - 5/2018	[REDACTED]
[REDACTED]	K-12 School	BG	Maple Heights, OH	\$247,040	\$184,887	21,007	3/2017 - 6/2017	[REDACTED]
[REDACTED]	Higher Education	BG	Kent, OH	\$173,527	\$2,311	263	8/2014 - 1/2015	[REDACTED]
[REDACTED]	K-12 School	BG	Paulding, OH	\$79,377	\$313,035	15,282	11/2015 - 10/2016	[REDACTED]
[REDACTED]	K-12 School	BG	Toronto, OH	\$34,580	\$74,119	3,649	6/2016 - 5/2017	[REDACTED]
[REDACTED]	K-12 School	BG	Collins, OH	\$34,333	\$82,157	5,532	6/2017 - 5/2018	[REDACTED]

*Behavior-based energy conservation project



10. Project References

*Arkansas Department of
Environmental Quality (ADEQ)
RFQ response for the Arkansas
Energy Performance (AEP)
Program*

10. Project References

Provide detailed information for a maximum of 3 public energy efficiency projects your firm completed or were completed by members of your locally represented firm, which can be used for references. Expand on the information provided in the previous section to give details on individual projects.

Project Identification				
Owner Name				
City/State				
Client Contact Information				
Name/Title				
Telephone Number				
Email				
Project Data				
Project Size				
Project Dollar Amount				
Source of Funding				
Project Dates	Audit Start	Audit Acceptance	Construction Start	Construction End
Contract Terms				
Contract Type				
Financing Arrangement				
Contract Terms				
Project Personnel				
List of Improvements				
Project Performance				
Project Schedule				
Project Savings (annually)	Projected Savings	Guaranteed Savings	Actual Savings	
M&V Approach				
Performance Guarantee				

Project Identification				
Owner Name				
City/State				
Facility Type				
Client Contact Information				
Name/Title				
Telephone Number				
Email				
Project Data				
Project Size				
Project Dollar Amount				
Source of Funding				
Project Dates	Audit Start	Audit Acceptance	Construction Start	Construction End
Contract Terms				
Contract Type				
Financing Arrangement				
Contract Terms				
Project Personnel				
List of Improvements				
Project Performance				
Project Schedule				
Project Savings (annually)	Projected Savings	Guaranteed Savings	Actual Savings	
M&V Approach				
Performance Guarantee				
Project Status				

Project Identification				
Owner Name				
City/State				
Facility Type				
Client Contact Information				
Name/Title				
Telephone Number				
Email				
Project Data				
Project Size				
Project Dollar Amount				
Source of Funding				
Project Dates	Audit Start	Audit Acceptance	Construction Start	Construction End
Contract Terms				
Contract Type				
Financing Arrangement				
Contract Terms				
Project Personnel				
List of Improvements				
Project Performance				
Project Schedule				
Project Savings (annually)	Projected Savings	Guaranteed Savings	Actual Savings	
M&V Approach				
Performance Guarantee				
Project Status				



11. Cost and Pricing

*Arkansas Department of
Environmental Quality (ADEQ)
RFQ response for the Arkansas
Energy Performance (AEP)
Program*

11. Cost and Pricing

11a. Investment Grade Audit (IGA) Costs

Please describe your company's approach to IGA Pricing. The IGA is an audit that fulfills the obligations outlined in Exhibit A of the AEO IGA Contract. All ESCOs in the AEPC Program are required to use the AEO-developed IGA costs in their competitive proposals to public entities, and in no case shall the prices in the table be exceeded. The cost for the IGA is based on cost per square foot and is intended to be the market rate for an IGA.

BG has reviewed and confirms our intent to utilize the AEPC Cost and Pricing Tool for EPCs with any Arkansas public entity. Further, we intend to follow the proposed basic cost per square foot for typical buildings in Arkansas.

IGA Pricing per SF	Under 250 k SF	250 - 500 k SF	501 k + SF
	\$0.20	\$0.18	\$0.15

If a specific project includes systems or facilities other than typical buildings (e.g. waste water treatment, baseball fields, pools, street lighting, etc.), the ESCO may provide estimated additional costs in its IGA pricing proposal. The public entity and selected ESCO will negotiate final costs prior to execution of the IGA and Project Proposal contract.

BG has a diverse history of IGA development for EPCs including "other than typical buildings." BG will engage in any negotiations prior to the IGA if we identify a need to provide additional costs in our IGA proposal.

11b. Fuel Escalation.

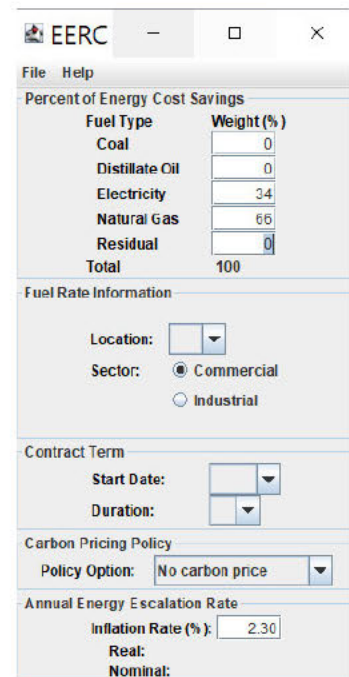
Please describe your company's approach to fuel escalation rates.

Per FEMPs report: *Guidance on Utility Rate Estimations and Weather Normalization in Performance Contracts*, published February 2019: For energy- or water-related expenses – such as those for expected operations and maintenance labor or repair and replacement parts – escalation of prices over the term of a performance contract may also be warranted. In these cases, in the absence of compelling evidence to the contrary, the long-term general inflation rate as forecast by the President's Council of Economic Advisers (CEA), as found in NIST's current EERC software⁵, is a logical escalator.

Reference:

The Energy Escalation Rate Calculator can be accessed through the below link:

<https://www.energy.gov/eere/femp/building-life-cycle-cost-programs>



11c. Equipment/Labor Cost Competition

Describe your company's process to solicit bids on equipment/labor or to ensure price/cost competition and the best value for the public entity.

Brewer-Garrett strives to provide our customers with seamless, cost effective design-build EPCs. BG's office and field tradesmen work together with the sole purpose of achieving the project team's goals. BG's engineering, estimating, and project management will coordinate and breakout the proposed work per trade and include detailed scope packages and project schedules to each bidder.

We will utilize existing subcontractor relationships in Arkansas, as well as seek out new firms to complete the work. For any project scope, BG looks to solicit a minimum of three responsible bids to ensure a best value cost/benefit decision can be made. We require that all of our bidders provide a detailed scope with their bid packages, and confirmation that they will be able to perform the work within the timeframe allocated in the master project schedule. Further, alongside a deep database of EPC pricing history, BG routinely creates estimates for project scopes that will not be self-performed to have benchmarks for all incoming bids.

Finally, these scopes are reviewed internally by a Project Executive and Senior Project Manager, who are responsible for coordinating and scheduling all of the individual project scopes of work. This process ensures that the appropriate subcontractors have been selected to execute the work and that all aspects of the work have been covered. The project scopes, bid out and coordinated by BG, will be done in collaboration with the site-specific stakeholders.

11d. Open Book Pricing

Open book pricing is full disclosure by the contractor to the public entity and AEO of all costs and markups for materials, labor, and services received during the project development, implementation, construction, and performance period phases. Open book pricing requires that all costs, including itemized costs of subcontractors and vendors, are fully disclosed if requested by the public entity at any time during a project, not just at the closing of the project. Describe your company's approach to open book pricing and its method for maintaining cost accounting records on authorized work performed under actual costs for labor and material, or other basis requiring accounting records.

It is Brewer-Garrett's intent to deploy its vast engineering and construction resources as required to develop any EPC. Throughout this process, an "open book" pricing scenario will be utilized to offer the level of transparency that many institutions have come to expect in this type of project. As the scope is finalized, BG would establish a GMP for the project in its entirety. Once established, BG would solicit competitive bids for all major equipment and any labor components not self-performed, with BG being responsible for the delivering the required professional services (i.e. engineering, project management, controls, etc.) at a proposed lump sum price indicated in a given proposal. After applying an indicated overhead and profit, final numbers would be reconciled against the GMP, with BG being responsible for any overages while Participating Owner maintains any achieved savings. The overall benefit to the client is that any overages that occur would be the responsibility of BG with the client never paying more than the established GMP. This open book competitive strategy ensures that an AEPC participant receives the highest achievable return on its investment.

On an agreed upon basis throughout the construction phase, we will submit a Status Report to the Participating Owner for review and informational purposes. This report will include an executive summary, an updated cost status report, the current schedule, a critical decisions report, a listing of other project issues, and a description of major accomplishments. Any invoicing for equipment/material, as well as certified payroll for all labor activities, will be submitted with monthly pay applications to ensure transparency in documentation.

Finally, all documentation for the project will be maintained by a BG team member to manage an indexed digital system that allows project documents to be readily retrievable. The organization of project documentation is essential to tracking project commitments and deliverables, and serves as a permanent, auditable record. Distribution lists will be reviewed with stakeholders to determine the appropriate person(s) for distribution.

11e. Project Cost and Pricing Elements

Once the public entity has selected a project scope, estimated project costs and open-book pricing elements will be negotiated and become part of the final EPC proposal and contract. The pricing table format to be used is provided as the AEPC Cost & Pricing Tool.

For the purposes of the IGA contract, an ESCO may provide estimated cost percentage ranges for each of the elements. Once the IGA is completed and final scope is developed, the ESCO will provide true costs and for which each category must fall within the proposed percentage range. ESCOs agree to use the cost and pricing values when developing a final IGA and EPC Project Proposal.

Brewer-Garrett has reviewed and confirms our intent to utilize the AEPC Cost and Pricing Tool for EPCs with any Arkansas public entity.



Attachment 1: State of Arkansas Contractor's License

*Arkansas Department of
Environmental Quality (ADEQ)
RFQ response for the Arkansas
Energy Performance (AEP)
Program*

Attachment 1

Please see below for BG's signed affidavit verifying the status of our temporary contractor's license for the State of Arkansas.

AFFIDAVIT

For Corporation, LLC, LP, LLP, Partnership or Sole Proprietorship

I, Louis G. Joseph, being duly sworn/affirmed, state under oath:
(Name of Owner/Officer/Member/Partner/Sole Proprietorship)

That I am President/CEO of The Brewer-Garrett Company;
(Position held) (Company Name, if applicable)

Further, that the foregoing statement of experience and all statements contained within this application, including attachments are true and correct; Further, that I am familiar with the books and records of the above mentioned company showing its financial condition; that the financial statement(s) and any accompanying financial data attached hereto (or submitted separately) are taken from the books and records of said company and form a true and accurate statement of the financial condition of said company as of the date shown; Further, that the foregoing statements of experience and financial condition are submitted to the Contractors Licensing Board or the Residential Contractors Committee for the express purpose of inducing the Board or Committee to license the applicant as a contractor in the State of Arkansas, and that any depository, vendor or state agency is hereby authorized to supply such Board or Committee with any information necessary to verify these statements. Any agency of the State of Arkansas is authorized to release to the Contractors Licensing Board, or its representative, or the Residential Contractors Committee, or its representative, any information necessary to show proper compliance with A.C.A. § 17-25-101 et seq., or A.C.A. § 17-25-501 et seq., including the obtaining and reviewing of a criminal background check.


(Signature of Owner/Officer/Member/Partner/Sole Proprietorship)

State of Ohio

County of Cuyahoga

Acknowledged before me, this 5th day of October, 2020.

My Commission expires: July 31, 2025


(Notary Public Signature) & notary stamp



DEBRA M. LESAR
Notary Public
State of Ohio
My Comm. Expires
July 31, 2025

Effective Date 11/2019 (Temp Comm App)

4.



Brewer-Garrett

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