

Arkansas Dept. of Environmental Quality Arkansas Energy Office

Arkansas Energy Performance Contracting Program Statement of Qualifications

NORTH LITTLE ROCK, ARKANSAS

Сору





ENVIRONMENTAL QUALITY





September 27, 2019

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

Re: Statements of Qualifications for the Arkansas Energy Performance Contracting Program

Dear Mr. Howland,

McKinstry Essention, LLC (McKinstry) is pleased to present our Statement of Qualifications for the Arkansas Energy Performance Contracting Program. We are excited about the opportunity to continue our participation in your program and we're confident our response substantiates our ability to continue to serve as a thorough and professional energy services partner to you and your agencies and as a committed member to the Arkansas Energy Office (AEO) in the development and fostering of the AEPC Program.

ABOUT MCKINSTRY

Established in 1960 as a mechanical contractor, McKinstry has evolved over the past 59 years into a clientcentric energy and facility services consulting and contracting firm, with 22 offices located in the South, Rocky Mountain, Pacific Northwest, and Midwest/Great Lakes regions.

Our best-in-class engineering, mechanical design, construction management, energy services, commissioning, and technical services capabilities enable us to self-perform much of the work, ensuring superior quality and value without excess markups or project cost escalation. Our goal is to deliver a superior program for you and Arkansas agencies across the state—on time and under budget.

It is our commitment to work tirelessly with the AEO and all Agencies to implement timely and seamless programs that will exceed their financial, facility, infrastructure, and operational objectives. Please feel free to contact us should you have any questions.

Sincerely,

Skip Woessner Arkansas Business Unit Manager 501.232.8871 | skipw@mckinstry.com

Michael Grabham Vice President and Principal Authorized Signature Authority



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ELECTRONIC SUBMISSION ON FLASH DRIVE:

SAMPLE INVESTMENT GRADE AUDIT REPORT REDACTED COPY OF SOQ FOR PUBLIC RELEASE

PLEASE NOTE THAT THIS RESPONSE PROVIDES THE BASIC ECONOMIC TERMS ON WHICH MCKINSTRY WOULD BE WILLING TO PERFORM THE SCOPE OF SERVICES OUTLINED HERE. THIS RESPONSE DOES NOT COVER ALL OF THE TERMS AND CONDITIONS RELEVANT TO A DEFINITIVE AGREEMENT ABOUT THESE SERVICES. NOTHING IN THIS RESPONSE APPROVES LEGAL TERMS SUCH AS WARRANTIES, INDEMNIFICATION, INSURANCE REQUIREMENTS, AND LIMITATIONS OF LIABILITY, EVEN IF THOSE TERMS WERE INCLUDED IN THE REQUEST FOR PROPOSAL. THE DETAILS OF THOSE TERMS MUST BE NEGOTIATED BY THE PARTIES AND SET FORTH IN A DEFINITIVE AGREEMENT WITH RESPECT TO MCKINSTRY'S SERVICES.







Submit an Executive Summary providing a brief overview of your company's proposal to be accepted as a pre-qualified ESCO in the AEPC Program:

1. AEPC Program Rules Manual Commitment of Compliance

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.)

McKinstry Essention LLC (McKinstry) has reviewed the available Arkansas Energy Performance Contracting (AEPC) Program documents and has had conversations with the Arkansas Energy Office (AEO) team. We agree to comply with the policies, procedures and rules as outlined in the AEPC Program Rules Manual and will work diligently with the Arkansas Energy Office and Arkansas Agencies, meeting all of the responsibilities outlined in the AEPC Program Rules Manual of a pre-qualified ESCO.

2. Minimum Qualifications

Summarize how your firm meets the minimum qualifications, stated in Part 1, Section 5.

As a pre-qualified and certified ESCO, McKinstry will meet the requirements set forth in the AEPC Program guidelines as amended by the Guaranteed Energy Cost Savings Act of 2013, Local Government Energy Efficiency Project Bond Act of 2015, and Act 507 of 2019.

✓ (A) Is properly licensed in the State of Arkansas.

Yes; McKinstry Essention, LLC is authorized to conduct business in the State of Arkansas. Our State of Arkansas Contractor's License number is

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

Yes; we were originally pre-qualified as an ESCO with the Arkansas Energy Office in 2014.

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

Yes; McKinstry Essention, LLC's core business is the design, implementation, measurement, verification, and installation of energy cost savings measures.

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

Yes; we have 19 years of experience providing analysis, design, implementation, installation, measurement, and verification of energy efficiency and facility improvements that include state agencies, higher education, and K-12 clients.

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

Yes; we regularly arrange and/or provide the necessary financing to support a guaranteed energy cost savings contract for our projects.



 (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.

Yes; we regularly perform under a contract that requires the person or business to guarantee the work performed by one (1) or more subcontractors.

3. Enhancing the AEPC Program

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

Every energy services company (ESCO) offers a similar range of services—auditing, programming, project management, training, and measurement and verification—it is the firm's ideology and experience that set it apart. What McKinstry brings to the AEPC Program first and foremost is that we will continue to be a strong partner with the AEO in the full execution of the AEPC Program. Not only is our staff driven to design and execute the best technical solutions while being exceptionally mindful of our clients' individual energy, operational, and financial goals and constraints, but we will provide excellent public relations, industry outreach, and mentoring for the AEO and the Agencies we have the opportunity to serve. We build long-term relationships with our clients; we are not a company that just performs an energy project and then disappears. We go the extra mile to come to a deep understanding of our clients' wants, needs, and desires, and we stay connected to ensure these goals are met.

The Arkansas Department of Environmental Quality's Energy Office was proud to partner with Sebastian County and McKinstry on a well-designed and executed project to provide much-needed infrastructure and energy efficiency improvements. We believe this project is both an economic development tool and a model for forward-thinking cities and counties across the state."

> Mitchell Simpson, Associate Director Arkansas Energy Office

We are not focused on piecemeal projects; we first understand your vision and environmental goals and use this information to direct our efforts in each facility. We use a systems-based approach—understanding not just what the equipment does, but also maintenance and operations practices, how the overall building systems are working together, and the environmental and economic performance relative to similar facilities. Our facility management experience enables us to assess a building/campuses' current operating condition and make recommendations that optimize operational savings based on the current or expected use of the facility.

Our experience will be a great asset to Arkansas clients; we have nearly 60 years of experience delivering performance-based design, engineering, delivery, operation, and maintenance of the built environment. We help customers develop, fund, and implement comprehensive and personalized solutions. We put our client's interests first and invite them to be actively involved in planning and overseeing the work we perform.

McKinstry's success is the natural consequence of our commitment to innovation, our long-term relationships with our clients, our focus on supporting our employees, our unique delivery, and our unwavering commitment to creating buildings and systems that are good to their owners, occupants, and the environment. Founded 59 years ago, McKinstry has grown to offer a comprehensive range of core competencies for clients throughout the United States. The following highlight our strong position as a provider of facility solutions:



- FULL SUITE OF SOLUTIONS—We can help you with your facilities, from new construction to retrofits, sustainability planning, commissioning, energy management and monitoring, and much more.
- FLEXIBLE AND COLLABORATIVE—Our flexible teams develop and implement projects at your pace with your needs in mind. We believe that open, frequent communication is good for everyone during the course of a project, and we establish protocols to ensure this goal is achieved.
- INNOVATIVE DESIGN—We are always striving for ways to better serve our clients through innovation. McKinstry can design, estimate, and perform all phases of an energy conservation project and we have designed and installed creative and renewable solutions such as waste heat recovery systems, solar thermal and solar photovoltaic systems, geothermal, wind turbines, biomass heat and co-generation.
- LONG-TERM—We are a privately held company, allowing us to develop long-term strategies that are good for our people and good for our clients, and not simply chasing after profits for stockholders. We realize that opportunities arise from the relationship we build with our clients and not the other way around.

OUR SERVICES

- ENERGY AUDITING—McKinstry's philosophy related to site auditing is to leave no stone unturned. We know our clients hire us to find energy savings opportunities and our audits are comprehensive, detailed, and creative. Our engineering-based approach to auditing, coupled with extensive site investigations and interviews, will generate recommendations that meet all of your financial, facility, and operational objectives.
- GUARANTEED PERFORMANCE CONTRACTING—McKinstry will guarantee up to 100% of energy savings on applicable scopes of work. We provide staff training and proper commissioning of systems to ensure savings are achieved year after year. We develop a measurement and verification performance assurance program to validate that optimal system performance is maintained.
- CONSTRUCTION MANAGEMENT—McKinstry serves as the prime contractor, responsible for all facets of successful project delivery and execution. We have a dedicated in-house, South-based construction management team that includes construction managers, site superintendents, and project engineers.
- COMMISSIONING AND RE/RETRO-COMMISSIONING—Our competency includes system balancing, control system testing, and digital archiving of building design and performance data, all focused on operational stability for either new construction or in existing buildings and facilities that can benefit from re/retro-commissioning.
- SUSTAINABILITY CONSULTING—McKinstry's team of experts help our clients navigate through all phases
 of sustainability planning and support, greenhouse gas inventories, climate action plans and/or
 providing technical assistance with LEED[®] and ENERGY STAR certifications.
- BEHAVIORAL ENGAGEMENT AND AWARENESS—McKinstry's behavioral engagement program, powerED, is a behavior-focused, energy awareness, and operational efficiency programs designed to reduce operational costs, increase efficiency, and promote environmentally friendly operations in educational and local government facilities.



- FACILITY CONDITIONS ASSESSMENTS—McKinstry's facility condition assessments provide an in-depth facility audit and report on the current conditions of an entity's building structure, systems, and equipment along with recommendations for repair and replacement priorities. This is a unique ESCO offering that can be combined with the traditional investment grade audit to dig even deeper into buildings.
- ACTIVE ENERGY MANAGEMENT—Active Energy Management (AEM) provides best in class services by analyzing and reporting through a combination of energy analytics software and our in-house commissioning team. This combination of software and "boots-on-the-ground" engineers allows for tracking of performance-related issues and providing immediate diagnostics and corrective action to building performance issues.
- FINANCIAL AND FUNDING—Our financial support team, McKinstry Capital, will work to identify the best, budget-neutral funding solutions from their access to multiple streams of capital on an entity's behalf. Our financing specialists will seek out any available grants, rebates, incentives, or in-kind donations available for your energy projects. We can provide bond campaign support through budgeting and public awareness campaigns and have local support for identifying and helping to generate project funds through grants and utility rebates and incentives.

OUR PEOPLE

Our people have a wealth of experience in the built environment and understand all facets of facility and systems design, construction, and operation. We leverage this experience for your benefit. Continual training and a focus on innovation differentiates McKinstry and our employees from others in our industry. At our foundation, we are an honest company with honest people from top to bottom who take pride in delivering exceptional results.

OUR CUSTOMERS

Our clients are a combination of public and private organizations that have collaborated with us to reduce their annual utility costs, upgrade aging infrastructures, and implement sustainable energy solutions at their facilities. Projects have ranged in size from \$100,000 - \$20,000,000 and include significant energy savings and utility rebates. Our customers consistently report that our projects meet or exceed their expectations in terms of

innovation, quality, and realized savings. We provide our services across all markets. We are not a transaction-based company. We focus first on developing long-term relationships with our clients, realizing that opportunities arise from those relationships and not the other way around.

IN THE SOUTH

In 2007, McKinstry opened our first South Regional office in Dallas, Texas. Our growth in the region led us to open an office in Little Rock, Arkansas and additional Texas offices in San Antonio, Austin, and Houston. These improvements will not only help our County stretch energy dollars, they will provide a more comfortable environment for all Maverick County residents. The fact that these improvements will come at zero cost to taxpayers makes us even more proud to partner with McKinstry to develop efficient and cost-effective solutions for our community."

> Judge David Saucedo Maverick County



Our South team has recently completed more than 100 performance contracts representing a total value of over \$200 million. Our local staff consists of energy professionals with significant energy services expertise. Key team members have been providing energy efficiency, conservation consulting and contracting, and commissioning/retro-commissioning services for more than 20 years. We know how to support our clients through design, build, and commissioning of projects. Additionally, our team members are knowledgeable in meeting the requirements of the Arkansas Code Requirement and are very adept at identifying local grants, incentives, rebates, and low-interest loans to implement the work.

- LOCAL STAFF—We staff our Arkansas/South region projects with local residents. We have a large dedicated staff of facility and engineering professionals in the region. We do this based on our belief that it creates community connections, long-term relationships with our clients, career opportunities for our staff, and overall better, more cost effective projects for our clients.
- LOCAL CONTRACTORS AND MINORITY BUSINESS PARTICIPATION—We believe in using qualified, local
 contractors on our projects. We conduct structured outreach programs for both local contracting and
 minority participation in the communities we work in. This keeps dollars in the communities where we
 work and live, fosters civic pride within our communities, and helps educate and train the workforce on
 energy improvements in the built environment.
- FEDERAL AND STATE GRANT AND INCENTIVE EXPERIENCE— Helping our clients find excellent funding and financing solutions is part of what we do best. Since 2009, we have helped our South region clients to receive and manage more than \$37 million in grant funding, rebates/incentives, and very low-interest federal financing.

COMPLIANCE WITH THE STATE AEPC PROGRAM

McKinstry is a client-centric company. We understand the importance of working within our client's framework for an energy performance contracting program and are firmly committed to working within the State's policies, procedures, and rules for its AEPC Program. We have successfully worked with many State organizations to drive significant energy savings for participants through such programs and bring the same commitment to quality, adherence to program specifications, and willingness to work under the rules and guidelines of the AEPC as we have brought to state programs like those in Colorado, Oregon, Washington, Wyoming, Utah, Idaho, Arizona, and the like.

4. Permission for AEO to Share McKinstry SOQ

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.

We acknowledge and accept that this statement of qualifications will be shared publicly and may be used by State Agencies and public organizations to help them determine which ESCO will be their partner in an AEPC Program. As a privately-held company, we do not share all of our information submitted to the State through this Qualification process with the public at large. Our submission of this response serves as our permission for the publication of the redacted version of this statement of qualifications electronically or online.



Summary

In summary, we provide excellent value, innovation, and guaranteed results. We are very excited about our continued participation in the AEPC Program and are confident you will find our statement of qualifications substantiates our ability to deliver high-integrity projects with unparalleled benchmarks for performance, quality, transparency, and service. We are prepared to mobilize a highly-skilled project development team in preparation for each project and look forward to partnering with AEPC Program clients to plan, develop, and implement seamless programs that exceed your clients' sustainability, financial, facility, operational, and financial objectives.







2a. History and Focus of Company

Describe the history and focus of the company, including: a) Structure and evolution of the firm;

MCKINSTRY STRUCTURE AND EVOLUTION

McKinstry advocates collaborative and sustainable solutions that create high performance buildings designed to ensure occupant comfort, improve system efficiency, reduce facility operational costs and ultimately optimize your operation...*For the Life of Your Building*.

McKinstry Co., LLC was founded in 1960 as a plumbing and piping contractor. As the business developed and the customer-base expanded, the company's founders took a systems-based approach to operate and maintain a complex mechanical and electrical infrastructure. McKinstry Co., LLC began expanding plumbing and piping services to eventually include sheet metal (HVAC), fire protection, temperature and fire/life safety controls, electrical, data services, audio/visual and architectural metals.



In 2000, McKinstry Co. began offering energy performance contracting (EPC) services, eventually transitioning that business line to an affiliated company,

McKinstry Essention. The two companies enjoy a close affiliation that allows us to offer an unmatched suite of services. Today, McKinstry Essention, LLC is not only a leader in EPC, but also offers additional services such as design and energy engineering, commissioning and retro-commissioning, measurement and verification, warranty and issue management, utility bill tracking, and behavior-based energy savings programs to meet all of a client's facility needs. We are the single point of accountability for our customers.

McKinstry Essention began expanding in 2007, we established offices in Texas, Colorado, Minnesota, and Wisconsin, and into Montana in 2008. Since 2010, we added offices in, Arkansas, Arizona, Illinois, Missouri, and Utah. Today, the McKinstry family of companies has 22 offices and more than 2,000 employees across the United States.

b) Number of years in energy-efficiency related business; and

NUMBER OF YEARS IN ENERGY EFFICIENCY BUSINESS

The McKinstry family of companies has been operating since 1960, and the dedicated energy services division—McKinstry Essention, LLC—has been operating since 2000.

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.

FIVE YEAR PERFORMANCE CONTRACTING HISTORY

2014	2015	2016	2017	2018

McKinstry performs approximately the same amount of EPCs both under and over \$1 million.



2b. Industry Accreditations and Memberships

Provide information on any accreditations and/or memberships in any industry organizations (e.g. Arkansas Advanced Energy Association (AAEA), Energy Services Coalition (ESC), National Association of Energy Service Companies (NAESCO).

ACCREDITATIONS AND PRE-QUALIFICATIONS

McKinstry has many accreditations and pre-qualifications that speak to our credibility and ability to deliver a full range of energy services:

- Pre-qualified ESCO with the Arkansas Energy Office since 2014
- One of 16 firms originally selected by the Department of Energy in 2008 for the designation of Super Federal Energy Services Company, which pre-approves firms to perform Federal energy services projects: 2008 DOE IDIQ ESPC Energy Services Company | Contract DE-AM36-09G029038
- U.S. General Services Administration (GSA) Pre-Approved Provider of Energy & Facility Services through the 03 FAC Schedule
- National Association of Energy Service Companies (NAESCO) Accredited ESCO firm, signifying our technical and managerial competence to provide a full range of energy services to develop comprehensive energy efficiency projects





• Pre-qualified in numerous states:



INDUSTRY MEMBERSHIPS

McKinstry belongs to a number of organizations that are in direct relation to our business. In many of these organizations McKinstry takes a leadership role on executive committees and boards. These affiliations across engineering, construction and maintenance organizations provide constant visibility into what is happening with laws and regulations in the industry. We are members of almost all major industry organizations and stay informed of the latest changes and industry trends, including legislation.

McKinstry has been a member of the Arkansas Advanced Energy Association (AAEA) since 2014. The AAEA is the business voice for advanced energy in Arkansas. AAEA and McKinstry are dedicated to growing Arkansas' economy through expanded utilization of advanced energy technologies. We look forward to continuing to have an active role in promoting the AEPC Program.





McKinstry is a long-term member of the Energy Services Coalition (ESC). The ESC has played an important role in supporting and facilitating the development and implementation of energy savings performance contracting programs throughout the country. McKinstry employees provide leadership and participate in state sponsored committees that work to make improvements in state legislation, energy efficiency guidelines, and the delivery of Energy Performance Contracting.



Following is a sampling of the industry organizations McKinstry participates in or is a member of:



Associated General Contractors – <u>http://www.agc.org/</u>



American Society of Heating, Refrigerating, and Air Conditioning Engineers - <u>http://www.ashrae.org</u>



The American Society of Mechanical Engineers — http://www.asme.org/



The American Society of Safety Engineers — http://www.asse.org/



Building Owners and Managers Association — http://www.boma.org/



International Facility Management Association - http://www.ifma.org/



Institute for Supply Management — http://www.ism.ws/



Mechanical Contractors Association of America — http://www.mcaa.org/



National Association of Energy Services Companies - <u>https://www.naesco.org/</u>



National Association of Industrial and Office Properties — http://www.naiop.org/



National Association of Women in Construction — <u>http://www.nawic.org/</u>



National Fire Sprinkler Association, Inc. — http://www.nfsa.org/



Sheet Metal and Air Conditioning Contractors National Association — http://www.smacna.org/





Design Build Institute of America — <u>http://www.dbia.org/</u>



As well as:

- 7x24 Exchange
- AEE (Association of Energy Engineers)
- AIC (American Institute of Constructors)
- APEM (Association of Professional Energy Managers)
- ASPE (American Society of Plumbing Engineers)
- CFMA (Construction Financial Management Association)

- ESC (Energy Services Coalition)
- IEEE (Institute of Electronic, Electrical Engineers)
- MCA (Mechanical Contractors Association)
- MCIE peer group (8 similar companies across the US who perform similar work and compare best practices)
- NECA (Electrical Contractors Association)
- NETA (International Electrical Testing Association)







3a. Project Management and Staffing

ORGANIZATIONAL STRUCTURE

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





ROLES AND RESPONSIBILITIES

Role	Responsibilities
Project Director	Serves as your single point of accountability for assigned projects across project development and construction. Owns the project from inception to 100% completion. Determines staffing needs and assigns staff as required. Assists with energy conservation measure qualification. Responsible for managing project budgets. Participates in AEPC marketing and PR.
Financing and Grant Funding Specialist	Responsible for all aspects of project funding to include coordination with client for traditional lease-purchase arrangements and any available grants or alternative funding including State, Local, Federal and foundation grants & other applicable sources. Coordinates with energy engineers on utility rebate analysis/application. Works with local economic development officials and small businesses to investigate opportunities for partnering and/or leasing of space.
Corporate Support	Provides corporate support and project oversight/review.
Project Development Program Manager	Manages the overall project development phase. Responsible to the project director to produce projects that meet the criteria for implementation. Also, responsible to provide day-to-day strategy guidance for all team members during the development phase.
Senior Energy Engineers	Directs all energy engineering activities including building and systems analysis, FIM development, design-assist services for energy systems and coordination of the building modeling process and development. Performs utility data analysis, auditing and assists with field data gathering.
Design and Energy Engineers/Project Engineer	Provides design services including developing detailed mechanical, electrical and plumbing drawings & specifications. Designs systems based on existing field conditions, overlaying code requirements (as applicable) for select facilities included in the Investment Grade Audit.
Renewable Energy Development	Provides renewable deployment strategy, design, financing, and utility interface.
Construction Manager	Responsible for all construction management functions with may include hiring and managing subcontractors. Manages project budget and critical path schedule. Responsible for all project-related contractual documents. Provides document management support. Assists with subcontractor coordination and project coordination.
Commissioning Engineer	Responsibilities include implementing commissioning activities, and training Agency staff on new equipment and systems.
Performance Assurance Specialist	Responsible for measurement and verification and related reporting duties.
Site Superintendent	Responsible for onsite supervision and coordination of all trades and subcontractors' field activities.



PROJECT RESPONSIBILITY

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.

The following table includes our pool of energy personnel who will potentially be assigned to each phase of AEO projects. With more than 40 South region energy professionals, and an abundance of additional out-of-state resources, we have included a representative group of our personnel who will be assigned to Arkansas EPC projects. We can provide back-up and specialty expertise through other branch offices, and if necessary, through subconsultants; these people will be identified on a project-by-project basis if the need arises.

Resumes for our primary **key** personnel are included in *Appendix A*. Tailored, market-specific resumes will be provided to clients as required for specific projects.

Name	Title	Staff/ Sub	Potential Role	Academic/Professional Qualifications	Level of Expertise	Base Location



Name	Title	Staff/ Sub	Potential Role	Academic/Professional Qualifications	Level of Expertise	Base Location



Name	Title	Staff/ Sub	Potential Role	Academic/Professional Qualifications	Level of Expertise	Base Location



Name	Title	Staff/ Sub	Potential Role	Academic/Professional Qualifications	Level of Expertise	Base Location



Name	Title	Staff/ Sub	Potential Role	Academic/Professional Qualifications	Level of Expertise	Base Location



APPROACH TO SUBCONTRACTING

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.

McKinstry typically self-performs all aspects of the audit phase including engineering, design, and development of each project. For construction, we have construction mangers, site superintendents, project engineers, and commissioning engineers all in-house in the South region. Our in-house experts will provide all guidance and the construction documents for the build effort. For construction, we believe in and will focus on using qualified, local firms to build/renovate the facility and subcontract out this work. This is important as it grows the Arkansas's economy and keeps the work in the local contractor community. McKinstry will actively manage the construction process with all the selected contractors. Below is a quick-reference of self-performed vs. subcontracted work.

Service	Self-Perform	Subcontract
Facility Condition Assessments	\checkmark	
Energy Auditing	√	
Energy Savings Guarantees	√	
Financing	√	√
Utility Rebates & Incentives	\checkmark	
Design	\checkmark	\checkmark
Procurement/Supply	√	
Engineering	√	\checkmark
General Contracting	√	
Active Energy Management	\checkmark	
Equipment Acceptance Testing	\checkmark	\checkmark
Training	√	√
Measurement and Verification	√	
Remote Monitoring	√	
Web-Based Project Management	\checkmark	
Construction Management/Administration	\checkmark	
Project Stabilization	√	
Equipment Installation		√
Commissioning/Retro-Commissioning	√	
Renewables Design	\checkmark	\checkmark
Renewables Install		\checkmark
Lighting Design	\checkmark	\checkmark



Service	Self-Perform	Subcontract
Lighting Install/Retrofit		\checkmark
HVAC Install/Retrofit		\checkmark
Controls Install/Retrofit		\checkmark
Water Conservation Install/Retrofit		\checkmark
AMR/AMI and Metering Install/Retrofit		\checkmark
Behavior Modification Program	\checkmark	
Testing and Balancing	\checkmark	\checkmark
Warranty Services	\checkmark	\checkmark
Maintenance	\checkmark	\checkmark
Systems Operations, Post-Installation	\checkmark	

3b. Arkansas State Construction Requirement

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

McKinstry is a large and well-managed company with dedicated resources to support our compliance with State and local licensing and labor requirements. We apply for the appropriate licensing as required by a project. Our approach is to identify and work with each local entity as we are selected for a project and ensure that we are in compliance with all appropriate licensing and labor standards and requirements.

We responsibly work to comply with prevailing wage and labor requirements and have successfully met the requirements for multiple other state and federal programs similar to the AEPC Program. We work closely with local subcontractors to ensure that they, too, are in compliance and that we report to the Agency as needed.

McKinstry does not enter a new market lightly. We consider Arkansas to be important to our future, worthy of our continued, significant investment and will work diligently to build a thriving business in Arkansas, with local staff and subcontractors, backed by McKinstry's full corporate support. We are registered with the Arkansas Secretary of State as authorized to conduct business in the State of Arkansas, and our State of Arkansas Contractor's License number is 0349210520.







Company Financial Status

4. Company Financial Status

4a. Financial Soundness and Profitability

Describe the history and focus of the company, including:

FINANCIAL SOUNDNESS

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

McKinstry is financially strong with no long-term debt, and we are privately held with all owners directly involved in day-today operations.

We have a history of financial stability and the capacity to perform the work we pursue and assume the liability of a long-term Energy Savings Guarantee to meet project needs for the life of any EPC project. We manage our volume and backlog to ensure we have the resources and staff to deliver all phases of each project on time.

PROFITABILITY

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

Over our 59-year history, McKinstry has been profitable every year save one, which speaks to our ability to guarantee project costs and savings over the long term. Please refer to our letters in *Appendix B* for supporting documentation.

FINANCIAL REPORT

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.

McKinstry prepares its own financial statements. We have our statements audited each year for third party review. Our accountant is James K. Darragh, CPA, Shareholder, and you may contact him for any direct questions in this regard.

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Clark Nuber Co., PS | 10900 NE Fourth St., Suite 1700 | Bellevue, WA 98004 | 425.454.4919
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In response to the above-stated inquiries regarding McKinstry's financial health, please refer to *Appendix B* for a letter from Joseph Hagar, McKinstry CFO, an Independent Auditors' Report by Clark Nuber demonstrating a third-party review of McKinstry's financial statements, and a letter from our banking partner demonstrating our financial strength.

Financial reports are also included with this response, electronically (*password protected*; *password sent to Chet Howland*). As a privately-held company, we do not provide permission for our financial reports to be shared publicly.



4. Company Financial Status

4b. Bonding

Include responses to the following:

- a) Current bonding rating (maximum project size firm can bond)
- *b) Current bonding capacity*
- c) Amount or percentage of bonding capacity currently obligated
- d) Current bonding rate
- e) Confirmation that the company is bondable for 100% of a payment bond on a project
- f) Confirmation that the company is bondable for 100% of a performance bond on a project
- g) Letter from a licensed surety as evidence of ability to bond for payment and performance

Please see the letter from our licensed surety company, CNA, in *Appendix C* for bonding ratings, capacity, and utilization.

McKinstry can provide a payment or a performance bond for any phase of work, if required. Our premium rates are some of the lowest in the industry and would be based on the construction contract amount.







Marketing Approach

5. Marketing Approach

Approach to Promoting and Marketing AEPC Program

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.

McKinstry is very excited about continuing our maturing and committed energy performance contracting services for the State of Arkansas. We are further impressed with the approach the AEO is taking to promote energy performance contracting services through the AEPC Program to public entities in Arkansas. We are a member of the Arkansas Advanced Energy Association (AAEA) with an active role in promoting the AEPC Program and look forward to the opportunity to continue working with the AEO to market the AEPC Program. We will be available to participate in any and all joint marketing efforts at the request of the AEO and will continue to meet the responsibilities of a Pre-qualified ESCO including, but not limited to, the areas discussed below.





COMMUNICATION AND REPUTATION REQUIREMENTS

- Practice and uphold the highest levels of ethical and industry standards in all matters under this Program, thereby establishing the positive reputation of the Program.
- Commit to proactively maintaining good working relationships with AEO and its Agencies to build a successful Program.
- Work to minimize conflict and misunderstandings by actively communicating with AEO if problems arise.

ACTIVITY REQUIREMENTS

• At the end of each year of the performance period, develop an AEPC Case Story for the project for marketing purposes. Include high-resolution photos, quotes, benefits, costs and savings for print, presentation and online marketing purposes.

PROJECT METRICS AND MARKETING REPORTING REQUIREMENTS

- Submit an AEPC Project Metrics and Marketing Report as data is initially available and updated when:
 - Contracts are signed
 - Amendments are signed
 - EPC work is accepted
 - Measurement and verification work begins and ends
 - End of each reporting period is reached
 - Additional information is requested by AEO



5. Marketing Approach

The McKinstry Arkansas team has developed a marketing plan for energy services in the State of Arkansas. This marketing plan includes the development of marketing toolkits for the specific target markets of State agency and higher education as well as schools, local government and hospitals when they participate in the AEPC Program. The toolkits will include specific energy efficiency statistical information pertinent to that particular vertical market (e.g., the impact of improved lighting on students' learning ability), information about the energy services that McKinstry's offers, and information about the energy performance contracting process in Arkansas and the collaborative partnership model between McKinstry and the AEO in implementing energy performance contracts. We envision a wide distribution of this information throughout the Arkansas marketplace with direct follow-up by our local Arkansas Business Development team. In addition, PowerPoint presentations that support the content of the toolkits will be developed for use at conferences and other events where it is appropriate to market the AEPC Program.

We also continue to attend trade shows and association conferences as a way to promote McKinstry's services and the AEPC Program in general. We envision participating in organization trade shows and conferences which are routinely attended by facilities management professionals. McKinstry would also like to participate with the AEO in their individual efforts to promote the AEPC Program.







Reporting Approach

Approach to Providing Contracts and Reports

Describe your firm's approach to providing signed copies of contracts and measurement and verification reports to AEO in a timely manner. In addition, describe how you will meet the requirements for providing project performance metrics, described in detail in the Program Manual.

McKinstry welcomes AEO participation during every step of the project. McKinstry will meet all of the responsibilities, requirements, and reporting dates as required in the AEPC Program Manual.

McKinstry has a dedicated Project Performance Monitoring Manager who tracks project performance monthly and presents results to all approved parties on a scheduled and non-scheduled basis. He also assists customers by providing insight into managing facility and system changes that may occur over time, as well as understanding the impact. Furthermore, he can assist with implementing additional operational strategies and technical modifications to increase energy savings. At the request of the client or the AEO, he will conduct training on how our off-the-shelf energy analysis software program works.

The AEO will be invited to all project development meetings, project kick-off meetings, and monthly project status meetings during project implementation. All major deliverables to the client (Investment Grade Audit, Project Proposal, Measurement & Verification Plan and Reports, etc.) will be provided to the AEO for review, comment, and acceptance using the AEPC standardized documents and processes as appropriate. Depending upon the final performance assurance plan developed with the client, the AEO will provide review of all measurement and verification reports (at the end of each reporting period if information is requested by AEO), and will be invited to all Project Performance Monitoring presentation meetings with the client.







Technical Approach

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. 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.

TYPICAL PROCESS: INVESTMENT GRADE AUDITS AND PERFORMANCE CONTRACTING

McKinstry's approach to the investment grade energy audit and performance contracting can be summarized in three words: *collaboration, flexibility, and transparency*. We believe first and foremost that successful energy performance contracting relationships hinge on a high degree of collaboration and communication with our clients. We are not just the vendor: the nature of energy performance contracting mandates that we are a long-term energy efficiency partner. For us to provide value, we must understand the client's vision, goals, preferences, and expectations. Throughout the development phase, we will work closely with the client to gather all the necessary information and develop a holistic program that meets everyone's needs, mitigates any concerns of decision-makers, as well as implements the desired improvements. We listen to client preferences for equipment and subcontractor choices and will work diligently on their behalf to implement the projects in the most effective and efficient manner possible. We do not manufacture any products or equipment and we have no hidden agenda; our only desired outcome is to implement a program that makes our clients proud of

your energy efficiency projects and their effect on their energy efficiency projects and their effect on residents, staff, students, and the environment.

McKinstry believes that dedicating the necessary time and effort up-front to establish the overall project goals will help direct the IGA and the follow-up project selection process for the client. As part of the eventual project selection process, the IGA involves a preliminary and then detailed audit phases as described below.

Preliminary Audit Phase

The preliminary phase of an IGA includes an audit kickoff meeting, facility data gathering, utility data analysis, rebate applications, site visits, and interviews. From the information gathered in these activities, McKinstry develops a preliminary list of potential energy conservation measures (ECMs) and facility improvement measures (FIMs) for client consideration. We then review the preliminary ECMs/FIMs with the client to determine which projects merit further consideration and analysis during the detailed audit phase.




Collaborative Vetting Process

It is important to note that McKinstry will customize our approach to best fit the needs of the client and their specific decision-making process. To that end and prior to beginning the IGA, McKinstry and the client's team will undergo a thorough vetting process to establish the overall goals for their EPC program. Together, we will define the parameters and objectives of the program, including the following categories:

- Financial criteria including payback/ROI goals, all available funding sources, fiscal deadlines, and project financing options and preferences.
- Client interests and objectives including ECM/FIM technology preferences (i.e., renewables, high efficiency systems for facilities, LED lighting, etc.), environmental, and other project-specific goals.
- Existing systems review including lighting, mechanical, HVAC, controls, water, fire protection, security, information technology, waste stream, hazardous, and others.
- Audit criteria including project timelines, existing facility information, deferred maintenance, available savings sources, utility data, and planned capital improvements among others.
- Construction criteria including project timeframes, bidding requirements, subcontractor preferences and vendor/product review, use of contingency and other special requirements.
- Other miscellaneous items for consideration.

Detailed Audit Phase

The purpose of the detailed audit phase is to fully investigate every measure on the Preliminary ECM/FIM List that has been retained after our collaborative decision-making process. The detailed audit phase includes the following tasks:

- 1. Datalogging/Detailed Energy Calculations
- 2. Subcontractor Pricing
- 3. Draft Investment Grade Audit Report Development
- 4. Final ECM/FIM Selection for the Performance Contract
- 5. Presentation of Detailed Audit Results

Datalogging/Measurements — Detailed Energy Calculations

During this phase, McKinstry will log equipment to verify operating parameters, run hours, etc. to refine our detailed energy calculations and develop the guaranteed savings amount for each ECM/FIM.

Subcontractor Pricing

To establish our lump sum price for each improvement measure, it is a McKinstry best practice to solicit subcontractor pricing in a competitive bid environment. McKinstry will develop detailed scopes of work and request for proposal (RFP) packages, conduct site walks, and receive subcontractor bid packages when appropriate. We will review these with the client and collaboratively choose subcontractors. We believe in and will focus on using qualified firms from the local community as well as surrounding communities to install the ECM/FIMs. This is important as it keeps the work and taxpayer dollars in the local community. McKinstry will actively manage the construction process with all selected contractors. With the volume of work that we currently procure across the region, we have built multiple relationships with excellent contractors.



Draft Investment Grade Audit (IGA) Report Development

McKinstry prepares a draft IGA report that provides an engineering and economic basis for negotiating a potential guaranteed energy performance contract (EPC). The report includes all data necessary to understand the proposed improvement measures, including detailed write-ups on each measure with energy savings calculations, scopes of work, cost estimates, proposed measurement and verification, and commissioning plans. We present this report to the client for review, comment, and modification.

Final ECM/FIM Selection for the Performance Contract

As part of the final IGA phase, McKinstry will work closely with the client team using a highly collaborative approach to the final project selection process. We use a structured and disciplined approach to develop and define high-potential ECM/FIMs for the program and then work with the client to evaluate the ECM/FIMs and assess priority rankings for each. In addition, McKinstry will perform a life cycle cost analysis of each ECM/FIM using our total cost of ownership (TCO) analysis to include a final extended lifecycle cost/benefit analysis. This serves as an additional screening tool. Based on the final quantitative (and, if any, qualitative) screening and ranking, McKinstry will recommend priority ECM/FIMs that in aggregate can be accomplished given estimated energy savings, energy production, forecasted available time, funding, and resource availability.

Presentation of Detailed Audit Results

McKinstry will then coordinate a detailed audit results presentation of our findings. These findings will become the basis for the development of an EPC project. As with the Kick-off Meeting and the Preliminary ECM/FIM Presentation Meeting, key decision makers should be present. It is appropriate at this point to present this information to key stakeholders so that any questions and concerns can be answered well before the project is approved. As part of this step, McKinstry will present a summary of ECM/FIM scopes of work in a summary table including recommended projects based on overall project goals.

The ECM/FIM summary table will typically include the following information for each ECM/FIM:

- Brief description
- Buildings associated with each ECM/FIM
- Construction cost
- Annual utility savings
- Estimated utility rebate
- Grant or capital contributions (if any)
- Net customer cost
- Net customer simple payback

The ECM/FIM summary table can be customized to include other categories such as annual CO_2 savings, annual maintenance savings, IGA fee, and any contingency dollars included in the project. After reviewing all projects investigated within the IGA, we come to an agreement on which ECM/FIMs to include in the final project development and proposal phase.

Project Development/Proposal Phase

The third phase in the IGA program is to develop the project(s) that form the basis for the energy performance contract. Proposed project development begins in the Detailed Audit Phase; and this final phase concentrates on refining details to bring the project to construction. Tasks included in this phase are:



- 1. Scope Refinement,
- 2. Financing Analysis,
- 3. Final Investment Grade Audit Report, and
- 4. Contract Development.

SAMPLE INVESTMENT GRADE AUDIT

A sample IGA for a recent EPC project, Howard County, is included in the electronic version of this proposal on the provided USB flash drive as a file titled *Sample IGA – Howard County*.

This audit was conducted by the following McKinstry team members who are all included in our personnel pool of individuals who will potentially be assigned responsibility for projects under the AEPC Program:

- Skip Woessner, Project Director
- Sharath Acharya, Operations Manager
- Denise Bullock, Energy Engineer

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.

We use a collaborative process to develop temperature, lighting, ventilation, and other categories associated with the standards of comfort, with ultimate direction residing with the client. The first step in this process is to research any operational standards the client already uses. We have found that many of our clients already have a detailed set of operational policies in place prior to involvement with McKinstry and the EPC program. To maintain consistency throughout client facilities, these operational policies typically form the backbone of the standards of comfort. McKinstry will then develop standards of comfort around applicable code requirements and recognized industry standards such as the Illuminating Engineer's Society of North America (IESNA), American Society of Heating, Refrigerating, and Air-Conditioning Engineers ASHRAE 55-2017 (including the adaptive comfort model for any portions of the building utilizing natural ventilation), and ASHRAE 62.1-2016.

McKinstry does not advocate negatively impacting the operation of facilities to achieve energy savings. Our clients are responsible for determining how they intend to operate their facilities. McKinstry will provide recommendations for minimizing energy consumption, but we believe our clients should make the decisions regarding comfort.



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.

KEY POINTS

- McKinstry's measure-specific energy baseline inputs reduce the impact of weather and facility use on M&V.
- When necessary, McKinstry uses intuitive and easy to follow methods to adjust for weather and facility use changes.



McKinstry will use the most recent edition of both the most current version of the International Performance Measurement and Verification Protocol (IPMVP) (EVO 10000 – 1:2016) and the Federal Energy Management Program's (FEMP) M&V Guidelines for specific ECMs to keep costs reasonable while still providing a high degree of accuracy.

When appropriate, McKinstry's measurement and verification strategy is to establish measure-specific baselines for each installed measure. We accomplish this by isolating and measuring only the energy related to the specific initiative. When a number of measures (i.e., lighting, controls systems, HVAC, plug load management, building envelope improvements, etc.) are installed at a single location, the energy savings become interrelated and we use IPMVP Option C to measure whole facility performance.

In general, the more detailed performance data that can be gathered relative to the specific measure (e.g., kW, run time, flow rates, temperatures, and equipment efficiencies), the more accurate a baseline we can develop. Therefore, to the extent that the project constraints will

allow, McKinstry will focus significant effort in collecting this data using data logging equipment. In addition, we will gather information from equipment logs, balancing reports, equipment specifications, and interviews with staff on the operation of the existing system. We will work with the client to ensure that any subjective information we gather is accurate and that we are all in agreement on any assumptions made.

At the beginning of the project, utility data is analyzed to provide an overall review at the buildings' energy use. Typically, two to three years' worth of utility data are entered into Utility Manager (UM) software. The UM software is used as a reliable storage database for basic reports and for secure Internet access to bill data. More in-depth reports are created by exporting specific pieces of data from the UM database into McKinstry's utility data analysis spreadsheet tool that incorporates heating degree day regression analysis, end use breakdown, occupancy, optimal benchmark targets, and current rate application. The utility analysis remains an important check of the energy savings, but as the project progresses, the focus shifts toward measure-specific baselines (i.e., based on real system operating parameters) with the utility bill baseline serving as a check and balance.

If a meter serves multiple buildings and no submeter data is available, the first method we employ is to assign a percentage of the meter to each building in the UM software—the percentage split is based on building square footage, operating hours, and use. This generally provides the accuracy necessary for a rough scope of the energy savings potential, and the measure-specific metering (described in the following paragraph) is put in place after the rough scoping stage. For certain ECM/FIMs, such as a full HVAC upgrade, building meter data might be required to establish the ECM/FIM baseline—in this case, McKinstry would either provide temporary logging (if possible) or we would work with the client to have a submeter installed.



McKinstry's first priority in developing initiatives for our customers is to ensure code compliance is maintained for the safety, health, and comfort of the occupants. In situations where the current operation of the system is not in compliance with current standards, McKinstry will bring the situation to the attention of the project team and may recommend a baseline adjustment. This modification to the baseline will represent what the energy consumption would have been had the existing situation been code compliant.

Energy cost savings are calculated utilizing the baseline analysis model with new input variables and logic to reflect the post-retrofit operation of the systems. The post-retrofit input variables are based on new equipment's performance specifications and the performance criteria that are specified for the new control system. The difference between the baseline energy consumption and the post retrofit energy consumption then becomes the target energy savings. Guaranteed savings levels are then set based on critical performance factors associated with the particular measure. All the baseline and savings calculations are available for review as part of the Energy Services proposal. A performance assurance plan is then developed outlining the methodology that will be used to measure and verify the savings for review and approval by the client.

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 of these factors are present. Include how the public entity is involved for agreement on any adjustments.

FACTORS AFFECTING SAVINGS PERFORMANCE

Many factors affect the performance of equipment and achievement of savings. Depending upon the scope of the savings determination (its boundaries), the range of parameters of concern can be very focused (specific ECMs/FIMs) or as wide as the whole facility. Parameters that are predictable and measurable can be used for routine adjustments. Such adjustments reduce the variability in reported savings and provide a greater degree of certainty in reported savings.

Unpredictable parameters within the boundaries of a savings determination may require future non-routine baseline adjustments (e.g., future increase in plug load). Unmeasured parameters give rise to savings fluctuations for which no adjustment can be computed, only estimated (e.g., air infiltration rate).

Therefore, when planning an M&V process, consideration should be given to:

- 1) Predictability,
- 2) Measurability, and
- 3) Likely impact of all plausible factors.



BASELINE ADJUSTMENTS

Where unexpected or one-time changes occur, they may require non-routine adjustments, normally called simply baseline adjustments. Examples of situations often needing baseline adjustments are:



- Changes in the amount of space being heated or air conditioned.
- Changes in the amount or use of equipment.
- Changes in environmental conditions (lighting levels, set-point temperatures, etc.) for the sake of standards compliance.
- Changes in occupancy, schedule or throughput.
- Significant changes to weather.

Baseline adjustments are not needed where:

- The variable is included in the mathematical model developed for the project.
- Changes affect a variable that was stipulated, as agreed to in advance, in the M&V Plan. For example, if the number of ton-hours of cooling were stipulated for a chiller efficiency ECM, an increase in the cooling ton-hours will not affect the savings determined by the agreed simplified method, though actual savings will change.
- Changes occur to equipment beyond the boundary of the savings determination. For example, if the boundary includes only the lighting system, for a lighting retrofit, addition of personal computers to the space will not affect the savings determination.

Base year conditions are well documented in the M&V Plan so that proper adjustments can be made. It is also important to have a method of tracking and reporting changes to these conditions. This tracking of conditions may be performed by one or more of the facility owners, the agent determining savings, or a third-party verifier.

It should be established in the M&V Plan who will track and report each condition recorded for the base year and what, if any, other aspects of facility operation will be monitored. Where the nature of future changes can be anticipated, methods for making the relevant non-routine.

As needed, McKinstry's energy engineers develop custom calculations for measures that do not fit the standard calculations. We also have a large library of custom calculations used on past projects that we can refer to as needed. McKinstry's approach is to use models, which include all the pertinent calculations and formulas.







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.

8a. Energy Systems in Buildings

CENTRAL PLANTS AND PACKAGED HEATNG AND AIR CONDITIONING

We can perform facility assessment, high efficiency central plant equipment upgrades, central system operation and maintenance optimization; DOE 2.2 modeling analysis of different optimized control sequences of boiler, chiller, and domestic hot water plants; custom spreadsheets for determining optimal condenser water temperature resets. Analysis of variable flow.

Packaged heating and air conditioning systems assessment, efficiency analysis, troubleshooting, design and installation of replacement and new systems.

VENTILATION SYSTEMS

Experience includes all types of ventilation systems, including variable air volume, constant volume, dual duct VAV, building and system pressurization issues, fan replacement strategies, fan array technology, coil cleaning, air-to-air heat recovery, demand ventilation, air balancing issues, commissioning and retro-commissioning of air systems, and other areas of expertise.

CONTROL AND BUILDING AUTOMATION SYSTEMS

Our experience includes assessment, troubleshooting, and retrofitting existing systems, and design and installation of new systems. Services include sequence of operations review and functional performance testing of systems, as well as specifying and designing complete automation systems including creation of custom sequences of operation and integration to multiple existing control platforms. We are proficient in the use of owner-directed systems (independent from controls industry) and existing control system optimization.

LED LIGHTING SYSTEMS (INDOOR AND OUTDOOR)

LED lighting is a core competency of ours; we offer innovative lighting solutions beyond the typical lamp and ballast retrofit offered by many firms. Our range of services and technical abilities include standards review, LEED and sustainability design guidance and oversight, purchasing and inventory control, operations standardization, and lighting auditing and design for major building renovation and new construction projects.

Lighting Design: Services offered as part of lighting design include schematic design, design development, and construction documentation; concept development, luminaire selection, initial layout, layout refinement, lighting controls design, code compliance analysis, and bid documentation.

Advisory Services: Services include LEED certification, rebate acquisition, code compliance, safety and standards review.

Visualization Methods: These include photometric calculations, photo-realistic renderings and physical mockups. Another key value-add offered is our ability to provide construction-grade cost estimates for our clients.

Energy Retrofit: Services include initial facility assessments, investment grade audits, utility rebate coordination, code compliance assurance, controls upgrades, retrofit, relight and redesign services, and construction management.



DARK SKY

We upgrade exterior lighting devices to comply with Dark Sky recommendations, and we perform roadway lighting auditing and design including control systems (where possible, designs adhere to the RP8 roadway lighting standard).

DAYLIGHTING

McKinstry's experience includes daylighting system design in both side- and top-lighting applications. We can provide physical modeling to scale on a Heliodone, overcast sky simulation, and software daylighting simulations. Skills include daylight factor calculation and determination of appropriate building fenestration.

RENEWABLES (SOLAR PHOTOVOLTAIC/THERMAL, WIND, BIOMASS/GEOTHERMAL)

Our experience includes feasibility, energy, and cost analyses, installation, dashboarding, and verification of performance for onsite renewable energy, including solar photovoltaic, solar-thermal, solar walls, geothermal, wind, and biomass, development of renewable projects in cooperation with utility, state, and federal incentives.

McKinstry's solar PV experience includes roof-mount, ground-mount, canopy, and building integrated systems. We regularly install systems that tie back into the utility's grid. Additionally, we have evaluated, designed, and installed solar walls to serve as the first stage of heat for facilities.

We have also installed numerous biomass boiler systems throughout the western U.S., including two pellet boiler systems. Services also included soliciting and negotiating fuel delivery contracts.

Furthermore, we have installed multiple ground source heat pump systems including both horizontal and vertical loop fields.

WATER-CONSUMING SYSTEMS (INTERIOR, EXTERIOR AND SMART METERING)

We perform field auditing and analysis of building water use, including toilets, urinals, lavatories, showers, kitchen equipment, single-pass condensers, cooling towers, chilled water systems, and boilers. We facilitate irrigation audits that review existing distribution networks, end devices, spray patterns, watering schedules, compatibility with existing turf and landscape, and leak detection.

We can install state of the art metering and communications for utility systems to help customers quickly and efficiently track performance of systems remotely. This same system allows us to assist the client in quickly analyzing performance.

We also retro-commission flush valves, replace aging china with new low-consumption china. We install ET compensated irrigation systems.

Additionally, we have experience also installing covers on primary clarifier tanks at water treatment plants to reduce evaporative loss and debris infiltration.

DISTRIBUTED GENERATION

We have performed energy and cost analyses of combined heat and power (CHP) technologies such as microturbines and internal combustion engines, hourly electric and heating coincident load analysis. We can provide comparisons of different systems and configurations. Skills include implementation of CHP cycle to save energy, reduce demand on power grid, and increase site electricity dependability and redundancy.



FUEL SWITCHING

We perform life cycle cost analysis of using other available fuels or blended portion of different fuels as opposed to continuing to use the current fuel. Analysis includes consideration of utility company support for extending supply infrastructure, comparison of different rate schedules, and comparison of deregulated suppliers.

HEATING SYSTEMS

McKinstry's experience includes DOE 2.2 modeling analysis, custom calculations focusing on specific measures, heat recovery, combined heat and power analysis, steam and hydronic systems upgrades, boiler upgrades and replacements, coil cleaning, fuel supply, ground source heat pump heating, and other areas of expertise.

INDOOR AIR QUALITY

Our experience includes CO₂ analysis for conditioned spaces and CO measurement and analysis for indoor garages and natatoriums, as well as various HVAC systems. We also implement demand control ventilation strategies.

KITCHENS

We offer assessment of existing equipment, elimination of single-pass cooling, high-efficiency equipment upgrades, high efficiency dishwashers, spray head replacements, and operation and maintenance optimization.

LABORATORIES

Laboratory safety is the primary consideration. We offer identification and analysis of possible measures in laboratories to save energy such as laboratory air change requirements, appropriate reduction of air change rate and fume hood exhaust rate based on low-flow hoods and/or sash position detection with VAV hoods, and day/night occupancy sensor control of air change rates. Discharge air temperature is critical for constant reheat volume systems.

LAUNDRY

We offer assessment of existing equipment, elimination of single-pass cooling, high-efficiency equipment upgrades, laundry heat recovery, laundry water filtration and reuse, high efficiency laundry tunnel washers, and operation and maintenance optimization.

SWIMMING POOLS AND RECREATIONAL FACILITIES

McKinstry has performed energy efficiency projects through energy performance contracts for more than 40 recreational districts. We offer a custom weather bin analysis spreadsheet to estimate annual energy consumption and annual energy cost at swimming pools and recreational facilities. We compare different types of mechanical systems based on bin analysis such as humidity control by outside air, by air-air heat recovery, mechanical refrigeration dehumidification with condenser heat recovery, and desiccant dehumidification.

We have optimized ice rink operations, replaced ice skid control systems, converted ice re-surfacers from CNG to electric, and converted ice arenas HVAC systems from steam to hot water. We have even designed and installed systems that use waste heat from ice rink cooling systems to heat pools.



TRANSPORTATION (FLEET FUEL MANAGEMENT, ETC.)

We perform lifecycle cost analysis of using other available fuels or blended portion of different fuels as opposed to continuing to use the current fuel. Analysis includes consideration of utility company support for extending supply infrastructure, comparison of different rate schedules, and comparison of deregulated suppliers.

UTILITY MANAGEMENT – ACTIVE ENERGY MANAGEMENT AND powerED

Some highlights of our expertise include auditing and analysis of building energy use and management practices; energy awareness campaigns; operations and maintenance procedures documentation, analysis, and recommendations based on best practices; behavioral modification training for maintenance, custodial, and end-user staff; identifying, designing, and implementing conservation measures, including retrofit and O&M for improved energy management; energy management work order tracking with 24/7 customer support and 24/7 control remote operations center.

8b. Project Development and Implementation

INVESTMENT GRADE ENERGY AUDITING (ASHRAE LEVEL 2 AND LEVEL 3 AUDIT)

We collaborate with clients in the public and private sectors to reduce their annual utility costs and upgrade aging infrastructures. We have vast experience with facility audits in hundreds of buildings. McKinstry's staff has many years of combined auditing experience within our dedicated energy group. Our facility auditing process consists of several steps designed to capitalize on the efficient use of the team's time and to strategically focus on initiatives that have a high probability of implementation and energy savings success.

FINANCING KNOWLEDGE: MUNICIPAL-TAX-EXEMPT LEASE PURCHASE, BONDS, SELF-FINANCED, OTHER

McKinstry enjoys nearly 60 years of experience within the engineering and contracting industry and our financial strength exceeds the industry average. Long standing relationships with vendors ensure that our customers receive reasonable pricing and excellent payment terms. For many years we have also worked with qualified, third-party financing companies that have experience providing municipal lease agreements to finance energy performance contracts. Our Mountain project team has worked with several of these financing companies on past projects to secure tax-exempt municipal lease purchases at very favorable terms and rates.

IDENTIFICATION OF AND APPLICATION FOR UTILITY REBATES

McKinstry will diligently explore all opportunities to bring additional funding to your client agencies' EPC programs, including utility rebates/incentives, low interest loans, and other grants. We have extensive expertise in leveraging utility and grant funding for energy efficiency projects.

Over the last decade, we have helped our South region clients in receiving and managing more than \$20 million in grant funding, rebates/incentives, and very low-interest federal financing. Access to such significant savings allows our customers the advantage of greatly reducing their capital infusion for projects, and essentially eliminates the oversight needed to manage the incentives.



In addition to our experience in the South region, McKinstry has helped our clients secure more than \$300 million in grant funding and utility rebates/incentive for clients. Seeking and securing utility incentives for our clients is a critical part of the financing ability we bring to a performance contract. McKinstry is your advocate in this process. We are familiar with a variety of utility companies' programs and people and work to get written commitment from the utility before the energy services proposal is presented. We will also search for and assist with federal tax credits.

COMMISSIONING OF PROJECTS AND RETRO-COMMISSIONING OF EXISTING BUILDINGS

We have a fully dedicated team of commissioning professionals that has successfully commissioned and transitioned over 100 million square feet of space. Our systems experience ranges from simple package rooftop equipment, to large central plants, to laboratory HVAC pressurization and control systems, etc.

IDENTIFICATION OF ASBESTOS AND OTHER HAZARDOUS MATERIALS AND ABATEMENT, RECYCLING OR DISPOSAL, AS APPLICABLE

Should any project require removal or disposal of hazardous material, McKinstry will request that the hazardous material or substances be removed and disposed of by our clients. McKinstry will not assume ownership of the material or act on behalf of our clients to subcontract the proper removal and disposal of the material; however, we will conduct a good faith survey prior to performing work to identify hazardous materials.

CONSTRUCTION

Calling upon nearly 60 years in construction, McKinstry's considerable experience enables our ESCO teams to successfully complete construction projects for our clients. Our clients include state agencies, cities, counties, school districts, university and college campuses, high-tech and biotech facilities, as well commercial buildings. Our construction management team leverages experience, technical tools, and personal commitment to deliver outstanding results and timely conclusions.

PROJECT CONSTRUCTABILITY

Calling upon nearly 60 years in construction, McKinstry's considerable experience enables our ESCO teams to successfully evaluate and complete construction projects for our clients. Our clients include state agencies, cities, counties, school districts, university and college campuses, high-tech and bio-tech facilities, as well commercial buildings. Our construction management team leverages experience, technical tools, and personal commitment to deliver outstanding results and timely conclusions.

SYSTEM DESIGN ENGINEERING (MECHANICAL, ELECTRICAL, ETC.)

McKinstry has a large team of industry professionals. Our energy services staff is 430 members strong and includes more than 70 Professional Engineers and 60 LEED[®] Accredited Professionals. We possess the unique inhouse capability to design all aspects of energy and utility conservation systems including chilled water systems, steam systems, central plants, ground source heat pump systems, PV arrays, ventilation and air distribution, plumbing, process piping, laboratory specialized HVAC, lighting upgrades, fire protection, and integrated fire detection and DDC systems. We are committed to providing the highest level of service to our clients and to creating innovative and cost efficient solutions to the design challenges.



PROJECT/CONSTRUCTION MANAGEMENT

Our construction and project managers have significant experience and are well-versed in the technical tools and planning processes needed to successfully implement ESCO projects. We routinely deliver projects on time and at or under budget. McKinstry staffs projects with on-site supervisors to assure our single point of accountability.

PROCUREMENT, BIDDING, COST ESTIMATING

McKinstry has significant experience providing clients with competitive bidding and procurement. We are vendor neutral and work with our clients to find the best solution for their needs. In addition, because we are a large mechanical contractor, we purchase large quantities of equipment and material for our construction business and we leverage this purchasing power for our energy performance contracts.

8c. Support Services

MEASUREMENT AND VERIFICATION OF SAVINGS

Delivering energy savings is the core of our process. Our dedicated measurement and verification team uses the latest remote monitoring technologies, loggers, and web-based services to enable the flow of data from and to our clients. Our in-house center monitors control systems. We use the Department of Energy IPMVP as our best practice standards.

EQUIPMENT WARRANTIES

McKinstry is very experienced in system performance and warranty concerns. We routinely complete services at no additional cost to our customers—after the original warranty expires to ensure our clients are satisfied and that the system operates as intended. Our network of buying power and our relationships with subcontractors and equipment providers make it possible for us to reduce the initial cost of equipment, in addition to being able to arrange for extensions to the warranty period of the equipment—at times by years. This combination of strong buying power and extended warranties gives us a value-added advantage that has proven beneficial to many of our clients.

CALCULATION AND REPORTING OF EMISSIONS REDUCTIONS

Our energy engineering model includes calculations of emissions reductions, expressed as reductions in pounds of CO_2 , VOC, NO_X , CO and SO_2 . In addition, we can report emissions reductions expressed as equivalent number of cars removed from the road and equivalent acres of trees planted.

MARKETING AND PROMOTION OF THE ARKANSAS STATE EPC PROGRAM

McKinstry commits to providing sales and marketing resources to promote the AEPC Program to prospective clients. McKinstry has a full staff of marketing and support personnel to create promotional literature, presentations, etc. to include in a marketing toolkit for use by the South Region team dedicated to Arkansas public clients. We do not enter into a new market lightly and are fully committed to developing a significant presence in Arkansas to help public entities with their energy efficiency needs through the AEPC.



McKinstry has significant experience in other State and Federal EPC programs, such as the U.S. Department of Energy's Energy Efficiency Program, the U.S. General Services Administration's Facilities Management Program, and with state-run programs such as those run by the Texas State Energy Conservation Office, Colorado Energy Office and the Wyoming Energy Conservation Improvement Program.

PERFORMANCE GUARANTEE FOR EVERY YEAR OF THE FINANCING TERM

McKinstry routinely provides a performance guarantee for all energy Performance Contracts. We will provide a guarantee for the full term of the financed project as required by State of Arkansas legislation.

INSURANCE PER CONTRACT REQUIREMENTS

McKinstry's insurance and surety carriers both carry A XV A.M. Best ratings. We maintain complete insurance coverage in all required areas: General Liability, Automobile Liability and Workers' Compensation and Employers' Liability insurance. We maintain \$5,000,000 in E&O insurance.

APPLICATION FOR AN ENERGY STAR LABEL APPLICATION FOR LEED CERTIFICATION

McKinstry has participated in several LEED[®] design and cost studies and is currently working on several projects submitting documentation for LEED certification. With more than 60 LEED Accredited Professionals in our organization, we are unique in our qualifications to assist our clients with LEED or ENERGY STAR certifications.

TRAINING OF MANAGEMENT, STAFF AND OCCUPANTS

Training is not just a four-hour class... It is part of an overall transition plan focused on transferring all relevant knowledge to appropriate personnel through formal and informal activities. We're not satisfied until our clients are 100% comfortable with the operations, maintenance, and emergency plans associated with all projects.

HAZARDOUS MATERIAL HANDLING

During the course of a project, McKinstry takes the lead role in addressing and managing any hazardous materials. All McKinstry projects are required to have a "Good Faith Survey" for hazardous materials before performing work in a facility. Upon careful review of the survey, if any hazardous materials are identified, we create a management plan prior to potential exposure of the hazardous material. McKinstry will manage the lawful abatement process. McKinstry has never been cited by any governmental or regulatory agency for inappropriate handling, transportation, or disposal of hazardous materials.







Project History

9. Project History

Energy Efficiency Project Experience

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.

McKinstry's EPC experience within the last five years is shown in the table below; all projects were completed by McKinstry as the prime contractor. We believe our firm experience demonstrates our capabilities in the region without the need to draw on employees' experience with previous employers, so **we have not included non-McKinstry-led projects**.

Owner/	Facility	City and	Project Size (\$)	Total Energy	Total Energy Savings	Project	Timeline	Accidenced Staff
Project Name	Туре	State		Savings (\$)	(MMBtu)	Start	Completion	Assigned Stan

9. Project History

Owner/	Facility	City and	Project Size (\$)	Total Energy	Total Energy Savings	Project	Timeline	Assigned Staff
Project Name	Туре	State		Savings (\$)	(MMBtu)	Start	Completion	

9. Project History

Owner/	Facility	City and	Project Size (\$)	Total Energy	Total Energy Savings	Project	Timeline	Assigned Staff
Project Name	Туре	State		Savings (\$)	(MMBtu)	Start	Completion	





Project References

10. Project References

Provide detailed information for a maximum of three (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. Include the following information on each project as a minimum (maximum five pages per project reference)

- 1. Project Identification: Owner name, city/state, and facility type (hospital, school, college, city, county, etc.)
- 2. Contact Information: Names and contact information of owner(s) representatives who can serve as references
- 3. Project Size: Number of buildings and total project square footage
- 4. Project Dollar Amount: Total contract amount and the total project capital expenditure amount
- 5. Source of Funding: A description of the source of funding used for the project and the company's role (if any) in securing that funding
- 6. Project Dates: Actual dates of audit start and acceptance; actual construction starting and ending dates
- 7. Contract Terms: A description of the type of contract, financing arrangement, and contract term
- 8. Project Personnel: A list of the name(s) of individuals involved in the project, their role(s) and if these personnel will be assigned to Arkansas projects. (Attach their resumes in the Project Management and Staffing section)
- 9. Project Schedule: Indicate if project was completed on schedule and, if not, please explain.
- 10. List of Improvements: The types of retrofits and operational improvements implemented related to energy, water and other cost savings
- 11. Project Performance: The amounts of projected annual savings, guaranteed annual savings, and actual annual savings for each project in a table.
- 12. Measurement and Verification (M&V): A brief description of the M&V approach for each project including which savings were stipulated, if any
- 13. Performance Guarantee: A description of the savings guarantee for each project and, if the guaranteed savings were not achieved (explain if so), how the company compensated the public entity for any annual shortfall (e.g. paid funds to meet the guarantee, etc.)
- 14. Project Status: Post M&V, Closed M&V term completed), Additional EPC Phase in Progress (audit or construction), Non-EPC work in progress, other (explain).
- 15. Additional Comments: Comments on any special features, services, conditions, creative approaches, special needs of customer, etc. that may be relevant to the AEPC Program and clientele.

Please refer to the following pages for detailed project information for:

We are proud of our projects and client relationships and would be pleased to provide additional references upon request.



10. Project References

1. PROJECT IDENTIFICATION

2. CONTACT INFORMATION

3. PROJECT SIZE

Buildings: Square Feet:

4. PROJECT DOLLAR AMOUNT

Total contract amount: Total project capital expenditure:

5. SOURCE OF FUNDING

9. PROJECT SCHEDULE

10. LIST OF IMPROVEMENTS

8. PROJECT PERSONNEL

6. PROJECT DATES

	Audit		Construction	
Phase	Start	End	Start	End

7. CONTRACT TERMS



11. PROJECT PERFORMANCE

Units	Projected Annual Savings	Guaranteed Annual Savings	Actual Annual Savings (to date)

12. MEASUREMENT AND VERIFICATION (M&V)

13. PERFORMANCE GUARANTEE

14. PROJECT STATUS

15. ADDITIONAL COMMENTS





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10. Project References

1. PROJECT IDENTIFICATION

2. CONTACT INFORMATION

3. PROJECT SIZE

Buildings: Square Feet:

4. PROJECT DOLLAR AMOUNT

Total contract amount: Total project capital expenditure:

5. SOURCE OF FUNDING

6. PROJECT DATES

	Audit		Construction	
Phase	Start	End	Start	End

7. CONTRACT TERMS

Phase	Туре	Financing	Term

9. PROJECT SCHEDULE

8. PROJECT PERSONNEL

10. LIST OF IMPROVEMENTS

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11. PROJECT PERFORMANCE

Units	Projected Annual Savings	Guaranteed Annual Savings	Actual Annual Savings (to date)

12. MEASUREMENT AND VERIFICATION (M&V)

13. PERFORMANCE GUARANTEE

14. PROJECT STATUS

15. ADDITIONAL COMMENTS



10. Project References

1. PROJECT IDENTIFICATION

2. CONTACT INFORMATION

3. PROJECT SIZE

Buildings: Square Feet:

4. PROJECT DOLLAR AMOUNT

Total contract amount: Total project capital expenditure:

8. PROJECT PERSONNEL

5. SOURCE OF FUNDING

6. PROJECT DATES

	Au	dit	Constr	uction
Phase	Start	End	Start	End

7. CONTRACT TERMS

Phase	Туре	Financing	Term

9. PROJECT SCHEDULE

10. LIST OF IMPROVEMENTS



11. PROJECT PERFORMANCE

Units	Projected Annual Savings	Guaranteed Annual Savings	Actual Annual Savings (to date)

12. MEASUREMENT AND VERIFICATION (M&V)

13. PERFORMANCE GUARANTEE

14. PROJECT STATUS

15. ADDITIONAL COMMENTS







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.

The basic cost per square foot of the IGA to be used for typical buildings:

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.

IGA PRICING APPROACH

McKinstry agrees to use the Arkansas Energy Office developed Investment Grade Audit Pricing as shown in the RFQ-provided table above or amended in our competitive proposals to Arkansas State Agencies.

McKinstry will provide estimated additional costs, if any, in its IGA pricing proposal if a specific project includes systems or facilities other than typical buildings (e.g., waste water treatment, baseball fields, pools, street lighting, warehouses, arenas, marinas, etc.). The Agency and selected McKinstry team will negotiate final additional costs prior to execution of the IGA and Project Proposal contract.

11b. Fuel Escalation

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

FUEL ESCALATION RATE APPROACH

McKinstry approaches fuel escalation on a client-by client basis. We educate the client on what fuel escalation is, provide historical data and any estimates or actual information about future fuel escalation (or deflation), and what impact it may have on a project's savings over time. Our experience ranges from using fuel escalation rates such as those shown in the current Arkansas Energy Office ESCO's preliminary annual cash flow analysis form to zero escalation rate or a deflated rate. An example is some lower natural gas estimates going forward.

McKinstry develops and presents multiple cash flow analyses for the client to consider and approve.

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.

EQUIPMENT/LABOR PROCESS FOR BEST VALUE

Because McKinstry self-performs design engineering, we provide construction-grade estimates during the IGA phase. We do not rely only on subcontractors to provide design/build estimates, so we are not tied to particular subcontractors or vendors when it is time to bid the scope packages. This allows us to engage our subcontractors in a true and open "bid to specifications" environment that provides the most competitive pricing for our clients.



We are completely vendor and product neutral. We do not push specific products or product lines and have no hidden mark-ups. Material, equipment, and subcontractors are bid out to at least three entities, unless directed otherwise, to ensure the lowest possible installed cost while maintaining quality standards. This allows our team to effectively use vendors and products that provide the most positive impact.

We select subcontractors and vendors once we have worked with the client to further define the scope of each measure of the project and the expertise needed. This process includes:

- 1. Compilation of a subcontractor and vendor list in consultation with the client
- 2. Prequalification and short list
- 3. Formal proposals and competitive bidding
- 4. Review and selection of vendors and subcontractors in consultation with the client

Because we have boots on the ground in Arkansas and the South region, we bring the added benefit of reliable and established local contractor relationships. We value the knowledge these contractors already have and the cost savings they provide as a result of their proximity to our project work. It is our best practice to select subcontractors and vendors in full collaboration with our clients, and we understand that they have previous relationships with subcontractors. Our preference is to consult with the clients and the necessary key stakeholders, and to use preferred and qualified local subcontractors to keep dollars in the local economies.

SUBCONTRACTING PROCESS

Management of the subcontracting process is performed by our Construction Manager, with input and support from our Project Director, Project Development Manager, and Construction Services Manager. Our engineering team also reviews all equipment vendor information to ensure all equipment proposed will meet the performance criteria specified. And finally, our Safety Director is involved to confirm that the subcontractors' safety history and approach to installation meet all quality and safety requirements.

Subcontractor Selection Criteria and Approach

Subcontractor selection is critical to successful construction performance. We begin the process by creating a list of pre-qualified subcontractors from the local community, with an emphasis on MBE/WBE/DBE. McKinstry maintains a standard Statement of Qualifications document for each critical subcontract trade that is specific to construction in Arkansas and the process includes:

Safety Review—McKinstry scrutinizes our partners with a prequalification of their safety records and programs. We review OSHA logs, any citations, EMRs and current safety programs. We also require site-specific safety plans prior to mobilization which are a more detailed analysis of the site and scope of the project. Furthermore, McKinstry will enforce any additional requirement for subcontractor background checks and drug or substance testing as directed by the client.

Confirmation of Financial Strength—We review a Dunn & Bradstreet (DnB) report and project bonding capability and rates to ensure financial strength is sufficient to complete the project.

Review Subcontractor References & Experiences—We request 3–10 references, based on the size and scope of services, and contact references randomly from each subcontractor. When contacting references, we focus on past performance, scheduling, and project staffing. We also request information about pending litigation.



Release an RFP—McKinstry runs a formal RFP process for almost all projects. This allows our subcontractors to fully understand the scope of work, site conditions, and contract terms and conditions, to inform accurate bid prices.

Host a Pre-Bid Meeting—We emphasize the project elements that are important to the client. This process of educating the bidders to the expectations of the client organization, as well as to our policies, will ensure that the construction process proceeds with an understanding of the project requirements and expectations.

Review Proposals—McKinstry will perform a thorough review of the subcontractor proposals to assure the scope of work is accurate and complete. We will evaluate past experience, references, current staffing and availability to perform to the schedule, pricing, etc.

Invite Best-Value Subcontractors to Interview—Shortlisted subcontractors may be invited for interviews if the scope and pricing of multiple contractors is comparable to determine which team is the best fit for the project.

Complete Bid Tabulation & Analysis—McKinstry will prepare a detailed bid tabulation which will be presented to our clients in a face-to-face meeting. McKinstry may recommend one subcontractor over another, but we will always seek client consensus before moving forward with the project. After approval, the subcontractors participate in preconstruction, constructability reviews, schedules and construction plans. Involving the subcontractors in the design phase also helps eliminate change orders and constructability issues later in the construction phase.

SUBCONTRACTOR MANAGEMENT

Quality Control of Subcontractor Delivery

McKinstry's Quality Control (QC) measures regarding subcontractor management are to provide a system that has a bias toward action, provides management with early recognition of problems, and establishes a pathway not only for corrective action, but also a means of evolving improvement in the absence of error. We provide a QC system developed specifically for each project site. This QC system is a hybrid composite of the best elements of the McKinstry Quality Management System, the Quality Self-Assessment Program, and the Customer Feedback System, and is designed to squarely focus our emphasis precisely where the customer requires it.

Elements of Our QC Program

McKinstry Quality Management System—Our approach to Total Quality Management (TQM) has played
a significant role in our success with subcontractors. We expect it to play an even larger role in our
ability to remain a competitive, successful solution provider in the future. This process is founded in the
philosophy of continuous improvement and in transforming the entire organization, at every level, into a
customer-driven business entity. In this context, each and every McKinstry employee understands the
importance of, and takes responsibility for, the quality of their work. All employees are charged with
doing the job right…the first time; and this attitude will be extended to our subcontractors and vendors.



- *Quality Self-Assessment Program*—In addition to a philosophy that stresses responsibility for quality at the worker level, we recognize the need for objective examination of contract services both at the supervisory level and independent of the operating organization altogether. Therefore, our program includes some more traditional elements. First, it includes select operations personnel, trained in QC techniques, who inspect the subcontractors' and equipment vendors' work product as part of their daily tasks. Second, our QC program includes operationally independent QC inspections by the McKinstry management team and our corporate leadership team. The McKinstry Project Director is also responsible to teach, monitor QC effectiveness, assess performance problems, and verify and assess deficiency resolution.
- *Customer Feedback System*—The ultimate objective of the Quality Control System is to be so effective that part three of our system is used only for positive reinforcement. The first two parts of our Quality Control System are proactive measures. The Customer Feedback System is the reactive segment of the program. We recognize that there is a fundamental requirement for Quality Assurance to be conducted by the client agency. This QC program element is designed to provide the responsive means for correctly reacting to the findings of the customer.

Quality Assurance and Quality Control

The key to McKinstry's approach to construction is the ability of our team and our subcontractors to define the desired outcomes of our clients and provide a process that assures these outcomes will be met. While our experienced and capable staff is the key ingredient to achieve this, we've put in place a system of Quality Assurance/Quality Control to provide an additional measure of discipline for our subcontractors.

ENSURING COST-COMPETITION AND BEST VALUE

Accurate, Construction-Grade Estimates

Our staff includes an experienced estimating department that maintains up-to-date cost data for all types of system installations. Our estimating department uses an electronic estimating system directly linked to our historical construction database. Project budgeting during the development and engineering phase is completed using construction quality budgeting versus engineering only budgets, ensuring the project cost is set at realistic construction or investment-grade values.

Long-Lead Equipment Procurement

Early identification of the actual equipment to be used in the project not only helps the designers, but also helps the construction team budget the costs and manage the delivery times. We suggest that a full bid tabulation process be used before completion of design development documents so that all equipment details can be defined and incorporated into the final construction document drawings.



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.

FULL AND TRUE OPEN-BOOK PRICING APPROACH

Since McKinstry is not an equipment manufacturer, we do not have a research & development budget associated with product development. Therefore, we do not carry the overhead coverage for a national home office or product R&D like many of our competitors. Our profit expectations are up to 10% lower than most national ESCO firms. This allows McKinstry to be one of the most cost-effective firms in the region. We are fee-flexible and provide a full and true open-book disclosure allowing our clients to see and receive all levels of project costs and fees. Unlike other ESCOs, open book pricing is a McKinstry standard of practice on all projects in all locations. An outline of our open-book pricing approach includes:

Costs Presented in Open-Book Format

The integrated delivery method is designed to ensure competitive pricing of projects and initiatives. With our open book pricing format, our clients review our actual invoices, direct costs, overheads, mark-ups, discounts, and labor rates.

Final Budget with No Changes

Our final proposal is based on final budget and project maximum construction costs that will be developed with input from all team members. Once this budget and scope of work is approved, the owner should not expect any change orders from McKinstry unless there has been a client-driven scope change or client delays resulting in documentable cost impacts. Our in-house estimating can develop this final budget to be guaranteed by McKinstry early in the process. The client can add to the scope of work, at which time we will agree on the new scope and associated costs prior to implementation.

PROCEDURES AND SCHEDULE FOR MEASURING FINANCIAL PERFORMANCE

Our philosophy as a company is built around openness and full transparency to ensure a long-term partnering atmosphere. And, since our mark-ups are clearly defined and in line with our profit motive, it is common practice for us to openly and regularly share project financial performance with our clients.

Our project team is equipped with procedures and tools necessary to provide clear and accurate financial performance at all points in the project.



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.

EPC PROJECT COST AND PRICING APPROACH

McKinstry understands that cost and pricing are very important aspects in your choice of an ESCO and we encourage the AEO and each Agency to take the time to fully understand the pricing models of the ESCOs responding to this RFQ. McKinstry is not a premium price ESCO, and we absolutely believe that our clients should not pay extra for the EPC process.

Markup Costs and Fees

McKinstry's pricing philosophy regarding markup costs and fees is one of transparency, openness, and flexibility. Because we have our roots in mechanical design-build contracting, our overhead and fee structure is typical of a design build contracting firm. Our markups and fees will be shown in the AEPC Schedule R below. Because every ESCO has a different basis for base construction costs, it is also important to look beyond the markups and fees to evaluate the ESCOs on their total cost.

Overhead and Profit

McKinstry applies overhead and profit *only* to the direct project construction costs, comprised only of subcontractor costs, material costs, direct McKinstry project labor, commissioning costs, and travel and per diem costs, all of which are easily tracked and auditable as *actual* costs of construction.

Other ESCOs apply overhead and profit to the total project costs which comprises all costs to the project, both direct project costs and indirect project costs. McKinstry does not charge indirect project costs to your project; those costs of doing business are included in our overhead.

Commissioning

Commissioning services are charged to your project as a percentage fee of the direct construction costs as noted in the AEPC Schedule R below. Again, commissioning is often a service that is passed on to subcontractors by other ESCOs and may be included and include inflated markups on top of markups in the subcontractor cost in other ESCOs' pricing models.

Self-Performed Work

Most of McKinstry's self-performed work is charged as a percentage fee and is included in the Design Engineering and Construction Management fees. These fees cover all project-specific management costs (Project Director, Program Manager, Construction Manager), engineering costs (Design Engineers, Lighting Engineers, Energy Engineers), and administrative costs. The cost for a Performance Assurance Specialist is covered in the annual Measurement & Verification contract.



Construction Performance Bonds

The construction bond will be charged to the project as the actual cost of bonding. This cost is included in the total construction cost in our pricing model and is *not* subject to overhead and profit markups. Please see the surety letter in Section 4.b. of this proposal for our current bonding rates.

Contingency

Contingency percentage is subject will be based on the complexity and risk of the final scope of work.

McKinstry will be able to expend the contingency for items necessary to complete the original scope of this project, pending review by the Agency. The intent of the contingency is to cover McKinstry-requested changes, unforeseen conditions or latent changes, and owner-directed changes beyond what was originally estimated and scoped by McKinstry.

ANNUAL COST

Warranty

Warranty is included as a percentage. The amount is subject to discussion and will also be based on the complexity and risk of the final scope of work

Monitoring and Verification

Monitoring and Verification costs are charged as an annual fee to support the annual guarantee. There is no upfront charge for measurement and verification in the construction project.

Maintenance

Maintenance cost is based on actual estimates for the desired level of maintenance and service that the Agency is requesting. Cost estimates can range from hourly labor rates to structured services agreements for preventive maintenance to all inclusion service programs that includes all cost for labor and material.

Application of Markups and Fees (Example)

McKinstry has the capability to self-perform construction management and design engineering. Those costs are shown in the pricing tool as fees and they are not subject to overhead and profit markups. Other ESCOs pass these responsibilities on to their subcontractors so the costs for those services are part of the subcontractor cost and subject to overhead and profit markups.

In addition, it is important to decipher what an ESCO is including in their base project cost. McKinstry only includes direct project construction costs as the project cost basis. These costs are comprised only of subcontractor costs, material costs, direct McKinstry project labor, travel costs and construction performance bond costs, all of which are easily tracked and auditable as actual costs of construction. Other ESCOs include fees, other direct costs, and indirect costs in their project cost basis and then mark up those costs with overhead and profit. McKinstry does not charge indirect project costs to your project; those costs of doing business are included in our overhead. Please see the matrix table below for what should and should NOT be included in the base project cost of a construction project.



Included in Base Project Cost

- Subcontractor Site Labor (not including design)
- Subcontractor Material or Equipment
- Direct Material Purchases
- Direct Equipment Purchased
- Direct Site Labor (self-performed)
- Construction Performance Bonds
- Commissioning Costs
- Travel & Per Diem Costs
- Construction Permits

NOT Included in Base Project Cost*

- Design Engineering
- Project Management
- Warranty
- Measurement & Verification
- Indirect Costs (Legal, Finance, Office Supplies, IT, HR, Employee Training, Credit & Collections, Procurement, Sales Incentives, Quality, etc.)*
- Research & Development*

*These costs are included in Overhead.

Project Percentage Development

McKinstry will provide project percentages for each project in Schedule R (shown below) of the Investment Grade Audit and Project Development Contract. The Investment Grade Audit Proposal Contract shall be used in the cost estimates unless otherwise documented and justified due to change in scope or size of project or other unforeseen circumstances.


11. Cost and Pricing

AEPC Cost & Pricing Tool - Schedule R

Α	В	С		С	D	E		F	G	н
		Proj	iect (osting Categories	IGA Contract Estimated % of Total Project Cost	Actual Final IGA Calculated % of Total Project Cost		Actual Final FPC Cost	Sub-Totals	Totals
1	Imp	mplementation Costs			i chai i reject con	lotal Project Cost				
2		Pre-Construction Costs*								
3			Design and Other Engineering		0.00%	0.00%	\$	-		
4			Pre-	Construction Services	0.00%	0.00%	\$	-		
5		Other Pre-Construction Costs		er Pre-Construction Costs	0.00%	0.00%	\$	-		
6		Pre-Construction Cost Subtotal				0.00%			\$ -	
7		Construction Costs*								
8			ECM #1			0.00%	\$	-		
9		ECM #2		1 #2		0.00%	\$	-		
10		ECM #3		1#3		0.00%	\$	-		
11		ECM #4		1 #4		0.00%	\$	-		
12		ECM #5		1 #5		0.00%	\$	-		
13		ECM #6		#6		0.00%	\$	-		
14		ECM #7		#/		0.00%	Ş	-		
15		ECM #0**		I #8**		0.00%	\$	-		
10		ECIVI #9***				0.00%	ç	-		
18		ECM/EIM Subtotal				0.00%	Ş	-	Ś	
19			LCIV	General Conditions*	0.00%	0.00%	Ś	-	Ŷ	
21				Commissioning	0.00%	0.00%	Ś	-		
22				Construction M&V	0.00%	0.00%	\$	-		
23				O&M Manuals	0.00%	0.00%	\$	-		
24				Training	0.00%	0.00%	\$	-		
20		Construction Close-Out*		struction Close-Out*		0.00%			\$ -	
26				Permits		0.00%	\$	-		
27				Insurance		0.00%	\$	-		
28				Performance & Payment Bonds		0.00%	\$	-		
29				Warranty Labor		0.00%	\$	-		
25		Other Construction Costs*		er Construction Costs*		0.00%			\$ -	
30		Construction Cost Subtotal				0.00%			Ş -	
31	Imp	nplementation Costs Subtotal*		ion Costs Subtotal*		0.00%				Ş -
22		Can P			0.000	0.00%	ć			
32	Prot	Pront: Overhead*			0.00%	0.00%	\$	-		
33	Con	Contingency*			0.00%	0.00%	ç	-		
34	love	Investment Grade Audit (IGA)*			0.00%	0.00%	Ş	-		
36	Total Facility Area			ility Area	0					
37		\$ / Sq Ft			Ŭ					
38		Investment Grade Audit Total Cost					\$	-		
39	AEC	AEO Administration Fee*				0.00%	\$	-		
40	Cap	Capitalized Interest*				0.00%	\$	-		
41	Tota	al Pro	oject	Price*						\$ -

*Please reference the **Definitions** tab for each term's definition.

** Self-Performed Work

NOTE: ESCOs may, at their discretion, use an unburdened or burdened labor rate when calculating implementation costs. Charge rates are acceptable for self performed work. Please note which cost accounting method is being used.



11. Cost and Pricing

Ongoing Annual Services

Ongoing annual cost will be percentages of total project cost, savings, or actual cost to perform the measurement and verification services as well as any other services desired by the Owner. Ongoing services proposals will be provided separately to the Owner.







Key Personnel Resumes













































































Financial Supporting Documentation











Surety Letter