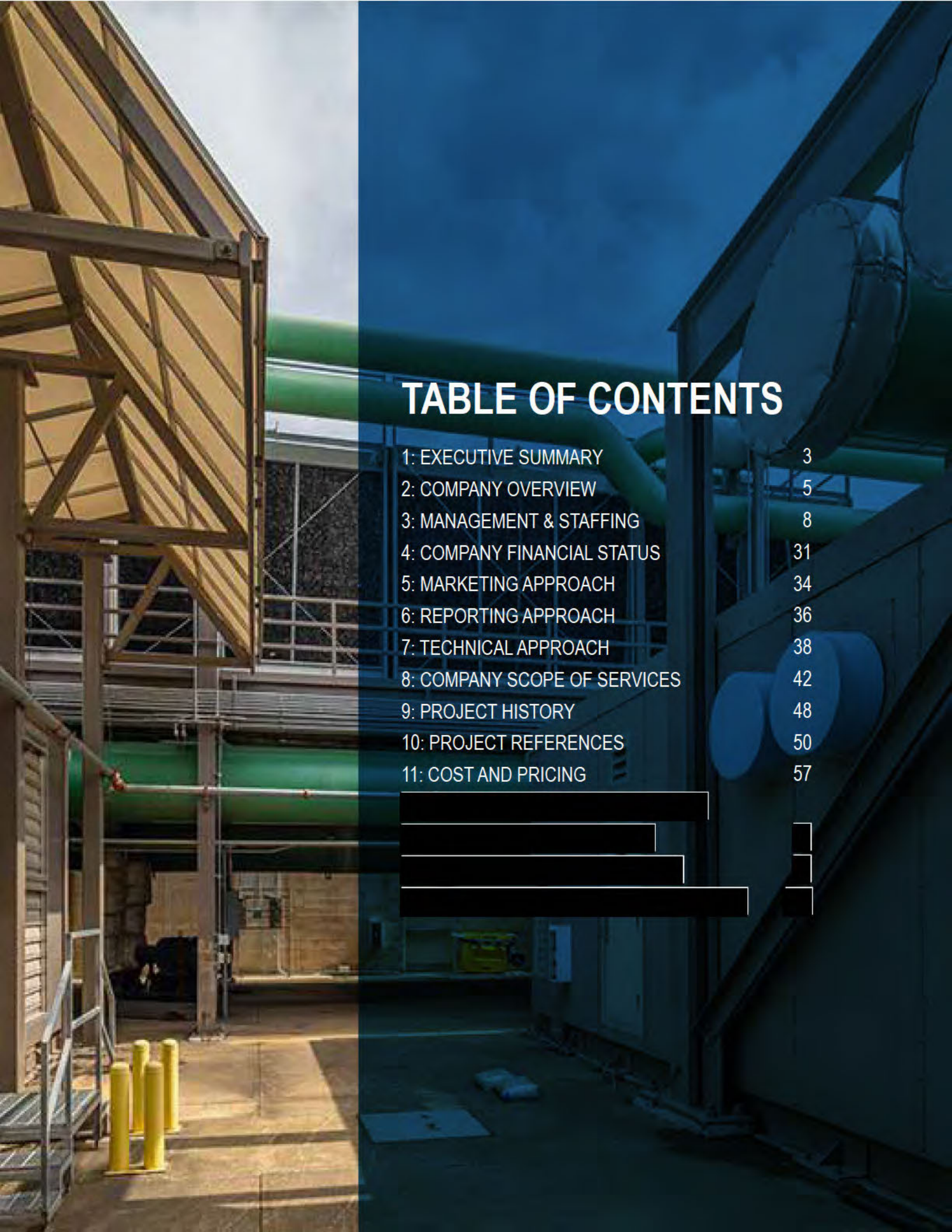
ESCO STATEMENT OF QUALIFICATIONS

Energy Performance Contracting Services

ADEQ I December 22, 2020

Bernhard



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1: EXECUTIVE SUMMARY

Bernhard

1: EXECUTIVE SUMMARY

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

Bernhard is available and committed to comply with the policies, procedures and rules as outlined in the AEPC Program Rules Manual. Bernhard will provide seamless financial and technical services with dedicated resources for the entirety of the project.

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

Bernhard is licensed State of Arkansas and has been an approved qualified provider in the Arkansas Energy Performance Contracting program since 2015.

Energy conservation is our core business. We focus on delivering projects that reduce energy consumption in the most sustainable and cost effective means possible through the design, implementation, measurement, verification, and installation of energy cost savings measures. As a full-service engineering and contracting firm, Bernhard is uniquely qualified to provide a turnkey solution.

Bernhard has the ability to perform under a contract that requires a guarantee that the work will be performed by one or more subcontractors. [redacted] Beyond the financial, our work is also supported by our long history of delivering quality results to our clients.

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

Through the collective of experience of each Bernhard division, our team is capable of reducing the total cost of facility ownership, provide resiliency, mitigate rising utility rates and eliminate deferred maintenance and future capital costs associated with energy assets. As evidenced through our experience in the AEPC program, Bernhard will continue to enhance the effectiveness and reputation of the AEPC program by providing energy efficient solutions that are customized to meet each the needs of each customer.

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

Bernhard grants permission for AEO to share the redacted, non-confidential and non-proprietary SOQ publicly online, electronically, or in print and may be used by Agencies to help select ESCOs to interview for ESPC projects. Bernhard specifically references that any and all of its financial information shall be confidential and redacted prior to publication online, electronically or in print. Additionally, the pages of the sample IGA shall be deemed confidential and proprietary and shall be redacted prior to publication online, electronically or in print.

2: COMPANY OVERVIEW

2A: HISTORY & FOCUS OF COMPANY

Describe the history and focus of the company, including:

a. Structure and evolution of the firm;

Founded in 2014, Bernhard, LLC (Bernhard) is the parent to a collection of Gulf South-based companies with more than 100 years of energy and infrastructure project experience, and over 2000 employees. Leveraging its combined expertise, Bernhard quickly began to implement its Energy-as-a-Service vision with projects at Ochsner Medical Center in New Orleans; AT&T Stadium in Dallas, Texas; the University of Arkansas for Medical Sciences in Little Rock; and beyond. In 2018, Bernhard's innovative work saved clients more than $14 million in energy costs.

The vision of Bernhard come to light in the early 2000's when Bernhard Mechanical, E.P. Breaux, and TME came together to work on what would be the firm's first Energy-as-a-Service project: the Louisiana State University Cogeneration Plant. The project was designed to greatly reduce operating energy costs and provide LSU an opportunity to upgrade its infrastructure. Overall, the project was a success and significantly reduced the LSU's energy footprint.

In addition to the LSU Cogeneration Plant and frequently working together prior to the formation of Bernhard, each of these parties have separately worked on numerous energy efficiency projects over the last 30 years.

b. Number of years in energy-efficiency related business.

25 years

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.

Under $1M: 500
Over $1M: 300

2B: INDUSTRY ACCREDITATIONS

2b. 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)).

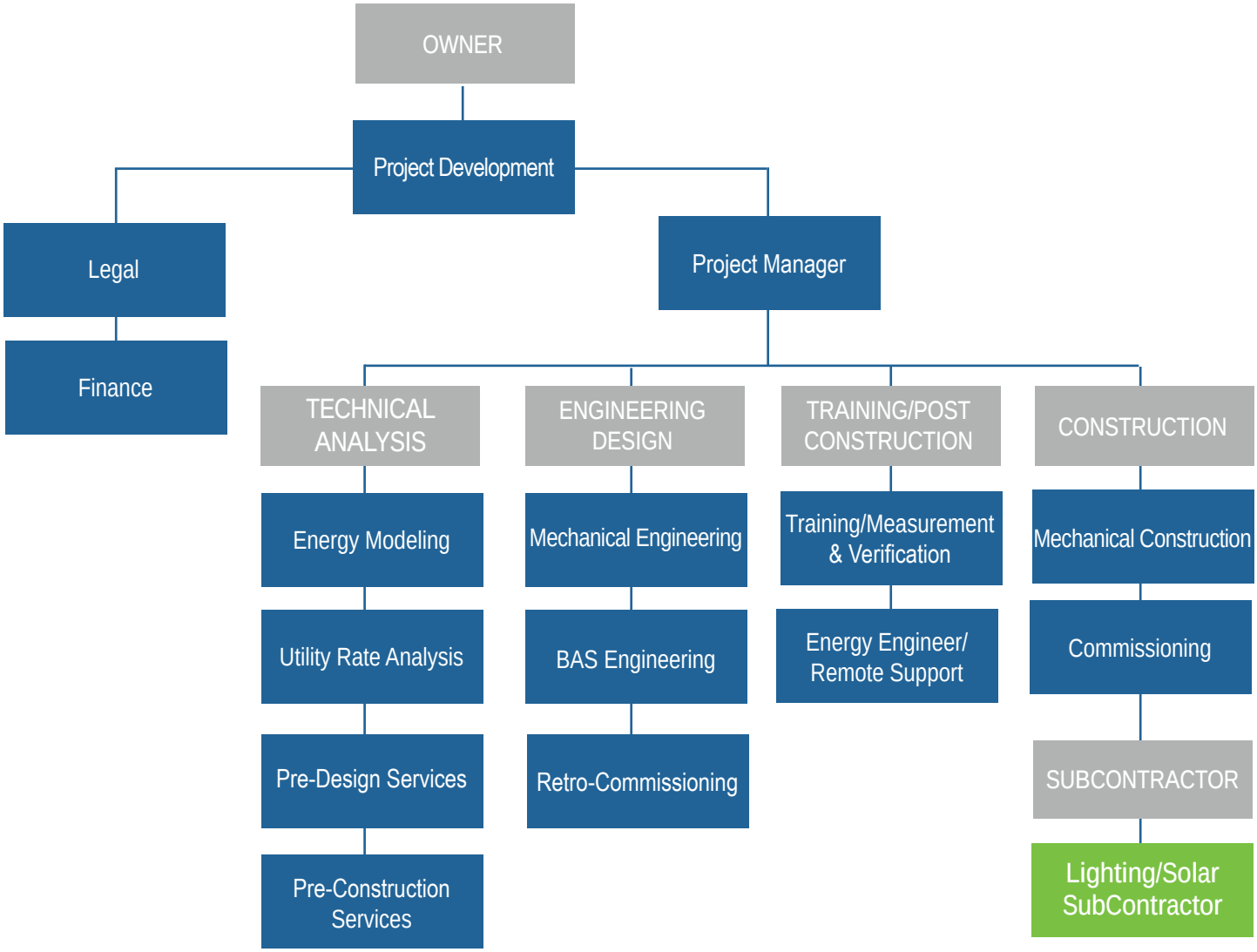
American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE)
American Society of Healthcare Engineering (ASHE)
Arkansas Association of Hospital Engineers (AAHE)
Arkansas Advanced Energy Association (AAEA)
Alabama Society of Healthcare Engineering (ALASHE)
AIA Arkansas
American Council of Engineering Companies (ACEC)
AR Academy of Mechanical Engineering
Arkansas Association of Energy Engineers (AAEE)
Association of Energy Engineers (AEE)
AABC Commissioning Group (ACG)
Electrical League of Arkansas (ELA)
International Association of Administrative Professionals (IAAP)

3: MANAGEMENT & STAFFING

Bernhard

3: PROJECT MANAGEMENT & STAFFING

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



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.

Personnel	Phase	Location	Bernhard Division
Rob Guthrie	Project Development	Little Rock, AR	Development
Kevin Patterson	Project Development	Little Rock, AR	Development
Jimmy Veteto	Project Development	Memphis, TN	Development
Larry Watkins	Project Development / Legal	Little Rock, AR	Development
German Krug	Project Development / Finance	Houston, TX	Development
Mike Fullerton	Investment Grade Audit / Survey	Little Rock, AR	Engineering
Steven Ward	Investment Grade Audit / Energy Modeling	Little Rock, AR	Engineering
Paige Naeyaert	Investment Grade Audit / Energy Modeling	Little Rock, AR	Engineering
Tony Robeson	Design & Construction / Design & Commissioning	Little Rock, AR	Engineering
Jason Mazurek	Design & Construction / BAS	Little Rock, AR	Engineering
Adam McElderry	Design & Construction / BAS & Retro-Commissioning	Little Rock, AR	Engineering
Michael Barnett	Construction / Commissioning	Little Rock, AR	Engineering
Neil Ammentorp	Construction / Program Management	New Orleans, LA	Engineering
Mike Barnett	Construction / Commissioning	Little Rock, AR	Engineering
Ed Nenon	Construction / Mechanical	Memphis, TN	Mechanical
Michael Cooper	M&V Guarantee Phase	New Orleans, LA	Mechanical
James Hess	M&V Guarantee Phase	Little Rock, AR	Engineering
Jessi Bienert	M&V Guarantee Phase	Little Rock, AR	Engineering
Liz Balentine	M&V Guarantee Phase	Little Rock, AR	Engineering

**Resumes are provided at the end of this section.*

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.

Bernhard provides the following services in-house:

- Project Development
- Financial Structuring
- Project Management
- Construction Management
- MEP Engineering
- Construction Administration
- Energy Modeling
- Measurement and Verification
- Sustainability Consulting
- O&M Benchmarking
- Utility Procurement
- Utility Bill Review
- Supply-Side Energy Audits
- Strategic Energy Plans
- Energy Audits
- Facility Condition Assessments
- Energy Efficiency Programs
- Operator Assessment and Training
- Remote Support Services
- BAS Design and Programming
- Energy System Commissioning
- Structural Engineering
- Utility Rate Advocacy
- CMMS Implementation
- O&M Resourcing
- BIM Library
- Electrical Construction
- Mechanical Construction
- Equipment and System Service
- Pre-Construction Services
- Retro-Commissioning

Each project requires different components, and there is not a one-size fits all approach. Bernhard will always do what is best for the client and will assist in identifying and evaluating specialty design firms and consultants. Ultimately, Bernhard is impartial to consultants or in-house capabilities and will use competitive procurement to deliver the highest value at the lowest risk to the client.

3b. Describe your firm's approach to complying with the Arkansas State licensing and labor requirements.

Bernhard has staff members dedicated to ensuring that our firm and each PE is kept current with Arkansas State licensing requirements. Bernhard is subject to Federal Labor Laws; plus the Labor Laws of various U.S. states including, but not limited to: Arkansas, Oklahoma, Arizona, Texas, Louisiana, Missouri, Tennessee, Alabama, South Carolina, Wisconsin, and New Jersey.

Bernhard's Human Resources Department is careful to post as required, Federal and State Labor Laws, and review such laws for compliance.

ROB GUTHRIE CEM

PROJECT DEVELOPMENT

Rob is the current Vice President of Business Development for Bernhard. With over 15 years of industry experience, Rob is a qualified leader in helping clients realize long-term operational savings and is experienced in developing projects including public/private partnerships, power purchase agreements, energy savings performance contracts, and energy asset concessions. Rob is a graduate of The University of the South (Sewanee) and a Certified Energy Manager (CEM). In his current role, Rob is responsible for leading Bernhard's business development team in the successful development of turnkey Energy-as-a-Service projects for clients in healthcare, higher education, and commercial sectors. Rob's role will be to provide executive oversight to Kevin and the modeling teams throughout all phases of the project.

EDUCATION

Bachelor of Arts in Spanish, Sewanee University of the South

LICENSES AND CERTIFICATIONS

AEE Certified Energy Manager

EXPERIENCE

15 years

RELEVANT PROJECT EXPERIENCE

Our Lady of the Lake Regional Medical Center | Baton Rouge, LA
Energy Asset Concession

Ochsner Medical Center | New Orleans, LA
Energy Asset Concession

University of Arkansas for Medical Sciences | Little Rock, AR
Energy Savings Performance Contract

Ochsner Medical Complex High Grove I Baton Rouge, LA
Energy Asset Concession

State of Louisiana | Baton Rouge, LA
Cooperative Endeavor Agreement

Eastern New Mexico University I Portales, NM
Energy Savings Performance Contract

AT&T Stadium | Arlington, TX
Energy Asset Concession

CPRT - Water Campus | Baton Rouge, LA
Energy Asset Concession

KEVIN PATTERSON CMVPIT

PROJECT DEVELOPMENT

Since joining Bernhard in 2016, Kevin has served in many different capacities including Energy Analyst, Executive Fellow to the CEO, and currently serves as Project Development Coordinator. In his current role, Kevin works closely with the business development team in development of Energy-as-a-Service projects. His technical background includes commodity management and measurement and verification services for clients in the healthcare, higher education and commercial sectors. Kevin is a graduate of the University of Arkansas and a certified measurement and verification professional in training (CMVPIT).

RELEVANT PROJECT EXPERIENCE

Our Lady of the Lake Regional Medical Center | Baton Rouge, LA
Energy Asset Concession

Ochsner Medical Center | New Orleans, LA
Energy Asset Concession

Ochsner Medical Complex High Grove I Baton Rouge, LA
Energy Asset Concession

University of Arkansas for Medical Sciences | Little Rock, AR
Energy Savings Performance Contract

Ascension Health System I Multiple Sites, USA
Energy Conservation Program

State of Louisiana | Baton Rouge, LA
Cooperative Endeavor Agreement

CPRT - Water Campus | Baton Rouge, LA
Energy Asset Concession

Eastern New Mexico University I Portales, NM
Energy Savings Performance Contract

AT&T Stadium | Arlington, TX
Energy Asset Concession

EDUCATION

Bachelor of Science in Economics, Supply Chain Management, University of Arkansas

LICENSES AND CERTIFICATIONS

AEE Certified Measurement & Verification Professional in Training

EXPERIENCE

7 years

JIMMY VETETO LEED AP

DIRECTOR OF BUSINESS DEVELOPMENT

Jimmy serves as Director of Business Development for Bernhard Energy and responsible for Healthcare Energy-as-a-Service (EaaS) transactions across the State of TN and Mississippi, plus Greenfield EaaS transactions throughout the U.S. Jimmy has served in all aspects of our industry from field technician, business development, project management, executive leadership and national developer for Bernhard. His knowledge and experience with operations, maintenance, mechanical contracting, building automation and energy retrofits over the last 24 years allows him to uniquely position EaaS transactions that best serve the client's needs.

RELEVANT PROJECT EXPERIENCE

FedEx Forum I Memphis, TN
Energy Conservation Measures
BAS Upgrades
Operation & Maintenance

Cook Convention Center I Memphis, TN
Energy Conservation Measures
BAS Upgrades
Operation & Maintenance

Memphis Pyramid (Bass Pro Shops) I Memphis, TN
Building Automation & Smart Building Technology

Southland Casino I West Memphis, AR
Energy Conservation Measures
BAS Upgrades
Operation & Maintenance

Memphis College of the Arts I Memphis, TN
Energy Conservation Measures
BAS Upgrades
Operation & Maintenance

Gaylord Entertainment - Opryland Hotel I Nashville, TN
Operation & Maintenance

Music City Center I Nashville, TN
Operation & Maintenance

Crittenden Regional Hospital I West Memphis, AR
Energy Conservation Measures
BAS Upgrades
Operation & Maintenance

EDUCATION

Engineering - Jackson State Community College

LICENSES AND CERTIFICATIONS

LEED Accredited Professional

ORGANIZATIONS

American Institute of Architecture

EXPERIENCE

24 years

LARRY WATKINS

LEGAL

Larry is Associate General Counsel for Bernhard. His primary focus is assisting with Energy-as-a-Service transactions including Public-Private Partnerships (P3), Energy Savings Performance Contracts, Energy Service Agreements, Power Purchase Agreements, Energy Savings Agreements and Energy Asset Concessions. With over 20 years of experience, Larry brings a diverse resume of construction mediation, arbitration, litigation, claims, consulting contracts, design agreements, construction contracts, project finance, project counsel, construction business and tax matters, and construction related regulations. Larry will provide legal expertise during the contract execution period.

RELEVANT PROJECT EXPERIENCE

State of Louisiana | Baton Rouge, LA
Cooperative Endeavor Agreement

Our Lady of the Lake Regional Medical Center | Baton Rouge, LA
Energy Asset Concession

Ochsner Medical Center | New Orleans, LA
Energy Asset Concession

Ochsner Medical Complex High Grove I Baton Rouge, LA
Energy Asset Concession

University of Arkansas for Medical Sciences | Little Rock, AR
Energy Savings Performance Contract

Eastern New Mexico University I Portales, NM
Energy Savings Performance Contract

East Alabama Medical Center I Opelika, AL
Energy Asset Concession Development

EDUCATION

Doctor of Law, University of Arkansas at Little Rock

Master of Engineering in Construction Engineering Management, University of Alabama at Birmingham

EXPERIENCE

12 years

GERMAN KRUG

FINANCE

As Director of Financial Analytics and Modeling for Bernhard, German is responsible for all aspects of financial research, and financial modeling. German has more than 20 years of experience in the energy industry, most recently with ENGIE, an International Energy Company. German has also held several commodity structuring roles at Entergy, Consumers Energy and Merrill Lynch Commodities. German and the financial modeling team will work with Midland to develop a project that is financially beneficial.

EDUCATION

Bachelor of Science, Business Administration
Universidad Finis Terrae, Santiago, Chile

Risk Management Diploma
Rice University

EXPERIENCE

22 years

RELEVANT PROJECT EXPERIENCE

Our Lady of the Lake Regional Medical Center | Baton Rouge, LA
Energy Asset Concession

Ochsner Medical Center | New Orleans, LA
Energy Asset Concession

Ochsner Medical Complex High Grove I Baton Rouge, LA
Energy Asset Concession

University of Arkansas for Medical Sciences | Little Rock, AR
Energy Savings Performance Contract

AT&T Stadium | Arlington, TX
Energy Asset Concession

State of Louisiana | Baton Rouge, LA
Cooperative Endeavor Agreement

Eastern New Mexico University I Portales, NM
Energy Savings Performance Contract

GDF, Suez Energy North America I Houston, TX
Central Portfolio Management*

Merrill Lynch Commodities I Houston, TX
Commodity Structuring*

Duke Energy International I Houston, TX
Risk Management*

Consumers Energy MS&T I Houston, TX
Price Structuring*

**Projects completed prior to employment with Bernhard.*

NEIL AMMENTORP

SENIOR VICE PRESIDENT OF PROGRAM & ASSET MANAGEMENT

Neil is a versatile industry professional with more than 35 years in construction and owner side representation. As the Project Manager, Neil is responsible for coordinating the engineering, procurement, and construction aspects of Bernhard projects. Maintaining a focus on owner advocacy, Neil will work with Midland and the entire project team to ensure that key project metrics and deadlines are met to provide a seamless implementation of the project.

EDUCATION

Bachelor of Science in Construction Engineering, University of Nebraska at Omaha

EXPERIENCE

35 years

RELEVANT PROJECT EXPERIENCE

Our Lady of the Lake Regional Medical Center | Baton Rouge, LA
Energy Asset Concession

Ochsner Medical Complex High Grove I Baton Rouge, LA
Energy Asset Concession

Ochsner Medical Center | New Orleans, LA
Energy Asset Concession

University of Arkansas for Medical Sciences | Little Rock, AR
Energy Savings Performance Contract

State of Louisiana | Baton Rouge, LA
Cooperative Endeavor Agreement
Shaw Building - Cooperative Endeavor Agreement

Sanford Medical Center | Fargo, ND
Renovation*

Fairview Ridges Hospital | Burnsville, MN
Renovation*

Fairview Southdale | Edina, MN
Renovation*

University of Minnesota | Minneapolis, MN
Jackson Hall*
Phillips Hall*

Ameriprise Financial | Minneapolis, MN
New Headquarters*

Dodgers White Sox | Glendale, AZ
Spring Training Facility*

**Projects completed prior to employment with Bernhard.*

MICHAEL FULLERTON PE, FPE, LEED AP, HFDP, CHFM, CEM

PRE-DESIGN SERVICES

Michael has been with Bernhard for 17 years and is a registered Professional Engineering in 12 states. He maintains multiple specialized certifications, including registered Professional Engineer, Fire Protection Engineer (FPE), LEED Accredited Professional, Health Facility Design Professional, Certified Health Facility Manager, and Certified Energy Manager. Michael and his team will be focused on identifying energy conservation measures and developing energy efficient design solutions for Midland.

EDUCATION

Bachelor of Science in Mechanical Engineering, Louisiana Tech University

LICENSES AND CERTIFICATIONS

Registered Professional Engineer: Alabama, Arkansas, Colorado, Florida, Georgia, Illinois, New York, North Carolina, Ohio, Tennessee

LEED Accredited Professional

Certified Healthcare Facility Manager

Healthcare Facility Design Professional

Certified Energy Manager

EXPERIENCE

17 years

RELEVANT PROJECT EXPERIENCE

Our Lady of the Lake Regional Medical Center | Baton Rouge, LA
Energy Asset Concession

Ochsner Medical Center | New Orleans, LA
Energy Asset Concession

Ochsner Medical Complex High Grove I Baton Rouge, LA
Energy Asset Concession

University of Arkansas for Medical Sciences | Little Rock, AR
Energy Savings Performance Contract
Campus Expansion
West Central Energy Plant

Ascension Health System I Multiple Sites, USA
Energy Conservation Program

Medxcel I Multiple Sites, USA
Energy Conservation Program Support

University of Alabama at Birmingham | Birmingham, AL
Energy Conservation Program Development

Piedmont Columbus Regional | Columbus, GA
Energy Conservation Program

State of Louisiana | Baton Rouge, LA
Cooperative Endeavor Agreement

AT&T Stadium | Arlington, TX
Energy Asset Concession

CPRT - Water Campus | Baton Rouge, LA
Energy Asset Concession

STEVEN WARD CEP

ENERGY MODELING

Steven has more than 20 years of experience in the industry and has played an integral role in the development and growth of Bernhard's energy engineering services. Steven's expertise and leadership bridges the gap between engineering, energy modeling, and financial modeling during the plan development phases. He currently leads Bernhard's energy modeling team and provides quality control review of all deliverables for accuracy and consistency with the Owner's requirements.

EDUCATION

Bachelor of Science in Electrical Engineering Technology, University of Arkansas at Little Rock

LICENSES AND CERTIFICATIONS

AEE Certified Energy Professional

EXPERIENCE

19 years

RELEVANT PROJECT EXPERIENCE

University of Arkansas for Medical Sciences | Little Rock, AR
Energy Savings Performance Contract
Campus Expansion

State of Louisiana | Baton Rouge, LA
Cooperative Endeavor Agreement

Ochsner Medical Complex High Grove I Baton Rouge, LA
Energy Asset Concession

Our Lady of the Lake Regional Medical Center | Baton Rouge, LA
Energy Asset Concession

Ochsner Medical Center | New Orleans, LA
Energy Asset Concession

AT&T Stadium | Arlington, TX
Energy Asset Concession

CPRT - Water Campus | Baton Rouge, LA
Energy Asset Concession

Eastern New Mexico University I Portales, NM
Energy Savings Performance Contract

Ascension Health System I Multiple Sites, USA
Energy Conservation Program

Medxcel I Multiple Sites, USA
Energy Conservation Program Support

PAIGE NAEYAERT, PE, CEM, CMVPIT

ENERGY MODELING ENGINEER

Paige is a Registered Professional Engineer and Energy Modeler for Bernhard. She regularly creates energy models for large scale higher education campuses and institutional healthcare clients. As a Certified Energy Manager, Paige specializes in the development and analysis of energy conservation measures. Most recently, Paige completed a complex energy model for the one million square foot Eastern New Mexico University campus and analyzed 45 proposed energy conservation measures to support the Investment Grade Audit and resulting Energy Savings Performance Contract. She is a graduate of Arkansas Tech University and has 6 years of experience with Bernhard.

RELEVANT PROJECT EXPERIENCE

University of Arkansas at Little Rock I Little Rock, AR
Energy Conservation Program

University of Arkansas for Medical Sciences I Little Rock, AR
Investment Grade Audit
Energy Savings Performance Contract

Southern Arkansas University I Magnolia, AR
Strategic Energy Plan

Arkansas Career Training Institute I Hot Springs, AR
Investment Grade Audit

Eastern New Mexico University I Portales, NM
Investment Grade Audit
Energy Conservation Program
Measurement and Verification
Curry / Quay Hall HVAC Upgrades
Greyhound Stadium

AT&T Stadium I Arlington, TX
Energy Infrastructure Project

Water Campus I Baton Rouge, LA
DBOOM Energy Infrastructure Project

Ascension Health I Multiple Sites, AR
Energy Conservation Program Support

Midland Memorial Hospital I Midland, TX
Strategic Energy Plan

EDUCATION

Bachelor of Applied Science in Mechanical Engineering, Arkansas Tech University, 2014

LICENSES AND CERTIFICATIONS

Registered Professional Engineer: Arkansas

Certified Energy Manager

Certified Measurement and Verification Professional in Training

EXPERIENCE

6 years

TOMMY SPEARS PE, LEED AP

MECHANICAL DESIGN / PROJECT MANAGER

Tommy has been with Bernhard for more than 25 years, working as a mechanical engineer and project manager. He has provided designs for large scale energy conservation programs, infrastructure upgrades, retro-commissioning efforts, and more for healthcare clients around the country. Tommy specializes in energy conservation measure development and district energy system design for large campus clients. Today, Tommy leads a dedicated team through design of Energy-as-a-Service projects that combine thermal system optimization with infrastructure upgrades to address capital renewal and deferred maintenance.

RELEVANT PROJECT EXPERIENCE

Our Lady of the Lake Regional Medical Center | Baton Rouge, LA
Energy Asset Concession

University of Arkansas for Medical Sciences | Little Rock, AR
Energy Savings Performance Contract

Methodist University Hospital | Memphis, TN
Shorb Tower Expansion

Tucson Medical Center I Tucson, AZ
Energy Conservation Program
West Tower Expansion
PEDS Mother/Baby Expansion
Central Energy Plant Upgrades
North Plant Expansion
Surgery Renovation
Cath Lab Renovation

Carondelet St. Joseph Hospital | Tucson, AZ
Hospital Renovation

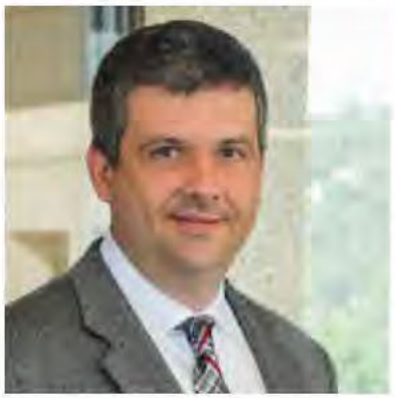
Carondelet St. Mary Hospital | Tucson, AZ
Hospital Renovation
Electrical Upgrades

University of Arkansas at Little Rock I Little Rock, AR
Energy Conservation Program
District Energy System Expansion

Memorial Hermann Southwest Hospital I Houston, TX
Chilled Water Optimization and Automation
Heating Water Upgrades

Medxcel I Multiple Sites, USA
Energy Conservation Program Support

Eastern New Mexico University I Portales, NM
Campus Heating Water Upgrades
Dormitory
Eddy Hall Boiler Replacement



EDUCATION

Bachelor of Science in Mechanical Engineering Technology, University of Arkansas at Little Rock

LICENSES AND CERTIFICATIONS

Registered Professional Engineer: Arkansas, Arizona, New Mexico, Idaho, Washington

USGBC LEED Associate Professional

EXPERIENCE

25 years

ADAM MCELDERRY PE, CEM

RETRO-COMMISSIONING / BAS

Adam is the Controls Design and Retro-Commissioning Team Leader at Bernhard. He is a graduate of the University of Arkansas at Little Rock with a Bachelor of Science in Mechanical Engineering. Adam is a Registered Professional Engineer (PE) and is a member of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). He has more than 9 years of industry experience, specializing in Retro-Commissioning.

EDUCATION

Bachelor of Science in Mechanical Systems Engineering
University of Arkansas at Little Rock , 2010

LICENSES AND CERTIFICATIONS

Registered Professional Engineer: Arkansas

Certified Energy Manager

ORGANIZATIONS

American Society of Heating, Refrigeration & Air Conditioning Engineers (ASHRAE)

EXPERIENCE

10 years

RELEVANT PROJECT EXPERIENCE

Atrium Health I Multiple Sites, NC
FMG Energy Management
Strategic Energy Plan and Retro-Commissioning
Atrium Health Mercy - Commissioning and Retro-Commissioning
Enterprise Energy Management Phase 1
Enterprise Energy Management Phase 2
Energy Engineering Consulting Services

University of Arkansas for Medical Sciences I Little Rock, AR
Energy Savings Performance Contract

White County Medical Center I Searcy, AR
Energy Conservation Program

Baptist Health Medical Center I Little Rock, AR
Tower 1 Retro Commissioning

Medxcel I Multiple Sites, USA
Energy Conservation Program Support and Retro-Commissioning

Houston Methodist Baytown Hospital I Houston, TX
San Jacinto Hospital Retro-Commissioning

University of Alabama at Birmingham I Birmingham, AL
North Pavilion - Surgery and Cath Lab HVAC Retro-Commissioning

Seton Highland Lakes Hospital I Burnet, TX
Retro-Commissioning

Seton Medical Center Hays I Hays County, TX
Retro-Commissioning

Dell Children's Medical Center I Austin, TX
Retro-Commissioning

Seton Medical Center Austin I Austin, TX
Retro-Commissioning

Seton Northwest Hospital I Austin, TX
Retro-Commissioning

JASON MAZUREK PE

CONTROLS ENGINEER

Jason has more than 15 years experience in controls design and optimization. He is a graduate of Milwaukee School of Engineering with a Bachelor of Science in Mechanical Engineering. Jason is a Registered Professional Engineer who specializes in providing innovative and energy efficient controls designs for our clients around the country. He has extensive experience working with several control systems including JCI, Tridium, Siemens, and Trane.

EDUCATION

Bachelor of Science in
Mechanical Engineering
Milwaukee School of Engineering, 2004

LICENSES AND CERTIFICATIONS

Registered Professional Engineer: Arkansas

ORGANIZATIONS

American Society of Heating, Refrigeration & Air Conditioning Engineers (ASHRAE)

EXPERIENCE

16 years

RELEVANT PROJECT EXPERIENCE

University of Arkansas at Little Rock I Little Rock, AR
Energy Conservation Program

Memorial Hermann Sugar Land Hospital I Sugar Land, TX
Retro-Commissioning

Memorial Hermann Cypress Hospital I Cypress, TX
Building Controls Design and Commissioning

Memorial Hermann Pearland Hospital I Pearland, TX
Building Controls Design and Commissioning

Memorial Hermann Northeast I Humble, TX
Building Controls Design and Commissioning

Seton Northwest I Austin, TX
BAS Upgrade

Ochsner Medical Center I New Orleans, LA
Energy Asset Concession

University of Arkansas for Medical Sciences I Little Rock, AR
Energy Savings Performance Contract
Automatic Temperature Controls Systems IDIQ

Our Lady of the Lake Regional Medical Center I Baton Rouge, LA
Energy Asset Concession

Arkansas Children's Hospital Northwest I Springdale, AR
New Hospital - Building Controls Design

CHI St. Vincent Infirmary I Little Rock, AR
Central Plant Controls Replacement

Ascension Health I Multiple Sites, USA
Retro-Commissioning
Energy Conservation Program Support

Arkansas State Crime Lab I Little Rock, AR
BAS Upgrade

MICHAEL COOPER PE, LEED AP

OPERATIONS & MAINTENANCE

Michael serves as the Executive Vice President to Bernhard's mechanical division and is directly responsible for the Bernhard Service organization within the Southeastern United States. Bernhard Service provides operations and maintenance services for customers in healthcare, higher education, and commercial sectors. Michael will oversee operation and maintenance services, preventative maintenance, repairs, and renewals during the project. Michael's 17 years of experience ensures Bernhard's continuing commitment to be a solution provider to our customers.

EDUCATION

Bachelor of Science in Mechanical Engineering, Louisiana State University

LICENSES AND CERTIFICATIONS

Registered Professional Engineer: Louisiana

USGBC LEED AP

EXPERIENCE

17 years

RELEVANT PROJECT EXPERIENCE

Our Lady of the Lake Regional Medical Center | Baton Rouge, LA
Energy Asset Concession

Ochsner Medical Center | New Orleans, LA
Energy Asset Concession

Ochsner Medical Complex High Grove I Baton Rouge, LA
Energy Asset Concession

CPRT - Water Campus | Baton Rouge, LA
Energy Asset Concession

West Jefferson Medical Center I Marrero, LA
Renovation and Addition

CBRE – Various Locations
Operations & Maintenance

Carolina Medical Center | Charlotte, NC
Operations & Maintenance

Duke University | Durham, NC
Operations & Maintenance

Duke Energy | Charlotte, NC
Operations & Maintenance

University Medical Center | New Orleans, LA
Diagnostic Treatment Center
Ambulatory Care Center
Utility Building

ED NENON

EXECUTIVE VICE PRESIDENT, MECHANICAL DIVISION

Ed is an Executive Vice President for Bernhard's mechanical division. He is an experienced construction executive with a demonstrated history of working nationally throughout the construction industry. Ed's area of expertise includes Design-Build, Contract Negotiations, Subcontracting, Construction Management, Process Scheduling, Budgeting, Value Engineering, Contractors, and Project Estimation. He is a graduate of the University of Memphis with a Bachelor of Science in mechanial engineering and is an integral leader in our Memphis office.

EDUCATION

Bachelor of Science in Mechanical Engineering, University of Memphis

LICENSES AND CERTIFICATIONS

HVAC Master License: Colorado, Florida, North Carolina, Oklahoma, Texas

OSHA 30

EXPERIENCE

40 years

RELEVANT PROJECT EXPERIENCE

St. Jude Children's Research Hospital I Memphis, TN
Tower II
Data Center
Mary Kay Tower

University of Memphis I Memphis, TN
School of Hospitality

West Cancer Center I Memphis, TN

Baptist Women's Hospital I Memphis, TN

JW Marriott I Nashville, TN

Baptist Rehabilitation Facility I Germantown, TN

Acadia Health Care I Germantown, TN

Beau Rivage Hotel and Casino I Biloxi, MS

Grand Casino Hotels I Tunica, MS

Palace Casino and Hotel I Biloxi, MS

Oxford Lafayette Medical Center I Oxford, MS

Methodist Hospital Expansion I Oxford, MS

Golden Triangle Regional Medical I Columbus, MS

NEA Baptist Memorial Hospital I Jonesboro, AR

Gaylord Texan I Dallas, TX

Choctaw Nation Medical Center I Durant, OK

Harrah's Cherokee Resort Expansion I Cherokee, NC

Hilton Waldorf Astoria Resort I Orlando, FL

TONY ROBESON, PE

DESIGN & COMMISSIONING

Tony Robeson serves as the Vice President of Design and Facility Solutions for Bernhard's Little Rock office. Tony manages the execution of design and commissioning projects and provides quality control. With 32 years of experience in the industry, he offers subject matter expertise for mechanical and controls design and commissioning. Tony will be the primary point of contact for the City of Little Rock.

RELEVANT PROJECT EXPERIENCE

Arkansas Division of Building Authority I Little Rock, AR
900 W Capitol M&V Report Review
One Capitol Mall Energy Analysis and Retro-Commissioning
Main Street Mall Retro-Commissioning

El Dorado Conference Center I El Dorado, AR
New Facility

Arkansas Oil & Gas Commission I Little Rock, AR
New Headquarters

Arkansas Department of Emergency Management I North Little Rock, AR
New Headquarters

Mount Magazine State Park I Paris, AR
New Lodge and Cabins

Arkansas Department of Human Services I Mansfield, AR
New Juvenile Treatment Center

Baldwin and Shell I Little Rock, AR
New Headquarters

Southwest Power Pool I Little Rock, AR
Corporate Headquarters
Operations and Data Center
Retro-Commissioning

Arkansas Children's Hospital I Little Rock, AR
Energy Conservation Program
South Wing Commissioning
Main Plant Modifications

University of Arkansas for Medical Sciences I Little Rock, AR
Primary Data Center Commissioning
Cancer Institute 9th and 11th Floor Tenant Finish Out

EDUCATION

Bachelor of Science in Mechanical Engineering, Louisiana Tech University 1987

LICENSES AND CERTIFICATIONS

Registered Professional Engineer: Arkansas, Kentucky, Missouri, North Carolina

NCEES Model Law No. 33091

Healthcare Facility Design Professional

AFFILIATIONS

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

PUBLICATIONS

Co-Authored Commissioning Standards for Ascension Health

Co-Authored Commissioning Standards for Military Health Agency

EXPERIENCE

31 years

MIKE BARNETT PE, CEM, HFDP

DIRECTOR OF COMMISSIONING

Mike Barnett is a Principal and Director of Commissioning for Bernhard's engineering division He is a registered Professional Engineer, a Certified Energy Manager, and an ASHRAE Healthcare Facility Design Professional with more than twenty years of experience in the industry. Mike's mechanical design experience informs his approach to commissioning, giving him a comprehensive understanding of how designs are implemented through construction and during facility operation. As the Commissioning Team Lead, Mike will manages the execution of commissioning services and provide technical expertise to his team, ensuring delivery of quality service.

RELEVANT PROJECT EXPERIENCE

Memorial Hermann Cypress Hospital I Cypress, TX
New Hospital Commissioning and Controls Design

University of Arkansas for Medical Sciences I Little Rock, AR
On-Call Commissioning
Winthrop P. Rockefeller Cancer Institute Commissioning
2E Surgical Services Area Renovation Commissioning
District Energy System Modifications

Baptist Health Medical Center - Conway I Conway, AR
New Hospital Commissioning

St. Vincent Orthopedic Hospital I Newburg, IN
New Orthopedic Hospital Commissioning

St. Vincent Evansville I Evansville, IN
Electrical Infrastructure Upgrade Commissioning

Borgess Medical Center I Kalamazoo, MI
Surgical Vertical Expansion and C-Section Suite Renovation

Baptist Memorial Hospital Crittenden I West Memphis, AR
New Hospital Commissioning

Our Lady of the Lake Children's Health I Baton Rouge, LA
Medical Office Building Commissioning
MEP System Optimization

Ochsner Medical Complex - The Grove I Baton Rouge, LA
New Central Utility Plant Commissioning

Arkansas Children's Hospital I Little Rock, AR
South Wing Addition Commissioning
Energy Conservation Program

Mercy Hospital South I St. Louis, MO
New Cancer Center Commissioning

EDUCATION

Bachelor of Science in Mechanical Engineering, Messiah College 1996

LICENSES AND CERTIFICATIONS

Registered Professional Engineer: Arkansas

Certified Energy Manager

Healthcare Facility Design Professional

AFFILIATIONS

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

EXPERIENCE

24 years

JESSI BIENERT LEED AP, CEM

REMOTE MONITORING AND M&V LEAD

Jessi Bienert is an expert in utility management with 11 years of experience in the industry. She specializes in utility rate analysis for large-scale campus energy conservation programs. Jessi oversees Bernhard's Facility Management Services team, which provides measurement and verification, utility analysis, utility management, utility bill auditing, benchmarking, O&M training, and more. Jessi is an Association of Energy Engineers Certified Energy Manager and a USGBC LEED Accredited Professional. She has shared her expertise at the World Energy Engineering Conference, the Critical Power Expo, the Rocky Mountain chapter of the Association of Physical Plant Administrators, and the annual conference for the American Society for Healthcare Engineering (ASHE) and through articles written for the Inside ASHE magazine.

RELEVANT PROJECT EXPERIENCE

University of Arkansas I Fayetteville, AR
On-Going Commodity Management
Utility Rate Consulting
Measurement and Verification

University of Arkansas at Little Rock I Little Rock, AR
On-Going Commodity Management
Utility Rate Consulting
Measurement and Verification

University of Arkansas for Medical Sciences I Little Rock, AR
On-Going Commodity Management
Utility Bill Auditing
Utility Rate Consulting
Energy Savings Performance Contract
Measurement and Verification

Mercy I Multiple Sites, USA
Enterprise Utility Management
Enterprise Sustainability Program Reporting and Dashboard

State of Arkansas I Multiple Sites, AR
On-going Commodity Management
Utility Bill Auditing

University of Alabama at Birmingham I Birmingham, AL
Supply-Side Energy Analysis
Utility Rate Consulting
Thermal Energy Rate Design
Measurement and Verification

EDUCATION

Bachelor of Science in Construction Management
University of Arkansas at Little Rock , 2010

LICENSES AND CERTIFICATIONS

AEE Certified Energy Manager

USGBC LEED AP

ORGANIZATIONS

United States Green Building Council (USBGC)

Association of Energy Engineers (AEE)

EXPERIENCE

11 years

JAMES HESS PE, CEM, BEMP, BEAP

REMOTE SUPPORT

James is a registered Professional Engineer, Certified Energy Manager, ASHRAE Building Energy Modeling Professional, and a member of the Association of Energy Engineers with 20 years of industry experience. He has wide-ranging experience in engineering design for new construction projects, energy conservation projects, and he specializes in energy engineering. He provides remote support and on-going monitoring for clients and has developed customized reporting tools to assist in issue identification and resolution.

EDUCATION

Master of Science in Mechanical Engineering, Louisiana State University

Bachelor of Science in Industrial Engineering, Louisiana State University

LICENSES AND CERTIFICATIONS

Registered Professional Engineer: Arkansas

AEE Certified Energy Manager

Building Energy Modeling Professional

Building Energy Assessment Professional

ORGANIZATIONS

Association of Energy Engineers (AEE)

EXPERIENCE

22 years

RELEVANT PROJECT EXPERIENCE

Midland Memorial Hospital I Midland, TX
Strategic Energy Plan
West Campus Central Plant Study
Energy Conservation Project
Chilled Water System Upgrade

Ochsner Medical Center | New Orleans, LA
Energy Asset Concession

University of Arkansas for Medical Sciences I Little Rock, AR
Energy Savings Performance Contract
Main Central Energy Plant Stream Conversion Feasibility Study

Ascension Health I Multiple Sites, USA
Energy Conservation Program Support

Ochsner Medical Complex High Grove I Baton Rouge, LA
Energy Asset Concession

Medxcel I Multiple Sites, USA
Energy Conservation Program Support

St. Vincent's Bridgeport I Bridgeport, CT
Electrical Distribution System Evaluation

National Center for Toxicological Research I Jefferson, AR
Strategic Energy Plan

University of Arkansas I Fayetteville, AR
Campus District Energy
Combined Heat and Power Plant
Hydraulic Model

LIZ BALENTINE CMVP, EEP

ENERGY ANALYST

Liz specializes in utility data analysis and utility bill auditing. She is an IPMVP Certified Measurement and Verification Professional with nine years of experience in data analysis and reporting. She works diligently to identify billing errors and advocate on behalf of her clients. During her six years with Bernhard, she has successfully negotiated more than $500,000 in utility billing corrections.

RELEVANT PROJECT EXPERIENCE

University of Arkansas at Little Rock I LIttle Rock, AR
On-Going Commodity Management
Measurement & Verification
Entergy Coordination

University of Arkansas for Medical Sciences I Little Rock, AR
On-Going Commodity Management
Utility Cost Allocations
Measurement & Verification

University of Arkansas at Pine Bluff I Pine Bluff, AR
On-Going Commodity Management

Southern Arkansas University I Magnolia, AR
Sustainable Energy Solutions Reporting
On-Going Commodity Management

University of Alabama at Birmingham I Birmingham, AL
Campus Energy Conservation Study
Measurement & Verification

Eastern New Mexico University I Portales, NM
Energy Conservation Program
Measurement and Verification

Mercy I Multiple Sites, USA
Enterprise Utility Management
Enterprise Sustainability Program Reporting and Dashboard
Measurement & Verification
ESP Utility Metering Integration
Automatic Fault Detection

Texas Children's Hospital I Houston, TX
Measurement & Verification

EDUCATION

Bachelor of Arts in Political Science,
University of Arkansas at Little Rock , 2006

LICENSES AND CERTIFICATIONS

Certified Measurement & Verification Professional (CVMP)

Energy Efficiency Practitioner (EEP)

EXPERIENCE

6 years

4. COMPANY FINANCIAL STATUS

Bernhard

4A: FINANCIAL SOUNDNESS AND PROFITABILITY

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

Each subsidiary of Bernhard LLC, are each consistently profitable with strong balance sheets.

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

Since the formation of Bernhard in 2014, the company has been profitable. Evidence of profitability is provided in Appendix A.

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.

Provided in Appendix A.

4B: BONDING

d. Current bonding rating

[redacted]

e. Current bonding capacity

[redacted]

f. Amount or percentage of bonding capacity currently obligated

[redacted]

g. Current bonding rate

[redacted]

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

Bernhard is bondable for 100% of a payment bond on a project. Confirmation is provided in Appendix B.

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

Bernhard Energy is bondable for 100% of a performance bond on a project. Confirmation is provided in Appendix B.

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

Evidence of the ability to bond for payment and performance is provided in Appendix B.

5: MARKETING APPROACH

5: MARKETING APPROACH

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

Bernhard strives for customer advocacy and acknowledges the importance of collaboration. Bernhard will communicate with AEO, Agencies and the ESCO community throughout the life of a project to promote energy savings and is heavily involved in AAEA, ASHE, AAHE, AAEE, ASHRAE and other national and local organizations. Bernhard will promote the AEPC Program and projects not only during day-to-day business interactions but also at events.

Our project marketing approach is multi-tiered and includes initiatives to promote the project throughout applicable industries, project stakeholders, and the community. Bernhard's marketing tactics can include:

- News releases distributed to local media throughout various milestones of the project.
- Groundbreaking event, signing ceremony, etc, to commemorate the project kickoff.
- Development and submittal of presentation abstracts for industry conferences and events.
- Promotion of project progress, milestone events and energy savings through various Bernhard marketing channels including social media, newsletter, and website.

Image by Bryan Clifton

UAMS Breaks Ground on a more than $150 Million Energy Project at Main Campus

By Ben Boulden

Nov. 20, 2019 | The University of Arkansas for Medical Sciences (UAMS) broke ground today in a ceremony marking the start of a more than $150 million energy project, including a new $49 million electrical power plant. The project is being paid for by a bond issue approved this year by the University of Arkansas Board of Trustees.

Shovels in hand, Board of Trustees members; local dignitaries; UAMS Chancellor Cam Patterson, M.D., MBA; and UAMS officials wearing hard hats officially turned dirt on the project that is estimated to result in $4.8 million in savings annually.

SPOTLIGHT

$150M UAMS Energy Project Ensures Unbroken Power, Savings Certainty

by Kyle Massey
Monday, Dec. 14, 2020 12:00 am 1 min read

The face of a $150 million energy project at the University of Arkansas for Medical Sciences peers down on visitors to the northeast side of the Little Rock campus, just behind the Markham Street Walgreens.

6: REPORTING APPROACH

Bernhard

6: REPORTING APPROACH

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

Bernhard is dedicated to delivering reports and contracts to AEO in a timely manner. Bernhard has a team of measurement and verification analysts generating energy reports daily for clients across the country. Bernhard will meet the requirements for providing project performance metrics by assigning a project manager who is personally responsible for delivering metrics in a timely manner.

7: TECHNICAL APPROACH

Bernhard

7: TECHNICAL APPROACH

a. 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.

An on-site survey is the first step in Bernhard's approach to performing an investment grade audit. Equipment and building controls are evaluated and detailed information regarding the age, condition, reliability, resiliency, and energy efficiency (where applicable) is documented using checklists, observation notes, and photos. The survey team also gathers data from the facility's computerized maintenance management software (CMMS) and building automation system (BAS) where available. For example, work orders are reviewed for the purpose of identifying infrastructure-related issues that are frequent, recurring, or systemic. Additionally, equipment trend data is gathered for use during the analysis phase.

Additional walk-throughs of each building during the on-site survey will provide a firm understanding of the building control, mechanical, lighting, and domestic water systems. While on-site and throughout the survey process, our survey team will periodically meet with facilities management personnel to gather additional information about the facility, including: operational challenges, equipment maintenance processes and histories, comfort issues, and other related criteria to be addressed throughout the project. In addition, our team typically meets with administrative, financial, and facilities management decision-makers to discuss priorities and long-term plans. For example, plans for a future expansion or changes in energy usage need to be considered during design and implementation of this project. Taking the Owner's future needs into consideration during the planning stage ensures that the final project not only meets current needs, but will also support future changes.

Energy Conservation Measures (ECMs)

Following the on-site survey, the team will compile all of the information gathered from the survey and utilize energy modeling software, utility accounting software, and benchmarking tools to understand how the facility uses energy. The ECM analysis addresses supply-side and demand-side opportunities utilizing a comprehensive energy model of equipment and system performance for every hour in a typical year (commonly referred to as an "8760 model"). Furthermore, our analysis will consider equipment remaining useful life, equipment

Comprehensive Report

After the supply-side and demand-side energy analyses are completed, our team will provide a comprehensive report containing the following information:

- An executive summary that details the overall approach to the project and highlights key findings
- An introduction with project approach and background
- Assumption used during the analysis process
- Methodology and processes used to project energy savings
- The baseline model used to perform the ECM analysis
- Recommendations for ECMs discovered during the on-site survey
- Written savings calculations with all supporting information
- Energy cost, energy units, operating hours, and all assumptions made in the energy calculations
- Comparison of reductions to existing historical utility consumption
- Explanation of the interactive effects of energy consumption reductions and their overall impact on rates and prices
- Turnkey pricing that includes of all costs of each ECM, including the costs and timelines of design, engineering, installation, maintenance, repairs, and applicable financial analysis
- Schematic design documents informed by the ECM analysis
- Results, conclusions, recommendations, and work papers related to the project and informed by the ECM analysis

We will then present our methodology, conclusions, and recommendations to key facility personnel and other project stakeholders. After incorporating the input, our team will use this report as a decision-making tool to prioritize ECMs for final scope development.

A sample IGA report for [redacted] is provided in Appendix C. Members of the Bernhard team listed in Section 3B were utilized in the development of the IGA report.

b. 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.

Bernhard keeps the customer experience in mind by installing fixtures that provide indirect lighting and have multi-lighting levels. Multi-lighting level fixtures not only regulate comfort levels but are also an energy-efficient alternative. Our team adheres to the Illuminating Engineering Society standards which are internationally know and will work with the architect and Owner on every project in order to find a balance between aesthetics and code.

Additionally, Bernhard has employees that sit on various ASHRAE Standard Committees to ensure that we are helping guide the direction for future codes and standards. We fully understand the need for balancing end-user comfort and maximizing energy savings. We also help ensure that strategies are in place to ensure that minimum ventilation requirements are maintained during occupied times and unoccupied sequences are implemented when possible to reduce energy costs.

c. 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.

Baseline calculations are built following the Efficiency Valuation Organization International Performance Measurement & Verification Protocol (IPMVP) and ASHRAE 14 Standards. IPMVP options A, B, C, and D are chosen on a project-by-project basis as applicable. Detailed M&V Plans are developed collaboratively with all invested parties prior to the beginning of the M&V period.

d. 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.

Routine Adjustments: Baselines are normalized for weather using multi-variable regression modeling.

Non-Routine Adjustments: Adjustments for facility size, operational and equipment changes are calculated using energy model data from industry standard software (eQUEST, TRANE TRACE 700, etc.) for measurements and/or statistical analysis. All adjustments, methods, and calculations are documented in an amended M&V Plan and reviewed by all invested parties.

Prior to implementing a project, Bernhard will work with the applicable agency to establish a baseline based on pre-existing and historical conditions at the facilities of the agency. In the event of a "material change" in the project, Bernhard would propose to adjust the baseline to accurately reflect the energy savings and changes in the project. A material change may include, but is not limited to the following:

- Change in the manner of use of any facility, building, structure, property, of the agency, or any entity operating a facility, building, structure, property, or Premises on behalf of the agency
- Change in the hours of operation for any facility, building, structure, property, or for any equipment, ECMs or energy using systems related to the foregoing
- Permanent changes in the comfort and service parameters for a facility, building, structure, property that deviate from defined standards of comfort
- Change in occupancy of a building, facility, structure or property
- Change in types and quantities of equipment or ECMs used at a building, facility, structure or property of the agency

- Modification, renovation or construction at any of the facilities or structures of the agency
- The failure of the O&M providers to perform its operational responsibilities in accordance with the obligations under the energy savings performance contract ("ESPC"), or to otherwise fail to operate the equipment and ECMs consistent with the provisions of this ESPC
- Casualty or condemnation of a facility, building, structure or property of the agency
- A catastrophic event, i.e., force majeure event, occurring at a facility, building, structure or property of the agency, or the equipment or ECMs at any of the foregoing
- Changes in utility provider or utility rate classification
- The closing, elimination, sale or transfer of any facility, structure or building
- Any other conditions other than climate affecting energy or water use at any facility, building, structure or property of the agency.

The agency shall use its best efforts to notify Bernhard of a material change, but no later than fourteen (14) days before knowledge of such material change. In the event of an emergency, the agency shall notify of the material change as soon as reasonably practicable. Any changes in the operation of the ECMs of equipment, or energy usage within a facility, building, structure or property, which occurs as a result of a reported material change shall be reviewed by the parties to determine what, if any adjustments to the baseline are needed. The parties agree that any adjustments made to the baseline shall be mutually agreed upon by the parties (unless otherwise resolved subject to the dispute resolution procedures of this ESPC) and in accordance with generally accepted engineering principles, and where applicable, the provisions of the IPMVP. Any disputes concerning any adjustment to the baseline shall be resolved pursuant to the terms and conditions of the dispute resolution provisions of the ESPC.

If the agency fails to notify Bernhard of a material change, in the operations of a facility, structure, building or property, the baseline consumption will be adjusted to account for this material change retroactive to the date when the material change occurred. Bernhard shall report its findings to the agency along with adjustments to the baseline. The agency shall review, and if necessary, within thirty (30) days of the change, may dispute the changes to the baseline in accordance with the dispute resolution provisions of the ESPC.

8: COMPANY SCOPE OF SERVICES

Bernhard

8: COMPANY SCOPE OF SERVICES

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

a. Energy Systems in Buildings:

Bernhard has experience with a multitude of energy systems in various building types. Our team can provide services in all of the listed areas. Some of our experience includes:

- Central plants
- Control and building automation systems
- Daylighting
- Distributed generation
- Fuel switching
- Heating systems
- Indoor air quality
- Kitchens
- Laboratories
- Laundry
- Lighting systems (indoor and outdoor)
- Renewables (geothermal solar-electric/thermal, wind, biomass)
- Swimming pools and recreational facilities
- Transportation (fleet fuel management, etc.)
- Utility management
- Ventilation systems
- Water-consuming systems

b. Project Development and Implementation:

- Investment Grade Energy Auditing (ASHRAE Level 3 audit)

  Bernhard regularly provides Investment Grade Audits for projects procured through the AEPC Program. Recent IGA's include [redacted], [redacted], and the University of Arkansas for Medical Sciences.

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

  At Bernhard, we take pride in our standing as the leading innovator in the U.S. energy services industry. While a significant part of that innovation resides within our engineering and construction divisions, our team is equally advanced in concepts related to tax, financing, commercial energy efficiency financing, and customer accounting. Our goal in each transaction is to craft a structure that best meets the customer's key objectives and thereby delivers the most ideal outcome. This involves a robust technical plan coupled with the right financing strategy to deliver the lowest annual cost to the customer.

  As a result of our experience, we are intimately familiar with a variety of financing mechanisms including tax-exempt bonds, taxable bonds, certificates of participation, and lease financing arrangements including tax-exempt leases. We have learned that each of these funding mechanisms has its advantages and disadvantages, specifically interest rate or bond coupon, costs of issuance, underwriting fees, governance requirements, and debt service covenants.

  The right financing method for a specific project is dependent on project specific circumstances and constraints including, statutory and regulatory requirements, credit rating, indentures, lender consent, Unrelated Business Income Subject to

Taxation (UBIT), private use, and much more.

Selecting the most favorable method for a specific application requires a comprehensive, rigorous, and collaborative analysis by a multi-discipline team. Bernhard purposefully includes key individuals with the technical, legal, accounting, tax, and finance experience needed to ensure this project is financed in the most cost-effective manner. Effectively, our thoughtful approach incorporates the use of low rates.

Bernhard also privately funds infrastructure renewal projects for large building owners, using vehicles such as an energy asset concession arrangement or Design-Build-Finance-Own-Operate-Maintain (DBFOOM). These transactions typically involve a lease of public assets; a sale of the tax ownership of the underlying public assets; a design-build agreement; a performance guarantee; and a long-term service agreement.

- Commissioning of projects and retro-commissioning of existing buildings

  Our new building commissioning and existing building commissioning services focus on long-term, sustainable operation. We don't believe in the 'check box' commissioning approach that is commonly found in the commissioning industry. Our building commissioning experts follow industry best practices and apply lessons learned from our experience to deliver hands-on, comprehensive commissioning services.

  Our team of commissioning experts includes engineers with experience in design and former facility manager who understand building operations. This knowledge is embedded into our approach, enabling our team to optimize building systems for sustainable and energy efficient operation. Bernhard's commissioning services include new construction commissioning, existing building commissioning, retro-commissioning, and ongoing and monitoring-based commissioning.

- **Identification of asbestos and other hazardous materials and abatement, recycling or disposal, as applicable**

  Bernhard is aware of the typical areas asbestos can be found in older facilities such as mechanical insulation, ceiling tiles, etc. Our team has extensive experience with consultants who will test the facility and remove any hazardous materials.

- Construction

  Bernhard's mechanical and electrical contraction divisions have over 100 years of experience in the industry. We take pride in building solutions that achieve our clients' outcomes. Our culture is grounded in assuring client satisfaction through safe, quality work. Our in-house team of designers, builders, and skilled laborers have broad experience in diverse market sectors. We bring the best ideas from our proven experience to every project through pre-construction and construction services. With 1,500 mechanical contracting professionals 300+ electrical construction employees and in multiple branch offices, our team brings quality service to job sites across the nation.

  All employees within our construction division are required to have a minimum OSHA 10 certification and supervisors/ management must obtain an OSHA 30 certification. Employees are encouraged to report unsafe conditions and are challenged to form individual goals for S.A.F.E. work: "See it, Assess it, Fix it, Every day!" As a result, we have been able to maintain an EMR well below industry average reported by BLS/NCCI as well as prevent specification non-compliance.

- Project Constructability

  To ensure the most efficient use of your two most valuable resources – time and money – our team conducts thorough constructability reviews to avoid wasting either one.

  An experienced superintendent is an important contributor to the valuable constructability review process. Details take many shapes and forms, from a structural system or roof system decision to wall/ceiling/floor material choices. The details of how these systems or materials work together can suggest a certain sequence of construction or means and methods that will yield the most favorable schedule duration or finished product.

  The superintendent, project manager, and other vital members of the project team will evaluate and comment on the design from a perspective of constructability, and use of materials and alternative approaches. Our project team will review the drawings and details to provide insight on how the details affect schedule and quality and suggest potential remedies.

Our project manager and superintendent will work together to advise the project team on the optimum path to identify potential detail or systems changes and/or resultant changes to subcontractor bid packaging and selection strategy. All of this work is done to ensure that your project is completed as quickly as possible and at the lowest cost without sacrificing quality.

- System design engineering (mechanical, electrical, etc.)

  We approach each project as a unique challenge. Creativity and innovation remain the cornerstone of our design process. For engineering design, we have developed a project management process, quality control process, and comprehensive scope of work that ensures the final deliverable will be consistent with the Owner's Project Requirements, the established Basis of Design, and the established project budget. The scope of work provided by our engineers includes value added services, like building information modeling, schematic design documents, and life cycle cost analysis, which are considered above and beyond standard MEP design services. We believe that these services are essential to provide the most cost effective and energy-efficient design for each project.

- Project/construction management

  The foundation for our project management and construction plan is open communication, proactive scheduling, and a commitment to quality and safety. Every project is assigned a dedicated project manager to serve as the liaison between the Owner, the design and construction team members, and all contracted parties. This individual's primary responsibilities include serving the Owner's needs above all others and promoting a successful execution of the project scope. The project manager, with support from the University, will determine how each aspect of the project will be scheduled and logistically organized. The project manager will schedule and conduct interim inspections throughout the project to confirm that work completed to date conforms to the project specifications and is of satisfactory work quality, to determine the current percent of total project completion, and to verify payment schedule compliance.

- Procurement, Bidding, Cost estimating

  Bernhard utilizes competitive procurement to deliver the highest value at the lowest risk to our clients. During this process, Owner involvement and input are critical. Bernhard is willing to use preferred subcontractors of the Owner.

c. Support Services:

- ***Measurement and verification of savings***

  Bernhard's Measurement and Verification process provides operations and maintenance personnel timely feedback on equipment and systems performance to ensure sustainable, energy-efficient operations. This process incorporates daily and monthly reporting from a whole-building perspective, providing a comparison of weather-adjusted baseline and targeted energy consumption to actual, metered consumption.

  Monthly reports provide financial information validating the effects of energy reduction measures and tracking achieved savings versus targeted goals. This equips facility managers with the justification they need to approach their board about future projects and investments.

  The daily reporting provides valuable feedback that can be used as an operational tool, allowing facility managers the opportunity to make data-driven decisions and take ownership of operations. This creates an environment where the staff is focusing on the big picture and is consistently pushing towards the same goal: reducing energy consumption and overall net costs. M&V creates an environment where the entire staff is focusing on the big picture and is consistently pushing towards the same goal: reducing energy consumption and overall net costs.

- ***Equipment warranties***

  All equipment installed as part of the performance contract will be covered by a one-year warranty from the date of project completion. Where new equipment is added to existing equipment, only the new equipment will carry this one-year warranty. An equipment list will be prepared at project closeout for each building that will detail all warranty dates including any manufacturer's warranties which exceed this one-year period. This document will also include any specific service requirement details which might be required by the manufacturer to keep these warranties in force.

The warranty claim process will emphasize prompt repair of critical systems and proper documentation of the circumstances surrounding the warranty issue. Bernhard will work with the client to establish a warranty claim procedure which utilizes the present service contractors or the installing contractor to provide the most prompt reaction to warranty issues for critical systems.

- ***Calculation and reporting of emissions reductions***
  Bernhard is committed to sustainability and energy conservation. We believe that reducing greenhouse gas emissions and fossil fuel consumption is absolutely essential. Our team is willing and has the capability to calculate and report emissions reductions. Our dedicated Measurement and Verification professional staff have calculated emissions reductions for a variety of project types and sizes.

- ***Marketing and promotion of a State or Federal EPC Program***
  See Section 5: Marketing Approach.

- ***Performance guarantee for every year of the financing term***
  Under the conventional performance contracting approach, the performance guarantee is contingent upon a number of factors including proper operation. Our approach includes proven support services designed to optimize operation, sustain energy-efficient performance, elevate operator capability, and ensure proper operation. Our performance guarantee is backed by a strong balance sheet supported [redacted]. Beyond the financial, our work is also supported by our long history of delivering quality results to our clients.

- ***Insurance per contract requirements***
  Proof of insurance is provided in Appendix D.

- ***Application for an Energy Star Label Application for LEED certification***
  Bernhard is committed to the principles of sustainability. We believe that the transformation of the design and construction industry from conventional practices to sustainable practices is critical for a sustainable future. We have completed more than 40 LEED Certified projects, including new construction and renovations. Through this experience, we have learned that the foundation of all sustainable practices is stewardship. Stewardship of financial and natural resources is what we do best. Every aspect of our practice has been structured to produce energy efficient and environmentally sensitive designs.

  The Bernhard team includes team members with extensive experience in LEED and Energy Star consulting services. We have the capability to prepare and submit an Energy Star application on behalf of our clients. Our experienced staff have maintained Energy Star Portfolio Manager accounts for many Energy Star certified facilities. With this experience comes an intimate understanding of the goals and requirements of the Energy Star program, which include monthly invoice data, performance and savings data, and detailed facility information. Our team also includes registered Professional Engineers who are available to facilitate the Energy Star verification process by reviewing and approving the application.

- ***Training of maintenance staff and occupants***
  Bernhard developed an Operations and Maintenance program to supporting building operators and maintenance staff in effectively maintaining their facilities. The program gives O&M staff access to training courses involving classroom instruction, field instruction, and plain language guidance on the building systems they encounter on a day-to-day basis.

  The program empowers O&M staff to operate their facility more efficiently and builds a purpose-driven team that is proactive in improving daily operations and sustaining energy savings. Training sessions are delivered onsite by experienced trainers. Each class lasts approximately 4 hours and includes a PowerPoint presentation and handouts. Classes include:

  – Air Handling Unit
  – Air Distribution Systems
  – Hydronic System
  – Chilled Water System

- Heating Water System
- Controls
- Additional classes are available on request.

Prior to training, the O&M staff are given an online assessment. The assessment results are used to tailor the training to your team's needs. The assessment consists of 75, multiple-choice questions and is made up of three sections; air-side, water-side, and controls. After the training is completed, the exact same assessment is given to verify retention and track progress.

- ***Hazardous material handling***

  Bernhard has developed policies and procedures that are compliant with all federal and state regulations regarding the handling of hazardous material.

- ***Long-term maintenance services of energy systems***

  Facility managers and their staff are faced with pressure to save operating costs while maintaining a higher level of service, comfort, and quality. We understand this challenge and have developed services and solutions to support effective, long-term operation and maintenance.

  From energy performance measurement and verification to preventative maintenance and 24/7 emergency service, we create value for our clients by offering services that focus on streamlining operations and sustaining energy efficiency.

  Equipment Service

  With expert technicians throughout the nation, we can support your ongoing service and maintenance needs as well as respond 24/7 to urgent needs. As the company that engineered and constructed your systems, we are the most qualified experts to support your needs with cost-effective and timely services. Whether you need us for planned routine maintenance or to consult on a new issue or area of concern, Bernhard is available to our customers today and for the life of your building.

  Measurement & Verification

  Bernhard's measurement and verification is structured to capture the effect of multiple variables on energy consumption. We analyze energy use for the whole building rather than focusing on the area or systems affected by a project. This gives you a complete picture of your facility's consumption and savings. Last year, our expert analysts measured $14,761,000 in energy savings.

  BES Platform

  The BES Platform is a customized building analytics dashboard to house all of your critical data—utility bills, measurement and verification reporting, automatic fault detection, and more. You get a complete view of your facility's energy use, from its initial procurement all the way to its end use in the facility in a platform totally configured to your needs and preferences. The best part? It is backed by a team of engineering experts and remote monitoring staff who offer real-time monitoring of your systems and facilities. We monitor 78,481,557 square feet which is over 150 buildings and more than 1,300 utility accounts.

  O&M Training

  Our comprehensive education and training program empowers Operations and Maintenance (O&M) to operate their facility more energy efficiently which ensures sustained savings over time. The program begins with an assessment of each individual's proficiency level. Our technical staff and education professionals use the results to develop a customized training program based on opportunities for improvement. The curriculum covers fundamental technical concepts and terminology, building maintenance and operations procedures, troubleshooting and diagnostics, and system optimization. This knowledge builds a purpose-driven team that is proactive in improving daily operations and sustaining energy savings.

  Utility Management

  We offer complete solutions for managing utility costs. Our dedicated team of analysts provides rate design, rate analysis, procurement, peak shaving, market monitoring, forecasting, budgeting, bill auditing, and more. We take a detailed and hands-on approach to deliver tangible results. Last year, we corrected over $342,000 in utility billing errors on behalf of our clients. You can trust that our expert staff will deliver maximum utility cost savings while ensuring a reliable energy supply.

9: PROJECT HISTORY

Bernhard

9: PROJECT HISTORY

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

Owner / Project Name	Facility Type	Firm	City & State	Project Size ($)	Annual Energy Savings ($)	Project Timeline
University of Arkansas for Medical Sciences ESPC	Academic Medical Center	Bernhard	Little Rock, AR	$150M	$4.8M (est)	Estimated Completion (Construction): November 2022
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
UA Little Rock Energy Conservation Program	Higher Education	Bernhard	Little Rock, AR	$29M	$3.1M	Completed in 2015
Eastern New Mexico State University ESPC	Higher Education	Bernhard	Portales, NM	$4.5M	$405K	Construction Completed: December 2018
Midland Health Energy Asset Concession	Healthcare	Bernhard	Midland, TX	$19.4	$664K	Contract Signed: December 2020
Southeast Missouri State University Integrated Energy Master Plan	Higher Education	Bernhard	Cape Girardeau, MO	-	$1.5M	Completed: December 2018

10: PROJECT REFERENCES

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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.)

Energy Conservation Program –University of Arkansas at Little Rock, Little Rock, AR (college)

2. Contact Information: Names and contact information of owner(s) representatives who can serve as references

David Millay
(501) 569-8897 | dmillay@ualr.edu

3. Project Size: Number of buildings and total project square footage

60 Building, Approx. 2.9 Million SF

4. Project Dollar Amount: Total contract amount and the total project capital expenditure amount

$29 Million

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

The $29.2 million project was financed through a combination of general obligation bonds and Arkansas Division of Building Authority Sustainable Building Design Revolving Loan Funds (RLF). UA Little Rock was eligible to receive RLF funding with the guarantee that the project's savings would pay back the loan fund.

6. Project Dates: Actual dates of audit start and acceptance; actual construction starting and ending dates

Actual Start and Finish Dates for Design: May 2013- September 2014

Actual Notice to Proceed and Substantial Completion Dates for Construction:
April 2014-May 2015*
**Because this project is comprised of 60 buildings, each with its own project schedule, substantial completion is derived when over 75% of the buildings are complete.*

7. Contract Terms: A description of the type of contract, financing arrangement, and contract term

Contract Delivery Method: Alternative Delivery

Financing Arrangement: Bond Sale,
Contract term: February 2010- Present

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)

Tommy Spears – Project Manager, Steven Ward – Director of Measurement & Verification, Tony Robeson – Retro-Commissioning Agent, Jason Mazurek – Mechanical Engineer, Jessi Bienert – Measurement & Verification Analyst

9. Project Schedule: Indicate if project was completed on schedule and, if not, please explain.

Completed on schedule.

10. List of Improvements: The types of retrofits and operational improvements implemented related to energy, water and other cost savings.

Bernhard provided retrofits for each of the buildings under this project, some of which included:

- District Energy System
  1. Installed 3 Heat Pump Chillers Heaters
  2. Tied Chilled Water and Heating Water system of each building together to form a district loop
  3. BAS upgrade in most building to integrate all control systems together
  4. Programmed efficient sequence of operations to control chilled water and heating water systems

- Electrical Upgrade
  1. Installed generator plant capable of powering entire facility
  2. Combined all electric meters to one electric meter
  3. Changed electric rate that main meter is on to Interruptible Service Rate

- Building BAS Upgrades (for 5 buildings)
  1. Replaced old pneumatic or outdated controls with new DDC controls
  2. Programmed Efficient sequence of operations for Air Handling Units and Terminal Boxes
  3. Implemented Room Ventilation Schedule to reduce airflow setpoint

- Retro – Commissioning (All buildings)
  1. Implemented Room Ventilation Schedule to reduce airflow setpoints
  2. Programmed efficient sequence of operations for some Air Handling Units
  3. Identified energy conservation measures to be implemented at each building
  4. Identified deficiencies in the control system that were listed out for repairs to be made

11. Project Performance: The amounts of projected annual savings, guaranteed annual savings, and actual annual savings for each project in a table.

Projected Annual Savings	Guaranteed Annual Savings	Actual Savings
In progress	$2.6 Million	$3.1 Million

12. Measurement and Verification (M&V): A brief description of the M&V approach for each project including which savings were stipulated, if any.

The M&V approach that was utilized for this project incorporates a whole campus method using a weather calibrated regression for

each meter that is directly affected by the project. This approach is consistent and similar to the International Performance Measurement and Verification Protocol (IPMVP) Option C method and involves identifying all utility meters, identifying the relationship between utility consumption and weather, using actual values as the baseline, convert utility savings to financial savings using both Stipulated (Baseline and Project) Utility Rates and Invoice Rates, etc.

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.)

Bernhard did not offer a savings guarantee, but rather pursues each job with fervency until savings are met.

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).

Ongoing Daily M&V

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.

In 2013, the University of Arkansas at Little Rock (UA Little Rock) embarked on a campus-wide energy conservation project aimed at reducing their $5.8 million annual energy costs. The UA Little Rock campus is comprised of more than 60 buildings with a cumulative 2.9 million square feet across 250 acres.

Bernhard was engaged to formulate a strategic energy plan with the goal of reducing energy costs by 20% by 2014 and 30% by 2017. UA Little Rock and Bernhard agreed to approach the project with an integrated scope consisting of a multitude of energy cost reduction measures, including upgrading and retrofitting the building automation systems, retro-commissioning the existing buildings, expanding the district cooling system, installing a district heating system, installing heat pump chiller heaters, and installing a distributed generation system with Tier 4 generators. Construction of the 10 MW self-generation station was economically justified based on the availability of an Operational Interruptible Service rider from the local utility. The $29.2 million project was financed through a combination of general obligation bonds and Arkansas Division of Building Authority Sustainable Building Design Revolving Loan Funds (RLF). UA Little Rock was eligible to receive RLF funding with the guarantee that the project's savings would pay back the loan fund.

Currently, UA Little Rock has realized a 42% reduction in energy consumption, which translates to a utility cost savings of $3.1 million per year (51% reduction in utility costs). The University has significantly decreased its carbon footprint and has a goal of becoming the most energy-efficient university in the United States. Since the project's completion in 2015, the savings have exceeded the original target of $2.6 million per year to achieve an annual savings of $3.1 million. Bernhard continues to provide daily measurement and verification to aid UA Little Rock in sustaining and growing project savings.

1. Project Identification: Owner name, city/state, and facility type (hospital, school, college, city, county, etc.)

University of Arkansas for Medical Sciences Energy Savings Performance Contract (academic medical center)

2. Contact Information: Names and contact information of owner(s) representatives who can serve as references

Brian Cotten
(501) 686-6088 | mbcotten@uams.edu

3. Project Size: Number of buildings and total project square footage

5.2 Million SF

4. Project Dollar Amount: Total contract amount and the total project capital expenditure amount

$150 Million

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

[redacted]

6. Project Dates: Actual dates of audit start and acceptance; actual construction starting and ending dates

Construction: December 2019 - December 2022

7. Contract Terms: A description of the type of contract, financing arrangement, and contract term

Contract Delivery Method: ESPC
Financing Arrangement: See #5 above.
Contract term: 20 years

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)

Juno Guedry – Project Executive, Michael Fullerton – Survey Engineer, Adam McElderry – Commissioning Agent, Tommy Spears - Engineering Manager, Jason Mazurek – Mechanical Engineer, James Hess – Measurement & Verification / Remote Support, Training Engineer - Brooke Foster

9. Project Schedule: Indicate if project was completed on schedule and, if not, please explain.

Projected to be completed on schedule.

10. List of Improvements: The types of retrofits and operational improvements implemented related to energy, water and other cost savings.

Pine-Cedar Boulevard Improvements, New Generator Plant, Campus-Wide Metering, Controls Upgrades, Interior Lighting Upgrades, Exterior Lighting Upgrades, Electrical System Upgrades, Mechanical System Upgrades, Building Infrastructure Upgrades

11. Project Performance: The amounts of projected annual savings, guaranteed annual savings, and actual annual savings for each project in a table.

Actual Annual Savings	Projected Savings
$559,391* (Year 1 Construction Period Savings Achieved)	$692,271 (Year 1 Construction Period Savings Target)

*The achieved savings are preliminary, awaiting possible adjustments for losses that may not be associated with the project.

12. Measurement and Verification (M&V): A brief description of the M&V approach for each project including which savings were stipulated, if any.

The M&V approach that was utilized for this project incorporates a whole campus method using a weather calibrated regression for each meter that is directly affected by the project. This approach is consistent and similar to the International Performance Measurement and Verification Protocol (IPMVP Option C method and involves identifying all utility meters, identifying the relationship between utility consumption and weather, using actual values as the baseline, convert utility savings to financial savings using both Stipulated (Baseline and Project Utility Rates and Invoice Rates, etc.

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.)

The project provides a guaranteed positive annual cash flow ($4.8 million per year average savings over the term of the agreement. Strict adherence to the most stringent industry standard for savings measurement and verification combined with independent objective oversight ensures the integrity and veracity of the reported savings.

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).

EPC work in progress.

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.

In July 2019, the University of Arkansas for Medical Sciences (UAMS was given approval by the University of Arkansas System Trustees for a $150 million Energy Savings Performance Contract (ESPC that will be administered through the Arkansas Energy Performance Contracting (AEPC program and implemented by Bernhard. The project is the largest energy savings project in the State of Arkansas, the largest in the academic and healthcare sector, and the second largest in the United States.

UAMS, like many academic health centers, is facing of a perfect storm of declining and capped health care reimbursements, declining state support for higher education, and ever-increasing costs. By leveraging guaranteed capital and operating cost savings provided through the ESPC project, UAMS can address $116 million in critical and other deferred maintenance needs and implement $34 million in incremental energy efficiency measures. The project includes controls upgrades, retrofitting interior and exterior lighting, installation of

campus wide metering, installation of a new generator plant, upgrading essential electrical systems and infrastructure, and upgrading lab controls, mechanical equipment, plants and systems.

The project will provide UAMS a guaranteed positive annual cash flow ($4.8 million per year average savings) over the term of the agreement, provide 100% back-up power the entire campus including cooling system and research facilities (the West Central Energy Plant currently serves the UAMS inpatient healthcare facilities), and funds upgrades to Pine and Cedar Boulevard that address safety concerns and provides 300 additional parking spaces immediately adjacent to the campus.

11: COST & PRICING

Bernhard

11: COST & PRICING

a. Investment's Grade Audit (IGA) Costs. Please describe your company's approach to IGA Pricing.

Bernhard initially negotiates and executes an agreement with the Owner, establishing the terms and conditions for the preparation of an IGA. The terms and conditions include a provision indication that the Owner is not obligated to compensate Bernhard for the Comprehensive Energy Audit or proceed with the execution of a performance contract with Bernhard should the audit fail to identify a qualified project (a project with positive cash flow).

Bernhard will then complete the IGA which includes the following steps: 1) supply-side energy audit; 2) utility rate analysis; 3) survey of campus and buildings; 4) interview maintenance staff; 5) establish baseline energy consumption and costs; 6) develop a baseline energy model; 7) calibrate the energy model to reconcile with the baseline energy consumption and costs; 8) develop a modified baseline model (accounting for planned additions, renovations, and buildings); 9) identify and evaluate potential energy cost reduction measures (conceptual design, implementation cost, energy savings, estimated useful life, and both individual and interactive utility cost savings calculated using actual rate structures inclusive of customer charge, demand and energy components); 10) ECRM summary; 11) avoided capital costs; 12) program financing; 13) program operating expenses; and 14) life cycle cost analysis.

There will be no charge for the Preliminary Energy Audit. Bernhard's compensation (fee and expenses) for the Comprehensive Energy Audit will be calculated based upon the total conditioned floor area of the Covered Facilities and the charge per square foot of floor space per the AEO-developed 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

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

In our experience, clients suggest a long term energy price escalation rate of 2% or 3%. We have used federal EIA projections at times. In any case, these are stipulated within the ESPC contract and not subject to change throughout the term of the ESPC agreement.

c. 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.

Bernhard was founded on one key principal – Client Advocacy. This is the key characteristic that we look for when evaluating other firms and consultants. Other characteristics we examine include previous working knowledge of the facility, firm history, project location, references/reputation in the industry, similar project experience, and client preferences.

Our experience has proven that a collaborative effort between the design and construction team can produce an exceptional product for a complex project. Furthermore, the business combination of each Bernhard division provides our team greater access to invaluable construction project expertise. Our teams regularly share insight into projects to implement best practice design and construction standards.

d. 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.

Bernhard pricing is open book meaning that all equipment, materials, and sub-contracts will be priced with full transparency and oversight by the Client. The Client receives 100% of the savings realized by these efforts. Additionally, Bernhard will maintain cost accounting records on all work performed and will allow access as desired by the Client.

e. 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.

Bernhard agrees to the provisions of the AEPC project cost and pricing elements and will use the cost and pricing values when developing a final IGA and EPC Project Proposal.

At Bernhard, we are passionate about providing an innovative solution to your unique challenges. We are creative thinkers, driven to improve our communities and the world.

BUILDING BETTER IDEAS.

For more information, visit our website: Bernhard.com

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