

AGENDA FOR THE SPECIAL MEETING OF THE
UNIVERSITY OF ARKANSAS BOARD OF TRUSTEES
VIA TELEPHONE CONFERENCE CALL
1:30 P.M., JULY 9, 2019

University of Arkansas for Medical Sciences

1. Consideration of Request for Approval of the Energy Conservation Project, UAMS (Action)

University of Arkansas, Fayetteville

2. Consideration of Request for Approval of Salaries in Excess of the Line Item Maximum, UAF (Action)

University of Arkansas Division of Agriculture

3. Consideration of Request for Approval of Salaries in Excess of the Line Item Maximum, AGRI (Action)
4. Consideration of Request for Approval to Grant a Utility Easement to Arkansas Valley Electric at the Clarksville Fruit Research Station in Johnson County, Arkansas, AGRI (Action)

UofA
UNIVERSITY OF ARKANSAS SYSTEM

Office of the President

July 3, 2019

TO MEMBERS OF THE BOARD OF TRUSTEES:

Dear Trustees:

As you will recall, Chancellor Cam Patterson, University of Arkansas for Medical Sciences, is requesting your approval of UAMS's Energy Conservation Project. A copy of the Capital Project Proposal Form is attached for your information.

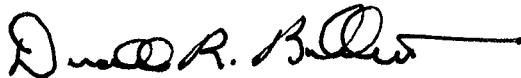
The Arkansas Energy Office has been designated by the Arkansas Legislature to implement the Arkansas Performance Contracting Program for State agencies. The Energy Office has established prequalification standards for qualified firms that can implement energy savings performance contracts with State agencies. UAMS selected the services of Bernhard Energy to perform these services.

The Investment Grade Audit has been completed by Bernhard Energy and UAMS is requesting Board approval to proceed with the implementation of the Campus Wide Energy Conservation Improvement Project.

I concur with Dr. Patterson's recommendation. A proposed resolution is set out below for your consideration. Financing of the project will be considered at a later date.

BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE
UNIVERSITY OF ARKANSAS THAT the Energy Conservation Project at the
University of Arkansas for Medical Sciences is hereby approved.

Sincerely,



Donald R. Bobbitt
President
Charles E. Scharlau Presidential Leadership Chair

Attachments

2404 North University Avenue / Little Rock, Arkansas 72207-3608 / 501-686-2505

University of Arkansas, Fayetteville / University of Arkansas at Little Rock / University of Arkansas at Pine Bluff
University of Arkansas for Medical Sciences / University of Arkansas at Monticello / Division of Agriculture / Criminal Justice Institute
Arkansas Archeological Survey / Phillips Community College of the University of Arkansas / University of Arkansas Community College at Hope
University of Arkansas Community College at Batesville / Cossatot Community College of the University of Arkansas
University of Arkansas Community College at Morrilton / University of Arkansas at Fort Smith
University of Arkansas – Pulaski Technical College / University of Arkansas Community College at Rich Mountain
Arkansas School for Mathematics, Sciences and the Arts / University of Arkansas Clinton School of Public Service / University of Arkansas System eVersity

The University of Arkansas is an equal opportunity/affirmative action institution.

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CAPITAL PROJECT PROPOSAL FORM

Campus: UAMS

Name of Proposed Facility: Energy Conservation Project

1. Project Function (See Attachments):

UAMS is seeking to realize value over the term of the agreement including 1) significantly reduced energy costs, 2) avoided capital investment into planned deferred maintenance projects, 3) increased funding for critical deferred maintenance projects, and 4) risk mitigation through improvements to critical infrastructure. An Investment Grade Audit (IGA) was prepared by Bernhard Energy starting in October 2018. The purpose of the IGA was to identify a successful campus infrastructure and energy conservation project utilizing an energy savings performance contract as authorized for Arkansas State Agencies. The format and structure of the IGA was created in consultation with the Arkansas Energy Office and in compliance with statutes set forth AR Act 554.

Based on the IGA the goals of the project are as follows:

- Upgrade and Retro-Commission BAS Controls
- Retrofit Interior and Site Lighting
- Install Campus Wide Metering
- Install New Generator Plant
- Upgrade Essential power System
- Upgrade Electrical Infrastructure
- Upgrade MCEP Chilled Water Plant
- Upgrade MCEP Heating Plant
- Upgrade Building District Energy Systems
- Replace Air Handling Units
- Connect Bioventures to District Energy Systems
- Upgrade Lab Controls
- Provide Operator Training
- Demolish ENT Building
- Realign Pine/Cedar Boulevard

2. Facility: Location and Description (Attach Map):

This project will include multiple buildings across the east side of campus.

3. Total Project Cost:

\$156,414,336

4. Parking Plan to Support New or Expanded Facility:

The Pine/Cedar Boulevard project will add approximately 300 new parking spaces.

5. Source of Project Funds:

The project will be financed by the issuance of bonds.



ATTACHMENT A

Cost Reduction Measures (CRM) Descriptions

The University of Arkansas for Medical Sciences (UAMS) decided to move forward with an investment grade audit (IGA) in October 2018 to evaluate the ability to fund energy efficiency improvements and deferred maintenance capital renewal projects through savings generated through energy, operational, maintenance, and avoided capital savings.

The purpose of the IGA is to identify a successful campus infrastructure and energy conservation project utilizing an energy savings performance contract as authorized for Arkansas State Agencies in A.C.A. § 19-11-120 and A.C.A. § 19-11-1208. UAMS is seeking to realize value over the term of the agreement including 1) significantly reduced energy costs, 2) avoided capital investment into planned deferred maintenance projects, 3) increased funding for critical deferred maintenance projects, and 4) risk mitigation through improvements to critical infrastructure.

A number of Cost Reduction Measures (CRMs) were evaluated over the course of the IGA. These CRMs were identified at each building level for evaluation purposes with final CRM selection based on UAMS priorities and desired scope. The final selected CRMs were condensed into 15 broad categories as summarized below.

CRM-01: Upgrade and Retro-Commission BAS Controls

Building Automation System (BAS) controls are vital to energy efficient operations. Controls technology has advanced over the last several years with the advent of Direct Digital Controls (DDC) and is far superior to pneumatic controls. However, even the presence of DDC controls does not ensure energy efficient operations. Controls technology becomes outdated and incorrect implementation of DDC control sequences are commonly seen throughout the industry. Sub-standard performance is often the result of poor programming and sequence development, even though the controlled equipment is designed to be energy efficient. The Upgrade and Retro-Commission Building Automation System CRM is intended to address the BAS system and optimize its operation. This implementation of this CRM involves two distinct components: 1) upgrading the existing BAS to current technology and 2) retro-commissioning the existing and upgraded BAS to optimize system operation. This CRM often generates substantial energy savings and resolves persistent operational and maintenance issues.

Upgrading the BAS involves the replacement, repair, or enhancement of the existing DDC control system to current technology including devices such as controllers, server, workstations, and network. This would include the replacement of pneumatic controls and integration of a common BAS platform when multiple control systems are present. Deploying DDC technology across all systems affords an enhanced degree of control and reliability to achieve the desired energy efficiencies.

Retro-commissioning the BAS emphasizes optimization through DDC control strategies to maximize energy efficiency. This effort focuses on re-designing control sequences and optimizing setpoints to reduce airflow quantities and improve equipment operation for energy efficiency while meeting all code requirements. Retro-commissioning also improves occupant comfort and reduces the burden of operations and maintenance.

CRM-02: Retrofit Interior and Site Lighting

Lighting energy costs for typical commercial buildings ranges from 10% to 15% of a building's overall utility costs. This can vary greatly depending on building occupancy, function, and type of lighting technology deployed. UAMS has a diverse use of lighting technology across its campus. Based on the lighting audit performed during the IGA, more than 70,000 fixtures were identified and evaluated for possible retrofit to an LED alternative. LED lighting technology provides an energy efficient solution when compared to traditional fluorescent fixtures. In recent years, LED lighting has made significant progress in terms of economic viability and provides significant life cycle cost savings. This CRM will reduce energy costs while also correct lighting levels in various spaces across the UAMS campus.

CRM-03: Install Campus Wide Metering

Energy conservation programs often require sufficient detail in order to identify, quantify, and monitor energy performance. This detail is accomplished by installing additional metering and a data archival system to monitor relevant energy and utility values. At UAMS, an extensive sub-metering and data archival system is currently in place. This existing system records data every 15 minute intervals and is stored in an SQL database. Information harvested from this system was critical in the analyses performed in the IGA. However, this system is not as comprehensive as desired with some buildings and systems only partially metered or not metered at all. The intent of this CRM is to retro-commission, repair, replace, or install additional metering on campus to provide UAMS the transparency necessary to optimize energy performance.

CRM-04: Install New Generator Plant

UAMS presently has a 13.5 MW diesel generator plant located at the WCEP that allows UAMS the opportunity to participate in Entergy's demand response program under its Optional Interruptible Service (OIS) rider. This program generates substantial cost savings for UAMS. The generator plant at the WCEP provides complete backup to the normal power system on UAMS' west portion of the campus plus additional off-takers including the Arkansas Department of Health and the Arkansas State Hospital.

Under this proposed CRM, UAMS would construct a new 24 MW generator plant located on the east portion of the campus with a proposed location on the corner of South Cedar Street and West Capitol Avenue, just east of Parking Deck 3. The intent is provide complete backup to the normal power system for the buildings located on the east portion of the campus and take advantage of Entergy's OIS rate, similar to the arrangement at the WCEP.

The new generator plant as described herein would provide the opportunity for significant cost savings to be realized by UAMS while also providing resiliency to UAMS' electrical service. After the completion of this scope, the entire UAMS campus (with very little exception) would have normal power backup and have the ability to continue business operations in the event of service loss from the utility.

CRM-05: Upgrade Essential Power System

In concert with CRM-04 – Install New Generator Plant, this CRM would upgrade the existing UAMS essential power system on the east portion of the campus to be served from the newly constructed east generator plant. UAMS presently has 19 independent generators on campus that serve various buildings and loads. These generators are maintenance intensive and are in need of replacement. This CRM would remove these generators and re-feed the emergency power circuits associated with those loads to the new generator plant.

CRM-06: Upgrade Electrical Infrastructure

A significant concern across several buildings around the campus is the age and condition of the existing electrical infrastructure systems. The systems are largely original to the buildings and have been modified in a piecemeal manner over the years to adapt to expansion requirements. This has resulted in some equipment being out of date and difficult to maintain without considerable capital expense. This project includes the removal and replacement of the existing electrical distribution systems with new 480V distribution. The primary buildings with electrical systems concerns include:

1. Central Building – includes MSG, Boiler House, old Emergency Room area, and Physical Plant
2. Shorey Building
3. Barton
4. Ed II Building
5. Outpatient Clinic
6. Jones Eye Institute

CRM-07: Upgrade MCEP Chilled Water Plant

The scope of this CRM is to upgrade the MCEP chilled water plant from a primary secondary pumping arrangement to a variable primary pumping system. This scope includes the replacement of existing primary and secondary pumps with new variable primary pumps and closing isolation valves on the existing primary secondary decoupler to increase plant pumping efficiency. The scope also includes the replacement of two (2) existing chillers with two (2) new standard efficiency chillers to improve chiller plant efficiency.

In addition to the above upgrades, the scope also includes the upgrade of existing cooling tower cells located at the MCEP. The scope proposes to replace six (6) existing cooling tower cells with new cells and extend equalization piping to the new cells such that any cell can be used with any chiller. This scope will provide an additional 1,500 tons of cooling tower capacity to the MCEP.

CRM-08: Upgrade MCEP Heating Plant

This intent of this CRM is to upgrade the MCEP heating plant to more efficiently serve low load conditions and replace aged steam boilers with more efficient boilers. The proposed scope is to install a small boiler to serve smaller loads when the existing heat pump chiller heater (HPCH) is in full operation. In addition, the proposed scope will replace one (1) existing steam boiler with a new steam boiler for increased efficiency and backup. Two (2) existing and recently upgraded steam boilers will remain in place. New flooded heat exchangers will be added in the MCEP to serve as supplemental heat to the HPCH during peak heating conditions. New heating water pumps will be installed to serve the flooded heat exchanger.

CRM-09: Upgrade Building District Energy Systems

This scope is applicable to multiple building-level district energy service upgrades to improve energy efficiency. These upgrades include: extension of the district heating water system to buildings not currently taking service from the system, converting domestic hot water heating from steam to heating water, utilizing point of use steam humidifiers in lieu of steam generated humidifiers, removing pressure drops from the chilled water system by removing triple duty valves, and converting existing 2-pipe fan coil units to 4-pipe fan coil units.

The majority of buildings on the UAMS campus are connected to the district heating water system with the exception of PET, Secondary Data Center, and Radiology Oncology. The proposed scope would extend the existing district

heating water loop to serve these remaining buildings to realize efficiency gains provided by the HPCH when compared to steam-sourced heating.

In addition, some buildings on campus utilize steam-fed domestic hot water systems. These buildings include Biomedical Research Center I, Biomedical Research Center II, Education III, College of Public Health, Jones Eye Institute, and Central Building. The proposed scope would provide new domestic hot water heat exchangers fed from the district heating water system to provide domestic hot water to the buildings. This scope allows these loads to take service from a more efficient source of thermal energy.

Employing the use of point of use steam humidifiers at MRI and Outpatient Center allows steam service to these buildings to be removed or capped, allowing steam distribution losses to be reduced and conserve energy.

The Central Building is currently conditioned inadequately by 2-pipe fan coil units, thereby creating comfort issues for its occupants, especially during seasonal changes of the year. This scope proposes to replace the existing 2-pipe fan coil units with 4-pipe fan coil units with DDC controls to improve occupant comfort.

CRM-10: Replace Air Handling Units

Air Handling Units (AHUs) can have a substantial impact on energy consumption and costs for a building. AHUs are common HVAC equipment seen in most commercial buildings and are responsible for the primary air movement of the HVAC system. AHUs have a finite useful operating life ranging from 25 to 30 years on average and need replacing once that useful life has been reached. Many AHUs on the UAMS campus have reached or are currently operating beyond their useful life and are in need of replacement. This CRM will replace selected AHUs as prioritized by UAMS.

CRM-11: Connect Bioventures to District Energy Systems

Bioventures is presently served by an independent air-cooled chilled water system and is not connected to the district chilled water system. In addition, the facility has an independent electrical service from the main campus. This proposed scope is to extend the district chilled water system and main campus electrical distribution system to serve the building in order to take advantage of the MCEP equipment efficiencies and the lower campus electricity rate structure.

CRM-12: Upgrade Lab Controls

UAMS has extensive research activities on campus which involves numerous labs. Laboratory spaces are energy-intensive spaces and are often configured as constant volume systems. UAMS has several labs on campus with constant volume hoods, supply, and exhaust. The conversion of these systems to variable volume often yields substantial energy savings.

The conversion from constant volume to variable volume requires the addition of variable air volume exhaust units on the existing hoods and supply air terminals to provide conditioned air to the lab space for comfort and make-up air. In addition, a general exhaust terminal is typically required to offset the supply airflow when the hood is at minimum exhaust airflow. The conversion also requires an upgrade to the control system to provide variable airflow control coordination of the hood, supply, and general exhaust to maintain correct hood face velocity and room pressurization. Variable volume conversion of lab spaces affords the opportunity to further enhance energy performance during unoccupied times by reducing minimum airflows when the hood sash is closed or no occupant is operating the hood.

The scope of this CRM is associated with constant volume laboratories located in Biomedical Research Center I, Biomedical Research Center II, Jones Eye Institute, and Arkansas Cancer Research Center (ACRC).

CRM-13: Provide Operator Training

Sustaining energy performance is highly dependent on the understanding of the operators responsible for the building and plant systems. A robust operator training program will fully inform UAMS staff of the systems on campus and best practices for operating them to sustain energy performance.

CRM-14: Demolish ENT Building (Head & Neck Clinic)

This CRM shall consist of the removal of the ENT Building and related appurtenances to the existing grade level of the lot. The ENT Building is currently unoccupied and unfit for use by UAMS and its operations.

CRM-15: Realign Pine/Cedar Boulevard

In order to alleviate traffic congestion, improve infrastructure quality, provide parking, and set a recognizable and aesthetically enhanced eastern boundary to the UAMS campus, the realignment of the geometric configuration of Pine and Cedar streets to one boulevard is necessary. This realignment will maximize parking spaces between the two existing streets and repurpose Cedar Street as a pedestrian space that maintains fire service to the campus.

ATTACHMENT B
Project Summary

#	Description	Cost (\$)
CRM-01	Upgrade and Retro-Commission BAS Controls	13,480,871
CRM-02	Retrofit Interior and Site Lighting	9,315,781
CRM-03	Install Campus Wide Metering	1,508,200
CRM-04	Install New Generator Plant	50,766,700
CRM-05	Upgrade Essential Power System	12,036,457
CRM-06	Upgrade Electrical Infrastructure	18,288,173
CRM-07	Upgrade MCEP Chilled Water Plant	9,560,307
CRM-08	Upgrade MCEP Heating Plant	3,150,437
CRM-09	Upgrade Building District Energy Systems	9,835,881
CRM-10	Replace Air Handling Units	3,741,835
CRM-11	Connect Bioventures to District Energy Systems	581,923
CRM-12	Upgrade Lab Controls	4,534,265
CRM-13	Provide Operator Training	136,707
CRM-14	Demolish ENT Building (Head & Neck Clinic)	69,371
CRM-15	Realign Pine/Cedar Boulevard	11,822,330
Subtotal		148,829,238
Capitalized Fees & M&V Costs		753,388
Total Project		149,582,626

ATTACHMENT C

Project Financing

Item	Units	Value
Total Project Cost	\$	149,582,626
Capitalized Construction Period Interest Charged	\$	14,759,011
Capitalized Construction Period Interest Earned	\$	(1,208,910)
Guaranteed Construction Period Cost Savings	\$	(8,249,528)
Cost of Issuance	\$	0
Underwriting Fees	\$	1,511,138
Arkansas Energy Office Administration Fee	\$	20,000
Subtotal Financed Amount	\$	156,414,336
Debt Service Term	Years	20
Debt Service Rate	%	3.16
Debt Service Payment Annual Escalation Rate	%	2.10
First Year Debt Service Payment	\$/Year	8,883,460

Debt Service Schedule

Year	Payment (\$)	Year	Payment (\$)
0	0	12	10,490,304
1	0	13	10,710,601
2	0	14	10,935,523
3	0	15	11,165,169
4	8,883,460	16	11,399,638
5	9,070,012	17	11,639,030
6	9,260,483	18	11,883,450
7	9,454,953	19	12,133,002
8	9,653,507	20	12,387,795
9	9,856,231	21	12,647,939
10	10,063,211	22	12,913,546
11	10,274,539	23	13,184,730

ATTACHMENT D
Project Savings Guarantee

	Year	Electric Savings (kWh/Yr)	Nat. Gas Savings (MMBtu/Yr)	Water Savings (kGals/Yr)	Electricity Savings (\$)	Nat. Gas Savings (\$)	Water Savings (\$)	Guaranteed Savings (\$)
Installation Period	1	5,617,516	20,473	3,185	581,728	88,663	22,624	693,016
	2	20,902,831	77,295	11,793	2,164,617	334,744	83,774	2,583,136
	3	40,174,921	150,733	22,555	4,160,361	652,789	160,227	4,973,377
Performance Period	4	45,207,417	172,097	25,257	4,681,507	745,310	179,419	5,606,235
	5	45,207,417	172,097	25,257	4,798,544	775,122	183,007	5,756,673
	6	45,207,417	172,097	25,257	4,918,508	806,127	186,667	5,911,302
	7	45,207,417	172,097	25,257	5,041,471	838,372	190,401	6,070,243
	8	45,207,417	172,097	25,257	5,167,507	871,907	194,209	6,233,623
	9	45,207,417	172,097	25,257	5,296,695	906,783	198,093	6,401,571
	10	45,207,417	172,097	25,257	5,429,112	943,054	202,055	6,574,222
	11	45,207,417	172,097	25,257	5,564,840	980,777	206,096	6,751,713
	12	45,207,417	172,097	25,257	5,703,961	1,020,008	210,218	6,934,187
	13	45,207,417	172,097	25,257	5,846,560	1,060,808	214,422	7,121,790
	14	45,207,417	172,097	25,257	5,992,724	1,103,240	218,711	7,314,675
	15	45,207,417	172,097	25,257	6,142,542	1,147,370	223,085	7,512,997
	16	45,207,417	172,097	25,257	6,296,106	1,193,265	227,546	7,716,917
	17	45,207,417	172,097	25,257	6,453,509	1,240,995	232,097	7,926,601
	18	45,207,417	172,097	25,257	6,614,846	1,290,635	236,739	8,142,221
	19	45,207,417	172,097	25,257	6,780,218	1,342,260	241,474	8,363,952
	20	45,207,417	172,097	25,257	6,949,723	1,395,951	246,304	8,591,977
	21	45,207,417	172,097	25,257	7,123,466	1,451,789	251,230	8,826,485
	22	45,207,417	172,097	25,257	7,301,553	1,509,860	256,254	9,067,667
	23	45,207,417	172,097	25,257	7,484,092	1,570,255	261,379	9,315,726
Total		970,843,608	3,690,441	542,673	126,494,191	23,270,083	4,626,031	154,390,305

Assumptions:

- Annual electricity cost escalation rate equals 2.50% per year.
- Annual natural gas cost escalation rate equals 4.00% per year.
- Annual water/sewer cost escalation rate equals 2.00% per year.

ATTACHMENT E
Project Cashflow Analysis

	Year	Guaranteed Savings (\$)	Avoided Capital Savings (\$)	O&M Savings (\$)	M&V Fees (\$)	Debt Service Payment (\$)	Net Savings (\$)
Installation Period	1	693,016	0	(138,430)	0	0	554,586
	2	2,583,136	0	(141,198)	0	0	2,441,937
	3	4,973,377	0	(144,022)	0	0	4,829,355
Performance Period	4	5,606,235	3,497,041	(146,903)	0	(8,883,460)	72,914
	5	5,756,673	3,549,497	(149,841)	0	(9,070,012)	86,317
	6	5,911,302	3,602,739	(152,837)	0	(9,260,483)	100,721
	7	6,070,243	3,656,780	(155,894)	(54,056)	(9,454,953)	62,120
	8	6,233,623	3,711,632	(159,012)	(55,137)	(9,653,507)	77,599
	9	6,401,571	3,767,306	(162,192)	(56,240)	(9,856,231)	94,215
	10	6,574,222	3,823,816	(165,436)	(57,364)	(10,063,211)	112,025
	11	6,751,713	3,881,173	(168,745)	(58,512)	(10,274,539)	131,090
	12	6,934,187	3,939,391	(172,120)	(59,682)	(10,490,304)	151,471
	13	7,121,790	3,998,482	(175,562)	(60,876)	(10,710,601)	173,234
	14	7,314,675	4,058,459	(179,073)	(243,858)	(10,935,523)	14,679
	15	7,512,997	4,119,336	(182,655)	(248,735)	(11,165,169)	35,774
	16	7,716,917	4,181,126	(186,308)	(253,710)	(11,399,638)	58,387
	17	7,926,601	4,243,843	(190,034)	(258,784)	(11,639,030)	82,596
	18	8,142,221	4,307,500	(193,835)	(263,960)	(11,883,450)	108,477
	19	8,363,952	4,372,113	(197,712)	(269,239)	(12,133,002)	136,112
	20	8,591,977	4,437,694	(201,666)	(274,624)	(12,387,795)	165,587
	21	8,826,485	4,504,260	(205,699)	(280,116)	(12,647,939)	196,990
	22	9,067,667	4,571,824	(209,813)	(285,718)	(12,913,546)	230,414
	23	9,315,726	4,640,401	(214,009)	(291,433)	(13,184,730)	265,955
Total		154,390,305	80,864,410	(3,922,996)	(3,072,042)	(218,007,122)	10,182,555
Net Present Value of Savings							1,635,409

Analysis Notes and Assumptions:

- Guaranteed Savings is the sum of Electricity, Natural Gas, and Water Savings as provided in Attachment D.
- Annual operations and maintenance escalation rate equals 2.00% per year.
- Annual measurement and verification escalation rate equals 2.00% per year.
- M&V Fees increase in Year 14 due to increases in energy savings guarantee insurance costs. Energy savings guarantee for Years 4-13 are capitalized.
- Avoided Capital Savings are based on \$56 Million principal amount financed over a 20 year term with an interest rate of 3.16% and payments escalating 1.50% annually.
- Debt Service Payment is based on \$156 Million principal amount financed over a 20 year term with an interest rate of 3.16% and payments escalating 2.10% annually. Refer to Attachment C.
- Net Present Value of Savings is based on a discount rate of 3.16% and excludes Installation Period Savings. The Installation Period Savings is used to offset capitalized interest.

Attachment F
Campus Wide Energy Savings Performance Contract (ESPC)
Selection Process
October 2018

The process for approval for the Campus Wide ESPC project and the selection of Bernhard Energy followed both Board of Trustees policies and state statutes.

The Arkansas Energy Office has been designated by the Arkansas Legislature to implement the Arkansas Performance Contracting program for State agencies. The Energy Office has established prequalification standards and regularly publishes a list of qualified firms that can implement energy savings performance contracts with State agencies. Bernhard Energy has been deemed qualified by the Arkansas Energy Office.

The Arkansas Energy Office assisted UAMS in the process of procuring the services of a qualified energy services provider. Four firms selected from list of qualified firms were interviewed by a team from UAMS and Arkansas Energy Office. The evaluation process was very analytical and objective in nature. Based on this process the team selected Bernhard Energy as the most qualified firm for this project.

Additionally, the Arkansas Energy Office developed the Investment Grade Audit and Project Development Agreement that authorized Bernhard Energy to perform technical energy audit and analysis of the buildings and facilities on the campus of UAMS. This agreement was executed by UAMS on October 1, 2018.

Bernhard Energy has completed the Investment Grade Audit (IGA) for the UAMS campus. All of the recommendations for energy savings have been identified reviewed and will be ready for implementation with the approval of the University of Arkansas Board of Trustees.

Attachment G ESPC Statute Requirements and Methods

Energy Savings Performance Contracting is a method of contracting that will allow energy savings projects to be performed and paid for over time by the guaranteed savings realized in our energy bills, operations cost, and avoided capital investments.

The enabling legislation for this is 19-11-1201 through 19-11-1206 and is titled "Guaranteed Energy Cost Savings Act" and as amended in section 19-4-522 "Act 554".

An excerpt taken from the definitions page of the statute reads:

"Guaranteed energy cost savings contract" means a contract for the implementation of one (1) or more energy cost savings measures and services provided by qualified energy service companies in which the energy and cost savings achieved by the installed energy project cover all project costs, including financing, over a specified contract term."

In other words, for a project to be eligible under this program we look for things on our campus that are wasting energy, are in need of replacement, causes excessive maintenance cost, or could perform better if they were repaired or upgraded. These are termed Cost Reduction Measures (CRM's). If you were to do a CRM, or a group of CRM's, a certain amount of energy and operational cost will be saved. This can be electricity, gas, fuel oil, water, maintenance, capital, or any other type of operational cost. This savings must be sufficient to pay for the conservation measure, plus the financing fees, and any other project costs, over an acceptable term. The statute has an upper limit of 20 years.

CRM's can include many things such as:

- Critical maintenance items
- Deferred maintenance items
- Broken or worn out equipment
- Enhancement projects, such as more sophisticated heating and air conditioning equipment that work better and save energy.
- Lighting retrofits or enhancements, new technologies in building lighting can do a great job in saving energy.
- Building Automation Controls, occupancy sensors
- Generation equipment that enables energy cost reduction
- Renewable energy systems
- Others, including building envelope problems.

The Energy Services Company (ESCO) is required to investigate the facilities on our campus through an Investment Grade Audit process. After the list of CRM's are agreed upon, then a cash flow process is developed leading to an amount to be guaranteed by the ESCO. The statute then states:

"If the annual energy or operational cost savings fail to meet or exceed the annual costs of the energy cost savings measure as required by the guaranteed energy cost savings contract, the qualified provider shall reimburse the state agency for any shortfall of guaranteed energy cost savings on an annual basis."

July 3, 2019

TO THE MEMBERS OF THE BOARD OF TRUSTEES

Dear Trustees:

Dr. Joseph E. Steinmetz, Chancellor of the University of Arkansas, Fayetteville, has submitted a request to exceed the line-item maximum salary for exceptionally well-qualified personnel. This request has been carefully considered, and I concur with Chancellor Steinmetz's recommendation.

Sincerely,



Donald R. Bobbitt
President
Charles E. Scharlau Presidential Leadership Chair

Attachment

2404 North University Avenue / Little Rock, Arkansas 72207-3608 / 501-686-2505

University of Arkansas, Fayetteville / University of Arkansas at Little Rock / University of Arkansas at Pine Bluff
University of Arkansas for Medical Sciences / University of Arkansas at Monticello / Division of Agriculture / Criminal Justice Institute
Arkansas Archeological Survey / Phillips Community College of the University of Arkansas / University of Arkansas Community College at Hope
University of Arkansas Community College at Batesville / Cossatot Community College of the University of Arkansas
University of Arkansas Community College at Morrilton / University of Arkansas at Fort Smith
University of Arkansas – Pulaski Technical College / University of Arkansas Community College at Rich Mountain
Arkansas School for Mathematics, Sciences and the Arts / University of Arkansas Clinton School of Public Service / University of Arkansas System eVersity

RESOLUTION

BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ARKANSAS THAT salaries, as set forth below, in excess of the line-item maximum established by law, are hereby approved for the following individuals at the University of Arkansas, Fayetteville, in accordance with Arkansas Code Annotated section 6-62-103:

Michael Adams, Assistant Golf Coach	\$119,331*
Robert (Bobby) Allen, Project/Program Director	\$221,601*
Christopher Bader, Mental Health Clinician (eff. 7/15/19)	\$107,500*
Todd Barbour, Assistant Coach	\$147,824*
Christopher Bogantes, Assistant Women's Gymnastics Coach (eff. 5/17/19)	\$120,667*
Christopher Brooks, Assistant Women's Gymnastics Coach (eff. 5/17/19)	\$120,667*
Rhett Brooks, Assistant Coach	\$115,425*
Chris Bucknam, Head Track Coach	\$496,500*
Steve Caldwell, Assistant Football Coach	\$480,600*
Trumain Carroll, Head Strength and Conditioning Coach	\$386,667*
Doug Case, Assistant Track Coach	\$279,126*
John Chavis, Defensive Coordinator	\$1,633,333*
Brooks Cockrell, Project/Program Specialist	\$95,200*
James (Jim) Coleman, Provost & Exec. VC for Academic Affairs	\$321,484
Car allowance	\$12,000
Bryan Compton, Assistant Track Coach	\$198,754*
Ron Cooper, Assistant Football Coach	\$473,333*
Joe Craddock, Offense Coordinator	\$733,333*
Julie Cromer Peoples, Sr. Associate Athletic Director	\$259,803*
Chris Crutchfield, Assistant Basketball Coach (eff. 5/17/19)	\$480,000*
Daniel Da Prato, Project/Program Specialist	\$117,333*
Karibi Dede, Project/Program Manager (eff. 4/22/19)	\$120,000*
Courtney Deifel, Head Softball Coach	\$435,000*
Rob Donnenwirth, Assistant Women's Soccer Coach	\$115,333*
Matthew Downs, Project/Program Specialist	\$139,768*
Megan Elliott, Project/Program Specialist	\$109,200*
Shauna Estes-Taylor, Head Golf Coach	\$324,867*
Jon Fagg, Senior Associate Athletic Director	\$253,559*
Dustin Fry, Assistant Football Coach	\$533,333*
Macey Gardner, Assistant Women's Volleyball Coach	\$94,000*
G. David Gearhart, Chancellor Emeritus and Professor	\$289,631
Turner Gill, Sr. Project/Program Director (eff. 5/31/19)	\$240,000*
Colby Hale, Head Soccer Coach	\$256,250*
Clayton Hamilton, Sr. Associate Athletic Director	\$260,755*
Neil Harper, Head Swimming Coach	\$221,733*
Lance Harter, Head Track Coach	\$546,800*
David Hinton, Associate Director of Technology Ventures	\$144,437
Matt Hobbs, Assistant Baseball Coach	\$312,667*
Scott House, Pilot	\$107,858*
Kendrick Ingram, Assistant Football Coach	453,333*
Andy Jackson, Head Tennis Coach	\$205,891*

Salary Exceptions, UAF
 Resolution
 Page 2

Chris Johnson, Assistant Track Coach	\$274,526*
Blaine Kinsley, Assistant Coach	\$106,667*
Barrett Lais, Assistant Golf Coach	\$119,531*
Stacy Leeds, Vice Chancellor for Economic Development	\$315,577
Car allowance	\$12,000
Jess Loepp, Project/Program Specialist	\$120,000*
Antornette Pauline Love, Assistant Basketball Coach	\$169,200*
Barry Lunney Jr., Assistant Football Coach	\$486,667*
Peter MacKeith, Dean, Fay Jones School of Architecture	\$274,839
Terry Martin, Vice Provost for Academic Affairs	\$252,892
Margaret McCabe, Dean, Law School	\$295,800
Chris McCoy, Vice Chancellor for Finance and Admin.	\$265,200
Car allowance	\$12,000
Brad McMakin, Head Golf Coach	\$333,167*
Yolanda McRae, Assistant Softball Coach	\$109,632*
Mathew Meuchel, Assistant Softball Coach	\$155,736*
Chad Morris, Head Football Coach	\$4,700,000*
Clay Moser, Assistant Basketball Coach (eff. 5/27/19)	\$272,667*
Yvette Murphy-Erby, Vice Provost for Diversity and Inclusion	\$224,421
Car allowance	\$12,000
Eric Musselman, Head Basketball Coach (eff. 4/6/19)	\$2,800,000*
Kim Needy, Dean of the Graduate School & International Education	\$292,410
Mike Neighbors, Head Basketball Coach	\$812,000*
Samuel Ogden Project/Program Director	\$115,600*
Mark O'Neal, Assistant Trainer (eff. 6/6/19)	\$100,000*
Chris Pohl, Senior Associate Athletic Director	\$194,900*
David Polanski, Head Football Trainer	\$169,200*
Brian Primack, Dean, College of Education and Health Professions	\$370,000
Derita Ratcliffe, Sr. Associate Athletic Director	\$281,797*
David Richardson, Assistant Coach	\$149,600*
John Roberts, Project/Program Specialist	\$100,000*
Charles F. Robinson, Vice Chancellor for Student Affairs	\$266,220
Car allowance	\$12,000
Randy Ross, Assistant Director of Athletics	\$280,000*
Anthony Ruta, Project/Program Manager (eff. 5/3/19)	\$151,333*
Phillip Mario Sategna, Assistant Track Coach	\$210,000*
Todd Schaefer, Assistant Basketball Coach	\$237,200*
Dale Schultz, Assistant Diving Coach	\$121,105*
Samantha Scofield, Assistant Soccer Coach	\$110,000*
Todd Shields, Dean, J. William Fulbright College of Arts and Sciences	\$300,444
Amber Shirey, Project/Program Director	\$119,109*
Mark Smith, Assistant Football Coach	\$300,000*

Salary Exceptions, UAF
Resolution
Page 3

Marc Soltis, Assistant Coach	\$105,400*
Courtney Steinbock, Head Tennis Coach	\$164,200*
Joseph E. Steinmetz, Chancellor	\$464,000
Car allowance (Also, \$250,000 Deferred Compensation Approved Jan. 2016)	\$12,000
Justin Stepp, Assistant Football Coach	\$533,333*
Joshua Thompson, Project/Program Manager	\$106,667*
Nathan Thompson, Assistant Baseball Coach	\$228,888*
Rick Thorpe, Sr. Associate Athletic Director	\$238,400*
Matt Trantham, Senior Associate Athletic Director	\$237,083*
Jeffrey Traylor, Assistant Football Coach	\$493,333*
Natalie Trotter, Assistant Trainer	\$81,600*
Dave Van Horn, Head Baseball Coach	\$1,461,600*
Cody Vincent, Project/Program Specialist	\$108,800*
Jason Watson, Head Volleyball Coach	\$264,382*
Dustin West, Assistant Trainer	\$85,333*
Jordyn Wieber, Head Women's Gymnastics Coach (eff. 4/23/19)	\$230,900*
Corey Williams, Assistant Basketball Coach (eff. 4/24/19)	\$339,333*
Dan Worrell, Management Professor, Sam M. Walton College of Business, & Interim Department Head	\$391,129
Hunter Yurachek, Vice Chancellor and Director of Athletics	\$871,210*

**Maximum Potential Including Post Season Compensation*

UofA
UNIVERSITY OF ARKANSAS SYSTEM

Office of the President

July 3, 2019

TO THE MEMBERS OF THE BOARD OF TRUSTEES

Dear Trustees:

Dr. Mark Cochran, Vice President for Agriculture, has submitted a request to exceed the line-item maximum salary for exceptionally well-qualified personnel. This request has been carefully considered, and I concur with Dr. Cochran's recommendation. A proposed resolution for your consideration is as follows:

BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ARKANSAS THAT salaries, as set forth below, in excess of the line-item maximum established by law, are hereby approved for the following individuals at the University of Arkansas Division of Agriculture in accordance with Arkansas Code Annotated section 6-62-103:

Rodolfo Nayga, Distinguished Professor	\$221,526
Lalit Verma, Departmental Chair	\$234,249

Sincerely,



Donald R. Bobbitt
President
Charles E. Scharlau Presidential Leadership Chair

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The University of Arkansas is an equal opportunity/affirmative action institution.

Office of the President

July 3, 2019

TO THE MEMBERS OF THE BOARD OF TRUSTEES

Dear Trustees:

Dr. Mark Cochran, Vice President for Agriculture, requests approval to grant a right of way easement to Arkansas Valley Electric Cooperative Corporation for the construction, operation and maintenance of a utility pole and service lines on property at the Fruit Research Station in Clarksville, Johnson County, Arkansas. The 40 foot wide easement will allow for utility service to a neighboring landowner. Dr. Cochran and other Division of Agriculture officials have reviewed this request and approve it.

A resolution is set forth below for your consideration. I recommend its approval.

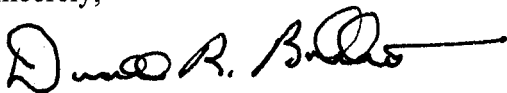
RESOLUTION

BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE UNIVESITY OF ARKANSAS THAT the Chairman and Secretary shall be, and thereby are, authorized to execute and deliver to Arkansas Valley Electric Cooperative Corporation, a right of way easement on, under and across the following described property in Johnson County, Arkansas:

A 40-foot wide easement through the SW/4 of the NW/4 of Section 11, Township 10N, Range 23W of the Fifth Meridian, Johnson County, Arkansas, being 20 feet each side of a centerline. 20' wide easement starting at GPS coordinates 35.540396 -93.415438. Then continuing South along the eastern most fence line for 300'.

BE IT FURTHER RESOLVED THAT the easement shall be in form and content approved by the General Counsel, and that with approval of the General Counsel the description of the location of the easement may be modified if required to improve the accuracy of the description.

Sincerely,



Donald R. Bobbitt
President
Charles E. Scharlau Presidential Leadership Chair

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