#### **Energy Performance Contract Workshop**

November 21, 2019 at the Washburn Tech Conference Center (5724 SW Huntoon St., Topeka KS 66604)

More information and registration: www.kansasenergyprogram.org/2019EPCworkshop

Time	Торіс	Speaker		
8:00 – 9:00	Registration	Kansas Energy Program		
9:00-9:15	Introductions	Lynn Retz – Kansas Corporation Commission Energy Division		
9:15-10:00	ESCOs Deliver	Tim Unruh – National Association of Energy Service Companies		
10:00-10:15	Networking	N/A		
10:15-11:00	Putting Energy Savings to Work	Dale Hahs – Energy Service Coalition		
11:00-11:45	Financing	Lisa Tames – Bank of America		
11:45-1:15	Lunch/Networking	Provided by the National Association of Energy Service Companies		
1:15-2:00	Customer Perspective	Washington USD 108 Bonner Springs City of Eudora		
2:00-2:30	Networking	N/A		
2:30-3:15	What's new with Kansas FCIP?	Lynn Retz – Kansas Corporation Commission Energy Division		
3:15-3:45	Wrap-Up	Kansas Energy Program		

#### Presentations are linked below.





#### 2019 GESPC Workshop Attendees

Green = speaker

Yellow = KCC/K-State staff

Last	First	Organization	Email Address	Phone number
Ardito	Vincent	Johnson Controls	vincent.j.ardito@jci.com	816.401.4234
Bachkora	Tom	Schneider Electric	Tom.Bachkora@se.com	9136342349
Bowman	Dale	State of Kansas		
		Bonner Springs/Edwardsville Unified		
Brungardt	Dan	School District (USD 204)		
Carter	David	Kansas Energy Program		
Clements	Doug	Kansas City Kansas Public Schools	doug.clements@kckps.org	913-627-3850
Cook	Yvonne	Kansas Energy Program		
Currier	Chadd	NORESCO		
Edwards	Hilary	Willdan	hedwards@willdan.com	9134162578
Endres	Terry	Bank of America		
Foley	Kurt	Kansas Energy Program		
Forsyth	Jill	Bank of America		
Golder	Jason	Seaman USD 345	jgolder@usd345.com	785-286-8430
Hahs	Dale	Energy Service Coalition		
Hamel	Ryan	Kansas Energy Program		
Harrell	Paul	Navitas, LLC	pharrell@navitas.us.com	816-674-9203
Hicks	Kris	Washburn University	kristine.hicks@Washburn.edu	785 670-1849
Inslee	David	Pratt SchoolsUSD 382		
Just	Eric	Washburn University	eric.just@washburn.edu	785-670-1860
Kearns	Ben	City of Manhatan, Kansas	ben.kearns@cityofmhk.com	7855874530
Kraus	Gary	Wheatland USD 292	gkraus@thunderhawks.org	785-673-4213
Kremer	Zach	Entegrity	zach.kremer@entegritypartners.com	8165164437
		Kansas Corporation Commission		
Lash	Cindy	Energy Division		
Matite	Barack	City of Eudora		
Mazurek	Chris	Ameresco	cmazurek@ameresco.com	314-713-2014
Mense	Tim	P1 Group		
Noble	Steve	Seaman USD 345		
Ochs	Danno	USD 309 Nickerson/South Hutchinson	dochs@usd309ks.org	620-200-0202
O'Dea	Denise	Washington County Schools (USD 108	)	
O'Kane	Tim	Energy Solutions Professionals, LLC	tim@energyesp.com	9133812800
Peerson	Mike	Johnson Controls	mike.1.peerson@jci.com	8167087715
		Kansas Corporation Commission		
Retz	Lynn	Energy Division		
Roderick	Russell	P1 Group	rusty.roderick@p1group.com	913-238-8270
Scheib	Roger	Seward county Community College	roger.scheib@sccc.edu	620-417-1240
Shea	Daniel	Ameresco	dshea@ameresco.com	5085984650
Sixta	Bill	Energy Systems Group	bsixta@energysystemsgroup.com	816-399-9621
Smith-Hanes	Phillip	Ellis County	psh@ellisco.net	17856211735
Starnes	Brad	Wabaunsee USD 329	bstarnes@usd329.com	785-477-2730
Tames	Lisa	Bank of America		
Terry	Ryan	Navitas, LLC		
Tilden	Aaron	Willdan		
Unruh	Tim			
Wilson	Mike	CTS Group, A Veregy Company	mwilson@ctsgroup.com	913-952-3501

43 Total Attendees

#### National Association of Energy Service Companies

#### Timothy D. Unruh, PhD, PE, CEM, LEED-AP





#### NAESCO – Who are we?

- A non-profit trade association advocating for the energy service company market
- In existence since 1983
- Membership of 98 companies
- Home of the only Energy Service Company (ESCO) Accreditation
- 30 Accredited ESCOs
- ESCO industry is about \$7-8 Billion Annual Spend

#### Accreditation

- A rigorous process of evaluation performed by an independent committee of reviewers
  - Financial Review
  - Project Review
  - Savings Achievement Assessment
  - Interviews with Site Personnel
  - Legal History Review
- Provides an additional assurance of ESCO Performance

## What is this all about?

- Energy Performance Contract (EPC)
- Energy Service Company (ESCO)
- Measurement and Verification (M&V)

- A contract that repurposes money wasted on energy and operational expenses
- A Company that develops a scope of work to install building improvements that will save money and energy
- A process of evaluating the performance of equipment installed that is intended to save money

#### How does this work



National Association of Energy Service Companies

NAESCO

#### What is the process?

- Step 1: ESCO and Client Discuss Needs
- Step 2: Preliminary Analysis to Determine Potential
- Step 3: ESCO and Client Refine Needs
- Step 4: Investment Grade Audit
- Step 5: Negotiate Final Scope of Work to Contracts
- Step 6: Construct the Project
- Step 7: Annually Assess Performance

#### Who uses EPCs?

- A term called the "MUSH" market is the predominant user of Energy Performance Contracts
  - M Municipal Governments
  - U Universities and Higher Education
  - S School Systems
  - H Hospitals
- These contracts are used by these entities because they have "enabling legislation" that allows them to redirect existing budget dollars into a new use
- The MUSH market often has challenges to acquire the money to do building improvements

#### Who uses EPCs? 100% TTA: S 75% Market Market share (%) Segment



Source: State of the US ESCO Industry, Lawrence Berkeley National Laboratory, 2019

Federal Govt Healthcare

K-12 Schools Private

State/Local Govt Univ/Colleges

#### National Association of NAESCO Energy Service Companies

By project count

By investment

level

50%

25%

0%

#### Where are they done?



Energy Service Companies



NAES

# What is being installed with EPCs?

Source: State of the US ESCO Industry, Lawrence Berkeley National Laboratory, 2019

National Association of Energy Service Companies

#### How much Energy is Saved?

Source: State of the US ESCO Industry, Lawrence Berkeley National Laboratory, 2019

NAESCO



National Association of Energy Service Companies



**Energy Service Companies** 

#### Operational Savings

Source: State of the US ESCO Industry, Lawrence Berkeley National Laboratory, 2019

#### Why are EPCs used?



# Some key things to know

- Audits
- Payback
- Cash Flow Proforma
- Energy Savings
- Energy Rates
- Energy Rate Escalation
- Operational and Maintenance Savings

- Risk and Responsibility
- Construction Savings
- Schedule
- Project Closeout
- Performance Period
- Measurement & Verification
- Warranty

## Audits

#### Preliminary

- Done at no cost to client
- Short few hours at site
- Estimated Savings
- No Contractor Bids, Estimated Costs
- Used to determine if further action is warranted
- Product is a project profile

#### **Investment Grade**

- Done at cost to client
- Duration of 2-6 months
- Guaranteed Savings
- Contractor Bids, Guaranteed Costs
- Used to establish the scope of the work agreement
- Intended Product is an EPC

#### Payback

- Project Information:
  - Interest Rate = 5%
  - Desired Project Duration = 15 Years
- So, Financed Project Payback = 15 Years
- Simple Project Payback:
  - Simple Project Payback = 10.37 years
     [( 1+ int )<sup>n</sup> 1 ]
     [ ( 1 + int )<sup>n</sup> x int ]



- Simple: A ratio of the cost divided by the savings
  - Cost of \$1,000, Savings of \$100/year
  - Payback = 10 years

## Project Length Considerations



As project duration increases, more of the savings must pay for interest on the loan amount

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#### Cash Flow Proforma

# • A numeric description of the project over the duration of the project.

-		-	-					
YEAR	PROJECTED UTILITY COST SAVINGS	GUARANTEED UTILITY SAVINGS	OPERATIONAL & MAINTENANCE COST SAVINGS	BUDGET CONTRIBUTION	FUNDS AVAILABLE	DEBT SERVICE	EXCESS SAVINGS	TECHNICAL SERVICE PAYMENTS
Construction	\$0	\$0	\$0	\$0	\$0	\$7,410	(\$7,410)	\$0
1	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$40,000
2	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$41,200
3	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$42,436
4	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$43,709
5	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$45,020
6	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$46,371
7	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$47,762
8	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$49,195
9	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$50,671
10	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$52,191
11	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$53,757
12	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$55,369
13	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$57,030
14	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$58,741
15	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$60,504
16	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$62,319
17	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$64,188
18	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$66,114
19	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$68,097
20	\$0	\$0	\$0	\$0	\$0	\$47,045	(\$47,045)	\$70,140
TOTALS	\$0	\$0	\$0	\$0	\$0	\$940,893	(\$940,893)	\$1,074,814

 The cash flow proforma outlines the costs incurred each year of the agreement, as well as the offsetting savings to justify the costs.

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#### Energy Savings and Rates

- Energy savings is the amount of <u>energy</u> (kWh, Btu, therms, MCF, ton-hours, etc.) that will be reduced by the project
- Rates convert the energy units saved into dollar savings
- Electric rates often have a time-of-use factor included, that can be time-of-day OR seasonal, or BOTH.
- Electric Demand rates are always time-sensitive
- Some electric savings may be in Power Factor improvement

# Energy Rate Escalation

🛓 EERC	—		×			
File Help						
Percent of Energy	Cost Sa	vings				
Fuel Type		Weight (%)				
Coal		0				
Distillat	Distillate Oil 0					
Electric	ity	100				
Natural	Gas	0				
Residual 0						
Total		100				
Fuel Rate Informat	ion					
Location: KS 💌						
Sector:  Commercial						
Contract Torm						
Start Date: 2020 💌						
Duration: 15 💌						
Carbon Pricing Policy						
Policy Option:	No cart	oon price	-			
Annual Energy Escalation Rate						
Inflation Rate (%): 2.20						
innauon i	Rate (%):	2.20				
Real:	Kate (%)	-0.00				

NAESC

FEMP Commercial Electricity Cost Escalation Rates for 25-Year Analysis for 2013



- While rates DO go up, the escalation factor you choose can have a large impact on the project
- Escalation rates should be carefully considered.

National Association of Energy Service Companies

# Operational and Maintenance Savings

- Operational and Maintenance Savings (O&M) can be included in savings for a project
- Savings must have clear documentation and substantiation
- Be careful about personnel savings in a project to ensure that it is real
- Measuring and verifying O&M savings relies upon the documentation you establish during the project audit

## Risk and Responsibility

- Sometimes called the Risk-Responsibility Matrix
- Identifies who is responsible for things that happen during the contract
- Can cover construction issues as well as performance period issues
- Example: If the operational hours increase from those established in the original agreement, who is responsible for the additional energy consumed due to these increased hours?
- Example: Who is responsible for equipment failures after the manufacturer warranty has expired, but still within the performance period?

#### **Construction Savings**

- During construction, some savings will begin to accrue due to some scope of work being completed, while other scope of work is yet to be started.
- Lighting savings are installed at the beginning of a project will produce significant savings.



## Schedule and Project Closeout

• Schedule – 2 different ones during entire project

- Audit Schedule how long will it take, may be key to complete on-time to ensure construction fits seasonal needs
- Construction Schedule crucial, as financing repayments may be tied to on-time completion
- Project Closeout
  - Substantial Completion client gets beneficial use of equipment, punch list of remaining items is created
  - Warranty typically starts at beneficial use/Substantial Completion, may be different for each ECM
  - Final Completion punch list is done, savings guarantee begins

#### Performance Period

- Begins at Final Completion
- Warranty Fulfillment
- Measurement and Verification
- Ongoing Services Provided by ESCO
- Maintenance done by client begins
- Operation according to agreement

#### Measurement and Verification

- Various types that can occur
  - Option A Partially Measured
  - Option B Fully Measured
  - Option C Utility Bill
  - Option D Models
- Process of gathering data varies
  - Spot measurements
  - Ongoing measurements (ie from Building Control System)
- Annual report of savings and project status
  - Guarantee reconciliation

#### Warranty

- Typical construction projects include 1-year of warranty on installed equipment
- Larger single point equipment often can have extended warranty included (ask for it if you want it)
- Performance Guarantee does not equal equipment guarantee

#### Timothy D. Unruh

timothy.unruh@naesco.org





# Energy Performance Contract Workshop

#### Energy Services Coalition Dale L. Hahs State Technical Liaison

November 21, 2019





#### Who am I?

Rooted as a proponent of efficiency

Served on the leadership team of an ESCO

Supporting states and GESPC programs since 2000

Served as a Subject Matter Expert during the American Recovery and Reinvestment Act (ARRA)

Responsible for or contributed in the assembling and illustration of market success attributes through the work of the Energy Services Coalition

Continue to support the Energy Services Coalition and several states independently in consultation and GESPC program development and improvement

Kansas Corporation Commission

#### Goals for our time together:

Illuminating some important considerations for Kansas FCIP projects

Sharing some Key Learnings from others

Providing awareness of the national project tracking resource

Answering your questions along the way

Helping us all take advantage of Guaranteed Energy Savings Performance Contracting (GESPC) and the considerable benefits it can provide

Kansas Corporation Commission

#### For Clarity

Common point of confusion . . .

#### "That's not how we do it in

- Enabling Legislation
- Program History
- Standardized Documents
- A defined process
- Pre-qualified ESCOs
- Assistance & Oversight provided by Kansas Energy Office



12/2/2019

"

#### Why FCIP . . .

- Supporting the use of legislatively enabled, non-traditional procurement and financing
- Providing reviewed and vetted standardized agreements
- Pre-qualified providers
- Tools and guides
- Risk mitigation
- Oversight

If you are an engineer with a law degree trained in the rules of procurement, construction management and negotiation, with a minor in finance and accounting, this will be a cinch!!



5

#### Shining a light . . .

How can I learn more?

- Contact the Kansas Energy Office at 785-271-3190 and check out the links below: https://kcc.ks.gov/kansas-energy-office/fcip
- KSA 75-37,125: Energy Conservation Measure
- Frequently Asked Questions
- FCIP Guidance
- List of Pre-Qualified ESCOs and Maximum Pricing
- Investment Grade Audit Agreement (IGAA) Master
- Energy Performance Contract (EPC) Master
- Memorandum of Understanding (MOU) for Program Participation
- Guidance from other organizations:
  - Principles for Strengthening Energy Performance Contracts, NASEO-ESC-NAESCO
    - Understanding Your ESPC Savings Guarantee, US DOE
    - The Business Case for Applying Measurement and Verification, US DOE
    - Strategies for Successful Measurement and Verification of Savings, US DOE
Q: As the "Customer", what should you share?

A: Everything! Consumption, occupancy (population by areas/buildings), square footage, when you need stuff on and when it can be off, problems, complaint areas, code violations, future plans, stuff that breaks a lot, maintenance problems, comfort complaints, needs, wants, all of it.

Q: As the "Customer", who should be on your team to help see that your project is a success?

A: (next slide)



# Assembling a GESPC Team

### APPROVING AUTHORITIES

You need these folk fully bought in and supportive of the rigor the team will provide to help mitigate risk and see that you get what you set out to acheive

### **OVERSIGHT**

This role is becoming far more common. Provide experience, insight and education along every step of the way

### CONSTRUCTION

Require that these projects meet or exceed your quality standards and BAU documentation and process. Assist with witnessing, approvals and invoice review

### MAINTENANCE

Know whats needed, where the challengs are today and what will be required of you future to maintain guarantee and savings

### **ENERGY FOLK**

Typically the ringleader or champion for the concept. Required to help assemble needed resources, tools, topical expertise

### LEGAL

Customize documents, review all ESCO provided input to ensure compliance and avoid contradictions.

### **FINANCE**

Know how the money moves from operating cost to note repayment and how to manage incentives or other revenues. Commit to full term budgeting

### PROCUREMENT

Ensure a competitive procurement. Generally this is two step; first for prequalified providers and later for each project

Q: What is a baseline and why is it important?

A: You get ONE shot at describing, defining, listing, documenting and agreeing to what your facilities and systems look like, all the variables that impact utility consumption and operation and maintenance costs before the project.

Facility Descriptions and Conditions, Standards of Comfort, Occupancy, Primary Use of Areas, Complete Load Inventory Reconciled to your Utility Bills, Utility/Tariff Descriptions, Meter Schedules, past consumption normalized for weather trends.



Intriguing comments include: "This does not apply to your kind of project OR that's not how we do it."

Q: How do rate escalations impact a project?

- A: 1. They make it bigger
  - 2. The Customer *generally* bears the risk of the "escalated amounts". Take notice of any non-guaranteed amounts.
  - 3. It SHOULD require a written commitment from your budget authority
- Q: How do I ensure a fair and reasonable price?
- A: Transparency. Prequalification secured maximum markups including overhead and profit. Secondary selection may allow markups to reduce depending upon your project complexity and requirements. All FCIP projects are Open Book.

NET RESULT: no more profit shall be made other than that which has been proposed via competitive procurement and to which has been contractually agreed.

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- Kansas Specific:
  - A minimum 3-Year Measurement and Verification (M&V) period has been incorporated
  - Requires an annual written reconciliation report documenting actual savings compared with guaranteed savings
  - If guaranteed savings are not achieved, the ESCO will pay the Customer the difference AND will continue to conduct M&V at its own expense until the guaranteed savings have been met or exceeded for 3 consecutive years. (EPC Sec. 2.2)
    - The ESCO will input the Customer's utility data continuously in Energy Star Portfolio Manager (or other approved system) until the M&V period is complete.

Q: Who is responsible for ensuring that you actually get the savings?

A: Both Parties; the Customer and the ESCO.

In many cases the Customer elects to maintain and be the operator of all systems and devices. This casts a role on the Customer to fulfill their responsibilities. Remember, you have deferred maintenance for a reason. Likely no time or no money or both built that ugly list of stuff you may be hoping to fix. But your role as the Customer in maintaining and operating the equipment as guided is super important. Nor should your effort to save impact your day to day operation and use of your facilities. When things change; number of people in the facilities, different hours, weather, new equipment or loads, extracurricular activities, and they will, it is typically

your role to report it and the ESCO's role to adjust the savings impact. The math, that things do what they are supposed to do when they are supposed to do it, that's on the ESCO.

- Did you realize that the FCIP program was shut down for a while and has been resurrected through the very hard work of a few to appease the concerns that had arisen?
- More communication is better than less. Just because you as an ESCO have done this more than once, does not mean that your Customer understands the nuances and implications of each step. Iterative baby steps achieving consensus is likely to help the project go faster.

Many people will review what the ESCOs writes. Some you may never meet. The math should be clearly displayed, but consider writing explanations fit for review by a third grade math teacher.

12/2/2019

- The contracts were written purposefully, carefully and diligently and reviewed and approved by state authorities. Both the Customer and the ESCO should read them, and hold one another to the letter of the agreements.
- Customers, it's OK to ask for help understanding these agreements and their impact on you and your organization. There are lots of resources however; this is the KANSAS FCIP program.
- The Investment Grade Audit contains an obligation that should you elect to walk away from a viable project, you may need to pay for the agreed upon cost of the audit. Check with your authorities, you may need to earmark, set aside, encumber funds
  - until you execute the EPC relieving you of this obligation.

- The quality of the work performed by the ESCO's team of providers should without fail meet or exceed the quality standards of your organization. These standards and requirements should be clearly stated/documented for all parties to consider upfront.
- Consensus of expectations may prove to be the most critical component of project success.
- *"That's the way we've always done it"* can never supersede the contract language, programmatic guidance and oversight that Kansas has provided for you.



- The project belongs to the Customer who has extended an opportunity for this work to be fulfilled per statutory and programmatic guidance. Be clear about sharing what you want and need the project to do for you so that all parties start and end on the same page.
- Engineers and operations staff need to know set points. Occupants at the Customer site(s) want to know that space temperatures meet a Customer approved range.
- If you don't understand it, don't sign it!!!!!



The history of this industry envisioned multi-decade working relationships where both parties worked hard to see that savings expectations were exceeded!

12/2/2019

# **Tracking Projects and Results**

Kansas will be using eProjectBuilder

- eProject Builder (ePB) is a secure, web-based data management system that enables agencies and ESCOs to preserve, track and report information for their portfolio of energy projects. This free system was developed and is maintained by Lawrence Berkeley National Laboratory on behalf of the U.S. Department of Energy.
- ePB enables ESCOs and customers to securely:
  - Manage, track and report data on a portfolio of energy projects
  - Quickly generate standardized project financial schedules and portfolio-level reports
  - Preserve and readily access project information, M&V data and additional uploaded documents in perpetuity 12/2/2019
    Kansas Corporation Commission

#### **Tracking Projects and Results Excel-based Data Template** eProjectBuilder **Energy Project Data at Your Fingertips** Annual Poyneir **M&V Reports** Output single year and cumulative project reports . Test IDIO project - MSV Year 0 54 Assid Anticipa (in the failed Polyheetis (1-4 NOT THE the L Performance \* \* \* printeder \*\* and - Condensider = -Type 1--ANNUAL PERFORMANCE PERIOD MAY GUARAWEED AND VERMED COST SAVING arthed Cod Incima 2464 100.01 ALL 14 MA -Cod Series Cold Service Name A 5009.104 \$000.141 284 int NUMBER 10021 100.10 411+124 Approved 1000.111 1000.308 Spot had LUL THE 907212

610.44

# **Tracking Projects and Results**

Kansas will be using eProjectBuilder

- Training sessions customized to FCIP will be provided for both Customers and ESCOs and offered via webinar platforms.
- A required set of data fields will be provided by the Kansas Energy Office. Customers may request additional information to be maintained.

The Energy Services Coalition and I provide training for eProjectBuilder and are available to schedule customized training for your application.

You can find me at:

dhahs@energyservicescoalition.org



12/2/2019

# Questions?



# Thank you!



# Financing for Energy Projects For Kansas

Equipment Lease Purchase Financing Lisa K. Tames, Senior Vice President Banc of America Public Capital Corp Energy Services



# Financing Options for Guaranteed Energy Performance Contracts

• Tax-exempt Lease Purchase Agreements

Revenue Backed Obligations

General Obligation Bonds

11/18/2019

# What is a Tax-exempt Lease Purchase Finance Agreement?



# Tax-exempt Lease Purchase Agreement

# **Fundamentals**

- An installment purchase, conditional sale or lease with an option to purchase for nominal value
- Non-appropriation Clause or Firm Term
- Title to the equipment is typically retained by the Lessee
- Interest income is Tax-exempt to the lessor who passes the tax benefit to the Tax-exempt entity in the form of a lower interest cost

# Advantages of Equipment and Lease Financing

- 100% financing of project costs
- Financing tool that allows Tax-exempt entities to acquire essential use equipment
- Ability to match financing terms to the useful life of the assets
- Flexible payment structure
- Voter approval may not be required
- Low transaction expenses
- Rate locks may be available
- Simplified process and flexibility to meet timing requirements

Advantages

# **Tax-exempt Financing Structure**

Traditional Tax-exempt Funding Mechanism for Energy Related Projects



# Various Project Profiles

• Energy Performance Contracts

• Central Utility Plants, District Energy/DG Facilities

• Renewable Energy

11/18/2019

# Case Study – USD # 204, Wyandotte County, KS

<u> Tax-exempt Lease Purchase Financing – Bonner Springs/Edwardsville</u>				
Transaction Size:	Phase 1 - \$1,998,750			
Structure:	Tax-exempt Equipment Lease Purchase Agreement			
Tenor:	15 years			
Equipment Type:	LED lighting, water conservation measures, building infiltration improvements, EMS Expansion, HVAC Upgrades			
Energy Savings:	\$2,194,320 in Guaranteed Energy Savings \$376,395 in Operational and Maintenance Savings			
	Total Lease Payments:\$2,568,106Total savings over the life of the project:\$2,198,089Excess Savings to the District:\$ 370,017			

The material contained herein is for informational purposes only

Lisa Tames Energy Services lisa.tames@bofa.com

# 646-855-4415



ESCO information (USD 204)

## First Time:

-Chose a company and worked through the KCC system. Total from Company:

Total Cost of Project		\$ 6,537,882.00
Total Savings Guaranteed by District		\$ 2,146,257.45

## **Outcome:**

Project to expensive

District savings not possible based on current staffing level.

Solution for High School HVAC not acceptable

Payback time of 28 years was to long.

Lots of unnecessary items with minimal payback.

The savings guaranteed by the district was not acceptable to the KCC.

Quite a bit of pressure from ESCO company to move ahead

Cost of not accepting proposal \$46,392.00.

ESCO information (USD 204)

## Second Time:

- -Sent out an RFP for ESCO services
- -Interviewed four companies
- -Still worked the system through the KCC

Total Cost of Project		\$ 4,563,593.00
Total Savings Guaranteed by District		\$ 458,244.00

# Outcome:

- High School option switched from four pipe system to VRF
- District savings based on current staffing level.
- Worked with ESCO to find areas of greater savings.
- Eliminated minor area of savings
- Eliminated high end district controls. District HVAC units can still be controlled and monitored by phone. District eliminated controls on meters that monitored real time usage
- Guaranteed savings are reaching their mark.
- Payback 18 years (Good news is that the ESCO is complexly paid off)

### REQUEST FOR PROPOSALS AND QUALIFICATIONS FOR GUARANTEED ENERGY COST SAVINGS CONTRACT

Bonner Springs/Edwardsville USD 204 is seeking to establish a relationship with an Energy Service Company for the purposes of developing and implementing an Energy Performance Contract as defined by KSA 75-37,125. Bonner Springs / Edwardsville USD 204 desires to select a full-service firm with an experienced team who will be available to assist with all aspects for project development, project implementation and the long term guarantee of savings.

The deadline for submitting your response will be no later than 2:00 P.M on July 24, 2017

### REQUEST FOR QUALIFICATIONS and PROPOSALS FOR KSA 75-37,125 GUARANTEED ENERGY COST SAVINGS CONTRACT

### Bonner Springs / Edwardsville USD 204 2200 South 138<sup>th</sup> Street Bonner Springs, KS 66012

### INTRODUCTION AND BACKGROUND

Bonner Springs / Edwardsville USD 204 (USD 204) ("District") issues this Request for Qualifications and Proposals to solicit Energy Service Companies (ESCO)s' to provide energy cost savings measures pursuant to KSA 75-37,125, to assist the District in its goals of becoming operationally efficient through analyzing facility energy efficiency measures, optimization of building operations and on-going maintenance of equipment. The District desires to implement a KSA 75-37,125 program on a performance based energy savings contract. (See KSA 75-37,125 attached hereto).

Under this request, it is expected that only one ESCO Accredited by the National Association of Energy Service Companies (NAESCO) will be selected. The District will consider KSA 75-37,125 service proposals based on a guaranteed savings agreement. This Request is for the identification and development of energy conservation measures on a District wide basis to be selected by the District and installed as scheduled by the District over the next several years. The ESCO that is selected by the District will be responsible for the identification, development and installation of the energy conservation measures.

Respondents should clearly describe the proposed services associated with the procurement and installation of the new equipment. The District has the right to accept or reject any or all proposals and to waive any informalities in the review process. Late responses will not be accepted and will be returned to the submitting company unopened. The District is not liable for any cost incurred by any person or firm responding to this Request.

#### 75-37,125

#### Chapter 75.--STATE DEPARTMENTS; PUBLIC OFFICERS AND EMPLOYEES Article 37.--DEPARTMENT OF ADMINISTRATION

**75-37,125.** Energy conservation measure, financing; prior approval of plans and projects; definitions. (a) As used in this act:

(1) "Federal entity" means the government of the United States of America or any bureau, department, instrumentality or other agency of the federal government.

(2) "Political subdivision" shall have the meaning ascribed thereto in subsection (o) of K.S.A. 74-8902, and amendments thereto.

(3) "State agency" means any office, department, board, commission, bureau, division, public corporation, agency or instrumentality of this state.

(4) "Energy conservation measure" means an energy study, audit, improvement or equipment which is designed to provide energy and operational cost savings at least equivalent to the amount expended by a participating political subdivision or state agency for such energy study, audit, improvement or equipment over a period of not more than 30 years after the date such improvement or equipment is installed or becomes operational, as the case may be.

(b) Subject to the provisions of subsection (c), a political subdivision or state agency, which include the board of regents and a regent's institution and a community or technical college, may enter into a contract or lease-purchase agreement for an energy conservation measure which meets the criteria of this section. In addition to any other authority provided by law a political subdivision or state agency may solicit proposals to contract for an energy conservation measure by advertising for proposals and qualifications in a newspaper of general circulation or the Kansas register, and by sending requests for proposals to at least three vendors and negotiating a lease-purchase agreement with one or more vendors submitting a proposal thereto. Negotiations entered into pursuant to this section with individual vendors shall not be subject to the provisions of the open meetings act. After an agreement has been executed, the agreement and all proposals from vendors shall be open records available for public inspection in accordance with the open records act. A state agency may utilize the procedures prescribed in K.S.A. 75-37.102, and amendments thereto, by the procurement negotiating committee to negotiate and contract for energy conservation measures. Each state agency shall provide copies of plans of the proposed energy conservation measure to the state corporation commission for review. No state agency may enter into a contract for an energy conservation measure unless such measure has been approved by the state corporation commission. Plans submitted under this section shall be retained and maintained by the state corporation commission.

(c) Before executing any contract or finance, pledge, loan or lease-purchase agreement under this section, the energy conservation contractor shall provide the political subdivision or state agency with plans for the proposed energy conservation measures prepared by an engineer licensed to practice in Kansas. The energy conservation contractor shall also provide a report of the calculations showing the estimated energy and operational cost savings that would result from the proposed energy conservation measures. Notwithstanding any provision contained in K.S.A. 71-201 and 72-8225, and amendments thereto or other provisions of law, the board of education of any school district and the board of any community college or technical college may enter into a contract or finance, pledge, loan or lease-purchase agreement for an energy conservation measure for a period exceeding 10 years. Political subdivisions and state agencies may include a provision in the contract with an entity providing the energy conservation measure requiring such entity to guarantee that the actual amount of savings of energy and operational costs attributable to the energy conservation measure be not less than the cost of the energy conservation measure over the time specified including financing costs.

(d) Within the limits of appropriations available therefor, the state corporation commission is authorized to provide grants for engineering studies and energy conservation measures for political subdivisions and state agencies.

(e) The state corporation commission, or its designee, may provide administrative support and resources available under the facility conservation improvement program under this section or K.S.A. 75-37,111 et seq., and amendments thereto, as requested by school districts, private and public colleges in Kansas, political subdivisions, state agencies or federal entities for purposes of this section. The state corporation commission, or its designee, may fix, charge and collect reasonable fees for any administrative support and resources or other services provided by the state corporation commission, or its

designee, under this subsection.

(f) The provisions of the cash basis law and K.S.A. 79-2925, and amendments thereto, shall not apply to any contract or lease-purchase agreement entered into pursuant to this section.

History: L. 2000, ch. 88, § 1; L. 2006, ch. 88, § 1; L. 2007, ch. 116, § 3; July 1.

### District's Representative

#### **Proposal Questions**

All questions or needed information relative to this proposal package should be directed to:

### Dan Brungardt, Superintendent

### brungardtD@usd204.net Cell Phone Number (913) 209-0100 Bonner Springs / Edwardsville USD 204 2200 South 138<sup>th</sup> Street Bonner Springs, KS 66012

Responses will be faxed or E-mailed to all vendors who received a bid. **Responses to questions** received later than 2:00 p.m. on July24th, 2017, may not be considered.

#### **Communication Protocol**

All communication must be directed through **Dan Brungardt**. Failure to comply with this communication protocol can be grounds for rejecting the ESCO's proposal.

#### PROCEDURES

#### 1.0 REQUIRED QUALIFICATION SUBMITTALS

- 1.1 Submission of Proposals: Respondent should submit five (5) paper copies and one (1) electronic copy on a flash drive of its sealed proposal by the proposal due date to USD 204. (Refer to USD 204 Representatives section of the RFP for contact information).
- 1.2 Proposals are to be prepared simply, providing a straight forward, concise description of the organization's capabilities to satisfy the requirements of this proposal. Emphasis should be on completeness and clarity of content. All respondents are required to complete <u>Appendix A</u>, <u>Bonner Springs RFP Response</u>.
- 1.3 Proposals must be received in the District Office <u>on or before the time and date specified</u>. Proposals received after the time and date specified, whether delivered or mailed, <u>will not be</u> considered and will be returned unopened.
- 1.4 Proposals information is restricted and not publicly available until after the award of the contract by USD 204.
- 1.5 All submissions become the property of the USD 204 and will not be returned to the respondent.

#### 2.0 PREPARATIONS OF PROPOSALS

- 2.1 Respondents are required to complete the <u>Appendix A, Bonner Springs RFP Response</u>. It is not the responsibility of the District to deliver needed information to the respondent to fulfill the RFP requirements without a formal request in writing from the respondent. This includes examining all drawings, utility bills, charts, specifications, requirements, schedules, instructions, etc.
- 2.2 The cost of preparing a response to this RFP will not be reimbursed by the District.

- 2.3 Addendums received prior to Proposal submittal and screening selection should be acknowledged in the proposal document. Addendums received after the Proposal submittal should be acknowledged by letter or email.
- 2.4 Facility analysis and saving calculations shall be performed in accordance with generally accepted engineering practices and professional judgment. All direct engineering and design work related to the installation or modification of facilities, and all installation and construction work, shall be performed by engineers and contractors respectively licensed in the State of Kansas.
- 2.5 Proposals shall be in accordance with State, Federal, and Municipal law, specifically, but not limited to, compliance with KSA 75-37,125.

### 3.0 MODIFICATION OR WITHDRAWAL OF PROPOSALS

- 3.1 A response to proposals that is in the possession of the District may be altered by letter or fax transmission bearing the signature or name of the person authorized for offering, providing it is received prior to the time of proposal submission. A letter or fax should not reveal the proposal price but should indicate the addition, subtraction, or other change in the proposal.
- 3.2 A response to proposals that is in the possession of the District may be withdrawn by the respondent in person or by written request up to the time of the Proposal opening. Responses to Proposals may not be withdrawn after the opening.
- 3.3 In submitting this proposal, it is understood that the right is reserved by the District to reject any and all proposals as non-responsive and to waive any irregularities or informalities when to do so is in the best interest of USD 204.

### 4.0 CONTRACT PERIOD

4.1 Contract period shall be within the guidelines of KSA 75-37,125 which allows up to 30 years. The contract period will be mutually agreed upon between the District and the selected ESCO.

### 5.0 EXTENSION

5.1 The respondent and USD 204 covenant and agree this proposal or subsequent contract may, with the mutual approval of the contractor and USD 204 be extended as necessary, as long as it remains in accordance within the 30 year limit set forth under KSA 75-37,125.

#### 6.0 ESCO REPRESENTATIVE

6.1 Successful respondent shall appoint, by name, a company representative who shall be responsible for servicing the contract from the award of this RFP. The appointed representative shall be responsible for functions as necessary to insure the contract will be maintained in a professional manner.

### 7.0 INTERPRETATIONS

7.1 No oral interpretations will be made for respondents as to the meaning of the RFP. Request for interpretations to the meaning of the RFP must be made in writing to the District no later than the date specified and failure on the part of the successful respondents to do so shall not relieve him/her of the obligations to execute such services. All interpretations made to the respondents will be issued in the form of addenda to the RFP and will be sent to all respondents. Such addenda are to be covered in the proposals, and in closing the contract, they become a part thereof.

#### 8.0 CONFIDENTIAL INFORMATION

8.1 It is to be understood that proposals made in response to this RFP may contain technical, financial, or other data, the public disclosure of which would cause substantial injury to the respondent's competitive position or that would constitute a trade secret. To protect this data from the disclosure, to the extent allowed by law, the respondent should specially identify the pages of the proposal that contain such information by properly marking the applicable pages and by inserting the following notice in the form of its proposal.

The data on the page identified by the ESCO for this proposal noted by an asterisk or marked along the margin with a vertical line may contain information which is trade secrets, disclosure of which would cause substantial injury to the respondent's competitive position. The respondent may request that such data be used only for the evaluation of its proposal. The disclosure will be limited to the extent that the District determines is proper under federal, state and local law.

8.2 The District assumes no responsibility for disclosure or use of data. In the event properly marked data is legally requested, the respondent will be advised of the request and may expeditiously submit to the District a detailed statement indicating the reasons it has for believing that the information is exempt from the disclosure under federal, state, and local law. The District will exercise care in applying this confidentiality standard, but will not be held liable for any damage or injury which may result from any disclosure which may occur. Respondent agrees to assume and pay for all costs incurred by the District including attorney's fees awarded by the court if the respondent requests the District to resist disclosure of material.

### 9.0 MINIMUM RESPONDENT(S) ELIGIBILITY REQUIREMENTS

- 9.1 USD 204 is a public education system interested in receiving proposals from ESCOs in compliance with KSA 75-37,125. Proposals are requested from firms capable of providing equipment and/or services necessary to achieve cost effective energy efficiency, reduce USD 204s' utility and operating costs, and provide guaranteed savings.
- 9.2 The District seeks only capable ESCOs with experience and qualifications in providing documented utility and operational expenditure savings. Note: Submittal of documentation to support required in-house certification and memberships is required.
  - a) ESCO must have successfully contracted and completed at least five (5) KSA 75-37,125 projects in the prior ten years. Projects completed by ESCO personnel while working for another company are excluded, since they do not represent the qualifications and experience of the specific responding ESCO.
  - b) ESCO must be an Accredited ESCO by the National Association of Energy Service Companies (NAESCO).

c) ESCO must have a service department with licensed technicians residing within 100 miles of USD 204

### 10.0 AWARD AND PURCHASE

10.1 All qualifications and proposals will be evaluated, and the District may conduct interviews with any finalists to clarify information provided in the proposals and supplied qualifications. The District will make a final selection based upon factors in the best interest of the District.

Qualifications will be evaluated and scored on criteria set forth below.

Pursuant to KSA 75-37,125, following the submittal of qualifications, the District will advertise and send requests for proposals to at least three vendors and negotiate with one or more vendors submitting a proposal thereto.

Plans submitted under this section shall be retained and maintained by the state corporation commission. The firm selected will be notified at the earliest practical date. The decision regarding acceptability of any firm's Proposal shall remain entirely with the District. The criteria for selection will include but is not limited to demonstrated experience, referenced performance, service opportunities and specific responsiveness to the RFQ.

10.2 USD 204 hereby notifies all respondents that minority business enterprises will be afforded full opportunity to submit proposals in response to this request and will not be discriminated against on the grounds of race, color, or national origin in consideration of an award. Respondent hereby agrees that any person is allowed to perform work regardless of race, religion, color, sex, national origin, or ancestry.

#### SCOPE OF SERVICES

#### 11.0 SCOPE OF SERVICES REQUESTED

11.1 It is the intent of this Request to ascertain qualifications for KSA 75-37,125 services. The District is interested in contracting for a full range of KSA 75-37,125 services as allowed by statute.

Energy systems under the statute include, but are not limited to, heating, ventilation, air conditioning systems, lighting, windows, insulation, energy management controls, life safety measures that provide long-term operating-cost reductions, building operation programs that reduce operating costs, other energy conservation related improvements, including improvements to equipment related to renewable energy, water and other resource conservation, and other equipment, services, and improvements providing building efficiency.

Energy services include but are not limited to, investment grade technical energy audit and report; design, acquisition, installation, modification, maintenance, commissioning, monitoring and training in the operation of new and/or existing energy systems which will reduce utility consumption associated with the hearing, ventilation and air conditioning system, the lighting system, building envelope, water usage, and other energy using devices, as well as for savings which would not reduce consumption per se, but are aimed at cost savings related to energy use, such as sewage, solid waste collection, fuel switching or demand reductions.

Any energy and/or non-energy cost savings that may be attributable to this project will be rigorously reviewed and, if agreed to, will be limited to those that can be thoroughly documented and verified by the ESCO and approved by the District. Additional services may include continuing Operational and Maintenance (O&M) for all improvements and/or training of District staff on routine maintenance and operation of systems as well as training of occupants.

- 11.2 USD 204 is initially seeking to establish specific qualifications from interested ESCOs which are capable of providing comprehensive KSA 75-37,125 services for this project. These services may include but are not limited to:
  - a) Buildings, Facilities and Sites Evaluation
    - I. Review of facility space
    - II. Review of sites and infrastructure
    - III. Review building condition and systems
      - Lighting systems
      - Building envelope, windows, doors and environmental issues
      - Mechanical, electrical, plumbing systems
      - Technology
  - b) ASHRAE Level III Energy Audit
    - I. KSA 75-37,125 Pro Forma
    - II. Energy Modeling
    - III. Operational expenditure savings opportunities
      - Analysis of repairs, parts and outside services
      - Analysis of labor utilization
      - Energy reduction analysis
  - c) The design and specification of equipment and systems
    - I. Mechanical, Electrical, Plumbing and technology
    - II. Life cycle costing and obsolescence protection
  - d) Services associated with the procurement and installation of new equipment
  - e) Construction Management
  - f) Initial and continuous system commissioning, training of custodial, maintenance, and administrative staff on energy efficient practices
  - g) In-house advanced real-time data-analytic services utilizing and responding to energy and building system performance data with 24/7 active monitoring, remote diagnostics and resolution, and in-house certified technical support. (Clarification note: this is not a BAS function).

All of these services are relative to the operational expenditures of USD 204 which will reduce costs associated with outside services, leases, labor, energy, future cost avoidance, utilities, and others as may be deemed necessary.

#### 11.3 Guaranteed Savings:

Improvements and services must result in guaranteed energy savings. Savings verification is required from the ESCO based on a guaranteed savings agreement. A guarantee is required to be greater than the project costs, and the combined savings achieved by the installed projects must be sufficient to cover all project costs including debt service.

Any O&M savings proposed by the selected ESCO will be thoroughly reviewed and, if agreed to, will be limited to those that can be thoroughly documented and approved by the District.
11.4 The approved ESCO services must be provided in compliance with all applicable Federal and State rules and regulations including, but not limited to any applicable state and local regulations.

#### 12.0 GENERAL STATEMENT OF PURPOSE

- 12.1 It is the intent of this request to solicit qualification statements from companies that describe their capability to implement a program to improve the operational efficiency of various USD 204 facilities. It is anticipated that significant improvements can be made and paid for through energy and operational savings. The primary task of the successful energy service company is to reduce the total energy and operational expenditures associated with operating USD 204 facilities.
- 12.2 Through the Request for Proposal process the District intends to screen proposals and select a firm to implement KSA 75-37,125 services at selected USD 204s' sites.
- 12.3 USD 204 requires a minimum guaranteed savings approach to the project. The guaranteed utility and other operational savings achieved by the installed projects must be sufficient together with funds provided by USD 204, in the judgment of USD 204 in its sole discretion, to pay all project costs, including project debt cost and annual maintenance and monitoring fees, for the duration of the contract term.
- 12.4 The ESCO will be required to work with the current facility management and maintenance personnel, to coordinate construction and provide appropriate training in operation retrofits. No equipment shall be installed that will require the hiring of additional personnel by the District unless agreed to by USD 204 in the contract.
- 12.5 ESCO must provide reproducible "as built" and record drawings of all modified conditions associated with the project, conforming to typical engineering standards within 30 days of the completion of the installation. These should include architectural, mechanical, electrical, structural, and where appropriate, control drawings and operating manuals. Submit also in electronic format, AutoCAD and Word.
- 12.6 Other contract provisions:

#### 13.0 PROCUREMENT

The District will review and evaluate the written responses to this Request for Proposal in accordance with the evaluation criteria identified in Section 15. The District will then make the final decision for negotiating with and selecting the qualified Energy Services Company to perform the work and services pursuant to KSA 75-37,125.

#### 14.0 TIMETABLE FOR SELECTION

14.1 The timetable that the USD 204 expects to accomplish selection of an Energy Services Company is as follows:

June 22, 2017 & June 29, 2017
July 16, 2017
uly 24, 2017 @ 2:00nm
ouly 24, 2017 @ 2.00pm
August 7th and/or 21st , 2017 (School Board Discretion)

#### **15.0 EVALUATION SCORING CRITERIA**

15.1 USD 204 is anticipated to award a contract to the firm with the most responsive proposal which best meets the needs of USD 204. The criteria for making this evaluation will be based on the following.

1.0 Overview of Approach	5%
2.0 Project History	10%
3.0 Qualifications	15%
4.0 General Scope of Services	15%
5.0 Technical Approach	15%
6.0 Management Approach	15%
7.0 Cost and Pricing	15%
8.0 Additional Information	10%

**16.0 REQUIREMENTS FOR PROPOSAL CONTENTS** – The format of the response shall contain the following information, in the following sequence and format.

- 16.1 Title Page
- 16.2 Contact Information
- 16.3 Completion of Appendix A: Bonner Springs RFP

#### **Additional Information required**

#### 17.0 INSURANCE COVERAGE

- 17.1 The successful respondent shall have adequate professional liability coverage to include:
  - A. Workers compensation, in accordance with State's Worker's Compensation requirements.

- **B.** Liability Insurance of \$500,000 bodily insurance and \$500,000 property damage to protect USD 204 interest against claims for personal injury or death and damage to the property of others. Each shall be named in the policy or policies as insured.
- **C.** Professional Liability Insurance: State the amount of coverage (\$1,000,000 as minimum).
- **D.** All insurance shall be carried with companies which are financially responsible. If any such insurance is due to expire during the contract period, the contractor shall not permit the coverage's to lapse and shall furnish evidence of coverage to USD 204.
- **E.** Claims against the respondents insurance should be in included in the respondent's response. It should include total dollars of claims and any pending claim amounts.

#### 20.0 CONTRACTUAL PROVISIONS

- 20.1 The contents of the RFP submissions, as appropriate, become part of the final contract
- 20.2 USD 204 must have access to inspect, test and approve both the work conducted in the facility, during construction and operations, and to the books, records, and other compilations of data which pertain to the performance of the provisions and requirement of this agreement. Records shall be kept on a general recognized accounting basis, and calculations kept on file in legible form.
- 20.3 All drawings, reports and materials prepared by the ESCO specifically in performance of the contract shall become the property of USD 204 and shall be delivered to USD 204 requested no later than upon completion of construction.
- 20.4 Ownership of equipment, after project acceptance, must reside with USD 204.
- 20.5 The District shall have the right to approve or deny any subcontractors.
- 20.6 ESCO and any subcontractors, suppliers, or agents shall comply with all local, state, and federal laws, ordinances, and regulations, in all bids.
- 20.7 RETAINAGE

From each progress payment the Owner shall retain five percent (10%) until completion and acceptance of all work under this Contract.

Appendix A Bonner Springs RFP Response

**Response to this Request for Qualifications** 

**TABLE OF CONTENTS** 

- **1.0 Overview of Approach**
- 2.0 Project History
- **3.0 Qualifications**
- 4.0 General Scope of Services
- 5.0 Technical Approach
- 6.0 Management Approach
- 7.0 Cost and Pricing
- 8.0 Additional Information

### **Overview of Approach to Energy Savings Performance Contracting (ESPC)**

Provide a stand-alone overview, maximum of one (1) page, to present an overview of your company.

#### **1.0 General Overview**

This overview has multiple purposes. It provides a good introduction of your firm to the evaluation committee and it can be used by program participants to narrow-down which ESCOs to consider for a specific project. For ESCOs selected under this RFQ for the list of as-needed pre-qualified ESCOs, this section may be posted on the program website.

#### 2.0 Project History

#### 2.1 Market Sector Involvement

Briefly describe your company's expertise/experience in working with School districts

#### 2.2 Project List

List <u>up to</u> 10 Energy Savings Performance Contracting projects developed and implemented by your firm within the past five years that have completed construction. Such projects involve a guarantee of savings and measurement and verification.

	Project Name	Market	City & State	Project Size	Project Size	Year
1	1 (unite		State		(Square reet)	
2						
3						
4						
5						
6						
7						
8						
9						
10						

#### 2.3 Project Data and References

Using the table below, provide detailed information on <u>up to</u> five performance contracting projects your firm completed. Only include projects that have at least one year of documented performance data, are currently in repayment, are currently under contract with your firm, and that can be used as references. If desired provide additional project detail, such as a case study, in any format (maximum of an additional two pages for each project).

Project Data and References	
Project Name	
Facility Type and Use	
Project Size:	
-Number of Buildings	
-Total Square Footage	
Types of Measures	
Project Cost: Installed Project Costs	
Project Cost: Financed Amount	
Guaranteed Annual Savings (\$)	
Financing/Funding Source	
Project Schedule:	
-Construction Start and End Dates	
-Guarantee Period Start and End	
Dates	
Describe if project was completed on	
schedule or delayed	
Measurement and Verification	
Methods	
Project Personnel:	

List all ESCO per with this project ( may be assigned t their roles and res list those who may project). Contact Informati Current phone and	sonnel as limit to t o a proje ponsibili y be assis on: d email a	ssociated hose who ct) and ties (only gned to a ddress of					
owner representat	ives you	worked					
Commodity	Units	Guarantee d Annual	Achieved Savings	Achieved Savings	Achieved Savings	Achieved Savings	Achieved Savings
	1-3371-	Savings	Year 1	Year 2	Year 3	Year 4	Year 5
Electric Domand							
Natural Gas	Ther						
Matural Gas	ms						
Fuel Oil	Gal						
Steam							
Fuel Oil	Gal						
Water							
Other							
Material	\$						
Maintenance Contracts	\$						
Other	\$						
TOTAL							

#### **3.0 Qualifications**

#### **3.1 NAESCO Accreditation**

Provide verification of NAESCO Accreditation, including a print-out of the listing on the www.naesco.org website or a letter from NAESCO that accreditation is in process. If desired, provide a narrative to highlight any elements in this Qualifications section, including subsections (limit to one page).

#### **3.2 History and Focus of Company**

Limit your response to no more than one page for this section (History and Focus of Company).

#### **3.3 Structure and Evolution of the Firm.**

List any other names for company's business. Provide any other information, <u>only</u> if deemed necessary.

#### **3.4 Years in the Energy Business.**

State the number of years the company has been involved in the energy-efficiency related business.

#### 3.5 Involvement in Performance Contracting.

- State the number of years the company has offered Energy Savings Performance Contracting services.
- State the number of project professionals (energy engineers, project managers, etc.) in your firm that are directly involved in the performance contracting and energy efficiency or renewable energy business.

#### 3.6 Number of Performance Contracting Projects.

State the number of performance contracting projects completed by the company.

#### **3.7 Industry Accreditations**

List any industry accreditations, partnerships, memberships, and prequalifications and briefly describe the relevance of each. Note that accreditation is not a requirement and no firm will be penalized for the lack of industry accreditations, partnerships, memberships and pre-qualifications.

#### 4.0 General Scope of Services

The purpose of this section is to ensure the firm has qualifications to provide the full scope of performance contracting services.

#### 4.1 Energy systems in buildings:

Provide a brief discussion (five pages maximum) for this section (Energy Systems in Buildings) to illustrate the company's capability in each area.

- Mechanical/Electrical Systems
- This discussion could include: lighting: indoor and outdoor, heating, ventilation and indoor air quality issues, cooling, control and building automation, fuel switching, central plant, etc.
- Water Measures
- This discussion could include: plumbing fixtures, landscape irrigation, mechanical plant water-saving measures, etc.
- Energy Management Services
- This discussion could include: energy management, occupant programs (behavior focus), utility bill auditing and bill payment, benchmarking, LEED for Existing Buildings, etc.
- Operational Savings Measures
- This discussion could include eliminated maintenance costs, training programs for staff or occupants, waste measures, etc.
- Other

#### **4.2 Project Development and Implementation**

- Energy auditing (potential measures, savings projections; cost estimates)
- Baseline development (including future savings adjustment)
- Project proposal (package of measures with cash flow)
- System design engineering
- Equipment and subcontractor procurement and bidding
- Construction management
- Commissioning of projects and retro-commissioning of existing buildings
- Project management
- Standards of comfort (lighting, thermal, ventilation)
- Hazardous materials identification and abatement, recycling or disposal (including asbestos)

#### 4.3 Core Performance Contracting Services

- Performance guarantee for every year of the financing term
- Insurance per contract requirements
- Equipment warranties
- Facilitation of financing (including a municipal, tax-exempt lease purchase), if registered and able to do so (federal regulations restrict ESCO involvement to advise on financing).
- Measurement and verification of savings
- Training (facility staff, occupants)

#### 4.4 Financial Soundness and Stability

Describe the financial soundness and expected stability of the company. Provide financial reports for the last 3 years, 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.

#### 4.5 Bonding

- Current bonding capacity
- Confirmation that the company is bondable for 100% of a performance bond on a project

#### **5.0 Technical Approach**

#### **5.0 Investment Grade Audit**

- Briefly summarize your overall approach to auditing.
- Provide a brief overview of your sample Investment Grade Audit. Provide a sample Investment Grade Audit report for an Energy Savings Performance Contracting project designed for a public school. Include detailed energy/water savings and economic calculations (excluding equipment cut sheets) and samples of tables and supporting calculations. This is intended to allow reviewers to

conduct a reasonable analysis of your company's auditing methodology. Please be judicious regarding the volume of information submitted.

#### **5.1 Measurement and Verification**

- Briefly summarize your overall approach to Measurement and Verification.
- Include a brief overview of your sample M&V plan. As an appendix to your response, provide a sample Measurement and Verification Plan from a performance contracting project implemented by your company.

#### 5.2 Measurement and Verification Savings Report

- Briefly summarize your approach to the M&V report.
- Include a brief overview of your sample Measurement and Verification Report. As an appendix to your response, provide a sample Measurement and Verification Savings Report prepared by your firm from a completed performance contracting project currently in repayment.

#### **5.3 Handling of Savings Shortfalls**

Address any savings shortfalls that occurred over the past 5 years (up to 10 examples) and describe how they were resolved.

#### 6.0 Management Approach

#### **Project Management and Coordination**

Limit this section (Project Management and Coordination, including subsections) to 5 pages.

#### 6.1 Organizational Structure

Show a typical/generic organization chart for implementing and managing a project with the core energy team. Also include an organization chart showing the corporate structure with added corporate support for the project.

#### 6.2 Local Staffing and Support

List the office location (city and state) for the core energy team proposed for projects under this RFQ. Describe the extent of current/proposed local staffing and support for the each phase of a typical project.

#### 6.3 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.

#### 6.4 Personnel and Staffing

Use the following table to present background on personnel or subcontractors who will potentially be assigned responsibility for a core project task. Also include any added expertise and capability of staff available through other branch offices, subcontracts, etc., that can provide back-up strengths.

Personnel Profile:	Name
Potential Role	
Base Location	
Current Employment	
Current job title	
Company (if subcontractor)	
Job responsibilities	
Number of years with ESCO	
Previous Employment	
Job Title	
Company name	
Job responsibilities	
Number of years with firm	
Academic/Professional	
Qualifications	
Degree/discipline:	
College/university	
Professional affiliations	
Technical Training	
Accreditations	
Overall	
Total years of relevant	
experience:	
Other relevant experience or	
accomplishments:	
Performance Contracting	
<b>Experience (Past 5 Years)</b>	
Project #	
Project Name:	
Project location:	
Type of facilities:	
Year implemented:	
Project Cost (installed cost):	
Role and responsibilities:	

### 7.0 Cost and Pricing

#### 7.1 Project Cost Breakdown

In the table below, provide your company's proposed Maximum Percentage of Total Project Price for each category listed. This format is required and must be completed in its entirety. Use only the categories shown. Ranges are not acceptable.

Clearly describe how incidental and ancillary work will be charged (billed hourly, billed as a markup of equipment and labor costs, etc.). Incidental and ancillary work includes but is not limited to work that is related to ensure jobsite safety and security, jobsite cleanliness and sanitation, limited demolition, and other incidental work that is necessary to enable subcontractors to perform their work in a timely manner.

Project Construction Cost Category	Maximum Percent of Total Project Price	Self-Performed or Subcontracted
Pre-Construction Costs		
Design and other Engineering		
Professional architectural and engineering		
services; Energy modeling		
Pre-Construction Services		
Construction management and project		
development services		
Other Pre-Construction Costs		
Site visits, Owner meetings, Legal review,		
Accounting services, etc.		
Construction Costs		
Trade Subcontractors	N/A until	
Construction contractors subcontracted to	Investment	
ESCO; Lighting, construction, sheet metal,	Grade Audit is	
etc.	completed	
	N/A until	
Design/Build Subcontracts	Investment	
Construction and design contractors	Grade Audit is	
	completed	
	N/A until	
Direct Purchase Equipment	Investment	
Equipment directly purchased by ESCO	Grade Audit is	
	completed	
Construction Management		
Construction manager and site		
superintendent		
Project Engineering		
Design engineer inspections; Engineering		

analysis	
General Conditions	
Miscellaneous non-staffing costs; Equipment	
rentals, security fencing, etc.	
Construction Completion	
Commissioning, Training, Construction	
M&V, O&M Manuals	
Other Construction Costs	
Site visits, Owner meetings, Permits,	
Insurance, Bonds, Warranty Labor	

#### 7.2 Profit Markup

In the table below provide the maximum percentage <u>markup</u> that will be applied to direct purchases of equipment, material, and subcontractors for any project within this program. Note that overhead is included in Construction Costs - General Conditions.

	Maximum % Markup
Profit Percent	X %

If a proposal is from a joint venture partnership, include proposed maximum allowable markups in the schedule format above for each participating company.

#### 7.3 Contingency

Describe your company's typical level of contingency budget for lighting, electrical, mechanical, controls projects, and other projects and how it proposes to apply contingency to cover changes in work scope and subcontractor change orders. Note that all unused contingency funds will revert to the Owner or be applied to additional work scope through a change order approved by the Owner.

#### 7.4 Investment Grade Audit Fee

In the table below, provide the maximum fee to conduct the Investment Grade Audit and Project Development Proposal, on a cost per square foot basis. Through this proposed maximum fee your firm acknowledges the responsibility to adhere to and complete the full scope of work as presented in the Attachment F (Investment Grade Audit and Project Development Contract).

	Proposed Max cost per sf
Investment Grade Audit and Project Proposal	\$/sf

#### 7.5 Annual Costs and Fees

#### Measurement and Verification – Annual Fee

- Describe how the post-retrofit Measurement & Verification annual fee is determined.
- The Measurement and Verification Services cost is the annual cost for the services necessary after acceptance of the project to annually verify the Energy Performance Contract guarantees. The cost for the guarantee is based upon the M&V option utilized, the risk of savings failure, the field time to measure building performance, and the time to document and present the report.

#### Other

Describe any other fees and how they will be determined.

#### 7.6 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 Owner.

#### 7.7 Best Value

Briefly describe how your approach to performance contracting delivers best value for the investment. Describe any utility rebates or other financial incentives or grants you can potentially provide and/or facilitate.

### **8.0 Additional Information**

Specific information the respondent chooses to include either about their company, specific information that sets their company apart from other competitors, and/or specific information that deals with services/cost savings for Unified School District 204 (Limit 5 Pages).



# Energy Performance Contract Workshop

Barack Matite 11/21/2019

# How We Started: Water Meters

Scope of our problem:

- □ Significant water loss (about 18%) = Loss of revenue [waters meters estimated to account for 9-15% of loss]
- Using handhelds to read meters susceptible to human error
- □ Multiple meter re-reads and/or misreads
- Ongoing maintenance issues
- □ Water meters going from bad to worse
- □ About 2,400 water meters needed to be replaced
- ✤ We had to educate and communicate







## **Final Project Scope**

#### **Final Project Pricing Details**

	\$1,189,894	80.0%	\$42,118	\$10,100	\$116,460	\$168,678	7.1
Payment and performance bond	\$46,880	3.0%	2	<u>_</u>	1(2)	23	12
City Wide - Street Lighting Upgrades to LED Lamps	\$181,356	12.2%	\$12,449	\$2,050	\$0	\$14,499	12.5
City Wide - Internet-Based HVAC Controls	\$22,995	1.5%	\$15,294	\$250	\$0	\$15,544	1.5
City Wide - Lighting Upgrades to LED Technology	\$84,261	5.7%	\$14,375	\$800	\$0	\$15, <b>1</b> 75	5.6
City Wide - Water Meter Replacements - Sensus Ipearl	\$854, <mark>4</mark> 02	57.4%	\$0	\$7,000	\$116,460	\$123,460	6.9
Direct project costs	Cost	Cost %	Utility Savings	Maint. Savings	Additional Revenue	Total Savings	Payback

Professional services	Cost	%
Engineering & Design	\$44,621	3.0%
Construction Management	\$44,621	3.0%
Commissioning & Measurement & Verification	\$29,7 <b>4</b> 7	2.0%
Program Management & Administration	\$14,874	1.0%
General Overhead	\$89,242	6.0%
	\$223,105	15.0%

Profit	\$74,368
	1000000

Fixed Turnkey Project Cost.

Project

\$1,487,368

5.0%

20.0%

Other required Program Costs	Cost
FCIP Fee	\$31,355
IGA Fee	\$48,134
Other Assumed Costs of Financing	Cost
Other Assumed Costs of Financing Placement Agent Fee	Cost \$15,842





#### **Total Project Amount Financed**

\$1,584,199	9.3-yr payback
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# Water Meter Replacement

### Installed smart water meters (Sensus iPERL)

- Replaced inaccurate mechanical meters with electromagnetic meters citywide
- Electromagnetic meters eliminate water losses due to meter "slow down"
- Meters communicate with new electric meters, eliminating manual meter reads

- Reduction in water loss. From 18% to 3% (per 2018 water report)
- Accurate water billings to capture all water use [additional revenue]
- Automatic read
- Accurate and instant leakage information to provide to residents
- No mechanical parts = maintenance free operation
- More billing information to share with residents









# **Building LED Lighting**

## Upgraded Building Lighting to LED

- City Hall & Annex
- Community Building Center
- Public Safety Building
- Storage Building
- Annex 2
- Wastewater Treatment Plant
- WWTP Office & Public Works Office
  - Replaced about 1,400 fluorescent light fixtures

- Improved lighting quality
- Reduced energy & maintenance costs
- Annual estimated savings of 169,000 kWh of electricity







# **LED Street Lighting**

## Upgraded Street Lighting from fluorescent or metal-halide fixtures to LED lighting fixtures

- Residential street lights
- Downtown street lights
- Approximately 330 total street lights

- Cuts electrical usage by more than 50%
- Longer lamp life reduces maintenance costs
- Improved light quality
- Annual estimated savings of 230,500 kWh of electricity







## **Internet Based-HVAC Controls**

### Installed internet-based thermostats

- City Hall
- Recreation Center
- Public Safety Building
- Public Works Office
- Wastewater Treatment Office

- Reduced energy & maintenance costs
- Automatic alerts of HVAC issues







# **Electric Meter Replacement**

### Installed new electric meters

• Replaced about 2,400 meters

### Impact

- Minimal reduction in operation/maintenance costs
- Automatic tamper or manipulation notification
- Meters communicate with water meters; eliminating manual meter reads
- More information to provide to residents





### Old Mtr Photo



## Take away from our experience

Take a holistic approach

## Do your research well

Select the right team for your project

Communicate and educate





























