

# Energy Performance Contract Workshop

## Energy Services Coalition

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# 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

# 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*

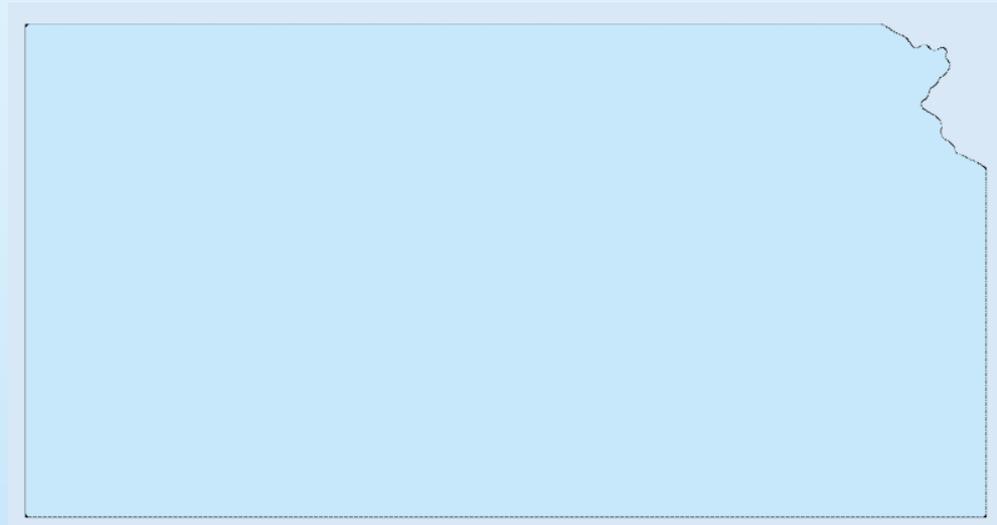
# For Clarity

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*



# 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!!



Kansas Corporation Commission

# 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



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# Shining a light . . .

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)



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# 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 achieve

## ENERGY FOLK

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

## 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 challenges are today and what will be required of you future to maintain guarantee and savings

## 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



# Shining a light . . .

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.



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Intriguing comments include: *“This does not apply to your kind of project OR that’s not how we do it.”*

# Shining a light . . .

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.



# Shining a light . . .

- 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.



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# Shining a light . . .

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.



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# Some things to consider. . .

- 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.



# Some things to consider. . .

- 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.



# Some things to consider. . .

- 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.



# Some things to consider. . .

- 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!

# 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

# Tracking Projects and Results



Energy Project Data at Your Fingertips



## M&V Reports

- Output single year and cumulative project reports

Test IDIQ project - M&V Year 0

ANNUAL PERFORMANCE PERIOD M&V FOR YEAR 0 ANNUAL EXPECTED SAVINGS BY ENERGY CONSERVATION MEASURES												
Details of Expected Energy and Cost Savings												
ECM Number	Start Description	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1	Replace 100 Wx CFLs with LED	2010-11	\$145,000	\$15,000								
2	Install 5,000 CFLs	2010-11	\$100,000	\$10,000								
3	Replace 10,000 Wx CFLs with LED	2010-11	\$200,000	\$20,000								
4	Install 10,000 Wx CFLs with LED	2010-11	\$200,000	\$20,000								

ANNUAL PERFORMANCE PERIOD M&V GUARANTEED AND VERIFIED COST SAVINGS				
Implementation Period (Year 0)	(\$)		(\$K/0.1K)	
	Estimated Cost Savings	Guaranteed Cost Savings	Verified Cost Savings	Performance Period Cost Savings
1	\$22,000	\$22,000	\$22,000	\$22,000
2	\$100,000	\$100,000	\$100,000	\$100,000
3	\$200,000	\$200,000	\$200,000	\$200,000
4	\$200,000	\$200,000	\$200,000	\$200,000



## Excel-based Data Template

SCHEDULE #1 BASIC PROJECT INFORMATION			
Project Name			
Project Location			
Project Start Date			
Project End Date			
Project Manager			
Project Sponsor			
Project Description			
Project Objectives			
Project Budget			
Project Status			
Project Risk			
Project Compliance			
Project Reporting			
Project Contact			
Project Approval			
Project Review			
Project Audit			
Project Closeout			

SCHEDULE #1 COST SAVINGS AND PAYMENTS			
Implementation Period (Year 0)	(\$)		(\$K/0.1K)
	Estimated Cost Savings	Guaranteed Cost Savings	
1	\$22,000	\$22,000	\$22,000
2	\$100,000	\$100,000	\$100,000
3	\$200,000	\$200,000	\$200,000
4	\$200,000	\$200,000	\$200,000
5	\$200,000	\$200,000	\$200,000
6	\$200,000	\$200,000	\$200,000
7	\$200,000	\$200,000	\$200,000
8	\$200,000	\$200,000	\$200,000
9	\$200,000	\$200,000	\$200,000
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95	\$200,000	\$200,000	\$200,000
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97	\$200,000	\$200,000	\$200,000
98	\$200,000	\$200,000	\$200,000
99	\$200,000	\$200,000	\$200,000
100	\$200,000	\$200,000	\$200,000

# 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](mailto:dhahs@energyservicescoalition.org)

# Questions?



Thank you!

