

5th Annual Market Transformation Conference
August 23, 2016 2:00 – 3:30 Breakout #1



ESPC Case Study

Fayette County Detention Center

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Lexington-Fayette Urban County Government

Background



- Detention Center constructed in 1999
- Increasing failure rate of M&E equipment
- Decrease in maintenance staff
- Service contracts for chiller system, server room and kitchen refrigeration
- Utilities about \$1M per year
\$250k gas, \$250k water, \$500k elec

Options



- In-House Repair
- Design + Bid + Build
 - Individual procurement
 - Multiple consultants/contractors
 - Duplicity (project overlap)
 - Hypothetical impact
- Performance-Based Contracting (KRS 45A)
 - RFQ for design/build contractor
 - Open book pricing, project selection
 - Sole responsibility (secure facility)
 - Whole-building approach
 - Energy savings are guaranteed

Performance Contract



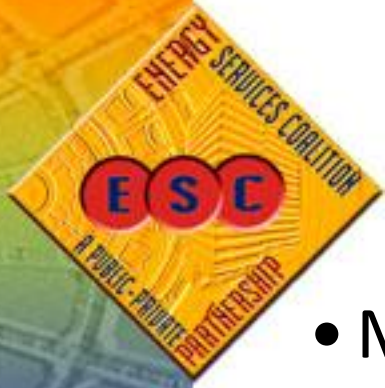
- Upfront time commitment by contractor
 - Qualifications submittal
 - Facility energy audits
 - Proposal development
- Requires annual utilities > \$1M
 - Savings pay for project (~20% typical)
 - Term 10 – 25 years (lighting to HVAC)
- No guarantee of award

Incentive



- RFQ → Short List (2)
50/50 chance of award
- Letter of Engagement → IGA
3 months to prepare detailed proposal
Projects of interest to Lexington
Desired range of term & price
- Comparative Proposals → Award

Upfront

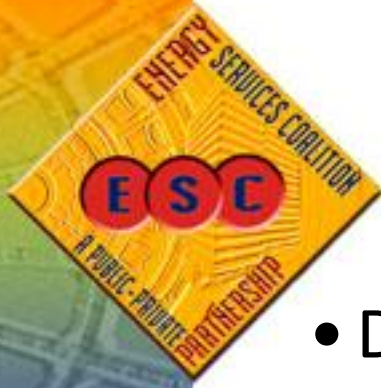


- Model IGA
- Model Contract
- Contract term (10 – 15 years)
- Annual Savings > Annual Costs

search “model instruments”

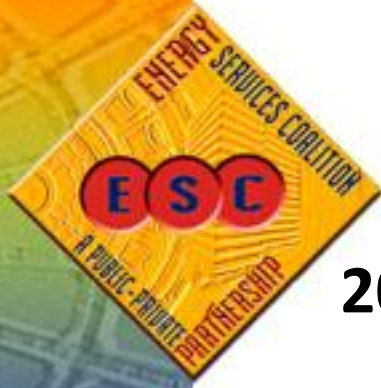
$\$1\text{M} \times 20\% \times 10\text{yr} = \sim \2M contract
(actual $\$3\text{M}$ over 12 years)

Special Terms



- Desired Projects
- Rebates & Grants
- Construction Period
- Standards of Comfort
- Savings Category
Utilities, Labor, Materials, Future Capital
- Fuel Escalation
Rates in 2024 ???

Timeline



2013

Core team & procurement strategy
RFQ preparation

2014

JAN advertised RFQ (5 submittals)
APR selected two ESCOs
JUN – AUG facility energy audits
SEP review of proposals
OCT contract negotiation **
DEC approved on both sides

Proposal



(Selected) Project Scope

10 conservation measures

Focus on lighting, HVAC and controls

\$3M cost with M&V

\$219,000 first year utility savings

30% reduction gas & electric

Financing



Self Financed

Low interest bonds (QECCB) – 94%

\$100,000 grant from state – 3%

Existing funds – 3%

Summary



- Equipment approaching end of service life
 - Collaborative approach
 - Cost-effective means of replacement
 - Reduce maintenance & utilities
 - Modernized equipment
 - Performance guarantee
- 3-year M&V by ESCO included

Preliminary Results



Installation: Feb 16, 2015

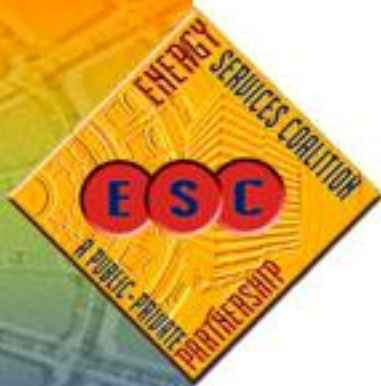
Accepted: Apr 8, 2016

Weather Normalized Comparison

kWh	6,817,615	5,298,992	-22.3
Mcf	42,451	25,205	-40.6

NORM – 06A Report

12 months starting July, 2012 vs 2015



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