



# **Energy Services Coalition 4<sup>th</sup> Annual Market Transformation Conference**

## **What does a successful ESPC project look like?**

September 2, 2015

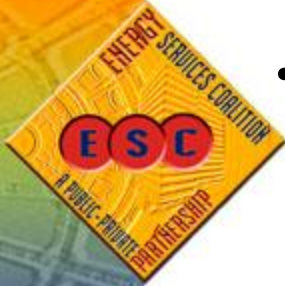
# ESPC Prequalification in 7 Questions



1. Does my facility need infrastructure upgrades?
2. Do I have a general idea of what my needs are?
3. Do we spend at least several hundred thousand \$/yr in utilities?
4. Would I like a fixed price contract with NO CHANGE ORDERS?
5. Would I like to be able to measure and verify success?
6. Would I trust a process that's been used by Federal, State, and Local Government agencies for over 30 years?
7. Do I have a lot of cash available to my organization?

HINT! If the answers to 1-6 are YES, and NO to 7, you are in luck! ESPC would be an excellent procurement vehicle to use!

# How do I get started?



- If you work for a State agency, or county, municipality, etc., contact your State Energy Office. Not sure who to call? ([Nat'l Association of State Energy Officials](#))
- If you are the State Energy Office, contact [DOE's State Energy Program](#)
- If you'd like to independently educate yourself go to the [Energy Services Coalition](#) website, learn ESPC basics, view FAQs, see case studies, etc.
- Start collecting basic energy and O&M data
- Don't let speed overrule due diligence, and bundle low payback ECMs with "need to haves"
- Last tip, follow the sage advice of the next three speakers!



Christopher F. Halpin, PE  
LEED, CEM, CMVP  
President

Celtic Energy, Inc.

(860) 882-1515

(860) 328-0535

[chris@celticenergy.com](mailto:chris@celticenergy.com)

[www.celticenergy.com](http://www.celticenergy.com)

# ESPC Best Practices



- Identify a Champion early!
  - Get Senior Leadership Buy-in
- Fully understand your current energy profile
  - Use, demand, growth, seasonal changes, customer requirements, etc.
- Clearly define the goals for your project
  - Energy Reduction, Deferred Maintenance, New Technology Demonstration, etc.



# ESPC Best Practices (*Cont.*)

- Understand the approval process and build a schedule to include all approval milestones
- Develop clear ESCO selection criteria
- Actively lead the process
- Pencils down!



Michael O'Connor  
Vice Chancellor for Facilities  
Appalachian State University  
[oonormj@appstate.edu](mailto:oonormj@appstate.edu)  
(828) 262-3190





# **Successful ESPC Project - Cost and Pricing**

ESC Market Transformation Conference  
September 2, 2015

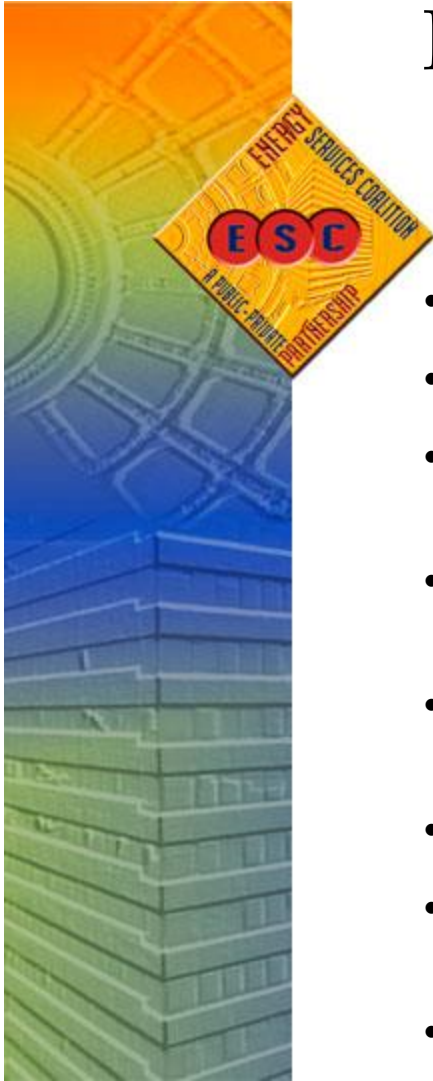


# Use a Two-Step Procurement Process



- First – Issue RFP to pre-qualify ESCOs
- Second – Issue Site-Specific RFP to select ESCO for your project from pre-qualified list

# Integrate Cost and Pricing Into ESCP Selection Process



- Include Markups and Fees in the Selection Criteria
- Require Open Book Pricing
- Don't allow ESCO to self-perform trade work without written approval
- Don't allow sole source product specifications without written approval
- Require Competitive Bidding of Trade Work and Equipment over a prescribed value (e.g. \$50,000)
- Prescribe Project Cost Reconciliation Process
- Negotiate terms and enter into ESPC Contract for Investment Grade Audit
- Later Amend ESPC Contract to Add ESPC Project Scope, M&V Services, Performance Guarantee, etc.

# GESP Master Contract

## Exhibit B Contractor's Fees

### 1. Contractor's Fees for Investment Grade Audit

The total compensation payable to the Contractor to fully perform the Contractor's Duties specified in Exhibit A, Section I of this Work Order Contract shall be the lesser of the total obligation payable under Section 3 of this Work Order Contract or an amount equal to the total square footage of building space that the State Institution authorizes, in writing, to be audited by the Contractor multiplied by \$0.00.

### 2. Costs, Markups, and Fees

Costs, markups and fees applicable to the cost estimates developed in the Performance of the Contractor's Duties as specified in Exhibit A, of this Work Order Contract shall not exceed the lower of the maximum amounts established in the Master Contract or this Work Order Contract. Markups shall not be applied to fees.

#### 2.1 Project Costs

The table below indicates the Contractor's proposed Maximum Percentage of the construction project's Total Project Price for each Project Construction Cost Category.

Project Construction Cost Category	Maximum Percent of Total Project Price	Self-Performed by Contractor or Subcontracted
Subcontractor Costs (Other Contractor Costs to Contractor)	N.A.	
Other Direct Purchases of Equipment, Material, Supplies by the Contractor (do not include subcontractor supplied purchases as they should be included above)	N.A.	
Design (state at right whether this shall be completed by the Contractor or subcontracted)	X%	
Project Management (state at right whether this shall be completed by the Contractor or subcontracted)	X%	
Commissioning (state at right whether this shall be completed by the Contractor or subcontracted)	X%	
Training (state at right whether this shall be completed by the Contractor or subcontracted)	X%	
Warranty (state at right whether this shall be completed by the Contractor or subcontracted)	X%	
Construction Measurement and Verification (state at right whether this shall be completed by the Contractor or subcontracted)	X%	
Permits (markup allowed only if permits are acquired by Contractor)	X%	
Performance Bond	X%	

### 2.2 Project Markups

The table below includes the maximum percentage markups the Contractor may apply to direct purchases of material, equipment and subcontracts under this Work Order Contract.

Project Markup	Maximum Percent Markup
Overhead Percent	X%
Profit Percent	X%

### 2.3 Self-Performed Work Fees

The table below includes the position descriptions and hourly rates for labor and services self-performed by the Contractor. Markups shall not be applied to fees.

Position Description	Hourly Rate
Position	\$xx.xx
Position	\$xx.xx
Position	\$xx.xx
Position	\$xx.xx

### 2.4 Open Book Pricing

The Contractor shall fully disclose all costs of materials and labor purchased and subcontracted by the Contractor and a list of hourly rates and position descriptions for labor or services provided by the Contractor. Estimates for number of hours required for the project and deviations of these budgeted hours shall require prior written approval by the State or shall not be paid. Contractor shall maintain cost accounting records on authorized work performed under actual costs for labor and material, or other basis requiring accounting records. Contractor shall retain these records and afford the State access thereto pursuant to Master Contract, Section 9: State Audits. Costs will be evaluated through price analysis to compare costs with reasonable criteria such as established catalog and market prices or historical prices. The pricing methodology and individual cost markups disclosed during preliminary contract negotiations will be expected to be applied, providing the scope and size of the project remain the same as assumed when markups were disclosed.

# GESP Project Budget Worksheet

## Minnesota Guaranteed Energy Savings Program - Project Budget Worksheet

Site:

		Project Budget	Fees (1)	Costs (2)	Overhead Markup (4)	Profit Markup (4)	Price	Maximum Percent of Total Project Price (4)	Actual Percent of Total Project Price	Self-Performed by ESCO or Subcontracted
		<b>Construction Fees and Costs</b>			0.0%	0.0%				
	a	Subcontractor Costs (Contractor Costs to ESCO)	N/A	\$ -	\$ -	\$ -	\$ -	N/A	N/A	N/A
	b	Other Direct Purchases of Equipment, Material, Supplies (Supplier Costs to ESCO)	N/A	\$ -	\$ -	\$ -	\$ -	N/A	N/A	N/A
	c	Design (3)	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	#DIV/0!	
	d	Project Management	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	#DIV/0!	
	e	Commissioning	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	#DIV/0!	
	f	Training	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	#DIV/0!	
	g	Warranty	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	#DIV/0!	
	h	Construction Measurement and Verification	\$ -	\$ -	\$ -	\$ -	\$ -	0.0%	#DIV/0!	
	i	Permits	N/A	\$ -	\$ -	\$ -	\$ -	0.0%	#DIV/0!	N/A
	j	Performance Bond	N/A	\$ -	\$ -	\$ -	\$ -	0.0%	#DIV/0!	N/A
sum (a:j) =	k	<b>Project Price Subtotal with Overhead &amp; Profit</b>	\$ -	\$ -	\$ -	\$ -	\$ -			
		<b>Other Fees</b>								
	o	Investment Grade Audit and Project Proposal	\$ -				\$ -	N/A	N/A	
	p	Contingency	\$ -				\$ -		#DIV/0!	
sum(k:p)=	q	<b>TOTAL PROJECT PRICE</b>					\$ -			

**NOTES:** (1) Fees include ESCO self-performed work, IGA and contingency. Markups shall not be applied to fees.

ESCO shall provide a list of hourly rates and position descriptions for labor or services provided.

(2) Costs include subcontracted work and direct purchases of equipment, material and supplies installed on the project.

(3) Design includes all types of engineering: design, electrical, mechanical, structural, civil, energy modeling, etc.

(4) Lesser percent of Overhead, Profit, and Total Project Price from ESCO's Master Contract or Work Order Contract.

Color = input cell



**Peter Berger, LEED AP BD&C**  
Guaranteed Energy Savings Program  
Manager  
651-539-1850  
peter.berger@state.mn.us

**Website:**

<http://mn.gov/commerce/energy/topics/financial/Energy-Savings-Programs/Government/Guaranteed-Energy-Savings-Program/Program-Resources/GESP-Program-Master-Contract.jsp>



# What does a Successful GESPC Look Like?

## *Measurement and Verification*

- Begin With the End In Mind
- Two Parties Mutually Invested in Achieving the Same Goal
- Great Expectations
- Transparency
- Plan By Measure, With Validation Proportionate to Risk
- Clear, Logical, Pragmatic Methodologies



# What does a Successful GESPC Look Like?

## *Measurement and Verification*



- Baseline with Agreed Upon Means of Adjustment for Dynamic Impacts

- Follow the Guides

<http://energy.gov/eere/wipo/model-documents-energy-savings-performance-contract-project#finance>

- Follow the Protocols

[http://www.evo-world.org/index.php?option=com\\_content&view=article&id=272&Itemid=379&lang=en](http://www.evo-world.org/index.php?option=com_content&view=article&id=272&Itemid=379&lang=en)

- Clear Reports, Witnessed Measurements, Baseline Adjustments and a Trackable Path from Each Measure to the Current Bill





Dale Hahs  
S'Energy Solutions  
[dhahs@s-energysolutions.com](mailto:dhahs@s-energysolutions.com)  
(913) 488-7208