

Introducing...

**Energy Saving
Improvement Programs**
aka: ESIP; ESCO; P.L. 2009, c. 4; A-1185

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What ESIP is All About

- Retrofitting public facilities with Energy Conservation Measures (ECM) without new capital investment
- Savings from reduced energy use pays for the improvements = No New Money!
- Applies to all government contracting units
- Not your father's Energy Services Company (ESCO) law – it's different

ECM Categories:

- Distributed generation (solar, wind, geo, bio...)
- Major HVAC (capital) and minor HVAC (non-capital)
- Energy efficiency, demand response equipment (C. 83)
- Non-energy savings related (building envelope)
- Future capital replacements
- Standalone lighting improvements
- New energy related capital improvements, i.e., new air conditioning installation in un-air conditioned facility
 - Must be funded separately from non-operating (i.e., capital improvement) funds
- **Water savings, i.e., low flow fixtures**

Two contracting models:

- Plan A - Agency hire an ESCO
 - ESCO is a single contractor that develops and manage the process – and can guarantee savings
 - Use public bidding or competitive contracting process to award a contract to a firm – an “Energy Services Company” to develop & manage construction of improvements.
 - Contract award is for “most advantageous, price and other factors considered process” or “lowest responsible bidder”

Plan B – Do-It-Yourself

- Hire an energy consultant to develop your Energy Savings Plan
- Develop your own specs and bid the job...
- ...Or hire professionals to do that work
- Rely on built-in verification process to assure savings

Conditions for Success

- Regardless of which model is chosen, the success of the project and accrual of savings depends on:
 - A solid plan
 - Competent construction and installation
 - Ongoing maintenance
- If any are skimped, the public loses and cost and energy savings lost!

Develop the ESIP

- **Step 1** – Perform independent audit
 - Third party – not the ESCO
- **Step 2** – Hire ESCO or manager to prepare Energy Savings Plan
 - If competitive process, use the audit as basis for proposals
 - ESCO must agree to provide an optional energy savings guarantee
- **Step 3** – Develop Energy Savings Plan
 - Identify the Energy Conservation Measures and projected energy savings
 - Savings based on BPU adopted standards

About Those Standards

- Energy savings calculations:
 - Based on BPU adopted standards: i.e., International Performance Measurement & Verification Protocol (IPMVP) or equal
 - Includes state & federal rebates & tax credits
- BPU required to adopt:
 - Interest rate standards & uniform values for escalation of labor, electricity, oil, & gas
 - Standard costs of life cycle & net present value format
 - Standards for Global Warming Reduction Act and carbon reduction obligations

About ESCO Guarantees

- Why a guarantee? To ensure energy savings are met.
- Owner and ESCO **may** enter into long term guarantee contract for up to 15 years
- An ESCO must provide a proposal for a long term guarantee as part of the ESP
 - Full cost disclosure (short and long term costs)
 - Can be for any number of years
 - Must provide for ongoing third-party validation of savings & guarantee (paid by owner in operating budget)
 - Maintenance costs must be publicly bid

More on Guarantees

- Guarantees not required:
 - The audit and verification steps are intended to offset the need for a guarantee
 - Key elements are maintenance and regular verification which are also part of an ESCO guarantee
- Owner formally decides to accept the guarantee in the ESP

Continuing On...

- **Step 4** - 3rd party verification of plan
 - Ensures calculations were done properly
 - Savings calculations does not include Energy Audit & Energy Savings Plan verification costs
 - Costs can be added to financing package
- **Step 5** – Make decisions, approve plan and file with BPU

Step 6 – Design and Bid

- ESCO or Engineer designs and prepares specs
- Contractor/Owner advertises and receives formal bids per the agency's contracting laws: i.e., Local Public/Public Schools Contracting Law, plus
 - Bid security, Bonding, Prevailing Wages, Public Work Contractor Registration, Prompt Payment, and all related laws for owners and their contractors
 - Subsidiaries owned by Contractor cannot bid on work
 - Specifications affecting State or national codes prepared by individuals properly licensed or certified
 - All contractors and professionals must be DPMC listed or classified – this is new for LPCL agencies.

An Exception from Competition

- If the ESCO makes its own “Direct Digital Controls” and the project is guaranteed, the controls can be specified without a competitive process
 - Honeywell, Johnson Controls, Siemens, Trane
 - Control systems must be open protocol & meet standard interoperability guidelines
- Spec must provide an “allowance” – the cost of the controls used by all bidders.
 - Ensures manufacturers do not favor contractors – everyone pays the same price for the parts
- Installation work part of the bidding process - and all public works construction laws and regulations

Step 7 – Construction

- ESCO can serve Construction Manager
 - Contracts awarded by owner
 - ESCO or CM can manage and oversee project schedules, installations, performance, quality and approves payment to subcontractors.
- All administrative and fiscal procedures are managed by Owner pursuant to public works construction laws

Step 8 - Completion of Work

- Commissioning after construction to get it operating property
- 3rd party verification required to validate projected savings after commissioning
 - Required to do financing
- Implementation of any energy savings guarantee
- As part of maintenance, require periodic “tune-ups” to make sure standards are being met

Step 9 – Project Financing

- Public agency arranges issuance of “energy savings obligations” to finance improvements
 - Lease-purchase/capital leases OR full faith & credit debt (refunding bonds)
 - Project financings must match payback life to maturity schedule
- Financing can be by the public agency, ESCO, or another public agency (i.e., EDA or County Improvement Authority)
- All agencies are granted authority to use operating budget funds to repay Energy Savings Obligations (DLGS and DoE working on details)

More Project Financing

■ Local issues:

- Full faith & credit debt will not require voter approval or go against debt limit
- BUT, debt service will NOT BE exempt from appropriation and tax levy caps or eligible for school debt service aid;
- Or be deductions to allowable debt limits

■ Financing cannot include:

- Maintenance agreements for equipment under warranty
- Maintenance services after warranty periods have expired

The Beginning?

Watch for Local Finance Notices
on ESIP and PPA Coming Soon!