ENERGY SAVINGS PERFORMANCE CONTRACTING (ESPC)- BASICS, PERFORMANCE ISSUES AND LATEST DEVELOPMENTS

Daniel E. Toomey, Senior Counsel- Duane Morris Construction Group and McCammon Group Mediator

www.duanemorris.com

Need for Alternative Financing Sources for Energy Improvement

- GAO reported that between 2008 and 2015 Federal Agencies would need to invest more than $1 billion to meet energy savings targets. Others say figure is $1.5 billion
- Consistent with President Obama's Executive Order 13514 from October 5, 2009, the White House announced on January 26, 2010 a goal of a reduction of 28% of greenhouse emissions by 2020
- During this financial crisis it is totally unrealistic to expect that Congress will appropriate anywhere near these levels.
- DoD claims that they don't even ask for appropriations because they know they won't get them

ENERGY SAVINGS PERFORMANCE CONTRACTING-BASICS, PERFORMANCE ISSUES AND LATEST DEVELOPMENTS

What is ESPC?

- Procurement , whether solicited or unsolicited, by energy savings contractors (ESCOs)
- Evaluate, design, finance, acquire, install and maintain energy savings equipment
- Compensation based and *dependent* upon on performance of equipment
- Terms of contract determine ESCO's level of payment
- Balance of savings beyond ESCO payment goes to client

ENERGY SAVINGS PERFORMANCE CONTRACTING-BASICS, PERFORMANCE ISSUES AND LATEST DEVELOPMENTS

- Historical background
  - Though Feds have been involved in performance contracting since 1985, only since 1995 did Congress authorized "shared energy savings agreements" [Pub. L. 99-272];
  - Though popular, ESCP was nearly "sunsetted." Now Federal Agencies authorized to enter into ESPC contracts until 2016 [Energy Policy Act of 2005, 42 U.S.C. § 15801]

Basic aspects of ESPC

Selection of ESCO-

- In Federal arena by pre-qualification under either DoD (by far largest user thus far) or DoE programs
- Usually no less than 3 nor more than 5 firms selected to provide abbreviated tech and price proposals, with “technical board” ranking firms
- Factors for selection-(1) Previous experience and demonstrated ability; (2) financial viability;(3) capacity to develop tech-acceptable energy baselines via audit; and (4) qualified staff and subs

ENERGY SAVINGS PERFORMANCE CONTRACTING-BASICS, PERFORMANCE ISSUES AND LATEST DEVELOPMENTS

- Energy Savings-***Key*** to ESPC success
  - Savings over term of contract pay for all (1) capital expenditures; (2) ESCO’s profit; & (3) ideally, client garners additional savings after ESCO profit
  - Development of Detailed Energy Survey (“DES”)
    - Undertaken at ESCO’s own risk
    - Recoverable in implementation price *but* only if project is awarded
    - Can be as much at $1 million on $3 million project

Development of Revised and Final Proposal

- Parties negotiate package of “energy conservation measures” (ECMs) based on DES and energy baseline
- Proposal addresses: (1) EMCs considered and rationale for selecting;(2) feasibility & energy savings calcs; (4) implementation costs with backup; and (5) annual savings with supporting data
- ESCO ***guarantees*** savings over baseline or doesn’t get paid.

Financing, and Operation and Maintenance

- Major benefit is that agency avoids initial outlay for material and permanent improvements because ESCO finances them
- Financing costs and ESCO's projected profits factored into over course of the contract
- Financing obtained by ESCO must be at arm's length, with ESCO responsible to obtain competitive financing and show process

Development of Acceptable Measurement and Verification ("M&V")of Energy Savings

- Need to develop an M&V which shows objectively, transparently and logically, annual energy savings
- M&V plan to show: (1) methods; (2) measurements, calcs and stipulations; (3) content of annual M&V report; (4) recurring (monthly) deliverables; (5) one time deliverables; (6) responsibility for M&V activities, analysis and documentation; and (7) O&M report requirements for each ECM

Length of ESPC contracts

- Up to 25 years
- Purpose is to allow amortization of costs
- Expectation is that ESCO will recover costs of improvements in first 10 years
- During performance phase, ESCO performs O&M to (a) further reduce agency's cost; and (b) ensure that ECM's are properly performing to protect investment in achieving guaranteed savings.

ENERGY SAVINGS PERFORMANCE CONTRACTING-BASICS, PERFORMANCE ISSUES AND LATEST DEVELOPMENTS

ESPC contracting-not easy

- Case study EPA Ada, OK Robert S. Kerr Environmental Research Laboratory http://www.labs21century.gov/pdf/cs_ada_508.pdf
  - Supposed to be a signature, state-of-the-art project
  - ESCO was one of the largest instrumentation companies in the World
  - Project was EPA's second ESCO project
  - Major upgrade of mechanical and electrical systems
  - Installation of geothermal ground source heat pump (GSHP)
  - Major complication-variable-air volume (VAV) on lab supply and exhaust

EPA's Lessons Learned from Ada Project

- Select PMs, designers and subs with demonstrated expertise in high performance buildings (VAV labs)
- Greater development of ECM system designs in final proposals
- Agency to provide experienced on-site, full-time PM
- Agency to ID key reviewers at beginning for engineering, safety, security and O&M
- System design fully complete and approved before construction started

EPA Lessons Learned, Cont'd

- ESPC contract provides clear scope and spec for lab system retrofit commissioning; commissioning experts involved from beginning
- GSHP installation to include bore field survey and mapping underground conditions before drilling

Duane Morris

ESCO-lessons learned from Ada arbitration

- Take responsibility for your own mistakes
- Cooperate and coordinate design issues with subs
- Keep subs fully involved in process with owner
- Follow sub-contract's default termination procedures to the "T"
- Read and react to FOIA documents in arbitration, at your peril
- Use expert witnesses with real expertise

Duane Morris

Consequences of Lessons Learned

- ESCO's witnesses killed on cross with their own FOIA docs
- Finding that ESCO violated the covenant of good faith and fair dealing for wrongfully terminating sub, as well as in connection with efforts to enforce performance bond
- Denial of all of their claims against sub
- Sub and surety awarded 93% of attorneys' fees and costs

What's New

- In the last two years, the number of "super" ESCOs has more than doubled. While this had created more competition, it has made ESPC contracts less attractive for the ESCOs
- The tight money caused by the economic crisis had a significant effect on the availability of financing but this has eased somewhat. Nonetheless, the cost of financing has gone up
- Stimulus money has had a negative effect on ESPC. In what is perceived as a perverse use of ARRA stimulus funds, some agencies have used these funds to pay off long term ESPC contracts. This has had a negative impact on the willingness of banks to finance ESPC contracts

What's new

September 2009 GAO report highly critical of Management by Agencies of ESPC contracts [DOE/IG-0822]

- In four of largest DoE ESPC's:
  - Failed to minimize costs by buying out projects that didn't generate savings
  - Failed to verify accuracy of claimed savings
  - Failed to include all costs necessary to implement ESPC in determining likely success
  - Failed to take action when ESPC contract's costs exceeded guaranteed savings

Conclusions

- Fed agencies' responsibilities for energy continue to grow
- In current economic climate, Congress will not appropriate sufficient funds to pay for required energy improvements
- Fed agencies will have to find alternative funding vehicles
- ESPC provides a viable alternative
- Agencies using ESPC will:
  - Have to ensure that their practices will make ESPC contracts attractive to ESCOs
  - Will have to carefully manage ESPC contracts to ensure that they are getting the benefit of their bargain