



U.S. Department of Energy
Energy Efficiency and Renewable Energy

Rebuild America Energy Technology Seminar

Introduction to Performance Contracting

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What Is Performance Contracting (ESPC)?

- Design Build, Performance Based Project
- Contractor Assumes Performance Risk
- Contractor Compensation is Tied to Measured Performance





Methods of Implementing a Performance Contract

- An entity can put together a bid specification and request proposals for a turnkey project from an Energy Services Company (ESCO).
 - ❖ This would entail all interested ESCOs to conduct energy audits of the facilities.
 - ❖ The evaluation of the bids becomes cumbersome (apples to apples)
 - ❖ Advantage - Different options or technologies
- Hire an ESCO to develop the scope of work, put together the bid specification, evaluate the bids, project manage the installation and facilitate getting the utility incentives.



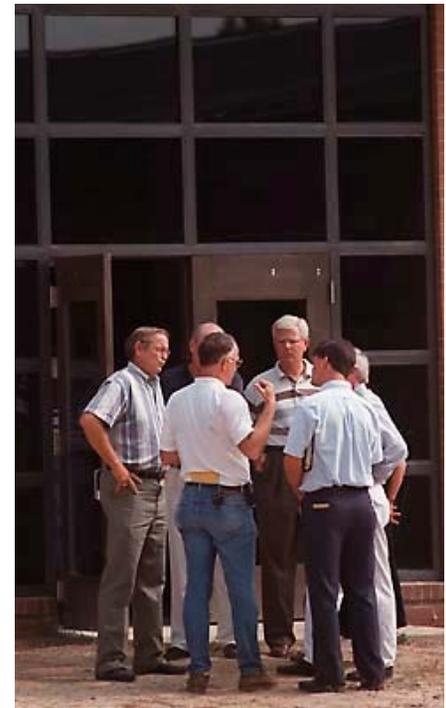
Methods of Implementing a Performance Contract

- Hire an ESCO as the owners representative to develop the scope of work, put together the bid specification, evaluate the bids, project manage the installation and facilitate getting the utility incentives.
 - ❖ The bid would go out to ESCO's that perform turnkey projects.
 - ❖ Advantages
 - Bids would be consistent
 - Owner would have more control over the process
 - The burden is no longer on the owner to evaluate the bids or to provide project management or oversight.



What Is An ESCO?

- ❖ **E**nergy **S**ervices **C**ompany
- ❖ A Company that Helps Clients:
 - ◆ Upgrade Facilities (Demand Side)
 - ◆ Energy Efficiency Upgrades
 - ◆ Process Improvements
 - ◆ Improved Operation and Maintenance
 - ◆ Purchase of the commodity (Supply-side)
 - ◆ By Providing an Integrated Package of Services
 - ◆ Pay for Some or All of the Cost with Guaranteed Energy/Operational Cost Avoidance





What Services Do ESCO's Provide for their Clients?

- ❖ Facility Energy Audit and Feasibility Analysis
- ❖ Engineering and Design
- ❖ Financing
- ❖ Project/Construction Management
- ❖ Installation
- ❖ Maintenance and/or Training
- ❖ Measurement & Verification (M&V)
- ❖ Performance Guarantee



Why Use an ESCO?

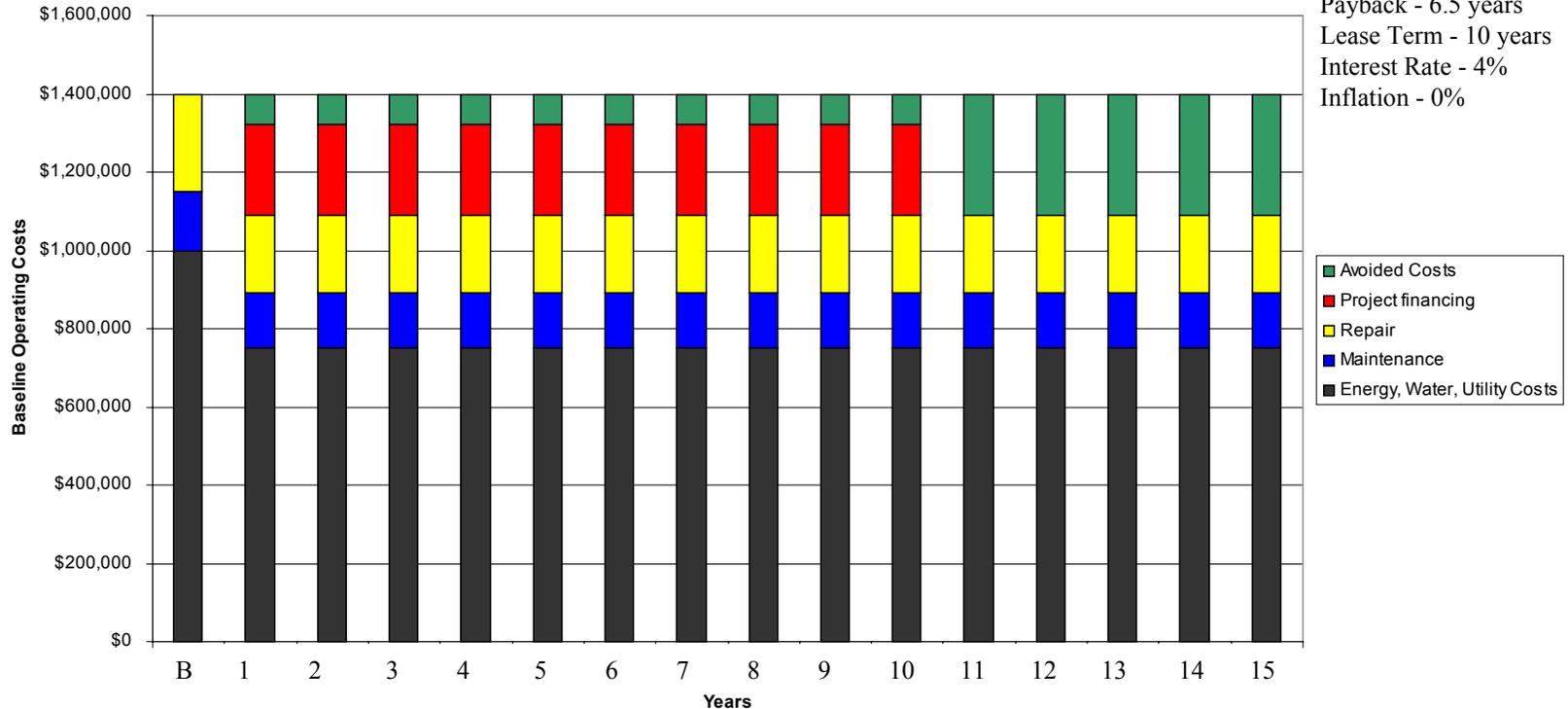
- ❖ Expertise:
 - ◆ Survey, Analysis, Engineering/Design
 - ◆ Project Management, Installation, O&M, M&V
 - ◆ Energy Procurement
- ❖ Innovative Financing Options
- ❖ Comprehensive Building Envelop Improvements
- ❖ Utility Incentive Facilitator
- ❖ Long-term Partnerships
- ❖ Goals In Line With Their Clients



It Is Possible to Structure Projects to Pay from Cost Avoidance

15 Year Financial Impact

Project - \$2.0 million
Savings - \$310,000
Payback - 6.5 years
Lease Term - 10 years
Interest Rate - 4%
Inflation - 0%





Performance Contracting in New York

Article 9 of State Energy Law

- Bundled Solution through a single contractor
- RFP Process
- 35 year payback (18 years for K-12)
- Non-debt accounting treatment
- Non-appropriation clause





Bundling vs. Cherry-Picking

- ❖ Comprehensive Bundle of Energy Conservation Measures (ECMs)
 - ◆ Problem (e.g. – Aging Equipment Needing Replacement)
 - ◆ No Money for Project to Solve Problem
 - ◆ Add Short Payback ECMs (Lighting)
- ❖ Cherry-pick the Short Payback ECMs
 - ◆ Makes Subsequent Comprehensive Projects in Same Buildings More Difficult to Fund





Who Needs an Energy Savings Performance Contract (ESPC)?

- ❖ Any Organization Looking For:
 - ◆ Cost Reductions
 - ◆ Energy
 - ◆ Operations
 - ◆ Maintenance
 - ◆ Energy Procurement (Purchase or Generation)
 - ◆ Upgrades of Aging Systems and Existing Buildings
 - ◆ Project Financing
 - ◆ Environmental Solutions



Advantages of an ESPC

- ◆ Little or No Up-front Funding
- ◆ Allows Replacement of Outdated Equipment
- ◆ Operational and Maintenance Improvements
- ◆ Guaranteed Performance
- ◆ Eliminates Technical and Financial Risks
- ◆ Uses Future Energy/Operational Cost Avoidance Now
- ◆ Comprehensive Projects