



Albuquerque Post



Energy Security Through Performance Contracts

Establishing an Energy Partnership With

DoD Installations

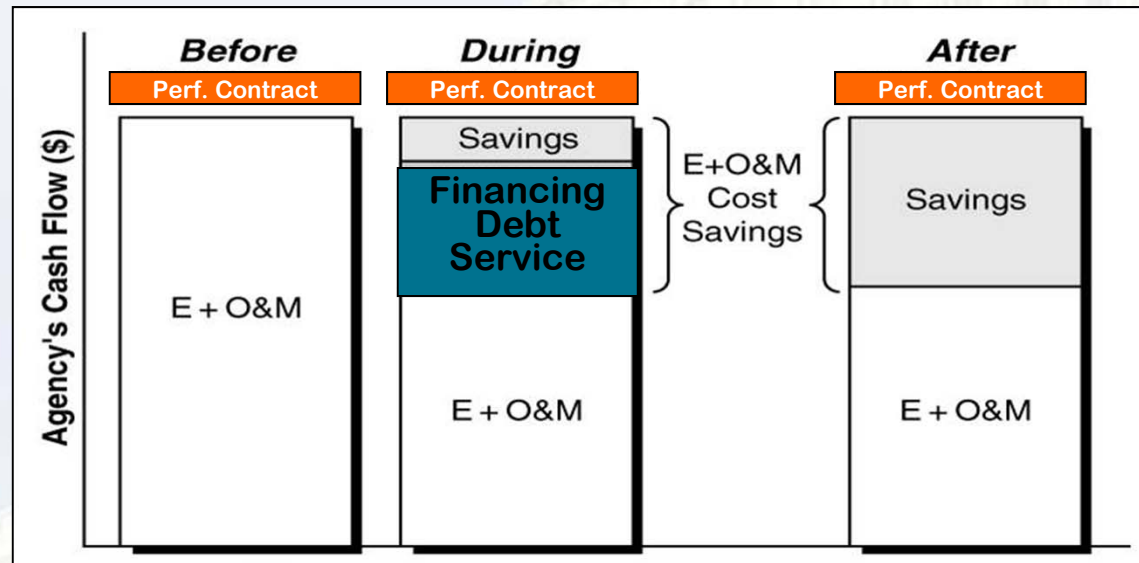


Meeting Agenda

- Introductions & Opening Remarks
- Performance Contracts – What & Why
- Types of Performance Contracts
- Why Utilities Want to Help
- Performance Contracts as a Best Value Option
- The Power of Performance Contracts – Flexibility
- Q&A and Wrap UP

What Are Performance Contracts

- Identifies/uses savings to upgrade infrastructure instead of paying for utilities expended by inefficient equipment



- Utility or ESPC Contractor front capital costs, assess opportunities, design and implement approved ECMs which are paid out of energy savings

Typical Performance Contract Renewable and Energy Conservation Measures

- Lighting & Water Retrofits
- Mechanical Upgrades (HVAC, Motors, Chillers / Turbocor, Boilers, Controls, AHU's, etc.)
- Central Steam System improvements and/or decentralization
- Retro / Recommissioning
- Solar Thermal (domestic & training pool water heating)
- Renewable Solutions (Solar PV, Wind, Biomass, etc.)
- Daylight Harvesting
- External LED applications
- Commercial GSHP
- Water/ Waste Water Plant improvements
- Automated Meter Reading
- Building Envelope
- Conservation Voltage Regulation

Typical PC Process

Step #	Description
1	Initial Concept Investigation
2	Request for Initial Audit (No Cost)
3	Initial Audit (PFA, PEA, etc.)
4	Request for Detailed Audit
5	Feasibility Study / ECP Proposal
6	Authorization to Award Design / Implementation Phase
7	Negotiation & Award
8	Project Design / Implementation
9	Acceptance, M&V, O&M & Loan Repayment

Why Use Performance Contracts

- **Unfunded Mandates** – From EPA Act of 1992 through EISA 2007 & Numerous Executive Orders
 - Energy & Water Conservation
 - Reduce energy intensity by 3% per year for years FY06 – FY15
 - Reduce water consumption intensity by 2% per year through FY15
 - Install Utility sub-metering for high energy usage Federal buildings by 2013
 - Renewable Energy – 7.5% by FY13 & beyond
 - Energy Security
- Supply & Demand Side Enhancements
- Infrastructure Improvement Needs
- Resource Supplement Opportunities

Types of Performance Contracts

- **Utility Energy Services Contracts (UESCs):**
Direct / Streamlined Contract with Serving Electric, Natural Gas or Water Utility Through
 - Utility Area Wide Agreement (Administered by GSA)
 - Basic Ordering Agreement (Ex – NAVFAC SE BOA's)
 - Site Specific UESC Agreement (Administered by Site Acquisitions)
- **Energy Services Performance Contracts (ESPCs or Super ESPCs):**
Limited Source Competition between Energy Service Companies (ESCOs) through
 - DOE Federal Energy Management Program (FEMP) Super ESPC Contracts
 - US Army Corps of Engineers ESPC Contracts (Huntsville)
 - Site Specific ESPC Contract Competitions between qualified ESCOs

Why Should Utilities Want to Help?

- Energy & water usage is going to be reduced – they are going to do it with or without Utility Involvement
- Opportunity to add value / improve relationships with existing Government customers
- Utility Plant Deferral / Need Elimination
- Added revenue stream

Performance Contracts as a Best Value Option for Energy Project Execution

Contract Characteristic	Contract Type				
	MilCon	ESPC	UESC	Set-Aside	MACC / BOSS
Competition	Open Bid	Restricted Bid	Competition at all levels – including Utilities	Restricted Competition	Restricted Competition
Open Book Pricing	No	Limited	Yes	No	Limited
Contract Value / Size	Dependent on Appropriations	Typically \$5M and above for Life Cycle Cost Effective Measures	As little as \$100K to over \$100M for Life Cycle Cost Effective Measures	Dependent on Appropriations	Dependent on Appropriations
Performance M&V	None	Required for all scope for entire contract term – Typically 3-5% of Contract Value	Optional for some or all scope and for some or all of the contract period – Typically 1-2% of ECM Value	No	No
Performance Guarantees	None	Required for all scope for entire contract term	Optional for some or all scope and for some or all of the contract period	None	None
Operations & Maintenance	None	Typically required for all scope for entire contract term	Optional for some or all scope and for some or all of the contract period	None	Optional

Performance Contracts as a Best Value Option for Energy Project Execution (continued)

Contract Characteristic	Contract Type				
	MilCon	ESPC	UESC	Set-Aside	MACC / BOSS
No Cost Initial Audit	None	Required	Required - provided as an incentive	None	None
Change Orders	Typically 5-10% of original contract value	None except for Government initiated scope changes	None except for Government initiated scope changes	Typically 5-10% of original contract value	Typically 5-10% of original contract value
Warranty	Per Contract Terms - Typically Equipment Manufacturer's Warranty	12 Months full warranty plus additional Equipment Manufacturer's Warranty	12+ Months full warranty plus additional Equipment Manufacturer's Warranty	Per Contract Terms - Typically Equipment Manufacturer's Warranty	Per Contract Terms - Typically Equipment Manufacturer's Warranty
Project Development Requirement / Risk	Fully on the Government	Shared with the Government	Primarily on the Utility - "Cradle to Grave Responsibility"	Fully on the Government	Fully on the Government
Design vs. Installed Project Quality	Value Engineering & Equipment Quality / Efficiency Reduced due to Budget	Primarily Driven by ESCO Team of Suppliers	Driven by Government Installation Needs & Preferences with No Changes due to Budget Constraints	Value Engineering & Equipment Quality / Efficiency Reduced due to Budget	Value Engineering & Equipment Quality / Efficiency Reduced due to Budget

Performance Contracts as a Best Value Option for Energy Project Execution (continued)

Contract Characteristic	Contract Type				
	MilCon	ESPC	UESC	Set-Aside	MACC / BOSS
Funding Source	Up Front Appropriations	Mix of Up Front Appropriations & Financing	Mix of Up Front Appropriations & Financing	Up Front Appropriations	Up Front Appropriations
Contract Timeline	Long timelines impacting costs and savings	18 - 36 months from request for PFA to design / build contract	6 - 18 months from request for PFA to design / build contract	Long timelines impacting costs and savings	Long timelines impacting costs and savings
Customer / Contractor Relationship	Traditional	Traditional	Partnership	Traditional	Traditional
Product Options	Based on Bid Specs or Equal	Based on ESCO Team Offerings	Product & Fuel Neutral Focus	Based on Bid Specs or Equal	Based on Bid Specs or Equal

• Performance Contracts are Cost Effective Tools for Energy Project Execution

- Not the only tool for energy projects
- Project by project evaluation should be conducted

The Power of Performance Contracting - Flexibility

- NAS Meridian – \$1.8M “use it or lose it” funds / from Initial Audit to contract in 4 months
- Shaw AFB - Frequent scope/ECM “horse trading” without continuous contract modification – Taxi way lighting
- Pope AFB Ramp Lighting Project - \$270K financed project
- Seymour Johnson AFB – ESG Salvaged old central plant equipment to help fund energy improvements during multi-phase steam decentralization project
- MCAS Cherry Point – Manage a significant BAS retrofit project (non-financed)
- MCB Camp Lejeune – several projects developed and executed through ECIP

Q&A & Wrap-up

- Any Questions??
- Contact Information:

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Thank You!

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