

A composite background image showing a military ship's deck. In the foreground, a soldier in a green uniform and helmet is looking at a map. In the background, a large aircraft carrier is visible on the water, with a helicopter on its deck. The image is semi-transparent, allowing the text to be overlaid.

NAVY AND MARINE CORPS

ENERGY PROJECT ALTERNATIVE FINANCING

UESC OR ESPC?

*Alternative
Financing
Track Four*



UESC AND ESPC

- Need for Energy Efficiency in DoN
- Alternative Financing
- How to decide which vehicle to use?
- DoN Organization for UESC and ESPC
- Case studies:
 - MCB Camp Lejeune, NC
 - MCAS Beaufort, SC



Department of the Navy Energy Efficiency Issues



Why does
Energy Efficiency
matter?



Department of the Navy

Energy Project Volume (\$M)

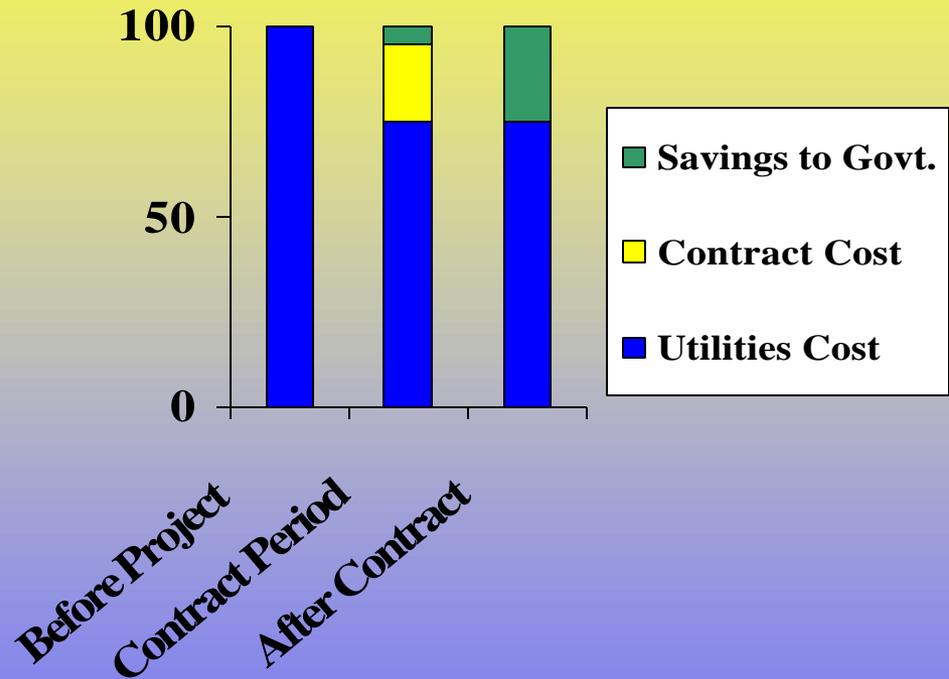
From FY00 – FY03

- \$ 570M Projects DON Financed
- \$330M ESPC Awards
- \$240M UESC Awards



How Does Alternative Financing Work ?

- Contractor finances project
- Gov't pays through utility budget





Contracts

- UESC / DSM
 - Utility Area-wide (BOA)
 - GSA Area-wide
 - Model Agreements
- ESPC
 - DoN Independent or Regional ESPC's
 - Army Corps of Engineers contracts
 - DoE Super ESPC's



Financed Projects

- Boiler Plant Improvements
- Building Automation Sys'
- Building Envelope Imp'
- Chiller Plants
- Cogeneration
- Compressed Air Sys'
- Electric Distribution Sys'
- Electric Motors and Drives
- HVAC
- Lighting/Lighting Controls
- Photovoltaic Sys
- Wind Power
- Water and Steam Distrib'
- Water Conservation
- Ground Source Heat Pumps
- EMCS



Alternative Financing UESC and ESPC

Utility Energy Efficiency Service Contracting (UESC)

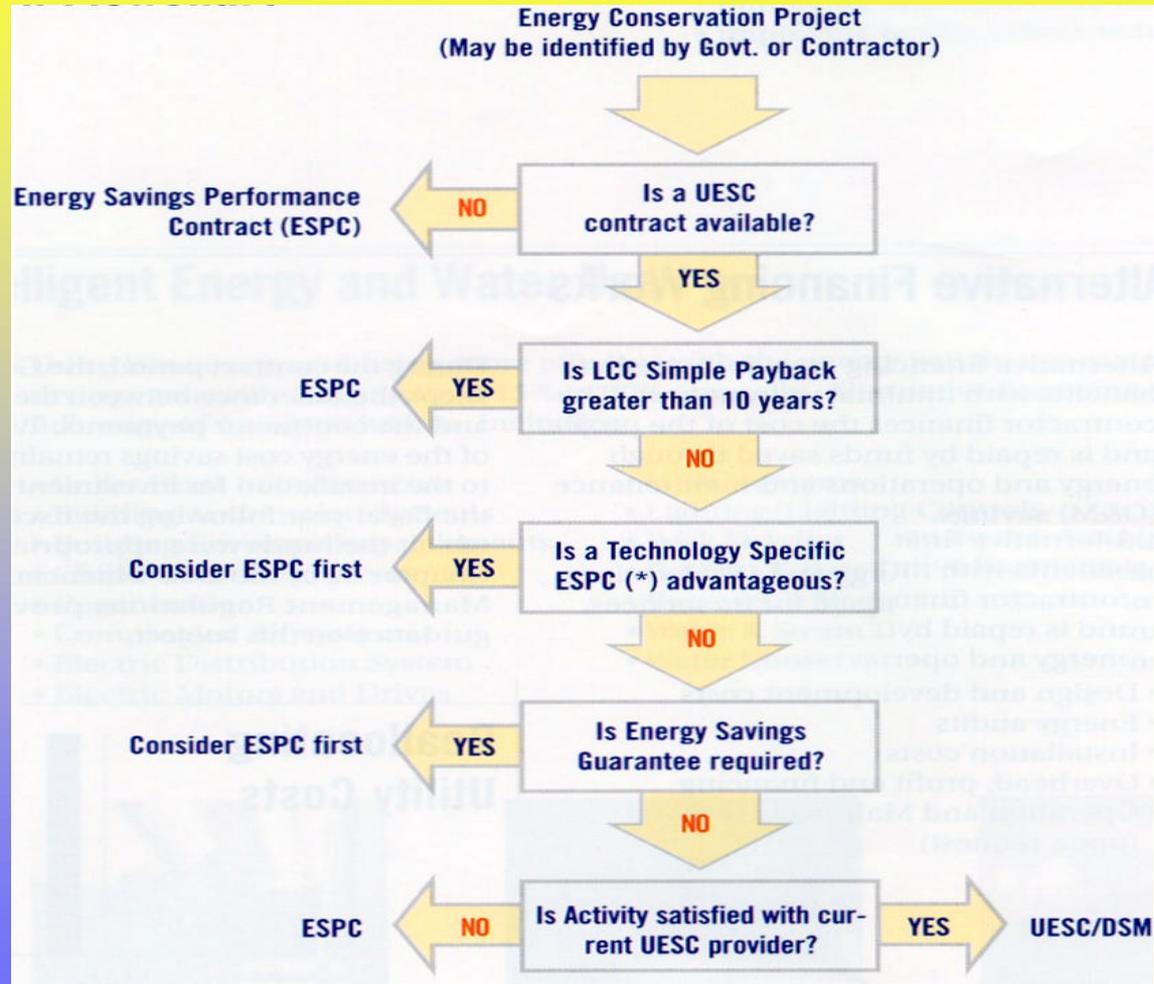
- Sole Source to Regulated Utility (Utility competes subs)
- Positive Net Present Value (computed over 10 years)
- Projects not always financed
- O&M Could Be Included

Energy Savings Performance Contracting (ESPC)

- Competitive Award to an Energy Service Co. (ESCO)
- Savings exceed payments each year of the term
- Equipment Performance “Guaranteed”
- O&M Has Been Included



Choosing the Approach





Selection Considerations

- **Funds Available to Audit**
 - **Relationships**
 - **Complexity of Project**
 - **Acceptable Risk to the Govt' or Contractor**
 - **Desired Financing Length of Term**
 - **Billing Mechanism**
 - **O&M Optional**
 - **Project "bundling"**
 - **M&V options**
 - **Desired Performance Guarantee**



Energy Project (UESC or ESPC) Improving Military Readiness

Leverage private sector financing for DON facilities infrastructure improvements, and reduce energy consumption and cost

Example: MAGTFTC Twenty-nine Palms, CA
Infrastructure Improvements

- 7 MW Cogeneration Plant
- Three central chiller plants
- 1.1 MW Photovoltaic System



Cogen Plant Ribbon Cutting
Ceremony - MAGTFTC, EFD,
NFESC, NAVFACCO, ESCO

March 2003



Energy Project (UESC or ESPC) Improving Military Readiness



Cogen Plant Installation

Leverage private sector financing for DON facilities infrastructure improvements, and reduce energy consumption and cost

Naval Medical Center San Diego

- one 4.6 MW turbine Turbine generator
- Steam will be used to produce chilled water



UESC

EFD

PWCs

Installations



ESPC

NFESC

NAVFACCO

PWCs

Installations

T e a m N A V F A C



UESC or ESPC ?

Case studies: MCB Camp Lejeune, NC
MCAS Beaufort, SC