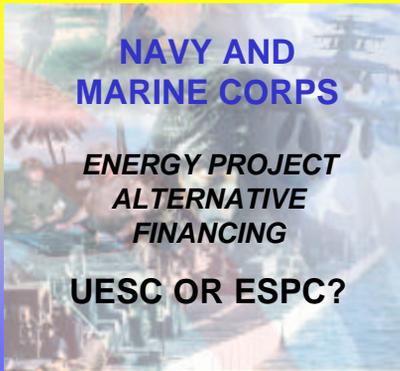




## NAVY AND MARINE CORPS

### ENERGY PROJECT ALTERNATIVE FINANCING UESC OR ESPC?

Alternative Financing  
Track Four



August 17-20, 2003

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## 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

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## Department of the Navy Energy Efficiency Issues



Why does  
Energy Efficiency  
matter?

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## Department of the Navy Energy Project Volume (\$M)

From FY00 – FY03

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

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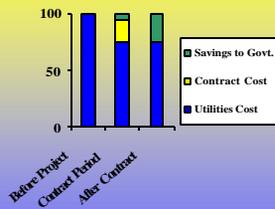
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## How Does Alternative Financing Work ?

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



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## 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

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## 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

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## Alternative Financing UESC and ESPC

- |  |   |
|--|---|
| Utility Energy Efficiency Service Contracting (UESC)       | Energy Savings Performance Contracting (ESPC)       |
| • Sole Source to Regulated Utility (Utility competes subs) | • Competitive Award to an Energy Service Co. (ESCO) |
| • Positive Net Present Value (computed over 10 years)      | • Savings exceed payments each year of the term     |
| • Projects not always financed                             | • Equipment Performance "Guaranteed"                |
| • O&M Could Be Included                                    | • O&M Has Been Included                             |

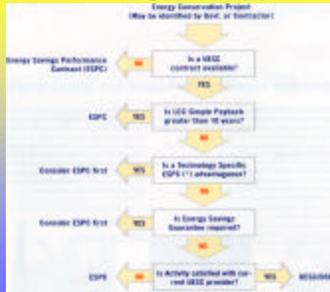
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## Choosing the Approach



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## 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

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## 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

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## 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

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**UESC**  
EFD  
PWCs  
Installations

**ESPC**  
NFESC  
NAVFACCO  
PWCs  
Installations

**Team NAVFAC**

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## UESC or ESPC ?

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

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