



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

*federal energy management program*

# **VA Energy Management Action Plan**

**Ken Demers**

**Chief, VA National Energy Business  
Center**



# Purpose

To develop a comprehensive Department-wide VA energy conservation policy and action plan to include acquisition, investment and conservation strategies to comply with federal energy mandates as well as achieve internal energy initiatives and goals.



# Cited Deficiencies Within VA's Previous Energy Program...

- No comprehensive Department-wide policy
- Lack of coordinated acquisition and investment strategies throughout the Administrations and Staff Offices
- No uniform measurement and verification of energy usage
- Unverifiable reporting mechanism
- Lack of capturing “lessons learned” and best practices from previous experiences



# Potential Annual Savings

	ENERGY COST (\$000)				CONSUMPTION (Billion Btu)			
	Baseline - FY 2005:				Baseline - FY 2005:			
		\$397,577						29,094
	Savings				Savings			
SOURCE OF SAVINGS	FY 2007	FY 2008	Future	TOTAL	FY 2007	FY 2008	Future	TOTAL
<b>Centralized billing</b>								
- 5%, FYs 2007 and 2008	\$19,879	\$19,879		\$39,758	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<b>Metering program</b>								
- 2% by 2012	---	---	\$7,952	\$7,952	---	---	582	582
<b>Direct commodity purchasing</b>								
- 3% by FY 2008	---	\$11,927		\$11,927	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<b>Alternatively financed projects</b>								
- 15% by FY 2015	---	---	<i>tbd</i>	<i>tbd</i>	---	---	4,364	4,364
<b>TOTAL</b>	\$19,879	\$31,806	\$7,952	\$59,637	---	---	4,946*	4,946



# VA Energy Cost and Consumption 2006 Year-To-Date

FY 2006 Energy Consumption Year-To-Date (7 Months)

**28,183 (billion Btu)**

FY 2006 Energy Costs Year-To-Date (10 Months)

**\$455,605,336.00**



# External Energy Management Oversight

## **Inspector General Report March 2005**

Recommendations include placing higher priority on managing energy and meeting federal agency requirements

## **GAO Report June 2005**

Recommends increased competition in energy services performance contracting and enhanced expertise at agency level



# Secretary's Assignment to Office of Management - August 2005

- Form a Department-wide energy management task force
- Create a VA energy management action plan
  - ✓ Short and long-term actions
    - ✓ Resource requirement estimates



# VA Energy Management Task Force Tackles VA Energy Challenges

Chartered in August 2005, the Task Force:

Met, established a working subcommittee for each challenge, and created an Energy Management Action Plan

Subcommittees made significant progress on selected activities

Address the following five major energy challenges:





# Five Energy Challenges for VA

1. Optimally manage energy systems
2. Purchase energy wisely
3. Make prudent energy investments
4. Implement renewable and alternative energy purchasing projects
5. Understand what we're using and how much it costs

*...while meeting the requirements of the Energy Policy Act of 2005 and existing Executive Orders*



# VA's Path to Improved Energy Management

Through the Action Plan, VA will:

VA is on track to realize \$59 million in avoided energy costs over the next 2+ years

Investment of \$54 million

102 new FTEE (Energy Managers)

Reduce annual energy consumption

Meet metering and other EPC Act 2005 requirements for federal agencies

Implement renewable energy projects



# FY 2006 Achievements

1. Procured \$2.1 million in energy assessments
2. Advanced energy efficiency pilots in VISNs 4, 21 and 22
3. Provided energy contracting support through Cleveland VAMC business office (National Energy Business Center)
4. Further developed a metering strategy
5. Begin evaluating options for more cost-effective commodity procurement
6. Selected renewable energy pilot sites for analysis by NREL



# VA's ESPC Process

Award Energy Assessment Contract with Options:

Phase I The contractor will develop or confirm an energy baseline and develop short-term and long-term commodity acquisition plans

Phase II The contractor will perform an initial energy assessment/audit and prioritize investment recommendations (ECMs)

Phase III The contractor will prepare a bid solicitation package for a request for quotes to energy savings implementation/installation contractors.



# VA's ESPC Process continued...

Phase IV The contractor will provide implementation/installation administration services during implementation/installation period

Phase V The contractor will provide oversight and monitoring services regarding measurement and verification of energy consumption and cost savings after the implementation/installation period



# Government Identified ECMs

VA uses two different contractors..

- o Energy Assessment ESCO

- o ECM ESCO



# Benefits of Government Identified ECMs

- EA contractor has no economic stake in ECMs
- VA has the benefit of working with two different ESCOs
- EA Contractor cannot bid for ECM work
- EA contractor assists VA with RFP preparation, consulting during installation/construction of ECMs and M&V



# Funding

CHALLENGE	FY 2006	FY 2007	FY 2008 Annualize d	TOTAL
1 – Data	\$310	\$3,100	\$3,193	\$6,603
2 – O&M	\$100	\$12,500	\$12,875	\$25,475
3 – Commodity Purchasing	\$140	\$1,200	\$1,236	\$2,576
4 – Investments	\$2,500	\$7,000	\$7,210	\$16,710
5 – Renewables	\$50	\$1,200	\$1,236	\$2,486
<b>TOTAL</b>	<b>\$3,100</b>	<b>\$25,000</b>	<b>\$25,750</b>	<b>\$53,850</b>





# Future Actions FY07 and Beyond...

Implement ECMs selected from first round of Energy Assessments a total of 64 facilities (Phase III)

Conduct a second round of Energy Assessments for another 63 VA Medical Centers, 56 NCA cemeteries, and two VBA office buildings

Monitor and evaluate current and future initiatives and make adjustments based on lessons learned

Implement a Commodities procurement strategy

Implement renewable ECMS for Pilot Sites (Phase III)