

Industry Forum 2013

Integrity - Service - Excellence



Energy Directorate

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Acting Chief
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Overview

- **Objectives & Organization**
- **Programs, Execution & Business Opportunities**
- **Contact Information**



Energy Directorate Objectives

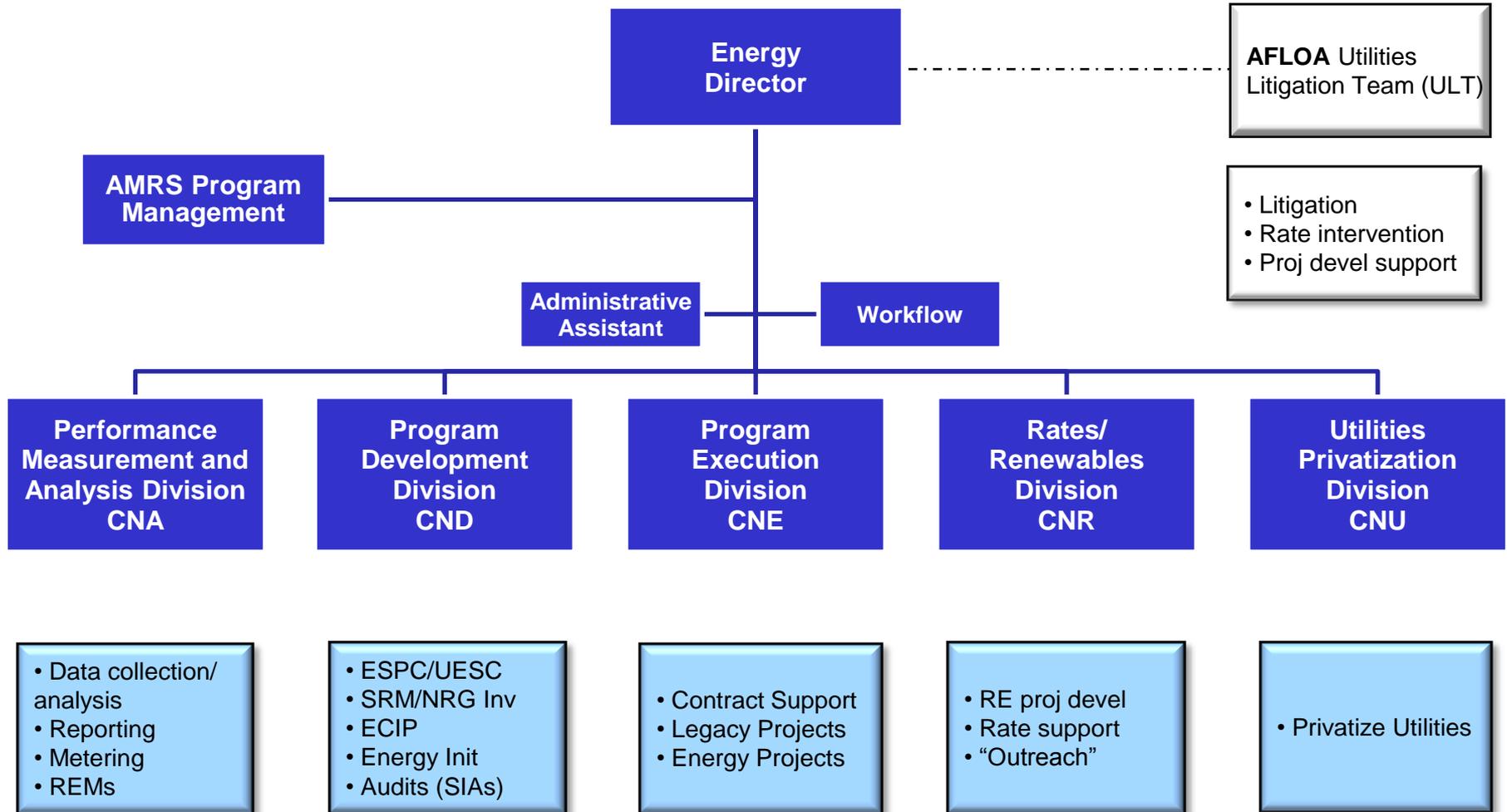
- *Drive facility energy reduction*
- *Leverage RE investments*
- *Exploit utility cost savings*
- *Privatize utilities infrastructure*





Energy Directorate

AFCEC/CN Organization





Facility Energy Programs

- **Energy Conservation Investment Program (~ \$38M - OSD Oversight)**
 - Design – AFCEC execution via 4PAE
 - Construction – AFCEC execution via SATOC
- **Energy (NRG-SRM) Focus Funds (~\$200M - AFCEC Managed)**
 - Design – Base preference execution
 - Construction – Base preference execution
- **Energy Initiative (~\$20M – AFCEC Managed)**
 - REMs and Labor Support
 - Pilot project development and execution
- **Third Party Financed (AFCEC Managed)**
 - Energy Savings Performance Contracts
 - Utility Energy Service Contracts (execution at base)
 - Renewable Energy Power Purchase Agreements



FY13 Energy/Water Conservation Breakout by Project Type

Technology	# Projects	MMBTU Saved	Investment (K)
Boiler Projects	4	16691	\$1,911
Chiller	6	31364	\$3,679
Commissioning	24	212148	\$8,102
EMCS (Controls)	25	133955	\$14,878
Envelope	11	42346	\$4,804
Ground Source Heat Pump	2	9023	\$1,332
HVAC	28	202086	\$16,694
Lighting	46	122840	\$22,382
Mechanical	22	140034	\$10,973
Roofing	11	17943	\$4,902
Renewable (Solar)	4	9614	\$3,343
Steam	5	50237	\$3,857
Plumbing	5	1629 (Mgals)	\$1,267
Water Distribution	7	102 (Mgals)	\$3,181
Total	200		\$101,305

200 FY13 energy and water conservation projects in progress



Energy Saving Performance Contracts (ESPC)

■ **ESPC definition:**

- **Provide conservation measures resulting in net decrease in future energy or water costs**
- **Contractor finances, designs, implements, operates, maintains, and owns infrastructure improvements**
- **Contractor paid from generated savings over time**

■ **DOE ESPC is the AF's preferred contract**

- **16 pre-qualified Energy Service Contractors (ESCO's)**
- **Any/all 16 ESCO's may propose on each project**

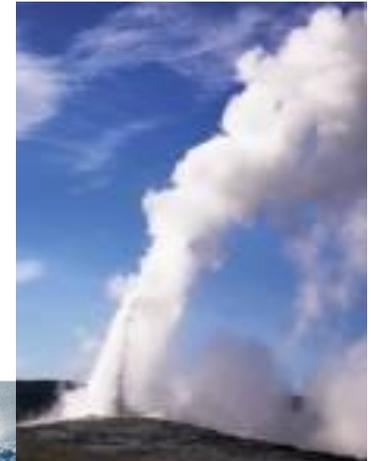
■ **ESCOs remain free to**

- **Introduce and/or share conceptual energy conservation ideas**
- **Marketing literature or conceptual ideas proposed may be shared with other AF organizations and must be presented in a non-proprietary document**



Renewable Technologies

- **Solar**
- **Wind**
- **Biomass**
- **Landfill Gas**
- **Geothermal**
- **Ocean**
- **Hydropower**
- **Waste to Energy**
- **Ground Source Heat Pumps**





Renewable Energy Procurement

- **On-site RE project development methods**
 - Direct AF investment (ECIP or SRM/NRG)
 - Renewable Energy Power Purchase Agreements (REPPAs)
 - Utility/Third Party Funded
- **REPPA advantages over direct AF funded projects**
 - REPPA Developer can hold and sell RECs in the marketplace
 - REPPA Developer can leverage RE incentives and tax benefits
 - REPPA Developer/Utility respond to State driven Renewable Portfolio Standard (RPS)
- **Direct funded projects less economical than REPPA**
 - AF cannot currently sell RECs or leverage benefits
 - AF must maintain and operate

REPPA provides lower cost solutions for RE goals



Upcoming Projects Summary

(FY13-15)

Technology	# Projects	Capacity KW
Photovoltaic	8	54,300
Wind	4	36,500
Biomass	1	25,000
Waste to Energy	1	5,400
Landfill Gas	1	4,300
Geothermal	1	10,000
Total	16	135,500



Utilities Privatization (UP)

- **Privatizes utility systems on installations**
 - **UP Privatizes Infrastructure, Not the Commodity**
- **Results in:**
 - **50-year utility service contract**
 - **Bill of sale (signed by SAF/IEI and system owner)**
 - **Systems maintained and operated at industry standard**
- **DLA Energy - AF preferred contracting office**
 - **DLA RFP Release Schedule Website**
http://www.energy.dla.mil/energy_enterprise/Pages/default.aspx
- **GSA and 10 CONS continue to release RFP's**



Summary

- **Comprehensive energy program strategy**
 - Meet objectives, reduce future costs
- **Focused/leveraged investments**
 - Proven conservation measures
 - Cost effective renewable energy procurement
 - Direct investment and 3rd party financing
- **Many opportunities for participation**
 - Multiple 'vehicles' and execution avenues
 - Get involved with SATOC, GSA, etc
 - **Look for notifications in FEDBIZ Ops**



Energy Directorate

Key Personnel

AFCESA Office Symbol	AFCEC Office Symbol	Office Name	Director/ Division Chief	Contact info
CEN	CN	Energy Directorate	Ken Gray (acting)	DSN 523-6357 Ken.Gray@tyndall.af.mil
CENE	CNA	Performance Measurement and Analysis Division	Ken Walters	DSN 523-6222 Kenneth.Walters@tyndall.af.mil
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AFCEC Website				http://www.afcec.af.mil/

QUESTIONS?

