# **Air Force Civil Engineer Center**



# AF Energy Planning Strategy



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## **Purpose**



## Provide Update on AF Energy Planning Strategy

Seek Industry Input & Assistance on Air Force Energy Planning Issues & Concerns



#### **Overview**



- AFCEC Energy Orientation
- Energy Planning Methodology
- Energy Planning Assumptions
- Energy Planning Progress
- Current Issues
- Future Concerns
- Q & A





# **Organizational Fit**

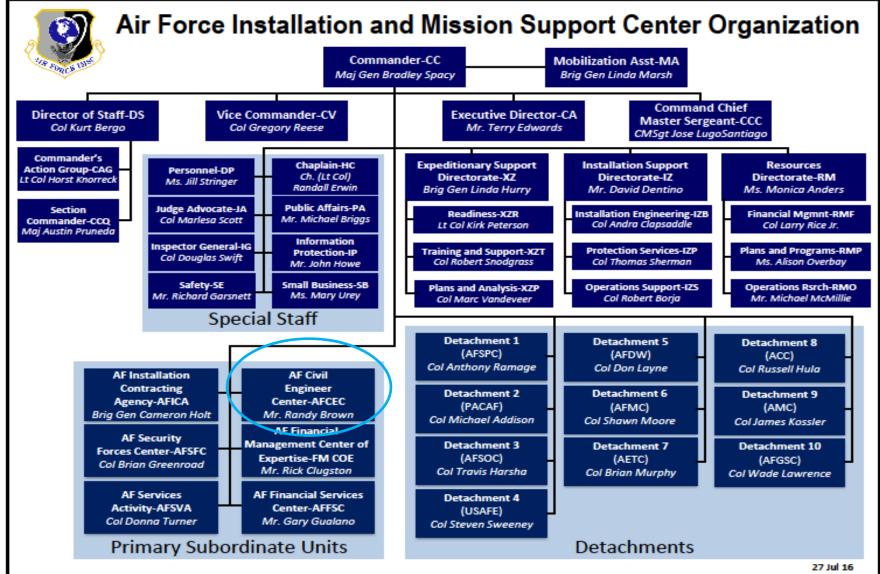






## **AFIMSC ORGANIZATION**

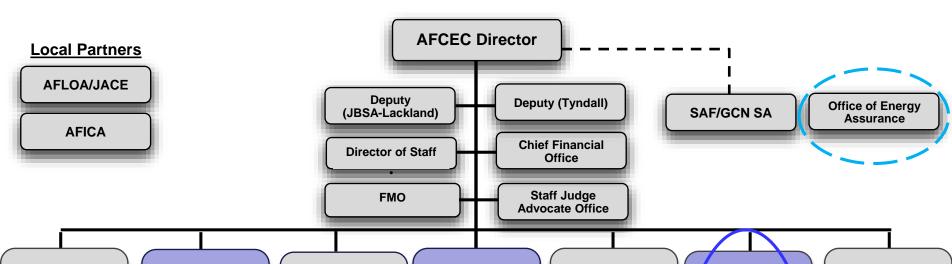






# **AFCEC Organization**





#### Planning and Integration Directorate

- Strategic enterprise wide planning
- Enterprise-wide
- output standards
   AFCAMP Investment
- AFCAMP Investment Plan – IPLS (Budget year) development / integration
- AFAMP Investment Plan (POM) development
- Enterprise procurement

#### Installations Directorate

- AF real estate (RE) management
- RE development (value-based & third party financed, REPI leases, GSA leases)
- Housing Portfolio mgmt.
- Utilities Privatization Program mgmt.
- Base Realignment and Closure (BRAC) Program

# Facility Engineering Directorate

- Centralized
   Design &
   Construction
   services for
   MILCON and O&M
   funded projects
- Standardized designs for similar facility and infrastructure
- Expertise in all facility construction

#### Environmental Directorate

- Planning, program and project validation, prioritization, strategy, technical support & execution for:
- Compliance
- Restoration
- Natural and Cultural Resources
- NEPA Center
- Leg and Reg Engage

#### Operations Directorate

- Facility ops analysis standardization support & assessments
- Preventative maint. oversight
- Asset Visibility
- Engineer SMEs
- Enlisted FDM
- Airfield pavement evaluations & CE Maint, Inspection & Repair Teams

#### **Energy Directorate**

- Facility energy and utility rate negotiation support
- Energy opportunity clearinghouse
- Renewable energy focal point
- Centralized ESPC/UESC program mgt
   Advanced meter eading systems

#### Readiness Directorate

- PRIME BEEF, RED HORSE, Expeditionary Engineering, Fire, EOD, and Emergency Mgmnt
- AF Contract Augmentation Program (AFCAP) support
- Reach-back center support
- •CE RDT&E



# **Energy Directorate**



#### Mission

Leading the way in delivering Air Force installation energy assurance

- Roles & Responsibilities
  - Legacy focus: conservation and compliance
  - New focus: delivering mission driven energy solutions
  - Developing new capabilities to:
    - Integrate disparate energy data collected across AFIMSC enterprise (data analysis)
    - Ensure data collection supports Air Force common operating picture (i.e., data availability)
    - Test and evaluate mission readiness through planned outages and recovery efforts
    - Derive actionable data and lessons learned to tailor energy investments for maximal mission impact



# **Proposed IEP Methodology**



- AF Phased Approach: Develop holistic installation energy plans for installations that incorporate conservation and resiliency
  - Phase 1 Data call to find current status of energy plans
  - Phase 2 Update current conservation plans where feasible
  - Phase 3 Build holistic energy assurance plans by year five
- Execution Plan
  - AFCEC will provide acquisition vehicle and tech support
    - Phase 1 complete
    - Phase 2 would require minimal resources as proposed; would require \$10-15M to meet Mar 2019 OSD deadline
    - Phase 3 requires more resources, but builds better plans
  - SAF/IEE will advocate for funding through corporate process



# **AF IEP Assumptions**



- AF IEPs include energy assurance, not just conservation & renewable energy efforts
- Energy Managers will lead; Planners will facilitate integration
- IEP Schedule will adjust based on available funding / manpower
- Will add or swap out some installations based on mission need, to incorporate previous efforts, and to leverage AMRS
- Upon further review of existing plans, some smaller bases may have an adequate plan
- AF Resiliency standards will not be complete until FY18



# **IEP Progress**



- ✓ Data call to find current state of IEPs
- ✓ Gap analysis to determine if plans meet DODI requirements
- ✓ Send to ASD (E,I&E) preliminary installation list and draft brief by 28 Feb 17
- √ 7 Apr 17: Brief ASD (E,I&E) prioritized installation list, schedule, challenges
- ✓ Draft IDP energy assurance component template
- Resilience UFC ECD Late summer 2018
- Advocate for Funds to conduct IEPs
- 39 Holistic Energy Assurance Plans Complete by end of Year 5



### **Current Issues**



- Business Case for Resiliency
  - Resiliency usually costs more
  - Mission assurance can be difficult to assign \$ value
- Cybersecurity
  - Reconciling industry standards with AF standards
  - Only AF-owned equipment on AF network
- Operation & Maintenance of new technology
  - AF prefers industry own & operate "new" tech
  - Exacerbated by cybersecurity issues above



#### **Future Concerns**



- Contractors at the appropriate security level
  - Energy & Mission Assurance challenging arena
  - Looking for cost effective solutions
- Ability to adopt emerging technology
  - Fielding technology without introducing more risk
  - Working closer with industry and academia



## Questions



## Have questions/comments on AF Energy?

#### AFCEC/CN POCS (Comm: (850) 283-xxxx, DSN 523)

- Director, Mr. Robert Gill, x6341
- Deputy Director, Maj Josh Aldred , x6867
- Program Development Chief, Mr. Les Martin, x6238
- Analysis Chief, Mr. Paul Carnley, x6222
- Rates/Renewables Chief, Mr. Dan Soto, x6357
- AMRS Chief, Mr. Dan Gerdes, x3150

