





OASD(EI&E) Facility Energy Directorate Federal Utility Partnership Working Group Seminar

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DoD Power Resilience Review

DoD Energy Resilience Overview and Next Steps

DoD Energy Resilience (1) Guidance & (2) Business Case Analysis Review



Overview Power Resilience Review

Acquisition, Technology and Logistics

- OASD(EI&E) conducted a DoD Power Resilience Review from Dec 2013 – Jun 2014¹
- DoD-wide power resilience review helped understand vulnerabilities and risks that impact mission assurance
 - Results included 500+ CONUS/Hawaii/Alaska installations, sites and facilities
 - Examined adherence to key resilience policies and policy gaps
 - Identified more integrated/holistic critical energy requirements
- □ Focus was on remediating issues associated with existing critical energy requirements and policies



Energy Resilience Findings and Next Steps

Acquisition, Technology and Logistics

DoD **energy resilience** is, the ability to prepare for and recover from energy disruptions that impact mission assurance on military installations.

What we found?

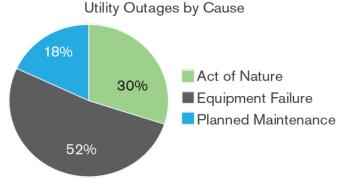
- Many energy resilience policies did already exist
- Disruptions primarily from natural and reliability issues
- 'Critical' energy requirements were identified by DoD Components that align to mission assurance
- Most solutions for critical energy requirements are fixed backup generators tied to a critical facility
 - Opportunities beyond generators could be more *cost-effective* while also improving *mission readiness*

□ What are we doing now?

- Developing universal energy resilience guidance
 - Ensure performance against existing requirements
 - Encourage the most *cost-effective* solutions that improve *mission readiness*
- Developing business case analyses (BCA) approaches to support budgetary resources or alternative financing opportunities
 - Study to review BCA approaches (MIT-LL Study)

²Further details of utility outages are found in DoD's Annual Energy Management Report, located at the following: <u>http://www.acq.osd.mil/ie/energy/energymgmt_report/main.shtml</u>.

FY 2014 Utility Outages²



Results – Dec 2013 thru June 2014

Existing Requirements Reviewed	DoD % Compliant
Trained Operator	90%
Received Preventive Maintenance	94%
Fueling Contracts in Place w/ DLA*	74%
Fueling Plans in Place	84%
Testing/Exercising	60%

*Installations also have contracts in place with other providers.



Energy Resilience Guidance & BCA Overview

Acquisition, Technology and Logistics

Developing universal energy resilience guidance

- Define, identify, and update 'critical' energy requirements
- Emergency energy preparedness communication and coordination
- Continue to perform against already existing requirements
- Encourage the most cost-effective solutions that improve mission assurance

Developing business case analyses (BCA) approaches to support budgetary resources or alternative financing

- Evaluate current DoD life cycle cost analysis approaches and levelized cost of electricity practices and methodologies
- Items of interest include:
 - ✓ Operations, maintenance, and repair related costs
 - ✓ Disruption/outage costs
 - ✓ Financial incentives
 - ✓ Availability, reliability, and quality metrics