

FEDERAL UTILITY PARTNERSHIP WORKING GROUP SEMINAR

November 15-16, 2017
Ontario, California

Department of Navy Update

CDR Schwalbe, Navy Resilient Energy Program Office

Hosted by:





Enhanced Mission Capability



“Our access to and use of energy must continue to be secure, reliable, and resilient... we must realize the shore is an integral part of this equation since it serves as the backbone from which our forces fly, sail, submerge, and communicate.”

- ADM John Richardson, Chief of Naval Operations



Energy Security Framework



Energy Security

Reliability

Staying
online

Resiliency

Recovering
from a
disturbance

Efficiency

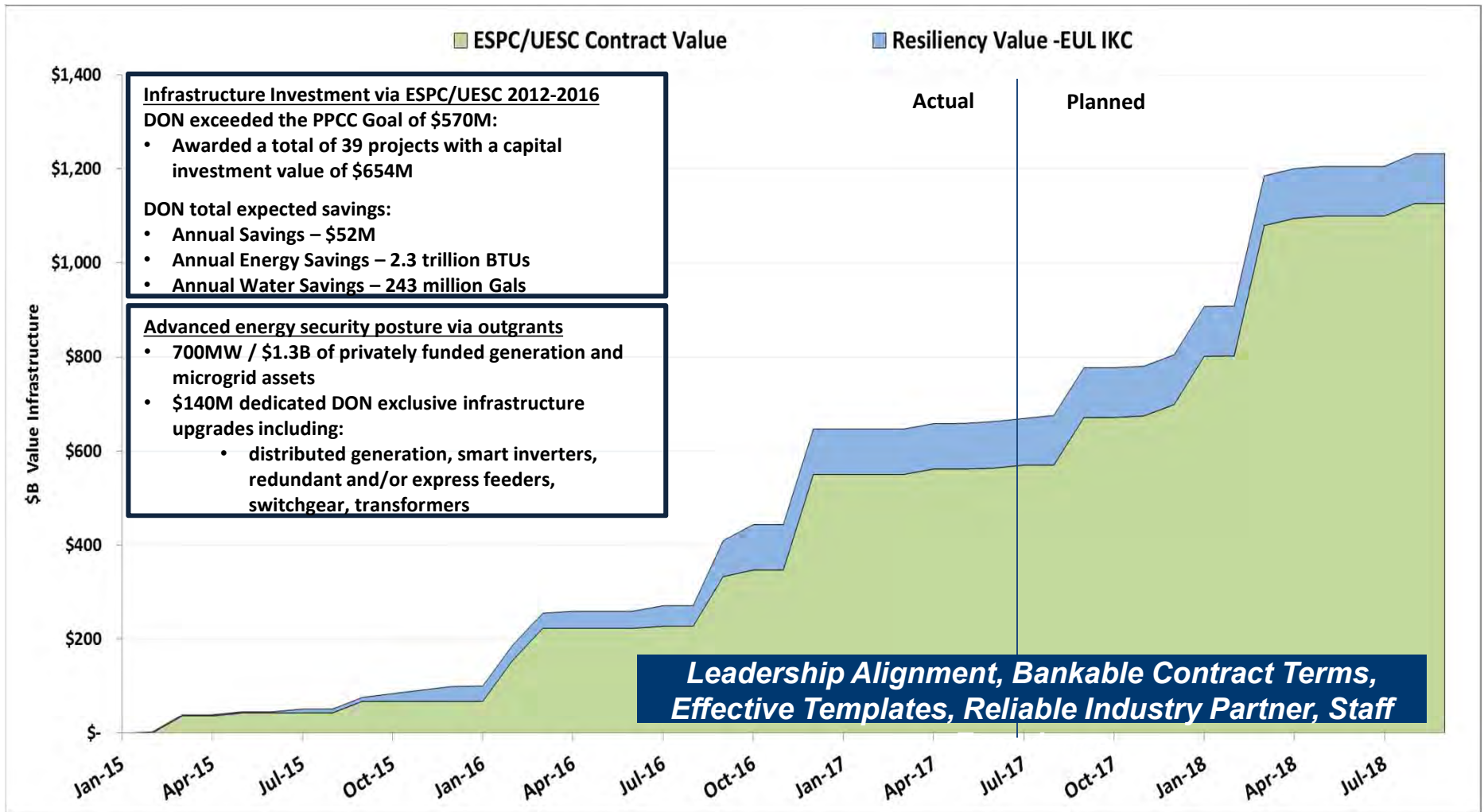
Using the
minimal
amount of
energy
needed

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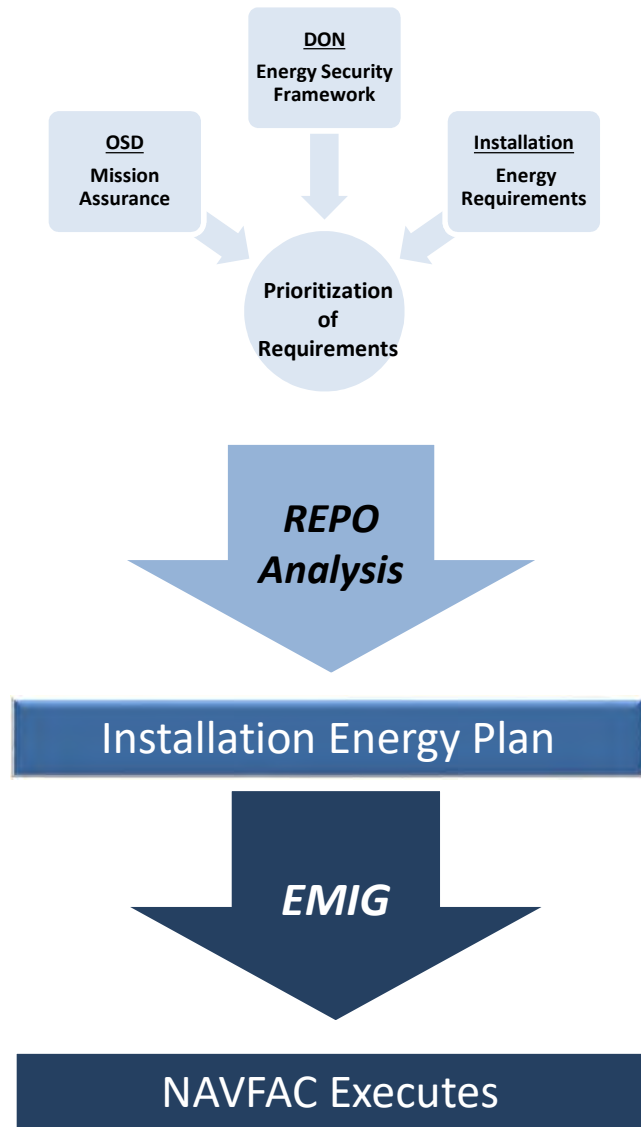


Project Execution





Project Development



Identify Problems: Gap Analysis

- Utilize multiple inputs to compare energy requirements versus current state to identify energy needs
- Create prioritized list of requirements based on energy needs identified in Gap Analysis

Identify Solutions: REPO Analysis

- Assess information from prioritized requirements list in conjunction with market information
- Identify opportunities and solutions to respond to requirements

Select Solutions: Installation Energy Plans

- Use REPO solutions to break large scope into single projects, using all energy tools available (REPO Models 1-3, ESPC/UESC, etc.)
- Submit requested projects to EMIG

Select prioritized and funded projects: EMIG process

- Installations submit annual project execution request to NAVFAC
- EMIG identifies projects which are planned, prioritized, and funded, to create future project execution pipeline

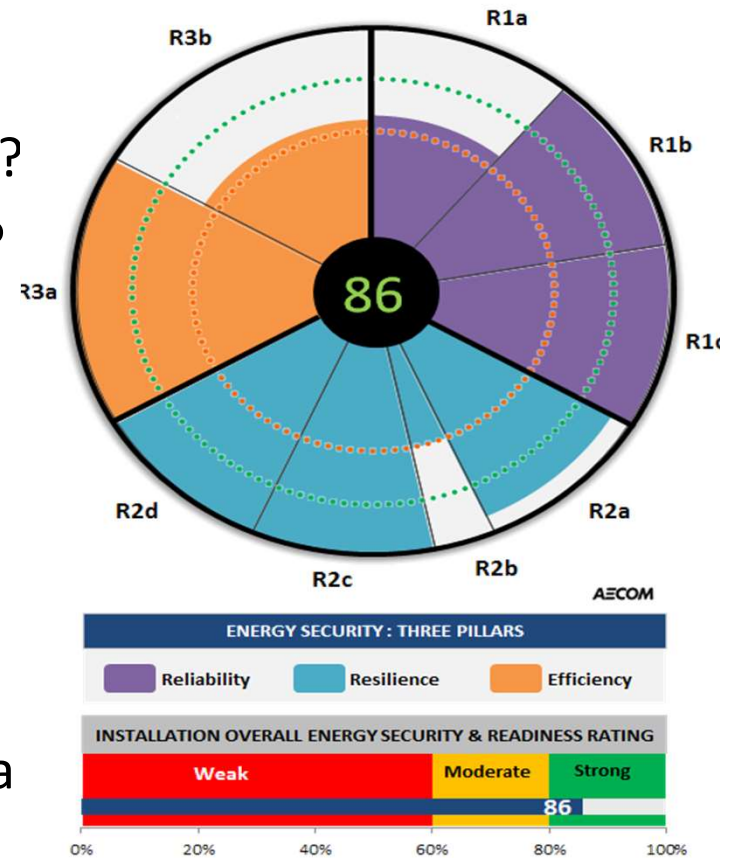
NAVFAC Executes



Energy Security Assessment Tool



- Data-driven mechanism to assess and analyze installation energy system performance against energy benchmarks and mission requirements
 - Is the installation energy efficient?
 - Is the installation’s electric service reliable?
 - Are backup generation requirements met?
- Outcomes
 - Energy Security Framework gap analysis
 - Scalable Scorecard
 - Identification of installation level Key Performance Indicators
 - Holistic enterprise-wide performance data

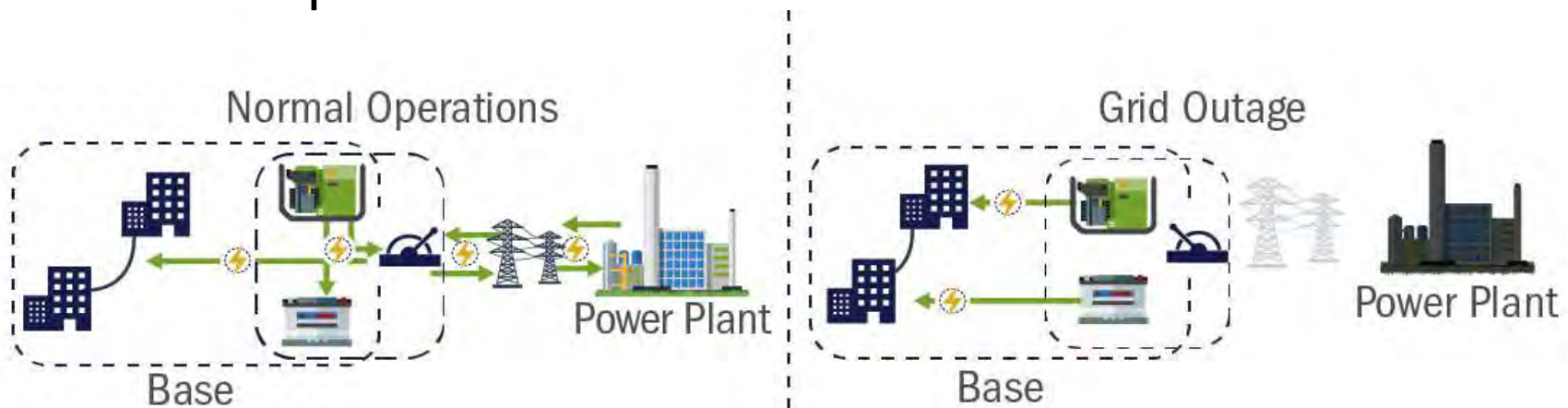




Marine Corps Air Station Yuma



- Installation Mission: Provide aviation ranges, support facilities and services that enable forces to enhance their mission capabilities and combat readiness



- Project Summary:
 - Diesel Generator Peaker Plant and Microgrid
 - 25 MW
 - Arizona Public Service

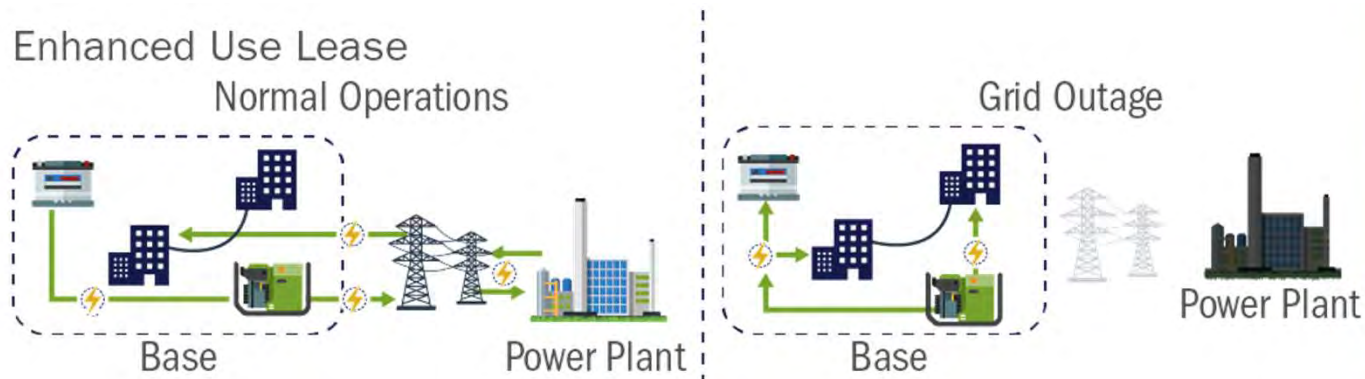




PMRF, Barking Sands, Kauai



- Installation Mission: The world's largest instrumented, multi-dimensional testing and training missile range.



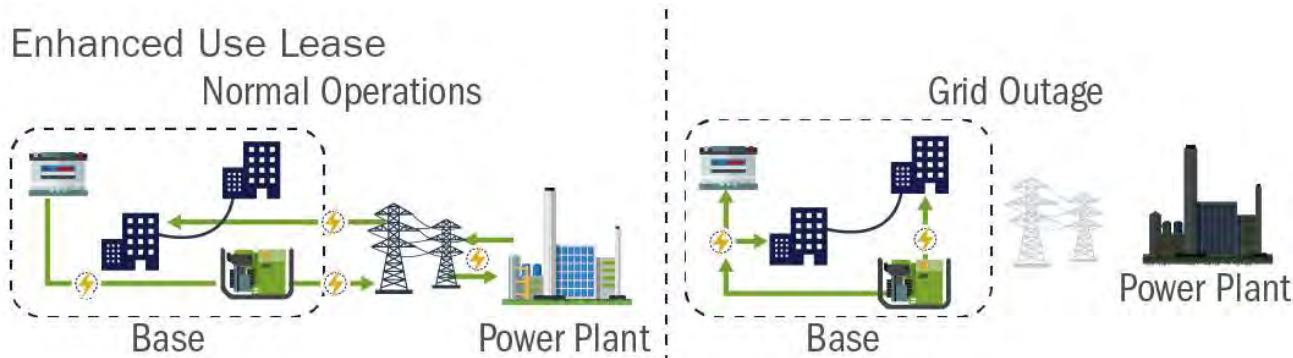
- Project Summary:
 - Solar Generation with Integrated Storage
 - 19 MW generation and 60 MWh energy storage
 - Kauai Island Utility Cooperative



SUBASE New London



- Installation Mission: As the DON's primary East Coast submarine base, provide infrastructure for Navy operating forces and is homeport to 5 attack submarines



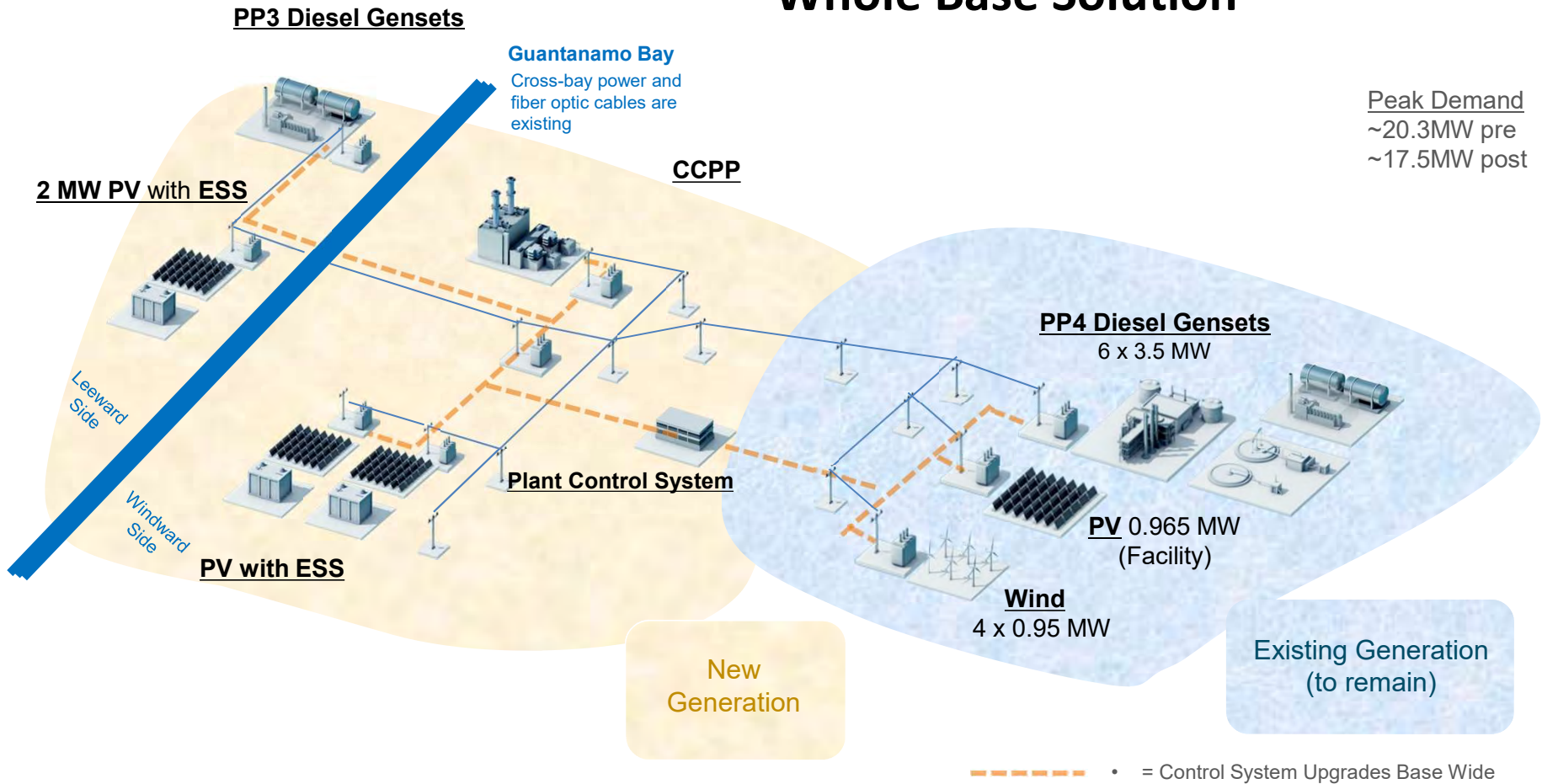
- Project Summary:
 - Fuel Cell and Microgrid
 - 7.4 MW
 - Partners Connecticut Municipal Electric Energy Cooperative (CMEEC), Groton Utilities and the state of Connecticut



NAVSTA Guantanamo Bay - ESPC



Whole Base Solution





Questions?

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