Marine Corps’ Drive To Resiliency

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Discussion Points

- Marine Corps Overview
- Centralized Energy Program
- Way Forward
Marine Corps has a centralized energy program which allows us to:

- Realign Our Vision
- Maximize Our Resources
Realigning Our Vision

- We are realigning our focus from addressing mandates to sustaining mission through energy resilience.

- This new focus leverages third party finance to improve our energy resilience through:
  - Diversifying supply through self-generation
  - Hardening our utility and controls systems against cyber attacks
  - Smart grid capabilities that integrate distributed and renewable energy supply into the electrical distribution system
Maximizing Our Resources

Third Party Finance

- ESPCs and UESCs offer preferred contract vehicles to pursue resiliency projects
- Allows USMC to implement broader, more complex resiliency upgrades
- Utilize “bundling” approach
Marine Corps approach to third party funding is that we look at the **total project “bundle”**, not just a single Energy Conservation Measures (ECM)

By utilizing savings from all ECMs, we can **address both the routine (Standard ECM’s) and the (Challenging ECMs):**

- **Standard ECMs:** HVAC, boilers, controls, water, lighting, etc.
- **Challenging ECMs:** “Resilience” upgrades to include: cybersecurity for Controls Systems; renewable energy; storage; micro-grids; Smart Grid; and utility upgrades, etc.
## Way-Forward

### ESPC

**MCRD Parris Island:**
- Energy Independent/Resilient
  - 3.5MW’s CHP
  - 3.5MW’s Backup Generators
  - 2 Large Backup boilers
  - 5.6 MW’s PV arrays
  - 8MWH Energy Storage
  - Base wide Micro-grid with fast load shedding

**MCLB Albany:**
- Net Zero/Energy Independent by 2018
  - 4 MW’s Landfill Power
  - 8.5 MW’s Bio-Mass
  - Base wide Micro-grid

### UESC

**MCB Camp Lejeune:**
- On-site generation
- Enhancing SCADA
- HVAC upgrades
- Transformer replacement
- Water/wastewater system upgrades
- Micro-grids, battery storage

**MCAS Cherry Point:**
- Exploring potential micro-grid, battery storage, renewables and CHP opportunities
- Kick-Off meeting was held week last week

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Thank You