DoD Update and Air Force Utility Partnerships Overview

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Overview

- Energy Chain of Command
- Air Force RE Projects
- Strategic Partnerships
- Air Force 1GW Goal Strategy
- Issues and Solutions
- Conclusion
AF Energy “Working Channels”
Many Differing Demands

- CEQ, DoE, OSD, SAF, A4C
  - Goal and $$ owners
- MAJCOMs/Bases
  - Land & Mission owners
- AFCEC/AFIMSC
  - The bridge between
AF Renewable Energy Projects

Vandenberg AFB
20 MW Solar

Edwards AFB
3 MW Solar

Edwards AFB
175 MW Solar

F.E. Warren AFB
3.3 MW Wind

Buckley AFB
1 MW Solar

AF Academy
6.5 MW Solar

Hill AFB
2.3 MW LFG

Nellis AFB
14.2 MW Solar

Holloman AFB
5 MW Biomass

Luke AFB
10 MW Solar

Dyess AFB
5.4 MW WTE

Laughlin AFB
5 MW Solar

Eglin AFB
30 MW Solar

Hanscom AFB
10 MW Solar

Otis ANG
6 MW Solar

J B Cape Cod
7.9 MW Wind

J B MDL
40 MW Solar
20 MW Biomass

Toledo ANG
1.5 MW Solar

Robins AFB
10 MW Solar

Moody AFB
4-10 MW Solar

JB ER
7 MW LFG

Planned

Completed

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Strategic Partnerships with Utility Companies

- The Air Force would like to work with utilities to replicate projects and contracts at multiple locations
  - Mutually beneficial opportunities at one site - let’s do it again
  - Both parties must be successful (we both have a boss)

- NOT always about low price (at/below market rates)
  - What can we do to decrease AF mission risk through utilities using asymmetric approaches (we don’t do everything the same)

- Open dialog/partnership key to get to a solution

Money is a big factor, but not THE factor
Strategic Partnerships with Federal Power Marketing Administrations

- The Air Force would like to work with any/all Federal Power Marketing Administrations
  - Federal PMAs have contracting authority that facilitates RE development
  - Western Area Power Authority (WAPA) is already partnering with DoD on select RE projects
  - Why not replicate as possible throughout WAPA, SWPA, SEPA, BPA ..... and TVA too?

- Our challenges
  - AF is limited by FAR rules (competition / pricing)
  - Ownership of the contract (lots of working channels)
Issues and Solutions

- Issue: AF is often averse to on base development
  - NEPA, encroachment, appearance, etc.
  - Program drives very long timelines
- Solution – immediately adjacent / near-by development
  - AF can make a 30 year 2922a deal, but how to deliver w/ 5 year supplier contracts?
- Issue: How does the AF gain true Energy Resilience with geographically separated RE generation?
- Solution – contingency agreements (AF can use the power when the grid can’t accept), localized micro grids, site specific development (nearby/adjacent to bases)
Issues and Solutions

- Air Force has ~102 MW of RE in production
- Tasked to get 1 GW of RE contracted by 2025
  - Energy Security is an important consideration
  - Capacity vs. Consumption
- Recognition of the evolving market
  - Grid stability, reliability, and risk management benefits all parties (government, utility, other consumers)
  - Tax credits (federal, state, local), local RE incentives/requirements, etc
- Life-cycle cost at or below projected market rate of brown power is a starting point constraint – what can we do?
Conclusion

- We need to work together to identify what is possible

- To solve these problems we need the right decision makers represented at the table: Contracting, Legal, Project Developers, Utilities, and Regulatory people
QUESTIONS?