

# FEDERAL UTILITY PARTNERSHIP WORKING GROUP SEMINAR

November 15-16, 2017  
Ontario, California

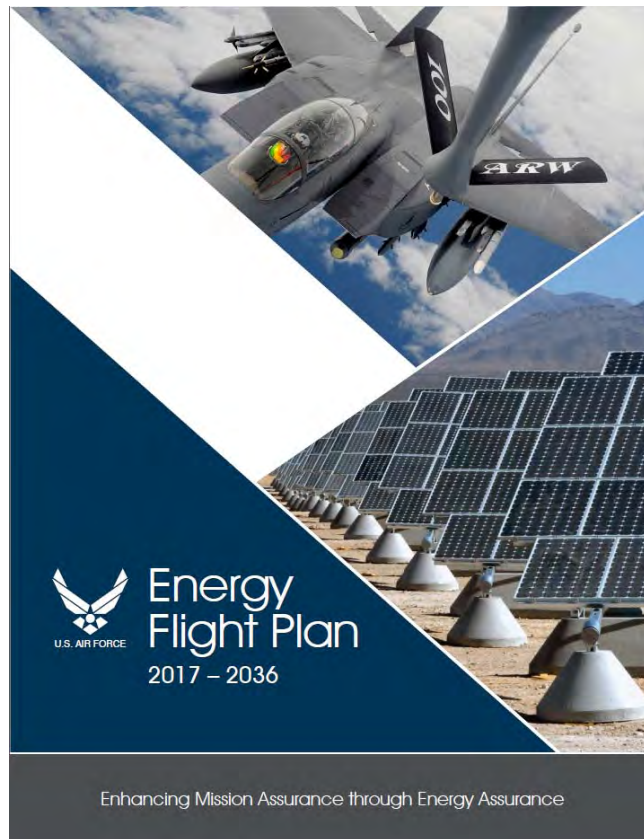
## Air Force Perspective on Resilience

Hosted by:



# Air Force Energy Flight Plan

*Enhancing Mission Assurance Through Energy Assurance*



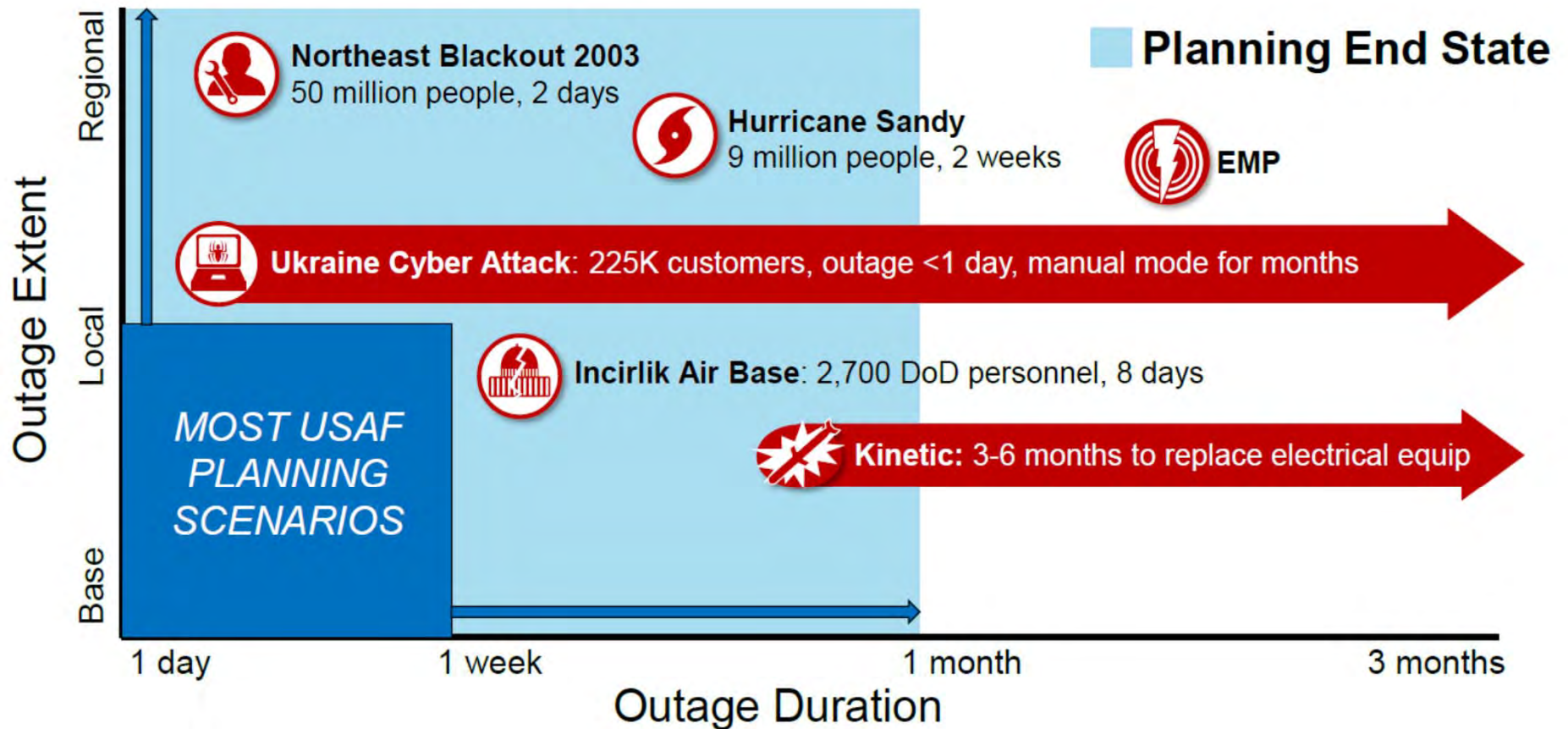
# AF Mission Threads



Federal Utility Partnership Working Group  
November 15-16, 2017 Ontario, CA



# AF Planning End State



# Battery Storage Procurement

- ESPCs/UESCs
- PPA
- EUL
- Supporting pathways
  - Utility transmission asset
  - California IOU storage procurements



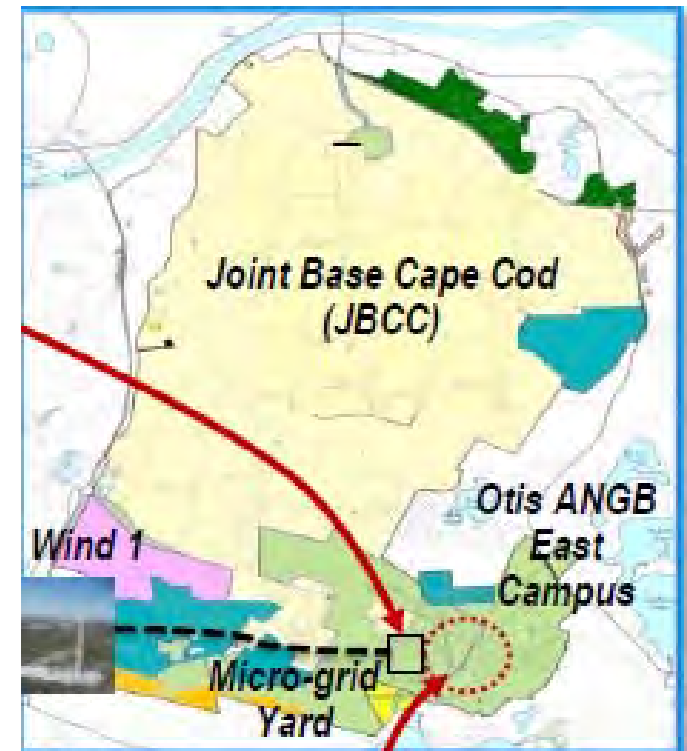
# Solar + Battery PPA

	Scenario 1	Scenario 2	Scenario 3
PV Size	10 MW	10 MW	10 MW
Battery Size	N/A	0.5 MW, 5.0 MWh	5.0 MW, 16.0 MWh + 2.0 MW generator
Resiliency	None directly	Island feeder load (0.5 MW) 24 hrs/day	Island substation load (5 MW) 24 hrs/day
PPA Rate	<< Utility rate	~ Utility rate	>> Utility rate

# ISO Ancillary Service Market Participation

## Otis Air National Guard Base

- Wind+Diesel+Battery Microgrid
- ISO NE Freq. Reg. Market
- Cyber-Secure Connection to ISO
  - Authority to Operate



## Contact OEA

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