

U.S. DEPARTMENT OF ENERGY

Office of Cybersecurity, Energy Security, and Emergency Response

# **Climate Effects Mitigation**

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#### **Organization**

Office of the Under Secretary for Infrastructure (S3)



Office of Cybersecurity, Energy Security, and Emergency Response (CESER)



Risk Management Tools and Technologies (RMTT)



All Hazards (basically anything non-cyber) - a new program for FY23.

#### Climate Effects Mitigation

- Adapting to climate change effects not solving climate change
  - Extreme weather effects on grid components
    - Heat/cold
    - High winds
    - Flooding coastal and riverine
    - Lightning
    - Modular, prefabricated, rapidly deployable, grid infrastructure
- Wildfires
  - Decision making toolsets
  - Impact on grid components (soot on solar)
  - Ignition sources
- Getting useful climate data out to utilities
- Seismic
  - Expanding previous modeling to grid components
  - Mitigation of effects on grid components

### New Program - Collaborative Partners!

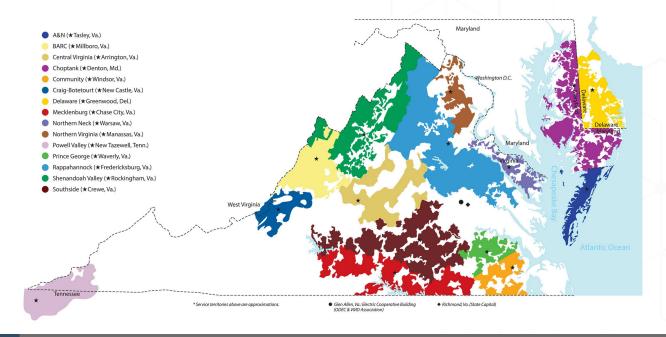
- Office of Electricity (OE) Transformer Bushing Decoupler
- Office of Biological and Environmental Research (BER) Usable climate data



- Office of Science (SC) High-capacity data transfer via ESnet
  - Getting usable climate data out to utilities
  - Interfacing with EPRI's Climate READi
- Grid Deployment Office (GDO) Shifts from mitigation demonstration to mitigation deployment

#### **Internships**

- Minority Educational Institution Student Partnership Program (MEISPP)
  - Students from Howard University and Morgan State University that will identify research gaps in the areas of climate effects mitigation
  - Summer FY23 to interface with the Cooperatives of the Virginia, Maryland, & Delaware Association of Electric Cooperatives (VMDECA)



## **Questions?**



## Thank You Placeholder



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