



This Briefing is Classified
UNCLASSIFIED

The background of the slide is a photograph of several high-voltage power line towers stretching across a landscape under a hazy, orange-tinted sky, likely at sunrise or sunset. The towers are silhouetted against the light, and power lines are visible between them.

Electric Energy Security in the Domestic Theater

**GovEnergy 2010
Bear McConnell
16 Aug 2010**



NORAD Overview

- **NORAD Mission:**

In close collaboration with homeland defense, security, and law enforcement partners, prevent air attacks against North America, safeguard the sovereign airspaces of the U.S. and Canada by responding to unknown, unwanted, and unauthorized air activity approaching and operating within these airspaces, and provide aerospace and maritime warning for North America



- **Aerospace Warning**
- **Aerospace Control**
- **Maritime Warning**



- **Bi-National**
- **Worldwide**





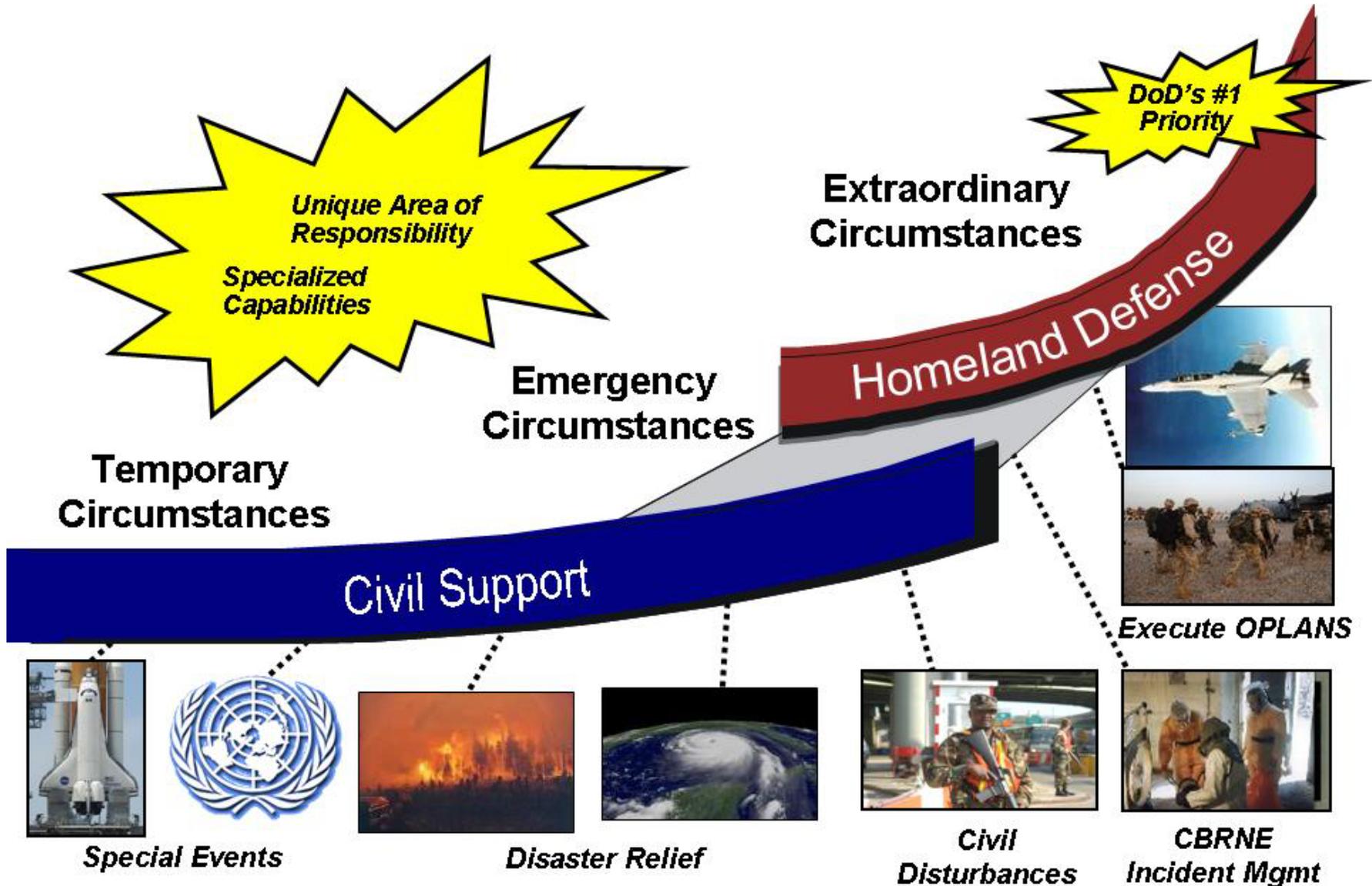
USNORTHCOM Overview

- **USNORTHCOM anticipates and conducts Homeland Defense and Civil Support operations within the assigned area of focus (AOF) to defend, protect, and secure the United States and its interests.**
- **AOF is the United States, Canada, Mexico, Bahamas, Puerto Rico, and the U.S. Virgin Islands and the surrounding water out to approximately 500 nautical miles.**





Protecting the Homeland





The Situation



Defense Science
Board

Feb 08 - “Critical national security and homeland defense missions are at an unacceptably high risk of extended outage from failure of the electric grid.”



May 09 - “Aurora threat revealed the possibility that sophisticated hackers could seriously damage the grid by destroying mechanisms downstream from the initial point of attack.”

Feb 10 - “DoD will conduct a coordinated energy assessment, prioritize critical assets, and promote investments in energy efficiency to ensure that critical installations are adequately prepared for prolonged outages caused by natural disasters, accidents, or attacks.”

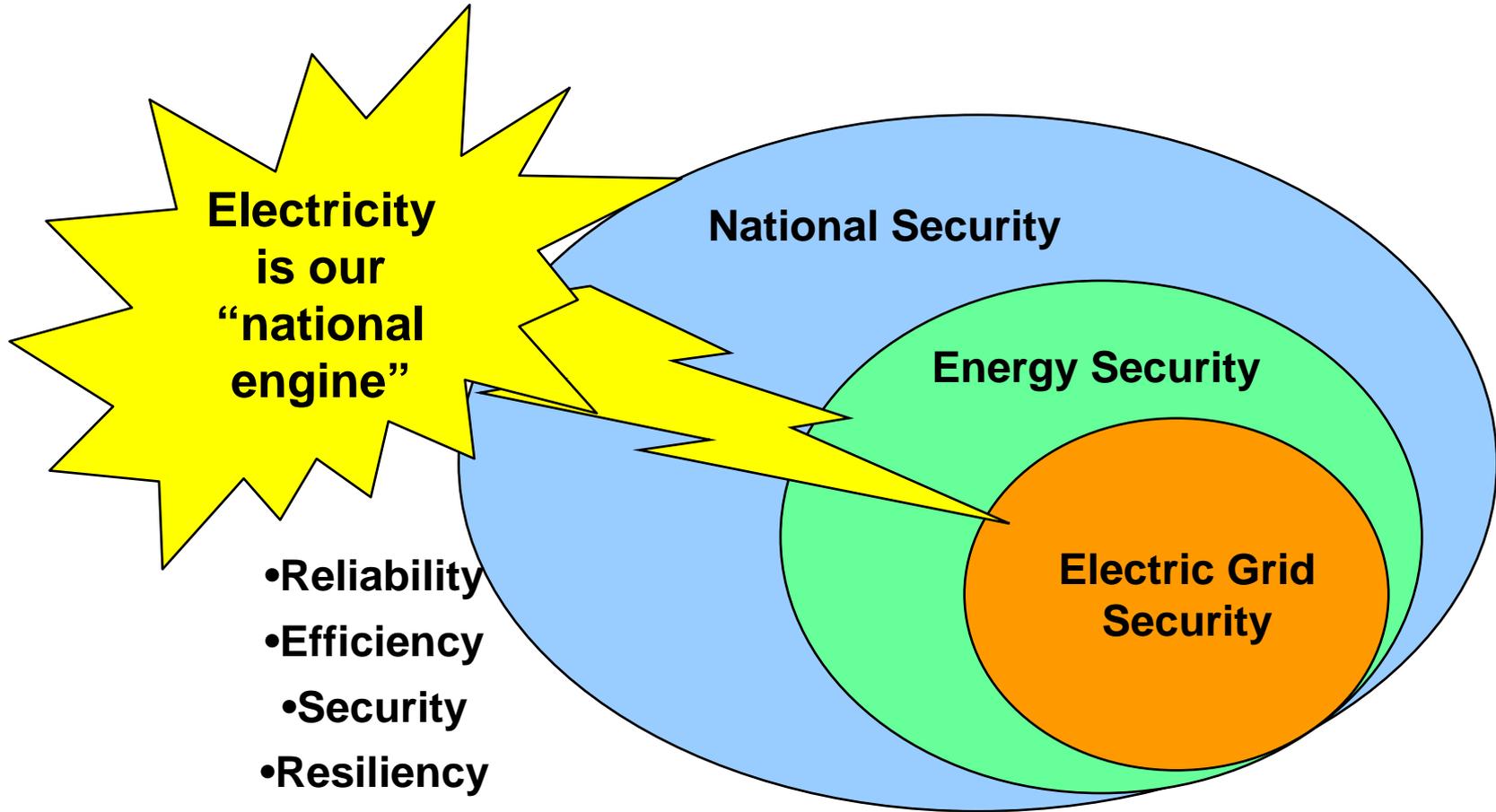


References:

- The Defense Science Board Task Force on DoD Energy Security, “More Fight – Less Fuel,” February 2008.
- Powering America’s Defense, Energy and the Risks to National Security, by the Center for Naval Analyses Military Advisory Board, May 2009
- Quadrennial Defense Review Report, February 2010



The National Engine





Objective – Electric Energy Security

- 1. Assured supply and availability of electrical energy.**
- 2. Protect against unauthorized access affecting information, control, availability, and reliability of electric power.**


Our Focus

**USNORTHCOM's unique focus is
DoD mission assurance in the homeland**



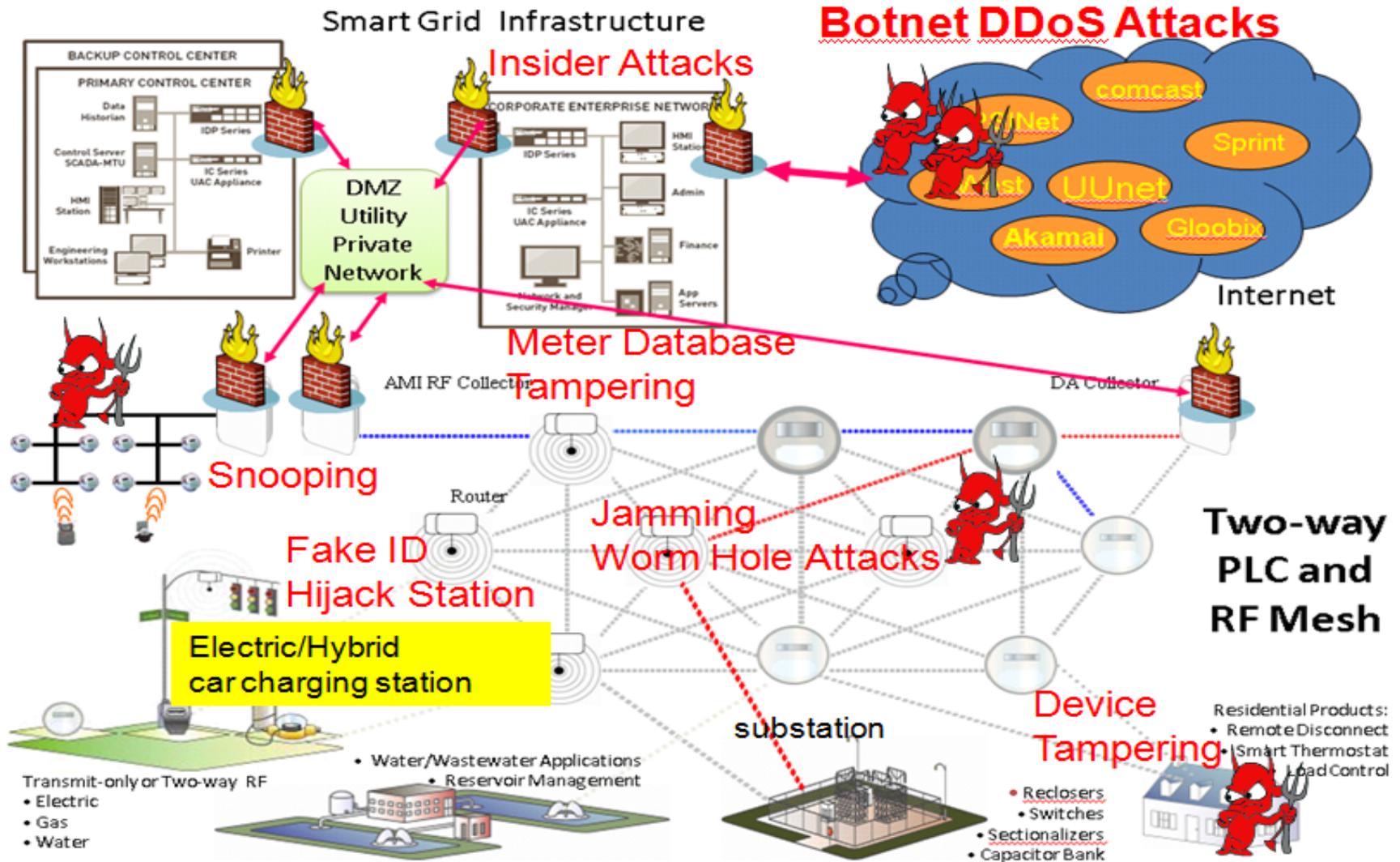
COCOM Leadership

- **Electricity is life to USNORTHCOM's Homeland Defense capabilities. We cannot blink**
- **Smart Grid security is an emerging area of concern for mission assurance. Seventy-six percent of all DOD infrastructure is within the USNORTHCOM Area of Focus (AOF). These bases are critical to the full array of potential missions, including Homeland Defense, Defense Support of Civil Authorities, and support of combat operations overseas.**

[Source: 2008 DOD Base Status Report]

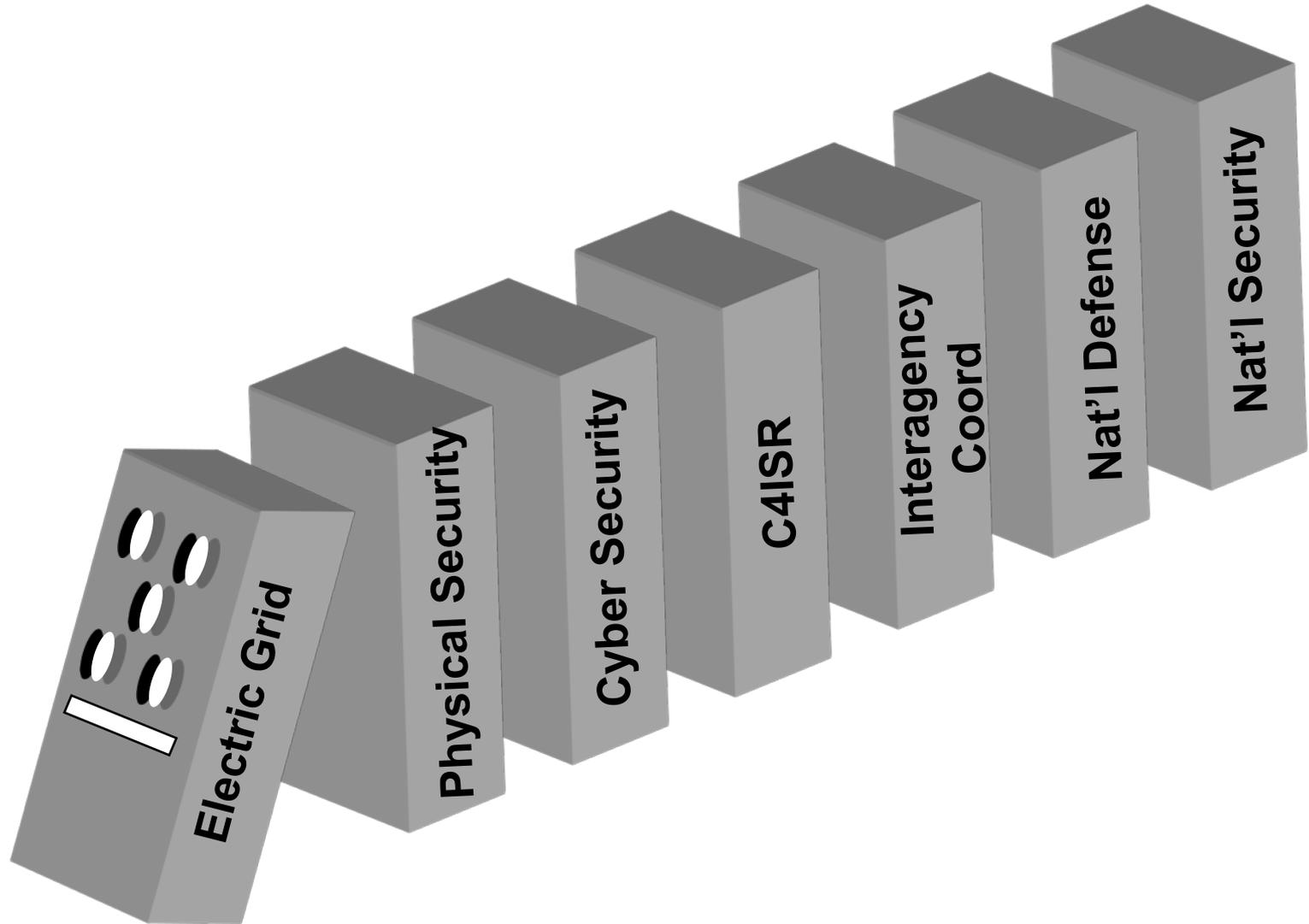


Smart Grid Cyber Vulnerabilities





Dependence on a Fragile Grid





Goal: DoD Intrinsic Security Requirements

- **At the factory**



- **In the field**





Our Bumper Sticker

Federal



State PUCs



Industry



When You Need a Friend, It Is Too Late to Make One!

