

Thanks to FERC Chairman Neil Chatterjee for the invitation to speak here today, and to you all for making time to discuss this important issue.

I want to kick-off my remarks by highlighting the challenges and opportunities we face in today's threat space, and provide a DoD perspective on the need for energy sector security investments for some parts of the grid that go beyond existing mandatory reliability standards.

Going back to the Cold War, we were faced with the threat of Soviet nuclear strikes against the homeland. While a daunting prospect, it was something we could wrap our minds around. We assumed that if an attack came, we could see it and respond in kind and that the capability to do so was a significant deterrent. In the post-Cold War world, the threat to the homeland shifted, and in the wake of 9/11, terrorism became the predominant threat at home. Today, the greatest threats to the homeland continue to change, and once more we must recalibrate our attention on great power competition—but in new and even more complex manifestations.

Last year, DoD released the most formal articulation of our strategic approach to national security, the 2018 National Defense Strategy. As energy

professionals, you may have missed the release of this strategy, but it contains an important message that is very germane to the energy industry. The unclassified summary of the strategy makes a striking, if overdue, public admission: the U.S. Homeland is no longer a sanctuary.

While conflict and competition are as old as humanity itself, it is the character of conflict and competition that are remarkably different today. Great power competitors understand full well that they can never win a conventional, force-on-force conflict with the United States. For that reason they have been intensely focused on developing capabilities and strategies for hybrid warfare, to operate in a “gray zone” between military and criminal action, to coerce below the threshold of traditional notions of war. While we focused for the last two decades on the threat of terrorism, great power competitors slowly but surely began to pursue capabilities to hold at risk or degrade U.S. critical infrastructure as a way to shape, deter, or coerce U.S. Government decision making and action. In this murky, deliberately obscure form of “warfare,” conflict and competition won’t be something that happens in a far off land. It will target us right here at home, indeed target the critical infrastructure DoD depends upon to wield the most powerful military force in the world, including and especially energy infrastructure. In short, we are facing an entirely new

strategic context: it's no longer a "home game" and an "away game." Now, it's all one game, with the homeland very much a likely theater of likely operations. Our domestic critical infrastructure—the energy infrastructure that you own and operate—is in many ways on the front line.

Let me repeat. Energy infrastructure is and increasingly will be targeted by sophisticated competitors as a part their efforts to disrupt U.S. critical infrastructure during a conflict. In this forum, I can't go into details, or confirm or deny what you may have read about in the media—but I can state, clearly and surely, that these threats are no longer high consequence and low probability. It's a highly probable, highly consequential reality. Sophisticated competitors and adversaries are preparing to try to prevent the Department of Defense from doing our job, through you.

- **Department of Defense Mission Assurance Construct**

The Department of Defense is responsible for defending the nation and our key interests abroad, and by necessity we plan for contingencies that we hope never arise. In order to ensure our capability to execute our essential missions in any circumstance, the Department has developed, and I help oversee the execution of, a Mission Assurance construct, a robust effort to manage risks to our most

critical capabilities. Mission Assurance is the process to protect or ensure the continued function and resilience of capabilities and assets—including but not limited to infrastructure—critical to the execution of DoD mission-essential functions, in any operating environment or condition.

We are well aware that trying to defend everything is implausible and financially impractical, so we have developed a prioritized approach to ensuring that our military capacities remain sufficient to prevail against any adversary.

The Department's approach to Mission Assurance includes four pillars. The first is identifying and prioritizing assets of such extraordinary importance that their degradation would have a very serious, debilitating effect on our ability to execute Defense Critical Missions. The second pillar is assessing the prioritized assets, networks, systems, and platforms affecting these Defense Critical Missions to illuminate single points of failure and other serious vulnerabilities, accounting for all hazards and all threats. The third pillar is managing risk to the prioritized vulnerabilities. And the fourth and final pillar is monitoring the execution of the risk management decisions. By engaging relevant stakeholders in a process to identify what's critical, what's vulnerable, and what we can do about it, we are able to focus the Department on the most critical assets, networks, and capabilities that play a unique and essential role in our ability to

protect our nation and its interests—even, and especially, in a contested homeland environment.

- **Energy Resilience for Mission Assurance**

Not surprisingly, energy resilience—both inside and outside our installations’ fence lines—is essential for mission execution, especially since almost all DoD installations rely on the commercial grid as their primary source of power and in our digitizing world, there is increasing reliance on electricity for almost every part of a military mission. The Department recognizes that our missions depend on resilient power not just for our bases, but also for the various civilian owned infrastructure that enable the execution of our essential missions, with special attention to natural gas/electricity and electricity/communications interdependencies.

Given the unique role that Defense Critical Infrastructure plays, certain installations require a higher bar of energy resilience than others. Even small disruptions to some installations’ energy supply—let alone a widespread or long duration outage—if timed to occur exactly when that installation needs the energy, could have significant effects on our ability to project power or protect our nation. And as you are well aware, when the power goes out, cascading

impacts on other critical infrastructure sectors result in second order and third order effects that further degrade the ability of the Department to execute its key missions. Managing the risk of energy disruptions is therefore a critical component of Mission Assurance. The Department of Defense is not a monolithic institution with standardized needs, especially when it comes to energy reliability, energy resilience, and power quality, so it's not surprising that we can't apply a one-size-fits-all approach to grid security and resilience for all DoD installations. A stronger and more resilient grid is a national security priority. A grid that is stronger and more resilient around certain loads, nodes, and communities is the most effective way to manage risk and cost for the Department and in turn the nation as a whole.

- **Paradigm shift—Private Sector Support for Defense Resilience**

What I'm presenting is a paradigm shift. Most conversations about public-private responses to disasters or hazards focus on how the government can help the private sector rebound and restore operations as quickly as possible. This is an important piece of the puzzle, but only one piece. An increasingly important piece of that same puzzle requires a paradigm shift. If our energy sector is attacked, a robust public-private coordinated response cannot just be about Defense Support of Civil Authorities, but it must *also* be about Private Sector

Support for Defense Resilience and National Security. We need to evolve our understanding of when the energy industry is supported and when it is supporting. In other words, ensuring the ability of the Department to do *its* mission will be just as critical for *your* ability to ensure the nation itself recovers and withstands any attack on our nation's grid. What I am proposing here is that you all no longer perceive us as "customer" but rather as "strategic partner."

Related to this concept, the Department of Defense is taking action to understand more fully, account for more thoroughly, and partner more effectively to manage risk related to the electric power dependencies of our most critical capabilities. Since enactment of the Fixing America's Surface Transportation (FAST) Act in 2015, DoD has been working with DOE to identify Defense Critical Electric Infrastructure (DCEI), the parts of the grid that support key national security installations, including key DoD installations.

Going forward, we need to do more than admire the problem or merely assess the vulnerability. We need to work in concert so that these unique corridors within the electric power grid are strengthened, made more resilient, and serve as the foundation for critical conversations about power restoration priorities.

- **Shared Responsibility**

In closing, I will stress that protecting our national security is not something the Department can do alone. This is a team sport. The evolving threats facing the Department, and the nation, require us to partner in new and important ways.

We need an extraordinary level of partnership to compete and succeed in this daunting new reality. Whether you realize it or not—and whether you want it or not—you are critical to national security. You are part of the fight. And by developing a more resilient system, leading potential adversaries to question whether they would achieve their goals, we retain the upper hand, and will deter such a foe from picking a fight it will not win, which is ultimately the outcome we all seek—but can only achieve together.