

UNLEASHING VIRGINIA

STRENGTHENING THE COMMONWEALTH'S TRANSMISSION SYSTEM FOR NATIONAL DEFENSE

REPORT BACKGROUNDER

CONVERGE STRATEGIES, LLC & ENERGY STRATEGIES

"Unleashing Virginia" is the first power flow analysis to model the national security stakes of Virginia's constrained grid capacity.

THE RESULTS

Virginia's grid — absorbing the world's largest data center buildout, powering the state's economy, and safeguarding national security — **can handle only a 5 to 10% increase in defense load.**

WHAT'S CLEAR

Virginia's defense load — the power that keeps its military bases, defense communities, and defense industry running — is approaching the **limit of what the grid can reliably deliver.**

THE IMPACT

These results almost certainly understate the risk and demonstrate that Virginia's grid can absorb only a fraction of its forecasted demand before it's pushed beyond what it can reliably deliver. The scenarios show instability under transmission outage conditions, forced power imports from neighboring states, and reliability violations.

SCENARIO STATE OF PLAY

An extended transmission outage affecting key defense areas such as Northern Virginia or Hampton Roads could simultaneously disrupt military command and control, degrade force deployment capabilities, and idle critical defense manufacturing, with impacts extending far beyond the Commonwealth's borders.

VIRGINIA BY THE NUMBERS

\$76.2B

Defense spending contribution to VA's economy in FY24, 10% of state GDP

246,000+

Military & civilian DoW personnel across 20+ installations

175–350 MW

Actual headroom over the 3,500 MW defense baseline

\$44M

Cost to reinforce transmission for the 20% scenario, the most conservative studied

87%

Share of hours in 2024 Dominion already imported power

THE VALUE

This report provides a shared foundation to catalyze coordination between Virginia's defense, energy, and economic development stakeholders. **Now is the time:**

- The Spanberger Administration is setting a new direction for Virginia energy and economic development policy.
- The 2026 National Defense Strategy calls for "supercharging" the defense industrial base.
- The National Defense Authorization Act expanded the Department of War (DoW)'s role in regional grid planning.
- This summer's heat waves have already placed PJM grid strain in the headlines.

LET'S CONNECT

Authors are available to share more on the findings and path forward.

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THE NATIONAL SECURITY STAKES OF VIRGINIA'S GRID

IN SHORT

Transmission investment is required now. The consequences of waiting will compound and any combination of higher military operational tempo, new defense industrial capacity, or adjacent commercial growth **could exhaust the grid.**

THE STAKES

Virginia's importance to U.S. national defense is unmatched. And today, it is at the epicenter of both U.S. defense priorities and the country's most dramatic surge in electricity demand. Virginia hosts the Pentagon, the world's largest naval station, and the nation's sole builder of nuclear-powered aircraft carriers. Electricity outages are not nuisances; they can cause casualties and may be strategically decisive.

Today

3,500 MW
Reliable

Moderate

+20% / 700 MW

High

+50% / 1,750 MW

Extreme

+100% / 3,500 MW

Moderate + State-Wide Emergency

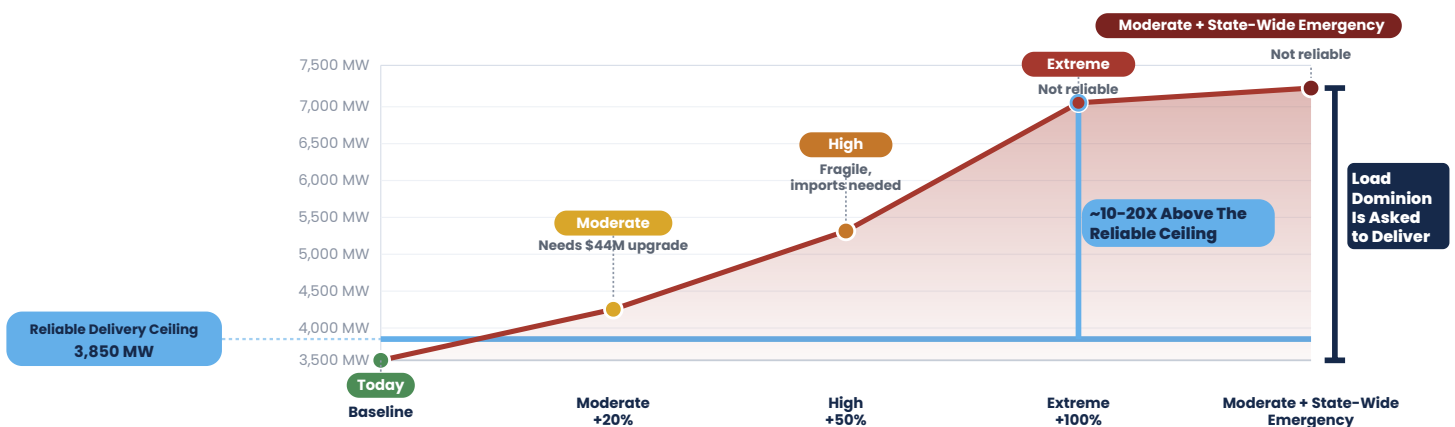
3,700 MW combined

WHY IT MATTERS TODAY

This is the first power flow analysis to model what happens if defense facilities have to compete for electricity. The increased load scenarios and analysis demonstrated that Virginia could support only a marginal increase in load by current planning assumptions, indicating **considerable transmission investments are required to maintain reliability.**

BY THE NUMBERS

Virginia's transmission system can reliably support only a **5-10% increase above the 3,500 MW defense baseline.**



175–350 MW stands between Virginia and an unreliable grid — less than a single large data center.

THE CHALLENGE

The gap between the energy requirements of Virginia's defense footprint and current grid capacity presents **national security threats and critical constraints** to the state's economic growth opportunities.

The challenge is that existing grid planning processes do not systematically **translate defense mission requirements** into demand growth forecasts, benefit metrics, or project selection criteria.

WHAT'S NEXT

Addressing Virginia's grid vulnerabilities will require a new model of collaboration between the DoW, utilities, state regulators, and regional organizations. **The report provides concepts to catalyze conversation on national defense and Virginia's economic future.**

Connect with [Adair Douglas](#), Converge Strategies, on opportunities to set up briefings and roundtables to discuss the analysis, align on the recommendations, and chart a coordinated path to implement next steps.

Figures excerpted directly from *Unleashing Virginia: Strengthening the Commonwealth's Transmission System for National Defense* (Converge Strategies, LLC and Energy Strategies, 2026). Full methodology and data available in the report.