

HVDC Transmission: A National Security and Energy Resilience Imperative

TODAY'S ELECTRIC GRID CANNOT ADEQUATELY ADDRESS THE NATIONAL SECURITY RISKS

6,288

Electricity outages across the U.S. Department of Defense (DoD) footprint in FY21.

\$128M

Economic loss associated with electricity outages on DoD installations in FY21.

99.9%

Minimum level of availability required to meet the energy load requirements of DoD's **critical national defense missions**.

77%

Of the entire federal governments energy consumption is represented by DoD with 707.9 trillion (BTU's).

An essential step in the process is for the Federal Government to take deliberate and unified action, prioritizing energy resilience as an essential element of the future grid.

A more secure, clean and resilient grid is not an option, but rather a national imperative that must be met.

THE ENERGY AND NATIONAL SECURITY NEXUS

Secure Supply Chain. Interregional HVDC components are available from North American and European suppliers.

Energy Independence. Diversity in energy generation sources reduces vulnerability to fuel disruptions.

Enhanced Cybersecurity. Interregional HVDC requires fewer substations and points of attack.

HVDC'S UNIQUE VALUE

Firm Load Profile. Interregional HVDC efficiently harnesses clean energy deployment by accessing generation sites to reach greater economies of scale.

Increased Control. Interregional HVDC immediately provides precise amounts of load balancing to the Bulk Electric System (BES).

Black Start Capability. Interregional HVDC transmission provides stability during delicate load balancing to restart disrupted grids.

PROVEN TECHNOLOGY

HVDC Pacific Intertie. Is a critical transmission line providing affordable, reliable, and renewable hydropower during times of unrelenting energy demand for customers.

Winter Storm Uri. SPP's load shedding was not as severe as predicted due to interconnections with surrounding RTOs and balancing authorities.

Reduced Footprint. Interregional HVDC carry the same amount of power as AC systems using 1/3 of the power lines and lower vegetation requirements.