



# North American Synchrophasor Initiative Work Group Meeting

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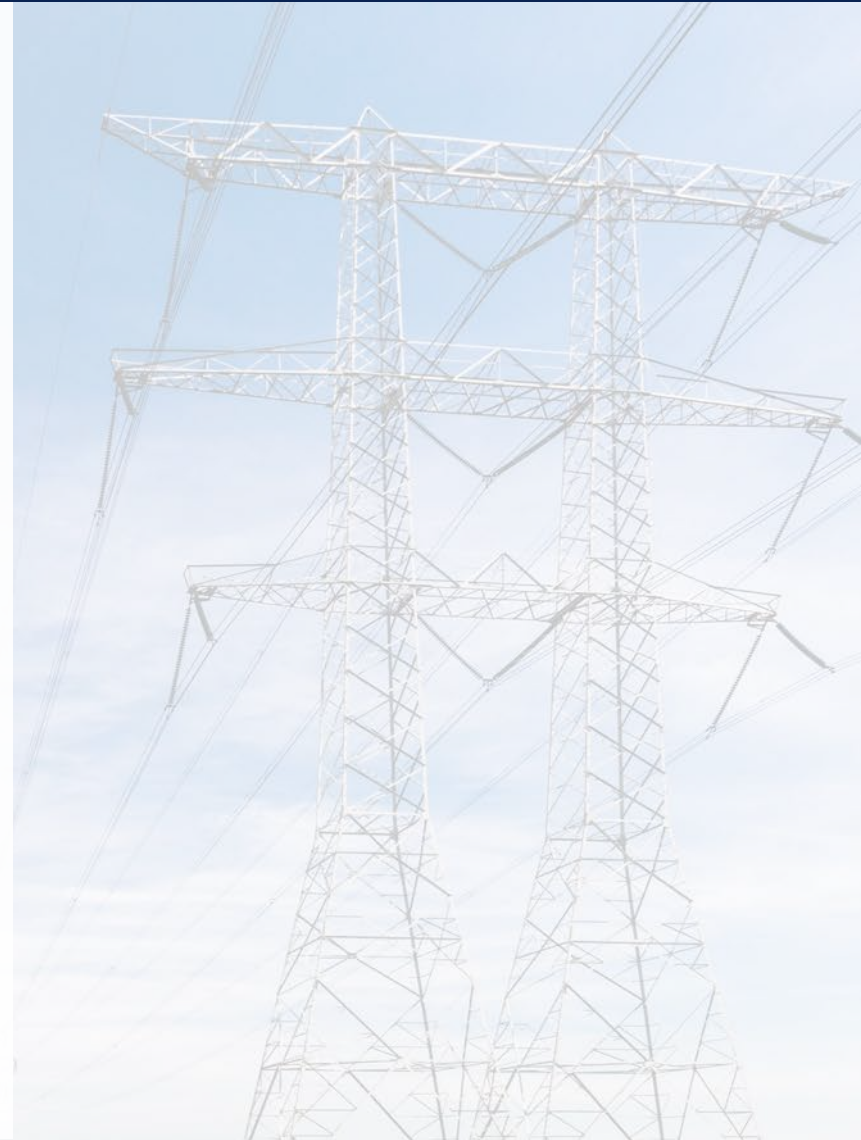
March 22, 2017



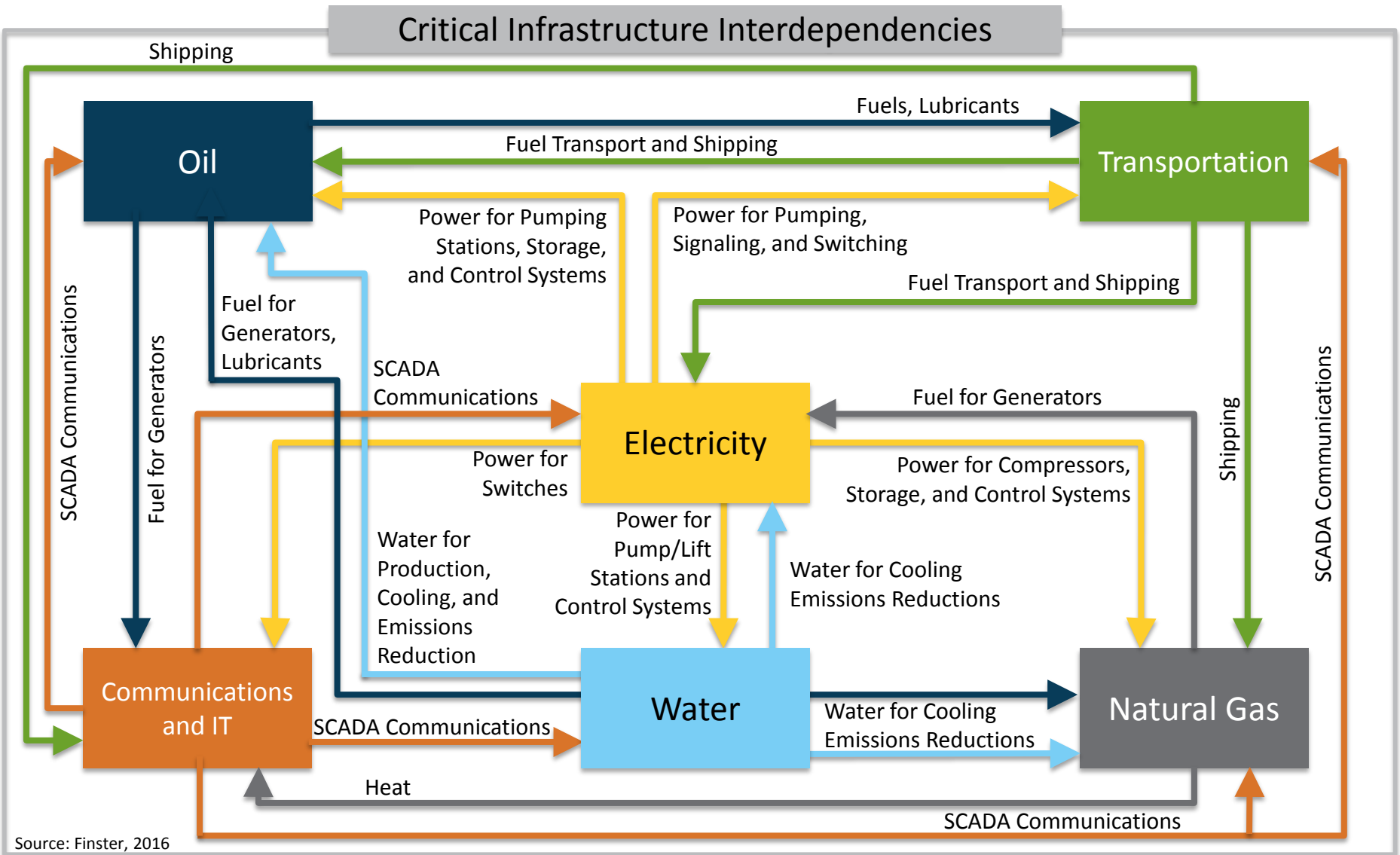
**Ensure the nation's security and prosperity by maintaining a resilient grid through transformative science and technology solutions.**

**Advance electricity technology to provides a pathway towards American energy independence and domestic job growth.**

**Protect our nation by hardening and evolving the critical grid infrastructure that the American people and the economy rely upon.**



# U.S. Critical Infrastructures Depend on Electricity



Source: Finster, 2016



# Key Trends Driving Electricity System Changes

A changing mix of types and characteristics of electric generation

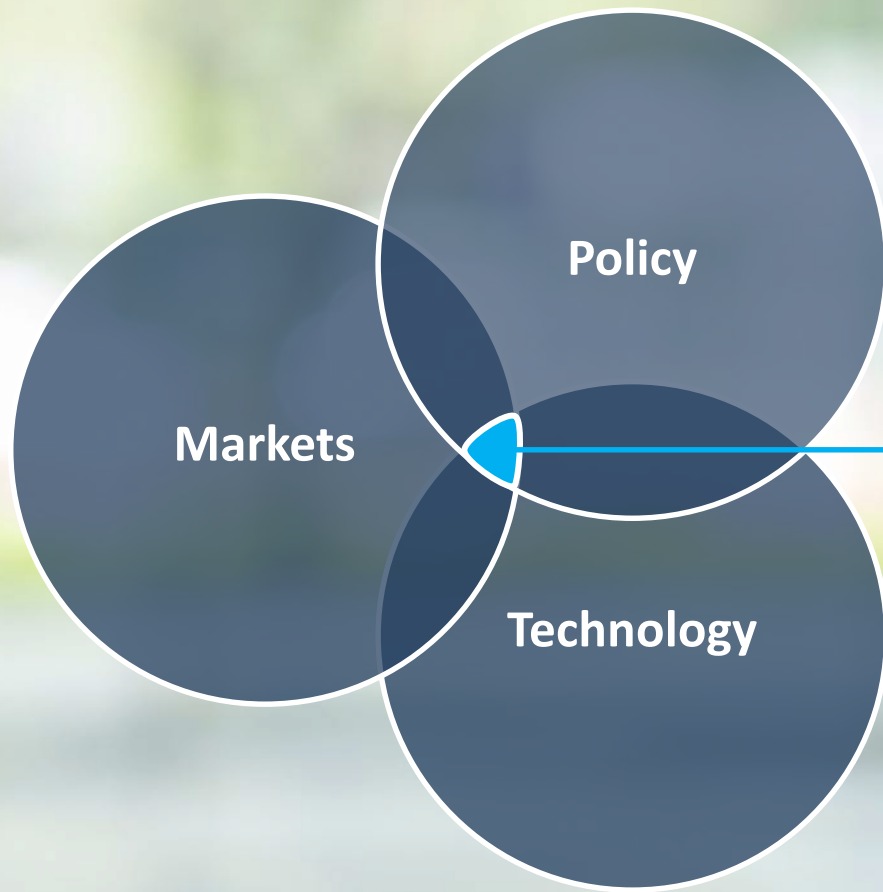
Growing demands for a more resilient and reliable grid

Aging Infrastructure

The emergence of interconnected electricity, information and control systems

Growing supply- and demand-side opportunities for customers to participate in electricity systems

# Grid Technology Commercialization



**Interaction** between Policy, Markets, and Technology.

# Advanced Synchrophasor Vision



**Maintain and ensure the benefits of new capabilities of Wide Area Visibility and Situational Awareness to inform policy and technology innovation**



**Model, interpret, and react to stream of new data to build an efficient, reliable, and flexible grid system.**



**Incorporate new data to assist and inform grid operators and develop an automatic switchable grid responding to the real-time environment**

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