

FUD versus Threats in the Electricity Subsector

Sam Chanoski, Director, Threat Intelligence, Electricity ISAC Department of Energy Electricity Advisory Council Meeting March 14, 2018

TLP: WHITE

RESILIENCY | RELIABILITY | SECURITY











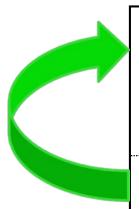
"Cyber is the continuation of war by other means"

Carl von Clausewitz, military theorist, born June 1, 1780





Information Warfare



Cognitive

- Perceptions
 - Attitudes
- Understanding

Information

- Information quality
- Information quantity
- Information content
- Information flow

Sum of 1st order effects create 2nd order effects

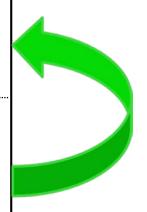
2nd Order Effects

<u>Ist Order Effects</u>
Execute tasks to cause effects in the physical domain

Physical

- Information systems
- Information networks

3rd Order Effects Sum of 2nd order effects generate a 3rd order effect





- Today's threat environment is characterized by persistent, constant malicious activity below the threshold of traditional warfare
- Targeting of the electric sector may be a means to a higher strategic end, as opposed to an adversary's ultimate objective
- Fear, unease, and distrust regarding adversary capabilities, electric sector defenses, and potential impacts can often be just as impactful as the technical effects