

Lecture 27: Power Grid and Other Infrastructure

Date: December 2, 2013

Homework Due: Dec. 6 at 5:00pm

1. Thinking about information warfare
 - a. Domains of attack: physical vs. cyber
 - b. Use of information to shape environment in non-lethal ways
 - c. Preventative disruptions; peacetime vs. wartime
2. Cyber warfare goals
 - a. Destruction (including non-physical)
 - b. Disabling, crippling, disruption
 - c. Delay
 - d. Diversion (distraction), distortion
 - e. Monitoring, controlling
3. Higher order goals
 - a. Swaggering
 - b. Punishing
 - c. Deterrence
 - d. Coercion
 - e. Undermining confidence and legitimacy
 - f. Market manipulation
4. Cyber-Physical Systems / Control Systems
5. Supervisory Control And Data Acquisition (SCADA)
6. The legacy power grid; Project Aurora
7. Fault tolerance and redundancy
8. Smart meters and grids
9. Automobiles