Edison Electric Institute

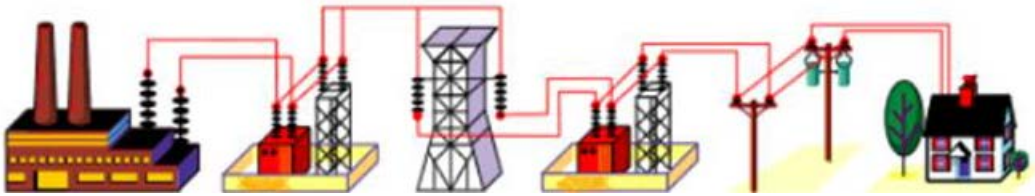
Power by Association℠

Electricity Industry Perspectives on the NIST Cybersecurity Framework

Melanie Seader | October 23, 2014

The Electricity Industry

Electricity generation, transmission, and distribution



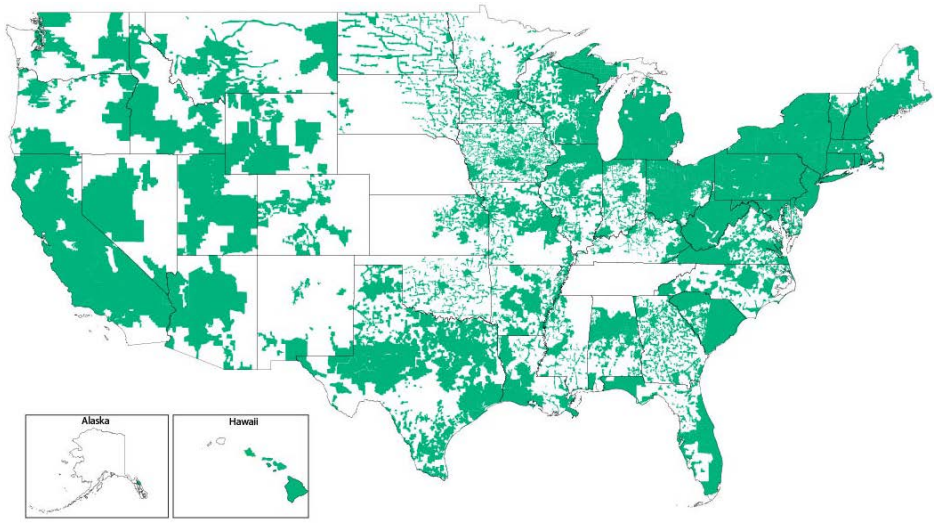
Investor- owned electric utilities – 67 parent companies, owned by shareholders, serve ~220 million people in all 50 states and DC

Public electric utilities – 2009 electric utilities; owned by non-profits, communities, and states; serve ~47 million people in 49 states

Cooperative electric utilities – 905 co-ops, owned by the customers, serve ~ 42 million people in 47 states

The Edison Electric Institute (EEI)

U.S. inventor- owned electric companies



Our members:

- Represent 70% of US Power Industry
- Provide electricity for 220 million Americans
- Operate in all 50 states and DC
- Employ more than 500,000 workers

EEI's Cybersecurity Efforts

- Information sharing
  - Policy/strategic level
    - CEO Policy Committee on Reliability & Business Continuity
    - CIO Executive Advisory Committee
    - Business Continuity Committee
    - Security Committee
    - Enterprise Risk Management Task Force
    - Cybersecurity Law Group
  - *ES-ISAC – tactical level*
- EEI's Threat Scenario Project
- Supply Chain Cyber Integrity Working Group
- Electricity Subsector Coordinating Council (ESCC)

ESCC – Executive Level Partnership

Electric Utilities	Reliability Organization	The Government
APPA American Public Power Association Canadian Electricity Association | Association canadienne de l'électricité EEI Edison Electric Institute epsa Electric Power Supply Association IRC ISO/RTO COUNCIL — Delivering the energy needs of today and beyond... NEI NUCLEAR ENERGY INSTITUTE National Rural Electric Cooperative Association — A Touchstone Energy® Cooperative	NERC NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION ES ISAC Electricity Sector Information Sharing Analysis Center	• The White House • Department of Energy (SSA) • Department of Homeland Security • Federal Energy Regulatory Commission

ESCC Focus Areas

- Advanced Cyber Preparation
- Clearances
- Cross-Sector Coordination
- Cybersecurity Risk Information Sharing Program (CRISP) Deployment
- Enhanced Information Sharing
- ESCC Incident Response Playbook Development
- NIST Framework Implementation
- Physical Security / Substation Campaign
- Public Affairs Outreach
- Spare Equipment

Framework Awareness

Cybersecurity risk management is not new

- Multiple electricity-specific standards, guidelines, and practices
  - Mandatory NERC Critical Infrastructure Protection Standards
  - DOE's Cybersecurity Capability Maturity Model (C2M2)
  - Smart Grid Cybersecurity Plans (ARRA funded projects)
  - NIST *Guidelines for Smart Grid Cyber Security* (NISTIR 7628)
  - DOE's Electricity Subsector Cybersecurity Risk Management Process
  - EEI's Threat Scenario Project

Strong member awareness of the Framework

- Strong engagement throughout development
- Awareness through trade organizations

Use of the Framework

Experiences with the Framework are just beginning

- Energy Sector implementation guidance
- Example company uses:
  - Internal security tool to identify strengths and gaps in existing cybersecurity programs
  - Internal communication tool
  - External communication tool

New challenges

- Utilities belong to multiple sectors
- Supply chain