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

<table>
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<tr>
<th>Electric Utilities</th>
<th>Reliability Organization</th>
<th>The Government</th>
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<tbody>
<tr>
<td>APPA, American Public Power Association</td>
<td>NERC, North American Electric Reliability Corporation</td>
<td>• The White House</td>
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<tr>
<td>Canadian Electricity Association, Association canadienne de l'électricité</td>
<td>ES ISAC, Electricity Sector Information Sharing Analysis Center</td>
<td>• Department of Energy (SSA)</td>
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<tr>
<td>EEI, Edison Electric Institute</td>
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<td>• Department of Homeland Security</td>
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<tr>
<td>EPRA, Electric Power Supply Association</td>
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<td>• Federal Energy Regulatory Commission</td>
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<tr>
<td>IRC, ISO/RTO Council</td>
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<td>NEI, Nuclear Energy Institute</td>
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<td>National Rural Electric Cooperative Association</td>
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- The White House
- Department of Energy (SSA)
- Department of Homeland Security
- Federal Energy Regulatory Commission
# ESCC Focus Areas

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<th>Advanced Cyber Preparation</th>
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<td>Clearances</td>
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<td>Cross-Sector Coordination</td>
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<td>Cybersecurity Risk Information Sharing Program (CRISP) Deployment</td>
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<td>Enhanced Information Sharing</td>
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<td>ESCC Incident Response Playbook Development</td>
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<td>Public Affairs Outreach</td>
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<td>Spare Equipment</td>
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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