

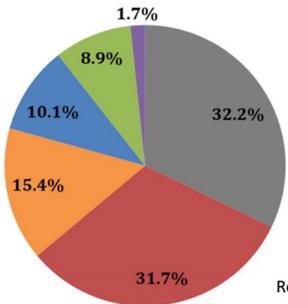
Cyber Integration and Information Sharing Solutions for Small Utilities

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NRECA and Not-for-Profit Electric Cooperatives

63 Generation & Transmission:

- ~ 5% of U.S. electricity

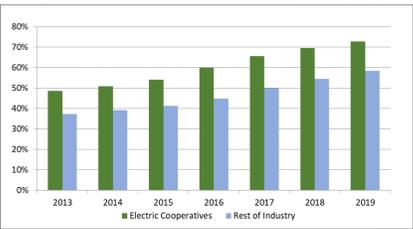


- Coal
- Natural Gas
- Nuclear
- Hydro
- Non-Hydro Renewables
- Oil, Other, or Unknown

Renewable numbers include owned and directly purchased generation, plus generation in the mix from wholesale purchases and do not reflect renewable credits

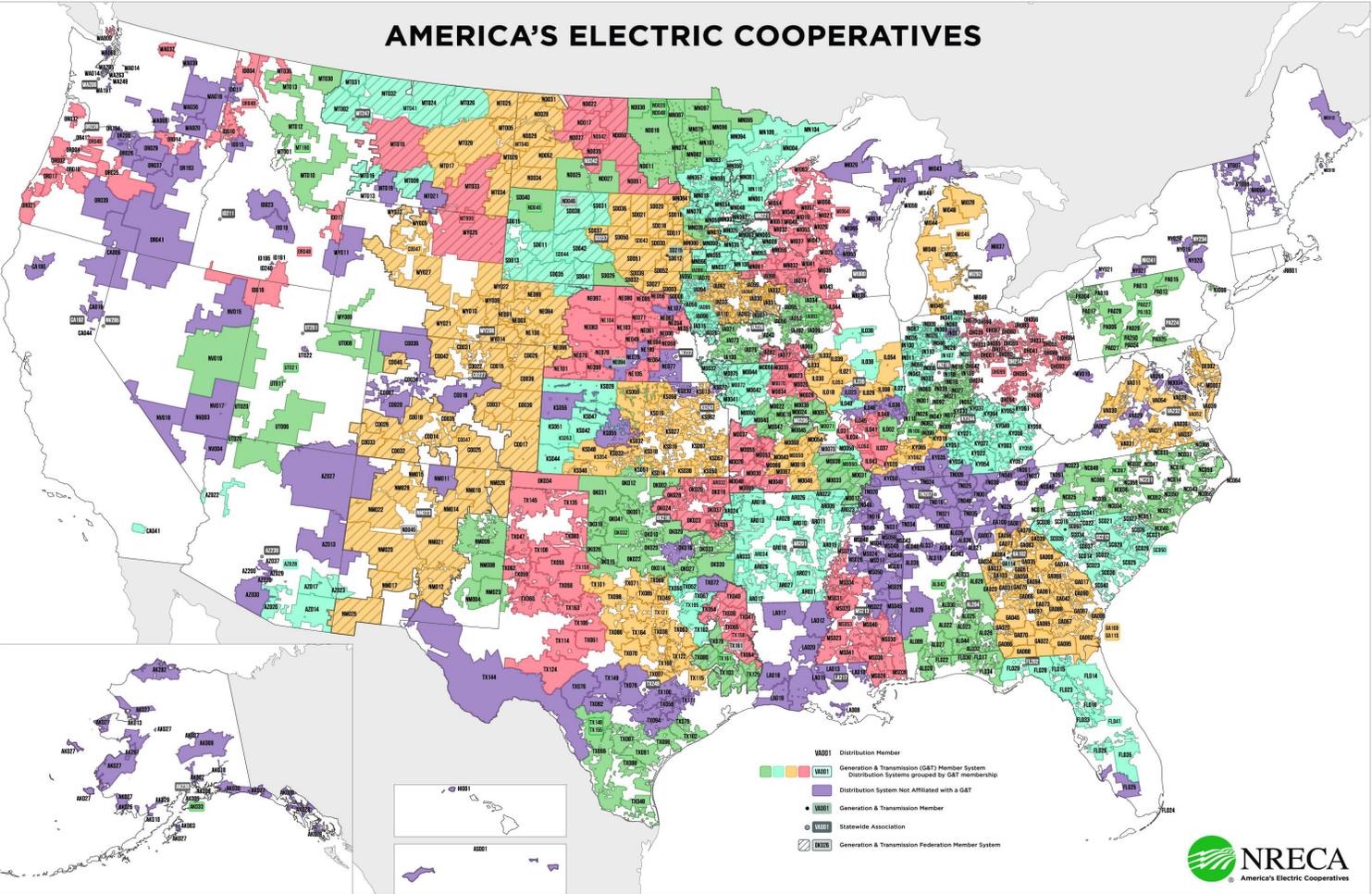
832 Distribution:

- 2.7 million miles of lines
- 42% of the U.S.
- 8 members/mile of line



73% AMI

- Electric Cooperatives
- Rest of Industry

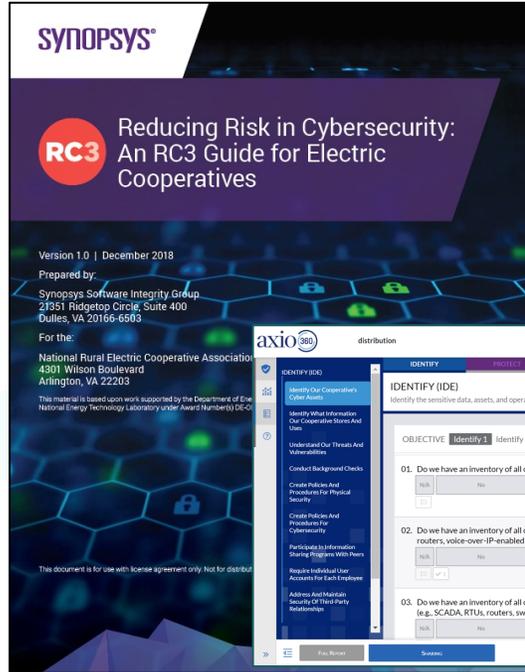


Program Strategy

- The NRECA Cybersecurity Program encompasses a wide range of efforts, including the successful RC3 Self-Assessment and the SANS training voucher program.
- Rural Threat Analysis Center & the Workforce Initiative are 2 key new pieces, tightly coupled and mutually beneficial:
 - TAC: Information Sharing & Incident Response focus
 - Workforce Development focus – rethinking workforce engagement

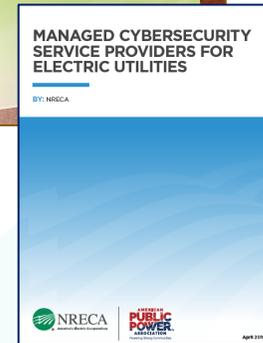
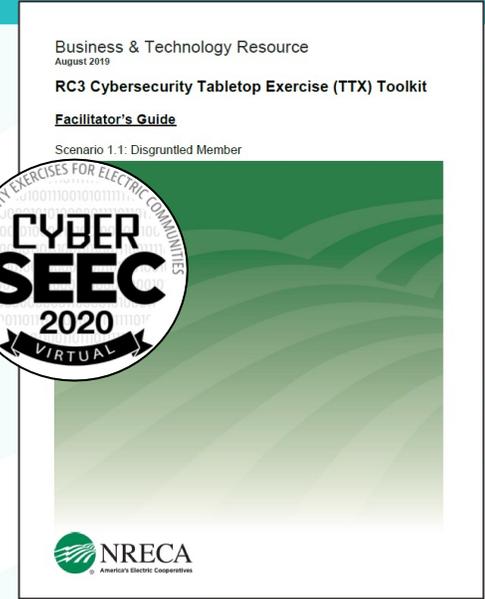
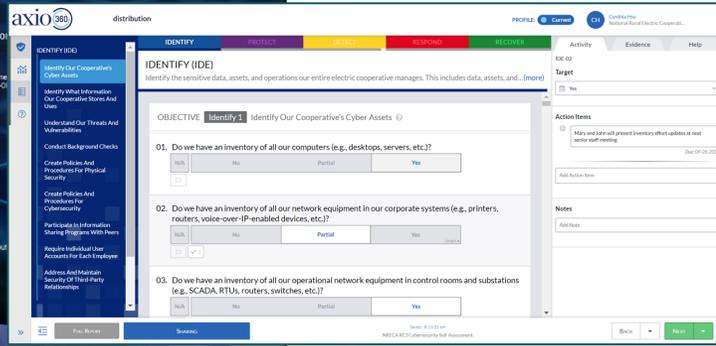


Resources and Education



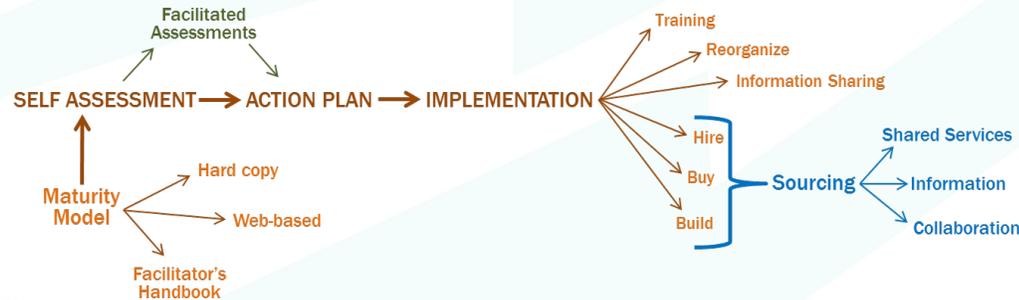
Cybersecurity Exercises

- RC3 Cybersecurity Tabletop Exercise Toolkit – 12 scenarios
- CyberSEEC – Distributed Play Exercise



RC3 Cybersecurity Guidebook For Electric Cooperative Attorneys

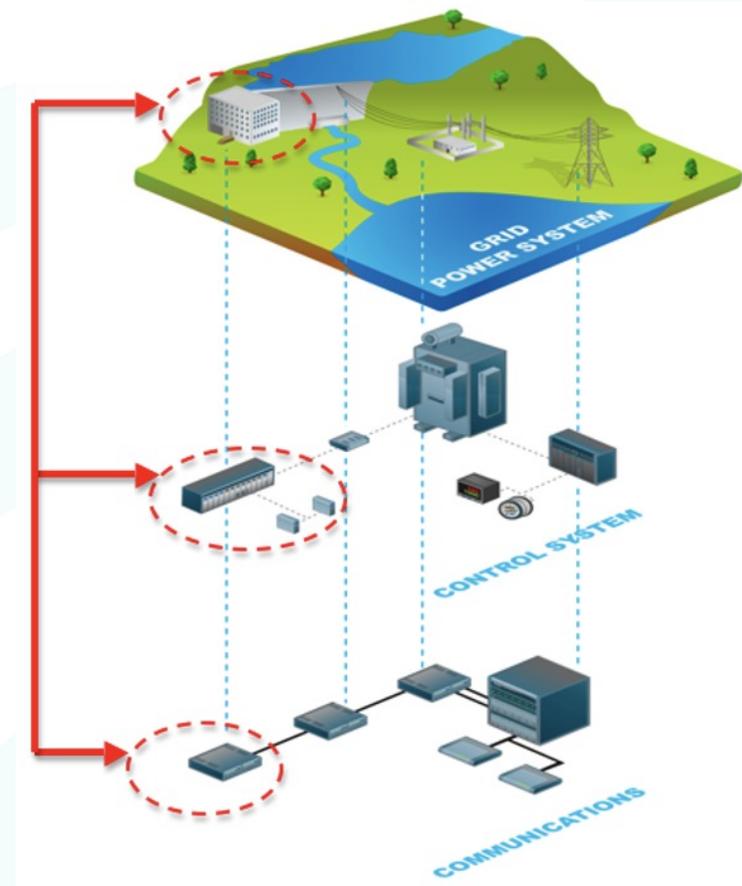
Managed Cybersecurity Service Providers for Electric Utilities



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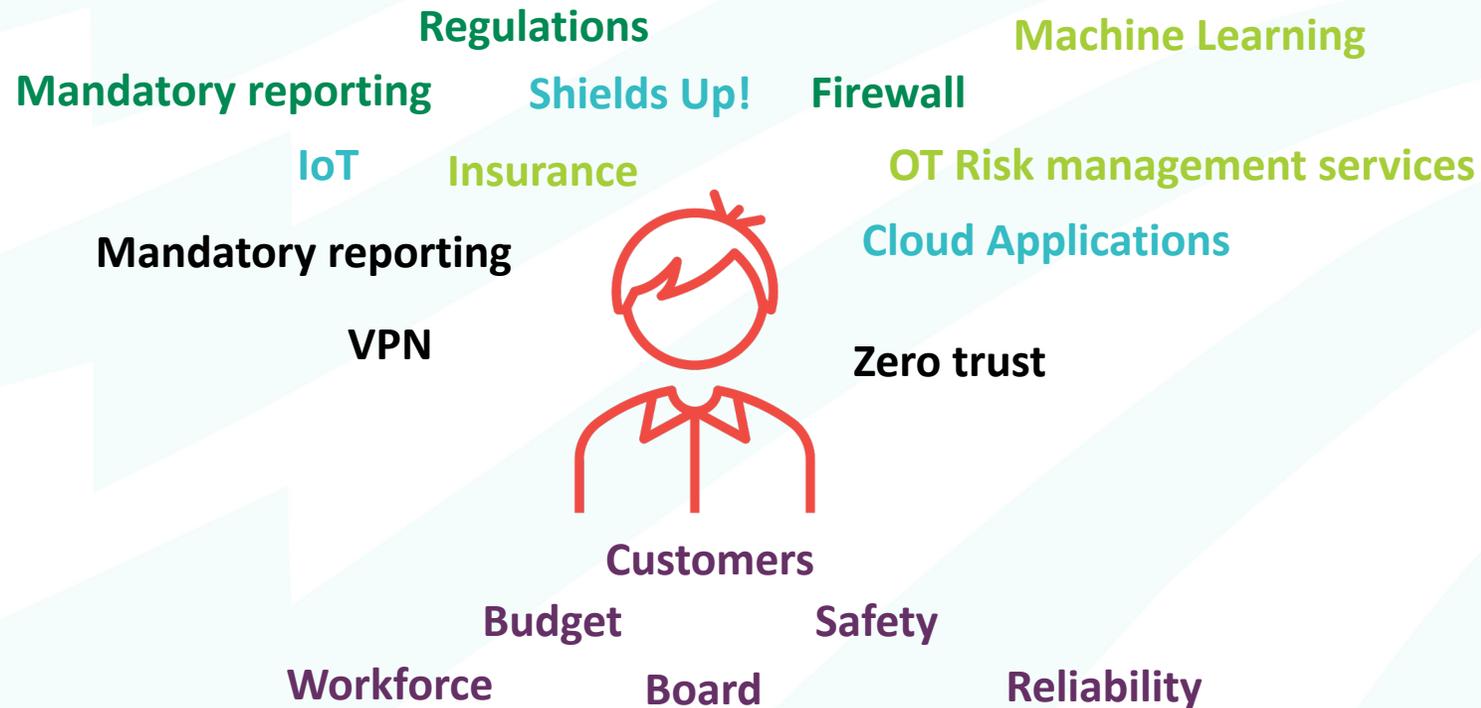
Infra spending, initiatives and investments are at an all time high

- How can we integrate communications, controls, distribution upgrades, and cybersecurity into DER deployment & decarbonization from the start – all of this depends on network security, but we need holistic integration – not a bolt on



Investment prioritization and decision support

The electric infrastructure community is splitting in cyber into those who can afford the mandated or proposed solutions, and those who must make difficult choices without decision support



Strategic Solution – Cyber Champions

Primary objectives:

- *Grow* cybersecurity expertise from within the local Co-op communities with clear educational and/or certification requirements for designated career tracks
- *Keep* cybersecurity professionals with competitive compensation and career development opportunities from across the Co-op space
- (But also, *Hire*: Use the collective Co-op strength through TAC to compete in the cybersecurity labor market)

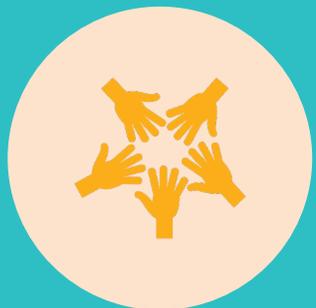
Summary & How to Work with Us



Cyber Program – mature and agile – partnerships!



TAC Timeline – Program is being piloted in 2 regions with a goal for expansion in late 2022



Partners and community engagement – join our efforts!



Standards for data and information integration – advisory