Public Power Cybersecurity Roadmap

Southeast Regional Municipal Cybersecurity Summit

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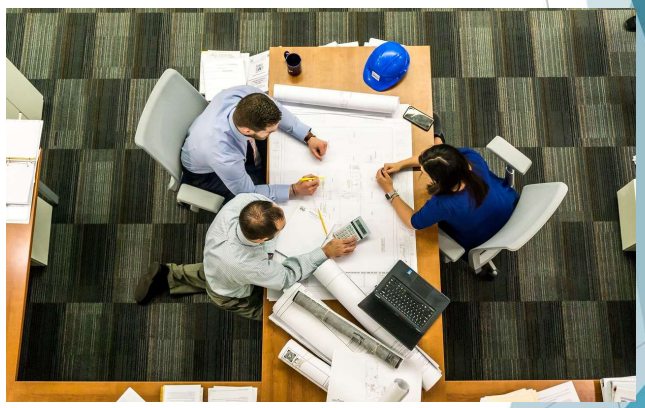

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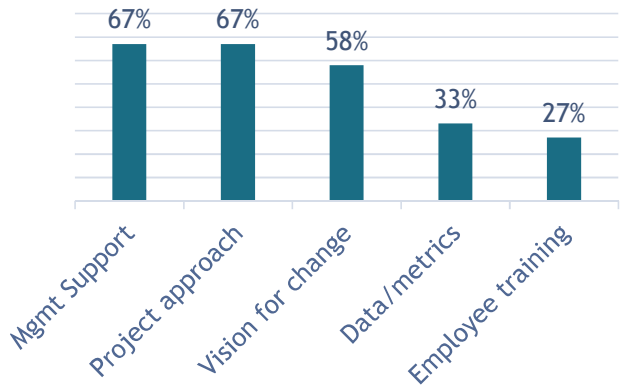
Overview

- About the Cybersecurity Roadmap Advisory Council
- Introduction to the Public Power Cybersecurity Roadmap
- Evaluate: Where are we now?
- Formulate: What should we do?
- Activate: Build a plan
- Integrate: Get it done
- Next Steps

Public Power Cybersecurity Roadmap Advisory Council

Designed approach to cybersecurity maturity implementation

- Establish management buy-in
  - Security program
  - Budget and resources
- Assess the need and set the vision



- Prioritize and treat cybersecurity maturity like a project
- Develop successful employee training
- Establish data/metrics for security program

CRAC Team

Bernie Acre, Bryan Texas Utilities
Cheryl Anderson, Florida Municipal Electric Association
Bill Berry, Owensboro Municipal Utilities
Randy Black, Norwich
David Boarman, Owensboro Municipal Utilities
Kenneth Carnes, New York Public Power Authority
Jack Cashin, American Public Power Association
Chris Ching, American Public Power Association
Jason Christopher, Axio Global
Phil Clark, Grand River Dam Authority
Jim Compton, Burbank Water and Po
Josh Cox, City of Westerville
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Alex Hoffman, American Power Association
Tony Holstein, Gainesville Regional Utilities
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Ken Simmons, Gainesville Regional Utilities
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Howard Wong, Glendale Water & Power
Giacomo Wray, American Public Power Association

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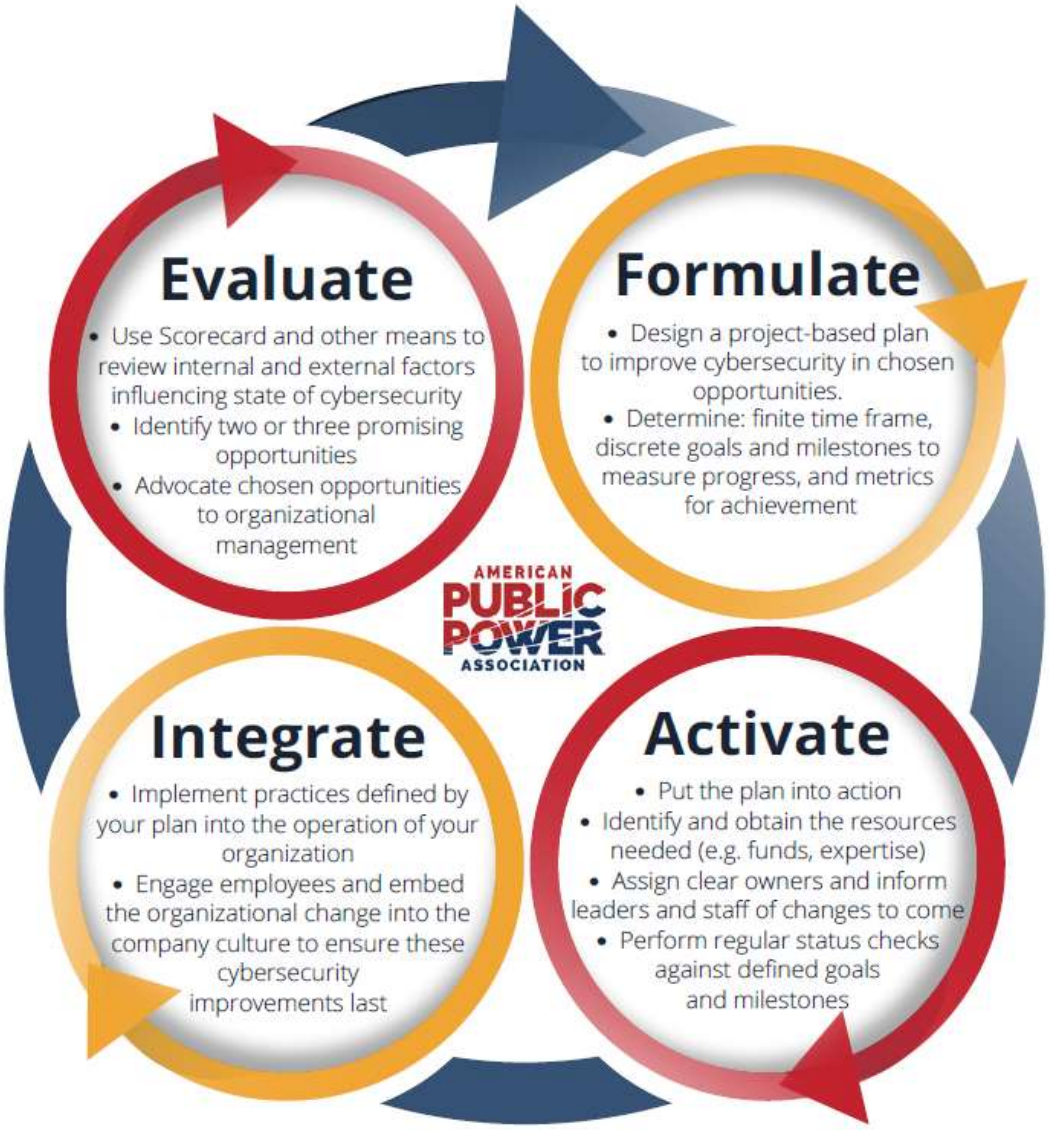
Introduction

- Setting the stage: The threats and vulnerabilities for utilities are real
- APPA provides the resources to help
  - Cybersecurity for Energy Delivery Systems
  - Public Power Cybersecurity Scorecard
  - Cyber Incident Response Playbook
- Cybersecurity Roadmap


Evaluate
• Use Scorecard and other means to review internal and external factors influencing state of cybersecurity
• Identify two or three promising opportunities
• Advocate chosen opportunities to organizational management
Formulate
• Design a project-based plan to improve cybersecurity in chosen opportunities.
• Determine: finite time frame, discrete goals and milestones to measure progress, and metrics for achievement
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Integrate
• Implement practices defined by your plan into the operation of your organization
• Engage employees and embed the organizational change into the company culture to ensure these cybersecurity improvements last
Activate
• Put the plan into action
• Identify and obtain the resources needed (e.g. funds, expertise)
• Assign clear owners and inform leaders and staff of changes to come
• Perform regular status checks against defined goals and milestones

Stage 1

Evaluate

Stage 1: Evaluate

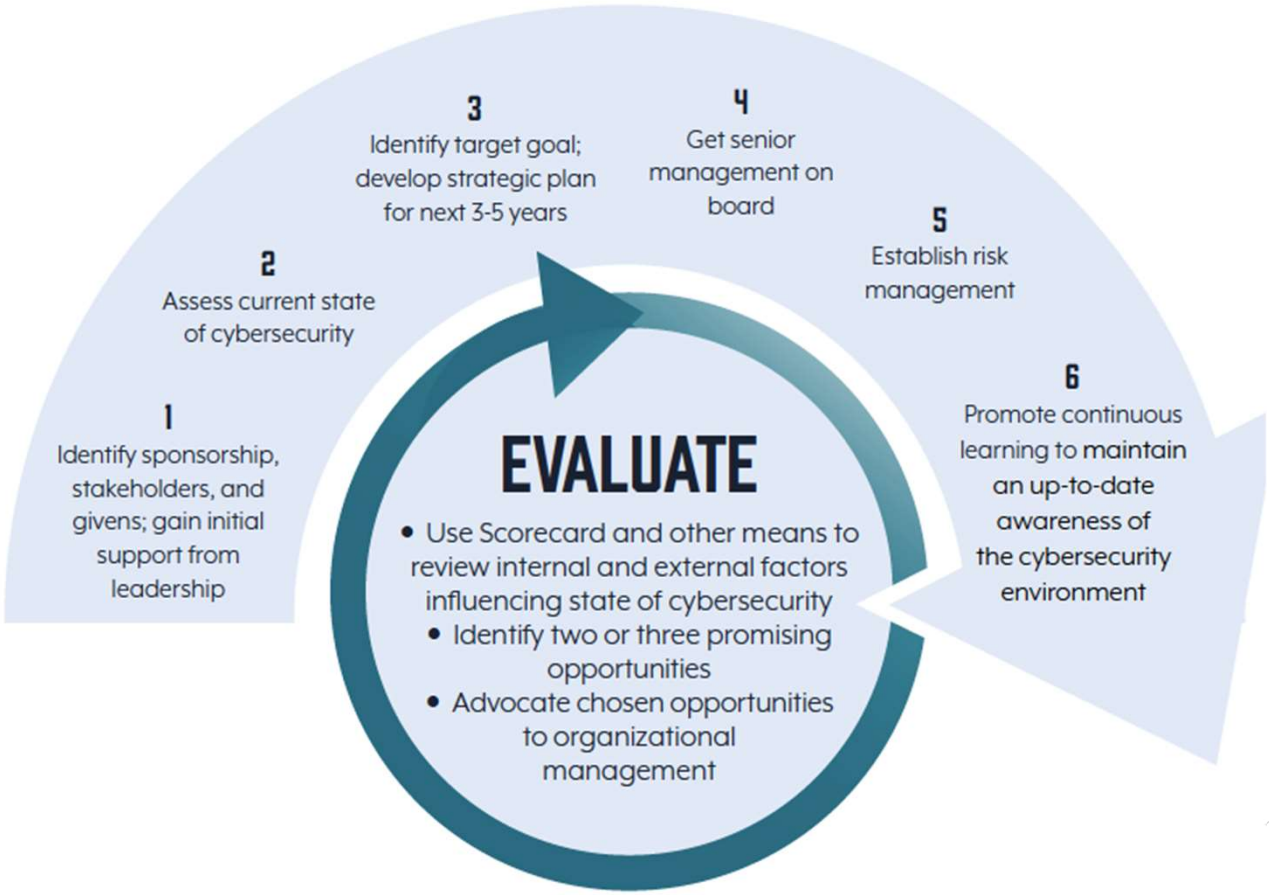
Evaluate internal and external factors influencing most pressing cybersecurity issues

Locate sponsors and leaders needed to achieve desired changes;

Generate a list of prioritized opportunities for improving cybersecurity; and

Consider the organization’s strategy and risk tolerance

Stage 1: Evaluate



Stage 2

Formulate

Stage 2: Formulate

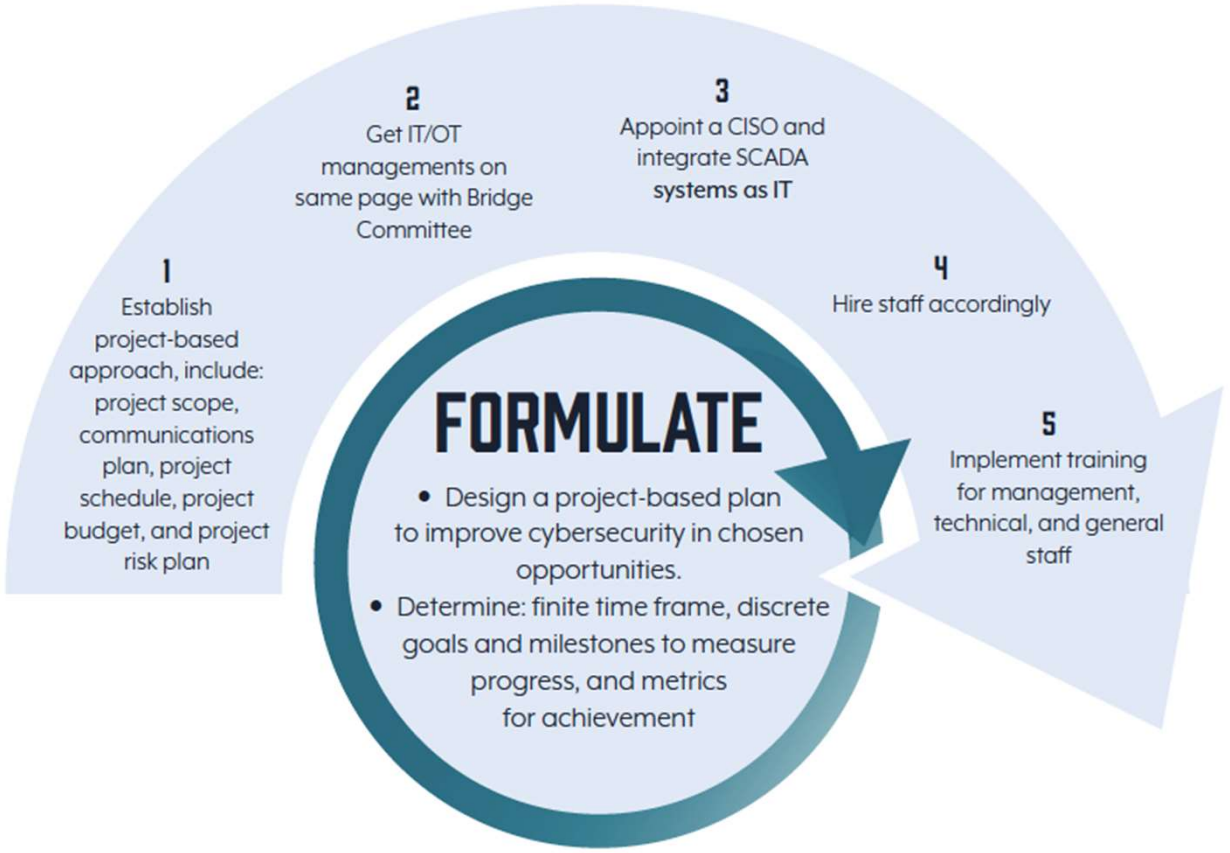
Formulate a project-based plan to improve cybersecurity;

Use a risk-based approach to identify two or three promising opportunities for improving cybersecurity;

Appoint leadership and hire appropriate staff to carry out cybersecurity efforts; and

Implement managerial, technical, and general staff training.

Stage 2: Formulate



Stage 3

Activate

Stage 3: Activate

- Activate the project-based plan by creating ongoing, enforceable policies for all personnel;
- Follow the activities or steps identified in the plan;
- Acquire any necessary new tools or systems then install and test them;
- Institute new policies and procedures needed to support tools and identified improvements to cybersecurity processes;
- Develop a cyber incident response plan using the Cyber Incident Response Playbook as reference; and
- Design a communications strategy to handle potential cyber incidents.

Stage 3: Activate

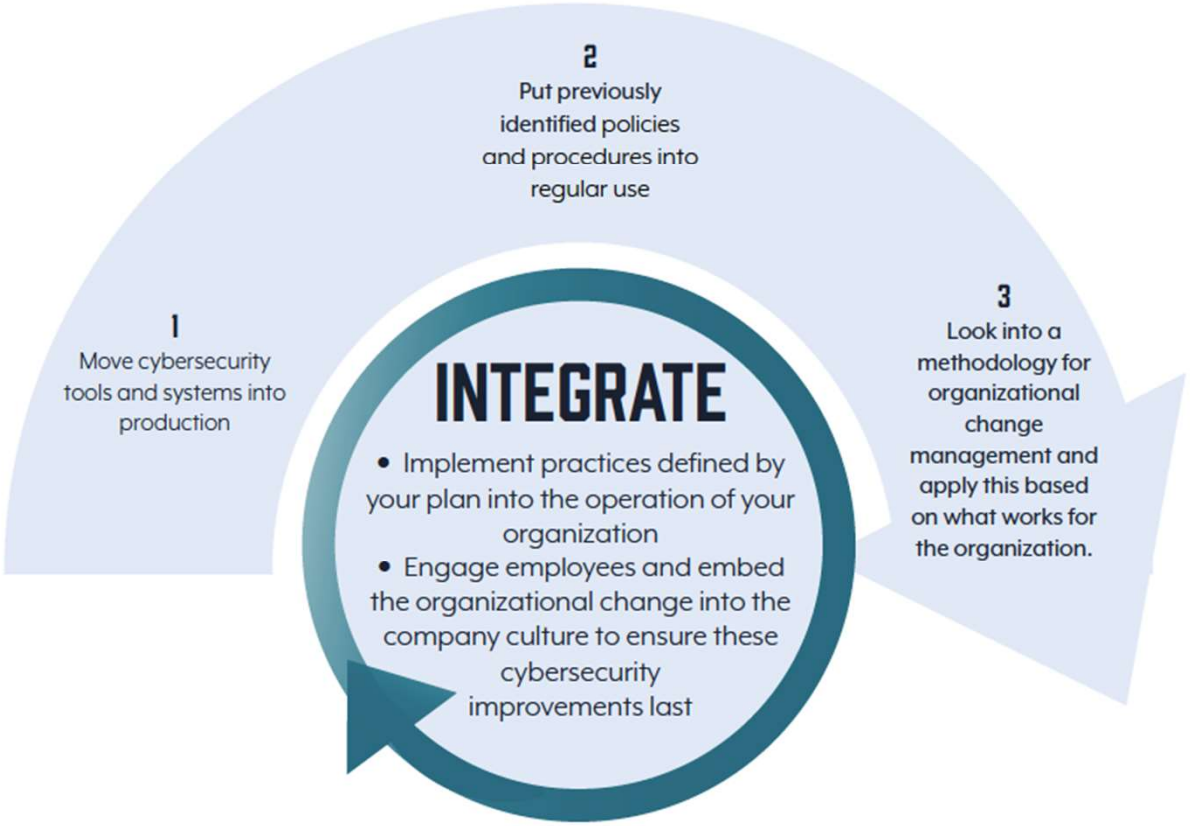
Stage 4

Integrate

Stage 4: Integrate

- Integrate practices defined by the plan into the operation of your organization;
- Move new tools or systems into the production environment;
- Ensure any new systems are regularly monitored and regular patches and upgrades are maintained;
- Operationalize and maintain the new process as part of business-as-usual practices.
  - This turns the “new” practices into “standard” practices--making them part of your organization’s culture is the final critical stage in improving cybersecurity and making sure the improvements last.

Stage 4: Integrate



Next Steps

Next Steps

- The Roadmap serves as a guide
- Success of any project lies in its execution
  - The Roadmap should help chart a path to an improved state in the future.
- Communication among peers and collaboration with APPA and experienced subject matter experts may be necessary,
- Working together we can improve the cybersecurity of the entire public power sector

- Maintain a posture of continuous cybersecurity improvement, no matter the size of your public power utility.
- Take advantage of resources and tools available to public power utilities referenced in the Roadmap.
- For the latest recommendations visit APPA's website at: https://www.PublicPower.org or email Cybersecurity@PublicPower.org.

Questions?


I'M NOT AN ENGINEER, SO THIS MIGHT BE A DUMB QUESTION.
DILBERT.COM @SCOTTADAMSSAYS
BUT WHY CAN'T WE 3-D PRINT A BLOCKCHAIN AND HTML IT INTO A BITCOIN?
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ALICE CAN ANSWER THAT.
I QUIT.