



Critical Infrastructure Protection and Incident Response Training

Portland State University proposal in support of NSA grant

Gretchen Bliss, UCCS, Director, Cybersecurity Programs

Thomas Gallagher, UM, Assoc. Vice Provost for Workforce Development

Critical Infrastructure Protection and Incident Response Training



Why NCAE-C?

- Mission-driven (CAE description)
 - “Values community outreach and leadership in professional development”
 - “Actively engages in solutions to challenges facing cybersecurity education”
- Relationships and collaborations (existing & new)
- Regionally located, site neutrality, and branding
- Leadership role as a State Hub for education

Montana Electric Grid Cybersecurity Tabletop Exercise (CyMET)

Thomas Gallagher, University of Montana

Montana Electric Grid Cybersecurity Tabletop Exercise



Concept Statement

- Enhance cybersecurity training for Montana's energy sector by bringing together the diverse entities responsible for protection.
- Simulate a cyber-attack incident (TTx) and practice the coordinated response needed to stop the attack and return baseline services.
- Address the unique responses needed from national guard, private industry, law enforcement, nonprofit cooperatives, and government (local, state, and federal).
- Develop a valuable learning environment for students and research opportunity for faculty.
- Establish a regular cycle for incident response training.
- Improve communication & collaboration with industry, academia, local state, and federal partners.

Montana Electric Grid Cybersecurity Tabletop Exercise



Timeline

- Oct 2022 PSU proposal through smart grid NSA grant (consultant)
- Nov–Mar Planning Team group: Tuesday standing meeting
- Dec 16 Planning Team: Full-day retreat (TTx)
- Feb 9 Tabletop exercise (first draft)
- Mar 6 Registration and promotion
- Apr 11 DECIDE Platform Training: Student scribes
- Apr 12 DECIDE Platform Training: Participants
- **Apr 19 Montana Electric Grid Tabletop Exercise**
- Apr 20 AAR Planning Team
- May 15 Summary documentation

Montana Electric Grid
Cybersecurity Tabletop Exercise

Hosted by



Missoula College River Campus – 1205 E. Broadway Missoula, MT
19-20 April 2023

Montana Electric Grid Cybersecurity Tabletop Exercise

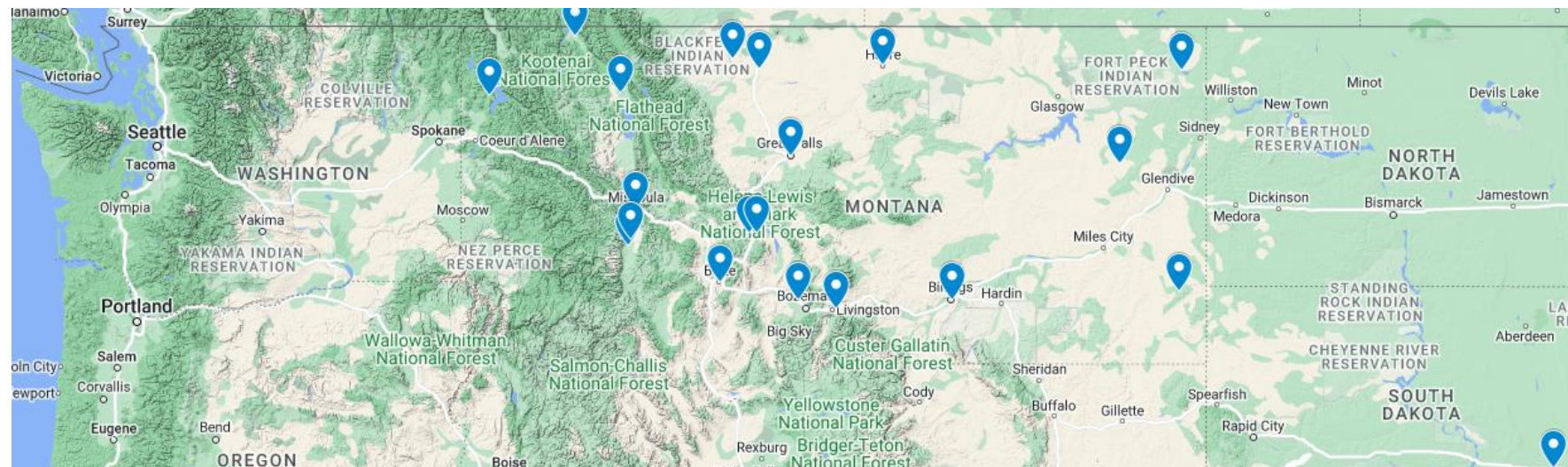


Process - Montana

- Concept development and timeline
- Important role of the planning team
- Master Scenario Events List (MSEL) development
- Tabletop Scenario (TTx) development
- Platform (DECIDE) training & support
- Student Engagement
- AAR - critical observations & final documentation
- Research results and scholarly contribution opportunities

Student & Faculty Role

- Invite students as event participants
- Identifying areas of existing research and research overlap
- Surveys, interviews, observations, experiments, and case studies – further development
- Early concept - *Rural Policy Academy*



Montana
Electric Grid
Cybersecurity
Tabletop
Exercise

Montana Electric Grid Cybersecurity Tabletop Training



Key Insights

- Valuable service to our community
- Importance of teamwork: relationship building, collaboration, and communication.
- Student and faculty engagement
- Unique vulnerabilities associated with rural remote state
- Concept - *Rural Policy Academy*





Colorado Electric Grid Protection and Incident Response Program

Portland State University proposal in support of NSA grant
Gretchen Bliss, UCCS, Director, Cybersecurity Programs

***Colorado Tabletop:
Tuesday, 18 July
8 am – 1 pm MT***

The goal is to exercise Colorado Springs Utilities (CSU) capabilities during an incident and discover gaps in incident response, process, prioritization, resiliency and defense of critical infrastructure with initial focus on the electric grid while working with the City of Colorado Springs, State OIT, and other utility providers to determine allocation of needed resources and processes for that distribution

Exercise Objectives

- Establish a collaborative structure across county, city, state, and Colorado utilities such that both communication coordination and investigation collaboration with outside agencies is open and aligned to build on one another's efforts and will avoid duplication and inefficiency
- Exercise the state's, cities', and energy/utility sector's ability to improve critical SmartGrid infrastructure incident response and escalation response, and to discover gaps and enhance resilience, especially as it relates to interaction, coordination, and communication across Colorado-based organizations
- Explore current emergency management policies and practices as they relate to municipal and regional (city, county, state) energy and utility SmartGrid infrastructure. Define/refine priorities – what needs are addressed first in an emergency – based on new policy across these organizations and the region

General Scenario

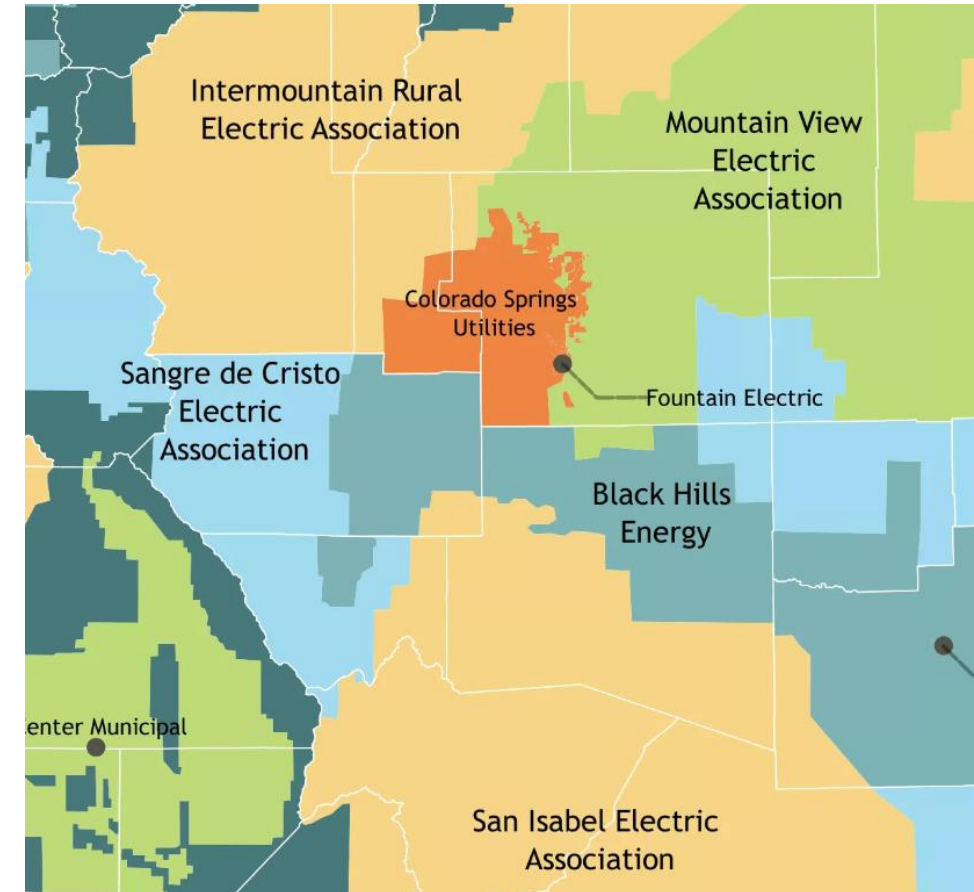
- Persistent cascading malware, forcing the utility to request resources and support from state level agencies & to coordinate response across energy & utility companies
- As part of the scenario the participants will explore the needed policy and processes to quickly and efficiently know what resources and support will be given and when

Challenges and Opportunities

- Participating organizations
- Scope of scenario
- Proprietary information
- Observers/mentors
- Resource allocation

Exercise Participants

- Colorado State OIT
- Colorado Springs Utilities
- City of Colorado Springs IT Dept.
- Other utility providers (proposed):
Excel Energy, Fountain Electric,
Black Hills Energy
- UCCS students (grad, undergrad)
- UCCS faculty
- SpaceCOM (observer)
- UCCS Emergency Management &
OIT



Tabletop Timeline

- Nov. 2022 – Meeting with UCCS, State and Colorado Springs Utilities (initial scoping)
- Nov. – Dec. 2023 - Partner participation determination
- Jan. 2023 – Stakeholders Kickoff and planning event
- Feb. – April: Objectives & Scope
- May: Participants, logistics, training planning
 - Training: July 14th and July 17th
- May - June: exercise scripting (inject definition), logistics & attendee confirmations, final document approval
- June – July: data collection, reporting, outbrief planning
- **18 July 2023: State-wide Cybersecurity Exercise and Seminar**
- September 2023: Executive outbrief and report submission

A nighttime photograph of a city skyline with various skyscrapers and buildings illuminated. A large teal rectangular box is overlaid on the left side of the image, containing white text.

Thank you!

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