



Fusion Centers and State Energy Stakeholders: Pathways to Robust Threat Information Sharing

National Association of Regulatory Utility Commissioners (NARUC) Center for Partnerships & Innovation (CPI)

Prepared by Jody Raines and Lynn P. Costantini, NARUC CPI.

Fall 2023

Threats to our nation's critical infrastructure are escalating in frequency and sophistication. It is essential for public and private sectors to join forces to understand the threats, mitigate risks, and plan to respond and recover from disruption. Fusion centers — organizations purpose-built to facilitate communication and cooperation between federal, state, local, and territorial law enforcement entities — are well-positioned to play a pivotal role in this context. Although fusion centers historically focused on crime and terrorism, there is a need to engage more broadly and build stronger threat information sharing relationships among energy stakeholders within their states.

This mini guide explores the current landscape of threat information sharing between fusion centers and state energy stakeholders. Based on interviews with a sampling of key stakeholders, from public utility commissions (PUCs), state energy offices (SEOs), state offices of emergency management (OEMs), and fusion centers, the mini guide highlights areas of successful practice, current challenges, and areas of potential improvements.

About Fusion Centers

Fusion centers are hubs for gathering, analyzing, and disseminating threat information. Established following the attacks of September 11, 2001, fusion centers focused on terrorism and homeland security. In many cases, that focus has expanded to an inclusive all-hazards approach, yet many fusion centers remain law-enforcement centric.

Today, there are eighty fusion centers across the country and U.S. territories. Every state has at least one. An additional 27 fusion centers operate in key urban centers and three are spread across U.S. territories. Typically owned and operated by the states in which they operate, many fusion centers also receive funding, training, and technical assistance from the federal government. A list of fusion centers and websites can be found on the Department of Homeland Security (DHS) website: <https://www.dhs.gov/fusion-center-locations-and-contact-information>.

There is significant variability in fusion center mission focus, leadership, and engagement. For example, some fusion centers are co-located within their states' emergency response agency, whereas others are led by state police. Some have embedded cyber units, others do not.

Few fusion centers engage with critical infrastructure owners and operators, including energy utilities. Even fewer have built direct information sharing pathways with state agencies that have energy specific roles, responsibilities, and expertise, including PUCs and SEOs.

The Value of CI/Energy Threat Information Sharing

Government officials play a critical role in securing the nation's critical infrastructure against manmade hazards and technological and adversarial threats. Although some fusion centers engage directly with the utilities, working with a public utility commission or state energy office can expedite communications because those entities are in contact daily with utilities and have current, updated connections. The value is not just limited to communications. If state energy officials understand the threats, they can make better informed policy and investment decisions, as well as energy security and response plans.

All three of the following state agencies are involved in energy security policies, investments, and emergency preparedness and could potentially share incidents and exchange information with the fusion center.

Governors' Offices: Governors' offices are responsible for statewide policy development, with roles and responsibilities that include policy, legal counsel, legislative relations, communications, appointments, scheduling, intergovernmental relations, emergency management/homeland security, and administrative support for the governor and family/spouse. Specialized staff in the governor's office oversee and coordinate directly with state agencies and departments, including public utility commissions, state energy offices, homeland security, and emergency management departments. Advisors provide guidance to the governor, who sets statewide policy and holds emergency authorities, including energy, cyber, and homeland security.

Public Utility Commissions (PUCs): Also called public service commissions (PSCs), PUCs are quasi-judicial governing bodies that primarily regulate the rates and services of investor-owned utilities. Through this regulatory function, the PUC has responsibility for energy policy, development, security, and reliability. The PUC also has authority to evaluate investments in infrastructure, including those to protect safe and reliable delivery of services. Commissioners are typically appointed by a governor but may also be elected by the public or a state legislature.

State Energy Offices: The 56 State and Territory Energy Offices advance practical energy policies and programs; inform the governor and legislature of energy policy development; inform regulatory processes, and support energy technology research, demonstration, and deployment. In partnership with the private sector, the offices accelerate energy-related economic development and support meeting state climate goals through energy solutions that address their citizens' needs and enhance physical and cyber energy security. Along with the increasing need for actionable interagency collaboration, fusion centers are a state partner to consider including in future exercises and training.

Each state has unique rules and regulations for energy, and this includes information sharing, handling of energy emergencies, and establishing relationships with fusion centers.

Energy Emergencies and the Role of ESF 12

When energy emergencies arise, public utility commissions and state energy officials are called on to assist with response and restoration. Collaboration among emergency response partners in PUCs, state energy offices, and state offices of emergency management is guided by the National Response Framework (NRF), which establishes specific authorities for managing incidents, and response.

Responsibility for the integrity of power systems during emergency situations and other man-made or natural catastrophes is generally designated as Emergency Support Function 12 (ESF12).

Due to their role with energy emergencies and response, as well as protection of lifeline services, energy stakeholders play a vital role and should be part of the threat intel information sharing by a fusion center. Energy stakeholders includes those entities involved in producing, storing, refining, transporting, generating, transmitting, conserving, building, distributing, maintaining, and controlling energy systems and systems components.

- ESF-12 stakeholders bring together expertise and assets, building capacity, and managing response activities when energy emergencies of a national scale occur.
- ESF12 Lead agencies/state agencies, particularly PUCs, SEOs, and OEMs, play an instrumental role in marshaling resources and coordinating response efforts within their jurisdictions. The energy emergency lead is typically designated by state legislation and may or may not be the public utility commission.

NOTE: In some states, the state energy office and the PUCs are the same agency.

State Energy Stakeholder Coordination with Fusion Centers

Based on interviews with personnel from fusion centers, law enforcement agencies, offices of emergency management, PUCs, and state energy offices,¹ engagement can be characterized as a continuum, from little or episodic to regular and sustained. The level of value increases as continuous, effective, actionable information sharing grows.

1 See Appendix I.

Of those interviewed, certain hallmarks exist that augur success:

Engagement Takes Time.

A recurring theme among states where strong, reciprocal relationships between the fusion center and state PUC/energy office evolved from a pre-existing interpersonal or other interorganizational relationships. As the benefits of the engagement were realized the relationship between the fusion center and PUCs/SEOs and other energy stakeholders became stronger and more enduring.

Key Tips:

Be Proactive.

Reaching out to the fusion center to introduce yourself is one of the suggestions repeated by multiple interviewees. Be sure to share how the PUC or SEO can add value – this may include the information and contacts the agency has ongoing access to and communication with. One clear example of adding value is by aggregating and sharing situational awareness data, especially during weather events. In Massachusetts, State Energy Office’s Paul Holloway, Emergency Planner and Energy Analyst at State of Massachusetts provides the fusion center with ongoing reporting related to gas and fuel supplies.

Relationships are developed through various means – Wisconsin reached out to fusion centers to help inform state energy emergency plans, and Tennessee counterparts engage in weekly breakfast meetings. These are all situations where personal outreach and contact resulted in organizational development.

Build Personal Relationships.

One of the frequently heard comments during interviews with both the fusion centers and the energy liaison is the importance of trusted interpersonal relationship leveraged for information and knowledge sharing. Essentially, these relationships form an ad hoc network of information sharing hubs.

Memorialize the Relationship: Put it in writing.

Formalize these relationships and commit them to a written agreement or memorandum of understanding. This will ensure that the information sharing network sharing will continue even with staff changes and attrition.

With a memorandum of understanding between agencies, information sharing has a better chance of standing the test of time.

Engagement requires trust.

Trust is an essential ingredient for engagement to flourish. Built over time, trust is a function of experience, expertise, and mutual benefit. Oftentimes trust is rooted in interpersonal relationships that eventually extend to the organizational level. Trust can also be moored to institutional mechanisms such as MOUs and security clearances.

Key Tips:

Consider Security Clearances.

For some fusion centers, security clearances are required prerequisites to open lines of communication. State Homeland Security may assist with procuring security clearances for staff or commissioners.

In lieu of security clearances, some fusion centers may offer an FLO (Fusion Liaison Officer) program. There are variations to the title and the requirements to qualify, but it’s another way energy stakeholders can join the threat conversation. One iteration of the FLO program is in Texas, where they offer a one-and-half-day training to vetted individuals.

Plan Recurring Meetings.

Scheduled briefings and regular meetings play an instrumental role in maintaining relationships and opening lines of communication on blue sky days. Whether the fusion center is providing or consuming information, the important aspect of information sharing is that it happens. Those organizations that benefited from mutual information sharing had regular, ongoing briefing or meeting schedules. Participants suggested that these meetings paved the way for trust building.

In New Jersey, there are daily meetings, weekly meetings, quarterly meetings, emergency situation meetings, ad hoc meetings. In Texas, the fusion center meets with its registered Fusion Liaison Officers on an ongoing and regular basis.

Kansas Fusion Center and Kansas City, Missouri, Fusion Center both meet with varied subsectors, including electric utilities on an ongoing basis. Also, being part of the distribution of materials has proven important to the Washington State Energy Office.

Exercise, Exercise, Exercise.

When fusion centers and state energy stakeholders exercise together, the understanding of the roles, responsibilities, and capabilities of each public and private organization grows. It also helps identify information sharing needs, existing gaps, and pathways to improvement. For example, the New Jersey fusion center, named the Regional Operations and Intelligence Center (ROIC), conducts an annual statewide exercise that includes multiple agencies. Typically, the Board of Public Utilities has a seat on the planning committee and the exercise includes critical infrastructure.

Another benefit of regular participation in exercises is that it helps to minimize the disruptive effects of employee turnover at state agencies. Regular participation in training events ensures that employees from each agency continue to interact and remain informed on who their ESF counterparts are in various state offices at any given time and aids in deepening and further institutionalizing relationships. Additionally, follow up exercises including After Action Reports and six-month follow ups afford additional opportunities for proactive engagement.

Co-location Removes Barriers.

Relationships and communication thrive when distance is not an impediment. In New Jersey, the BPU's Bureau of Emergency Management is embedded in the ROIC. According to both state police and FBI at the ROIC, this leads to greater and better interaction with the agency. Daily briefings are attended by the commission staff, who add perspective and insight to statewide discussions. Texas has one PUC staff focused on physical security with the fusion center. In Tennessee, the SEO is co-located in the state's Emergency Operations Center, helping foster reciprocal communications and interactions that monitor and share threats.

State-level Information Sharing Protections Encourage Information Sharing.

Notably, more than half of U.S. states have exemptions for Critical Energy Infrastructure Information (CEII), created by statute, that protect designated information shared by energy infrastructure owners and operators from disclosure under open records laws.² State-level open record exemptions and CEII designations foster confidence and trust among information sharing partners that sensitive information will be protected.

Ongoing threats to critical infrastructure are typically shared in Suspicious Activity Reports (or SARs) that are created by the fusion center. The SAR program is a nationwide effort.³ Generally, SARs may be accessed through the Homeland Security Information Network (HSIN), which Public Utility Commissions and State Energy Offices are encouraged to join. Additionally, information may be accessible through membership in an Information Sharing Analysis Center (ISAC), which are delineated by sector. The Multi-State or MS-ISAC is open to public-sector entities.

Engaging with Fusion Centers

NARUC asked PUCs, State Energy Offices and fusion center leaders how to develop better working relationships. The following bullets include some of their tips and tricks.

- Proactively reach out to the fusion center to provide introduction, especially due to personnel changes both at the PUC/SEO and at the fusion center.
- Consider security clearance for one or more staff members, if required by fusion center to attend briefings.
- Learn whether the fusion center has a liaison program and complete the requirements.
- Reach out to the fusion center and provide a synopsis of what the PUC/SEO offers – including ongoing interaction with utilities and ongoing status updates of power/water/gas across the state.
- Join or encourage regular meetings.
- Ensure that contact lists are maintained and updated on a regular basis. Keeping up to date lists and contact information can become an important challenge.

2 <https://www.ecfr.gov/current/title-18/chapter-I/subchapter-X/part-388/section-388.113>

3 https://www.dhs.gov/sites/default/files/publications/17_0526_NSI_SAR-Analysis-TTA-Fusion-Center-Analysts.pdf

- Create written relationship guidelines and memorandum of understanding between agencies. Have a documented succession plan.
- Use group email lists and phone numbers to minimize the reliance on one or two people. Consider using lists that reference titles instead of individuals to assure continuity.
- Create joint coordination groups, or sector-specific groups to discuss solutions to common issues,
- Establish guidelines for information sharing to protect critical infrastructure, and other sensitive issues.
- Participate in exercises and workshops to build a deep, collaborative relationship with the fusion center.
- Retain open lines of communication between State Energy Offices and the fusion center to assure collaboration and aggregation of data points that could signal trends.

Regardless of how well state agencies collaborate, there are always challenges to building and maintaining the relationship. These include **personnel turnover**, navigating the **jurisdictional boundaries** between regulators and regulated utilities, and **developing trust relationships** with intelligence gathering entities, such as Fusion Centers. Personnel turnover is an issue for many state agencies. Staff may leave and find other jobs within or outside the government, creating a talent vacuum. PUCs also have a delicate relationship with the utilities they regulate, and utilities can be sensitive about releasing confidential information to the PUC—making maintaining open lines of communication a challenge.

Engagement Case Studies

Case Study 1: New Jersey

Agency	Personnel
PUC	Jim Bruncati
Fusion Center – State Police	Brendan Liston
Fusion Center – FBI	Dean D’Agostino

The Regional Operations Intelligence Center (ROIC) is New Jersey’s state fusion center, a joint interagency intelligence enterprise comprised of 175 personnel from various law enforcement and public safety agencies. The ROIC is the state’s hub for intelligence and includes input and personnel from agencies such as the FBI; US Department of Homeland Security, NJOHSP; and numerous state, county, and municipal agencies. Analysts from all partnering agencies collaboratively link data to create “actionable” intelligence that guides tactical investigations in real time. The ROIC is also the home for the Office of Emergency Management and State Emergency Operations Center, and it serves as the command center for all state-led emergency response operations, such as natural disasters, chemical/nuclear emergencies, and terror alerts. During emergency response missions, the ROIC serves as the gateway for situational information and requests for aid. It allows a coordinated and measured response by matching requests with resources and personnel run by federal, state, and local agencies.

Engagement with State Energy Stakeholders: There is a mature and reciprocal relationship with the NJ Board of Public Utilities and the New Jersey Fusion Center, located at the Regional Operations and Intelligence Center (ROIC) in West Trenton. The NJ Fusion Center is co-located with the State Police and the Emergency Management and Response function for the state. Two NJ BPU emergency management staff are assigned to the Regional Operations and Intelligence Center (ROIC), where they interact daily with the other Emergency Support Function leads. On a day-to-day basis, the NJ BPU staff are included in intelligence briefings that encompass statewide jurisdiction. When major events happen, such as the Super Bowl or the Pope visiting a neighboring state, the energy sector is represented at the planning stages by the NJ BPU staff.

Benefits: Information flows daily both from the NJ BPU to the fusion center and from the fusion center to the NJ BPU. When a situation arises and information is needed from the utilities, the NJ BPU staff has ongoing relationships and can obtain information quickly.

- **Faster Response:** When a shooting occurred at a utility, state police and the fusion center were alerted by local authorities. To get information quickly, the fusion center/state police reached out to the NJ BPU Bureau of Emergency Management, who were able to get quick insight and report back. This is due to the nature of the relationships that the BPU has with the emergency management staff of the utility. In this instance, the shooting was targeted, and appropriate response was made.

Without the quick turnaround and response, law enforcement would have taken much longer to find the right resource to get information, and the response would have taken much longer.

- **Proactive Coordinated Efforts:** In response to the uptick in attacks on substations, the fusion center/State Police and NJ BPU Emergency Management Bureau initiated a proactive review of vulnerability of substations. Working with the utilities across the state, the NJ BPU identified the infrastructure and prioritized the criticality of substations. A physical inspection by law enforcement and the BPU Emergency Management staff of the substations was scheduled and conducted with recommendations for hardening them as a target being proposed. This is an excellent example of partnership at work.

Tips:

- Build relationships.
- Co-location has proven time and again to be advantageous, reducing lead time and increasing interaction.
- Open lines of communication - reciprocal conversations
- Security clearance, although not specifically a requirement, is helpful for determining who is vetted.

One example of this rapport was cited by New Jersey's fusion center. Brendan Liston (New Jersey State Police at the fusion center) pointed to the NJ Board of Public Utilities (NJ BPU) as the lead agency for energy related matters. Staff from the NJ BPU are embedded at the Regional Operations and Intelligence Center (ROIC) and are engaged frequently to gather background information when energy related matters are involved. Recently an initiative to evaluate substations as part of the infrastructure protection unit's plan to secure state level assets and community-based targets, the NJ BPU scheduled site surveys of system critical substations. NJ BPU gathered the background information and prioritized the assets for the exercise.

Dean D'Agostino, FBI with the New Jersey fusion center reiterated the importance of the relationship with the Board of Public Utilities. According to D'Agostino, the relationship established with the NJ public utility commission, which is also the state's Emergency Support Function 12 (Energy) lead is exemplary and has been the model for other states to emulate. Among them, Boston Regional Intelligence Center (BRIC) and Delaware Information and Analysis Center (DIAC), as well as Joint Regional Intelligence Center (JRIC) in California have used New Jersey's model.

Both Liston and D'Agostino stated that the BPU is co-located, and this goes a long way to the partnership. The BPU is involved in daily briefings and emergency management during state declarations.

Understanding the role of the fusion center and the value of reporting:

Fusion centers serve as a clearinghouse for data. Their all-hazards, all threats approach purposely enables them to vet information and create a picture that individual entities may not have. By gathering information from multiple sources, the data can be evaluated and analyzed to determine if there is a pattern.

A situation was shared where there was a shooting at a utility. Although the shooting was reported to the local police, and the police investigated, unless it is reported to the utility commission or the fusion center, it may not be perceived to be part of a pattern. In this instance, the local police shared the information with the fusion center who reached out to the state public utility commission (in this instance, New Jersey's BPU) who then contacted the utility to get the background. Due to the relationships the PUC has with emergency management personnel at the utility, and the relationship the PUC has with the fusion center, information was gathered and relayed quickly. In this situation, the shooting was targeted and was not an attack on the grid.

With strong relationships, the proactive protection of critical infrastructure assets is a result of collaboration by the fusion center and the PUC. An example of this cooperation is the evaluation of substations and their vulnerabilities that was done by the fusion center and Board of Public Utilities in New Jersey. These proactive programs are in the best interest of the public and can provide valuable insights for utilities. An additional program hardening those substations was also implemented that included training in what to report and who to report it to for entities that surround critical infrastructure. Although not impossible to conceive or implement, it would be much more challenging to put programs like these in place if the fusion center and the energy stakeholder officials are not collaborating and working together.

Case Study 2: Texas

Agency	Personnel
Public Utility Commission of Texas	Chuck Bondurant
Texas Fusion Center	Clint Ladd

Although not officially in the Infrastructure Liaison Officer (ILO) program, the fusion center recognizes the importance of the Texas utility commission's role as lead with energy emergencies.

Relationship: The Texas fusion center does have a good relationship and communicate with the PUC. Both the PUC and the fusion center recognized each other and work together during blue and black sky. In Texas, there are eight fusion centers with 30-40 partners in the electric sector who represent both physical and cyber security. These partners participate in an ILO or Infrastructure Liaison Officer program. ILOs are vetted to receive intelligence information and trained to properly identify and report suspicious activities, possible threats to critical infrastructure, and crimes to the state's 24/7 fusion center.

The fusion center offers a program to private/public entities that is a two-day course, and upon completion the entity is entitled to sit in on briefings.

The fusion center participates and hosts monthly and quarterly meetings with the critical infrastructure community.

Benefits: The fusion center hosts a Homeland Security Information Network (HSIN) community of interest and shares monthly newsletters, training, conferences, and shares CISA updates and INTEL products. It also provide awareness of incidents, threats, and trends involving crime, sabotage, and terrorist activity via webinars, bulletins, and a training conference. Access is available to organizations through the HSIN portal and acceptance to the Fusion Center Community of Interest.

Another benefit of the fusion center is to enhance networking, collaboration, and the communication of intelligence information between multiple agencies and sectors.

The fusion center also provides real-time information during critical incidents and active, time-sensitive investigations.

Roadblocks: Although the lead person at the PUC has a security clearance, the fusion center still requires an ILO certification for many of the activities. This has not hampered the relationship; however, it appears that other fusion centers may have similar programs open to members of the State Energy Office or PUC. In addition, there are guidelines for participating in the ILO program including:

- Have a minimum of five years of experience in their industry or field, preferably with supervisory or management duties.
- Perform a role involving security, safety, and/or emergency management of critical infrastructure.
- Obtain permission from a supervisor to participate.
- Consent to undergo a criminal history background check.
- Sign a confidentiality agreement.
- Complete the ILO training course.
- Demonstrate active participation over time.

Tips:

- Develop the relationships prior to an event/incident.
- Open communication is key.
- Develop an ongoing schedule of meetings.

“The Real-Time Watch Center unit powers the Texas Fusion Center. The Watch is a 24/7 unit that works with federal, state, regional, and local law enforcement and serves as the state repository for homeland security information and incident reporting. It provides real-time intelligence support to law enforcement and public safety authorities and consolidates information and data on suspicious activities and threats from all jurisdictions and disciplines as well as the public. During emergencies or periods of increased threat, the Watch may ramp up to receive and process additional information.”

Appendix I: Interviews for this Guide

State	Agency	Personnel
New Jersey	PUC	Jim Bruncati
	Fusion Center – State Police	Brendan Liston
	Fusion Center - FBI	Dean D’Agostino
Texas	PUC	Chuck Bondurant
	Fusion Center	Clint Ladd
Missouri	Fusion Center- Kansas City	Mike Satter
Kansas	PUC/SEO	Lynn Retz
Kansas	State Fusion Center - Topeka	Colin Mulloy, Dave Young, Mike Riblett, Mike Brent
Massachusetts	SEO	Paul Holloway
Illinois	PUC	Jim Harmening
Michigan	SEO/PUC	Alex Morese
Montana	SEO	Jeff Blend
Tennessee	SEO	Ben Bolton
Wisconsin	WEM (Fusion Center)	Drew Werner
Washington	SEO	Elizabeth King, Johanna Hanson, Gonzalo Nunez
Federal Agencies, National Associations, and Organizations	DOE	Megan Levy
	NASEO	Sarah Trent, Kirsten Verclas, Blake Kinney
	NGA	Dan Lauf, Jessica Davenport
	Del Val Fusion Center and NFCA	Stacy Irving

Appendix II: Resources

- [List of Fusion Centers](#)
- [Considerations for Fusion Center and Emergency Operations Center Coordination: Comprehensive Preparedness Guide \(CPG\) 502, May 2010](#)
- [National Fusion Center Association](#)
- [National Network of Fusion Centers Fact Sheet](#)
- [Protection Capabilities for Fusion Centers: An Appendix to the Baseline Capabilities for State and Major Urban Area Fusion Centers, December 2008](#)
- [State Protection of Critical Energy Infrastructure Information \(CEII\), National Governors Association, July 2019](#)
- [Human-Driven Physical Threats to Energy Infrastructure, National Association of State Legislatures, May 2023](#)

Acknowledgment

This material is based on work supported by the Department of Energy under Award Number DE-CR0000009.

NARUC thanks the following individuals and organizations for their valuable contributions to the development of this mini-guide: **NASEO** – Kirsten Verclas, Blake Kinney, and Sarah Trent, **NGA** – Dan Lauf and Jessica Davenport.

Please direct questions regarding this mini-guide to Jody Raines, NARUC, jraines@naruc.org.

Disclaimer

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.