



The Our American States podcast—produced by the National Conference of State Legislatures—is where you hear compelling conversations that tell the story of America’s state legislatures, the people in them, and the policies, process and politics that shape them.

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Meeting Threats to Our Energy Security | Sept. 4, 2022 | OAS Episode 170

Ed: Hello and welcome to “Our American States,” a podcast from the National Conference of State Legislatures. This podcast is all about legislatures, the people in them, the policies, process, and politics that shape them. I’m your host, Ed Smith.

KB: *Our primary role is to help federal, state and industry partners to overcome the inherit challenges associated with the restoration of damaged energy systems.*

Ed: That was Ken Buell, deputy director of the Office of Cybersecurity, Energy Security and Emergency Response or CESER at the U.S. Department of Energy. He is one of my guests on the podcast along with Brandi Martin, who manages the State, Local, Tribal and Territorial Program at CESER. Our focus on this podcast is the resilience of our electrical grid and systems in the face of extreme weather events and cyber threats. Just this summer, we’ve seen major flooding in Kentucky and Texas, extreme heat across the country and in Europe and growing concern about wildfires in the western U.S. State legislatures play a key role in shaping state policies that improve the security and resilience of energy systems. States also partner with federal agencies to identify risks, mitigate threats and respond to disruptions. CESER addresses emerging threats and works to protect the reliable flow of energy by improving energy infrastructure security. Buell and Martin discussed how CESER responds to natural and manmade threats, how the office works with legislatures and other state entities and the value of teaming up with state and local partners both during an emergency and at other times. They also highlighted efforts states are making to make their electrical systems more resilient. Here’s our discussion.

Brandi, Ken, welcome to the podcast.

BM: Thanks for having us.

KB: Yes, we are really excited to be here.

Ed: Well good to talk to you today, and I want to talk today, of course, about emergency preparedness and response and the overall resiliency of our energy systems, a subject we who are not in your field have come become all too familiar with in recent years. So why don't we start by telling the audience about the role of your organization. Ken, why don't you go ahead and start.

KB: Well Brandi and I are with the Department of Energy's Office of Cybersecurity, Energy Security and Emergency Response or CESER where I serve as the deputy director for Emergency Response and Restoration and federal lead for emergency support function 12 or ESF 12 under FEMA's National Response framework. During incidents like a major hurricane, FEMA will activate the National Response framework to bring to bear all federal resources available to help impacted regions and states with the immediate response of restoration of a community's critical lifelines. As ESF 12, our primary role is to help federal, state and industry partners to overcome the inherent challenges associated with the restoration of damaged energy systems through well-established coordinating mechanisms that enable shared situational awareness in a common operating picture. When needed, we can also provide technical expertise to assist with the assessment of damaged energy systems, restoration planning and connecting our state partners to available federal systems to include DOE's energy resilience programs.

Ed: So, Brandi, can you talk a little bit about your role working with the state, local and tribal and territorial governments as well?

BM: Sure. I lead the State, Local, Tribal and Territorial or SLTT program at CESER. We work closely with SLTT officials to enhance energy, security and resilience planning to build cybersecurity knowledge and, of course, to help with response with there is an emergency event. We engage with state officials who have equities in energy security, emergency preparedness and response. And this includes state legislators, governors and their energy advisers, state energy offices, public utility commissions and emergency managers. And all of these stakeholders play an important role. They make policy or investment decisions. They implement plans or they are preparing and responding to emergencies. Because CESER works with all of the officials I just mentioned directly and through our partnerships with associations like NCSL. And for example, with NCSL, we've been striving to keep state legislators informed of energy cybersecurity threats. Like this is the need to protect our critical energy infrastructure that enables our way of life. So, we know it is top of mind for states just in the number of bills we've seen proposed in recent years.

Ed: So, we talked a little bit Brandi before we got started on this about the fact that I was a newspaper reporter in the 1970s in Northern California and certainly covered a drought, wildfires, earthquakes, all kinds of natural disasters. But the scale of what is going on now seems to be so much different for states. And I wonder given those challenges, can you talk about how you work with states to prepare for these types of events and improve their energy resilience?

BM: Ed you hit the nail on the head. We've already seen nine weather and climate disasters so far this year. We've exceeded a billion dollars in losses so a massive amount of damages in 2022 alone. In fact, the National Oceanic and Atmosphere Administration or NOAA recently tallied up the cost of these storms since 2016 and we are only talking about tropical storms and hurricanes at this point. But they said it's half a trillion dollars in damages. Though not only is it a very expensive problem we are dealing with, it's the disruption to our daily lives. It's the loss of property and life and we are seeing this increase on not only the natural disaster side, but also on the cyber sides. Our office is very much focused on the cybersecurity side as well. We are seeing a frequency in sophistication of cyberattacks continue to increase. These growing threats on both sides, right, the natural disaster side and then these threats underscore our office's mission. We believe we can combat these increasing threats, but of course we can't do this alone. So CESER believes the best way to address these threats is through strong and collaborative partnerships with all of our stakeholders. So, across all different levels of government and with industry we all need to work together to address some of these challenges. And I'll note that recently we've been supporting state energy offices updating their energy security plans. These plans describe the state's energy landscape, the people and the processes and the state's energy resilience strategy. The plan outlines how a state can work with energy sector partners to protect their energy infrastructure from all of the hazards we just talked about and how they can mitigate energy disruptions by keeping the lights on and that fuel moving. These state energy security plans are required by congress and their intent is to ensure that each state has reliable, secure and resilient energy infrastructure. So, I encourage all of the legislators listening to check out your state's plans once they are completed.

And we've also heard that many state energy offices will be expanding their energy security planning programs or their energy security teams over the next few years. And we look forward to working with them directly to support those efforts.

(TM): 07:47

Ed: Ken, let me switch to you for a second. If I understand correctly, your team's work is primarily on the response side. And I wonder do you also work in the preparedness area or how does it fit in with preparedness?

KB: Well preparedness and response can really be thought of as a feedback loop. The lessons we learned during real world emergency response following a disaster directly informs our preparedness activities. The cycle ultimately leads to better emergency response. After every major incident, we conduct an after-action review with our ERS 12 responders and our partners that we worked with during the incident to capture the lessons learned about things that we did well and opportunities for improvement. Lessons learned are shared across CESER teams helping inform our non-response activities, including research and development of tools and technologies. Likewise, lessons learned during exercises or best practices heard from states and the industry get incorporated into our future responses.

Ed: So, are there any specific emergency preparedness initiatives you'd highlight the types of things you are talking about that you have worked on with states or areas of the country?

KB: Absolutely. Our team has its most significant impact during an incident at the state level. Response is relationships. The relationships that we build with our state partners during both a response and steady state are critical to our mutual success. Our response cadre is made up of over 100 volunteers recruited from across the DOE enterprise. We have a regional model that not only enhances our engagement with regional and state partners, but also enables us to respond to multiple and simultaneous or back-to-back incidents. Each regional team is led by a very experienced ESF 12 regional coordinator or RC. Our RCs frequently engage in regional and state training and exercise opportunities, and we look to expand our regional presence and capabilities in the coming years.

In 2021, we launched federal, state ESF 12 training to introduce our state counterparts to the capabilities that we can offer, get a better understanding of the issues that concerned our state partners and to further develop as important response relationships. In the last couple of years, we've continued this state ESF 12 training and invited our state partners to our regional team annual refresher training. We've had great interest with over 50 states and territories attending. And when we've had major incidents, the joint training has really paid off.

Ed: Ken let me ask you, how well does the federal government work with states to address these energy concerns related to extreme weather? Is it better in some places than others? Some regions than others?

KB: From the perspective of DOE's response and restoration team, we are primarily focused on the immediate aftermath of a disaster and those issues impacting life and safety. So, we are looking to assist impact the states with rapid and efficient restoration of damage

and energy systems. Getting the power back on and the fuel moving is critical to the stabilization of community lifelines that will, in turn, enable longer term recovery. In the aftermath of the historic 2017 hurricane season, we created an ESF 12 catastrophic incident response team or CIR team. This team has the technical skill to assist with damage assessment and restoration planning. In the last two years, we've deployed CIR team members to Louisiana to assist the state and small coastal rural electric utilities devastated by Hurricanes Laura and Ida. Our efforts in coordination with the states significantly expedited the restoration of transmission and distribution systems that were essentially wiped out. We coordinated with our interagency partners to get temporary power or generators to those areas that experienced long term power outages enabling some return to normalcy for the people whose lives were forever changed by these storms. And our damage assessment reports assisted Louisiana and the utilities with FEMA public assistance requests and longer-term recovery planning.

In the last few years, we've recruited team members that work with the DOE programs focused on grid development, energy efficiency and renewable energy. When needed, we plan to deploy these individuals towards the end of the response and restoration phase to assist states with longer term planning that can support the state's energy resilience goals.

Ed: Thanks Ken. I'll be right back after this with the rest of our discussion.

(TM): 12:27 advertisement

I'm back with Ken Buell and Brandi Martin from the Office of Cybersecurity, Energy Security and Emergency Response. Brandi we were just talking before the break about the relationship between your agency and state and local folks. What kind of feedback do you get from the people that you deal with?

BM: We are hearing that our priorities are really aligning so focusing on energy resilience and very much on energy reliability, it's top of mind for us. And the really exciting thing is the Infrastructure Investment and Jobs Act, which was passed last year, includes \$62 billion, so B with a B billion dollar, for DOE. And a lot of that funding is going to go to states and energy owners and operators to upgrade and modernize our energy infrastructure. It's going to make it more resilient to all these extreme weather and climate events we are talking about and to cyberattacks. So, it's going to be a lot of efforts around technical assistance. And we are going to work very closely with states to make sure that they are able to make the most of this once in a generation opportunity.

Ed: Well, let me ask you also about the role of state legislatures. In the actual response to an emergency, I know it is various state agencies on the executive side that lead that effort, but what's the role of legislatures?

BM: I think it's a great question and that sometimes I have to explain that to other energy officials that we know that the state legislators aren't the emergency responders. But they do have an important role. Like legislators are the ones who are going to establish the framework that enables a coordinated response when there is a disaster. Through legislation, states can designate specific agency emergency authority roles or responsibilities. They are establishing the priority and special powers and they are creating high level state strategies around planning and preparedness requirements. And, of course, they also provide funding for all of these efforts. And I'll also note that outside of emergencies, they also have a big role in hazard mitigation. Thinking about how do we prevent some of the damage. How do we prevent some of the loss of life or loss of businesses or households. This might be through action right after a disaster where they focus on how do we build back better or it could be through proactive measures to strengthen infrastructure. So, for the next you know ahead of that next storm or ahead of that next event, we want to overall reduce the risk or the severity of the disruption.

Ed: Can you give me any specific examples of state legislation trying to address this whether its preparedness or resilience or response?

(TM): 15:36

BM: There's actually a lot of great examples. We don't have an hour, so I'll just highlight a few. A few states have focused on investments. So, Oregon created a \$50 million fund to provide grants for planning and developing community resilience projects. Maine passed a law to create a clean energy and a sustainability accelerator really focusing on climate equity. Colorado put some money forward to enhance rural communities' energy resilience through development of microgrids. And all three states kept vulnerable communities in mind when they drafted the legislation. And, of course, I've got to mention cybersecurity, too. That has been top of mind recently. Tennessee just passed legislation requiring cooperative and municipal owned utilities to prepare and implement a cyber plan for ... facilities and electronic data. And then also I'll just mention that with all of what we've seen in the past few years with this extreme weather, we are seeing other states move to protect that energy infrastructure itself. So, New Mexico was focused on the hardening utility distribution systems. Texas introduced weatherization requirements for critical energy infrastructure. And lastly you and Ed and I were talking about the wildfires. California and Oregon recently passed

quite a few different laws requiring utilities to create and comply with risk-based wildfire mitigation plans. A lot going on the state side. Some really great work.

Ed: Yeah, it sounds like it. And a good point that cybersecurity is a critical issue here, too. Staying with the state legislatures, Ken, let me ask you. Certainly, they sometimes feel they are weighing investments and energy resilience versus energy response. And what would your advice be? Should they prioritize one over the other or is it really two parts of the same thing?

KB: The short answer is no. We need to focus on both capabilities to ensure rapid and efficient restoration of damaged energy assistance with an eye towards resilient longer-term rebuilding once the impact of communities are stabilized. In the last few years, we've seen a convergence between immediate response of longer-term recovery and an increasing ability to build back better as energy systems are restored. During the recent flooding event in Kentucky, we saw the deployment of FEMA's response and recovery teams almost concurrently. In a meeting as recent as this week, FEMA leadership noted that the concurrent deployment of these teams would be their model going forward. And we've geared our ESF 12 program to support that model and we will be looking to assist states with this new transition between response and recovery.

Ed: And so finally, I'd like to ask both of you if you have any other thoughts you'd like to share with our audience which is state lawmakers, legislative staff and others interested in state policy. Ken why don't you go ahead? What would your closing thoughts be?

KB: Well first it's been a real pleasure to join the podcast today. Historically hurricane season has peaked around September and October and while we are certain we will see some activity this year, we are hopeful that impacts will be minimal. Regardless the DOE ESF 12 team stands ready to support your immediate response needs and to help achieve your longer-term resilience goals. We thank you for your time today and all the best as we go through this hurricane season.

Ed: Well, thank you Ken. Brandi you get the last word. What would your message be to those folks at the state and local level?

BM: I would like to thank all of our listeners and NCSL for giving us the opportunity to share more about CESER's work. This is my first podcast. It's been a great experience. Although the state legislators are tuning in, we look forward to seeing you at future NCSL events and encourage that if you would like to learn a little bit more about what Ken and I talked about or access any of the great resources we've created specifically for state officials, state local travel territory officials, please visit our website and that's energy.gov/CESER and that's C E S E R.

Ed: Well thanks to both of you so much. This is such a critical area and it's reassuring to know that there is a team such as yours on top of it and keeping an eye on things. I thank you both so much and have a good weekend.

KB: Thank you.

BM: Thanks Ed.

(TM): 20:10

Ed: And that concludes this episode of our podcast. We encourage you to review and rate NCSL podcasts on Apple podcasts, Google Play, Pocket Casts, Stitcher or Spotify. We also encourage you to check out our other podcasts: "Legislatures: The Inside Storey" and the special series "Building Democracy." Thanks for listening.