Remarks of Commissioner Geoffrey Starks

Congressional Black Caucus Foundation 2021 Virtual Annual Legislative Conference

Energy Braintrust Panel

September 14, 2021

Thank you, Congresswoman Jackson Lee, and thank you to the Congressional Black Caucus Foundation for inviting me to join this distinguished panel today. This is a timely discussion, as our need for a secure, resilient energy grid has never been greater. Each year brings the impact of climate change into clearer focus, as we cope with record high and low temperatures, storms of greater ferocity and scope, and rapidly depleting natural resources. At the same time, we are dealing with the greatest public health crisis in a century, forcing many families to stay home for work, schooling, and connecting with their community.

But even as our reliance on the energy grid has increased, we face new challenges. As Secretary Granholm recently warned, cybercriminals and adversary states seek to hack into America's energy sector. In addition, the unpredictable weather patterns generated by climate change have increased demand and upended historical approaches towards energy resource management. These extreme weather events are particularly devastating for Black people and other communities of color, which are concentrated in areas hardest hit by extreme weather, natural disasters and power outages.

Addressing these issues will take a whole-of-nation response, and because of the interrelationship between the energy and communications sectors, the FCC has a critical role to play. During a disaster, lives may depend on public safety communications, but those networks rely on power. That's why the FCC must ensure that our telecom networks have reliable access to power even as these events become more frequent. Doing nothing is not an option, as I learned when I visited Puerto Rico in late 2019. I heard from the public, industry, and government about how several natural disasters had affected the Commonwealth's communications networks. After the earthquakes in early 2020, the overwhelming majority of wireless service outages in Puerto Rico were due to power loss, not damage to facilities. As Congresswoman Jackson Lee and Mayor Turner know very well, Hurricane Harvey had a similar impact on Houston.

Given the importance of these issues, the FCC should update our rules for this era of climate change. I appreciate industry's voluntary efforts in this area, but the Commission should prioritize developing mandatory rules. Access to backup power and pre-planned coordination with energy companies could make a huge difference in maintaining or quickly restoring communications during an emergency, and I would additionally welcome legislation on this subject.

Like the energy sector, telecommunications networks also face serious cyber threats from criminals and state actors. In the last year, ransomware hackers have successfully penetrated the security of major telecom providers in South America and Asia. Other groups linked to adversary states have sought to obtain sensitive information from carriers in the United States, Southeast Asia, and Europe. Our networks – from the sophisticated operations of a commercial wireless carrier to your home's Wi-Fi router – also may contain equipment from untrustworthy vendors that could provide backdoor access to criminals and adversary states.

I appreciate President Biden's recent National Security Memorandum calling for a broad government and industry cybersecurity initiative across critical infrastructure sectors. Like our colleagues in the Department of Energy and DHS, the FCC is working aggressively to counter all cyber threats. We are engaging with our federal partners, including CISA, to identify network vulnerabilities and encourage carriers to adopt security best practices. We have initiated proceedings to block certain foreign telecom carriers from carrying communications within the US. Working with Congress, we have begun the process of identifying, removing, and replacing nearly $2 billion worth of equipment from untrustworthy vendors in our wireless telecommunications networks. And most recently, we have proposed to revoke the authority to import, market or sell equipment from those same vendors. This could include devices like sensors, webcams, and routers that might be used by consumers and businesses, including energy companies.

The energy sector needs to know that our telecom networks are secure and resilient. With such assurances, the energy sector can take full advantage of 5G, the next generation in wireless service. 5G will not only be faster than its predecessor, but also will allow expanded communications between devices. While 4G allows communications between up to 4,000 devices per square kilometer, 5G will allow communications between up to 1 million devices in the same area. Energy companies, along with many other critical infrastructure sectors, will be able to use this technology to create massive networks of sensors generating information for data analysis and action.

Smart meters are a good example of how the energy sector is already using advanced telecom capabilities. As I explained in an op-ed published nearly two years ago, smart meters allow energy companies to monitor the health of the grid and deliver services to customers. Using these smart meters, energy companies can inform consumers about their energy usage, warn them about potential high energy costs before they are incurred, and identify consumers who might benefit from enrollment in billing support programs. This is particularly important for Black households, who spend 43 percent more of their income on energy costs versus white households.

Energy companies are also using advanced wireless technology to increase the efficiency and safety of their networks. Indeed, nearly two years ago, I met with a startup company specializing in cloud-based energy management. Like those technologies, smart grid systems will not only automatically detect potential grid failures and pipeline breaks, but will be able to react within a fraction of a second to confirm and address any problem before it poses a threat. The next-generation energy grid will also be able to shift resources to adjust to changing demands, integrate new renewable energy sources, and perform complicated data analysis at the edge of the network, increasing speed and security.

Finally, all across America I see energy and telecom companies partnering with cities to power smart cities, which use monitoring systems to reduce pollution and energy consumption. Mayor Turner's Houston is a leader in this area, using communications technology to control traffic, monitor air quality, manage water and energy resources, and identify public safety hazards before they turn into crises. 5G will allow these efforts to go to the next level, with significant benefits for urban communities with the highest concentration of people of color and the greatest environmental concerns.

I see deep parallels between the energy sector and telecommunications sector – both face some serious challenges, but the future also holds tremendous promise. Let's keep pushing to fulfill that promise. I look forward to the discussion.