Prepared Remarks of FCC Acting Chairwoman Mignon L. Clyburn
UTC Critical Infrastructure Communications Policy Summit
Washington, DC
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Good morning, and thank you, Ms. Nelson, for the introduction.

It's always a pleasure to be with UTC. I especially appreciate the fact that the invitation came before my title changed. You asked me here because of my erudite policy analysis, not my title. Right, Mr. Oldak? Seriously, today's summit really is in my wheelhouse.

If you had a Venn diagram, with telecommunications in one circle, and critical infrastructure, like energy and water, in the other, my professional background is where the two circles overlap. I've served as FCC Commissioner for the past four years, but I spent 11 years on the South Carolina Public Service Commission working on the nuts and bolts of state energy policy.

So when I arrived at the FCC in 2009, I did not need a primer on the extent to which our communications networks and critical infrastructure, like electric and gas utilities, are interrelated, and how that interdependence is increasing every day.

The fact that smart grid technology promises to increase the efficiency of electric networks by intelligently monitoring and moderating user demand, improve resiliency by detecting problems, and automatically routing power to avoid localized outages is not a surprise to me. Fully realizing this potential, however, requires modernizing meters, energy generation, transmission, and distribution systems; which call for robust and advanced communications systems. When the FCC released the National Broadband Plan in early 2010, I was elated that there was a distinct chapter on harnessing high-speed Internet to improve energy efficiency. The Plan included recommendations to speed the deployment of smart grid technology by providing utilities greater flexibility to deploy the technologies that best suit their needs.

The subjects of today's summit – the reliability, resiliency, and security of critical infrastructure – offer some of the best examples of how closely our communications networks and electric grid are intertwined.

Over the past year, two major weather incidents kept us busy at the FCC: Superstorm Sandy, and the June 2012 derecho. Immediately after Sandy, about 25 percent of the cell sites in the affected areas were not operational, and cable service was hit just as hard. After the derecho, 17 emergency call centers lost service completely, affecting the ability of more than two million people to reach 911.

One common link of most of these communication failures was the power grid.

It's hard for many to imagine getting through an ordinary work day without a smartphone, tablet, or laptop. In times of emergency there is a more acute need to be connected; whether it's to check on loved ones or call 911. Massive outages are simply unacceptable.

So, the FCC has been moving aggressively to enhance network reliability, resiliency, and security. We launched an investigation of the network failures after the derecho, and issued a report at the start of this year. Then in March, we initiated a proceeding to examine and advance

many of the recommendations of that report; such as auditing the physical routes of 911 networks to identify and correct single points of failure, promoting greater physical diversity of monitor and control links, improving notification of power outages for emergency call centers, and improving backup power at central offices.

Earlier this year, we also conducted field hearings to explore the lessons of Sandy and other natural disasters. The key objectives of these hearings were to identify ways to prevent communications outages in the first place, hasten network recovery, and better prepare the public to cope with disaster, and we are continuing to move forward.

Stepping back and looking more broadly, the Commission is working on a number of additional items to enhance public safety, which would be relevant to today's summit. A common theme of these initiatives is spectrum.

Early last year, Congress passed a law giving the FCC authority to conduct the world's first incentive auction to reallocate broadcast spectrum for broadband. The law also stated that revenue from this two-sided auction would support the deployment of a nationwide broadband public safety network operated by the First Responder Network Authority, or FirstNet. The Commission is taking its FirstNet responsibilities seriously, and has met all its statutory obligations on time.

The Commission's biggest responsibility regarding FirstNet, is conducting a successful auction that will raise revenue for the network. There is no higher organizational priority than incentive auctions, and we are on track to conduct the first incentive auction in 2014.

The Commission proposed incentive auctions in the first place because we have an economic imperative to use spectrum more efficiently. Fueled by the emergence of smartphones, which generate 50 times more traffic than traditional cell phones, we've seen an explosion in demand for spectrum. But spectrum is finite, so we have to make sure we are maximizing the value of this limited resource. One band in particular that we are looking to put to better use is the 4.9 GHz band. When the Commission first allocated 50 MHz of spectrum in the 4.9 GHz band for fixed and mobile services, it intended to provide the public safety community with the opportunity to develop and leverage the benefits of emerging broadband technologies. The agency anticipated that this band would support new broadband applications, such as high-speed digital technologies, for on-the-scene incident management and dispatch operations. Last year, the Commission determined that this band has not been as well utilized as expected. The Commission thus launched a rulemaking to unlock the potential of the 4.9 GHz band for public safety use, foster the development of new technologies for public safety, and enable mutually beneficial relationships between public safety and users in the critical infrastructure sector.

Among our proposals are: adopting standards to promote interoperability of equipment in this band; using the band for wireless backhaul that could support the deployment of the nationwide public safety network; and expanding eligibility to more than just public safety entities.

We are specifically examining whether, and to what extent, critical infrastructure industries, such as utility companies, should be able to hold these licenses, and if so, how we can best accommodate a variety of uses in the band by reevaluating existing coordination procedures, spectrum sharing mechanisms, and technical specifications.

There is a wide range of bands and services that have been actively used by utilities, or that we expect could be useful, to meet the industry's varied needs – whether on a licensed or leased basis.

Moreover, many of these bands are allocated on a primary basis, incorporate frequency coordination procedures, or have other characteristics that allow for high quality of service more appropriate for critical infrastructure and routine communications needs. The FCC staff has historically worked with utilities to find appropriate ways to address these needs.

Yes, it's true that there are many issues to work through, but today's summit, which is co-hosted by the Department of Energy, provides a valuable forum for various stakeholders to tackle our common challenges. By working together, we will develop solutions that strike the right balance between critical infrastructure industries, consumers, carriers, and those in the public safety community.

And my interest in these issues does not just stem from my professional background, but it is extremely personal.

Home for me is Charleston, South Carolina. I still remember that evening in Moncks Corner, South Carolina on September 21, 1999, when Hurricane Hugo struck. I was balled up in a dark corner, near other family members who thought we would escape the worst of it by traveling 30 miles or so inland. I listened to the first trees I ever loved being broken like toothpicks. I sat in fear as my grandmother's tin roofs from the barn, smoke house, and parts of the house were being pulled away by what at the time felt like the a huge, heartless hands of a giant.

Many of you can recount similar experiences, and while we cannot prevent natural disasters from occurring, we can and should do everything in our power to lessen their human toll by ensuring that we have reliable, resilient, and secure critical infrastructure. And while the stakes are high, together – as we accept that the once in every 100-year event is likely to occur each year, is now the new normal – let's roll up our sleeves, get to work, and do this thing right.

Thank you.