

## UNITED STATES SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES SENATOR LISA MURKOWSKI, Chairman

Opening Statement Hearing on Evolving Energy Infrastructure Chairman Lisa Murkowski February 8, 2018

Good morning, everyone. The committee will come to order.

During his State of the Union address, President Trump called for a renewed focus on our nation's infrastructure. Here at the Energy and Natural Resources Committee, we have been working to improve our nation's energy infrastructure for the past several years—largely focusing on the roadblocks that hinder responsible development, challenges related to cybersecurity, and the pursuit of innovative technologies.

Our nation's energy delivery systems have benefited from significant innovation over the years. Today's hearing will put current infrastructure opportunities into perspective by examining how America's energy—from production to generation to distribution—has evolved over time. This is an opportunity to look at what we have, how we came to have it, and to examine which policies helped the effort.

I often think back to the development of the Trans-Alaska Pipeline during the 1970s. Prudhoe Bay was the largest oilfield ever discovered in North America but we needed a way to transport the oil from our remote North Slope.

After much study and debate, Alaskans determined that a pipeline was our best option, which required Congressional approval in the midst of an oil crisis. Since TAPS came online in 1977, the 800-mile pipeline has successfully transported more than 17 billion barrels of oil from the North Slope, to an ice-free port in Valdez.

More than half of the pipeline runs above ground—which is a necessity given Alaska's prevalent permafrost terrain. It is truly an engineering marvel. It's a lifeline for Alaskans, it creates jobs, provides revenues, and has enabled the creation of our Permanent Fund. It is also a critical national security asset for all Americans, particularly those along the West Coast.

Today's technologies like fracking have allowed us to reach oil and gas resources that were previously unattainable. And technological improvements like horizontal drilling have enabled industry to shrink their footprint while reaching resources miles away from the drill site. One thing that hasn't changed is that we still need pipeline to deliver these resources to refineries and natural gas plants—it's just unfortunately become a little bit harder to build them. Perhaps no asset has seen more innovation and evolution than our nation's energy grid. I think we all recognize that the grid is no longer just an energy delivery system for large, centralized generation assets. Distributed generation, micro-grids, and energy storage now bring electricity closer to home, changing the way consumers interact with their electricity providers.

At the same time, we have seen significant changes in energy consumption. Efficiency improvements and retrofits allow us to use less energy to power and heat a greater space at a lower cost. In some of Alaska's more remote communities, simply switching streetlights to more efficient LEDs we have seen savings in tens of thousands of dollars annually.

Layered on top of the infrastructure evolution is the digital revolution. The increased digitalization of our nation's energy delivery system provides numerous benefits. Real-time monitoring can allow for system optimization and identify potential issues in their earliest stages. Better data assists consumers in making informed choices about their energy usage.

At the same time, increasing the amount of internet connections also increases the number of access points, which can leave our critical infrastructure vulnerable to potential bad actors. Determining how best to secure our infrastructure from ever-increasing cybersecurity threats is one of the biggest security challenges facing our nation today.

As we consider the evolution of energy infrastructure, it is impossible to ignore the impact of government policy. There have been times where Congress has made a positive impact, such as recognizing the value of TAPS during an energy crisis. But too often we have seen failed government attempts to impose outcomes or pick winners and losers—and we don't always pick the winners.

It is important then that we use the lessons learned from the past to inform future Congressional actions. We have a distinguished panel of witnesses today, who I will introduce in a moment.

I now turn to Ranking Member Cantwell for her opening statement.

###