

Chair Jeff Duncan
Opening Statement – Subcommittee on Energy, Climate, and Grid Security:
“The Role of Artificial Intelligence in Powering America’s Future”
October 19, 2023
As prepared for delivery

The subcommittee will now come to order.

Welcome to the Energy, Climate, and Grid Security Subcommittee hearing, “The Role of Artificial Intelligence in Powering America’s Energy Future.”

Artificial Intelligence has advanced significantly over the last several years, and now provides many potential applications across a wide range of sectors.

AI has beneficial uses in each of the sectors under the Energy and Commerce Committee’s jurisdiction, from innovation, data, and commerce, to healthcare, to applications in energy.

Today, I am looking forward to learning about and examining AI’s uses in the energy sector, the importance of a national data privacy and security standard, and the ways it can foster innovation to strengthen America’s energy leadership and energy security.

The United States Department of Energy has been a world leader in technological and scientific innovation. DOE’s research and development have made consequential impacts on today’s world.

During World War II, the government launched the Manhattan Project. The Manhattan Project and Atomic Energy Commission propelled the United States into nuclear leadership. The research and development today at the DOE and our nation’s 17 labs continue to contribute to our energy and national security.

These labs, which have world leading technological capabilities, do much more than just energy policy. They have been working to improve existing energy technology as well as develop new energy technologies – now with the capabilities of AI and advanced computing.

Our national labs use some of the fastest and most sophisticated supercomputers in the world to help us remain strong innovators and leaders in energy.

Private sector innovators are also developing new technologies and applications for AI.

American energy companies are utilizing AI and advanced computing across the energy sector value chain – from oil and gas exploration and production to power generation and electric distribution.

They are using AI to help inform decision making, to automate equipment, to identify trends, and to predict everything from the weather to market conditions.

Many companies are now exploring ways to utilize AI to help drive efficiency, productivity, and safety.

As we embrace the capabilities and functions of AI, we must recognize that we are on the precipice of a new frontier: the AI race. Our adversaries, China and Russia, are also competing to harness the power of AI to their own advantage.

With America's innovative spirit and the right policies in place, we can outpace our adversaries to strengthen our energy and national security.

Our energy security is not just energy exploration, production, and transmission of energy across the grid and the pipeline network to power America.

The security extends to the hardware and software to power AI, like semiconductors, algorithms, and other inputs that make AI possible.

As we rely more on data and data intensive processes, we must prioritize data security. Just the other day, it was reported that over 2,100 organizations filed data breach notices through the first nine months of this year, setting a new record.

It is critical that we promote innovation and establish sensible safeguards to provide people control over how our data is collected, used, and shared.

We must also recognize the implications AI could have on an already strained electric grid.

The computational power of AI, while impressive, consumes large amounts of electricity.

As we heard in our hearing with grid operators a few weeks ago, we are already facing reliability concerns on the grid. The need for affordable and reliable electricity must remain a priority for all aspects of our economy, including those that innovate and contribute to our energy leadership and security.

Successfully harnessing the benefits of AI will increase safety, reliability, resiliency, and hopefully lower costs for American energy consumers.

These benefits will improve the quality of life and save Americans money during a time of severe inflation due to the failed policies of the current administration.

This Committee, and Congress as a whole, needs to understand the hurdles to AI innovation as well as the potential harms.

AI can play a critical role in better delivering reliable and affordable energy to Americans.

I look forward to this hearing today to better understand AI's intersection with the energy sector and ways Congress can approach AI regulation to both support innovation and minimize threats.

We have an excellent panel of witnesses today to help us explore these issues.

With that, now I would like to recognize Ranking Member DeGette for five minutes to give her opening statement.