

Opening Statement  
Chairman Bobby L. Rush  
Subcommittee on Energy  
Committee on Energy and Commerce  
Hearing on “Building a 100 Percent Clean Economy: Advanced Nuclear Technology and Its  
Role in a Decarbonized Future”  
March 3, 2020

On December 2, 1942, the world’s first controlled, self-sustaining nuclear chain reaction occurred beneath the surface of the First Congressional District of Illinois at the University of Chicago. This occurrence, in conjunction with the discovery of nuclear fission, propelled our nation into the dawn of a new age.

Since the creation of the Chicago Pile-1 reactor — the world’s first nuclear reactor — peaceful applications of nuclear technology have provided solutions to various modern challenges. This includes the detection and management of threats linked to human health, food security, and growing demands for electricity. However, one of the greatest challenges facing the globe remains — and that is climate change.

Catastrophic climate change is an existential threat that will spare no community from its widespread impact. Therefore, the large-scale deployment of low-carbon energy is necessary to decarbonize our economic sectors and reduce greenhouse gas emissions.

A projected 50 percent increase in the world's energy usage is likely by 2050. Faced with this reality, it is critical we deploy every method at our disposal to effectively mitigate this threat. This includes the use of next generation nuclear reactor designs.

At present, existing light water reactors account for up to 20 percent of annual electricity generation in the U.S. Additionally, reactors produce the world's second leading source of low-carbon emitting power and are necessary to meet climate goals and growing energy needs.

To remedy challenges posed by climate change, nuclear plants must evolve to become increasingly cost competitive, readily deployable, and most importantly, safe and secure. Through the advancement of next generation nuclear technologies, like small modular and other advanced reactor concepts, we can accomplish these objectives.

Emerging reactor designs are targeted to produce nuclear power with greater efficiency and flexibility. For instance, these dispatchable sources of energy may be assembled in factories and shipped to underserved areas. Apart from this, advanced reactor designs may also result in the recycling of nuclear fuel and much needed waste volume reductions.

Today’s discussion is deeply important to our nation’s path to a clean energy future. I thank our witnesses for their participation. With that, I yield to the gentlemen from Michigan, my friend and colleague, Ranking Member Upton.