

Chairman Joe Manchin's Opening Statement

March 25, 2021

Hearing to examine the latest developments in the nuclear energy sector

- The Committee will come to order.
- I'm pleased to focus our conversation today on nuclear technology and how we can maintain and expand the use of nuclear energy both domestically and abroad.
- And I want to thank our witnesses who will provide us with a vision of our nuclear energy future.
- A lot happened in the last year on the nuclear front.
- First and foremost, we passed the Energy Act with the Advanced Reactor Demonstration Program, which was spearheaded by Senator Murkowski.
- We also were successful in lifting the Development Finance Corporation's ban on civil nuclear financing, allowing the U.S. to offer more competitive deals to the international community.
- Two of our witnesses, TerraPower and X-energy, were selected as winners of the Department of Energy Advanced Reactor Demonstration Program.
- And \$75 million was appropriated to initiate a Uranium Reserve while we also authorized the Russian Suspension Agreement to prevent manipulation of our energy markets.
- With those accomplishments behind us, we still have a lot of work ahead of us.
- The public remains cautious about nuclear, Congress must pass legislation that allows states to have buy in when it comes to the nuclear

repository site selection and construction, and we must ensure that the National Nuclear Security Administration has the proper resources to operate their nonproliferation and safeguards program in coordination with the International Atomic Energy Agency.

- I look forward to working with members of this committee to accomplish these objectives.
- But today I want to focus on our efforts to build advanced reactors.
- The Department of Energy and our National Laboratories play a central role in leading this effort in concert with private advanced nuclear energy companies.
- This public-private relationship is incredibly important, especially in delivering financing to commercialize these reactors. Already private investments have surpassed \$1.3 billion.
- This is largely because of their enormous market potential for electricity, process heat for manufacturing, electrolysis for hydrogen production, and desalinization.
- We included important provisions with in the Energy Act directing the continued research of how to develop hybrid or integrated energy systems to operate seamlessly together.
- Idaho National Lab, the National Renewable Energy Lab, and NETL in Morgantown, West Virginia, are leaders in this effort.
- Nuclear power provides about 10 percent of the world's electricity and prevents approximately two gigatons of carbon from reaching our atmosphere every year.
- But about 789 million people around the world still live without electricity.

- Nuclear energy can be part of delivering that electricity to lift people out of poverty and provide the opportunities that many have become accustomed to.
- The Tennessee Valley Authority was created to do that very thing during the Great Depression. This is a model that can inform our efforts both domestically and abroad.
- Russia and China have made a strategic effort to supplant our nuclear leadership over recent years. We must push back.
- With the necessary policy and funding we can maintain our nuclear supply chain, create high-paying manufacturing jobs, and reassert U.S. leadership.
- We also need to discuss the role of our existing fleet, where we're seeing more closures.
- This year alone five reactors at three locations with 5.1-gigawatt capacity are slated to close.
- The International Energy Agency found that across advanced economies, if countries continue to allow nuclear reactors to be prematurely shutdown, it will be \$80 billion a year more costly to meet emission goals.
- Lifetime extensions are cheaper than new builds and are generally cost-competitive with other generation technologies.
- We cannot afford to let this carbon-free energy resource fade out.
- With that, I'll turn it over to Ranking Member Barrasso for his opening statement.