Recognizing the 50th Anniversary of the Advanced Test Reactor at Idaho National Laboratory

Hon. Michael K. Simpson of Idaho in the House of Representatives, Tuesday, April 25, 2017

Mr. SIMPSON. Mr. Speaker, I rise today to call your attention to an extraordinary facility located on the Department of Energy's 890-square-mile Site in Idaho, and the many people who have been employed there over the last 50 years.

Idaho National Laboratory is this nation's lead nuclear research, development and deployment laboratory. It also has emerged as a world leader in cybersecurity, keeping our critical infrastructure safe from those who would do us harm, and broader clean energy research and development.

One of INL's crown jewels is the Advanced Test Reactor. This summer, we are celebrating the 50th anniversary of ATR, and recognizing that experiments conducted there have helped ensure our national security and advance knowledge about clean nuclear energy.

Just as importantly, we also recognize that, with regular maintenance and upgrades, ATR will continue to be this nation's test reactor of choice at least through 2050.

What makes ATR so unique—and valuable—is its ingenious cloverleaf design, envisioned by an engineer named Deslonde de Boisblanc on a lonely stretch of Highway 20 in the Idaho desert more than a half century ago.

de Boisblanc's design resulted in a one-of-a kind reactor that can house simultaneous experiments under distinct temperatures, pressures and irradiation conditions. That means, at the ATR complex, we can test materials for academia, industry and the U.S. Navy—all at the same time. The knowledge that our talented scientists, engineers and technicians pull out of this reactor is incredibly valuable.

For example, when the Navy began sending fuel samples from its nuclear submarines to the INL Site, that science was in its infancy. Eventually, nuclear fuel became more complex. The Navy needed to test larger fuel elements, not just samples, and with the Cold War accelerating, it needed those test results more quickly.

So, ATR was built, started up in 1967, and two years later brought to full power of 250 megawatts. The impact on America's Nuclear Navy has been remarkable. Early submarines had to be pulled out of duty every two years or so for expensive and time-consuming refueling. Because of what we have learned from experiments at ATR, the reactor cores for the Navy's newest submarines last for their entire lifetimes, more than 30 years.

Idaho National Laboratory's Advanced Test Reactor has saved taxpayers millions of dollars and made our country safer and more secure. That's a testament not only to the facility—and de Boisblanc's unique design—but also to generations of world-class scientists, engineers, technicians and mechanics who have kept the reactor functioning at the highest possible level these five decades.

ATR has also played a central role in helping sustain this nation's current light-water nuclear reactor fleet, which produces 19 percent of America's electricity and 63 percent of its carbon-free electricity.

In 2007, ATR became a National Scientific User Facility. That allows our colleges and universities to run experiments at ATR, with the Department of Energy footing the bill. As a result, we have expanded knowledge about clean nuclear energy throughout the nation and built a foundation for the next generation of reactors, including small modular reactors, such as one that could begin producing power in the Idaho desert as soon as 2024.

It is a great honor to congratulate INL on ATR's 50th anniversary, acknowledge its dedicated, talented and determined workforce, from past and present, and look ahead to many more years of valuable service to our nation.