

# Going nuclear

90

**1980**  
90 percent of uranium used in the U.S. was produced domestically



251 nuclear power plants generated 11 percent of U.S. electricity

5

**2021**  
5 percent of uranium used in the U.S. was produced domestically



55 nuclear power plants generated 20 percent of U.S. electricity



On Feb. 28, the **Atomic Energy Advancement Act** passed the House 365-36, clearing the two-third majority needed to fast-track the legislation.



The bill advances to the **Senate** where it is expected to pass then move to the president's desk for signature.



### Atomic Energy Advancement Act

is an omnibus of 11 bills:

- 1 NRC Mission Alignment Act**  
*Rep. Jeff Duncan*
- 2 Nuclear Licensing Efficiency Act**  
*Rep. Rick Allen*
- 3 Strengthening the NRC Workforce Act**  
*Rep. Diana DeGette*
- 4 Advanced Reactor Fee Reduction Act**  
*Rep. Larry Bucshon, Rep. Scott Peters*
- 5 Advanced Nuclear Reactor Prize Act**  
*Rep. John Curtis, Rep. Paul Tonko*
- 6 Modernize Nuclear Reactor Environmental Reviews Act**  
*Rep. Randy Weber*
- 7 Nuclear for Brownfields Site Preparation Act**  
*Rep. Brett Guthrie, Rep. Paul Tonko*
- 8 Advancing Nuclear Regulatory Oversight Act**  
*Rep. Debbie Lesko*
- 9 Advanced Nuclear Deployment Act**  
*Rep. Richard Hudson, Rep. Kim Schrier*
- 10 Global Nuclear Energy Assessment and Cooperation Act**  
*Rep. Buddy Carter, Rep. Scott Peters*
- 11 Strengthening American Nuclear Competitiveness Act**  
*Rep. Bill Johnson*



### WHAT THE BILL PROMISES



- trim regulation
- streamline permitting
- promote emerging technologies

HR6544 promotes emerging technology like **small modular reactors (SMR)**. SMRs' smaller, mass produced design delivers added benefits like safety, cost and flexibility in nuclear power generation.

#### Small

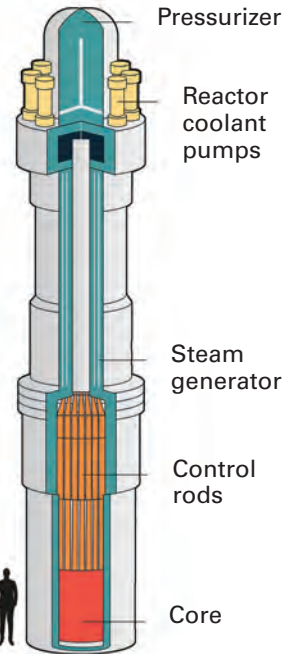
SMRs produce in the range of 1 to 300 megawatts—roughly one third of the gigawatt scale of traditional nuclear reactors.

#### Modular

SMRs can be manufactured in a factory and transported to the site making them easier to deploy and potentially reducing construction costs.

#### Reactor

Like all nuclear reactors, SMRs harness nuclear fission to generate heat to produce energy.



### Main SMR types



Light water reactors

High temp gas cooled reactors



Molten salt reactors



#### U.S. electrical grid fail

Electric shortages, brownouts and blackouts increase as the nation's power grid becomes less reliable and more fragile. This is especially troubling with the proliferation of electric cars and appliances due to gas appliance bans.



#### Large, sustained outages have increased over the past two decades.

In 2000, there were fewer than 24 major disruptions. In 2020, the number surpassed 180.



Utility customers on average experienced just over eight hours of power interruptions in 2020, **over double of that in 2013**



Maine, Louisiana, California had a **50 percent-plus increase in outage duration** even as residents endured mounting interruption costs