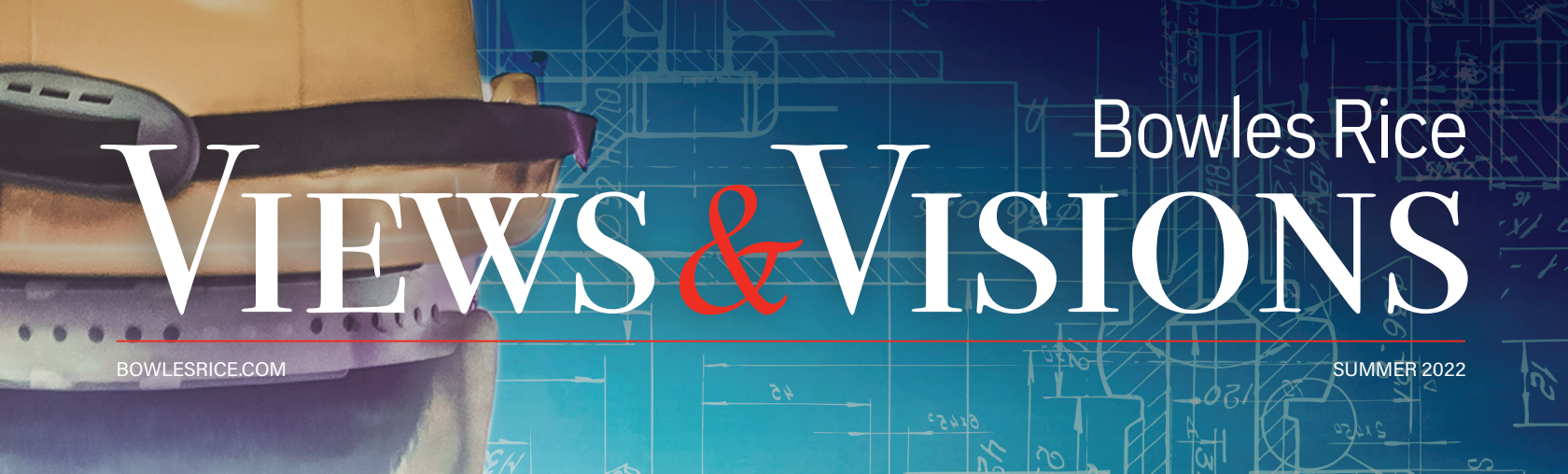


Bowles Rice

VIEWS & VISIONS

BOWLESRICE.COM

SUMMER 2022

West Virginia: No Country for Old Ban

Marc Mignault
Bowles Rice LLP

Marc Mignault is a member of the Bowles Rice Litigation Department and is leading the firm's Nuclear Energy team. He focuses his practice on the potential for nuclear energy in West Virginia, energy litigation, business litigation, and more. He has represented clients before Circuit Courts, the Supreme Court of Appeals of West Virginia, and the United States District Courts for the Northern and Southern Districts of West Virginia. Recognized as a *Super Lawyers* Rising Star in Business Litigation, Mignault is licensed in West Virginia and the District of Columbia.

In 1996, West Virginia instituted a ban on nuclear power production over concerns of waste disposal and economic feasibility. Many believed the Mountain State would never lift the ban, but after 26 years of advancements in technology, changes in the geopolitical landscape, and surrounding states gaining more jobs and revenue from the nuclear sector, on February 8, 2022, West Virginia Governor Jim Justice signed Senate Bill 4, repealing the state's ban on nuclear power. The bill passed the legislature with little opposition and went into effect on May 1, 2022.

Lifting the ban allows the construction of nuclear power plants, nuclear factories, and nuclear electric power generating plants in West Virginia. "The bill I have signed today is a positive step in modernizing our state's regulatory environment," Governor Jim Justice included in his letter upon signing the bill.

technologies are more essential than ever to preserve jobs and provide a supply of always-on carbon-free power. The passage of this bill alongside the state's recent resolution on grid stability opens the door for advanced nuclear to be the backbone of the energy grid for West Virginia." said Maria Korsnick, NEI's President and Chief Executive Officer. Among surrounding states, there are more than 11,320 nuclear energy jobs combined in North Carolina, Maryland, Ohio, Pennsylvania, and Virginia, according to the NEI. Kentucky removed a similar ban on nuclear energy in 2017 and is moving forward with plans to utilize nuclear energy in the state.

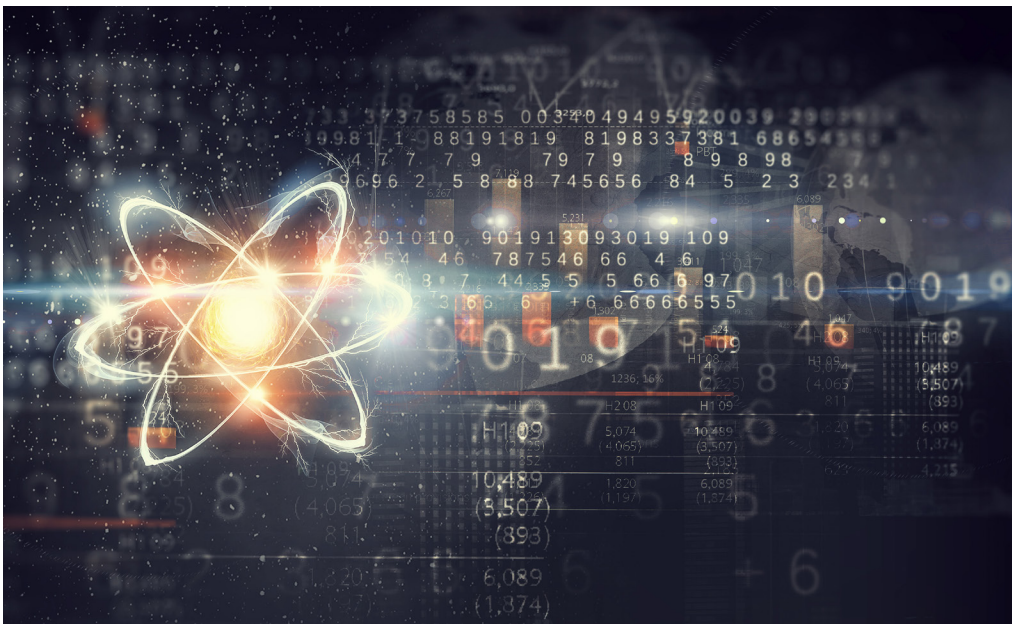
Senators Shelley Moore Capito (R-W.Va.) and Joe Manchin (D-W.Va.) both commended the lifting of the ban and are big proponents of moving nuclear energy forward in the state. Senators Capito and Manchin have both

"The inclusion of nuclear energy will help West Virginia remain a top energy-producing state, as well as a key player in bolstering America's energy independence."

West Virginia ranked fifth among states in total energy production in 2019, according to the Energy Information Administration. The inclusion of nuclear energy will help West Virginia remain a top energy-producing state, as well as a key player in bolstering America's energy independence. Currently, 20 percent of America's energy comes from nuclear energy.

West Virginia's repeal was quickly applauded by the Nuclear Energy Institute (NEI). "With more fossil fuel plants retiring, new nuclear

introduced recent legislation supporting nuclear energy. Senator Capito reintroduced the American Nuclear Infrastructure Act, which would improve the nation's nuclear infrastructure, secure America's uranium supply chain, create jobs, and strengthen energy and national security. Senator Manchin introduced the International Nuclear Energy Act, which would increase U.S. uranium enrichment capability through a "Nuclear Fuel Security Program" and create a "National Strategic Uranium Reserve Program" that



boosts U.S. uranium mining and reduces U.S. reliance on uranium imports.

A major reason behind the state lifting the ban is the incredible advances the nuclear industry is making around the development of small modular reactors (SMRs). Their name reflects their innovation and capability.

Small – physically a fraction of the size of a conventional nuclear power reactor.
Modular – systems and components can be factory assembled and transported as a unit to a location for installation.
Reactors – harnessing nuclear fission to generate heat to produce energy. SMRs are capable of generating up to 300 megawatts (MWe) of electrical output.

These new advanced reactors are also capable of being self-adjusting due to their simple and responsive design concepts, allowing the use of passive safety systems that prevent any potential of overheating.

SMRs are designed to produce power, process heat, cleanly power desalination projects, and produce hydrogen fuel on locations not suitable for larger nuclear plants, while requiring much less capital investment than bigger facilities. Projected SMR sites require less than one-tenth the land of a traditional nuclear power plant, and a minimal emergency planning zone need only be the boundary of the site (estimated at 400 meters). These smaller reactors and site requirements allow for seamless integration with renewables within microgrids; use for emergency response to help restore power to areas hit by natural disasters; longer core life, operating for up to 10 years without refueling; and the reactors can be quickly removed from sites and exchanged for new ones.

The U.S. Nuclear Regulatory Commission approved its first design for a small modular reactor in August 2020 for NuScale Power. NuScale believes its VOYGR™ SMRs are a good fit for existing coal plant sites because NuScales's VOYGR-12 plants are roughly equivalent to a medium-size coal plant, can fit within the confines of an existing coal plant property, allows the use of existing cooling water delivery systems and other infrastructure, and can save as much as $100 million per site.

SMRs are a key focus of the newly enacted Infrastructure Investment and Jobs Act (the "Bill"), which contains a number of provisions supporting nuclear energy. The Bill has two key components to support nuclear energy: the civil nuclear credit program and funding for the Department of Energy's (DOE) Advanced Reactor Demonstration Program (ARDP).

The civil nuclear credit program is a $6 billion program designed to preserve the existing nuclear fleet in the United States, currently the largest fleet in the world, with 93 reactors operating at 55 nuclear power plants in 28 states, and to prevent premature shutdowns of nuclear power plants. The first awards cycle will "prioritize and be limited to reactors that are approaching near-term closure," the DOE said in a recent update. The ARDP is intended to speed up the demonstration of advanced reactors and SMRs. The Bill authorizes $3.2 billion through 2027 for advanced reactor demonstrations. The Bill further appropriates $2.4 billion for existing ARDP awardees for 2022 to 2025, which may be used for additional advanced reactor projects.

The Bill also seeks to help rural and economically hard-hit communities, such as West Virginia, by authorizing assistance for feasibility studies for siting advanced reactors for the deployment of SMRs and advanced nuclear reactors in isolated communities.

The use of nuclear energy poses big opportunities for West Virginia in the way of jobs, revenue, economic development, and the attraction of businesses to the state. Bowles Rice has begun a new initiative with its Nuclear Energy team, which will continue to track these developments, provide informational and technical updates, and assist potential prospects in the nuclear energy space for West Virginia. Additional information from our team can be found at **bowlesrice.com/practices-nuclear-energy.html** and **twitter.com/AtomicAttorney**.