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How Tennessee Paved the Path to a Secure Energy Future

Authors: Robert Culver Schmid, Christopher C. Chandler

December 04, 2025

Tennessee Governor Bill Lee heralded the release of the final 2024 report of the Tennessee Nuclear Energy Advisory Council with the observation that "Tennessee is rapidly becoming the epicenter of new nuclear and leading America's energy independence." Through the state's legacy of public and private partnerships, Tennessee has positioned itself as a front-runner in nuclear energy.

Tennessee's history of coordinated public-private action rivals that of any other state, and that history – and the fact that many of the same historical actors are still here – illuminates a path to a brighter, more prosperous nuclear energy future for Tennessee and other states. Other states and regions have stories to tell about their own roles in energy innovation, complementary government, and industry activity, but none of these stories can match Tennessee's for scale or longevity. This article examines how Tennessee's enduring public-private partnerships have propelled the state to the forefront of nuclear energy, highlighting its unique history and offering insights for businesses eager to shape a nuclear energy future.

Tennessee's Rise as a Nuclear Energy Leader

Anyone who took a civics class in junior high or high school heard of the Tennessee Valley Authority (TVA), very likely in the context of the Great Depression and the New Deal. The availability of affordable power created through federal action and TVA-owned generation unquestionably expedited electrification of the Tennessee Valley and improved the standard of living for residents. It also spurred industrial development in the region, which not only benefited residents and communities through economic growth but also furthered wider American interests, as manufacturers in increasing numbers began to produce materials for the country's defense needs.

Repurposing civilian industrial capacity to meet the demands of national security may be the most dramatic manifestation of public-private partnership in Tennessee. The most famous of these industrial efforts, and the most consequential, resulted in the selection of Oak Ridge as a facility to produce material for the Manhattan Project. The presence of TVA power figured prominently in the selection of the site for the Manhattan Project – as did the presence of Tennessee Senator Kenneth McKellar on the Senate Appropriations Committee who, when reportedly asked to help mask the \$2 billion project appropriation, famously replied to President Roosevelt, "Where in Tennessee do you want me to hide it?" The Manhattan Project was a massive effort, in money, material, and personnel, spanning multiple locations in the United States and abroad, and its success resulted from the collaboration of government, academia, and private industry.

Oak Ridge National Laboratory (ORNL) is today the largest of the national laboratories, supporting research across multiple disciplines, and continues to be a magnet for public and private investment and innovation, especially in the nuclear field. Private industry has recently announced plans for nuclear fuel cycle facilities, microreactor construction, and the construction and operation of demonstration reactors.

How Government Action Influenced Tennessee's Nuclear Landscape

Senator Howard H. Baker used his position as a member of the Senate, serving on the Senate Energy and Natural Resources Committee, as well as in his capacity as minority and majority leader of the Senate, to promote nuclear energy programs. He was instrumental in the development of the Clinch River Breeder

Reactor, whose site is currently planned for use in efforts by TVA to promote small modular reactors. Senator Baker modeled how Tennessee government leaders could promote nuclear energy with private partners.

Unsurprisingly, Tennessee's state government has emerged as a leader in new nuclear. Governor Lee ordered the creation of the Tennessee Nuclear Energy Advisory Council in May 2023, with members drawn from government, academia, and private industry, the Council's purpose being to make policy recommendations to the state to grow the nuclear industry in Tennessee. The Council's final report included recommendations to support specific projects, such as TVA's Clinch River project, to promote capital investment and nuclear supply chain development in the state, and to develop a nuclear workforce in connection with state higher education. Because of the state's leadership, the region's nuclear heritage, and advocacy of groups, innovative nuclear companies are striving to create a presence in the Oak Ridge area. Private companies such as Radiant Industries, BWXT Enrichment Operations, Oklo, and Kairos Power have planned investments in excess of \$2 billion.

At the Federal level, the Trump administration has taken aggressive steps to accelerate new nuclear development, issuing multiple executive orders to achieve that end. The private developmental activities blossoming in Tennessee will put industry in close physical proximity to TVA and Department of Energy sites and promote closer cooperation between those federal agencies, tasked by the administration with furthering its nuclear policy objectives, and the private companies, backed by private financial investment, which can make those objectives a reality. As if to demonstrate this principle, the Department of Energy recently announced that Oak Ridge National Laboratory, in conjunction with Hewlett Packard Enterprises (HPE) and Advanced Micro Devices (AMD), would deploy two new supercomputers to promote AI-driven research.

Looking Ahead: Tennessee's Blueprint for America's Energy Future

Since 2023, the Tennessee legislature has appropriated \$70 million for the Tennessee Nuclear Fund. The Fund, administered by the Tennessee Department of Economic and Community Development (TNECD), is designed to promote nuclear development and manufacturing in the state through grants and other forms of assistance. As of December 2025, the fund has awarded more than \$35 million to nuclear-related projects, from state workforce development programs and infrastructure improvements to private companies seeking to establish or expand their presence in Tennessee.

It is no accident that most of these projects are in the greater Knoxville/Oak Ridge area. These companies have already recognized the value of being in close physical proximity to ORNL and to TVA. Some are working directly with the Department of Energy, the TVA, or both. Kairos Power, for example, is constructing a demonstration reactor on Department of Energy land in Oak Ridge and recently announced a power purchase agreement with TVA to power data centers in the region. And TVA, the Department of Energy, and the State of Tennessee are actively seeking other arrangements with private industry to further develop the nuclear energy ecosystem in the state.

Information for Companies Interested in Nuclear Energy Programs in Tennessee

- The Tennessee Department of Economic and Community Development maintains the Nuclear Energy Fund grants and other incentives for companies seeking to locate or expand activities in the state.
- The Tennessee Valley Authority has several additional resources, including a slate of available properties and targeted incentive programs, available for businesses.
- Oak Ridge National Laboratory recently established a new grant program, the Innovation and Research for Industry Success (IRIS) program, to facilitate research and long-term investment.

Although these agencies' economic development resources are accessible on a rolling basis, some resources are subject to availability, and companies contemplating Tennessee growth should engage with these agencies early on in their planning.

In 1953, President Eisenhower delivered his "Atoms for Peace" speech to the United Nations General Assembly, pledging the United States would "devote its entire heart and mind to find the way by which the miraculous inventiveness of man shall not be dedicated to his death, but consecrated to his life." With the combined efforts of government and private action, Tennessee is poised to help the country do just that. Tennessee's long history of cooperation between public and private institutions established Tennessee as a leader in nuclear energy development, serving as a lighthouse for other states aspiring to address this nation's energy needs.

If you have any questions about nuclear energy in Tennessee or need assistance in pursuing economic development, please reach out to [R. Culver Schmid](#) and [Christopher Chandler](#).