Georgia is on the cusp of a very important decision about nuclear energy. We shouldn’t miss what’s at stake.

The Georgia Public Service Commission will probably rule this week on whether work should continue on two nuclear reactors under construction near Augusta, the only commercial nuclear project underway in the United States. The commission has been enthusiastic about nuclear power for years, but since it authorized Georgia Power in 2009 to break ground for two new reactors at the Alvin W. Vogtle generating station, the financial calculus has changed. Mainly, the price of natural gas, an important competing fuel for electricity generation, has dropped sharply, and taken the wholesale price of electricity down with it.

Making matters worse, the project is behind schedule and over budget; by some estimates, it could end up costing as much as $25 billion, nearly twice the initial estimate of $14 billion. Yet the Vogtle expansion will be a valuable source of reliable, clean and stably priced electricity for decades to come. Because of several factors, including lower interest rates than assumed, Georgia Power projects a peak rate increase of 10 percent, less than the originally projected increase of 12 percent. And that is with the cost overruns.

But the Vogtle expansion, which when fully operational will generate enough to power about 500,000 homes and businesses, has implications well beyond Georgia and the Southeast. America’s commercial nuclear industry safely and reliably produces 63 percent of our emission-free electric power. The cancellation of the Vogtle project would likely dim the future of this vital American industry. To fully understand the national ramifications of the Vogtle decision, it’s helpful to understand the history and transformation of the nuclear industry, which has made the United States the global leader in nuclear safety, security and technical innovation.

More than 60 years ago, President Eisenhower challenged the world to use the newly discovered energy of the atom for peaceful purposes. Many were enthusiastic about the use of nuclear energy to generate electricity and this enthusiasm resulted in an overly casual approach to reactor operations. This attitude contributed to the March 1979 accident at the Three Mile Island nuclear plant, alarming the entire nation. The industry responded aggressively, most notably by forming the Institute of Nuclear Power Operations. As a self-regulatory body, the group borrowed
from the exacting specifications of the United States Navy’s nuclear program and set and enforced the highest standards of operational safety and reliability. Underpinning the organization’s operations was a concept first articulated by Pat Haggerty, a founder of Texas Instruments and a member of the presidential commission on the Three Mile Island accident, who in 1980 noted that nuclear power companies were captive to one another as in no other industry and dependent on the performance of the weakest among them. This resonated with utility C.E.O.s and still does today.

Working together, the industry transformed itself and today the country’s nuclear stations are among the safest and most efficient in the world. Plants used to suffer automatic shutdowns about a half a dozen times a year; today, because of improved operator training and equipment reliability, the average in less than once a year. Plants used to run only seven or eight months a year; today they run more than 11 months because of quality maintenance. Similar improvements have been made in radiation exposure, industrial safety and equipment failures. It is this sustained world-class performance that serves as a foundation for America’s global leadership in nuclear safety and security.

The reactor design for the Vogtle expansion is a significant American advance in nuclear technology and safety. The innovative Westinghouse AP1000 is being successfully built in China and is an important export opportunity as well as a future domestic source of emission-free electric generation.

The Vogtle expansion is a 60- to 80-year investment that should not hang on short-term commodity considerations. Its benefits include plant reliability, fuel diversity, zero emissions and immunity of our electric system from international disruptions. Furthermore, we probably can't compete worldwide in nuclear construction if we can't do it at home. And we need to expand in the United States, because the country’s existing reactors may have life expectancies of only another 40 years. The construction of any first-of-a-kind reactor design is going to be rocky, but we learn by doing, capturing the lessons, and continuously improving. And this is happening.

What we are seeing in Georgia today is a mismatch between costs and benefits. The Public Service Commission is appropriately focused on the economic stability and health of Georgia. The plant is being built by a coalition of companies led by Georgia Power that have a mission to serve customers and shareholders.

But the consequences are important for America's global influence and the health of the global environment, considerations that require federal support, including loan guarantees and the extension of nuclear production tax credits. Unfortunately, these credits, which would apply to the Vogtle expansion, were dropped last week from the final tax bill. They are crucial to making the finances work for the project. Senator Lisa Murkowski, Republican of Alaska, said they could be included in separate legislation early next year.
Cancellation of the Vogtle project would mean a long-term reduction in the United States of this reliable and emission-free source of generation. It will also diminish American leadership in global nuclear safety and security, reduce the diversity of available energy sources and be a blow to thousands of skilled workers with an inevitable loss of many well-paying jobs.

President Eisenhower was right — America needs to use “atoms for peace.” After a difficult learning curve, we have proved we can do it better than any other country. Successful completion of the Vogtle expansion will go a long way to assuring the health of this critical industry. Georgia Power and its co-owner partners should get full federal and state support to move forward with the Vogtle expansion

This is a time to think broadly and long term.

Zack T. Pate is the chairman emeritus of the Institute of Nuclear Power Operations, where William E. Webster Jr. was executive vice president.

Follow The New York Times Opinion section on Facebook and Twitter (@NYTopinion), and sign up for the Opinion Today newsletter.