



Early Site Permit Application Process

Frequently Asked Questions

Why nuclear energy?

Customers expect their electricity to be there whenever they need it – every day, without exception – in hospitals, powering life-saving equipment; in grocery stores, keeping food cold; and at home, ensuring lights illuminate dark rooms and the air conditioning and heat turn on.

Electricity from nuclear power plants is the only clean energy source that is safe, reliable and always on regardless of weather conditions.

Duke Energy operates the largest regulated nuclear fleet in the country, producing 10,819 megawatts of clean energy from 11 units at six sites, generating more than 50% of the energy customers in the Carolinas depend on.

Meeting the growing needs of customers and modernizing the electric system are only possible with Duke Energy's existing nuclear fleet and strategic investments in new nuclear energy options.

Duke Energy is pursuing an early site permit from the U.S. Nuclear Regulatory Commission (NRC) for the potential development of new nuclear units on a 1,000-acre site near the Belews Creek Steam Station in Stokes County, N.C. A rigorous reactor technology evaluation is ongoing, and the decision to build new nuclear units at the site has not been made.

What is an early site permit?

An early site permit is an optional NRC process that resolves environmental and site safety topics on the front end of a project and confirms a site's suitability for new nuclear generation.

Why is having this permit beneficial?

If Duke Energy decides to build new nuclear units in the future, having an approved permit for this site reduces the risk of delays during licensing and construction. Pursuing the permit also provides more time for reactor technologies to evolve and mature, while allowing the company to make progress on licensing activities.

What is the timeline for receiving the permit?

Duke Energy submitted the permit application to the NRC in December 2025. The review and approval process takes about 18 months. Once the permit is received, likely in 2027, it remains valid for 20 years and can be renewed for up to 20 more years.

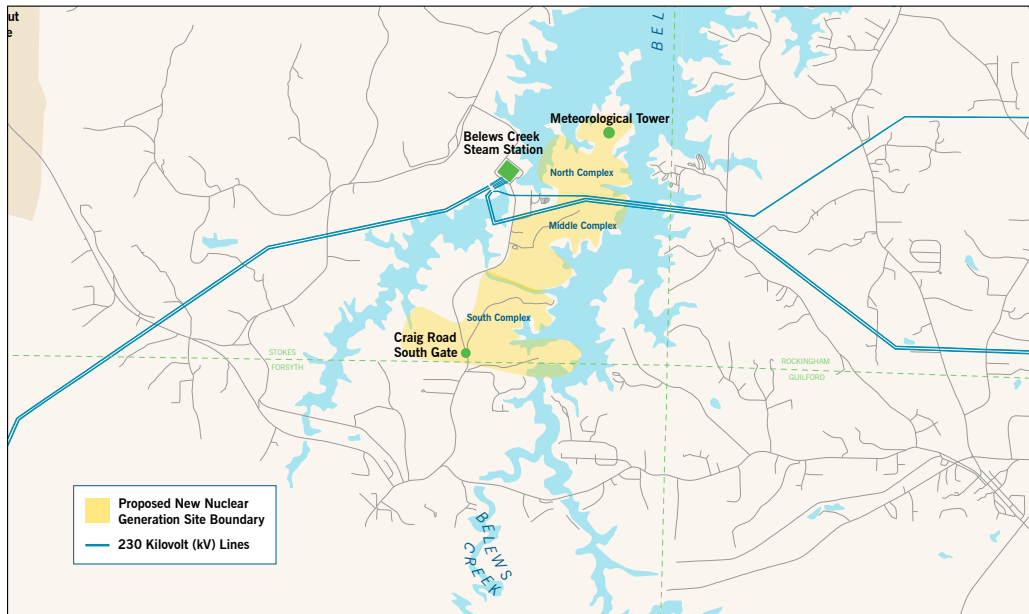


BUILDING A SMARTER ENERGY FUTURE®



*Belews Creek, N.C., Site
Stokes County*

Belews Creek, N.C., Site



Why did Duke Energy select the Belews Creek, N.C., site as a potential location for new nuclear units?

The Belews Creek Steam Station, a 2,220-megawatt coal plant that can co-fire up to 50% natural gas to produce energy, is slated to retire in the late 2030s. Repurposing the site is practical and beneficial – saving customers money and allowing Duke Energy to reinvest in the local community. The Belews Creek, N.C., site is ideal for new nuclear generation because of its access to water, transmission infrastructure and a skilled workforce; land availability; and connection to the local community.

What reactor technology has Duke Energy selected to replace the coal units?

Duke Energy has not yet selected a reactor technology for the site, and a rigorous evaluation is ongoing. The company plans to select a small modular reactor technology by 2027. The early site permit is technology-neutral, meaning Duke Energy may select a reactor technology later, providing more time for reactor technologies to evolve and mature. Duke Energy's application includes six reactor technologies, four small modular reactors and two non-light-water reactors. The application does not include large reactors.

When will new nuclear units be built at the Belews Creek, N.C., site?

New nuclear generation is projected to be needed on line by the late 2030s; however, Duke Energy has not committed to building new nuclear units at the Belews Creek, N.C., site. The company is maintaining optionality for the future. Decisions will be made in conjunction with coal plant retirements and after completing a complex, multiyear licensing and permitting process.

How long does building new nuclear units take?

The process to site, permit, receive state and federal regulatory approval and construct new nuclear projects is complex and lengthy, taking about 10 years to complete. The process also involves many opportunities for stakeholders to participate and provide feedback.

How much do small modular reactors cost to build?

Cost estimates for small modular reactors and non-light-water reactors are in the initial stages of development, as most designs are still maturing. These advanced reactors do not yet exist in the U.S., and no precedents for these technologies exists to provide confidence in a cost estimate. Initial cost estimates are also expected to change significantly, as first-of-a-kind demonstration projects come on line and lessons learned are incorporated into next-generation projects.