Nuclear Subsequent License Renewal

Meeting Customers' Energy Needs with Safe, Carbon-free, Reliable Electricity

Overview

The first Duke Energy nuclear generating units will reach the end of their current operating licenses in the early 2030s. As we plan to meet our customers' future energy needs and continue to reduce our carbon footprint, we are seeking to renew the licenses of the 11 nuclear units we operate at six plant sites in the Carolinas. This provides the option to operate these plants for an additional 20 years.

The company submitted the license renewal application for Oconee Nuclear Station in June 2021. Oconee is the company's largest nuclear station, with three generating units that produce more than 2,500 megawatts. We will develop applications for the remaining plants and expect to submit those in approximately three-year intervals.

A diverse, increasingly carbon-free energy mix is important for our customers. And, nuclear energy is a proven part of that mix having provided our Carolinas customers with safe, clean and reliable electricity for decades.

Environmentally Sound

Climate change is a significant challenge for our nation, and Duke Energy is committed to leading the way on a solution. We've set aggressive goals to ensure we're tackling climate change from all angles.

- Duke Energy has carbon reduction goals of at least 50% by 2030 and net-zero by 2050 from electricity generation.
- Nuclear power plants generate more than half of all carbon-free electricity in the United States and are the only always-on power sources that do not emit greenhouse gases.
- Our Duke Energy nuclear fleet plays an important role in our company's efforts to lower carbon emissions. In 2021, operation of our nuclear fleet avoided the release of more than 50 million tons of carbon dioxide.

Learn more: Achieving a Net-Zero Carbon Future
Energy for a Better Tomorrow

Technologically Safe and Reliable

Nuclear power plants are the most reliable generating facilities in the United States.

- In 2021, our Duke Energy nuclear fleet provided more than half of our Carolinas customers' electricity (more than 75 billion kilowatt-hours).
- Duke Energy's nuclear fleet marked its 23rd consecutive year in 2021 with a fleet capacity factor – a measure of reliability – greater than 90%. The 2021 fleet capacity factor was 95.7%, matching the fleet record.
- Our nuclear plants are carefully monitored, expertly maintained and upgraded with state-of-the-art technology and components to ensure they operate safely and are available for our customers – now and in the future.

Learn more: U.S. Department of Energy–Office of Nuclear Energy

Economically Beneficial

Nuclear plant operation beyond the current licenses provides significant value to Duke Energy customers, as well as continuing support for Carolinas communities through jobs, significant tax revenues and partnerships.

- Nuclear energy helps keep the lights on for our more than 4 million Carolinas customers.
- Duke Energy employs nearly 5,000 nuclear employees across the Carolinas, with additional contract workers supporting refueling outages and major project work throughout the year.
- Every year, our nuclear teammates support the communities where they work and live through donations, including coats, personal care items and bikes, and they volunteer their time with various community organizations.

Learn more: Nuclear Energy Institute–Nuclear Jobs

Forward-Looking Information

This document includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are based on management's beliefs and assumptions. Various factors may cause actual results to be materially different than the suggested outcomes within forward-looking statements. The factors that could cause actual results to differ are discussed in Duke Energy's Form 2021 Form 10-K and Quarterly Reports on Form 10-Q filed with the SEC and available at the SEC's website at sec.gov. Duke Energy expressly disclaims an obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.