

Rolls-Royce Selects Siemens Energy as Key Supplier for SMR Project

March 4, 2025



Rolls-Royce has chosen Siemens Energy to provide critical power generation technology for its Small Modular Reactor (SMR) project, marking a significant step forward in the development of advanced nuclear energy solutions. The agreement, with final terms to be formalized by the end of 2025, will see Siemens Energy supply steam turbines, generators, and auxiliary systems for Rolls-Royce's Generation 3+ modular nuclear power plants.

This collaboration leverages Siemens Energy's extensive expertise in power island components, crucial for the non-nuclear aspects of nuclear power plants. Rolls-Royce's SMR technology, featuring pressurized water reactors, is designed to deliver up to 470MW of electrical output per unit, capable of powering approximately 1.1 million homes. Each SMR is projected to generate 1,358 megawatt-hours (MWh), significantly contributing to low-emission energy production.

The standardized, modular design of Rolls-Royce SMRs promises faster commissioning compared to traditional nuclear plants, offering a scalable and efficient solution for meeting growing energy demands. Economic impact assessments suggest a fleet of Rolls-Royce SMRs could contribute £54 billion to the UK economy between 2025 and 2105.

Karim Amin, Executive Board Member of Siemens Energy, highlighted the strategic importance of this partnership: "We are currently experiencing a global renaissance of nuclear energy. Numerous countries are turning to nuclear technology to produce low-emission electricity, and small modular reactors will play a key role in this. Siemens Energy brings decades of experience in conventional equipment, while Rolls-Royce has the necessary implementation expertise. This perfect symbiosis enables us to jointly shape the future of energy supply. We are very pleased to be working with Rolls-Royce SMR on this exciting project."

Siemens Energy, with operations spanning 90 countries, will play a crucial role in delivering reliable and efficient power generation solutions for the Rolls-Royce SMR project, reinforcing both companies' commitment to advancing sustainable energy technologies.