



High-Fidelity Simulation for Peak Nuclear Plant Performance

Validate Changes | Improve Performance | Reduce Risk

Backed by decades of experience supporting mission-critical nuclear operations, Curtiss-Wright's **3KEYMASTER™** high-fidelity simulation platform is designed for the operational and regulatory demands of the nuclear industry. By accurately replicating plant behavior and control system responses, it enables utilities to evaluate complex conditions, improve decision-making, and enhance performance. Operators and engineers gain a trusted environment to safely test scenarios that cannot be performed in the plant, supporting operational excellence and long-term reliability.

The platform exceeds requirements for ANS/ANSI 3.5-compliant operator training and certification while extending value through Simulation-Assisted Engineering (SAE). Engineering teams can recreate plant events, perform FMEA-based scenario analysis, and validate design or control system changes before implementation. Using a scalable, object-oriented architecture, the platform enables

efficient model updates without extensive recompiling. This simplifies maintenance, accelerates alignment with plant modifications, and keeps models synchronized with actual configurations.

Built on the **3KEYMASTER™** high-fidelity simulation environment, Curtiss-Wright supports the full lifecycle of plant performance—from design through operation and optimization—helping utilities optimize performance, strengthen reliability, and confidently implement complex plant changes. By integrating training, engineering validation, and lifecycle model management, we deliver a flexible simulation environment that improves performance, supports modernization, and strengthens nuclear fleet reliability.

Contact us to learn how **3KEYMASTER™** can improve your plant's performance.