

Holtec International's SMR-300 Chosen to Power the Green River Advanced Nuclear Project in Utah

GREEN RIVER, Utah – Holtec International, a world leader in nuclear energy technology, advanced manufacturing and nuclear plant decommissioning, is pleased to announce its pivotal role in the Green River Advanced Nuclear Project, a transformative initiative advancing Utah's clean energy goals under Operation Gigawatt. This project leverages the innovative Holtec SMR-300 Small Modular Reactor technology, supporting reliable, carbon-free power generation tailored for the region's needs.



Artist rendering of Holtec SMR-300 using Air-Cooled Condenser Technology

The Holtec SMR-300 stands out with its advanced design rooted in 80 years of proven pressurized water reactor technology. It offers a unique optional Air-Cooled Condenser (ACC) system, enabling operation in arid environments like Utah, where water resources are scarce. This flexibility means SMR-300 can effectively operate in desert climates, providing a reliable and environmentally responsible energy source.

Dr. Rick Springman, President of Holtec International, summed up Holtec's vision for Utah: "With Holtec's restart of Palisades Nuclear plant in Michigan ongoing, and the first Holtec SMR-300s, Pioneer 1 & 2, in the NRC licensing process and early site preparation, the work by our partners to acquire sites for next-of-kind deployment in Utah is paramount to our Mountain West expansion strategy as part of Operation Gigawatt. Supply chain development follows reactor deployments, making the advancement of this project crucial to downstream supply chain investments in the state across the nuclear ecosystem."

This project supports Utah's Operation Gigawatt goals and builds on the state's growing nuclear ecosystem, including previous projects such as the Brigham City advanced nuclear initiative.

Chris Hayter, Founder of Fulcrum Point and Chief Operations Officer of Hi Tech Solutions, emphasized the critical role his company will play in moving the project into its next phase. "Fulcrum Point is stepping into this project as a true development partner to help move the Blue Castle Project from years of groundwork into the next phase of execution," he said. "Blue Castle has done important work to position this site for success, and we now bring the technical, operational, and project development capabilities needed to help advance it through licensing, deployment planning, and eventual construction. This project has the potential to strengthen Utah's energy future, support rural economic growth, and deliver reliable power for decades to come."



Aaron Tilton, CEO of Blue Castle Holdings, reflected on the foundation laid over nearly two decades: “Blue Castle’s focus from the beginning has been to create exactly this kind of opportunity with a company like Fulcrum Point. Over the past 19 years, Blue Castle has laid the groundwork to de-risk a site for the deployment of nuclear power, creating significant value for future energy development that can serve energy demand across Utah and the surrounding region, as well as potential on-site, behind-the-meter opportunities for advanced technology applications. We appreciate the collaborative effort with Emery County and the City of Green River to create high-value jobs and meaningful economic impact in rural Utah.”

The Green River site, benefiting from extensive environmental and technical analysis including meteorological, seismic, and groundwater studies, also offers important logistical advantages such as existing water rights, access to the Union Pacific railway, proximity to I-70, and multi-market transmission opportunities. The project supports Emery County’s long-standing identity as an energy-producing region and is expected to create construction and skilled energy sector jobs that will benefit workers, families, and local businesses as energy demand grows.

Emy Lesofksi, Energy Advisor to the Governor and Director of the Utah Office of Energy Development, highlighted the strategic importance of partnerships like these. “Utah is building an energy future that is reliable, innovative, clean and secure through Operation Gigawatt. Partnerships with innovators like Holtec International and Hi Tech Solutions are helping us achieve that future and seeing communities like Green River help secure Utah’s legacy of energy abundance.”

The project will progress through federal licensing and toward reactor deployment, under an exclusive arrangement with Holtec to supply the SMR-300 advanced nuclear power plant. Hyundai E&C, Holtec’s global construction partner, will join the project with Holtec following closure of key project development milestones and associated funding arrangements. Holtec is also supporting Fulcrum’s Brigham City project under development in Utah, setting up the framework for a potential SMR-300 fleet deployment across the state.

Holtec International is a world leader in nuclear energy technology, specializing in heat transfer and reactor components, spent fuel storage, small modular reactors (SMRs), and nuclear plant decommissioning. With a strong commitment to innovation, sustainability, and energy security, Holtec provides cutting-edge solutions that support a clean energy future. Through its expertise and pioneering technologies, Holtec is driving the next generation of nuclear energy worldwide. The company is spearheading the historic restart of the Palisades nuclear plant, marking the first-ever reopening of a U.S. nuclear facility. Holtec’s advanced SMR-300™ will deliver safe, reliable, and carbon-free power anywhere in the world.

