GSE Solutions to Develop First-of-its-kind Hydrogen Plant Model for NuScale Power

COLUMBIA, Md., Dec. 6, 2022 — GSE Solutions ("GSE Systems, Inc." or "GSE" or the "Company") (Nasdaq: GVP), a leader in advanced engineering and workforce solutions that supports the future of clean-energy production and decarbonization initiatives of the power industry, announced today that it will build a Hydrogen Plant Model for NuScale Power's VOYGR™ small modular reactor (SMR) plant simulator. GSE will provide the models, integration, and testing support to NuScale using its JPro™ Dynamic Simulation Software.



GSE strives to create the most accurate, highest-level of advanced modeling technologies on the market, providing unparalleled accuracy and detail, enabling simulators to be used to test engineering changes, control system design and strategies, and even perform human factors engineering prior to plant commissioning.

GSE is one of just a handful of companies tapped to support NuScale in developing and assessing an economically optimized Integrated Energy System (IES) for hydrogen production using electricity and process heat from the $VOYGR^{TM}$ SMR. The existing NuScale control room simulator will be modified to evaluate the dynamics of the IES and will include GSE's models for hydrogen production. The project will determine the technical and economic feasibility of connecting a hydrogen production facility to a NuScale SMR and evaluate operating parameters.

GSE appreciates their long-standing, 10+ year relationship with NuScale that has resulted in the delivery of their four Energy Exploration Centers, which employ GSE Solutions' state-of-the-art simulation technology. The companies also worked together to demonstrate NuScale's new control room operating and staffing philosophy to regulators and customers using a GSE simulator. The Solid Oxide Electrolysis Cell project will again showcase new concepts for use in small modular reactor power plants.

"We are proud to support NuScale in conducting this innovative research," said Kyle Loudermilk, President and Chief Executive Officer of GSE Solutions. "Our modeling of SMR technology and nuclear power systems help facilitate hydrogen production and demonstrates

the potential to balance and stabilize power grids that will be driven by renewable energy sources in the future."

Read NuScale project release: NuScale Power Signs Research Collaboration Agreement for Clean Hydrogen Production

ABOUT GSE SOLUTIONS

We are the future of operational excellence in the power industry. GSE Solutions leverages top talent and technology to provide advanced engineering and flexible workforce solutions that support the future of clean energy. Our specialized solution teams include design and analysis, systems and simulation, programs and performance, technical staffing, and training help the power industry reduce risk, extend plant operational lifetime, and optimize performance. GSE is a proven, with over five decades of experience, more than 1,100 installations, and customers in over 50 countries spanning the globe. www.gses.com

Media Contact

Sunny DeMattio, GSE Solutions sunny.dematttio@gses.com
P: +1 410.970.7931

Investor Relations Contact

Adam Lowensteiner, Lytham Partners gvp@lythampartners.com
P: + 1 646.829.9702

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