

NE-24-32496 – Confirm Product Quality Achieved by Using Electroreduction Technology to Convert GNF Provided Uranium Oxides to Metal

Global Nuclear Fuel (GNF), a joint venture between General Electric and Hitachi (GEH), is a world-leading supplier of BWR fuel, nuclear packaging, and fuel related engineering services located in Wilmington, North Carolina. GEH's purpose is to build on their legacy and boldly innovate to provide reliable carbon-free power to the world.

GNF is developing metallic fuel engineering and manufacturing capabilities. One process under consideration is the electroreduction technology to produce metallic uranium from uranium dioxide. One question is understanding the product quality of the process to understand how it could be deployed at a commercial scale.

GNF will partner with Argonne National Laboratory (ANL) to perform to perform electroreduction tests on various uranium oxide samples to understand product quality and impurities such that GNF can determine if it's feasible to adopt into metallic fuel manufacturing.