

GE Hitachi and Holtec Announce Cooperation to Accelerate Commercialization of Holtec's SMR-160 Small Modular Reactor

On February 14th 2018, GE Hitachi Nuclear Energy (GEH), Global Nuclear Fuel (GNF), Holtec International and SMR, LLC, announced a collaboration to advance the SMR-160 small modular reactor. The SMR-160 is a single loop, 160 MWe pressurized light water reactor designed by Holtec to be “walk away” safe and commercially competitive.

In a Memorandum of Understanding, the companies have agreed to enter into a procompetitive collaboration to progress SMR-160 which SMR, LLC intends to develop, design, license, commercialize, deploy, and service globally. The cooperation will initially include nuclear fuel development supported by GNF and control rod drive mechanisms designed by GEH and may later extend to other areas.

“We are excited to leverage the experience and capabilities of world-class nuclear companies like GEH and GNF as we bring our game changing SMR-160 technology to global markets,” said Holtec President and CEO Dr. Kris Singh. “SMR-160 has prioritized safety in its design to produce a right-sized, passively-safe and cost-effective solution for carbon-free energy. This collaboration will ensure that the SMR-160 supply chain can deliver and fabricate critical SMR-160 technologies and components at our new Advanced Manufacturing Division in Camden, New Jersey.”

“With more than half a century of experience in the nuclear power business we look forward to providing engineering expertise and technical capability to help advance the development of SMR-160,” GEH President and CEO Jay Wileman said. “By utilizing our combined strengths, we can accelerate commercialization of this technology.”

On January 31, SMR, LLC submitted a proposal to the U.S. Department of Energy with support from GEH and GNF, among others, in response to funding opportunity announcement DE-FOA-0001817. The “Integral and Separate Effects Test Program for the Investigation and Validation of Passive Safety System Performance of SMRs” project would yield a uniquely configurable set of testing platforms to demonstrate passive safety system performance, accelerate the SMR-160 and other small modular reactor designs to market, and help license these designs with the U.S. Nuclear Regulatory Commission and international regulators. GEH and GNF will support phenomena assessments, scaling analyses, safety analysis system code assessment, and benchmarking and identification of recommended experimental tests.

“We believe that our experience with boiling water reactor fuel lends itself quite well to the design features of the SMR-160,” said Amir Vexler, CEO of GNF. “We’ve been manufacturing boiling water reactor fuel at our Wilmington, North Carolina facility for nearly 50 years and we look forward to the possibility of making SMR-160 fuel here too.”

GEH and GNF are the latest partners to join the SMR-160 coalition. Existing partners actively participating in the technology development and licensing effort include SNC-Lavalin of Canada and Mitsubishi Electric Corporation of Japan. The next semi-annual Holtec Advisory Council meeting, consisting of eminent domestic and international nuclear experts, will take place on February 28th 2018 at the KPS Technology Campus in Camden, NJ.