**DC Section High-Efficiency Ultrasonic Fuel Cleaning Presentation by Mike Little, Principal Officer of Dominion Engineering, Inc.**

**Wednesday, September 23
7:30 pm ET**

**High-Efficiency Ultrasonic Fuel Cleaning (HE-UFC)**

This presentation provides an overview of High-Efficiency Ultrasonic Fuel Cleaning (HE-UFC), All-Metal Filter Module (AMF) equipment and the industry experience, including adaptations made by DEI in response to the COVID-19 pandemic. These adaptations were also highlighted in a July *Nuclear News* article titled, “[Remote fuel cleaning from across the globe](https://www.ans.org/news/article-353/remote-fuel-cleaning-from-across-the-globe/),” which focused on an ultrasonic fuel cleaning operation performed remotely at a nuclear power plant in Europe in the midst of the COVID-19 pandemic.

HE-UFC was developed to remove crud from PWR fuel in order to mitigate crud-induced power shift (CIPS). The technology was later shown to reduce radiation fields and improve fuel reliability at both PWRs and BWRs, and HE-UFC is now a widely performed maintenance activity during nuclear power plant refueling outages. HE-UFC later prompted the development of related nuclear field services and technologies, including AMFM filtration which utilizes an ultrasonic concentration process to minimize radwaste resulting from cleaning and filtration activities at nuclear facilities.



Mike Little

Mr. Little is the President and Principal Officer of Dominion Engineering, Inc. (DEI) in Reston, VA. He is responsible for leading DEI in its mission to provide innovative, value-adding technical products and consulting services that ensure sustainable and cost-effective delivery of nuclear power technology worldwide. Mr. Little directs DEI’s global business operations in North America, Europe and Asia, including technology licensing and international partnerships, and leads the development and execution of DEI’s strategic plan. He has helped establish DEI as an industry leader in the agile development and delivery of specialized products and services, while assisting clients in reducing operational and maintenance costs and improving plant reliability and performance.

Mr. Little has participated in numerous R&D programs and consulted to nuclear utilities, research organizations, OEMs and service providers on plant and equipment challenges in the areas of chemistry, materials, radiation protection, radwaste, fuel reliability and plant economics. Mr. Little is a listed inventor for 18 U.S. and foreign patents and is the primary author of more than 200 industry publications and technical reports for commercial and government clients. He holds a B.S. in Chemical Engineering from Cornell University and is a licensed Professional Engineer in the Commonwealth of Virginia.