

X-energy



Nuclear Energy. Reimagined



"Progress in Developing the Xe-100 Pebble Bed Reactor"

Ralph Loretta, Chief Financial Officer

Jeff Harper, Senior Director of Business Development

Dr. Pete Pappano, Vice President for Fuel Production

October 27, 2015 at 5:30 p.m.

At [Dominion Innsbrook Technical Center](#), Glenn Allen, VA

Topic:

Doug McCuistion, Ralph Loretta, and Jeff Harper will be discussing X-energy and the recent progress in developing the Xe-100 pebble bed nuclear reactor. Key topics will include a technical overview of the Xe-100 concept, a discussion of the many benefits the reactor offers to diverse customers, and a recap of some of X-energy's progress.

Presentation:

X-energy's Xe-100 pebble-bed High Temperature Gas-cooled Reactor (HTGR) will allow nuclear energy to take a larger role in solving tomorrow's energy challenges. Each reactor generates approximately 50MWe. A standard plant consists of 4 reactors, allowing construction in increments of up to 200MWe. The Xe-100 uses fuel "pebbles", graphite spheres containing TRISO particles (uranium oxycarbide fuel kernels surrounded by multiple layers of pyrolytic coating). The Xe-100 builds upon decades of experience in previous pebble bed projects. The first pebble bed proposal dates to 1944, and real-world test reactors have been around since 1966. A U.S. Department of Energy panel recently affirmed that the Xe-100 has among the greatest market attractiveness and licensing readiness of any advanced reactor, thanks in part to the extensive worldwide history of the technology.

Speaker Biographies:

Ralph Loretta, Chief Financial Officer

Ralph has more than 30 years of experience building global consulting organizations to assist executives in responding to emerging regulatory and technology challenges. These practices focus on merger integration, organizational re-alignment, business process improvements, and large-scale information system implementations. Collectively, these consulting organizations involve more than 250 individuals generating fees of \$750 million.

Jeff Harper, Senior Director of Business Development

Jeff brings more than 30 years of experience in providing innovative business development solutions and value for international energy companies. Jeff's career has focused on: growing revenue and new business starts; leading programs, projects and teams; and, improving earnings, operations, performance and quality.

Dr. Pete Pappano, Vice President for Fuel Production

Pete holds a B.S. in General Science, and an M.S. and Ph.D. in Fuel Science, all from Pennsylvania State University. Prior to joining X-energy, Pete was the Materials Scientist Program Manager for the Office of Fusion Energy Sciences at the Department of Energy, where he was responsible for planning, integrating, and documenting research on materials and small scale components of major fusion device sections to provide maximum earned value for the Fusion Energy Sciences research portfolio. Prior to his time at the Department of Energy, Pete worked at Oak Ridge National Lab on the Research Staff and oversaw project management of high temperature alloy and graphite materials research programs in support of the Next Generation Nuclear Plant (NGNP) Program, including raw material selection, instrumentation development using SolidWorks, manufacturing process line development, quality control, Nuclear Quality Assurance compliance, standard operating procedure writing, and laboratory space management.

Schedule:

- Social Hour - 5:30 p.m.
- Dinner - 6:00 p.m.

- Presentation - 6:45 p.m.
- Adjourn - 8:00 p.m.
- Directions to the [Dominion Innsbrook Technical Center](#)

COST: \$25 (\$15 for students) includes dinner and social refreshments.

Reservations for the meeting have closed as of 4 p.m. on Friday, October 23, 2015.
Please address any questions to [Erich Fritz](#).