AREVA NP Implements New Technique to Extend the Life of Reactor Components; Earns WNE Award

CHARLOTTE, N.C., June 30, 2016 – AREVA NP executed an innovative new maintenance technique, for the first time, on the reactor vessel closure head at Unit 2 of Exelon’s Byron Generating Station in Illinois. This technique, known as cavitation peening, is designed to extend the life of nuclear reactor primary circuit components for more than 20 years and can be used on all reactor designs. AREVA received an innovation award for this technique on June 28 at the World Nuclear Exhibition in Paris.

To prevent stress corrosion cracking on reactor components, ultra-high-pressure water jets generate vapor bubbles that collapse with enough force to create beneficial compression of the components’ internal surfaces. This surface compression improves the component’s material properties and enhances resistance to corrosion and other types of degradation, which reduces the effects of aging.

Following the successful completion of this project, AREVA NP can now offer to nuclear operators a proven alternative to component replacement.

AREVA NP will also provide cavitation peening services at Byron’s Unit 1 and Exelon’s Braidwood Generating Station’s Units 1 and 2.

“Our Byron Generating Station plays an important role in meeting Illinois’ electricity demand, and thanks to innovative techniques like cavitation peening, we are able to ensure that it continues to operate efficiently for decades to come,” said Scot Greenlee, Senior Vice President, Engineering and Technical Services, Exelon.

“Applying our expertise to develop innovative solutions represents AREVA’s commitment to sustain and advance the U.S. nuclear energy industry,” said George Beam, senior vice president of Installed Base Services at AREVA Inc. “Cavitation peening is the latest example of a breakthrough idea that supports our customers’ safe and reliable operations and cost-efficiency goals.”

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AREVA in North America (AREVA Inc.) combines U.S. and Canadian leadership to supply high added-value products and services to support the operation of the commercial nuclear fleet. Globally, AREVA is present throughout the entire nuclear cycle, from uranium mining to used fuel recycling, including nuclear reactor design and operating services. AREVA is recognized by utilities around the world for its expertise, its skills in cutting-edge technologies and its dedication to the highest level of safety. AREVA Inc.’s 4,100 employees are helping build tomorrow’s energy model: supplying ever safer, cleaner and more economical energy to the greatest number of people. Visit us at http://us.areva.com or follow us on Twitter: @AREVAus.