Westinghouse Awarded Contract to Apply Underwater Laser Beam Welding



The underwater laser beam welding process has been applied in Japan and will be implemented at South Carolina's Progress Energy's Robinson Nuclear Plant. Shown is the underwater laser welding machine (left, horizontal) getting installed into a reactor vessel coolant loop nozzle mockup at 40 ft of water depth. (Photo courtesy of Toshiba Corp., Nuclear Energy Systems.)

Westinghouse, Pittsburgh, Pa., has been awarded a contract to apply the underwater laser beam welding process (ULBW) at Progress Energy's Robinson Nuclear Plant in Hartsville, S.C. This will be the first application of the process, which has been applied previously in Japan, at a U.S. nuclear plant.

Developed jointly by Westinghouse and majority owner

Toshiba Corp., the ULBW process applies stress corrosion cracking-resistant weld metal underwater onto the inside diameter surface of aged components, serving as a method of mitigation and repair. The laser beam's heat and dilution controls result in consistent weld quality and high deposit purity.

At Robinson Unit 2, the process will be applied to reactor vessel nozzle dissimilar metal welds during the fall 2013 outage.

"Development of the underwater laser welding process allows us to make welds to vessel components without the customer having to drain their vessel," said Nick Liparulo, senior vice president, Westinghouse Nuclear Services. He also added this results in a shorter implementation schedule and reduced exposure for maintenance crews and plant personnel.

Monroe County Community College to Offer Nondestructive Testing Certificate

Monroe County Community College's Industrial Technology Division's Nondestructive Testing (NDT) certificate program has been approved by the curriculum committee.

The program is one of the first to be offered at a community college in the state of Michigan with larger schools in Georgia and California. Seven new courses are derivative of the existing Nuclear Engineering Technology associate degree program. They also have direct relevance to the college's existing welding technology associate degree program.

The testing program taps into the state's need for hi-tech skills in high-demand occupations. It is estimated between 6000 and 7000 NDT jobs opened up last year. In addition, the U.S. Bureau of Labor Statistics reports 430,450 NDT- related jobs in the U.S. alone, approximately 20,000 of which are in Michigan with salary ranges from \$37,400 to \$53,690 annually or \$17.98 to \$25.81/h.

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