TRAINING

Southern Nuclear's Operator Jump Start

A new training program developed for Southern Nuclear Company is helping to fill the utility's staffing pipeline with the licensed reactor operators and instructors who will be needed for its proposed new units, Vogtle-3 and -4, in Waynesboro, Ga. The Nuclear Operator Jump Start Program is being taught at Augusta Technical College, in Augusta, Ga.

Southern Nuclear partnered with GSE Systems Inc., headquartered in Sykesville, Md., to create the new program. "The unique aspect of the Jump Start course is that it immerses the candidates in realistic, integrated plant operations by use of a soft panel simulator," said Charlie Nesbitt, Southern Nuclear's training deployment manager.

Since the first class was conducted in July 2009, 31 candidates have participated in the program. Of those, 21 operations instructors and nine senior ROs have successfully completed it. All nine of the senior RO candidates have passed the NRC's generic fundamentals examinations. GSE, in cooperation with Augusta Technical College, is under contract to Southern Nuclear to train and screen all of the potential training and operations personnel hired to staff Vogtle-3 and -4.

The 20-week Jump Start program was developed to include three sections—fundamentals, plant systems, and operations. The fundamentals section includes, but is not limited to, the generic fundamentals exam materials required by the NRC. The plant systems section includes plant-specific systems material. The operations section provides hands-on training on a full-scope simulator running the reference plant simulation load.

Knowledge retention is checked with weekly tests throughout the program. The students are required to maintain an 80 percent average or better—the same pass/fail criterion used in a traditional initial license class. The program's three sections are taught and evaluated at a licensed RO training level.

Nuclear industry statistics show that the initial license trainee (ILT) throughput rate, from entry to license, was about 60 percent in 2009, according to GSE. Given a typical ILT class size of 15 candidates, a utility can expect six candidates to fail to obtain an NRC license. Assuming an approximate salary-and-benefits package of $350 000 per student for the 18- to 24-month ILT program period, the cost of six failures is $2.1 million. After factoring in related financial costs—overtime for current licensed operators, Institute of Nuclear Power Operations accreditation issues, instructor and material costs, and loss of simulator time—losing 40 percent of the class can cost a utility over $3 million.