Giant Holes in the Ground
An expected nuclear renaissance has failed to materialize as plans for new plants are scrapped or delayed. What happened?

November/December 2010 | By Matthew Wald

At the edge of the massive excavation project that is a preliminary step to building America’s biggest nuclear power plant, Joshua Elkins stands next to two holes that span 42 acres in the red Georgia clay. Elkins maintains the earth-moving equipment that dug these holes, each as big as 15 football fields, 90 feet down to bedrock and then painstakingly refilled them to about 50 feet with soil tested to maintain stability in an earthquake. In helping to lay the foundation for the two 1,100-megawatt reactors the Southern Company is building here, his machines will contour the earth to specifications meticulously measured by GPS.

The last time anybody in the United States did excavation work for a new nuclear reactor, Elkins, who turned 27 in October, had not been born. Indeed, the groundbreaking for these Westinghouse-designed reactors at the Vogtle nuclear plant, 35 miles south of Augusta, Georgia, represents the first new nuclear construction since the 1970s. (Two existing reactors at the plant began commercial operation in 1987 and 1989.) An unlikely coalition of large utility companies, government policy makers, and environmentalists worried about global warming hoped that it and several other large planned plants in the United States would mark the beginning of a nuclear renaissance, with scores of new reactors being built around the country and worldwide.

And at first glance, circumstances finally seem to favor an expansion of nuclear power. Some $18.5 billion in federal loan guarantees was made available to cover as much as 80 percent of the cost of building a new plant, and the loan program may soon offer tens of billions more. (The new Vogtle reactors received $8.3 billion in loan guarantees from the U.S. Department of Energy in February.) President Obama,