



The Future of Power

Southern Company continues to transition to a Smart Grid system that touts sustainability and innovation
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With a growing focus on energy efficiency and sustainability, it comes as no surprise that consumers are expecting more from their utility companies—and in turn, these companies are investing millions of dollars to overhaul their existing grid systems in an effort to operate more efficiently and maintain reasonable rates.

This sort of electrical evolution has a name: the Smart Grid. And simply put, it is the convergence of information and operational technology applied to the electric grid, allowing sustainable options to customers and improved security, reliability and efficiency to utilities. Moving to a Smart Grid not only increases efficiency and adds more service and monitoring options for electric utilities, but also has ongoing political ramifications as consumers demand lower rates

and politicians, including President Barack Obama, continue to pledge the ongoing creation of a Smart Grid system.

Numerous justifications certainly exist for the Smart Grid, but it's no easy project. Often costing millions of dollars—if not more—the Smart Grid also requires a time-consuming upgrade of existing equipment and infrastructure that can deliver enhanced services and handle a huge amount of incoming data that will provide consumption and other pertinent information.

Leading the Smart Grid transformation

Several electric utilities have proactively pursued this transition to a Smart Grid. Southern Company, one of the nation's largest generators of electricity, has been among the leaders in this transition pursuing a Smart

Grid evolution that extends to its operating companies including Alabama Power, Georgia Power, Gulf Power and Mississippi Power. Georgia Power is in the midst of several substation projects the goal of which, according to Southern Company Services (the engineering arm of Southern Company) Protection and Control Supervisor Steve Campbell, is “to modernize or update protective relaying in a lot of our facilities.”

One of the primary components of the project involves removing much of what Campbell calls “the old technology,” or electro-mechanical relays, in order to install microprocessor-based relays.

Although updating the relays is a small part of the overall Smart Grid transformation process, Campbell says the project has several benefits as related to the company's

