

# Lakeland Electric Projected to Save between 15 and 20 Percent of Coal Supply Costs Annually with GE's Coal Treatment Technology

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- *GE's Chemical Treatment Technologies to Increase Flexibility and Efficiency in Coal-Fired Generation Operations*
- *Utility Savings on Coal Purchases Can be Passed through to Customers via Stable Rates*

ORLANDO, FLA.—December 11, 2012—The City of Lakeland, Fla., and its McIntosh Power Plant Unit #3, will save between 15 and 20 percent of coal supply costs per year by using GE's (NYSE: GE) innovative FuelSolv\* coal treatment technology. FuelSolv is a portfolio of specialty chemical additives that minimize combustion challenges in the utility's coal-burning generator. The McIntosh Power Plant is part of the city's public power utility, [Lakeland Electric](#), which is the third largest public power utility in Florida with a total generation capacity of nearly 1,100 megawatts. Lakeland Electric serves around 120,000 customers and is a top quartile utility in terms of unit reliability and competitive electric rates.

A typical coal-burning power plant will spend approximately 70 percent of its operating budget on fuel. With the price of coal rising as it has, many power plants are looking to fuel their plants with lower cost and subsequently more difficult to burn coals in order to stay competitive. These changes in fuel and boiler operation may cause plants to experience an increase in ash slag deposits on the boiler walls, superheater and reheater tubes in their boilers, which reduces efficiency and increases operating costs due to tube failures, decreased heat transfer and increased maintenance costs. GE's [FuelSolv](#) is a fuel treatment program for deposit control that increases efficiency and reduces costs.

"As we see prices for bituminous coal increasing and natural gas prices decreasing, lower quality and lower priced 'harder-to-burn' coals make sense from a fuel cost perspective, but they present unique operational challenges for a power utility. GE offered a solution that allowed us to purchase less expensive coal, but burn it nearly as efficiently as our historical operations," said Ken Riddle, supervisor of chemical processes, Lakeland Electric.

FuelSolv, GE's portfolio of chemical additives, reduces slagging, which in turn allows for operating at maximum loads with minimal need to shut down for cleaning. Deposits that do form in the combustion zone are generally much easier to remove, which reduces the down time required to carry out mechanical cleaning.

Results from a pilot project estimate significant fuel cost savings. Depending on the mix of coals used, projected savings may be between 15 and 20 percent of coal supply costs per year for a 50 percent central Appalachian/50 percent opportunity fuel blend (these estimates are dependent upon current coal rates and whether the selected opportunity coal is northern Appalachian or Illinois basin bituminous coal).

In addition to the chemical additives, the plant also is utilizing GE's [Zonal\\* combustion monitoring](#) system to help improve boiler reliability and efficiency while reducing emissions. The combustion monitoring system provides real-time mapping of combustion quality to identify poor combustion zones and helps operators and engineers run the boiler at balance combustion conditions.

"As the demand for alternative fuel choices continues to increase, GE is committed to innovating solutions like FuelSolv and Zonal combustion monitoring for the power generation industry. This combination of products offers our customers flexibility and their fuel cost savings can ultimately be passed on to their customers," said John Schumann, global product manager—water and process technologies for GE Power & Water.

For more information and images, visit [GE's POWER-GEN International site](#).

## About GE

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## Contact Information

Name  
GE news  
Division  
Masto Public Relations  
Email  
[information@mastopr.com](mailto:information@mastopr.com)

Name  
Jennifer Seiler  
Division  
GE Power & Water  
Phone  
+1 215 942 3140  
Email  
[jennifer.seiler@ge.com](mailto:jennifer.seiler@ge.com)

Name  
Beth Coffman  
Division  
Masto Public Relations  
Phone  
+1 518 786 6488  
Email  
[beth.coffman@mastopr.com](mailto:beth.coffman@mastopr.com)

Name  
Howard Masto  
Division  
Masto Public Relations  
Phone  
+ 1 518 786 6488  
Email  
[howard.masto@ge.com](mailto:howard.masto@ge.com)