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## POWER NOTES - DUKE ENERGY PROGRESS EDITION

### WINTER 2015 ISSUE - POWER NOTES

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### COAL TO NATURAL GAS CONVERSIONS

According to SourceWatch.com, in recent years Duke Energy Progress has closed a total of 11 coal fired power plants divided between the following locations:

- Lee Steam Plant, Goldsboro, NC
- L.V. Sutton Plant, Wilmington, NC
- Cape Fear Plant, Moncure, NC
- Weatherspoon Plant, Lumberton, NC

These were Duke Energy Progress' remaining "unscrubbed" plants in NC, that do not have flue-gas desulfurization controls (scrubbers). These plants were closed in response to an order by the NC Utilities Commission to provide a retirement schedule for "unscrubbed" coal-fired plants in North Carolina.

Collectively these plants produced almost 1,500 megawatts and represented about a third of Duke Energy Progress' coal-fired generating capacity in NC.

Most of this generating capacity has been replaced with new natural-gas fired generating plants, often at the same locations as the plants being replaced.

Power companies all over the U.S. are in the process of replacing coal-fired plants with natural-gas fired plants.

### IMPACT ON ELECTRIC RATES

The costs of decommissioning the coal plants and building new natural gas plants has already been factored into your electric rates. These new plants increased the total "rate base" and have caused your fixed costs associated with generating electricity to increase.

Currently, the increase in fixed costs has been more than offset by the very low costs of natural gas; that have temporarily helped to minimize the rate of increase in electric rates. However, the items described in our last newsletter (Coal Ash Pond Mitigation, Fukushima Related Nuclear Upgrades and Buying the NCEMPA Interest In Power Plants) are likely to more than offset the savings from natural gas in the coming years.

### THE ROLE OF FRACKING

The very low prices for natural gas are a result of hydraulic fracturing (fracking). This process allows for the cost-effective extraction of natural gas in areas that would previously not have been cost-effective. The mass conversion from coal to natural gas has quickly made our nation increasingly dependent on a large supply of natural gas at reasonable prices. If something in the market were to significantly change, the cost of natural gas and of electricity could rapidly increase for everyone. The two items that have the most potential to dramatically change the market are:

- Environmental regulation significantly limiting fracking
- Mass conversion from coal to natural gas fired power plants eventually causing the demand to outrun the supply of natural gas



## UPGRADING EXIT SIGNS TO LED

Upgrading exit signs to LED (Light Emitting Diode) is a low-cost investment that pays for itself in less than a year. Exit signs have the unique characteristic of running at the same load 24 hours per day, 365 days per year. Therefore, upgrades in efficiency quickly pay for themselves.

If you haven't upgraded, we encourage you to walk your facility. You may be surprised to learn how many of these devices you have. The next time you talk to your electrician, ask about getting your exit signs replaced with LED. The installed cost (parts and labor) is often less than \$50 per sign.

"Exit signs are an excellent, low-cost, low-labor opportunity to increase the energy efficiency and safety of your facility."

The U.S. Small Business Administration

"Savings of \$50 per fixture can be achieved annually with every LED exit sign installed with a one year return on investment!"

East Carolina University – Center for Sustainable Tourism

Type	Watts	Bulb Life	Bulb+Labor Cost/Year	Energy Costs/Year	Annual Operating Cost
Incandescent	40	6 months	\$26	\$39	\$65
LED	2	10+ years	\$0	\$2	\$2
<b>Annual Operating Savings</b>					<b>\$63</b>

The data in the table above are typical for LED exit signs and incandescent exit signs. Note that with a \$50 upgrade for parts and labor, your investment is returned in less than one year.

## CUSTOMER SATISFACTION SURVEY

Thank you for participating in the UMS Annual Customer Satisfaction Survey. The response rate was very high and the feedback was greatly appreciated. We will use your feedback to continue to improve the service that we provide to you.

Congratulations to each of the following iPad Air winners, whose names were drawn from the responses received:

- Jeff Hood, Neomonde Baking Company, Morrisville, NC
- John Profflet, Citizens Trust Associates, Norfolk, VA

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