

## An Uptick in Recent Electric Utility-Gas Utility Mergers— Expect More

By Jim McMahon and Justin Fong – November 20, 2015

On October 10, 2015, Duke Energy, the holding company for electric utilities with more than 7 million customers, announced it was acquiring Piedmont Energy, the holding company for a predominantly gas utility with 1 million customers. Piedmont's natural gas service territory and Duke's electric service territory overlap in parts of the Carolinas, and Piedmont's gas pipelines supply some of Duke's natural-gas-fired power plants. Moreover, Duke and Piedmont recently announced the joint development of the Atlantic Coast Pipeline, which will transmit natural gas from the Marcellus shale to the southeastern United States. Duke's chief executive officer, Lynn Good, described the deal as "establish[ing] a valuable natural gas infrastructure platform, which will provide strong growth opportunities for years to come."

Duke's move is the most recent example of a predominantly electric company expanding with a natural gas utility acquisition. In June 2015, Southern Company, an electric utility with 8 million customers in the Southeast, announced it was acquiring AGL Resources, a gas utility with territories in the Southeast and Midwest. Just prior to that, Black Hills Corporation, an electric utility in North Dakota and Colorado, announced it was expanding its customer count by nearly 50 percent by acquiring SourceGas, a 450,000-customer gas utility with operations from Colorado to Arkansas. Finally, in October 2014, Iberdrola US, which owns Central Maine Power, New York State Electric & Gas, and Rochester Gas & Electric, announced it was acquiring the predominantly gas UIL Holdings. As the maps below illustrate, these transactions offer the acquirer a natural gas service territory that overlaps or is directly adjacent to its own electric service territories. In most cases, the transaction also offers expansion into a new state.

**Figure 1. Map of Southern Company's and AGL Resource's Service Territories**

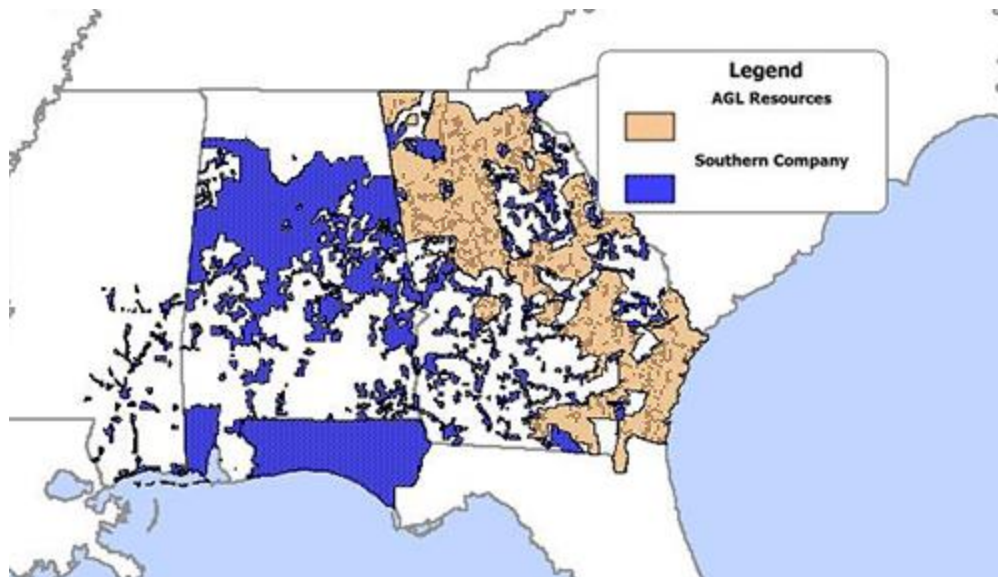
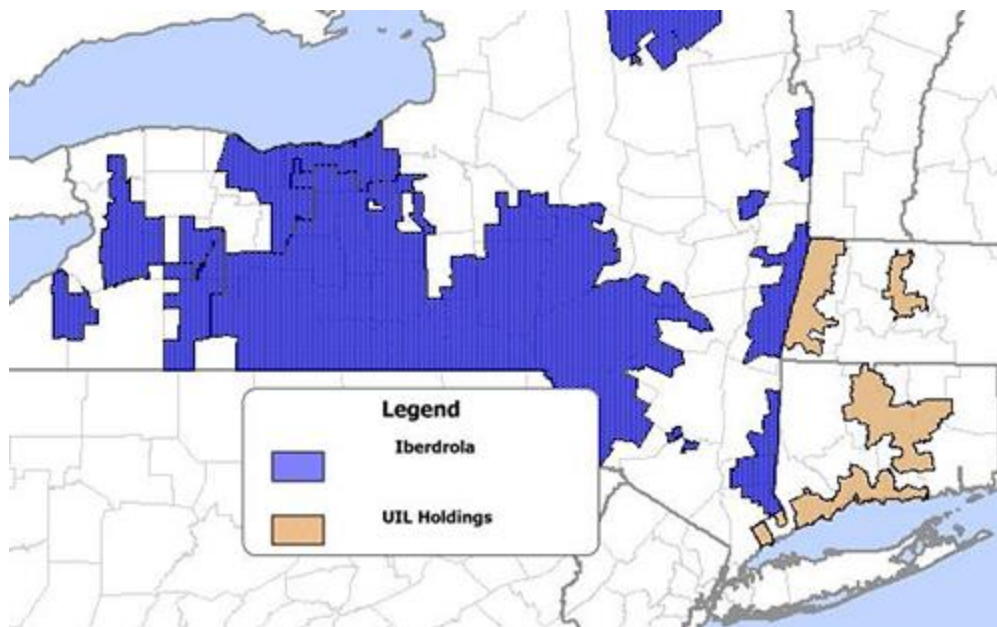
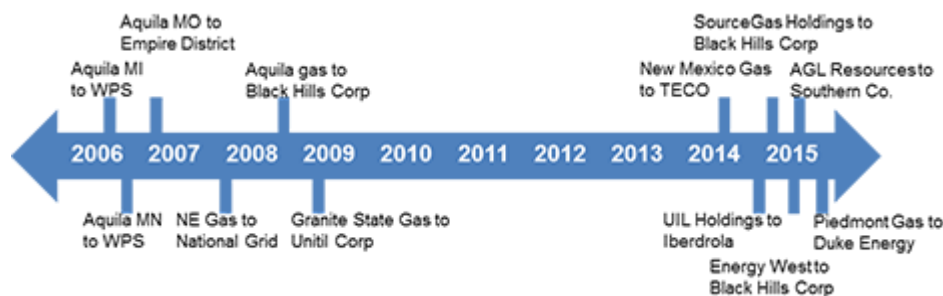


Figure 2. Map of Iberdrola, S.A.'s and United Illuminating Co.'s Service Territories



This trend in gas utility acquisitions by electric companies began principally in 2006–2008, with a focus on unlocking synergies between operating companies. Within the space of two and a half years beginning in 2006, five similar transactions took place with the sale of Aquila’s gas assets in separate transactions, as well as two acquisitions in the New England region. As the timeline below illustrates, this type of acquisition hit a lull for five years coinciding with the U.S. financial crisis and the general tightening of liquidity. The industry is now ramping back up with two completed acquisitions and five announcements between June 2014 and October 2015, four of which were by predominantly electric utilities.

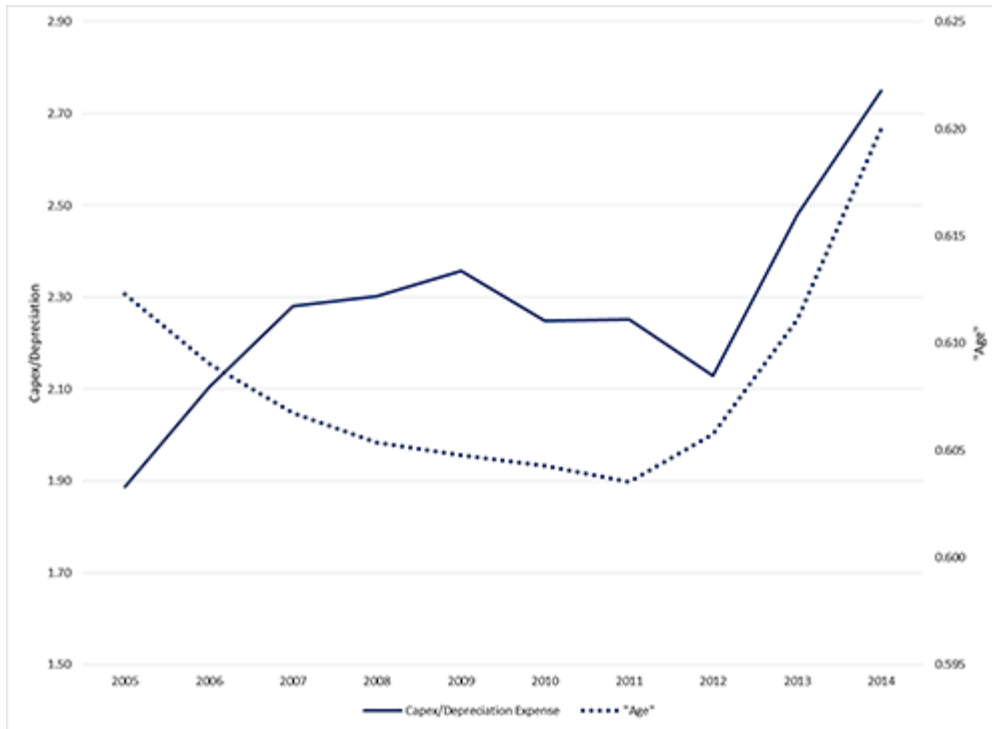
Figure 3. Gas LDC Acquisition Timeline (2006–2015)



The recent surge in natural gas utility acquisitions by electrics is not simply a coincidence. The conditions in both the electric and natural gas industries have changed considerably in the last five years, leading many companies to adjust their investment focus. For natural gas utilities, increased demand from retail gas conversions, low natural gas development costs in shale gas basins, and new natural-gas-fired power plants have resulted in infrastructure expansion and replacement initiatives. The graph below illustrates the trend in natural gas utility capital spending above depreciation over the last 10 years (left axis). In the last 3 years, average gas utilities’ yearly capital expense

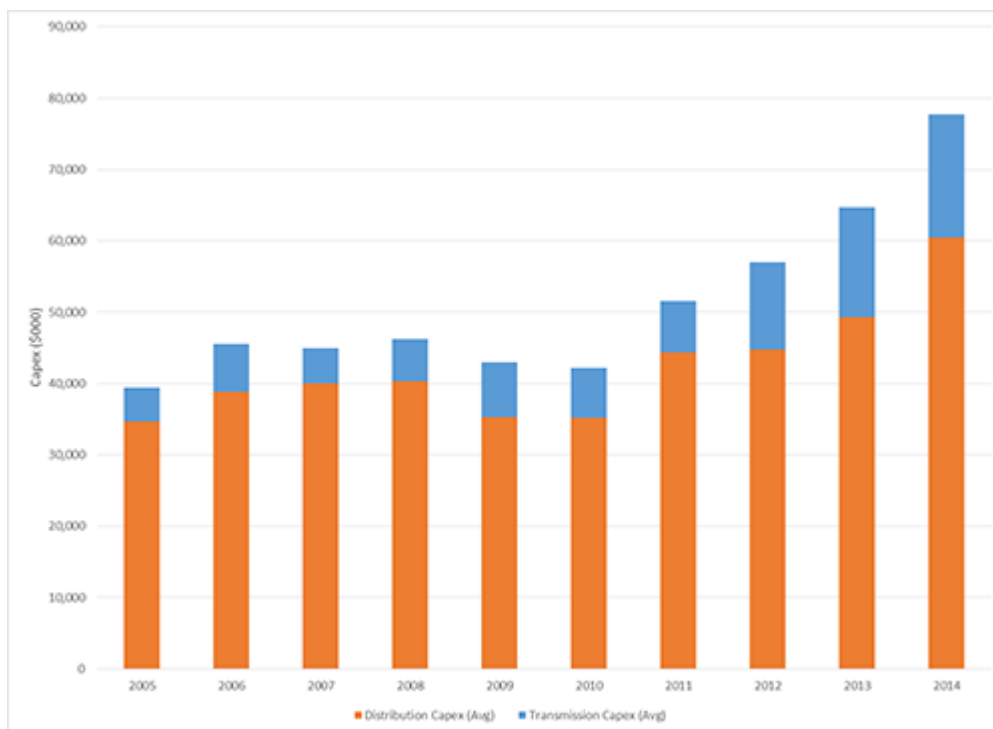
has risen from 2.1 to over 2.7 times more than depreciation expense. Meanwhile, the average “age,” as defined by the ratio of a utility’s net plant to its original cost, has risen 1.5 percentage points. In other words, on average, natural gas utilities’ assets are about 38 percent depreciated, down from an average of almost 40 percent in 2011, due to this large influx of capital spending across the industry.

**Figure 4. U.S. Gas Utilities’ Capex/Depreciation Expense and “Age” (2005–2014)**



Natural gas pipeline investment has experienced a similar rise to that of natural gas **local distribution company** (LDC) spending. The graph below illustrates the average gas utility capital expense investment in the United States between 2005 and 2014. The recent rise relates primarily to pipeline developed to support movement of natural gas between the Marcellus and Utica shale regions to other parts of the country. Prior to the shale boom, most gas demand in the Northeast and Mid-Atlantic, for instance, was served by resources in the Gulf of Mexico or Canada. Low-cost shale resources have forced the rewiring of the U.S. natural gas system.

Figure 5. U.S. Gas LDC Average Capex (2005–2010)



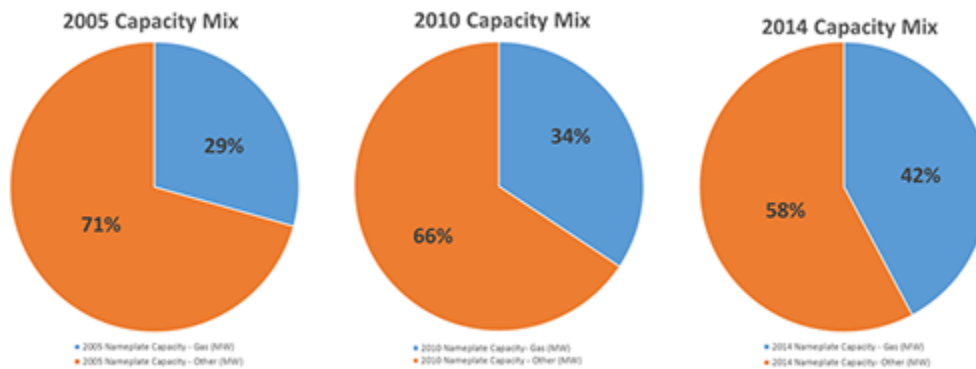
For predominantly electric utility holding companies, investment in natural gas utilities has become attractive for several reasons. First, many electric utilities are experiencing low load growth, which has led to a more cautious approach to infrastructure investment and a desire to look at other infrastructure opportunities. Load growth is at historic lows and the U.S. Energy Information Administration (US EIA) predicts that load growth will remain at or below this level for the future (see the table below). In a low load growth environment, a utility may not be able to reinvest retained earnings without substantial rate increases, which are always politically difficult to accomplish. Capital can instead be invested and reinvested more opportunistically in the natural gas system.

Figure 6. Total Electricity Use (billion kilowatt-hours) (US EIA Annual Energy Outlook 2015, Table A8)

2013	2020	2025	2030	2035	2040	Growth 2013-2040
<b>3691</b>	<b>3941</b>	<b>4078</b>	<b>4205</b>	<b>4319</b>	<b>4470</b>	<b>0.70%</b>

Second, many utilities own natural-gas-fired plants and can own assets further up the supply chain. Having access to transportation and sourcing options can yield economies of scope to owners of gas plants. Figure 7 below illustrates how the U.S. generation landscape is shifting toward natural gas to an unprecedented degree. Among power plants owned by electric utilities, natural gas plants (as a percentage of total utility-owned nameplate capacity) have increased from 29 percent in 2005 to 42 percent in 2014. The economies of scale from operating multiple utility companies under shared services are just as important as the economies of scope. While both companies sell different commodities, the similarities between gas and electric utilities are drivers of significant merger activity.

Figure 7. Utility-Owned Power Plant Capacity Mix 2005, 2010, 2014



This activity is happening in a highly favorable lending environment. Figure 8 below illustrates the number of credit rating upgrades for U.S. investor-owned utilities over the last 12 years. Credit rating upgrades have been trending upward, especially in the post-recession recovery time period. As access to capital is improving across the industry, the cost of borrowing is decreasing as well, as seen by the declining rates of the 10-year Treasury bond illustrated in figure 9. These two factors lower the cost of borrowing and allow room for deals to be made.

Figure 8. Utility Credit Ratings Percentage Upgrades (Edison Electric Institute Credit Analysis Using Fitch, Moody's, and Standard & Poor's Ratings)

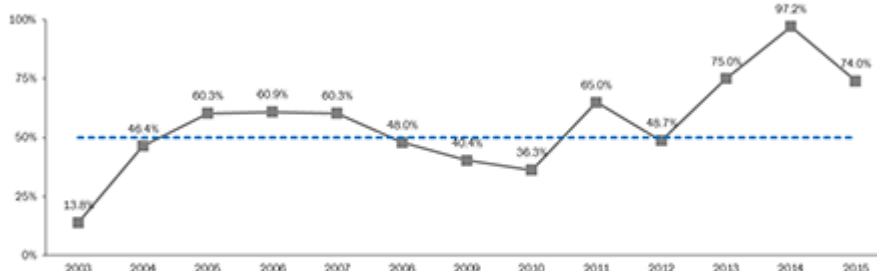


Figure 9: Interest Rates for Ten-Year Treasury Bonds (2005–Present)



Low borrowing costs and constrained load growth are leading predominant electric utilities to look elsewhere for growth. As predominantly electric utility companies grow their gas generating base, and natural gas utilities will continue to develop favorable capital expenditure plans, we expect to see this merger-and-acquisition model to continue to play out.

**Sources:** U.S. EIA, SNL Financial, Edison Electric Institute

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