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INDUSTRY OUTLOOK

US Regulated Utilities:

Regulatory Support, Low Natural Gas Prices Maintains Stability

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Our outlook for the investor-owned US regulated electric and gas utility sector is stable. This outlook reflects our expectations for the fundamental business conditions in the industry over the next 12 to 18 months.

» **The outlook for the US investor-owned regulated electric and gas utility sector is stable.** We expect a supportive regulatory environment to remain intact over the next 12 to 18 months, providing a timely recovery of prudently incurred costs and investments through authorized rates. We see a sustained period of low natural gas prices benefitting utilities seeking other rate base increases; steady and stabilizing financial ratios, and average annual revenue increases between 3-5%.

» **Capital markets remain highly accessible.** The sector benefits from flight-to-quality dynamics, with a return to long-term liquidity facilities as the norm.

» **We expect high capital expenditures to continue for the foreseeable future.** Large capex will contribute to rate base growth; however, management must carefully address the financing of corresponding negative free cash flow, along with the increased rate pressure on customers.

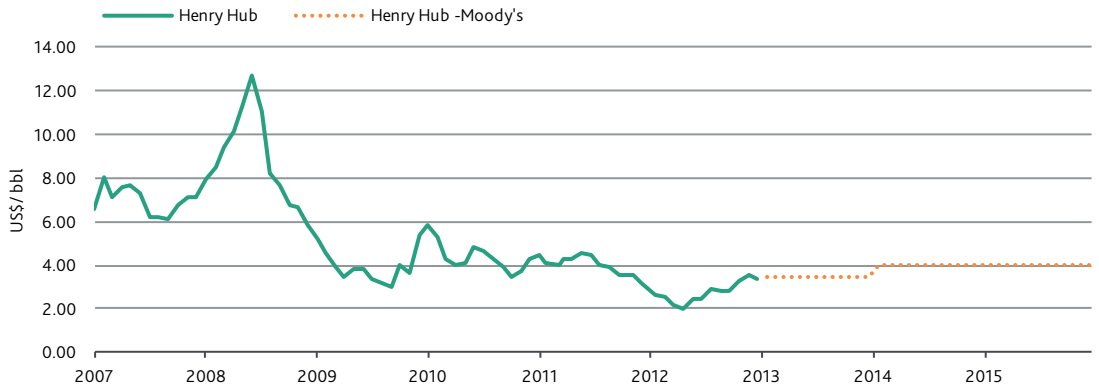
» **States to watch in 2013.** We see regulation throughout the US in a business-as-usual status over the near-term, but there are certain states where our perception of regulatory supportiveness may change in 2013. States we view as prone to positive changes are Maryland, Arizona, New Mexico and Texas. States we view as prone to negative changes are the eastern states impacted by Hurricane Sandy, Illinois, North Carolina, Ohio and Mississippi. We also see potential for negative changes at the FERC.

» **We anticipate financial metrics stabilizing over the near term.** Cash recovery of costs through special recovery mechanisms and the extension of bonus depreciation should help to offset reduced allowed returns on equity (ROE) and low customer demand. Companies pursuing large capex plans will see a decline in financial metrics and are at the highest risk for recovery delays.

Low natural gas prices continue to benefit utilities, customers and commissions

The abundant supply of domestic natural gas is a material credit positive for regulated utilities. Low natural gas prices have facilitated an easing of fuel costs and power prices throughout the nation and should continue to provide a backdrop for continued supportive regulatory relationships over the next 12-18 months. The proliferation of shale gas supplies in the US has driven natural gas prices to new lows as seen in Figure 1, below. This phenomenon, in combination with low customer demand due to a sluggish recovering economy, mild weather and the effects of energy efficiency and demand side management (DSM), has kept power prices low - a trend we expect to persist through 2013.

FIGURE 1
Natural Gas Prices and Assumptions[1]



Source:EIA.gov and Moody's

Since a peak of over $12 per MMBtu in 2008, gas prices have been on a rather steady decline. Since fuel and purchased power costs represent the single largest utility cost, and are typically a direct pass-through to rate payers, customer bills benefit significantly from reduced commodity and procurement costs.

These variable cost decreases have provided headroom in rates, enabling regulators to allow utilities to recover rising non-fuel costs through increases in base rates without a material change to the aggregate amount of a customer's bill. The offset of fixed cost increases, with variable cost decreases, is largely unnoticed by the typical residential consumer. The cost offset helps to avoid any negative customer reaction that might place political pressure on utility commissions and lead to their reluctance to allow some general rate increases for utilities.

Figure 1 also reflects our belief that the cost environment for natural gas will be low for several years. We expect this environment to give regulators additional flexibility in maintaining their support for the recovery of rising utility operating costs. Our natural gas price expectations are influenced by our view that a sudden "game-changing" growth spurt in demand is unlikely over the near term and that a gradual increase in gas consumption will occur throughout all corporate sectors in 2013. Our price assumptions show Henry Hub natural gas at $3.50 per MMBtu for 2013 and at $4.00 thereafter.

[1] Our natural gas price assumptions are derived from the Moody's energy team and its Global Oil and Natural Gas outlook. These price assumptions are used for rating purposes and as sensitivity inputs for production companies' projected performance.

Low commodity prices benefit industry liquidity

Low commodity costs have also bolstered utility liquidity profiles, as reduced collateral calls and inexpensive hedges are increasingly replacing historical positions. The sector continues to benefit from open and welcoming credit markets, as utilities remain a safe haven for investors looking for steady and predictable returns. Furthermore, bank support via long-term credit facilities (e.g., 5 year tenors) has returned, following a contraction during the Great Recession.

We expect the industry axiom of open and welcoming markets to continue over the next 12 to 18 months; however, the flight from trouble in Europe may have potentially run its course, and Basel III requirements on bank capital may weaken the appetite of lender interest in the sector. Since the next round of refinancing may be more expensive, it will provide an indication of which issuers refinance only opportunistically and which issuers refinance because maintaining longer-term liquidity is a core tenet of their financial policy.

Regulatory support is a credit positive, despite lower authorized ROEs

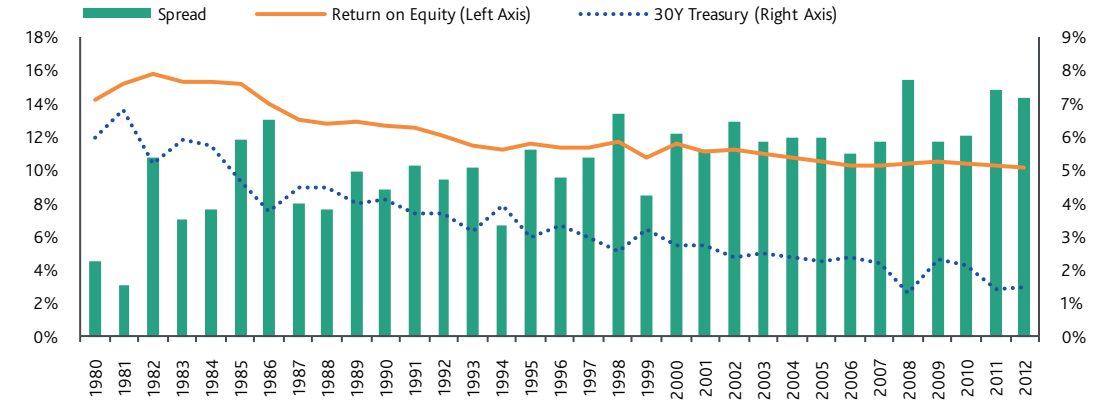
Given the headroom created by lower fuel and purchased power costs, regulatory support for general rate increases has continued throughout the nation with few states generating any prospect of immediate concern. The general trend for approved rate increases in the US were 61% of requested amounts granted in 2012, compared to 55% in 2011 and 57% in 2010. Our ongoing premise is that regulatory commissions prefer to regulate financially healthy utilities and that utility managements have core competencies in navigating the regulatory landscape, in order to support the long-term financial wellbeing of the companies.

One point of interest to note is in the trend of falling allowed ROEs throughout the industry, which includes several jurisdictions recently crossing below the 10.00% threshold. For example, several issuers in Oregon (Northwest Natural Gas, A3, negative and Idaho Power, Baa1, stable) and Washington (Puget Sound Energy, Baa2, stable and Avista Corp. Baa2, stable) dropped below 10.00% allowed ROE in 2012, with some companies experiencing sub-10.00% allowed ROE in multiple jurisdictions, such as PacifiCorp (Baa1, stable) and Kansas City Power & Light (Baa2, stable - its Missouri rate case decision occurred in January 2013). According to SNL Financial, the average allowed ROE for investor owned utilities, has dropped to 10.07% in 2012 versus 10.21% in 2011. We have observed two oft-cited reasons behind a commission reducing a utility's allowed ROE; those being 1) the prevalence of single item rate making through specific riders and trackers, and 2) the current low interest rate environment.

Many commissions have reasoned that a heightened use of special cost recovery mechanisms such as environmental cost trackers, weather normalization adjustments, decoupling mechanisms, and the like, have reduced the business and financial risk of a utility, thus justifying a reduction in allowed ROE.

Similarly, various commissions cite that due to the current low interest rate environment, a utility's cost of capital has been reduced to a point that warrants a lower allowed return and reduced rates for customers. Figure 2 identifies the declining ROE trend in recent years, compared to the risk free rate of return on the 30 year US Treasury bill.

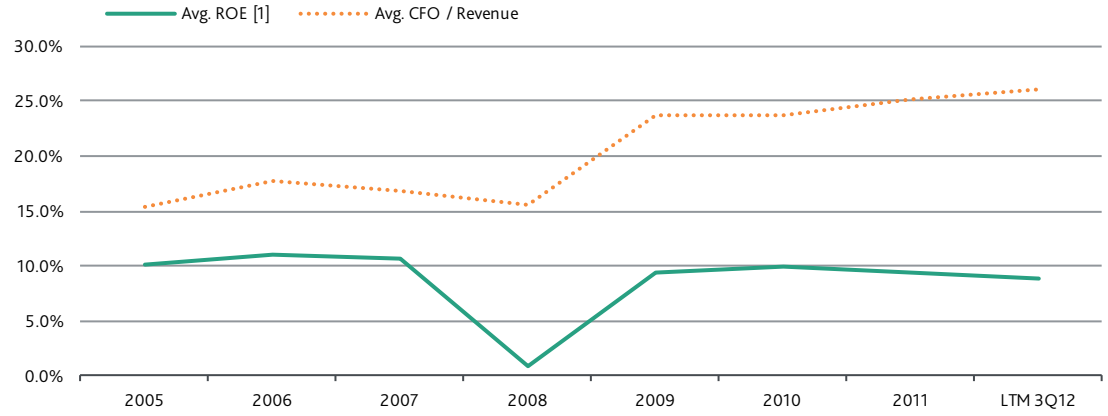
FIGURE 2
Authorized Returns on Equity, Treasury Rates and Spread



Source: SNL & Bloomberg

We expect the risk free rate of return to remain low through 2014 and that pressure on ROEs will persist over the near-term. Despite this trend, we see evidence of cash recovery being sufficient to sustain most utility financial profiles over the next 12 to 18 months. In Figure 3 below, we observe that although ROE has declined over the past two years, cash flow from operations (CFO) as a percentage of revenue has actually increased, potentially due to enhanced cost recovery provided by trackers and certainly from federal tax incentives such as accelerated bonus depreciation.

FIGURE 3
Cash Generation versus Returns



[1] 2008 Moody's Adjusted Net Income experienced significant reductions due to large losses in pension plan assets for several companies in our peer group.

Source: Moody's

If cash recovery is maintained near current levels, despite minor reductions in ROE, there should be no negative impact on ratings. However, declining allowed ROE levels are negative because we often regard the level of allowed ROE as a barometer of the relationship that a specific utility maintains with its commission. Thus we view punitive reductions to ROE as a credit negative, although the immediate impact is usually delayed, somewhat, by continued growth in rate base. Furthermore, we could see negative rating actions if ROEs were to decline to levels near 9.00%, as reduced revenues will eventually lead to declines in cash flow, or turn investor interest toward competing utilities in more investor-friendly jurisdictions, or even to different sectors.

Our primary concern about the trend toward lower industry ROEs is the eventual return of higher interest rates without the benefit of timely and commensurate adjustments toward higher allowed ROEs. That is, when the relationship between interest rates and ROEs starts to converge (identified by the green columns in Figure 2), there is risk for credit deterioration and negative rating impacts.

We view regulatory compacts that have annual updates to ROEs, such as the historical multi-year rate plans evidenced in states like New York and Vermont, to be more credit supportive in circumstances of a rising interest rate environment. The allowed ROEs in the historical rate plans of these states are formulaic, with treasury bill rates as an automatic input to the outcome of an allowed ROE. They also contain annual rate increases to capture rising costs and investment for the respective utility. Conversely, in states where there are several years between rate cases, there is a higher risk of allowed returns lagging interest rate growth and achieving all-in rates that do not reflect the reality of a more costly economic environment.

States to watch in 2013

Although our general view of regulation throughout the US is business-as-usual over the near-term, there are certain states where our perception of regulatory supportiveness may change in 2013. Figure 4 identifies those states we view a change in the current regulatory environment, either positive or negative, as a real possibility in 2013, with a bias to the negative. We also describe the circumstances motivating our vigilance in these states.

FIGURE 4

Potential Shifts in Regulatory Support

Positive Potential		Negative Potential	
State	**Comment**	**State**	**Comment**
MD	Governor recently wrote to Maryland Public Service Commission urging them to adopt a task force recommendation to allow cost recovery mechanism for investments aimed at improving reliability of a utility's distribution system.	NY, NJ, CT	Effects of Hurricane Sandy and potential for deferred recovery of costs and heightened political influence over rate making.
AZ	UNS Gas, Arizona Public Service, and Southwest all recently received credit supportive rate case outcomes and included shorter time frames for deciding cases and decoupling. Positive outlook for UNS Energy and subsidiary Tucson Electric Power (TEP) reflects our expectation for a reasonable outcome in upcoming TEP rate case.	IL	Although recent legislation has improved Commonwealth Edison and Ameren Illinois' cost recovery prospects, the regulatory and political environment remains unpredictable with adverse regulatory decisions continuing to be a continuing trend.
NM	The state recently finalized rules allowing rates to be based on a forward looking test year, but these new rules have yet to be implemented in a rate order. The legislature is also expected to promulgate rules following a recent referendum requiring more stringent qualifications for elected commissioners.	NC	At Duke Energy, management changes and other developments following the Progress Energy merger and a subsequent settlement with North Carolina Utilities Commission has increased regulatory risk at a time when both of its North Carolina utility subsidiaries are pursuing rate cases.

FIGURE 4

Potential Shifts in Regulatory Support

	Positive Potential		Negative Potential
TX	Political and regulatory intervention seeks to alter the market structure to benefit generators.	OH	Although Electric Security Plans provide some clarity through 2014, the market transition toward fully deregulated generation could negatively affect utility financials.
		MS	Unanimous Mississippi Public Service Commission vote to deny Mississippi Power's request of financing costs on Kemper County IGCC plant due to a pending Sierra Club lawsuit was a credit negative. A settlement agreement on cost recovery has since been reached.
		FERC	Changes already enacted to the FERC rate making methodology in California and the current legal battle regarding New England transmission ROE reductions threaten pervasive changes to the degree of financial support offered by the FERC.

Stable financials, but falling cash flow ratios for big spenders

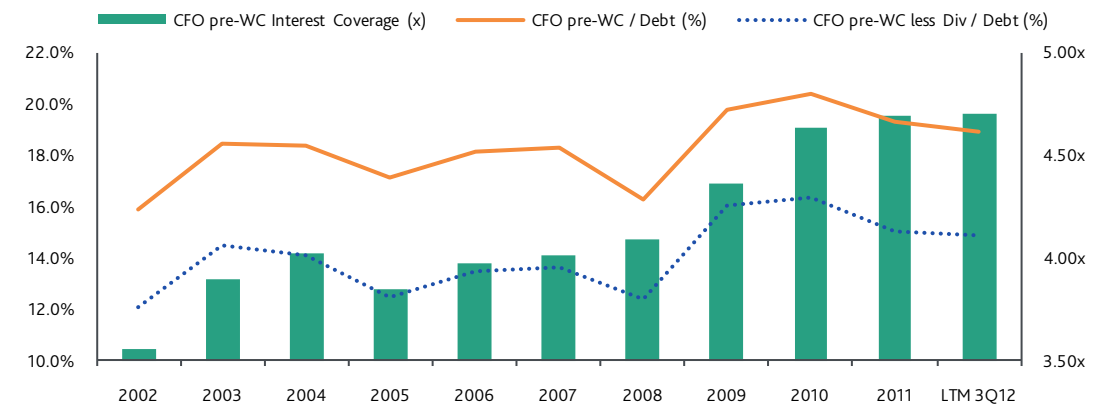
In recent years, utilities have elected to take advantage of favorable tax policies which boost near term cash flow in exchange for reduced rate base growth in the future – specifically, bonus depreciation. This voluntary tax election also benefits utilities because it temporarily boosts key financial metrics such as CFO pre-WC to debt[2] and CFO pre-WC interest coverage. Since 2009, tax policy changes such as those associated with accelerated bonus depreciation, uniform capitalization and capitalized repairs have provided the industry with one-time changes to tax accounting methods that have generated significant amounts of cash flow from tax savings or refunds.

We estimate that, on average, a utility company's cash flow to debt metric benefitted anywhere from 200 to 300 basis points in any given year (2009-12), depending on the timing of when a given company exercised accounting methodology changes. Although these one-time effects have largely run their course, we note that the recent extension of 50% bonus depreciation will continue to support (or inflate, if comparing to organic run-rate potential) cash flow levels in 2013.

As seen in Figure 5, even with benefits from 100% bonus depreciation in 2011 and 50% in 2012, cash flow coverage of debt has declined for our peer group since the height of 2010.

[2] Cash Flow from Operations before Working Capital to debt

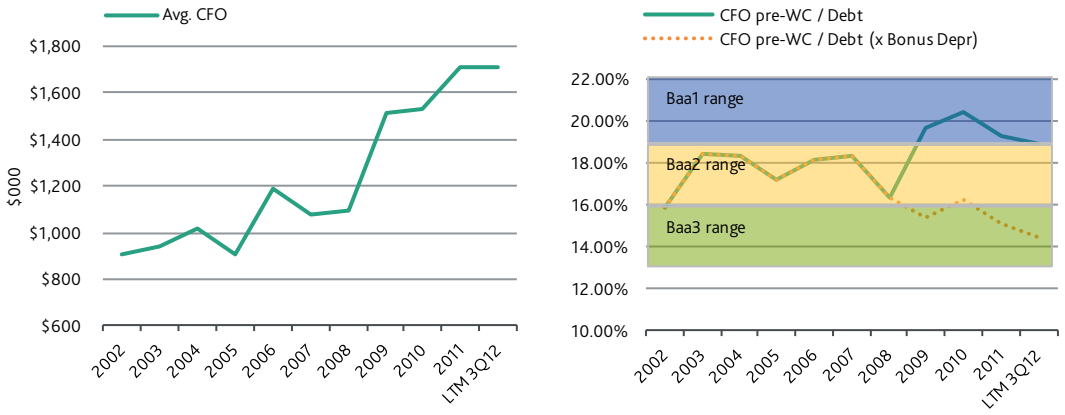
FIGURE 5
Key Cash Flow Metrics



Source: Moody's

This inflation due to one-time benefits is a risk, as utilities will likely have lower cash flow when bonus depreciation ends, all else being equal. In Figure 6, we estimate the magnitude of the effects of bonus depreciation (assuming 70% of capex represents qualifying assets and a 35% tax rate) on the peer group's CFO pre-WC to debt. Without bonus depreciation, the financial profile of the group falls from a level in-line with the low Baa1 rating range of our Regulated Electric & Gas rating methodology, to a level solidly in the Baa3 range.

FIGURE 6
Effects of Bonus Depreciation



Source: Moody's

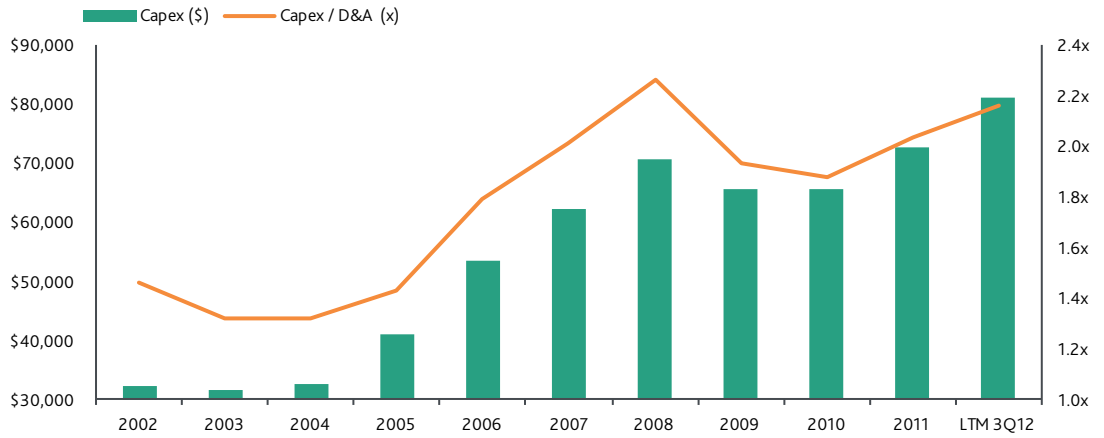
Nevertheless, we expect financial metrics to remain relatively steady in 2013, given our assumptions of ongoing rate relief, the continuance of low interest rates, cash flow stability provided by cost recovery mechanisms, government policy from the extension of bonus depreciation, and the potential for the Moving Ahead for Progress in the 21st Century Act (MAP-21) to reduce the funding requirements for pension obligations. More importantly, we think managements will utilize a balanced mix of debt and equity to keep the leverage and capitalization of their utilities in a conservative range and not test negatively biased rating actions.

Although we expect metrics for the industry to be stable, companies with robust capital programs, such as Virginia Electric and Power Company (A3, stable), Indiana Michigan Power company (Baa2, stable), SCANA Corporation (Baa3, stable), and Public Service Company of Oklahoma (Baa1, stable), could experience a decline in financial metrics due to increased debt associated with growing free cash flow deficits. In each of these cases, we anticipate that the resulting financial profile will still be appropriate for each company's current rating.

Rate shock and regulatory contentiousness are primary risks to stable outlook

Capital expenditure plans for most US utilities have rapidly outpaced depreciation and amortization (D&A) levels in recent years. The need for environmental retrofits, growth in renewable energy use and basic system maintenance and upgrades are the primary drivers for the capex growth trend observed amongst our sample utility peer group (made up of 45 industry peers; see Appendix A). Figure 7 shows the relationship between capex and D&A over the past ten years for these companies.

FIGURE 7
Capex Levels for Moody's Peer Group
($ millions)



Source: Moody's

We view capital investment in rate base positively over the longer term, as it contributes to growth in operating cash flow. Given the low commodity price environment, we assume that these growth investments will be recovered through base rate cases on a timely basis without contentious regulatory proceedings. However, given the magnitude of these investments, corresponding increases in customer bills and associated financing needs, we see the need for each company to carefully execute their capital raising strategies in order to maintain stable credit profiles across the sector. We view the relationship between rising customer bills and the current economic environment as a potential credit negative. While the risk of this scenario (i.e., significant rate shock) is considered to be remote, if there were a reversal in the plodding economic recovery, and lower variable costs were no longer sufficient to offset the higher costs of capex programs, recovery of these costs could be delayed over the intermediate-term in order to avoid customer rate shock and/or rate fatigue.

In order to gain an appreciation for the magnitude of these prospective risks, we analyzed the potential rate impact of expected capex levels for companies involved in large capital programs. Figure 8 shows the utilities that we believe have the largest potential rate increases over the near-term. The analysis includes 2013-2014 capex data made available in 2011 10K company disclosures and assumptions

explained in Appendix B (also see our report "High Capital Expenditures Adding to Rate Pressure for Utilities" (October 2012)). Although the time horizon of the capital expenditures extends outside of our outlook horizon, we find it valuable to determine what companies will require substantial rate increases to recover capital expenditures, in order to monitor management's near-term response to mitigate and/or absorb future risks to rate recovery. Proactive management strategies, in our opinion, include implementing cost cutting measures, strengthening the balance sheet and bolstering liquidity. Several of these utilities were recently awarded increases in rate cases that were determined in late 2012.

FIGURE 8

Largest Potential Rate Increases

Company	Rating	Total Rate Increase for 2013-2014 Spending	Estimated Capex 2013-2014 (millions)	CFO pre-WC / Debt LTM 3Q12	Projected CFO pre-WC / Debt 2014	Metric Cushion	Supportiveness of Regulation
Louisville Gas and Electric	Baa1	18%	$1,538	27%	23%	7%	Above Average (A)
Mississippi Power	A3	18%	$1,235	14%	16%	-4%	Above Average (A)
South Carolina Electric & Gas	Baa2	12%	$2,600	17%	17%	0%	Above Average (A)
Kentucky Utilities	Baa1	11%	$1,583	23%	21%	5%	Above Average (A)
Southwestern Public Service	Baa2	11%	$1,160	24%	22%	6%	Average (Baa)
PPL Electric Utilities	Baa2	10%	$1,689	22%	21%	5%	Average (Baa)

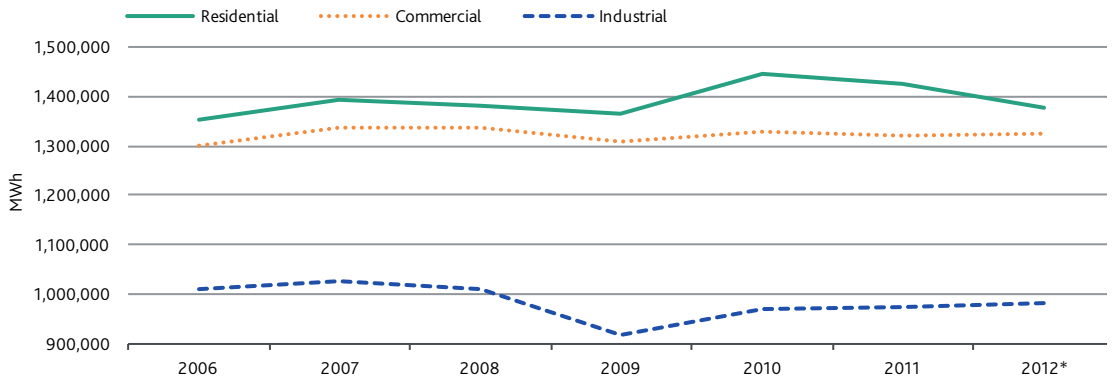
Source: SNL, 10K and EIA filings, Moody's

Over the next two years, some of these companies could find themselves poorly positioned within their rating category as a result of their cash outlay. Although we assume a 50% debt financing of these expenditures, negative ratings action could occur if management takes a more aggressive leverage policy or if cash flow recovery is slower than expected. Thus, attention will be given to the progress of each company's capex program and the regulatory developments that dictate the timing and duration of recovery.

Utilities will need to manage continued flat volume growth due to economy, energy efficiency and demand side management

Another key to our outlook assumptions is the industry's ability to pass through base rate increases (aided by low commodity costs) without the benefit of robust organic growth in customers or usage per customer. Flat to declining demand (see Figure 9) represents yet another key risk to the stability of our outlook, as it places the full amount of rising cost pressure on a static amount of customer use.

FIGURE 9
Retail Sales by Customer Class



*2012 data through November
Source: EIA.gov

Effects of a struggling economy, mild weather and continuing efforts promoting more efficient appliances and customer conservation (aka demand side management, DSM) are all contributing to very-low-to-declining demand growth across the majority of the sector. Whereas fiscal and monetary policy is still attempting to prod the economy out of the Great Recession and spur growth, federal and many state governments are taking significant measures to increase greater energy efficiency through various means including appliance and equipment standards, building codes, transportation policies and utility programs. These policies are gaining momentum across the country, with most states increasing their budget allocation for efficiency programs in recent years.

The credit implication of these initiatives are largely twofold. On one hand, we view utilities having a high degree of fixed cost recovery in the demand portion of rates as better positioned to withstand a low demand environment. Thus, utilities in states such as California and New York, where legislatively backed decoupling mechanisms have been implemented at essentially every utility, should maintain relatively stable and predictable financial results, even with slumping energy sales. On the other hand, utilities that have a greater portion of fixed costs in the energy or other variable portions of the rate payer's bill have greater exposure to fluctuations in demand and a higher potential for negative rating action in a continuing low demand environment.

Since a growing utility can recover more fixed costs through margin expansion from new customers, reducing the need for general rate increases, a low demand or no growth environment ups the ante for utility asks in rate cases. Rate cases under no growth scenarios become must-haves for a utility, in order to recover increasing operating costs. The addition of static growth to the aforementioned mixture of rising consumer rates in a depressed economic environment might lead to breach of the inflection point (i.e., the point at which customers complain to regulators about their inability to pay for continued utility rate increases) in one or more states. Appendix C details a state-by-state comparison of inflection point sensitivity, based on income, average utility bill and retail rates. States that we suspect to be potential areas of inflection point concern (e.g., Kansas, Michigan, Missouri and West Virginia) are those where utility bill rate increases have grown at a high rate since 2008, and also where the utility bill represents a relatively high percentage of the rate payer's discretionary income.

One point of growth differentiation is found with local distribution companies (LDCs) that are benefitting from the attractive economics of heating one's home or small business with natural gas versus propane or oil. Service territories containing a large amount of customers who have historically

used propane or oil for heating have begun converting their heating systems to run on natural gas, given the exceedingly low cost for natural gas. Many of these conversion opportunities are significant for companies like UIL Corp. (Baa3 stable) and UGI Utilities (A3 stable) in the Northeast, which has traditionally relied on oil for space heating and the natural gas grid has been late to develop.

Federal Government actions represent a wild card

Although Congress has approved a short-term extension of the debt ceiling, ultimate policies regarding the debt ceiling and budget sequestrations are highly uncertain and have the potential to impede the already sluggish economic growth. On January 30, the Commerce Department reported that the economy shrunk by 0.1% in 4Q12 – the first economic contraction since the recession ended in 2009. Uncertainties surrounding government spending and the economy's durability in 2013 could have negative effects that exacerbate an already low power demand environment; a negative for the sector.

These economic vagaries are at play while newly re-elected President Obama's eventual nominee to replace Lisa Jackson, the head of the Environmental Protection Agency, may try to generate renewed momentum for additional environmental compliance regulations. However, the slow and litigious process for promulgating regulations means that their impact would be unlikely to have a material impact in the near-term.

Appendix A – Peer group listing

	MDY Rating	MDY Outlook
Madison Gas and Electric [1]	A1	Stable
PECO Energy	A3	Stable
Public Service Electric and Gas	A3	Stable
Wisconsin Energy	A3	Stable
ALLETE, Inc.	Baa1	Stable
Alliant Energy	Baa1	Stable
Baltimore Gas and Electric [2]	Baa1	Stable
Consolidated Edison, Inc.	Baa1	Stable
Integrys Energy Group, Inc.	Baa1	Stable
MidAmerican Energy Holdings Co.	Baa1	Stable
NextEra Energy, Inc.	Baa1	Stable
OGE Energy Corp.	Baa1	Stable
PG&E Corporation	Baa1	Stable
Sempra Energy	Baa1	Stable
Southern Company (The)	Baa1	Stable
Xcel Energy Inc.	Baa1	Stable
American Electric Power	Baa2	Stable
Commonwealth Edison [2]	Baa2	Stable
Dominion Resources Inc.	Baa2	Stable
DTE Energy	Baa2	Positive
Duke Energy	Baa2	Stable
Edison International	Baa2	Stable
IDACORP, Inc.	Baa2	Stable
ITC Holdings Corp.	Baa2	Stable
Northeast Utilities	Baa2	Stable
Pinnacle West Capital Corporation	Baa2	Stable
TECO Energy, Inc.	Baa2	Stable
Westar Energy, Inc.	Baa2	Stable
Ameren Corporation	Baa3	Stable
Black Hills Corporation	Baa3	Positive
CenterPoint Energy, Inc.	Baa3	Positive
Cleco Corporation	Baa3	Stable
Entergy Corporation	Baa3	Stable
FirstEnergy Corp.	Baa3	Stable
Great Plains Energy	Baa3	Stable
NiSource Inc. [3]	Baa3	Stable
Pepco Holdings, Inc.	Baa3	Stable
PPL Corporation	Baa3	Stable
SCANA Corporation	Baa3	Stable
UIL Holdings	Baa3	Stable
CMS Energy	Ba1	Positive
DPL Inc.	Ba1	Under Review - Down
NV Energy Inc.	Ba1	Stable
PNM Resources, Inc.	Ba1	Stable
Puget Energy, Inc.	Ba1	Stable
UNS Energy	Ba1	Positive

[1] Madison Gas and Electric is used as a proxy for its parent, MGE Energy, which is not rated.

[2] Significant operating subsidiaries are used when its parent company is not rated under the Regulated Electric & Gas Utilities methodology.

[3] The Baa3 rating is the Senior Unsecured rating at its guaranteed financing subsidiary.

Appendix B – Capex Model Assumptions

We calculated the revenue requirements for utilities assuming a 50/50 debt to equity capital structure, 10.00% ROE, and a 30-year expected life for the capex. Based on our estimates, the revenue requirements associated with the capex is approximately 13.8% of the annual spending. Increases in the equity ratio or equity and debt returns raise the revenue requirement, and increases in the useful life of the asset reduce the revenue requirement. We also assumed underlying revenue growth of 1% based on customer and usage growth. Based on our conversations with utilities, the revenue requirement varies between 12-18% depending on the capital structure, allowed returns, and other rate recovery treatment.

FIGURE 10

Generic Revenue Requirement Example

Step 1: Calculate the Weighted Average Cost of Capital

	% of Capitalization		After Tax Return		After Tax WACC	Pre-Tax WACC @ 35% rate
Debt	50%	x	5.50%	=	2.75%	2.75%
Equity	50%	x	10.00%	=	5.00%	7.7%
			WACC		7.75%	10.4%

Step 2: Calculate Revenue Requirement

Capital Expenditures	100				
Pre-Tax Debt Return	100	x	2.75%	=	2.8
Pre-Tax Equity Return	100	x	7.69%	=	7.7
Depreciation @ 30 years	100	/	30	=	3.3
Revenue Requirement					13.8

Step 3: Project Income Statement

Income Statement

Revenue Requirement	13.8
- D&A	3.3
- Interest Exp	2.8
= Pre-Tax Income	7.7
- Tax Expense	2.7
= Net Income	5.0
+ Depreciation	3.3
= Cash from Operations (NI + D&A)	8.3
CFO / Debt	17%
Net Income	5.0
/ Equity	50
= Return on Equity	10%

Appendix C – Inflection point data

	Average Bill / Disposable Income				Average Retail Rate (cents per kilowatt hour)				
	2008	2009	2010	2011	2008	2009	2010	2011	2008 - 2011 CAGR
West Virginia	3.4%	3.7%	4.3%	4.2%	7.06	7.90	8.79	9.39	7.4%
Michigan	2.7%	2.9%	3.2%	3.3%	10.75	11.60	12.46	13.27	5.4%
Missouri	3.1%	3.3%	3.8%	3.8%	8.00	8.54	9.08	9.75	5.1%
Kansas	2.7%	3.0%	3.4%	3.4%	8.88	9.53	10.03	10.65	4.6%
Nebraska	2.7%	2.9%	3.1%	3.0%	7.87	8.52	8.94	9.32	4.3%
Pennsylvania	3.3%	3.3%	3.7%	3.7%	11.35	11.65	12.70	13.26	4.0%
Kentucky	3.9%	4.0%	4.4%	4.2%	7.94	8.37	8.57	9.20	3.7%
North Dakota	2.7%	2.9%	2.8%	2.8%	7.51	7.58	8.13	8.58	3.4%
Ohio	3.4%	3.5%	3.9%	3.7%	10.06	10.67	11.32	11.42	3.2%
Indiana	3.5%	3.7%	3.9%	3.9%	8.87	9.50	9.56	10.06	3.2%
Wisconsin	2.9%	3.0%	3.2%	3.1%	11.51	11.94	12.65	13.02	3.1%
South Dakota	2.7%	2.9%	3.0%	2.8%	8.27	8.49	8.97	9.35	3.1%
Minnesota	2.5%	2.6%	2.7%	2.7%	9.74	10.04	10.59	10.96	3.0%
Idaho	3.1%	3.6%	3.4%	3.3%	6.99	7.80	7.99	7.87	3.0%
Oregon	3.2%	3.3%	3.2%	3.4%	8.49	8.68	8.87	9.54	3.0%
Vermont	2.9%	2.9%	3.0%	3.0%	14.48	14.90	15.57	16.26	2.9%
Tennessee	4.3%	4.4%	4.7%	4.7%	8.91	9.32	9.23	9.98	2.9%
South Carolina	4.8%	5.1%	5.6%	5.3%	9.89	10.44	10.50	11.05	2.8%
Georgia	4.3%	4.5%	4.9%	4.9%	9.93	10.13	10.07	11.05	2.7%
Colorado	2.1%	2.2%	2.5%	2.5%	10.13	10.00	11.04	11.27	2.7%
Wyoming	2.0%	2.3%	2.2%	2.3%	8.21	8.58	8.77	9.11	2.6%
Virginia	3.5%	3.9%	3.9%	3.7%	9.62	10.61	10.45	10.64	2.6%
Iowa	2.9%	3.1%	3.3%	3.0%	9.49	9.99	10.42	10.46	2.5%
New Mexico	2.5%	2.6%	2.7%	2.8%	10.01	10.02	10.52	11.00	2.4%
Washington	2.5%	2.6%	2.6%	2.7%	7.54	7.68	8.04	8.28	2.4%
Utah	2.6%	2.7%	2.8%	2.8%	8.26	8.48	8.71	8.96	2.1%
Arizona	4.1%	4.5%	4.5%	4.4%	10.27	10.73	10.97	11.08	1.9%
North Carolina	4.0%	4.4%	4.8%	4.4%	9.52	9.99	10.12	10.26	1.9%
California	2.5%	2.8%	2.7%	2.6%	13.81	14.74	14.75	14.78	1.7%
Montana	2.9%	3.0%	2.9%	3.1%	9.13	8.93	9.16	9.75	1.7%
Hawaii	6.6%	4.9%	5.4%	6.2%	32.50	24.20	28.10	34.68	1.6%
Alabama	5.2%	5.3%	5.7%	5.4%	10.40	10.66	10.67	11.09	1.6%
Alaska	3.2%	3.4%	3.1%	3.3%	16.55	17.14	16.26	17.62	1.6%
Illinois	2.6%	2.7%	2.9%	2.8%	11.07	11.27	11.52	11.78	1.6%
New Hampshire	2.9%	3.1%	3.0%	3.0%	15.68	16.26	16.32	16.52	1.3%
District of Columbia	1.8%	1.9%	2.1%	1.8%	12.79	13.76	14.01	13.40	1.2%

	Average Bill / Disposable Income				Average Retail Rate (cents per kilowatt hour)				
	2008	2009	2010	2011	2008	2009	2010	2011	2008 - 2011 CAGR
Oklahoma	3.6%	3.6%	4.0%	4.0%	9.09	8.49	9.14	9.47	1.0%
United States	3.4%	3.6%	3.7%	3.6%	11.26	11.51	11.54	11.72	1.0%
New Jersey	3.0%	3.0%	3.3%	3.0%	15.66	16.31	16.57	16.23	0.9%
New York	3.1%	3.0%	3.2%	3.1%	18.30	17.50	18.74	18.26	-0.1%
Florida	4.3%	5.0%	4.6%	4.3%	11.65	12.39	11.44	11.51	-0.3%
Delaware	4.4%	4.5%	4.7%	4.3%	13.93	14.07	13.80	13.70	-0.4%
Mississippi	5.4%	5.3%	5.6%	5.3%	10.39	10.22	9.87	10.17	-0.5%
Nevada	3.8%	4.4%	4.1%	3.7%	11.93	12.86	12.36	11.61	-0.7%
Arkansas	4.1%	4.1%	4.3%	4.1%	9.27	9.14	8.86	9.02	-0.7%
Maryland	4.1%	4.4%	4.4%	3.7%	13.84	14.98	14.32	13.31	-1.0%
Maine	3.1%	3.0%	2.9%	2.8%	16.20	15.65	15.71	15.38	-1.3%
Connecticut	3.6%	3.9%	3.6%	3.3%	19.55	20.33	19.25	18.11	-1.9%
Louisiana	4.6%	3.7%	4.3%	4.1%	10.28	8.10	8.98	8.96	-3.4%
Texas	4.9%	5.0%	4.7%	4.6%	13.04	12.38	11.60	11.08	-4.0%
Massachusetts	2.9%	2.8%	2.6%	2.4%	17.68	16.87	14.59	14.67	-4.6%
Rhode Island	3.3%	2.9%	3.0%	2.6%	17.45	15.60	15.92	14.33	-4.8%

The inflection point data contains average household income statistics from the Bureau of Economic Analysis (BEA) and average retail electric prices according to the Energy Information Administration (EIA). As the EIA information contains average retail prices throughout each state, including the rates charged by municipal utilities and generation and transmission cooperatives, a specific investor owned utility's rates and CAGR may differ from the averages presented here.

Moody's Related Research

Industry Outlooks:

- 2013 Utilities and Power Outlook Presentation, December 2012 (148183)
- Six Month Update: US Regulated Utilities Outlook Stable, But Plentiful Gas Changes The Landscape, July 2012 (143891)
- Six Month Update: US Unregulated Power Companies, July 2012 (143650)
- US Regulated Electric and Gas Utilities: Stable Despite Rising Headline Rhetoric, January 2012 (137878)
- US Unregulated Power Companies: Hunkering Down in Hope for Better Prices, January 2012 (138140)

Special Comments:

- Global Oil and Natural Gas Industry: Oil Prices Support Global Investment in 2013, But Demand Challenges Remain, January 2013 (148596)
- Global Infrastructure Focus Newsletter, January 2013 (148638)
- US Extends Tax Credit for Wind Power, a Credit Positive for Developers and Utilities, January 2013 (148915)
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- Sandy Hits New York Area Utilities Hard But Leaves Credit Quality Intact, November 2012 (147069)
- Pacific Northwest Utilities: Regulatory Support Paves Way for Improving Credit Profiles, November 2012 (146170)
- US Unregulated Utilities and Power Companies: Rising Rate Pressure for Investment-Grade Issuers as Speculative-Grade Restructurings Move Center Stage, November 2012 (146765)
- US Utilities: Low Gas Prices and Weak Demand are Masking US Nuclear Plant Reliability Issues, November 2012 (146663)
- US Investor-Owned Utilities: High Capital Expenditures Adding to Rate Pressure for Utilities, October 2012 (144792)
- US Investor-Owned Utilities: Bonus Depreciation and Pension Adjustments Create Short Term Cash Bridge But Longer Term Issues Persist, October 2012 (146039)
- Decoupling and 21st Century Rate Making: Increased Usage of Decoupling Mechanisms is Credit Positive, November 2011 (136797)

Rating Methodologies:

- Regulated Electric and Gas Utilities, August 2009 (118481)
- Natural Gas Pipelines, November 2012 (146415)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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