

# ARE YOU READY FOR THE WRATH OF THE CUSTOMER?

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The bad news for US consumers may be about to get even worse. In addition to falling home values, high gasoline prices, and persistently high unemployment, there is a growing need to increase electricity prices. These rate increases are largely being driven by environmental, regulatory, and security requirements that have one thing in common: they have limited perceptible value to consumers. This situation risks invoking what one utility CEO aptly called “the Wrath of the Customer.” This refers to customers feeling that these rate increases are adding to their financial strain at the worst possible moment, without any clearly articulated value, creating a highly charged atmosphere where minor service issues become angry customer complaints. In response, utilities will need to work closely with regulators and policy makers to achieve constructive regulatory outcomes while building and leveraging their capabilities, offerings, tools, and resources to create new value for their customers.

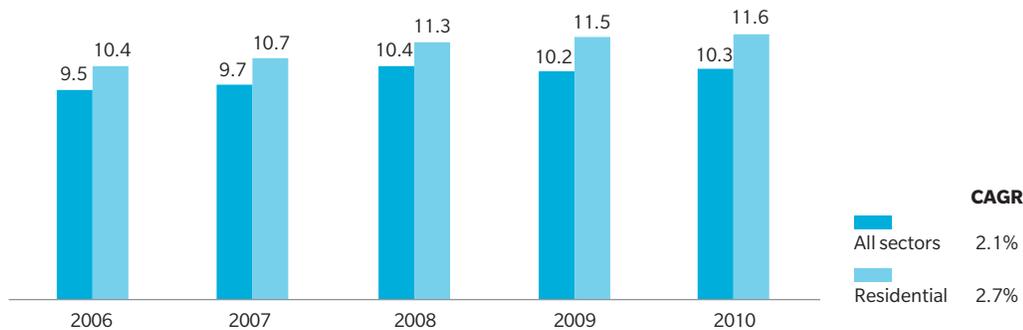
## ELECTRICITY HAS BEEN A “SET AND FORGET” COMMODITY..THAT IS ABOUT TO CHANGE

Over the past three decades, electricity prices have represented a small portion of disposable income in the US, in large part because consumers have benefitted from low-cost nuclear power as well as abundant and low-cost coal and natural gas. Electricity has historically been a “set and forget” commodity that most consumers do not really focus on beyond their monthly utility bill. That may be changing, because we have reached a key inflection point where the direction for retail rates largely depends upon public policy and regulatory decisions.

## RESIDENTIAL RETAIL RATES HAVE BEEN RISING OVER THE PAST 5 YEARS

According to data from the US Energy Information Administration (EIA), average retail prices have risen across all customer segments; however the increases have been most significant in the residential segment (Exhibit 1).

EXHIBIT 1: RESIDENTIAL vs. ALL SECTORS (C/KWH)

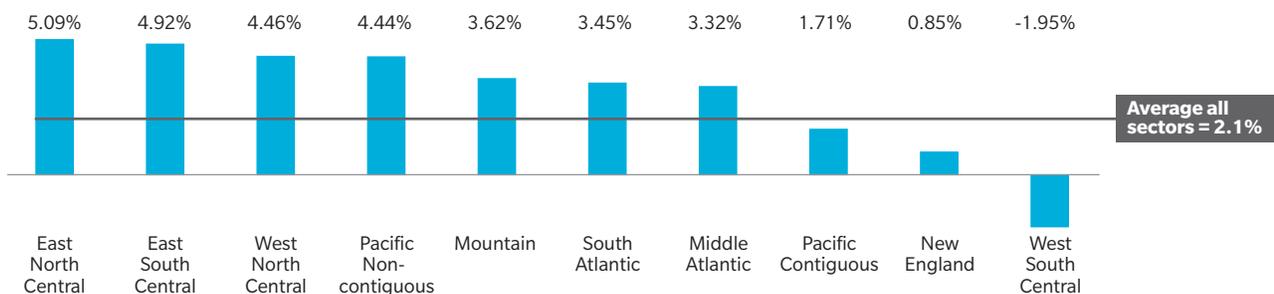


Source: US Energy Information Administration, Monthly Energy Review August 2011 Table 9.9, Monthly Average Retail Price of Electricity.

Over the past 5 years, retail electricity prices across all customer classes increased by a compound annual growth rate (CAGR) of 2.1% per year. Residential rates grew more quickly than the average of all sectors, with a CAGR of 2.7%, despite benefitting significantly from lower natural gas generation costs. In contrast, the Consumer Price Index, excluding food and energy, rose by 1.7% per year over the same period. Residential electricity prices have increased a full percentage point annually (60% higher) versus other goods and services over the past 5 years.

In addition to price increases being more pronounced in the residential customer class, there are also significant regional differences in how those price increases impacted customers. Exhibit 2 depicts the disparity in regional impacts over the past 5 years.

EXHIBIT 2: AVERAGE ANNUAL RETAIL PRICE CHANGE (2006-2010), ALL SECTORS (AVG. ANNUAL PERCENT CHANGE)



Source: US Energy Information Administration, Monthly Energy Review August 2011 Table 9.9, Monthly Average Retail Price of Electricity; Oliver Wyman analysis.

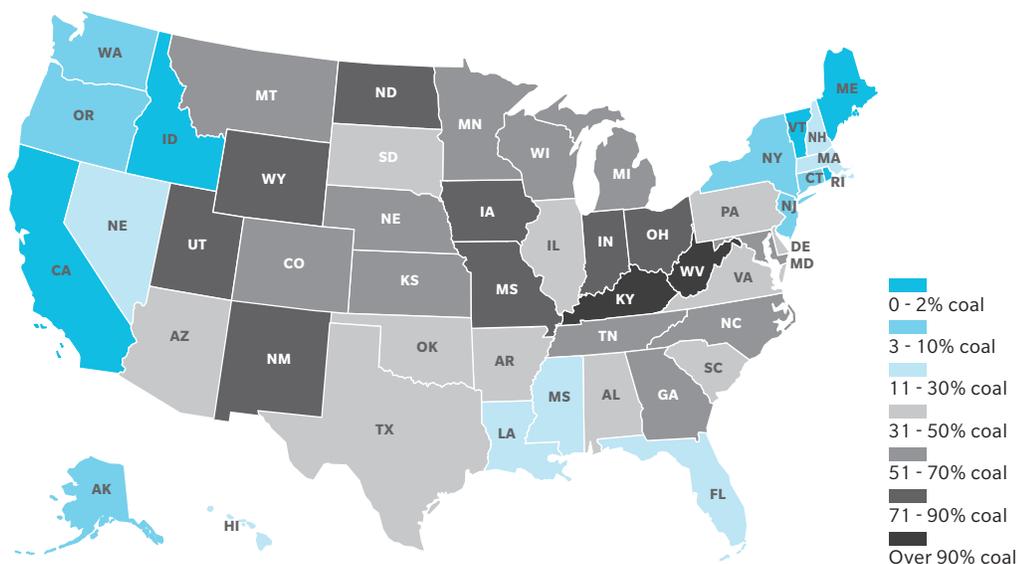
During the period from 2006 to 2010, East North Central and East South Central had average annual rate increases of 5.1% and 4.9% respectively across all customer segments, against the national average of 2.1%. Customers in seven out of the ten census regions have experienced average prices increases of at least 3% annually over the past five years. These regions are heavily dependent upon coal for generation and are in the midst of significant environmental retrofits and retirements of older coal plants to meet existing environmental requirements.

## FUTURE RATE INCREASES ARE LIKELY TO BE EVEN GREATER

According to our research, pending rate cases demonstrate that this trend is likely to continue, with increases of up to 27% proposed to regulators. The average request pending before regulators is for a 9.6% increase in retail electric rates. The historical average of the rate case results since 2007 indicates that the utilities may ultimately be granted 92% of their request, so roughly an 8.9% increase can be anticipated.

These anticipated increases are likely to be dwarfed by the rate increases needed if any significant portion of the Edison Foundation’s estimated \$1.5 trillion infrastructure investment is deployed. This is just the investment required for utilities to maintain today’s high level of reliability through 2030 and does not include any new carbon policy impacts, which were estimated to be an additional \$500 billion. In addition to these projected investment requirements, there are a number of proposed Environmental Protection Agency (EPA) rules pending that could have a significant impact on retail rates. While the EPA recently agreed to a White House request that it defer its Ground Level Ozone rules until 2013, a number of other

### EXHIBIT 3: COAL AS A PERCENTAGE OF ELECTRIC GENERATION



Source: US Energy Information Administration, Electric Power Generation and Consumption Data by Month and State, August 18, 2011 Release.

rules remain pending, including Cross-State Air Pollution (CSAPR) and Maximum Achievable Controls Technology (MACT), which could drive up retail rates even further. If these are enacted and enforced, the Federal Energy Regulatory Commission (FERC) staff has informally estimated that 8% of our electric generation capacity, representing 81 GW of the nation's generating capacity, will need to be retired.

Unfortunately for customers of utilities that rely on coal generation to keep their electricity costs low, these increases will not be evenly distributed. The vast majority of the costs of complying with these EPA rules will fall on coal generation and consequently, on the residents of those states with a greater proportion of electricity generated from coal, primarily in the Southeast and Midwest (Exhibit 3).

## DISPOSABLE INCOMES HAVE BEEN FLAT WHILE ELECTRIC RATES HAVE BEEN RISING

The deteriorating financial fortunes of many consumers are compounding the impact of projected increases in electricity rates. Rising electricity rates are more manageable when disposable income (the funds left over for the consumer after taxes), is rising as fast or faster than electricity prices; however, in a period of relatively flat disposable income growth, energy consumption will represent an increasing share of disposable income. Over the past 5 years, electricity rates grew by a CAGR of 2.7%, while disposable personal income grew by a meager 0.2%, with nearly zero growth over the past 3 years.

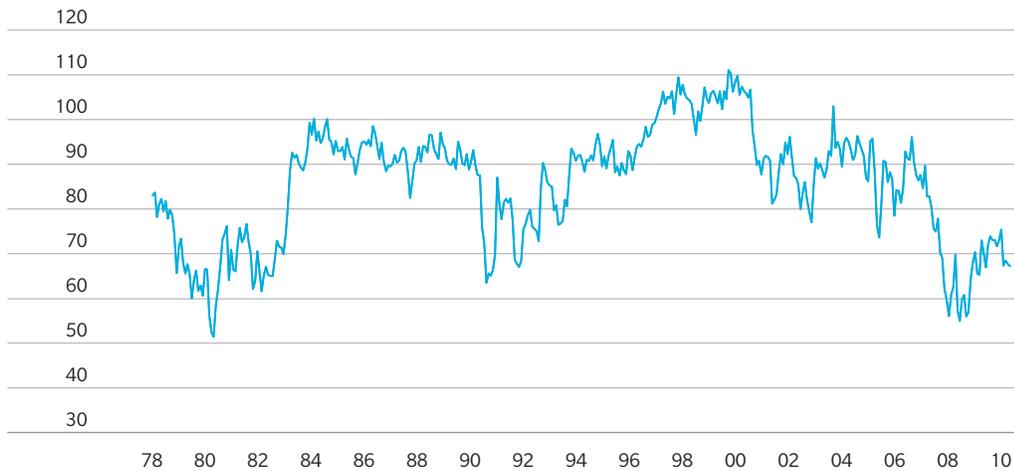
Consumers have allocated an increasing portion of disposable income to paying their electricity bills. In 2006, electricity represented 3% of disposable income; however, by 2010, electricity represented 3.4% of disposable income, increasing its share of disposable income by over 12%. Increasing electricity rates, combined with already stretched disposable incomes, are putting utilities in a difficult political situation as they seek to obtain the regulatory authority to fund their mandated environmental and operational obligations.

## WILL THE DISPARITY BETWEEN ELECTRIC RATES AND DISPOSABLE INCOMES CONTINUE TO GROW?

Unfortunately, it appears that electricity's share of wallet will only grow over time. According to the Congressional Budget Office (CBO), unemployment will not return to historical averages until 2016. With unemployment hovering above 9% and the number of "under-employed" representing an additional 14%, nearly a quarter of the US population has less disposable income than in previous years. The consumer's assessment of the economic outlook is not much better. According to the University of Michigan's Consumer Sentiment Index (Exhibit 4) consumer sentiment is at its lowest levels since the early 1980s and has still not recovered from the economic downturn in 2008-2009.

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#### EXHIBIT 4: UNIVERSITY OF MICHIGAN CONSUMER CONFIDENCE SENTIMENT INDEX



Source: Federal Reserve Bank of St. Louis, University of Michigan: Consumer Sentiment Index, <http://research.stlouisfed.org/fred2/series/UMCSENT>.

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While the future outlook for electricity rates is largely dependent upon public policy and regulatory and utility management decisions, one fact is clear: substantial capital investments are required by the nation's utilities to modernize the electric grid and to meet proposed environmental requirements. For example, the Edison Electric Institute (EEI) estimates that the incremental investments needed to comply with the proposed CSAPR and MACT rules through 2020 will be between \$114 billion and \$270 billion. These cost increases will be highest in the states that rely most heavily on coal for generation (Exhibit 3). If other potential drivers such as grid modernization, homeland security requirements to increase cyber-security, and/or rising natural gas prices add to these costs, even greater rate increases could be in store for consumers.

## WHAT IMPACT WILL RISING PRICES HAVE ON CONSUMER SATISFACTION?

According to the J.D. Power 2011 residential customer satisfaction study, the two most important factors contributing to satisfaction are reliability and price. If reliability stays roughly constant while electricity rates continue to rise, it is reasonable to assume that overall customer satisfaction will fall. If electricity accounts for what the consumer perceives to be too great a portion of their monthly expenses, the likelihood of increasingly dissatisfied customers complaining to regulators regarding billing, customer service, or reliability issues increases dramatically. Small numbers of unsatisfied customers will be able to blog and "tweet" their displeasure to their increasingly interconnected and financially stretched fellow customers, negatively impacting the public perception of the utility.

## WHAT ARE THE IMPLICATIONS?

Deteriorating economic conditions and pending increases in electricity rates are likely to put increasing focus on electricity prices and consumption. Regulators will be under pressure to keep electricity rates low as part of additional “economic stimulus.” Utility companies need to work with their legislators and regulators to seek constructive solutions to keep rates low for consumers, including deferring or modifying rules and regulations that have significant capital requirements.

## HOW SHOULD UTILITIES RESPOND?

Utilities need to have several key things in place to ensure that they increase the value proposition for their customers and the probability of constructive regulatory outcomes:

1. **Drive meaningful cost reduction/efficiency efforts.** While cost reductions will not be able to outpace future revenue requirements, utilities should ensure that they have undertaken significant efforts to reduce and control O&M and G&A expenditures through streamlining and simplifying both operations and corporate services. Maintaining key O&M performance metrics and continuous improvement efforts will help drive both performance and public perception, while reducing the utility’s revenue requirements and improving its cash flow.
2. **Develop strong customer analytics and value-based interaction capabilities.** Utilities that can learn recursively from customer interactions and provide access to that information to help consumers manage their energy usage will create significant new value. This keeps the utility’s offers relevant and better targeted, by providing customers with analysis regarding what customers with similar needs have been interested in or purchased in the past. Creating positive “value-based” interactions will increase the frequency and quality of future interactions.
3. **Simplify your energy management offerings.** Most existing energy efficiency offerings are too complex and require too much capital investment by the utility or the consumer (who may move in a few years). Utilities should provide simple, low-cost tools and solutions for customers of all customer classes to better manage usage, keeping their total cost of electricity as low as possible without lifestyle or operational impacts.
4. **Move toward customer-centric operations.** Utilities should provide their customers with access to non-sensitive operational data. This sort of operational transparency helps make UPS and FedEx among the leaders across all industries in customer satisfaction every year. With access to up-to-date operational data, business and residential customers are able to make plans relative to operations or lifestyles regarding energy usage. This should be supported by proactive use of social media to ensure that there are immediate and accurate answers available for customers as issues arise.
5. **Invest in regulatory and governmental affairs capabilities.** Utilities must clearly articulate to their regulators that the cost of “having it all” is too great for consumers to bear. The utility and regulators will need to work together to find appropriate tradeoffs in response to the economic environment and operational realities of compliance. Significant impacts on

customer prices in the future are being debated today and should be at the forefront of every utility's executive agenda to help keep electricity affordable for consumers.

Although some of the forces at work that are putting pressure on energy costs may be outside of a utility's control, the levers above demonstrate that there are ways for a utility to improve its regulatory outcomes, cost structure, and operational efficiency. And helping keep energy prices down for already-stretched consumers will pay off in the long run in terms of happier customers.

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