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## Top 10 U.S. Electric Utility Credit Issues For 2008 And Beyond

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### Table Of Contents

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1. What To Do About Coal?
2. Customer Expectations For Reliability
3. Regulatory And Legislative Backlash
4. Use Of Renewable Resources
5. Transmission Buildout
6. Nuclear Renaissance
7. Importance Of Natural Gas
8. Rising Costs
9. Access To Capital Markets
10. Mergers, Acquisitions, And Divestitures

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"Anything, everything, is possible."

One hundred years ago Thomas Edison used those words to describe the growth potential of electricity and the boundless future opportunities it afforded society. The U.S. electric power industry has reached a point where those same words--anything, everything, and possible--best illustrate future credit quality, ratings, and direction for the industry. Standard & Poor's Rating Services has identified 10 key issues that will likely define electric utility credit quality into the next decade.

## 1. What To Do About Coal?

The single biggest challenge regulated electric utilities will tackle is the discharge of carbon dioxide (CO<sub>2</sub>) into the air. Congress took a futile stab at the broader global warming issue in late 2007, but key credit impacting decisions concerning CO<sub>2</sub> went unresolved. Three items that will have the biggest credit impact are integrated resource plans that reduce or eliminate the building of new coal-fired power plants, the need for carbon sequestration on existing coal units to meet newer, more exacting standards, and research and development for cleaner coal technologies. All are potentially large ticket items that electric utilities might have to confront.

It's likely that the new administration in Washington will try to make its mark on greenhouse gas sometime in 2009; until then federal action seems remote, although campaign rhetoric will be heated. Framing the 2009 dialogue will be energy independence, national security, and carbon-based fuels, such as coal and oil. Future legislation that crimps coal use and affects credit quality for electric utilities is possible, but not certain at the moment, given past stalemates on energy policy issues. Of course, this inertia is the worst of all outcomes for electric utility managements and those who invest in their fixed-income debt instruments.

Funding for reducing greenhouse gas emission will affect credit quality for coal plant operators. Preserving credit quality may be possible from carefully structured initiatives, such as a cap-and-trade mechanism, incentive returns, or a wires surcharge. A rider on customer bills for CO<sub>2</sub> costs similar to monthly or quarterly fuel true-ups would also benefit cash flow and credit.

## 2. Customer Expectations For Reliability

Residential consumption in the U.S. has risen 8%, to 11,093 kilowatts (kWh) in 2006 versus 10,275 kWh in 1996, despite efficiency gains in appliances and other household items. With consumer fascination with electronic gadgetry continuing unabated, continuing to meet these needs in a green fashion that is credit neutral is clearly a challenge.

Several jurisdictions, notably California, have been promoting demand-side management through smart metering that have changed consumption patterns and help shave peaks.

Electric utility customers continue to demand greater reliability in an age when plasma televisions and high-tech items that consume copious amounts of electricity are the standard. Most residential customers are not yet concerned with what it takes to produce the electricity to power their home computer or washing machine--what

## *Top 10 U.S. Electric Utility Credit Issues For 2008 And Beyond*

they want is to just flick a switch. Education about the fixed and variable costs associated with on grid access in the 21st century may promote a spirit of sacrifice and conservation, especially if yearly double-digit rate increases come into vogue.

Maintaining reliability standards is likely to become harder to achieve through this decade as reserve margins are squeezed by intermittent power sources. This condition will be exacerbated if customer usage growth is not curbed or consumption patterns are not shifted from historical norms. Credit quality for electric utilities is very vulnerable to future declines in reliability, which would likely trigger an acute response from regulators in the form of lower returns.

### **3. Regulatory And Legislative Backlash**

An environment of rising customer tariffs, coupled with a sluggish economy, portend a difficult regulatory environment in coming years. Add in the substantial costs associated with complying with CO2 reduction and other "green" initiatives, and regulators are facing the prospects of presiding over sizable rate increases annually. Recovering in a timely manner federally and/or state mandated compliance costs is paramount to preserving credit quality for regulated electric utilities.

The specter of price shocks caused vociferous push-back from state governments in Maryland and Illinois, unsettling credit quality for the incumbent utilities. Looming battles over transition rules in Ohio and Pennsylvania may not be as contentious, but there is risk that electric providers could be harmed. Effective price signals and clearly delineated electric bills that identify what the customer is paying may help quell customer unrest.

As Standard & Poor's has previously observed, the tenure and experience level of regulatory commissioners throughout the U.S. continues to wane. This may become more in focus into the next decade as legislative bodies, intervenors, and consumer advocates pressure state commissions about unpopular decisions. At some point the pendulum may swing away from electric utilities in the form of lower returns, cash deferrals, and exclusions, which all dampen credit quality.

### **4. Use Of Renewable Resources**

More than one-half of U.S. states now have some sort of renewable energy goal or standard in place, with much of the generation coming from wind or solar. Interestingly, several states have ratcheted up their opening bids to totals of 25% to 30% of installed capacity in a short period of time. To meet the 2015 targets for renewable standards in place, 45 gigawatts (GW) of additional capacity is needed, nearly 3 times the installed wind capacity. The industry built a record 5 GW of wind generation in 2007; continuing that pace each year will be a daunting task that could strain balance sheets.

Additional capital spending will also be needed to effectively promote renewable usage. Utilities will have to increase reserve margins to offset the intermittent nature of renewable energy to maintain reliability and transmission capacity will need a boost to get the renewable output to customer load pockets. The dollars spent on peaking plants and transmission projects will be sizable, and timely recovery of these costs is critical to credit quality preservation.

A dispute between the Federal Energy Regulatory Commission (FERC) and Washington State over the regulating authority for offshore renewable facilities could stall the effort of developers to tap into tidal waves as a consistent

*Top 10 U.S. Electric Utility Credit Issues For 2008 And Beyond*

source for renewable energy. Advances are being made in the areas of solar voltaic and wind-blade rotations, which can increase capacity factors. At current installed prices, renewable technologies are not economically viable without government subsidies that are slated to expire at the end of 2008 if not extended. Electric utility credit quality could be at risk if these incentives were to cease to exist at the same time additions to portfolios were required.

## 5. Transmission Buildout

We expect spending on transmission projects to keep a breakneck pace in coming years, with \$10 billion or more likely being paid out every year through the end of the decade. Many of the transmission builds are work that's been re-energized by strong signals from FERC in the form of incentive returns. In addition, the future pipeline should remain brisk, as newly installed renewable electricity is moved from the production site to the end customer. Ample returns earned in a quick manner have buoyed credit metrics for many independent transmission operators.

In addition to encouragement from the FERC, system reliability has facilitated needed builds. Several large scale projects are slated for New England, Southern California, and a western connection for the PJM region. Several large interstate transmission builds have been announced, including the joint venture between American Electric Power Co. Inc. and Allegheny Energy Inc. for a 290-mile, extra-high-voltage line from West Virginia to Maryland at a projected cost of \$1.8 billion

Costs for the projects should climb in coming years. Aesthetically pleasing transmission lines buried in Connecticut and contemplated in other states such as Michigan are 10 times as expensive as traditional overhead wiring. Also, local opposition to transmission sites contributes to build delays and cost overruns.

## 6. Nuclear Renaissance

Buoyed by provisions of the Energy Policy Act of 2005 and the search for less atmospherically intrusive forms of generating electricity, the industry is poised to begin building a nuclear plant in the U.S. after a 30-year lag. Momentum is rising as several regions of the U.S. have expressed interest in having plants sited, but challenges from environmental groups may grow as evidenced by recent relicensing protests in New York. In addition, several presidential candidates have either spoken against or are noncommittal toward new nuclear plants as part of the solution to U.S. energy needs.

Several companies, including Dominion Resources Inc., Duke Energy Corp., and NRG Energy Inc. have applied for combined construction and operating licensing. In the next couple of years, the financial exposure from this first step will likely be limited to the initial applications approvals, not concrete and steel in the ground. This gives the potential builders time to seek funding options, such as Department of Energy guarantees and off-balance-sheet project financing to preserve credit quality.

Given the enormous sums of money that a new nuclear unit will ultimately cost, transferring risk is important for capital preservation. Standard & Poor's believes that the current estimates of \$3 billion to \$3.5 billion for a standard size nuclear unit will likely climb in coming years. Several states have specified recovery mechanisms for nuclear costs during the construction cycle in advance of operations, including Florida, South Carolina, and Georgia.

## 7. Importance Of Natural Gas

One of the tests electric utilities must cope with is managing commodity price risk, especially volatility in natural gas prices. Balancing this conservation with recovery of lost revenue is important for sustaining credit quality. Fuel-adjustment mechanisms that quickly reflect costs to the customer are also beneficial to cash flow and credit quality.

Cost pressures from natural gas are not likely to recede in the near future. The denial of plans to build new coal plants in Florida, California, and Oklahoma, combined with the lengthy construction periods for new nuclear plants, leaves natural gas as the cleaner fossil-fuel alternative. With gas increasingly setting the price of electricity, demand for natural gas remains robust.

Building the infrastructure to transport natural gas has been slow. New producing basins in the Barnett Shale and Rockies gas fields are away from traditional pipeline connections, thus spurring the need for new capital to build new pipes. The massive Rockies Express Pipeline project to bring gas from the West to the East is close to completion for Phase 1. Better access for Rockies producers from this new interstate system should aid natural gas supply.

## 8. Rising Costs

Rising construction and raw material costs for items such as steel have continued on an upward trajectory. Prices for commodity fuels, such as coal and processed uranium, have also been on the upswing. Add in unabated rises in benefits costs for employees and a recipe for customer rate pressure and resistance is at hand.

A prolonged period of yearly double-digit operating and maintenance cost increases may pressure regulators to find areas for disallowance. To speed recovery and mitigate this risk to some extent, several state commissions are seeking proactive solutions. Several states, including California, Georgia, and Wisconsin, allow future test-years rather than historic ones in rate filings, and Florida preapproves certain capital expenditures. Conversely, actions that defer costs without a path to recover them will weaken balance sheets and, ultimately, credit quality.

The shortage of skilled labor and the rising average age of workers in the electric industry are a growing concern. In an environment that is becoming more technically demanding, finding, training and retaining plant personnel is going to be an ongoing challenge.

## 9. Access To Capital Markets

Notable capital programs planned in 2008 include American Electric Power's \$3.8 billion, Duke Energy's \$4.5 billion, Pacific Gas and Electric Co.'s \$3.5 billion, and Southern Co.'s \$4 billion. With a large plate of construction projects identified, electric utilities will need to be able to continue sourcing capital. Beginning in the fourth quarter of 2007, investors seeking to hold investment-grade debt began finding solace in electric utilities, diversifying away from financial institutions; a continuation of this trend bodes well for the industry's financing plans in coming years.

Based on spending programs, expected negative free-cash flow for the average electric utility, and significant volume of refinancing for existing issues, Standard & Poor's expects 2008 debt issuance for the regulated electric utility sector to climb above last year's \$35 billion. Considering the state of the existing generation, distribution, and

*Top 10 U.S. Electric Utility Credit Issues For 2008 And Beyond*

transmission infrastructure, many projects are going to go ahead regardless of whether a prolonged economic slowdown hits the U.S.

Electric utilities are well positioned on the liquidity front, with most extending their credit facilities well beyond the next three years. This helps eliminate exposure to a potential retrenchment by commercial banks on credit renewals and extensions, regardless of credit quality. Of course, a severe dislocation in the banking sector could cause restrictions in the access to and the amount of credit available despite the committed lines, which could crimp discretionary funding of some capital projects.

## 10. Mergers, Acquisitions, And Divestitures

Electric utility merger activity in the medium term is likely to remain strategic in nature. Several deals are currently pending, including Macquarie Infrastructure Partners' purchase of Puget Energy Inc., Great Plains Energy Inc. acquiring Aquila Inc., and Energy East Corp. being acquired by Iberdrola S.A.

Preserving credit quality has not been a primary consideration in most deals to date. However, ring-fencing measures and provisions that structurally restrict cash at the operating company may benefit existing ratings after transactions are completed. By establishing a bankruptcy-remote structure away from its parent, Texas Competitive Electric Holdings Co. LLC, ratings from Oncor Electric Delivery Co. LLC are at a higher stand-alone level. Of course, the strength of any provisions or restriction at the subsidiary level may harm the parent's credit quality because access to utility cash flow is restricted.

The sale of selective, nonstrategic assets is possible in coming years as companies seek to right-size their balance sheet and raise funds for potential capital investment. Current examples are Dominion trying to sell its gas distribution properties (after its deal with Equitable Resources Inc. collapsed), PNM Resources Inc. putting its local gas distribution system up for sale, and Entergy Inc.'s contemplated spin-off of its merchant nuclear holdings. How companies use the sale proceeds and the impact on overall business risk are the key rating determinants.

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