EXHIBIT NO. ___(EMM-12)
DOCKET NO. UE-07___/UG-07___
2007 PSE GENERAL RATE CASE
WITNESS: ERIC M. MARKELL

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY, INC.,** **Respondent.**	**Docket No. UE-07____** **Docket No. UG-07____**

ELEVENTH EXHIBIT (NONCONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF ERIC M. MARKELL ON BEHALF OF PUGET SOUND ENERGY, INC.

DECEMBER 3, 2007

August 2007

Contact	Phone
New York	
Jim Hempstead	1.212.553.1653
Mike Haggarty	
Kevin Rose	
A.J. Sabatelle	
Laura Schumacher	
W. Larry Hess	

Storm Clouds Gathering on the Horizon for the North American Electric Utility Sector

Summary

While the rating outlooks for the vast majority of the North American regulated electric utility companies remain stable, a number of "storm clouds" appear to be gathering on the horizon which could have negative credit implications over the intermediate-term. The stable outlook is primarily based on the consistency of key financial credit ratios reported over the past few years, an expected continuation of relatively strong financial metrics over the next 6 to 18 months, our views regarding timely regulatory recoveries of prudently incurred costs and investments and an overall focus on regulated operations by management. One of the most significant factors incorporated into our outlook is a view that most utility management teams will maintain healthy and constructive relationships with their state regulatory authorities and that most state regulatory authorities prefer to regulate financially healthy utilities within their states.

However, there are concerns arising from the sector's sizable infrastructure investment plans in the face of an environment of steadily rising operating costs. Combined, these costs and investments can create a continuous need for regulatory rate relief, which in turn can increase the likelihood for political and/or regulatory intervention. Conceivably, the combination of rising costs, higher infrastructure investment needs and larger or more frequent requests for rate relief could create pressure for future incremental rate relief from state regulators, or at a minimum, raise the uncertainty level associated with expected recoveries — thereby directly affecting one of our primary rating drivers. This potential for increased regulatory uncertainty and pressure for rate relief might peak several years from now, at precisely the time when many companies are completing their base-load generation construction projects or other non-discretionary infrastructure investment projects and the potential for rate shock to consumers would be highest.

Moody's Investors Service
Global Credit Research

Furthermore, despite the clear and present challenges currently facing the industry over the near, intermediate and longer-term horizons, some utility parent holding companies continue to pursue overly biased shareholder reward policies in the form of high dividend payout targets, annual dividend rate increases and common equity repurchase programs. While these financial policies may be rooted in capital efficiency philosophies, and companies obviously work for shareholders, Moody's observes that these shareholder reward strategies are currently being established in the face of increasing business and operating risks that are clearly articulated in the public SEC disclosures, and, in our opinion, typically result in a permanent increase to leverage and fixed obligations. If utility companies experience construction cost overruns, lengthy delays, quasi-permanent recovery deferrals or other adverse regulatory rulings, a deterioration of credit quality could result. Should this situation materialize, Moody's would be concerned over the potential prospect that regulators may harbor little sympathy for companies seeking financial relief if they previously chose a policy that overly benefited shareholders, given the lost opportunity costs associated with strengthening a balance sheet.

Moody's acknowledges the longer-term aspect of the risks associated with these storm clouds and the uncertainty associated with potential downside scenario assessments. At this time, the unknowns associated with the investment plans and regulatory relationships are not sufficient enough to cause direct implications to near-term credit ratings. However, Moody's will continue to assess the constructiveness of the regulatory relationships between utility companies and their respective regulatory commissioners. In our opinion, the relationships with regulators could conceivably counterbalance any potential deterioration of key financial credit ratios, especially if the deterioriation is expected to be relatively temporary. In addition, Moody's expects most utility companies to approach their financing plans with a balanced mix of debt and equity to fund their capital expenditures. If however, the business and operating risks for a utility appear to be increasing at a more significant pace, or the regulatory relationships appear to take a more adversarial tone, the rating outlook would likely change, even if the key financial credit ratios were maintained at current levels.

In this Special Comment, Moody's will explore several of these downside risks to credit quality and articulate our views regarding these risks and how we may incorporate them into our credit analysis.

Summary of Rising Business and Operating Risks

The storm clouds referenced in this report essentially point to a potential increase in the business and operating risk profile for the sector. In our opinion, the rising costs and investment needs will have a direct impact on all three financial statements: income, cash flow and balance sheet. As a result, one of the biggest challenges for utility companies will be to seek and receive timely recovery of prudently incurred expenses. In addition, the substantial increases in capital expenditures will have a material impact on the sector's ability to generate free cash flow. While Moody's recognizes that the utility sector usually operates in a negative free cash flow environment, a concern could be raised if the level of negative free cash flow became large enough, or if regulatory lag was long enough, that the leverage were to increase materially. Furthermore, shareholder dividends could conceivably begin to outpace earnings growth, if the regulatory relationship were to become more confrontational.

Income Statement	Revenues	Will rate relief stay current given potential for rising regulatory/political intervention?
	Fuel & Purchased Power	Rising – need for timely recovery
	Operations & Maintenance	Rising expenses to maintain existing assets
	SG&A	Rising – healthcare / work force
	Interest	What happens to interest rates?
	Taxes	Rising
Cash Flow Statement	Net income	Rising with rate relief and attempts for cost containment
	Depreciation & Amortization	Lower than capital expenditures
	Working Capital/Other	Impact of deferred costs / Liquidity impact
	Capital Expenditures	Rising significantly (plus environmental compliance risk)
	Dividends	Rising. Consistent with earnings. A fixed obligation.
Balance Sheet	Regulatory Assets	Increasing
	Debt	Rising – to fund negative FCF
Increasing regulatory / political intervention risks		
Increasing risks associated with environmental compliance/ Carbon legislation		

Comparable Company Analysis

Moody's regularly utilizes comparable company analysis as part of our fundamental credit research, which we typically refer to as peer groups. These peer groups can be created based on a specific rating category (for example, all Baa1 parent holding companies) or by business composition (for example, all transmission and distribution "T&D" utilities). In this Special Comment, Moody's will summarize the financial results of a much broader peer group than we would typically use for a specific rated entity. In addition, we acknowledge that there may be occasions where a particular company's extraordinary event may skew an annual average (which we may not adjust for), so we have attempted to minimize the effect by also assessing a 5-year average and a 4-year Compound Annual Growth Rate (CAGR) from 2002 to 2006.

The companies included in the peer groups for the bulk of this Special Comment are listed in the tables below. The companies that comprise any additional peer groups, which include companies characterized by region or other industrial, non-utility peer groups, are listed in Appendix A.

Utility Parent Companies	Senior Unsecured Rating*
Allegheny Energy, Inc.	Ba2
ALLETE, Inc.	Baa2
Ameren Corporation	Baa2
American Electric Power Company	Baa2
Aquila, Inc.	Ba3
Avista Corp.	Ba1
Black Hills Corporation	Baa3
Central Vermont Public Service Co.	Ba2**
Cinergy Corp.	Baa2
Cleco Corporation	Baa3
CMS Energy Corporation	Ba1
Constellation Energy Group, Inc.	Baa1
Dominion Resources Inc.	Baa2
DPL Inc.	Baa3
DTE Energy Company	Baa2
Duke Energy Corporation	Baa2
Duquesne Light Holdings, Inc.	Ba1
E. ON U.S. LLC	A3
Edison International	Baa2
El Paso Electric Company	Baa2
Empire District Electric Company	Baa2
Entergy Corporation	Baa3
Exelon Corporation	Baa2
FirstEnergy Corp.	Baa3
FPL Group, Inc.	(P)A2
Great Plains Energy Incorporated	(P)Baa2
Hawaiian Electric Industries, Inc.	Baa2
IDACORP, Inc.	Baa2
Integrys Energy Group, Inc.	A3
IPALCO Enterprises, Inc.	Ba1***
MidAmerican Energy Holdings Co.	Baa1
OGE Energy Corp.	Baa1
Otter Tail Corporation	A3
Pepco Holdings, Inc.	Baa3
PG&E Corporation	Baa3
Pinnacle West Capital Corporation	Baa3
PNM Resources, Inc.	Baa3
PPL Corporation	Baa2
Progress Energy, Inc.	Baa2
PSEG Energy Holdings L.L.C.	Ba3
Public Service Enterprise Group	Baa2
Puget Energy, Inc.	Ba1
SCANA Corporation	A3
Sempra Energy	Baa1
Sierra Pacific Resources	B1
Southern Company (The)	A3
TECO Energy, Inc.	Ba1
TXU Corp.	Ba1
TXU US Holdings Company	Baa3
UniSource Energy Corporation	Ba1***
Westar Energy, Inc.	Baa3
Wisconsin Energy Corporation	A3
Xcel Energy Inc.	Baa1

** Long-term Issuer Rating used where Senior Unsecured is not available.*
*** Preferred Stock*
**** Senior Secured*
***** First Mortgage Bond*

Integrated Utilities	Senior Unsecured Rating*
Alabama Power Company	A2
Appalachian Power Company	Baa2
Arizona Public Service Company	Baa2
Black Hills Power, Inc.	Baa2
Central Illinois Light Company	Ba1
Cleco Power LLC	Baa1
Columbus Southern Power Company	A3
Consumers Energy Company	(P)Baa2
Dayton Power & Light Company	Baa1
Detroit Edison Company (The)	Baa1
Duke Energy Carolinas, LLC	A3
Duke Energy Indiana, Inc.	Baa1
Duke Energy Ohio, Inc.	Baa1
Entergy Arkansas, Inc.	Baa2
Entergy Gulf States, Inc.	Baa3****
Entergy Louisiana, LLC	Baa2
Entergy Mississippi, Inc.	Baa3
Entergy New Orleans, Inc.	Ba2
Florida Power & Light Company	A1
Georgia Power Company	A2
Green Mountain Power Corporation	Baa1****
Gulf Power Company	A2
Hawaiian Electric Company, Inc.	Baa1
Idaho Power Company	Baa1
Indiana Michigan Power Company	Baa2
Indianapolis Power & Light Company	Baa2
Interstate Power and Light Company	A3
Kansas City Power & Light Company	A3
Kansas Gas & Electric Co.	Baa2***
Kentucky Power Company	Baa2
Kentucky Utilities Co.	A2
Louisville Gas & Electric Company	A2
Madison Gas and Electric Company	Aa3
MidAmerican Energy Company	A2
Mississippi Power Company	A1
Monongahela Power Company	Baa3
Nevada Power Company	B1
Northern States Power Company (MN)	A3
Northern States Power Company (WI)	A3
Ohio Power Company	A3
Oklahoma Gas & Electric Company	A2
Pacific Gas & Electric Company	Baa1
PacifiCorp	Baa1
Portland General Electric Company	Baa2
Progress Energy Carolinas, Inc.	A3
Progress Energy Florida, Inc.	A3
Public Service Company of Colorado	Baa1
Public Service Company of New Hampshire	Baa2
Public Service Company of New Mexico	Baa2
Public Service Company of Oklahoma	Baa1
Puget Sound Energy, Inc.	Baa3
Savannah Electric and Power Company	A2
Sierra Pacific Power Company	B1
South Carolina Electric & Gas Company	A2
Southern California Edison Company	A3
Southwestern Electric Power Company	Baa1
Southwestern Public Service Company	Baa1
Tampa Electric Company	Baa2
Tucson Electric Power Company	Baa3
Union Electric Company	Baa1
Virginia Electric and Power Company	Baa1
Wisconsin Electric Power Company	A1
Wisconsin Power and Light Company	A2
Wisconsin Public Service Corporation	A1

T&D Utilities	Senior Unsecured Rating*
AEP Texas Central Company	Baa2
AEP Texas North Company	Baa1
Atlantic City Electric Company	Baa1
Baltimore Gas and Electric Company	Baa2
CenterPoint Energy Houston Electric	Baa3
Central Hudson Gas & Electric Co	A2
Central Illinois Light Company	Ba1
Central Illinois Public Service	Ba1
Central Maine Power Company	A3
Cleveland Electric Illuminating	Baa3
Commonwealth Edison Company	Ba1
Connecticut Light and Power Company	Baa1
Consolidated Edison Company of NY	A1
Delmarva Power & Light Company	Baa2
Duquesne Light Company	Baa2
Illinois Power Company	Ba1
Jersey Central Power & Light Company	Baa2
Metropolitan Edison Company	Baa2
New York State Electric and Gas	Baa1
NSTAR Electric Company	A1
Ohio Edison Company	Baa2
Orange and Rockland Utilities	A2
PECO Energy Company	A3
Pennsylvania Electric Company	Baa2
Pennsylvania Power Co.	Baa2
Potomac Edison Company (The)	Baa3
Potomac Electric Power Company	Baa2
PPL Electric Utilities Corporation	Baa1
Public Service Electric and Gas	Baa1
Rochester Gas & Electric Corporation	Baa1
San Diego Gas & Electric Company	A2
Texas-New Mexico Power Company	Baa3
Toledo Edison Company	Baa3
TXU Electric Delivery Company	Baa2
West Penn Power Company	Baa3
Western Massachusetts Electric Co.	Baa2

T&D Parent Companies	Senior Unsecured Rating*
AES El Salvador Trust	Baa3
CenterPoint Energy, Inc.	Ba1
CILCORP Inc.	Ba2
Consolidated Edison, Inc.	A2
Energy East Corporation	Baa2
Northeast Utilities	Baa2
NorthWestern Corporation	Ba2
NSTAR	A2
UIL Holdings Corporation	Baa3

Rising Operating Cost Structure

In general, Moody's believes that the North American regulated utility sector is facing a long-term period of rising operating costs, which include fuel and purchased power, operating and maintenance (O&M) costs, and selling, general and administrative (SG&A) expenses. The ability to recover these rising costs on a timely basis through rate relief has increasingly become a significant determinant to credit quality and highlights the importance for utility management teams to maintain constructive relationships with state regulatory authorities and provide reliable service to end-use customers.

The stable rating outlook for the sector is largely premised on our belief that these costs will be recovered on a reasonably timely basis. However, for those companies that are incurring large, multi-year deferral balances, Moody's may begin to incorporate a higher risk profile, which would create pressure to maintain a stronger balance sheet and cash flow coverage metrics. The size of these potential balances should become more clear over the next 18 to 24 months.

FUEL AND PURCHASED POWER

The largest and most volatile expense on the income statement is fuel and purchased power, which has averaged approximately 48% of revenues over the past 5 years for the integrated electric utility group. The trend has been rising, with these costs averaging 51.4% of revenues in 2006, compared with 43.7% in 2002. As noted in Table 1 below, the average gross margin for the integrated electric utilities has declined from 56% in 2002 to 49% in 2006, a decline of roughly 13%, while the gross margin of T&D utilities has remained reasonably steady.

Table 1

Gross Margin as a % Revenue

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Integrated Utility	56%	54%	54%	49%	49%	52%	-3.3%
T&D Utility	45%	46%	46%	45%	45%	45%	—
Utility Parent	56%	53%	51%	49%	49%	52%	-3.3%
T&D Parent	49%	48%	46%	41%	43%	45%	-3.2%

Moody's acknowledges that an assessment of gross margin is somewhat misleading for the utility sector, especially when considering the pass-through nature of many fuel and purchased power costs. For example, if a utility collects $100 in revenue and spends $50 on fuel, its gross margin would be 50%. If however, that same utility experienced a doubling of its fuel costs — to $100 — which was directly passed-on to customers, its revenues would be $150 and its gross margin would fall to 33%.

With respect to these gross margins, Moody's notes that the vast majority of utilities do not earn margins on their fuel and purchased power expenses, but instead enjoy specific rate riders to address these costs as direct pass-through items to end-use customers. Our concern with these pass-through rate riders, however, reside with the timing differences between when a company needs to procure its fuel and purchased power and when it collects the costs from ratepayers. Due to the extremely volatile nature of natural gas, oil and power commodity prices, many companies can very quickly find themselves in a significant under-recovery position, which could stress liquidity. Examples of utilities which have experienced large deferred fuel and purchased power costs include Alabama Power, Georgia Power, Virginia Electric and Power and Arizona Public Service.

Recovery of deferred fuel costs over an extended time period during which fuel costs are rising weakens the overall credit profile of utilities, due to the increasing mismatch between cost incurrence and cost recovery. Moreover, Moody's believes utilities may find themselves having a more difficult time seeking other base rate or incremental fuel relief in such an environment. End-use customers and intervener groups are also less likely to be sympathetic to the factors driving the rate increases during regulatory proceedings making the management of relationships with regulators and other interested parties challenging. (Moody's acknowledges that most large industrial customers recognize the fuel rates and the pass-through nature of the fuel riders and tend to be less concerned with this particular issue).

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

In addition to fuel costs, the fundamental operating cost structure appears to be rising as well. Industry consulting groups and data collection agencies can demonstrate a clear trend in rising costs on a per-customer basis. However, over the past 5 years, this trend can not be demonstrated through our financial analysis, as the level of SG&A expenses as a percentage of revenues appears to remain relatively stable at roughly 11% for the integrated electrics and roughly 9% for the T&D utilities.

Table 2

SG&A expenses as a % revenue

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Integrated Utility	11%	10%	12%	11%	10%	11%	-2.4%
T&D Utility	10%	8%	9%	9%	9%	9%	-2.6%
Utility Parent	11%	9%	10%	9%	9%	10%	-4.9%
T&D Parent	16%	10%	11%	10%	11%	12%	-8.9%

OPERATING MARGIN

However, the concern over a steadily rising operating cost structure is evident in the average operating margins. As noted in the table below, the operating margin as a percentage of revenue has steadily fallen for the integrated utilities from approximately 18% in 2002 to approximately 15% in 2006. The deterioration is also evident for the T&D utilities, which have fallen from approximately 16% in 2002 to approximately 13% in 2006.

Table 3

Operating Margin as a % revenue

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Integrated Utility	18%	17%	17%	15%	15%	16%	-4.5%
T&D Utility	16%	16%	16%	15%	13%	15%	-5.1%
Utility Parent	14%	15%	15%	15%	15%	15%	1.7%
T&D Parent	13%	12%	17%	11%	11%	13%	-4.1%

In general, the vast majority of the operating costs related to regulated utility operations are recoverable through base rates, and most regulatory authorities are aware of the rising costs facing the industry. While operating margin is less helpful to credit analysis, it does provide a view of profitability. Any sustained deterioration of the sector's profitability could negatively bias our sector rating outlook.

INTEREST EXPENSE

Interestingly, the average interest expense as a percentage of revenue appears to remain relatively stable at approximately 5% for the integrated electrics, having fallen from roughly 6.3% in 2002. For the T&D utilities, interest expense as a percentage of revenue fell from approximately 6.4% in 2002 to 5.75% in 2006. As debt levels and interest rates reverse the declining trend of the last several years, interest expense as a percentage of revenues may begin to increase, depending on cost of capital recovery proceedings.

Table 4

Interest Expense as a % revenue

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Integrated Utility	6%	6%	6%	5%	5%	6%	-4.5%
T&D Utility	6%	6%	6%	5%	6%	6%	—
Utility Parent	8%	8%	8%	6%	7%	7%	-3.3%
T&D Parent	7%	7%	7%	6%	6%	7%	-3.8%

In summary, the majority of the expenses "above the line" are expected to be recovered through the regulated rate-making process, although some of this recovery could be impacted by regulatory lag. Utility companies should recover these costs and expense deferrals (such as those associated with fuel and purchased power) in a reasonably timely manner. As such, the primary credit implications associated with the costs and expenses, and recoveries associated with regulatory lag, relate to working capital and liquidity.

In general, a vast majority of utility companies maintain a relatively healthy amount of liquidity capacity that helps them mitigate the loss of financial flexibility from any delayed regulatory response to cost recoveries. We have also observed, over the past few years, a trend away from bilateral facilities and more towards committed, fully syndicated multi-year facilities without MAC clauses beyong initial closing on the facility. We view this development as a credit positive.

Larger Capital Expenditure Programs

Although industry estimates vary widely, there appears to be an expectation that the utility sector will make significant infrastructure investments over the next few years, including investments in generation, transmission and distribution assets as well as environmental mitigation. In fact, there has been a considerable increase in the projected estimates of capital expenditures in the public disclosure for year-end 2006 versus year-end 2005.

Given the relatively non-discretionary nature of the announced capital expenditure plans (such as environmental compliance, new generation build and transmission upgrades), Moody's expects a significant portion of these plans to translate into actual investments. However, we note that the timing associated with some of the announcements appears to be relatively aggressive. For example, a number of companies in the sector have announced plans to build new base load generation, such as coal or new nuclear plants. In our opinion, these projects will take approximately 50–60 months for construction, after the necessary permitting process has been completed. In addition, many T&D utilities (as well as integrated electrics) have announced new transmission projects beyond simple maintenance of the existing system. In our opinion, there will likely be significant resistance from numerous intervener groups which could potentially delay some of these projects.

There are many ways to evaluate the increase in capital expenditure plans, the most notable of which is the public disclosure in the annual SEC filings. This increasing level of investment has actually started to materialize in the financial statements as utility companies geared up over the past few years for the increases in maintenance and new projects. This increase is apparent in a ratio of capital expenditures to cash flow from operations, as noted in the table below and is arguably related to the expiration of many rate-freeze periods when capital expenditures may have been smaller.

Table 5

Capital Expenditures / CFO

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Integrated Utility	83%	99%	78%	410%*	110%	93%	7.3%
T&D Utility	78%	72%	69%	72%	129%	84%	13.4%
Utility Parent	79%	77%	71%	113%	126%	93%	12.4%
T&D Parent	90%	55%	83%	144%	113%	97%	5.9%

** Excluded from 5-yr. average. Outlier primarily attributed to Entergy subsidiaries.*

Capital expenditure as a percentage of annual depreciation expense has also been increasing, and Moody's observes that the investments are beginning to be made in very long-lived assets with long book depreciation lives.

Table 6

Capital Expenditures / Depreciation Expense

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Integrated Utility	286%	148%	157%	166%	200%	191%	-8.6%
T&D Utility	120%	134%	151%	172%	189%	153%	12.0%
Utility Parent	164%	147%	140%	153%	195%	160%	4.4%
T&D Parent	174%	152%	165%	165%	192%	170%	2.5%

One of the more alarming ratios that highlight the increased spending and its potential impact on credit quality is cash flow, adjusted for working capital items less dividends, as a percentage of capital expenditures. Prospectively, Moody's would expect these ratios to continue to decline over the next few years, depending on how much of the expected investment actually materializes and what recovery arrangements are in place.

Table 7

CFO Pre-W/C – Dividends / Capital Expenditures

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Integrated Utility	101%	101%	102%	88%	76%	94%	-6.9%
T&D Utility	134%	127%	136%	95%	65%	111%	-16.6%
Utility Parent	114%	122%	123%	103%	96%	112%	-4.2%
T&D Parent	94%	104%	103%	108%	72%	96%	-6.5%

As these cash outlays begin to flow through the statement of cash flows, many companies will begin to stress their key financial credit metrics, regardless of any regulatory recovery mechanisms, due to timing differentials and the sheer size of the projects. If the expected deterioration to the financial statements materializes or if the financing plans associated with the increased expenditures primarily encompass the use of debt, negative rating actions could result. For example, SCANA Corporation and its principal utility subsidiary, South Carolina Electric and Gas, were recently placed on review for potential downgrade in part due to its announced increased spending plans driven by higher construction and material costs, new nuclear permitting costs and a change in the associated financing plans of said projects which will now be done soley with the issuance of additional debt. This is clearly a more aggressive financing policy than the company utilized previously. Otter Tail Corporation is another example of a company that has recently experienced a negative rating action (outlook changed to negative from stable) as a result of an expected deterioriation to key financial credit metrics.

Potential For Regulatory and/or Legislative Intervention

An environment of rising operating costs and capital investment needs should increase the frequency of requests for rate relief from state regulatory authorities. In Moody's opinion, these requests appear to be occurring annually or bi-annually now that many rate-freeze periods have expired. Eventually, rate-payers may resist these increases, depending on the magnitude of the increase. Additionally, individual state legislatures may feel the need to intervene to either help address the situation or revise the current rules and regulations.

Not all intervention is negative to credit quality, however. In fact, it appears that many states have recently seen regulatory or legislative intervention that has proven quite beneficial to the utility sector. In general, higher rates make future increases harder to obtain and so many utilities and regulators are beginning to pursue a series of smaller annual increases in an effort to avoid a more dramatic rate shock.

States with More Constructive Recent Regulatory or Legislative Actions	States with Less Constructive Recent Regulatory or Legislative Actions
Wisconsin	Maryland
Virginia	Illinois
Iowa	Arkansas
Florida	Arizona
Louisiana	
Nevada	
North Carolina	
South Carolina	

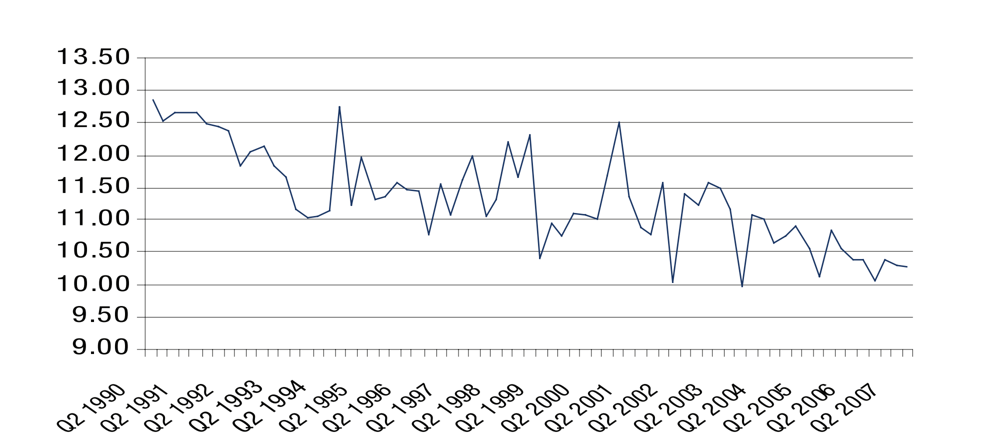
From a credit perspective, the intervention risk could also be affected by management's desire to attain pre-approvals on investments or other cash recovery mechanisms or assurances prior to committing to a particular investment. A future regulatory risk could arise over the intermediate- to longer-term where regulatory authorities find it beneficial to allow for pre-approval or other assurances for recovery but subsequently prescribe a lower allowed equity return reflecting the lower risk profile of the investment.

Table 8

Net Income / Average Equity

	2002	2003	2004	2005	2006	4-yr Avg	3-yr CAGR
Integrated Utility	n/a	11%	11%	10%	10%	11%	-3.1%
T&D Utility	n/a	13%	12%	11%	9%	11%	-11.4%
Utility Parent	n/a	10%	9%	10%	11%	10%	-3.2%
T&D Parent	n/a	12%	11%	9%	12%	11%	—

The chart below is a graphical depiction of average awarded ROE's as calculated by the Edison Electric Institute which shows a similar trend to our analysis in Table 8.

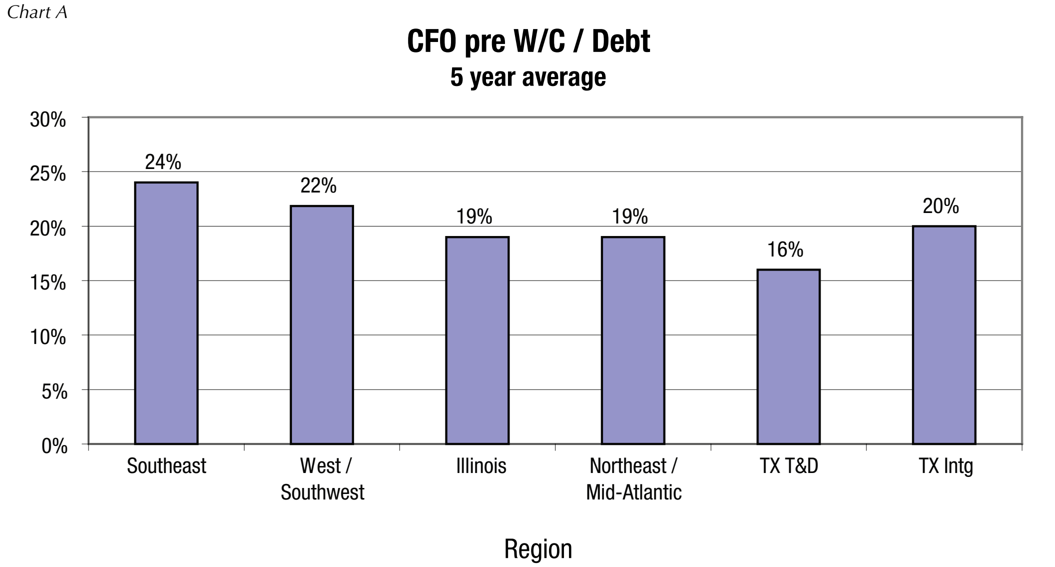


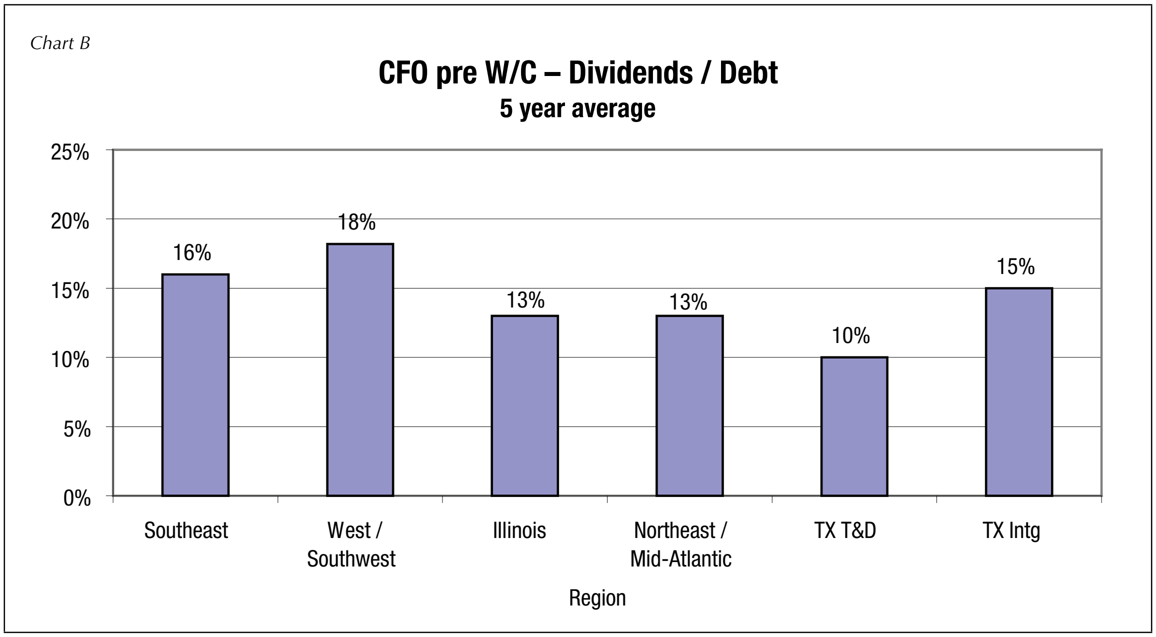
Source: EEI Q2 2007 Financial Update.

Given current macroeconomic market conditions, Moody's believes there are several regulatory commissions that are actively targeting progressively lower equity returns, presumably on the premise that utilities are lower-risk businesses than industrial companies. Consequently, the equity market valuations being ascribed to the regulated utility sector, which are at all-time highs, are likely to reverse themselves in the future. This potential outcome might lead many regulators to question why more companies did not look to access relatively cheap equity at this time, knowing they were entering a phase of significant infrastructure investment.

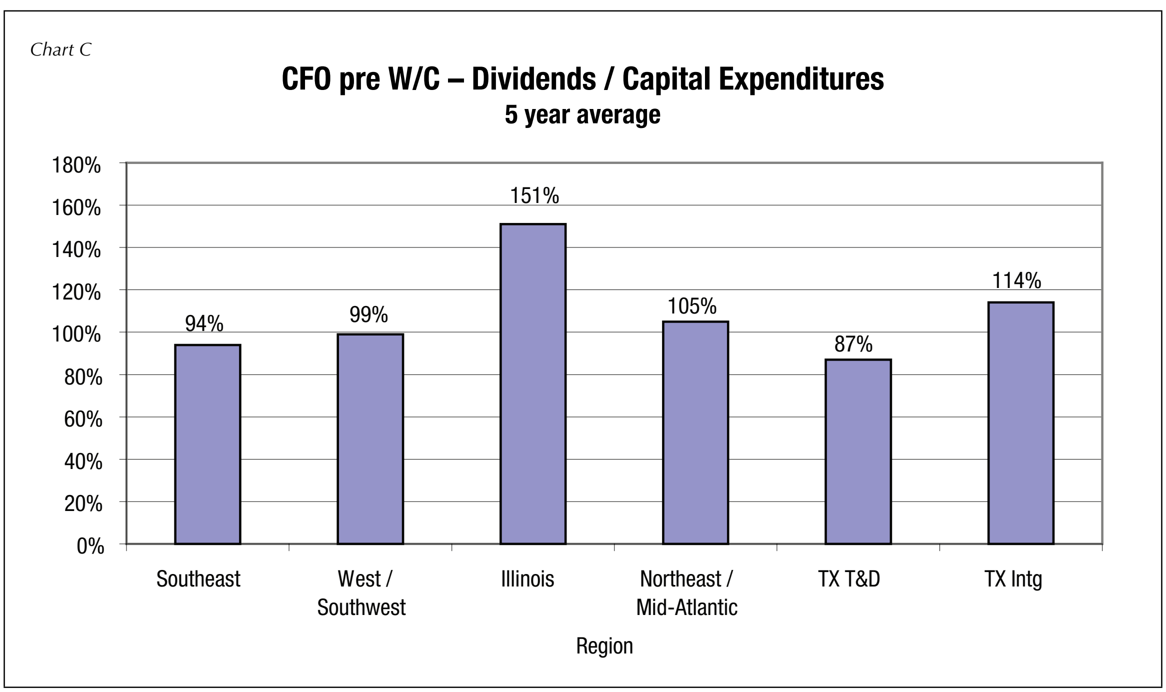
Moody's believes there is a discernable difference between individual state regulatory commissions, their relationship with the utilities they regulate and individual states' prior attempts to deregulate the industry. As noted in the charts below, the states in the southeastern region of the United States and in the West / Southwest, have produced, on average over the past 5 years, higher credit metrics than the states in the Northeast / Mid-Atlantic region, where most utilities divested their generation assets, or perhaps transferred those assets into a less-regulated, affiliate entity. Interestingly, in addition, it appears as if the average metrics for the utilities in the West/Southwest peer group may be experiencing some lift from California.

Chart A





As demonstrated in these charts, the T&D-related utilities in Illinois and the Northeast / Mid-Atlantic region tend to produce a lower level of cash flow to adjusted total debt than their integrated peers, given their rating category. Theoretically, this makes sense given the lower business and operating risk profile associated with many of these T&D utilities, as they generally do not have the more risky generation assets within the vertically integrated utility structure. However, many of these utilities need to procure their power supplies on the open market or through bi-lateral agreements with power generators or merchant energy companies. While these costs are generally passed through to end-use consumers through various rate-rider mechanisms, there could be very significant and potentially devastating consequences to credit quality if regulators, legislators, or other political leaders intervene over rapidly rising prices. This case is most prominent in Illinois where the legislators, not the regulators, lead the intervention, in part due to the steep increase in rates that went into effect this past January after a 10-year rate freeze.



Generous Shareholder Rewards Policies Appear Inconsistent With Increasing Business and Operating Risk Profiles

In general, Moody's observes that most companies and industries that are facing increasing business and operating risk profiles tend to institute corporate finance strategies that are designed to bolster the balance sheet in an effort to address rising uncertainties in a more conservative manner. In the regulated utility sector, some companies appear to be more focused on competing for investor attention by instituting overly generous shareholder reward policies. These shareholder reward polices typically include steady and predictable annual dividend rate increases and equity repurchase programs.

Over the past few years, Moody's has observed a trend where many utility companies are beginning to slowly increase both their leverage and dividend obligations or reinstitute the payment of dividends, such as CMS Energy (dividend only) or Dominion Resources. Moody's generally considers dividends as a fixed expense given the historical reluctance of issuers to either cut or halt the dividends except when confronted with an extremely dire financial situation. Several companies have also raised their dividend payout targets in an effort to attract or retain investor interest. While Moody's recognizes the importance of issuers maintaining strong equity interest given the capital intensive nature of the industry and the need to tap the equity markets from time-to-time to help maintain their metrics, Moody's would also prefer to see a more consistent balance between protection of creditors and shareholder rewards in an effort to defend a particular rating. In the table below, Moody's observes that the average dividend payout for the sector has declined for the integrated utilities and increased for the T&D parent companies.

Table 9

Dividend Payout Ratio (Dividends / Net Income)

	2002	2003	2004	2005	2006	4-yr Avg	3-yr CAGR
Integrated Utility	n/a	82%	75%	44%	68%	67%	-6.0%
T&D Utility	n/a	139%	77%	89%	134%	110%	-1.2%
Utility Parent	n/a	69%	74%	44%	56%	61%	-6.7%
T&D Parent	n/a	69%	69%	139%	106%	96%	15.2%

A majority of the integrated electric utilities in our coverage universe are subsidiaries of parent holding companies. As such, many of the utilities incorporate financial policies that are designed to achieve a leverage target consistent with the allowed regulated equity ratio or regulated capital structure. As a result, some of these subsidiaries are actually demonstrating a reasonably consistent retained cash flow to debt ratio. The same can not be said for the T&D utilities, which have had steadily declining retained cash flow to debt ratios since 2004.

Table 10

CFO pre W/C – Dividends / Debt

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Integrated Utility	16%	17%	17%	15%	17%	16%	2.0%
T&D Utility	13%	13%	16%	14%	10%	13%	-8.3%
Utility Parent	12%	14%	14%	13%	14%	13%	5.2%
T&D Parent	9%	10%	11%	12%	9%	10%	—

From a credit perspective, these shareholder reward programs could have implications in companies' dealings with regulators or legislators. Regulatory authorities may feel less sympathetic to companies that might find themselves in increasingly stressful financial conditions as they recall the equity repurchases or other shareholder rewards of the past few years. Under this scenario, it is conceivable that regulators may ask management why it would implement these programs in the face of increasing business and operating risks; especially as it relates to building new base-load generation facilities. This leads us back to the issues of constructive regulatory relationships and timely recovery of costs.

Comparison to Other Regulated, Capital Intensive Industries

Moody's compared the integrated electric utilities and T&D utilities to a selected group of peer industries. These peers are large, capital-intensive industries that are also affected by significant amounts of regulation — for example, environmental or safety-related regulation — or are affected by commodity cycles or weather. For each comparable sector, we selected a small group of companies that we believe constitute a reasonable representation for the peer group average. A list of the companies selected for the peer group is included in Appendix A.

Table 11

CFO pre W/C + Interest / Interest

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Steel	9.2x	6.6x	19.9x	18.0x	22.3x	15.2x	24.8%
Major Oil	8.0x	13.5x	15.1x	18.0x	18.6x	14.6x	23.5%
Shipping	6.3x	7.3x	8.4x	8.3x	7.9x	7.7x	5.8%
Chemicals	5.3x	7.0x	7.5x	7.7x	7.6x	7.0x	9.4%
Integrated Utility	4.9x	5.1x	5.4x	5.0x	4.9x	5.1x	0
Divr. Nat. Gas	4.5x	4.9x	4.9x	4.0x	5.7x	4.8x	6.1%
Paper	3.5x	4.4x	4.6x	4.6x	5.5x	4.5x	12.0%
Railroads	3.8x	4.0x	4.3x	4.7x	5.5x	4.5x	9.7%
T&D Utility	4.1x	4.1x	5.0x	5.0x	3.7x	4.4x	-2.5%
Utility Parent	3.5x	3.7x	3.9x	3.8x	4.0x	3.8x	3.4%
Airlines	3.2x	4.1x	3.5x	3.2x	4.0x	3.6x	5.7%
T&D Parent	2.9x	3.2x	3.3x	3.4x	3.1x	3.2x	1.7%

Table 12

CFO pre W/C / Debt

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Major Oil	34%	58%	70%	95%	98%	71%	30.3%
Steel	31%	20%	92%	83%	120%	69%	40.3%
Chemicals	25%	27%	34%	39%	42%	33%	13.9%
Shipping	22%	29%	34%	37%	35%	31%	12.3%
Paper	15%	22%	22%	23%	31%	23%	19.9%
Integrated Utility	24%	25%	25%	21%	22%	23%	-2.2%
Divr. Nat. Gas	19%	21%	22%	18%	29%	22%	11.2%
T&D Utility	20%	19%	23%	21%	16%	20%	-5.4%
Railroads	17%	18%	20%	23%	28%	21%	13.3%
Utility Parent	16%	18%	18%	18%	19%	18%	4.4%
T&D Parent	12%	13%	15%	16%	15%	14%	5.7%
Airlines	10%	13%	11%	11%	18%	13%	15.8%

One of the more interesting differentiation factors between these large capital intensive industrial sector peers and the utility industry is the ability of the industrials to capitalize on commodity prices. This is most evident with the major oil and steel companies. Oil companies, in general, do not hedge their production the way utilities hedge, and as a result the significant rise in oil prices has resulted in a dramatic impact on earnings and cash flows. Similarly, steel companies have benefited from increased demand and higher prices.

Table 13

CFO pre W/C – Dividends / Debt

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Steel	25%	17%	87%	73%	96%	60%	40.0%
Major Oil	25%	46%	57%	76%	82%	57%	34.6%
Shipping	19%	25%	30%	32%	31%	27%	13.0%
Chemicals	19%	22%	27%	31%	32%	26%	13.9%
Railroads	16%	17%	18%	21%	25%	19%	11.8%
Paper	11%	17%	18%	18%	25%	18%	22.8%
Divr. Nat. Gas	14%	17%	18%	13%	24%	17%	14.4%
Integrated Utility	16%	17%	17%	15%	17%	16%	1.5%
T&D Utility	13%	13%	16%	14%	10%	13%	-6.4%
Airlines	10%	13%	11%	11%	18%	13%	15.8%
Utility Parent	12%	14%	14%	13%	14%	13%	3.9%
T&D Parent	9%	10%	11%	12%	9%	10%	—

Moody's also observes that there is a noticeable consistency among the regulated industries with respect to annual credit ratios versus the more volatile industrial sectors. That being said, Moody's also notes that the industrial peers, many of whom are bailing hay while the sun shines, are not overly leveraging their balance sheets when times are good. Theoretically, this may be due to the inherent acknowledgement that the cyclical nature of the industry sector may eventually turn around again, and some industrial companies are less enthusiastic to an increased level of leverage if they believe future cash flows may be stressed.

Table 14

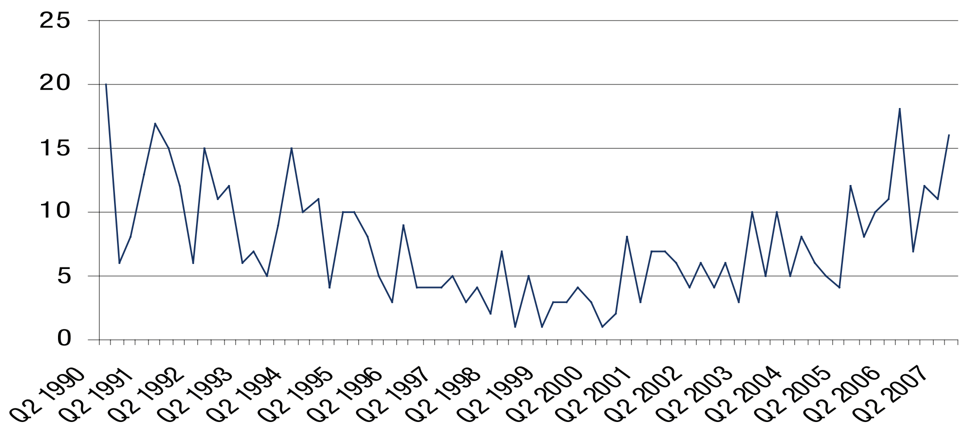
CFO pre W/C – Dividends / Capital Expenditures

	2002	2003	2004	2005	2006	5-yr Avg	4-yr CAGR
Steel	191%	62%	419%	333%	365%	274%	17.6%
Chemicals	148%	217%	224%	216%	168%	195%	3.2%
Paper	135%	215%	213%	173%	220%	191%	13.0%
Shipping	109%	154%	212%	242%	173%	178%	12.2%
Major Oil	96%	146%	157%	175%	163%	147%	14.2%
Railroads	121%	117%	120%	127%	137%	124%	3.2%
Utility Parent	114%	122%	123%	103%	96%	112%	-4.2%
T&D Utility	134%	127%	136%	95%	65%	111%	-16.6%
T&D Parent	94%	104%	103%	108%	72%	96%	-6.8%
Integrated Utility	101%	101%	102%	88%	76%	94%	-6.9%
Divr. Nat. Gas	69%	113%	113%	63%	91%	90%	7.2%
Airlines	56%	76%	72%	84%	105%	79%	17.0%

Conclusion

The regulated electric utility sector is currently facing a period of rising expenses, huge needs to invest in its infrastructure and significant needs to address steadily increasing environmental mandates. As a result, the sector will most likely be very active with state regulators in seeking rate relief, which could strain the reasonably constructive relationships they have enjoyed over the last few years. In addition, legislators may view the sector as an easy target with which to score political points, and may intervene to protest the steadily rising costs associated with lighting, heating and cooling constituent's homes or businesses.

The chart below depicts the number of rate cases filed by utilities as calculated by the Edison Electric Institute.



Source: EEI 2Q 2007 Financial Update

However, none of the issues currently facing the industry are new. In fact, the utility sector has faced an environment with eerily similar uncertainties in the past. The risk, in our opinion, is whether or not the experiences of the past will be repeated in the future. The most significant risk might be future disallowances of investments that were made with an understanding that those investments were prudent and necessary at the time they were made.

Our concern is that even in states with reasonably constructive CWIP or other construction recovery mechanisms, over the life of construction, only approximately 10% – 20% of the total project costs would be recovered. If the balance of the costs, in this case 80% – 90%, were added to rate base in year 5 or 6, rate shock could be meaningful for some utilities. If this scenario materializes, Moody's would be concerned if the regulatory relationship is more confrontational, potentially increasing the risk for large deferrals or disallowances, as had been sometimes the case in previous years. In addition, while Moody's did not spend any material attention to the risks associated with carbon legislation or carbon tax issues in this report, we believe the issues over carbon could be substantial for utility companies over the next several years.

From a credit perspective, it is unclear what impact these storm clouds on the horizon may have on the utility sector. The risks that are currently being highlighted are sufficiently far enough out on the horizon that there appears to be little threat of imminent rating action especially if key financial credit ratios remain at current levels. However, Moody's has raised a question on many occasions as to whether or not utility companies should be re-doubling their efforts to strengthen balance sheets and bolster liquidity capacity, given the potential risks over the intermediate and longer-term horizons.

From a rating perspective, Moody's expects to carefully monitor utility investment plans, the associated financing plans related to those investments and the potential those investments could have on future rate cases. While we recognize that there are significant needs that need to be addressed — in terms of generation capacity, fuel diversity, transmission and distribution upgrades and enhancements and substantial uncertainties associated with increasingly stringent environmental mandates — credit quality could suffer if key financial ratios were to deteriorate meaningfully or if the deterioration appeared to be sustained for an extended period of time.

Déjà vu All Over Again

The following excerpts are from an annual report published by a large, multi-state utility holding company. Can you guess what year the report was published?

A. 2005
B. 1996
C. 1970
D. 1964

"…inflationary pressures pushed the costs of doing business progressively higher and compelled …our operating companies to ask for rate increases."

"… difficulties as fuel shortages and environmental concerns…"

"…operating expenses reached new heights, primarily because of significant increases on the costs of fuel and of purchased power.…Labor and materials costs, too, were higher than ever before."

"Construction of generation plants and other needed facilities continues to carry high priority in the…planning for the future, as do research and development activities aimed at finding ways to protect more effectively the quality of air and water in our service area."

"…subnormal hydroelectric generating conditions."

"Contributing to...higher construction costs are the environment-protection facilities associated with the production of electric power."

"Public concern over fuel shortages, power supply inadequacies, need for increased revenues, and ecological considerations — more visible than usual through increased national news coverage — amplified the concern already being shown by the nation's producers of electric power."

"…it is probable that about half of the new generation installed…on the system…will be nuclear."

"In the long run, the development of "clean coal" — through gasification or solvent refining — probably will provide the most feasible solution to the challenging problem of controlling stack effluents."

Answer: C. 1970 The Southern Company

Related Research

Special Comments:

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Global Chemicals and Allied Products, February 2002 (# 74324)

North American Diversified Natural Gas Transmission And Distribution Companies, March 2007 (# 102513)

Industry Outlook:

U.S. Electric Utilities, December 2006 (# 101304)

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.

Appendix A

Company	Senior Unsecured Rating
Airlines	
Southwest Airlines	Baa1
AMR Corporation	B2
Continental Airlines	B2
JetBlue Airways	B2
Major Oils	
Exxon Mobil Corporation	Aaa
BP plc	Aa1
Royal Dutch Shell plc	Aa1
Chevron Corporation	Aa2
Conoco Phillips	A1
Marathon Oil	Baa1
Diversified Natural Gas	
Equitable Resources	A2
KeySpan Corporation	A3
Consolidated Natural Gas	Baa1
National Fuel Gas	Baa1
CenterPoint Energy Resources Corp	Baa3
Southern Union	Baa3
Williams Companies	Ba2
El Paso Corp	Ba3
Questar	—
Paper	
Sonoco Products Company	Baa1
Weyehaeuser Company	Baa2
International Paper	Baa3
Temple-Inland	Baa3
Railroads	
Burlington Northern Santa Fe	Baa1
Norfolk Southern Corp	Baa1
CSX Corporation	Baa2
Union Pacific Corp	Baa2
Shipping	
United Parcel Service	Aaa
FedEx Corp	Baa2
Con-way Incorporated	Baa3
Overseas Shipping Corp	Ba1
Chemicals	
E.I. DuPont de Nemours & Company	A2
Praxair, Inc.	A2
Dow Chemical Company	A3
Monsanto Company	Baa1
Steel	
Nucor Corporation	A1
United States Steel	Baa3
Steel Dynamics	Ba1
AK Steel Holdings Corp	B1

Southeast	West/Southwest	Illinois	Northeast/Mid-Atlantic	TX T&D	TX Integrated
Alabama Power	Arizona P.S.	Ameren CIPS	Baltimore G&E	AEP Central	El Paso Electric
Appalachian Power	Nevada Power	Commonwealth Ed	Boston Ed	AEP North	ETR- Gulf States
Cleco Power	P.S. Colorado	Illinois Power	Central Hudson	CEHE	SPS
Duke Carolinas	P.S. New Mexico	PECO	Central Main Power	TNMP	SWEPCo
ETR - LA	PG&E		Con. Ed	TXU Delivery	
ETR - MS	San Diego G&E		Connecticut L&P		
FP&L	Sierra Pacific Power		Delmarva P&L		
Georgia Power	SoCal Edison		JCP&L		
Gulf Power	Tucson Electric		Mass. Electric		
Kentucky Power			Met. Ed		
Kentucky Utilities			NYSEG		
Louisville G&E			Penn. Electric		
Mississippi Power			Potomac Electric		
Monongahela Power			PPL Electric		
PGN - Carolina			PSE&G		
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James Hempstead	*Indu Sambandam, CFA* *Ryan Wobbrock*	*Ida Chan*