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Energy Industry Update

Highlights of Recent Significant Events and Emerging Trends in the Energy Industry

Early Summer 2006

Contents

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Seeking a Path Forward and a Way to Pay for It

Energy and utility companies continue to develop strategies to cope with fuel supply and price uncertainties exacerbated by last year's monster hurricanes, new and evolving federal energy policies, industry consolidation (and associated uncertainty), an aging workforce, and an emerging need for new power generation capacity. At the same time, state regulators are beginning to see increasing costs and are not liking what they see...and they are letting the industry know it.

Gas Prices: An Uncertain Variable in Many Equations	Natural gas prices have receded from their post-Katrina highs, but supply/demand balance remains precarious. Customers and utilities must determine the best way to deal with persistently high gas prices. For example, gas utilities heretofore worried about demand destruction now have to consider whether customers might switch to electricity for certain energy applications. Gas price expectations are also having a profound effect on the consideration of generation options.
A Changing Generation Mix and Daunting Planning Decisions	Generation ownership in the electric industry has become evenly shared between investor-owned regulated utilities and non-utilities such as competitive gencos. Meanwhile, new technologies—clean coal, wind, and next generation nuclear plants—are arousing the interest of resource planners as capacity margins dwindle. There are, however, mixed views on each technology's potential. Utilities are now beginning to weigh economic tradeoffs as they consider new capacity. The combined uncertainty of fuel prices, emissions and greenhouse gas constraints, unproven nuclear capital costs, tax credit limitations, and NIMBY responses to even the "greenest" project will make planning decisions more challenging.
Regulators Flex Their Muscles	FERC has completed most of its "to-do's" required under the Energy Policy Act, paving the way for increased investment in generation and transmission and for industry consolidation. But the energy industry is finding that state regulators are taking a more active role in dictating policy. The sunsetting of rate freezes has sparked battles over rates. It has also soured the political and regulatory climate, leading to increased scrutiny of merger approvals, RTO participation, and the cost of greenhouse gas regulation. Meanwhile, "across the pond" in Europe, jurisdictional battle lines are drawn as national regulators seek to protect domestic utilities from acquisition by "foreigners," while European Union regulators are moving to combat energy nationalism more aggressively.
Many Financial Obligations and More Funding Needed	Utilities are facing large capital outlays, as they are also committed financially to other operating obligations. Still recovering from epic storms last year, many utilities are bracing for another active hurricane season, spending more on storm readiness and hardening the utility infrastructure. Longer-term, post-retirement benefits are not yet a critical concern, as they have been with other manufacturers in the news this year. But underfunding has some watching cautiously as the industry prepares for a wave of retirements over the next five to ten years and must fund pensions and retiree health care. Private equity and hedge funds potentially are deep sources of capital for the industry. However, a combination of large expected returns, competition for capital from other sectors, and an increasingly hostile regulatory environment may discourage stock purchases in the energy sector by these players.

Chief Executives Comment

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Diversified (Electric & Gas) Integrated Utilities

Significant Pressures Converging on the Business

"[O]ur stock is trading at a discount to our peers due to the overhang of several challenges, including limited financial flexibility, high gas prices that have caused reduced customer gas usage and may impact the timing of regulatory initiatives...." (NiSource)

"We are convinced that the combined pressures of industry consolidation and rising customer expectations will make it impossible...to survive, much less succeed, without restoring the customer as the focal point for our business.... [We continue] to invest in critical electric transmission projects–the fastest growing part of our business." (PG&E)

"Over the past decade, the majority of U.S. power plants built have been gas-fired, causing increasing strain on declining natural gas supplies. A primary solution to the problem is LNG." (Sempra)

Transmission & Distribution Utilities

Active on the Regulatory Front

"One of the biggest impediments today to fostering competition is the lack of transmission.... [F]ederal regulators have recognized this and are now providing attractive financial incentives for transmission investments." (Energy East)

"Central to our success...has been the effective integration of our six operating utilities." (Energy East)

"We work constructively with regulatory agencies and other constituents to communicate the importance of...having the necessary resources to continue investing in the region's energy infrastructure." (Con Edison)

"[W]e foresee a period of continued high regulatory activity.... [O]ur [capital] investments are...aimed to improve reliability, meet load growth and enhance customer service...and build our utility rate base." (Pepco Holdings)

Merchant Generators

Strengthening Balance Sheets, Trimming Risk, and Focusing on the Assets

"We strengthened our balance sheet.... Gross margin increased.... Credit quality rose incrementally, on track with our long-term goals...." (AES)

"We emerged from Chapter 11 with one of the strongest balance sheets in the independent power business.... Our focus is on our power plants and how to maximize their value through operations, marketing their power and disciplined growth. We engage in only a limited amount of proprietary trading...." (Mirant)

"[W]e are employing a straightforward commercial strategy that focuses on selling our electricity close to the time it is actually produced.... [W]e will use the value created in a favorable environment to further improve our balance sheet." (Dynegy)

Electric-Predominant Integrated Utilities

Big Ticket Investment in Generation on the Horizon

"One of the ways that we are able to offer retail prices significantly below the national average is to maintain a fuel mix that is diverse and thus less subject to price volatility." (Southern)

"...[I]ncreasingly stringent environmental standards, growing concern about greenhouse gases, skyrocketing fossil-fuel prices and a need to develop the next generation of capacity will challenge the industry.... Massive investments will be required at a time when customers are becoming more and more concerned about price and reliability." (Duke)

"[W]e are evaluating other generation options, aggressively pursuing energy-efficiency initiatives, and supporting alternative energy technologies..." (Progress Energy)

"We are successfully reinvesting cash into our non-utility businesses to grow their scale and scope." (DTE)

Gas Utilities

Responding to Gas Price Pressures

"The benefits of high prices in the current natural gas market can easily mask operational underperformance." (Equitable Resources)

"A decade ago less than 10% of total U.S. natural gas production came from unconventional reservoirs.... [T]hat share could grow to about 50% over the next decade...." (Questar)

"We continued to identify and implement technology and other process improvements that have moved us closer to our vision: a 'one company' operational platform that eliminates duplicate systems and disparate processes among our companies and establishes the possibilities of virtual workforce automation while creating a platform for scalability." (AGL Resources)

Note: Integration does not mean functional integration; rather it indicates parts of the value chain—generation, transmission & distribution—under the relevant corporate umbrella

Sources: Utility annual reports

Energy Industry Stock Prices

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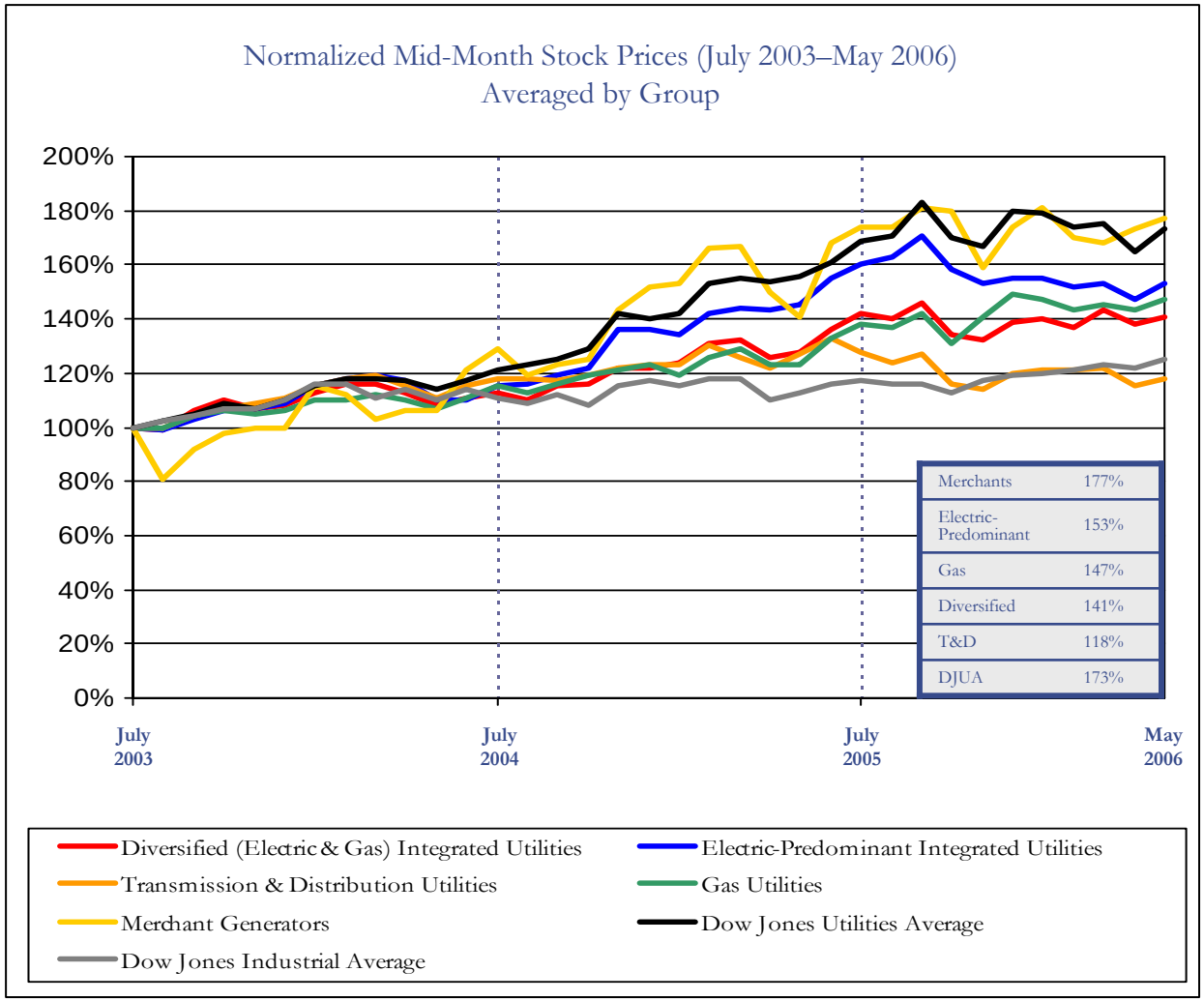
After a Run-Up, Potential Plateau for Utilities?



Selected Statistics—May 2006

Company		Group Averages at May 2006 P/E	ROE
Alliant Ameren Aquila* CMS Energy* MDU Resources NiSource OGE Energy	PG&E PSEG Scana Corp. Sempra Energy Vectren Wisconsin Energy	17 (σ = 5)	8%
Centerpoint Con Edison Duquesne Light Energy East National Grid*	Northeast Utils.* NSTAR Pepco Holdings Puget Energy	14 (σ = 1)	19%
AES Calpine (restructuring)* Dynegy	Mirant* Reliant Energy* Williams	38 (σ = 30)	-19%
AEP Allegheny Energy Cinergy (acquired)* Constellation Dominion DTE Energy Duke Energy Edison Int'l Entergy Exelon FirstEnergy FPL Group	Great Plains Energy Hawaiian Electric Pinnacle West PNM Resources PPL Corp. Progress Energy Sierra Pacific Southern Co. TECO Energy TXU Xcel Energy	20 (σ = 10)	29%
AGL Resources Atmos Energy KeySpan Energy National Fuel Gas New Jersey Resources Nicor ONEOK	Peoples Energy Piedmont Natural Gas Questar Southern Union† Southwest Gas Westar Energy WGL Holdings	20 (σ = 19)	13%

Notes: This panel is composed principally of Fortune 1000 Energy and Utility companies.
P/E is for most recent four quarters, as available, based upon May 31, 2006 stock price; ROE is trailing reported four quarters as of May 15, 2006.
σ means the standard deviation of P/E ratios for the group. Figures are rounded to nearest integer.
Averages and σ exclude statistics deemed "Not Available," but include reported negative ROE figures.
* means P/E omitted because not available, recent trailing four quarters loss, or no longer separately traded (i.e., Cinergy);
† means P/E omitted from calculation of average and σ because >100.

Sources: *The Wall Street Journal Online* (accessed May 16, 2006) (ROE, P/E, historical stock prices); *The Wall Street Journal* (June 1, 2006) (P/E, historical stock prices); Yahoo! Finance (historical stock prices); S&P Capital IQ (provided by Yahoo! Finance) (ROE)

The Investment Community's View

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Mixed Opinions Across the Board—Rate and Regulatory Risk Dominates

Diversified (Electric & Gas) Integrated Utilities

Neutral to Positive ⇔

"Integrated names generally still look attractive, with relatively low valuations...."

"We expect that regulated operations will see weaker results in 2006."

"Multi-utilities that participate in competitive wholesale and retail power markets should benefit from additional market deregulation and firming power prices."

"The integrated group...[is] trading at much more reasonable valuations.... These stocks exhibit diminished interest rate correlation, with the value proposition being driven by expanding earnings and cash flows derived from re-pricing of legacy below-market contracts/hedges on deregulated power and energy assets."

Transmission & Distribution Utilities

Negative ⇩

"Until state regulators become less accommodative, we expect spending to continue exceeding budgets, which is a risk."

"The debate over expiring rate freezes, caps, and [POLR] obligations...has begun to spread.... This is another example of what could be shifting sands on the regulatory and political front, which has been fairly benign, even constructive over the past couple of years."

"T&D companies conducting business under rate caps have endured notable margin pressure."

Merchant Generators

Mixed ⇧ ⇩

"[U]nwarranted pessimism on natural gas prices is driving energy merchants...into an oversold condition."

"[T]he competitive supply segment...is fundamentally unattractive. Profitability is affected by too many factors that are outside the company's control...."

"[M]erchant power generators are highly leveraged and may once again encounter difficulties in meeting their debt obligations."

"Longer term, we expect [IPPs] that have secured economies of scale as well as geographic and fuel diversity in their generation portfolios to outperform."

Electric-Predominant Integrated Utilities

Neutral to Positive ⇔

Although we are underwhelmed by the merger's strategic rationale, it...[adds] to the size of its regulated business portfolio."

"The decision to exit proprietary trading...shows [it] is willing to take decisive actions to secure long-term profitability."

"Private equity risk [leverage] is perceived to be less severe in the utility sector.... Overall, credit profiles have improved, and business risk has been reduced."

"The integrated sub-group is cheap...."

"Historical tendency...is to underperform in a rising interest rate environment."

Gas Utilities

Negative to Neutral ⇩

"Regulators have been less willing to give rate increases to those companies with businesses in nonregulated operations...."

"Our 12-month investment outlook for natural gas utilities is negative.... For 2006, we expect low single-digit growth, on average, for regulated utility operations."

"Our fundamental outlook for vertically integrated natural gas distribution companies with unregulated midstream operations is neutral."

"Until liquefied natural gas becomes more prevalent, domestic producers...should have an advantage over foreign competitors."

"We project higher production-related costs restricting earnings gains at gas utilities with E&P operations."

"Combine election-year politics, bitterness between the Democrats and Republicans, tightly contested races, politically motivated attorneys general (AG can also denote "aspiring governor"), then toss in the issue of rising utility rates, and suddenly you've got a horse that everyone can flog. That's great, unless you're the horse."

– *Wachovia Securities*

Sources: Standard & Poor's Stock Reports; Citigroup Smith Barney; Value Line Investment Survey; Morningstar; Banc of America Securities: Wachovia Securities; Calyon Securities; *The Wall Street Journal*

The Gas Markets: Still Precarious

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New Price Expectations?

- Despite recovering from last fall's $12+ per MMBTU level and help from a temperate winter, spot gas prices remain high compared to historical $3-$4 levels
- Some believe that expectations of "moderate" gas at $7+ per MMBTU will lead to elevated base gas price levels
- Opinions differ, however: Forward prices show gas in the $7-$10 range through 2010, although Fitch projects stabilization in the $4-$6 range as its base case
- Supply/demand balances are tight, leading to potential price spikes if supply or demand change substantially (if hurricanes strike the Gulf this summer and/or a cold winter ensues in 2006-07)

Increasingly Attractive Economics of Alternative Sources

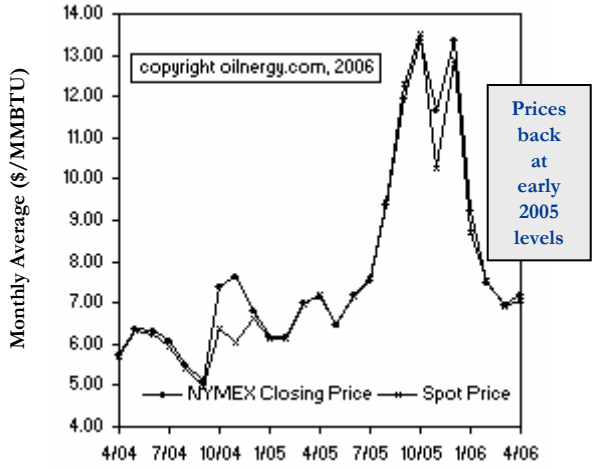
- Higher gas prices have sparked interest in new alternative gas sources
- BP, ExxonMobil, and ConocoPhillips have agreed to build a pipeline from Alaska's North Slope in February 2006, but it will not be completed until well after 2010
- Also, despite its high cost, advances in horizontal drilling have led Big Oil to sign deals to drill in previously ignored unconventional fields encased in coal and shale, such as the Barnett Shale field (Texas) and the Fayetteville Shale (Arkansas). Potential is high, with estimates for Barnett over 26 TCF. Such fields will likely spur pipeline construction
- Liquefied natural gas remains a "holy grail" for some, but entering a worldwide gas market also poses some risks for availability and price

Storage Seen as Critical

- Adequate storage and deliverability is seen by FERC as key to a long-term tight supply/demand situation and to help mitigate price volatility
- FERC staff reports that working gas storage capacity has fallen by 6.5% since 1989 to 4.3 trillion cubic feet
- While storage projects of nearly 140 billion cubic feet of gas are possible, peak amounts of working gas in storage have not changed, meaning deliverability is a critical factor
- FERC hopes that by swiftly processing storage applications and proposing market-based rates for storage, industry will be incented to develop new high-deliverability storage

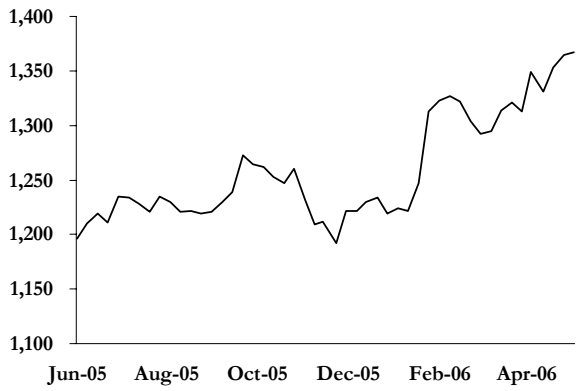
Gas Prices, While High, Have Moderated...

NYMEX Henry Hub and Spot Natural Gas Prices



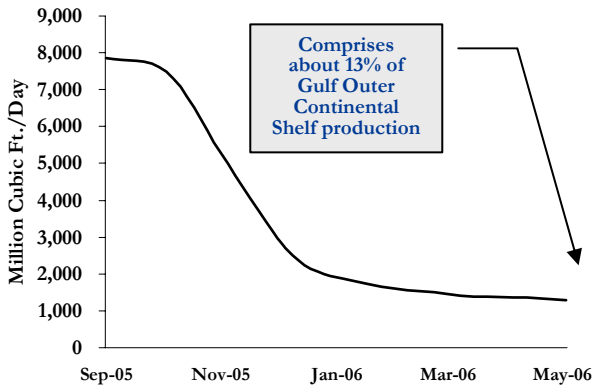
...As Equipment Is More Available...

U.S. Weekly Gas Rig Count (June 10, 2005–May 12, 2006)



...And Gulf Production Has Increased

Shut-In Gulf of Mexico Production (Sept. 2005–May 2006)



Sources: Citigroup Smith Barney, *Spark Spread Biweekly* (May 8, 2006); FitchRatings, *Wholesale Power Market Update* (Mar. 13, 2006); American Gas Ass'n; U.S. Minerals Mgmt. Service; Advanced Resources International; *The Wall Street Journal*; FERC, *Winter 2005-06 Energy Market Update* (Mar. 16, 2006)

Coal Markets: Getting Back on Track

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Strong Economy + High Gas Prices = Coal

- Continued economic growth, combined with high gas prices, and continued reliance on lower BTU Powder River Basin (PRB) coal, caused a 2+% increase in power generator coal consumption in 2005
- A mild winter permitted utilities to replenish their coal inventories (up to 104 million tons vs. 98 million tons last summer), although they remain thin
- Heading into the cooling season, stronger utility demand and better rail service are expected to benefit coal producers, especially for PRB

Coal Prices Ease...Slightly

- After a difficult year of transportation problems, prices have eased, especially in the West
- Going into summer, Northern Appalachian ($42-$45/ton) and PRB ($13-$14/ton) are staying within tight price ranges, as prices for 2007 delivery are relatively flat compared with 2006, reflecting in part the pull-back in gas prices and an improved rail situation

The Federal Government Examines Transportation and Safety

- Utilities and regulators complained to Congress about surface transportation issues for PRB coal in 2005 and the estimated $3 billion increase in costs to replace it last year. This has also increased scrutiny of utility inventory practices
- Railroads, in response, seek a 25% tax credit on rail capacity investments
- One railroad has proposed a 900-mile, $2.5 billion expansion to increase market accessibility of PRB coal (see below) and reduce reliance on BNSF and Union Pacific Railroads
- In response to a spate of highly publicized, deadly mining disasters this past year—especially the Sago explosion—the Mine Safety & Health Administration and U.S. Senate have begun investigating mine safety and have recommended improved equipment requirements. The potential impact of investigation and remediation upon operations (and costs) is unclear

Proposed 900-Mile Expansion to Southern PRB by Dakota, Minnesota & Eastern Railroad

*Includes the Iowa, Chicago & Eastern Railroad, which DM&E purchased to extend its geographical reach for coal deliveries.

Emerging Trend:

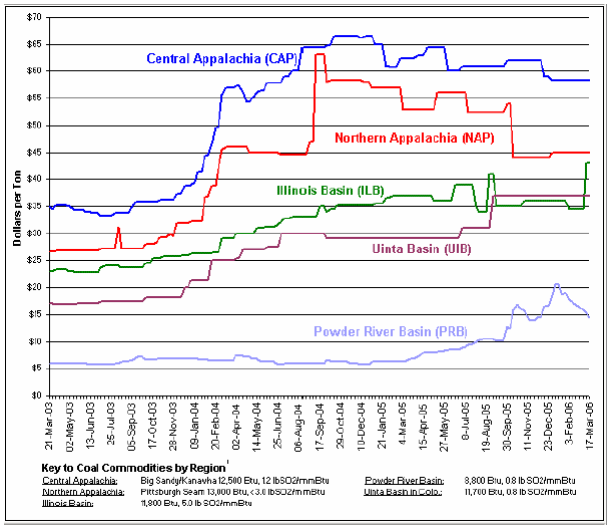
Coal producers are upgrading equipment and expanding capacity but locking up utility commitments to fund it.

Some examples:

- **AEP signed a 15-year contract with Consol for 82+ million tons**
- **Arizona Public Service signed a 19-year deal with Peabody for 65 million tons**

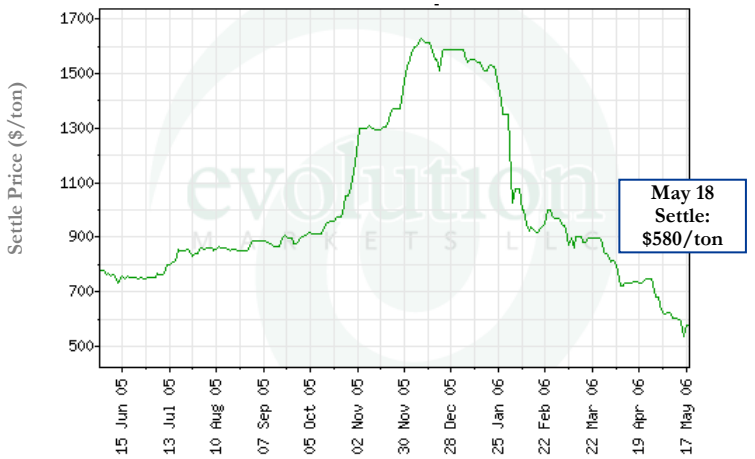
Powder River Basin Coal Prices Have Begun to Ease...

Coal Prices by Region
Mar. 2003–Mar. 2006 ($/Ton)



...And Emissions Allowance Prices Have Fallen Substantially

SO_2 Spot Allowance Settle Prices
June 1, 2005–May 18, 2006 ($/Ton)



Sources: Energy Information Administration; Evolution Markets; *The Wall Street Journal* (citing Dakota, Minnesota & Eastern Railroad); Citigroup Global Markets, *Metals & Mining: M/Metals Prospects* (May 7, 2006); FitchRatings, *U.S. Coal Producers Update* (Apr. 11, 2006)

Power Markets Update

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Fuel Diversity on the Radar Screen

- Gas is on the margin a significant amount of time in Texas, Florida, California, and the Northeast, and this proportion is growing in all regions (see chart at right)
- A mild winter eased pressure on constrained gas supplies and reduced danger of curtailments, although a continued tight supply/demand situation could pose a long-term problem
- Federal and state officials are increasingly focused on diversifying the fuel mix

Buy, Borrow, and Build

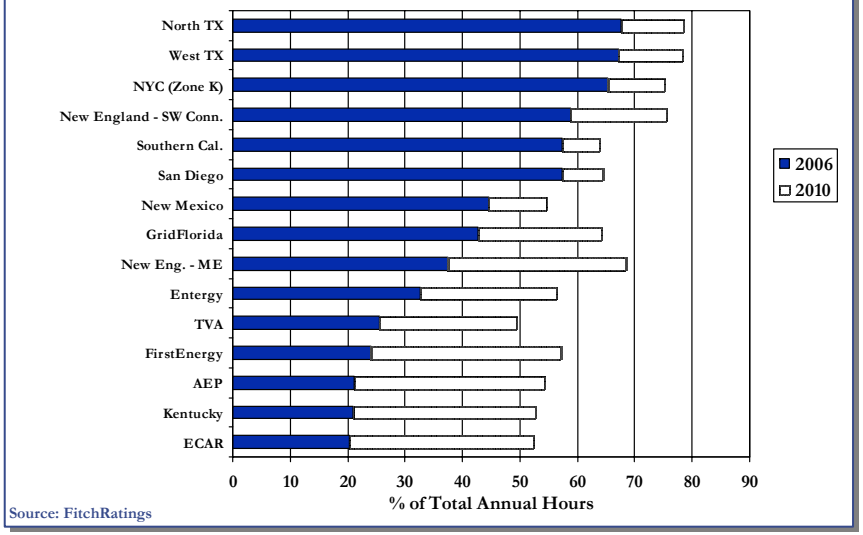
- Many firms have sought to meet increased load obligations by buying capacity
- About 35 gigawatts changed hands in power generation asset transactions during the last half of 2005; about 90% of that capacity was gas-fired
- Capacity needs in ERCOT—evidenced by rolling blackouts in April—have led some suppliers (TXU, International Power) to bring mothballed generation back online
- Southeastern utilities have made a number of proposals for new nuclear and clean coal baseload facilities

Starts and Stops in Market Structure

- PJM's proposed Reliability Pricing Model (RPM) was accepted by FERC, with details to be determined in a technical conference
- New England's LICAP is expected to be approved in late June. This, along with RPM, should help solidify capacity markets in the Northeast
- In ERCOT, however, where members have incurred over $1 billion in congestion charges since 2001, the Texas PUC delayed implementation of locational pricing until 2008 at the earliest

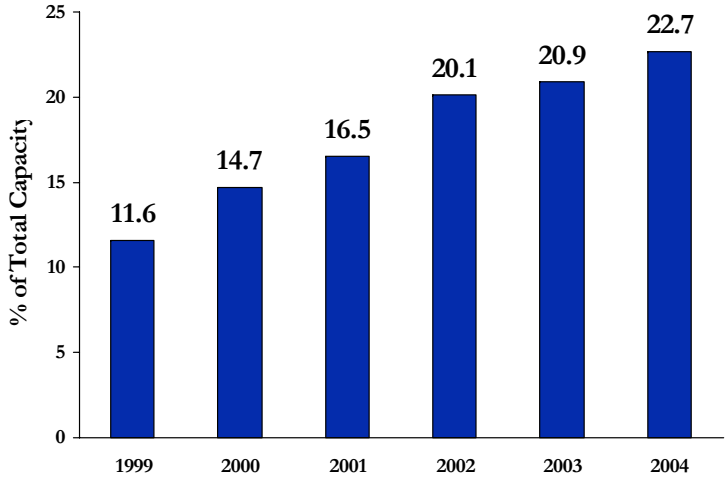
"It's A Gas": Gas-Fired Generation Keeps Growing

Gas on the Margin in Selected Zones (Projected)



Source: FitchRatings

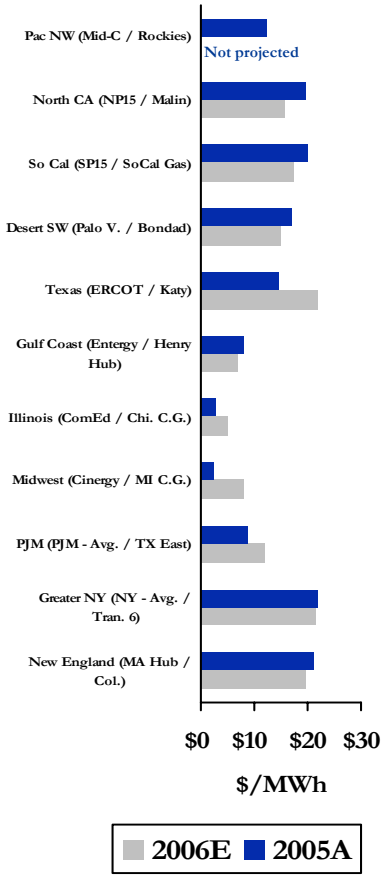
Two-Fold Increase in Gas-Fired Capacity as % of Total U.S. Capacity



Source: NERC

Mixed Signals on Sparks

Spark Spreads (2005 Actual vs. 2006 Estimated)



Source: Citigroup Smith Barney

Notes: Spark spreads based upon 7,000 BTU/kWh heat rate. LICAP means locational installed capacity.
Sources: Citigroup Smith Barney, *Spark Spread Biweekly* (Apr. 24, 2006); FitchRatings, *Wholesale Power Market Update* (Mar. 13, 2006); NERC *2006 Summer Assessment* (May 2006)

A "Generation Shift" Becomes Evident

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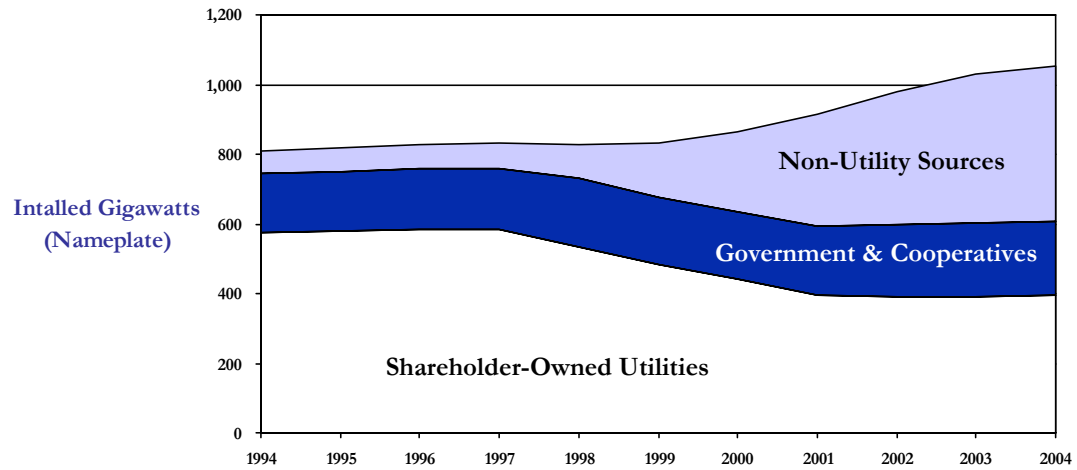
"You got to be careful if you don't know where you're going, because you might not get there."
- Yogi Berra

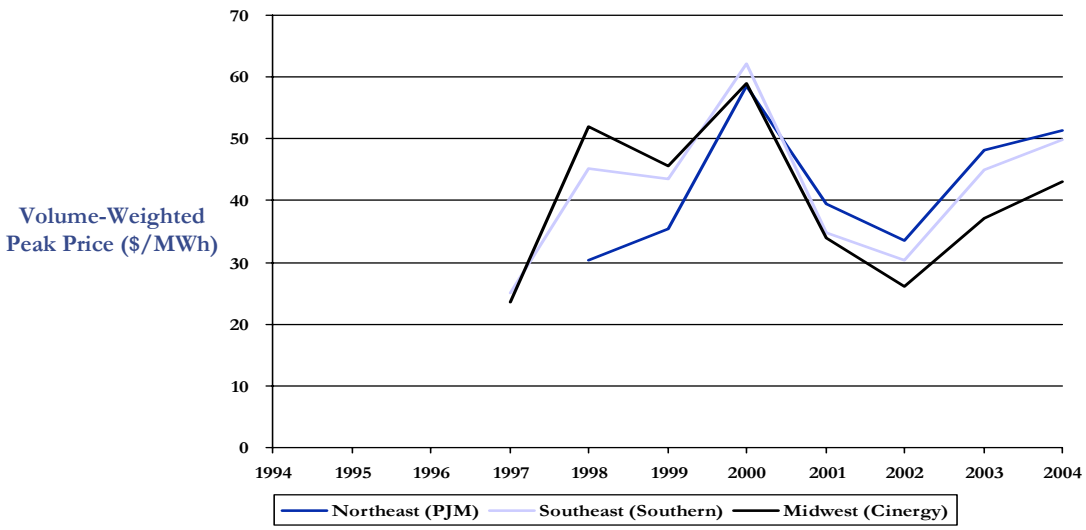
While the industry has seen the rise and fall of merchant generators, an important artifact has been the shift in the mix of generation ownership. This has implications for corporate and regulatory strategy as generation remains increasingly less "tethered," long term, to specific load.

Shift in Generation Ownership Since 1994



Source: EEI

Market Prices in Selected Regions During the Same Period



Source: RDI PowerDat

"Old World"	"After the Shift"	Imperatives
Uniform industry voice	Diverging interests and strategies	Ongoing knowledge of ally and competitor positions
Strong regulatory support for utility generators	Sometimes hostile relationships with regulators for perceived profiteering	Deft regulatory and political skills and ability to forge stakeholder alliances
Straightforward strategy options	Multiple options with disparate outcomes	Flexibility (hedged bets) regardless of or specific to market structure and competitive environment
Price and demand certainty	Increasing volume and price risk as load is re-bid periodically	Pricing, auction bidding, and contract structuring acumen; marketing and trading capabilities
Aligned and deterministic planning and construction	"Dis-integrated" resource planning	Market knowledge, informed by real options analysis and game theory
Reasonable likelihood of full cost recovery	Market conditions and elusive fuel pass-throughs	Relentless focus on cost
Profit limited to regulated return on equity	Significant profit potential under the right management approach	Operational excellence and high availability

Note: 2004 figures are preliminary.
Sources: Edison Electric Institute, *Statistical Yearbook of the Electric Power Industry* (Aug. 2005); RDI PowerDat

Generation Economics Revisited

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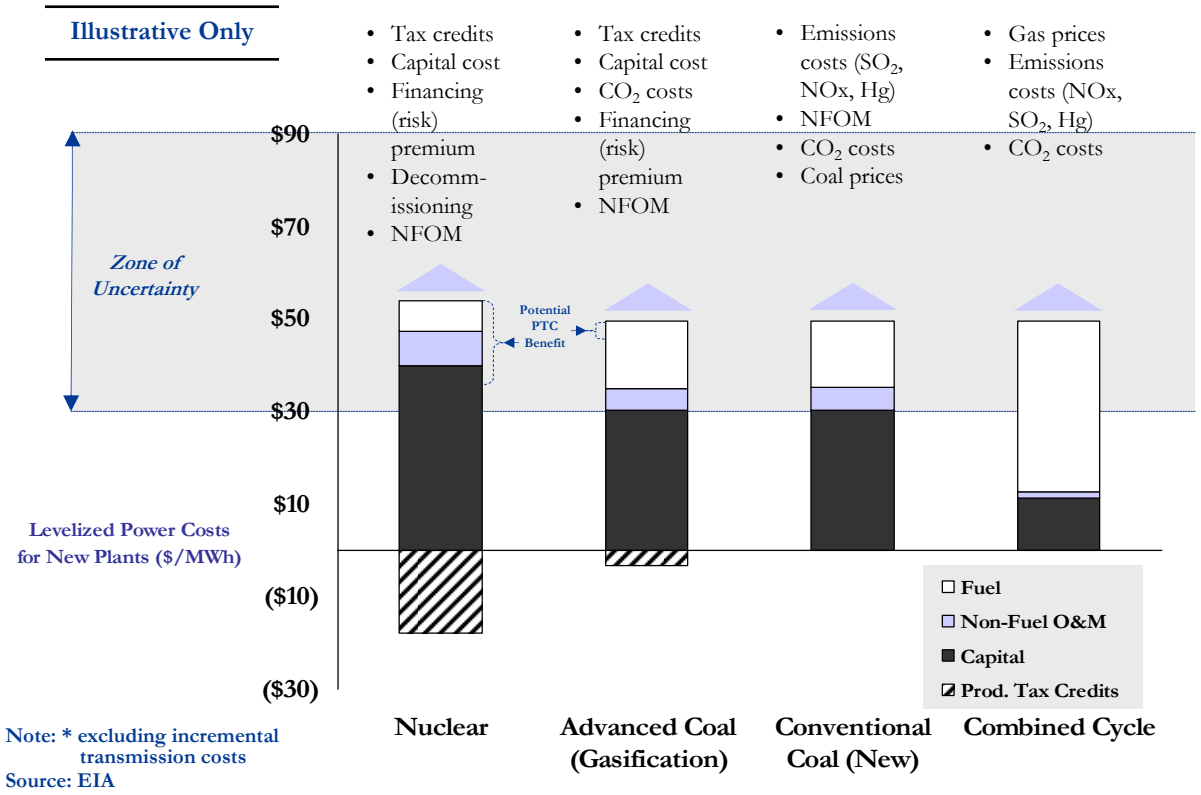
A Closer Race Between Technologies on a Levelized Cost Basis...

A Comparison of Projected Levelized Costs (2015)* and Some Key Uncertainties among Generation Options



Note: * excluding incremental transmission costs
Source: EIA

Building Optionality into the Business Case

- ❑ Prepare for a wide variety of outcomes, especially on the timing and cost of new technologies, fuel costs, and regulatory support or resistance
- ❑ Consider psychology in evaluating financing costs; bankers' skittishness converts into basis points
- ❑ Assess overall impact on production tax credits (and their sunset) on the plan
- ❑ Develop scenarios around emissions and ensure carbon-constrained and a carbon "loosely constrained" futures among them
- ❑ Think internationally, especially for fuel and equipment availability and cost
- ❑ Consider factors that may drive up non-fuel O&M, such as labor availability

... Dependent upon Critical Assumptions

Financing Costs	• Huge upfront capital costs on new nuclear and clean coal plants • Financing risk premium for new technologies • Possible interest rate increases in near-term, just as projects are proposed
Non-Fuel O&M	• NFOM is still a significant factor, as firms continue to drive down cost • New technologies have relatively unproven O&M costs
Fuel Cost	• Sustained high gas prices migrate production to coal and nuclear • <u>But</u> after staying in the $9-$12/lb. range, uranium prices have skyrocketed to over $40/lb., which will be felt as refueling outages increase the weighted average fuel price • High nuclear capacity factors, which preserved low costs/MWh, are topping out and new worldwide fuel demand is expected over the next 10-15 years • Coal prices have trended upward as well, driven by worldwide demand
Sustenance Capex	• Aging coal requires more sustenance • Decommissioning costs remain a burden for nuclear • New technologies have unproven track records on ongoing capex needs
Emissions Costs	• SO_2 emissions costs are increasingly price volatile, driven by market factors and the next phase of clean air compliance • CO_2 limitations and emissions costs (or carbon tax) are a wild card, with some belief that a cap-and-trade approach will be implemented

Sources: Energy Information Administration, *Annual Energy Outlook 2006*, Table 16 & Figure 69 (Feb. 2006); industry news; ScottMadden analysis

Clean Coal: A Primer

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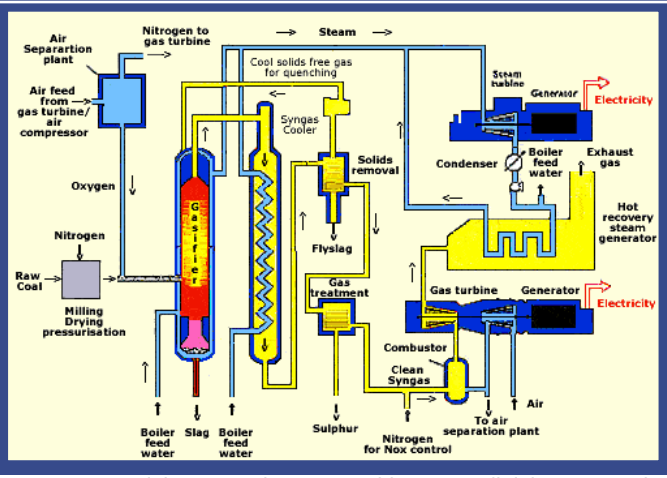
Tailwinds (⇧) and Headwinds (⇩) for Clean Coal

- ⇧ Environmental benefits: SO_2, NOx and CO_2 emission reduction, with potential for CO_2 sequestration
- ⇧ Incentives—tax credits, loan guarantees, and subsidies—for private investment
- ⇧ Fuel and operating flexibility—ability to use lower quality (higher sulfur) fuels
- ⇧ Lower O&M costs
- ⇧ A downward trend in new construction cost
- ⇧ Interest in demonstration facilities
- ⇧ Major equipment manufacturers and constructors (e.g., GE, Bechtel) developing standard IGCC offering
- ⇧ Hydrogen output from process can power a hydrogen economy
- ⇧ Technology adaptable for CO_2 sequestration of gas output
- ⇧ Enables use of cheaper high sulfur coal
- ⇩ High level of capital investment—currently $1,000 to $1,300/kW (industry target: $800 to $900/kW by 2020)
- ⇩ Technology risks that could impact availability and reliability (delayed commercial employment)

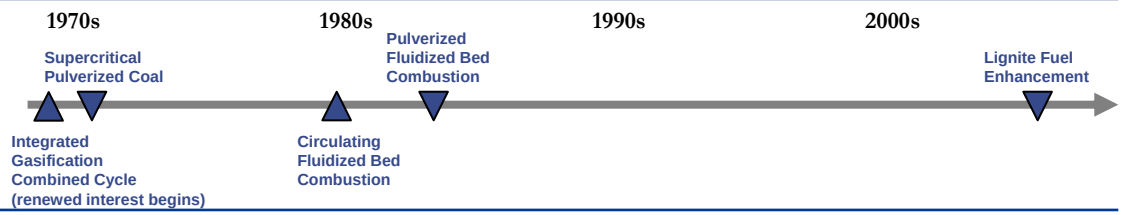
An Integrated Coal Gasification Combined Cycle System



Competing Clean Coal Technologies

	Circulating Fluidized Bed Combustion (CFBC)	Pressurized Fluidized Bed Combustion (PFBC)	Integrated Gasification Combined Cycle (IGCC)	Supercritical Pulverized Coal
Description	❑ Burns coal in bed of heated particles suspended in a gas flow ❑ Bed acts as a fluid, resulting (with higher velocity so particles held in flue gases) in rapid mixing of particles ❑ Coal is added to the bed, and the continuous mixing encourages complete combustion (recycles 10-50x) and a lower temperature than that of conventional combustion ❑ Efficiency similar to conventional plants, with better environmental performance using lower grade (more polluting) fuels	❑ Boiler operates at elevated pressure and temperatures ❑ "Fluidization" is similar to CFBC ❑ Current technology mixes coal with sorbent, facilitating SO_2 capture ❑ Second generation technology integrates a coal gasifier (carbonizer) to produce a fuel gas ❑ Fuel gas is combusted in a topping combustor and adds to the combustor's flue gas energy entering a gas turbine in a combined cycle configuration ❑ Targeting 50%+ efficiency by 2015	❑ Combusting coal brought into contact with steam and oxygen ❑ Generates thermochemical reactions that produce a fuel gas, largely carbon monoxide and hydrogen ❑ Gases are combusted to power gas turbines ❑ 45%-50% efficiency ❑ Typical size: ~250 MWs ❑ Higher thermal efficiencies with 50% of solid waste of conventional coal ❑ Fuel flexible (high sulfur coal, pet coke) ❑ Gasifier technology now used in oil & gas industry	❑ Uses specially developed high-strength alloy steels, which enable the use of supercritical and ultra-supercritical steam (pressures >3,600 psi and temperatures >1,050 °F)† ❑ Depending on location, achieves close to 45% efficiency (targeting 55%) ❑ Achieves MWh higher output per CO_2 emitted ❑ Favorable experience in Europe, Japan, and Korea
Emissions Reduction Potential	SO_2: 90%-98% removal NOx: <200-400 mg/m^3 Hg: Not specified	SO_2: ~95% removal NOx: <100-200 ppm Hg: 70% removal*	SO_2: 98%-99% removal NOx: <125 mg/m^3 Hg: Not required	SO_2: 95%-98% removal NOx: <125 mg/m^3 Hg: 60%-70% removal**
No. of U.S. Plants Proposed	**20**	Not Specified	**22**	**7**

Technology Vintages (Approx. Dates of Initial Introduction)



Notes: Hg = mercury; ppm means parts per million; *means requires baghouse; **means requires baghouse and flue gas desulfurization; † bar converted to psi by dividing by .06895, °C converted to °F using the formula: °F = (1.8 x °C)+32

Sources: IEA Clean Coal Centre (http://www.iea-coal.org.uk/site/ieaccc/home); U.S. Department of Energy; National Energy Technology Laboratory Export.gov; World Bank; BBC News; Natural Resources Defense Council; Australian Coal Ass'n; *Power* (Nov.-Dec. 2005); *Hart Energy Markets* (June 2005); Pembina Institute; Natural Resources Canada; *Electric Perspectives* (May-June 2005); *Public Utilities Fortnightly* (June 2005); *The Wall Street Journal*

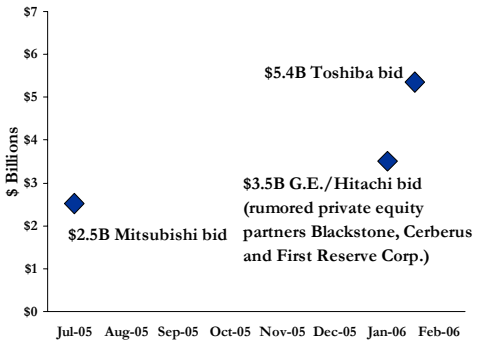
Bulls and Bears Weigh In on Nuclear

SCOTTMADDEN Management Consultants

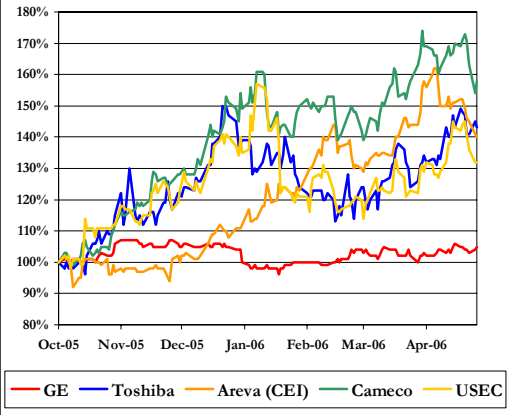
A Bull's View: Toshiba Doubles Down on Nuclear and Buys Westinghouse Nuclear

- **Seller:** British Nuclear Fuels
- **Transaction value:** $5.4 billion
- **Seller's Gain:** British Nuclear Fuels purchased Westinghouse in 1999 for $1.1 billion (sale price is nearly five times its purchase price)
- **Projected Closing Date:** 2nd Quarter 2006
- **2005 Sales:** $1.78 billion (FY ended March 31)
- **2005 Earnings:** $153 million (FY ended March 31)
- **Employees:** 8,500
- **Large Installed Base:** Westinghouse built 49 of the United States' 103 U.S. nuclear reactors (vs. GE's 35)
- **Strategic Rationale:**
  - — Achieves scale and technological capabilities required to be a global competitor
  - — Takes advantage of growing appetite for nuclear power—Toshiba expects global nuclear generation to grow by 50% by 2020
  - — Expects operational and technological synergies to lead to an expansion of Toshiba's nuclear business by 3 to 3.5 times by 2015
  - — Acquires proprietary advanced nuclear design—the AP1000—a technology of great interest in China where Westinghouse is a leading player. Westinghouse received AP1000 design certification from the NRC on December 31, 2005
- **Potential Deal Issues:**
  - — Toshiba's debt insurance cost may increase
  - — Possible foreign ownership objections by the United States (e.g., CNOOC deal)—is considered less likely since Westinghouse Nuclear is foreign-owned now
- **Partnership Rumors:** To pass foreign ownership scrutiny and share financial risk, Toshiba is rumored to be teaming up with Shaw Group, Marubeni Corp., and Mitsui & Co., offering them a 49% interest in Westinghouse

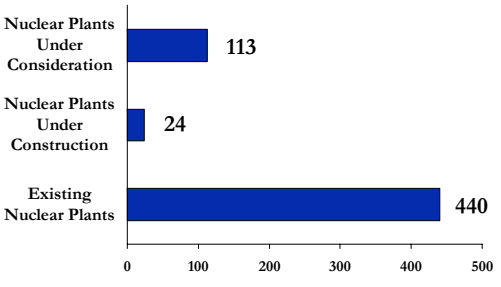
A Review of the Bidding for Westinghouse Nuclear



Stock Price Performance (Oct. 2005–May 2006) Selected Nuclear Fuels and Service Providers



A Growing Worldwide Market



Amidst Bullishness, Some Bearish Signals on Nuclear

- ❑ **Potential financing premium:** Credit agencies deem nuclear plant ownership generally less supportive of credit quality because it "introduces added levels of operating, regulatory, and environmental risk to a business profile"
- ❑ **Slow progress on waste storage:** While a National Academy of Sciences panel endorsed the Yucca Mountain nuclear waste storage facility, continued political opposition may drag licensing of the facility past 2010
- ❑ **Environmental groups may change their tune on "lesser of two evils":** Despite advocacy by the politically-weakened Tony Blair, U.K.'s Sustainable Development Commission has opposed construction of nuclear plants to meet carbon reduction targets. Similar concerns have been voiced in Canada and Italy
- ❑ **Learning curve and nervous bankers:** Some advanced designs have never been built and no nuke has been built in over 20 years, making lenders nervous about potential cost overruns
- ❑ **Possible resource constraints:** Worldwide high demand for resources to build and service nuclear plants, especially in China (which plans 40 new plants by 2020), and an aging skilled nuclear workforce, may strain existing resources
- ❑ **Government fiscal constraints:** DOE's Nuclear Power 2010 funding was cut by more than $10 million for 2007 (versus a $90 million increase anticipated by industry), potentially hampering advancement of new nuclear projects

Sources: Industry reports: Toshiba press releases; Yahoo! Finance (historical stock prices); *EnergyBiz Insider*; ScottMadden analysis

Tilting at Windmills

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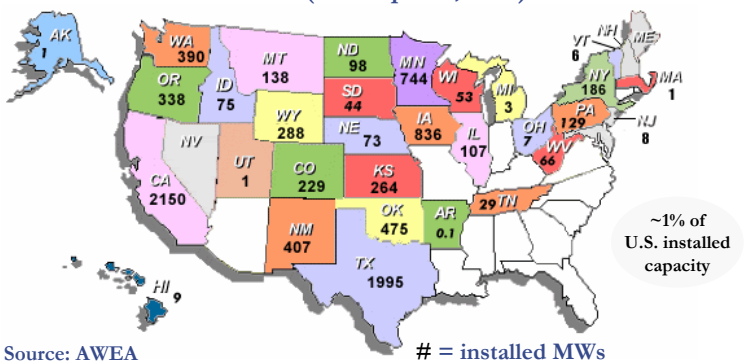
Installed Wind Capacity Is Now Meaningful...

Total Installed Wind Energy Capacity
in the U.S. (as of Apr. 26, 2006)

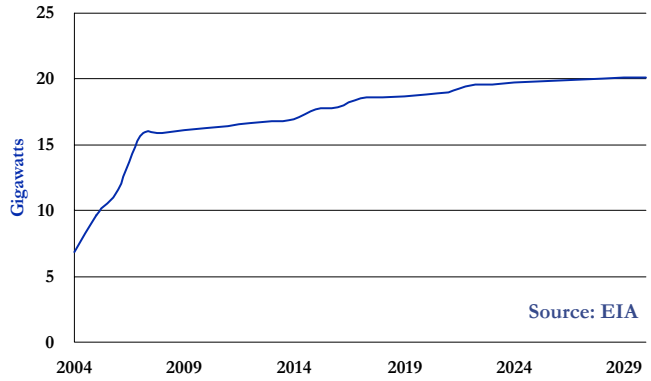


Source: AWEA

= installed MWs

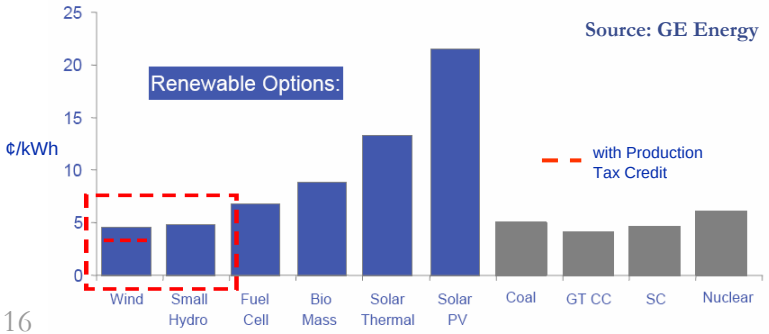
...And Is Expected to Grow Rapidly...

Projected U.S. Wind Energy Capacity



Source: EIA

...And Touted as the Most Cost-Effective Renewable



This is my quest, to follow that star ...
No matter how hopeless, no matter how far ...
To fight for the right, without question or pause ...
To be willing to march into Hell, for a Heavenly cause ...
- *"The Impossible Dream" from Man of La Mancha*

Interest in Wind Energy Is Accelerating	• GE, which bought Enron's wind business in 2002 to form GE Wind Energy, intends to spend to triple its investment in renewable energy (especially wind) to $3 billion by 2008 • In February 2006, Shell Renewables was rumored to be interested in acquiring Danish turbine manufacturer Vestas • U.S. wind developers added 2.5 GW in 2005 worth $3 billion, with 3,000 MWs of development expected in 2006 • Ibedrola has entered the U.S. market by purchasing a Pennsylvania wind marketing company
And Installed Cost Is Decreasing	• GE Energy states that installed wind turbine cost has declined from $2,600/kW to under $800/kW, as size has increased 60 times
FERC Also Supports Wind Power	• FERC has exempted wind generators from being required to produce reactive power and has finalized interconnection rules that favor wind projects
Interest Is Coming from Some Perhaps Unexpected Corners	• Virginia and Missouri, among others, have incorporated a requirement for renewables, especially wind, in the energy mix • Southern Co. is exploring investment in and development of renewables projects outside the Southeast
Opposition Has Been Seen from Unforeseen Regions	• In Massachusetts, which has a strong environmental stance, opposition to the Cape Wind project may have a chilling effect on development (ironic factoid: Sen. Kennedy opposes it; the Bush Administration favors it) • New Jersey, another "green" jurisdiction, has opposed offshore wind development, as well
Development Challenges Remain	• Wind expansion is inherently limited by locational characteristics • Wind penetration is highly dependent upon state renewable portfolio standards and the federal 1.9¢/kWh production tax credit, which expires at year-end 2007 (although there is a proposal in the Senate to extend it) • The top eight players, led by FPL, have 59% of the market, making it difficult for smaller players to get equipment

Sources: American Wind Energy Ass'n; European Wind Energy Ass'n; GE Energy; Energy Information Administration; industry news

FERC Moves on EPAct Obligations

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A Long "To-Do" List: Significant FERC Tasks under the Energy Policy Act of 2005 and Their Status

Area	Activity
LNG 	☑ Promulgate regulations on pre-filing process for LNG under National Environmental Policy Act
Electricity 	☑ Issue report on California electricity crisis investigation and ensure refunds are paid, along with a timetable for further action ☑ Issue final rule implementing new reliability provisions (see box at right) ☑ Issue report on steps required for Transmission System Monitoring—real-time transmission system functional status ☑ Revise criteria for useful thermal output of PURPA facilities (QFs) ☐ Outline how FERC will exercise authority to facilitate planning and expansion of transmission, especially to allow load-serving entities to meet native load and procure firm transmission rights ☐ Establish rules for incentive-based rate treatments for transmission ☐ Convene regional boards to study security-constrained dispatch ☐ Publish annual report on demand response resources ☐ Assemble inter-agency task force and submit report on competition in wholesale and retail energy markets ☐ Issue rules for "national transmission corridor" permits ☑ Adopt rules for expedited §203 (merger) applications ☐ May issue order or rule providing for comparable open access by non-regulated transmission utilities ☐ Terminate mandatory purchase and sale requirements for QFs
Natural Gas 	☑ Report on licensing and construction of Alaska gas pipeline ❑ May authorize market-based rates for new gas storage
Power & Gas Markets 	☒ May issue rules to increase transparency in gas and power markets ☑ Issue rules deemed necessary to make unlawful any "manipulative device or contrivance" and issue policy statement on enforcement
PUHCA 	☑ Issue rules to implement the new Public Utility Holding Company Act ☑ Exempt certain activities and players (e.g., "non-power goods and services," intrastate transactions, foreign utility companies) from certain FERC reviews and required authorizations

Legend: ☑ completed ☐ begun ☒ to be done but not begun

The Chairman Assesses FERC's Progress

On what's been done: FERC has "met or exceeded every deadline Congress set for us" and "completed its actions *required* by the Act." (emphasis added)

On FERC's approach: "Competition is a means, not an end" to the FERC's "overarching objective: to protect consumers from uncompetitive suppliers. There is a significant rebalancing of competition and regulation. Coupled with this is a sincere intent to have regulation grounded in clear, explicit rules, not case-by-case.... This clarity may have far-reaching consequences and be more impactful than the prior Pat Wood agenda."

On the work ahead: "Implementation of the Energy Policy Act is a huge undertaking, and it may be tempting to think that with the issuance of the last final rule our work will have ended. But, in a larger sense, it will have only just begun."

"Close, but No Cigar": Initial FERC Review Finds Proposed NERC Reliability Rules Lacking

- As part of its EPACT tasks, FERC staff reviewed proposed NERC reliability rules
- While NERC has recognized a number of remaining issues it needs to address, FERC staff found some significant issues with the rules and invited NERC and public response:
  1. Missing requirements recommended in the U.S./Canada Blackout Report
  2. Ambiguous standards, given the high cost of violations, i.e., $1 million per day penalty
  3. Technical inadequacy to ensure reliability
  4. Lack of measures and compliance
  5. Undue negative impact on competition (e.g., available transmission capacity calcs)
  6. "Fill-in-the-blank" standards, which defer to regional reliability organizations not in existence
  7. Unclear applicability, given lack of definition of "users, owners, and operators"

Sources: FERC Chairman Kelliher remarks at EXNET 19th Annual Utility M&A Symposium (Jan. 2006); FERC website; press reports; FERC Open Meeting Transcript (Feb. 2, 2006)

RTOs: Setbacks and Realignment

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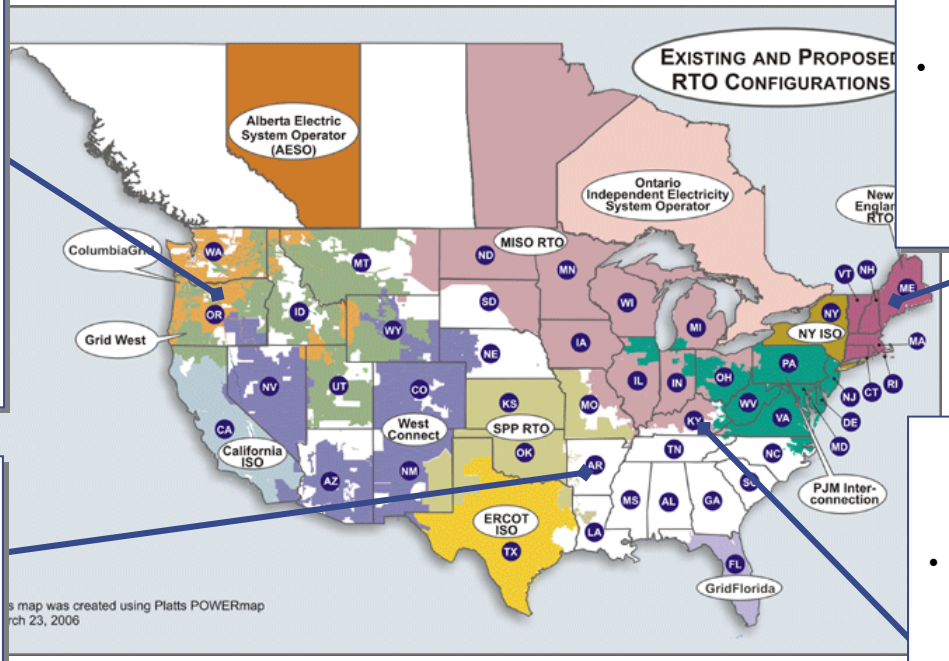
And Then There Were None... GridWest Pulls the Plug

- In April, following the exit of BPA (the largest transmission player in the Pacific Northwest) in January 2006, GridWest voted to dissolve for lack of financial support
- A key sticking point of the GridWest proposal for Northwestern public power agencies was the ceding of grid control to a separate RTO that would be subject to federal regulation
- Successor ColumbiaGrid—comprised of BPA, Avista, Puget Energy, and some NW publics—is under development
- Another proposed Western RTO—WestConnect—has been inactive since early 2004

Entergy Makes Another Run at an ICT

- In April, FERC approved Entergy's designation of SPP as independent coordinator of transmission (ICT) as a four-year "experiment" that would result in "improved transparency, higher quality transmission service..., improved access...and fewer complaints...."
- FERC Commissioner Brownell described the approval as a "triumph of hope over experience," citing "many, many, many, many complaints about operations"
- Arkansas PUC Chairman Hochstetter acknowledged the ICT is better than the status quo and hopes to see fuel cost savings through a proposed weekly power supply procurement process

"Today's order demonstrates the Commission's commitment to voluntary participation in regional transmission organizations. The Commission will honor contractual obligations regarding withdrawal rights."
- FERC Chairman Joseph T. Kelliher



ReliabilityFirst Is Born
Effective January 1, three NERC reliability councils—Mid-America Interconnected Network (MAIN), East Central Area Reliability Coordination Agreement (ECAR), and Mid-Atlantic Area Council (MAAC)—were combined to create ReliabilityFirst. This combination aims to implement more consistent standards and better coordination among the areas.

Maine Threatens to Take Its Capacity "Ball" and Go Home

- In February, Maine regulators and legislators began to examine alternatives to membership in ISO-NE. Maine Gov. Baldacci announced his plan to create a task force to examine the issue
- The move was prompted by Maine industrials dissatisfied with a contentious capacity market proposal, which could entail potential cost increases from sharing capacity resources across the grid

Two Kentucky Utilities Do Take Their Capacity "Ball" and Go Home

- In March, FERC conditionally approved E.ON subsidiaries Louisville G&E's and Kentucky Utilities' application to withdraw from Midwest ISO
- FERC's approval was given after LG&E and KU agreed to delegate certain reliability and tariff duties to TVA and an "independent" Southwest Power Pool, respectively
- FERC also sought to ensure existing contractual rights of transmission customers wouldn't be jeopardized

Sources: FERC; FitchRatings; SNL Energy *Electric Transmission Week* (Feb. 27, 2006); Maine.gov; industry news

Rate Climate: A Selected Litmus Test

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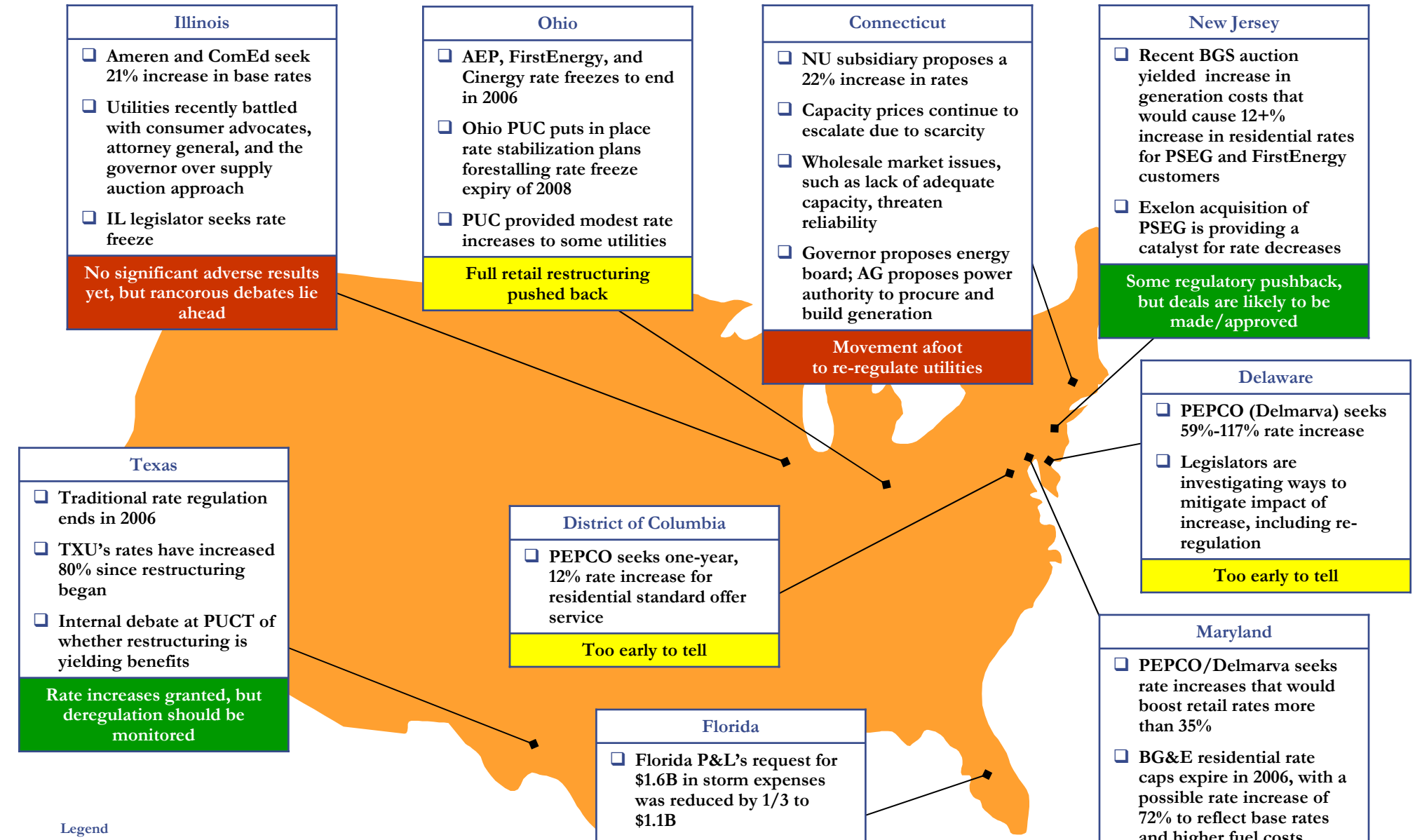

Illinois
- Ameren and ComEd seek 21% increase in base rates
- Utilities recently battled with consumer advocates, attorney general, and the governor over supply auction approach
- IL legislator seeks rate freeze

No significant adverse results yet, but rancorous debates lie ahead

Ohio
- AEP, FirstEnergy, and Cinergy rate freezes to end in 2006
- Ohio PUC puts in place rate stabilization plans forestalling rate freeze expiry of 2008
- PUC provided modest rate increases to some utilities

Full retail restructuring pushed back

Connecticut
- NU subsidiary proposes a 22% increase in rates
- Capacity prices continue to escalate due to scarcity
- Wholesale market issues, such as lack of adequate capacity, threaten reliability
- Governor proposes energy board; AG proposes power authority to procure and build generation

Movement afoot to re-regulate utilities

New Jersey
- Recent BGS auction yielded increase in generation costs that would cause 12+% increase in residential rates for PSEG and FirstEnergy customers
- Exelon acquisition of PSEG is providing a catalyst for rate decreases

Some regulatory pushback, but deals are likely to be made/approved

Delaware
- PEPCO (Delmarva) seeks 59%-117% rate increase
- Legislators are investigating ways to mitigate impact of increase, including re-regulation

Too early to tell

Texas
- Traditional rate regulation ends in 2006
- TXU's rates have increased 80% since restructuring began
- Internal debate at PUCT of whether restructuring is yielding benefits

Rate increases granted, but deregulation should be monitored

District of Columbia
- PEPCO seeks one-year, 12% rate increase for residential standard offer service

Too early to tell

Florida
- Florida P&L's request for $1.6B in storm expenses was reduced by 1/3 to $1.1B
- PSC reversed a rate agreement from last August and alleged FPL did not do enough to mitigate storm damage

Too early to tell

Maryland
- PEPCO/Delmarva seeks rate increases that would boost retail rates more than 35%
- BG&E residential rate caps expire in 2006, with a possible rate increase of 72% to reflect base rates and higher fuel costs

Strong resistance to rate increases, PUC members under fire from the Legislature, and possible scuttling of FPL deal

Legend

State
Events
Current Outlook

Sources: Industry, rating agency, and investment bank research reports

Northeastern States Seek GHG Reduction

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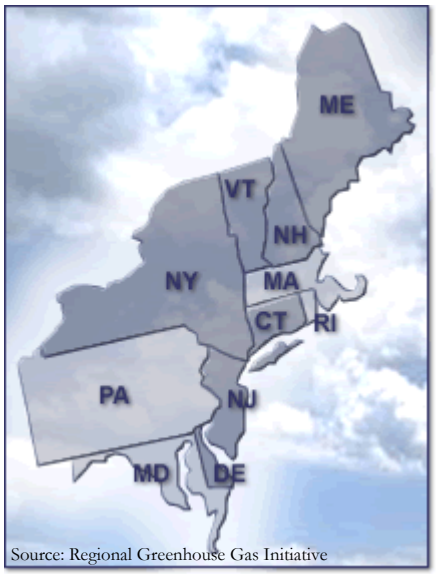
A Regional Greenhouse Gas Initiative Begins, but Some States Reserve Judgment

Description	A voluntary program formed through a multi-state memorandum of understanding (MOU) that agrees to a carbon control plan for the power sector in participating states
Program Goal	To develop a multi-state cap-and-trade program covering greenhouse gas (GHG) emissions
Program Guiding Principles	❑ Emphasize uniformity to facilitate interstate trading in GHG allowances and build on successful cap-and-trade programs and mechanisms already in place ❑ Be expandable and flexible, permitting other states to seamlessly join in the initiative when they deem it appropriate ❑ Do not unduly interfere with other emissions trading programs and initiatives, but serve as a platform and model for implementing future additional emissions trading programs ❑ Start simply and develop over time • **Initial phase:** Allocate and trade CO_2 allowances to and by power sector sources only • **Subsequent phases:** Develop reliable protocols for offsets (i.e., creditable reductions outside the power sector) that may be used to meet the cap
Participating States	❑ Initially seven states: ME, NH, VT, NY, CT, NJ & DE. MD legislation passed in April 2006 requires MD to join in 2007 ❑ "Observers": DC, MA, PA, RI, the Eastern Canadian Provinces, and New Brunswick ❑ MA and RI withdrew from the Initiative, after a MA GHG reduction proposal that minimized rate impacts could not be reconciled with the RGGI plan. They may join the RGGI system any time before 2008 with an agreed-upon amount of allowances (see chart on this page) ❑ Any state can withdraw upon 30 days' notice
Rate Impact	Potential retail rate impacts of 0.3% to 3.2% depending upon scenario
Effective Date	2009

RGGI Participating States

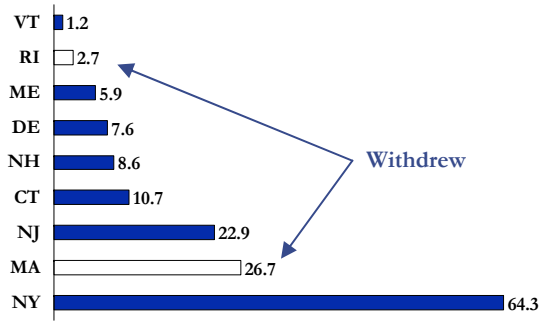


Source: Regional Greenhouse Gas Initiative

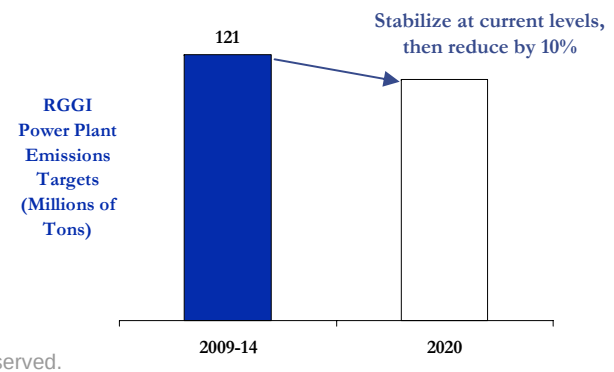
Key Features of the RGGI Allowance Program

- ❑ States may allocate allowances to generators "as they see fit," but 25% must be auctioned, with proceeds to fund "consumer benefit," i.e., energy efficiency or renewables
- ❑ The program applies to generators of 25 MWs or greater
- ❑ Only U.S. offsets may be used if allowances are <$7/ton. Offsets outside RGGI region are discounted 50% and can cover only 3.3% of emissions. If prices are >$7/ton for 12 months, North American offsets may be used
- ❑ Eligible offsets are designated by MOU
- ❑ Chicago Climate Exchange is expanding operations to support RGGI program

Initial Emissions Allotments Vary



10% Reduction Targeted by 2020



Hardspots for RGGI Program

- **Effectively requires migration to natural gas**
- **"Leakage"—price increases cause large customers to increase power imports**

Note: RGGI means Regional Greenhouse Gas Initiative

Sources: Regional Greenhouse Gas Initiative (www.rggi.org): industry news

Calpine Goes Bust: Ripple Effects?

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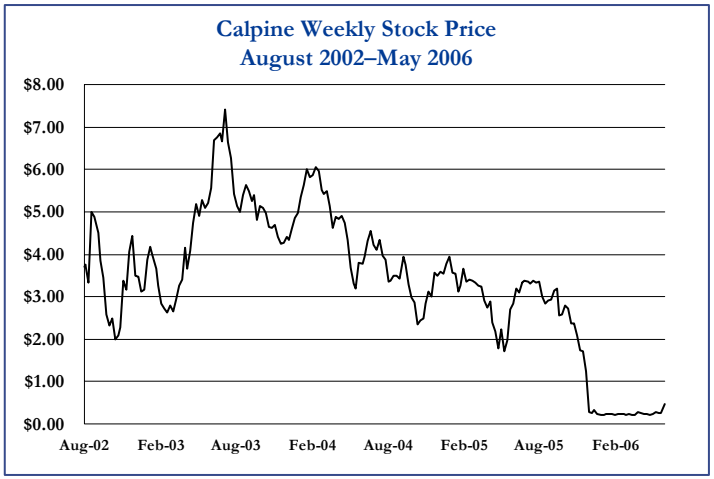
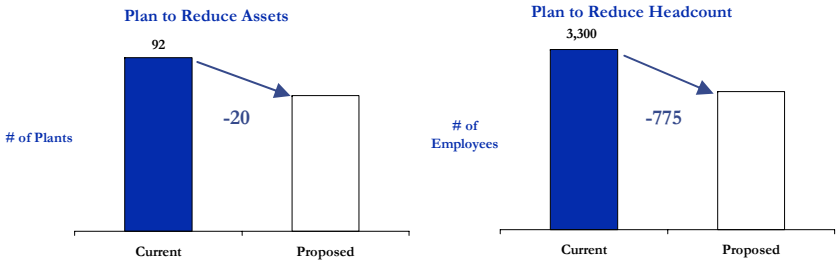
A Long Descent into Restructuring...



...Involving Some Very Big Numbers...

- With more than $27 billion in assets, the Calpine bankruptcy was the second largest in 2005 (behind Refco but ahead of Delta) and eighth largest of all time
- Calpine's debt was more than $17 billion, and it has indicated that creditors may demand "significantly greater" payment
- Calpine's 2005 net loss was $9.9 billion—the largest ever at an investor-owned U.S. power company—and reduced power industry net income for 2005 by 42%

...And Leading to Aggressive Cost Reduction



Possible Impacts for the Energy & Utilities Sector

Contract repudiation vulnerability	• Calpine may try to repudiate power sales contracts, forcing buyers to seek alternatives or renegotiate price at a time when power prices are increasing and reliability concerns continue
More aggressive contract litigation stance	• To enforce contracts, Calpine may play hard ball with its counterparties • For example, it is suing a lender to allow it to continue operating facilities despite non-payment of rent. Calpine alleges the plants "are exposed to an ever-increasing risk of physical deterioration and possible damage"
Equipment freeing up	• Calpine's inability to continue to fund ongoing construction might free up generation equipment production slots for utilities considering new build
Generation on the block	• In April, Calpine announced it will sell 20 "non-strategic" power plants, some of which may be sold "at dramatic discounts or abandoned" • This capacity is, however, overwhelmingly gas-fired, which can be an expensive proposition in the current market
Changing partners?	• Bear Stearns exited CalBear, its energy trading and marketing joint venture with Calpine, after Calpine declared bankruptcy • Challenges of building its own energy trading operation may lead Bear Stearns to consider another venture with an established player

When Is a Deal a Deal? Still Uncertain...

- **Calpine seeks to reject certain of its contracts by leaving the bankruptcy court and not FERC as the ultimate arbiter. After losing at the federal district court, Calpine has appealed the issue**
- **FERC can consider the "public interest" and whether it is fulfilling its duties under the Federal Power Act in considering whether a bankrupt party like Calpine can reject an uneconomic power sales contract**
- **Bankruptcy courts are confined to considering the economics of the deal or "business judgment" in voiding a contract, which can create more latitude than the FERC's public interest standard**

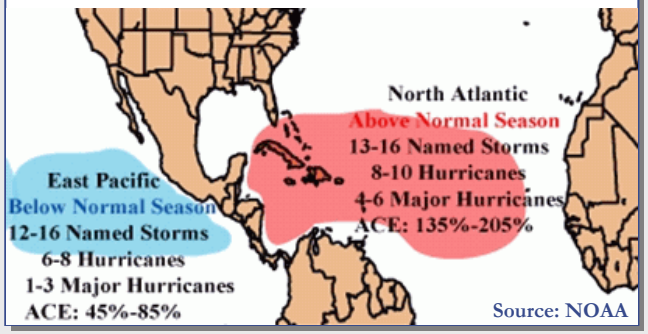
Sources: Industry news; company press releases; H. Siegel, Smackdown! Round Three: The Bankruptcy Court vs. FERC, *Fortnightly* (Apr. 2006); *Electric Utility Week*; FERC; ScottMadden analysis

Storm Readiness: Raising the Bar

SCOTTMADDEN Management Consultants

Anticipating a Busy Hurricane Season

NOAA 2006 Hurricane Season Outlook (May 22, 2006)



Florida PSC Mandates Storm Plans and Hardened Infrastructure

Disappointed by perceived unnecessary outages in the wake of Hurricane Wilma last October, Florida's PSC recently mandated utilities enhance storm readiness through the following steps:

1. Report: Utilities must provide a 2006 hurricane preparedness briefing
2. Plan: Utilities must file plans and estimated implementation costs for ongoing storm preparedness initiatives
3. Harden: PSC will require adoption of more stringent distribution construction standards (to be determined)
4. Underground: PSC will identify areas and circumstances where undergrounding distribution facilities should be required

A key question:
Which states will follow Florida?

Utility Supply Chain Excellence: A Central Part of a Storm Preparedness Program

Selected Observations from Past Storms	• "Fuel delivery was a big issue." • "If you didn't already have pre-committed [transportation] resources, you would be in trouble." • "Our problem was finding our employees. There were no communications...." • "Any info [on materials in stock] was only good for a short period of time."
Our View of the Implications	• The primary objective of the supply chain during storm response: Ensure continuity of supply and timely availability of necessary materials and services • New "hardening" standards and other proposed changes are likely to result in significant variance from forecasted needs for standard material and services • Absent well-constructed supplier contract and plans, immature supply chains for critical products and services—still strained by response to 2005's storms—may cause material and service interruptions

Planning for the Storm—Key Steps for Utilities in Planning and Contracting

Stratify Suppliers

Divide suppliers into 3 levels:

Level 1: Essential materials and services for power restoration (e.g., fuses, splices, pole line hardware, line contractors, and transportation)

Level 2: Essential materials and services for power restoration provided by local market (e.g., lodging/meal services, local contractors, radio/wireless services, fuel, and managers of pre-established staging sites)

Level 3: Not needed during restoration

Engage Critical Suppliers in the Planning Process

Conduct face-to-face meetings with Level 1 and Level 2 suppliers to develop coordinated plans (perhaps including upstream manufacturers)

Include key clauses in supplier contracts regarding requirements before and after storms

Establish supplier performance measures with incentives and penalties for exceeding or not meeting performance targets

Ensure Supplier Plans Contain Certain Items

Scrutinize supplier plans for storm-related items, e.g.:

- ❑ Pre-storm activities
- ❑ Inventory levels and ownership of storm-related inventory
- ❑ Pricing, emergency fee and escalation allowances
- ❑ Product and service availability
- ❑ Staging of materials and personnel
- ❑ Backup supply points and backup contracts for supply
- ❑ Commitment of equipment
- ❑ All points of contact, including single points for restoration coordination
- ❑ Streamlined procurement process
- ❑ Special supplier fees for storm and restoration support

Note: ACE is the Accumulated Cyclone Energy index, the measure of total seasonal storm activity (collective intensity and duration of Atlantic named storms and hurricanes) used by NOAA. Sources: NOAA; ScottMadden analysis; *Utility & Telecom Fleets* (Sept./Oct. 2005); *Electrical Wholesaling* (Oct. 1, 2005); *Transmission & Distribution World* (Sept. 1., 2005; Dec. 1, 2005)

End-Use Gas vs. Power: Battle in the Trenches

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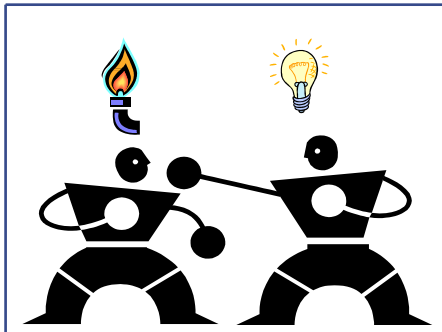
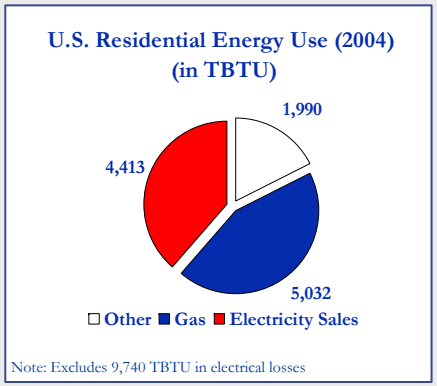


As natural gas prices hover around $7 per MMBTU, immediate industry concerns center around demand destruction.

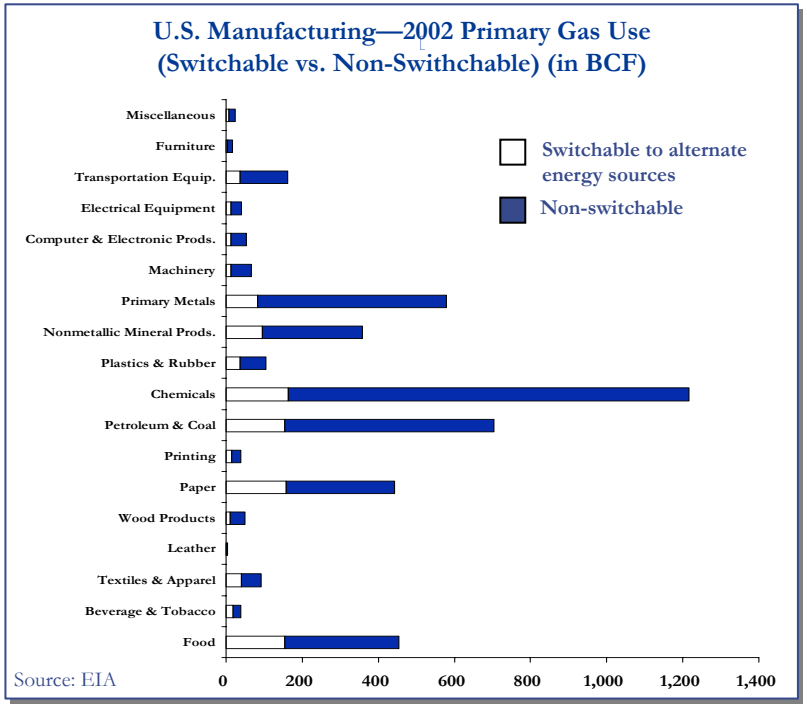
However, with sustained high gas prices not seen before in the gas industry, potential switching from gas to electric applications has emerged as a growing perceived threat to gas utilities.

Gas/Electric Cross-Price Elasticity (Defined)	• Sensitivity of demand of one commodity (electricity) to the changes in price of another (gas). High cross-price elasticity means the goods are close substitutes • Propensity to switch may differ in the short- and long-run, depending upon switching costs and existing infrastructure
Much Depends upon Long-Term Price Expectations for Natural Gas	• Supply relief is years away at best. There is mixed opinion on whether gas prices will recede to lower levels (~$5/MMBTU) helped by LNG and other new gas sources, or remain elevated • Gas-to-electric switching has never been tested under the current market conditions
Our View	• Short term, customers are "sticky"—price inelastic—even with dramatic run-ups in price (much like gasoline users pay more at the pump near-term but may buy smaller cars long-term) • Intermediate term, gas prices will remain high long enough to incent some switching for new build (e.g., new housing subdivisions, commercial office space construction, and expanding industrial facilities) and for fuel-agile industrials • Long term, it is expensive to switch from an installed gas base except at the end of equipment's life. We do not foresee much switching except for replacements, but if gas prices remain elevated for an extended period, installed base could be contestable

There is much gas usage at stake at the residential level (see right), given high gas prices and electric technology development, but most is for hot water and space heating. For the former, gas remains more economic than electric, minimizing risk of attrition.



The Inherent Ability to Switch from Gas to Other Energy Sources Is Limited...for Now



Note: Manufacturing primary gas use excludes use that could not be identified as switchable or non-switchable.

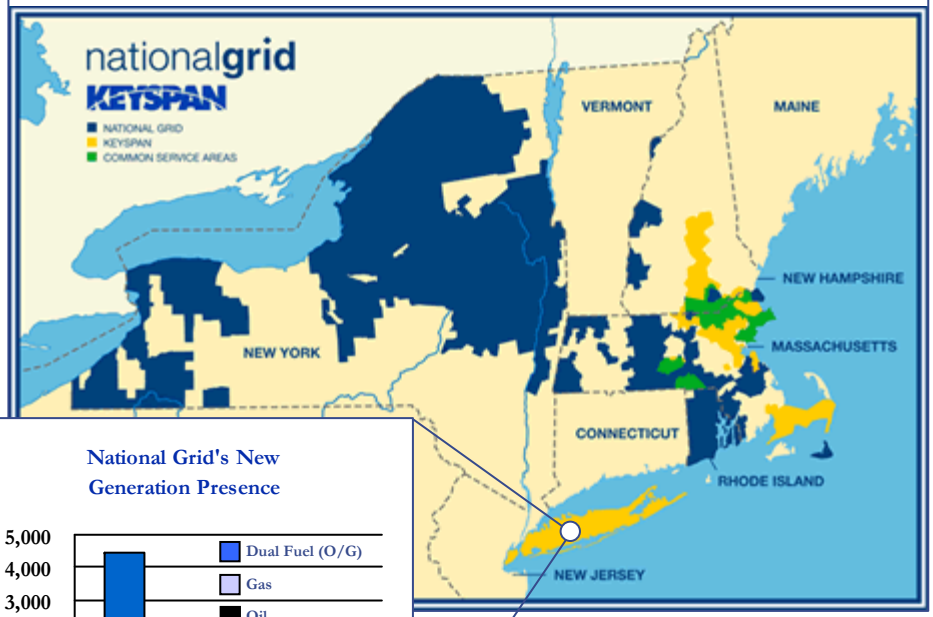
Sources: Organization of Economic Cooperation & Development; EIA, *Price Responsiveness in the AEO2003 NEMS Residential and Commercial Buildings Sector Models*; EIA, *2002 Manufacturing Energy Consumption Survey*, Table 10.2; EIA, *Annual Energy Review 2004*, Table 2.1b (Aug. 2004); ScottMadden analysis

Merger and Acquisition Update

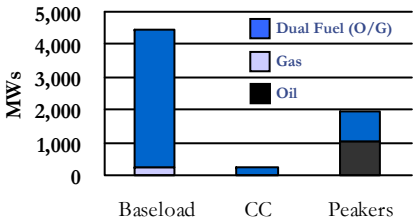
SCOTTMADDEN Management Consultants

National Grid Acquires KeySpan, A Step to Further Expand in the United States and Enhance Its Gas Presence

Combined National Grid/KeySpan Service Territories



National Grid's New Generation Presence



Source: KeySpan

"KeySpan is an acquisition which makes sense at every level.... Together, we can create an even more efficient company focused on controlling delivery costs and enhancing customer service."
- KeySpan CEO Robert Catell

"The acquisition provides us with an excellent opportunity to combine our core operational expertise with that of KeySpan, while continuing to provide safe and reliable service to customers....[C]ustomers will benefit by being served by a larger, stronger company that is focused on energy delivery, and has a growing presence and strategic commitment to the region."
- Steve Holliday, National Grid CEO Designate

- **Transaction Value:** $7.3 billon (US $42/share) all-cash offer National Grid will acquire KeySpan's equity and assume $4.5 billion of debt (enterprise value of $11.8 billion). Deal includes a $250 million break-up fee
- **Combined Revenues:** $14.8 billion (2005) (U.S. operations only)
- **Combined Utility Customers:** 4.4 million electric, 3.4 million gas
- **Combined Employees:** 17,900 (current)
- **Combined U.S. Generation After Transaction:** 6,650 MW
- **Expected Closing:** By Summer 2007
- **Synergies:** $200 million annual cost savings—50% coming in the 1st year after closing, with 100% coming within four years—by removing duplicate support functions and implementing best practices
- **Expected Earnings Impact:** "Earnings and cash flow enhancing on a business performance basis"
- **Stated Strategic Rationale:**
  - Leverages and build on gas capabilities: Builds on National Grid's existing natural gas expertise in the U.S. and U.K.
  - Overlapping territory: Strategic and operational fit with National Grid's presence in the Northeast; KeySpan's service territory is in states where National Grid already has a presence; and service areas are contiguous in many places
  - Delivery-focused: National Grid and KeySpan are both focused on energy delivery
- **Possible Deal Complications:**
  - LIPA concerns about new management of T&D system and ownership of generation assets in NYC and Long Island load pockets
  - Regulatory concern about rising rates—gas and power—reflecting the recent run-up in gas prices, may lead to unpalatable rate concessions

National Grid's Stepwise Gas LDC Expansion

While garnering less attention than its KeySpan offer, National Grid announced on February 16, 2006, its agreement to acquire Southern Union's gas distribution business and properties in Rhode Island (New England Gas) for $575 million. The business consists of 3,000 miles of gas main and nearly 250,000 customers.

Sources: *The Wall Street Journal*; Dow Jones Newswires; KeySpan 2005 Form 10-K; National Grid, KeySpan websites and investor presentations; industry news; Citigroup Global Markets; Standard & Poor's

Merger and Acquisition Update (Cont'd)

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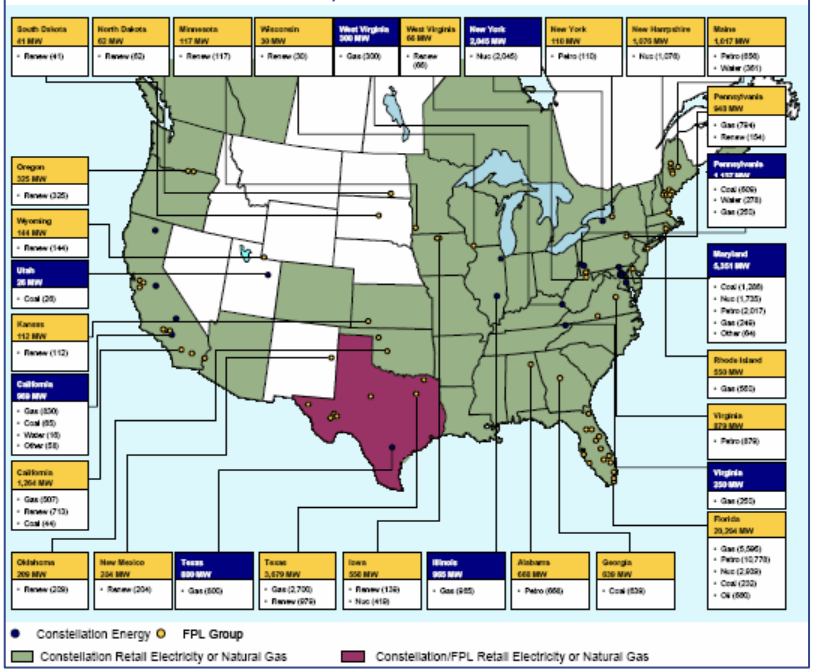
FPL Agrees to Acquire Constellation in "Modified Merger of Equals," Expanding Competitive Generation Scale

- **New Name:** Constellation Energy (dual headquarters in Juno Beach, Florida and Baltimore, Maryland)
- **Transaction Value:** $11 billion all-stock transaction with Constellation shares exchanged for 1.444 Constellation shares of combined entity (15% premium)
- **Combined Revenues:** $26.5 billion
- **Combined Assets:** $57 billion
- **Combined Utility Customers:** 5.5 million electric and 625,000 gas
- **Combined Employees:** 21,750 (at announcement)
- **Combined U.S. Generation After Transaction:** 45,194 MWs
- **Expected Closing:** 4th Quarter 2006
- **Synergies:** $200-250 million pre-tax per year (before integration costs) by the end of the 3rd post-merger year—most from deregulated operations—through consolidation of operations, best practices, improved procurement strategies, and systems and support consolidation
- **Expected Earnings Impact:** Immediately accretive to earnings, excluding costs to achieve synergies and favorable purchase accounting
- **Stated Strategic Rationale:**
  - Competitive energy market leadership: Creates more balanced footprint in major competitive regions of New England and Texas, doubling respective generation fleets and more closely matching power sales with the output of its own larger power plant fleet, yielding lower operating costs
  - Increased nuclear scale and experience: Creates third largest nuclear operator in the U.S. and could continue growing through reactor purchases and new construction, continuing stated nuclear growth and consolidation strategies
  - Diversified and balanced fuel mix: FPL oil/gas, nuclear, and wind fleet balances Constellation's oil/gas, nuclear and coal fleet, and combined gas purchasing power can be leveraged
  - Growth opportunities balanced by "strong, predictable, profitable utility operations": Combination creates second-largest regulated gas and electric utility, a strong balance sheet, and stable, growing earnings and cash flow from Florida and Maryland utilities

Sources: *The Wall Street Journal*; Dow Jones Newswires; FPL, Constellation websites and investor presentations; industry news; Citigroup Global Markets; Morningstar

Combined FPL/Constellation Generation Portfolio



Source: FPL Energy

Possible Deal Complications

- **Unfriendly political environment in Maryland may smother the deal:** Deal approval process comes at a time when Constellation utility BG&E residential customers transition to market pricing for generation service (read: increased rates for standard offer service) and fall elections have led to calls for deferred rate increases and possible re-regulation
- **"Co-leader" model:** Both CEOs remain with the company. Lew Hay becomes CEO and a director, with Mayo Shattuck becoming chairman as well as reporting to Hay as head of Competitive Energy
- **No headquarters consolidation:** New entity will have dual corporate headquarters—competitive energy in Maryland and fossil and renewable generation in Florida—with regulated utility headquarters remaining in respective jurisdictions
- **Some diminution of financial strength because of differing regulated/unregulated split:** FPL's A credit rating (reflecting FPL's 60% of total earnings from utility Florida Power & Light) may be diluted by Constellation's lower BBB rating, which reflects increased financial risk from its greater proportion of competitive business revenues, as well as a post-deal dividend increase for current Constellation shareholders

European Nationalism Rises

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"Your Money's No Good Here"—Nationalism Inhibits Some European Cross-Border Transactions

Gallic Saga

January 2006

Italian utility Enel expresses interest in Electrabel, Belgian subsidiary of French energy company Suez

February 2006

France's finance minister allegedly learns of potential Enel bid in weekend meeting with Suez (1/15)

France approves the GdF/Suez merger it supported but must change French law to reduce its GdF ownership to <33-1/3% (2/25)

After considering labor concerns about privatization and job cuts at Suez and hastily convening their boards, Gas de France agrees to acquire Suez for $38B (2/25)

Italy's prime minister describes French intervention as "act of economic hostility" (2/27)

March 2006

E.U. begins inquiries to determine whether France acted properly in brokering the GdF purchase (early March)

Enel considers hostile bid for Suez to get Electrabel, seeking $54-$60B bank support (3/6)

April-May 2006

Belgium's energy regulator wants to strip gas & power assets from Suez to prevent French control of Belgium's energy supply (March)

Suez complains about Enel threat to E.U. (3/27)

Bullfight in Madrid

October – November 2005

Spanish gas utility Gas Natural makes $26B hostile offer for Spanish electric utility Endesa (Oct.)

E.U. says Spain has antitrust jurisdiction over transaction (Nov.)

December 2005 – January 2006

Endesa proposes a $3B dividend to convince shareholders to reject Gas Natural's bid (1/18)

February 2006

After rumored opposition, Spain nears Gas Natural deal approval, subject to some asset sales (2/3)

Endesa says Gas Natural should increase its bid by 25%-40% (2/14)

In a surprise move, cash-flush German energy giant E.ON offers nearly $35B for Endesa (2/21)

While declaring it won't veto E.ON's bid, Spain's prime minister says it will "seek to protect Spain's national interest" (2/22)

March-May 2006

Gas Natural gets financing but won't increase its bid unless E.ON exits (3/2)

E.U. considers legal action against Spain for hastily enacting regulations that would allow it to block the E.ON bid (3/29)

How Might This Affect U.S. Utilities?

Capital looking for a home: Inability of large, well-capitalized European utilities to invest in Western Europe might lead to increasing interest in investing in utilities or infrastructure assets elsewhere

Distraction of players with existing U.S. presence: Some potential and rumored acquirers/targets (e.g., E.ON, Centrica, Suez, and Ibedrola) have an existing U.S. presence (to varying degrees). European battles may impact capital for U.S. operations as well as possible management focus on defending the E.U. home front

Barriers to European capital coming to the United States: Inhospitable U.S. state regulatory environments, recent political sensitivity to foreign ownership of critical infrastructure (e.g., CNOOC/Unocal), a mixed U.S. track record (e.g., Scottish Power withdrawal), and potential flows of excess European capital to China, India, and other rapidly growing regions

Energy Under the E.U. Microscope

E.U. Competition Commissioner Neelie Kroes (right) has launched an inquiry into energy sector competition. At least two of its preliminary findings indicate where E.U. action might lead:

- **Market concentration: "Very little new entry in the markets. The old incumbents still have quite a firm grip and often retain their old, traditional territory"**
- **Lack of market integration: "Markets remain predominantly national...Incumbents rarely enter other markets as competitors"**

 Sources: *The Wall Street Journal*; Dow Jones Newswires; industry news; European Union

Sarbanes-Oxley: The Beat Goes On

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Has Anybody Seen My SOX?

1. The Sarbanes-Oxley Act of 2002 (SOX) was designed to improve corporate responsibility and the quality and transparency of financial reporting
   - Driven by financial scandals (although, except for Enron, the energy industry did not make headlines)
   - Applies to all SEC-registered companies
2. Key features of SOX:
   - Created Public Company Accounting Oversight Board (PCAOB) (cont'd at right)
   - New relationships between auditors and audit committees
   - Tough penalties for those who commit fraud or fail to report fraud
3. Section 404–Management Assessment of Internal Controls has been the most difficult and expensive to implement
   - Management must attest to having an adequate internal control structure
   - Management must assess its effectiveness

I Feel Like I've Been SOX'ed!!

Year 1 (2004): Implement SOX projects to identify shortcomings	Year 2 (2005): Transition from project to program	Year 3 (2006): Institutionalize the program
❑ Identify key controls for business processes ❑ Test key controls and disclose material weaknesses ❑ Remediate weaknesses ❑ Incur very high costs	❑ Leverage learnings from year 1 ❑ Reduce cost of compliance	❑ Continue to reduce the cost of compliance ❑ Improve corporate and business unit staff training ❑ Move from compliance-based to risk-based approach
Average §404 cost:* $8.5 million	**Average §404 cost:* $4.8 million**	**To be determined**

Lessons Learned from the "School of Hard SOX"

1. Too many key controls! Many have been eliminated in years 2 and 3
2. Documentation requirements were underestimated
3. Financial systems were vulnerable
   - Limited controls over access to financial systems
   - Poor segregation of duties among users
   - Weak program change controls
4. More attention was needed on complete and timely reconciliation of accounts
5. Key decisions were not adequately documented
6. More guidance needed from PCAOB and the SEC
7. A "compliance office" within the company is a necessity
8. Decentralized accounting creates SOX challenges: Having all accounting functions report directly to corporate controller simplifies controls and reduces SOX compliance costs
9. Notwithstanding these lessons, because of pervasive industry regulation, large utilities discovered few material weaknesses

SOX It to Me!! ...Turning Lemons into Lemonade

1. SOX creates greater transparency and insight into business processes, including end-to-end process thinking
2. SOX has created greater ownership of controls at the corporate and business unit levels
   - Improved understanding of controls
   - Clear accountability
   - Improved teamwork between corporate and the field
3. SOX drives a comprehensive approach to risk management
4. Strong internal controls can *increase* efficiency
   - Accelerated standardization and automation of processes across the enterprise
   - Elimination of duplication of work and improvement of hand-offs
   - Better controls result in reduced error rates, reducing transaction processing costs
   - Timely reconciliation of accounts reduces rework

Note: *reflects large company compliance costs (internal and third party costs, including audit fees) per an April 2006 CRA survey.
Sources: AICPA; CFO.com; SEC; PCAOB; Protiviti; CRA International

Private Equity and Hedge Funds Eye Energy

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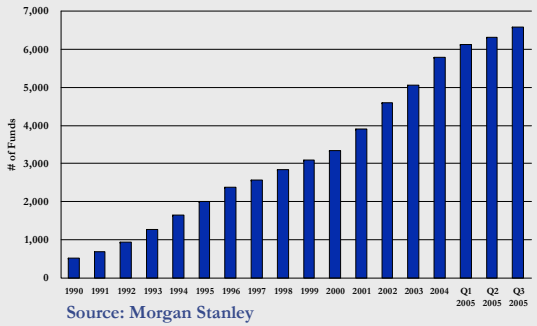
Hedge Fund Growth Has Been Remarkable...

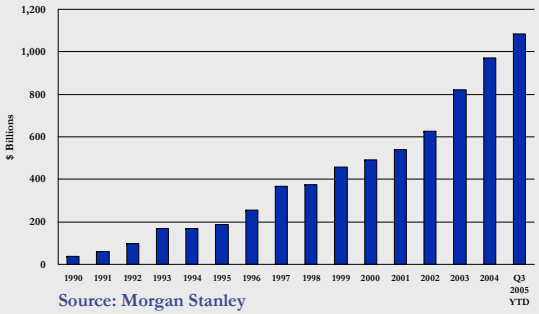
No. of Hedge Funds (1990–Q3 2005)



Source: Morgan Stanley

...As Has Been Its Growth in Capital...

Hedge Fund Assets (1990–Q3 2005) (in $ Billions)

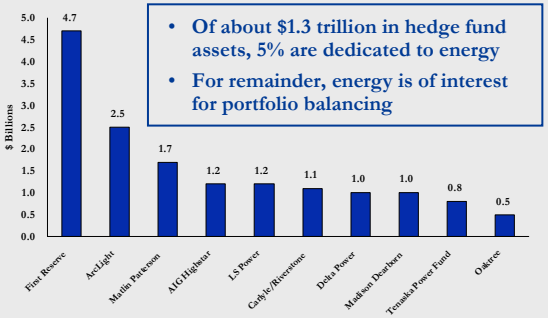


Source: Morgan Stanley

There Are Large Pools of Energy-Focused Private Equity...

Selected Private Equity Utility/Energy Fund Assets (in $ Billions)

- Of about $1.3 trillion in hedge fund assets, 5% are dedicated to energy
- For remainder, energy is of interest for portfolio balancing



Source: Morgan Stanley

...But Opinions Are Mixed on Their Ongoing Influence

- Regulatory and political challenges with utility acquisitions have refocused private equity activity on asset acquisitions and spin-offs
- Some say the purchasing power of private equity may have reached a high water mark in 2005, with such power waning because of higher borrowing costs and resurgent strategic buyers

The line between private equity and hedge funds continues to blur—a trend termed "convergence"—but differences exist between them on defined versus indefinite fund lives, investment mandates, use of leverage, and accumulation of capital for specific investments vs. "recycling" of funds

Key Differences: Private Equity and Hedge Funds vs. Institutional and Individual Shareholders

Shorter Investment Horizon	❑ One- to three-year horizon for many hedge funds ❑ Energy-focused funds have longer time horizons, but not much
Willingness to Quickly "Bail Out"	❑ Hedge funds will exit quickly once significant gains are achieved or if those returns look unlikely ❑ Funds may shift capital quickly to other industries ❑ If concerned, a hedge fund's investors may redeem, forcing liquidation of easier-to-sell holdings
Outsized Expected Returns	❑ Private equity saw 20%+ annual returns in 1st half of 2005 vs. <5% for the S&P 500 ❑ Hedge funds target stocks that will out- (or under-) perform the market by 20%
Increased Activism	❑ While institutions are more vocal now than in the past, hedge funds are more aggressive and vocal—sometimes termed "interventionists" ❑ Prone to brinksmanship: Calpine succumbed to bankruptcy in part because of lawsuits by hedge fund bondholders who may have shorted Calpine
Less Regulatory Oversight	❑ Unlike institutional firms subject to Investment Company Act constraints, for example, fewer restrictions exist for hedge funds
Traveling in Clubs	❑ More firms are engaging in "club deals" in which private equity and hedge funds co-invest with each other ❑ The ability to act and invest as a "pack," however, enables hedge funds to block deals to extract a premium from strategic buyers
Leverage	❑ High leverage used, with a view to a liquidation event ❑ Rating agencies are increasingly concerned about LBO-type leverage risk
Regulatory & Political Skepticism	❑ PUCs are concerned that leverage and short-term focus will cause capex underinvestment and "imprudent" cost-cutting

Sources: *The McKinsey Quarterly* (Apr. 2006); EXNET 19th Annual Utility M&A Symposium (Jan. 2006); Morgan Stanley; Lehman Brothers; Wachtell, Lipton, Rosen & Katz Client Memo, *Shareholder Activism in the M&A Context* (May 15, 2006); *CFO* magazine; news reports

Pensions and Benefits: Not a Cash Crisis...Yet

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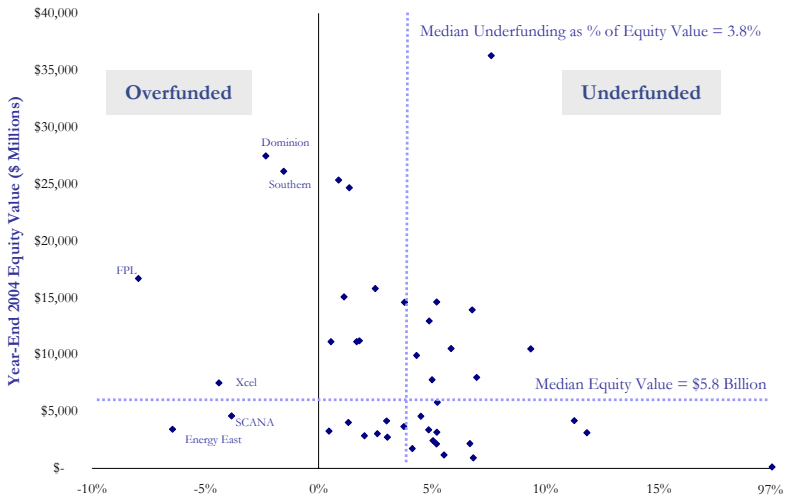
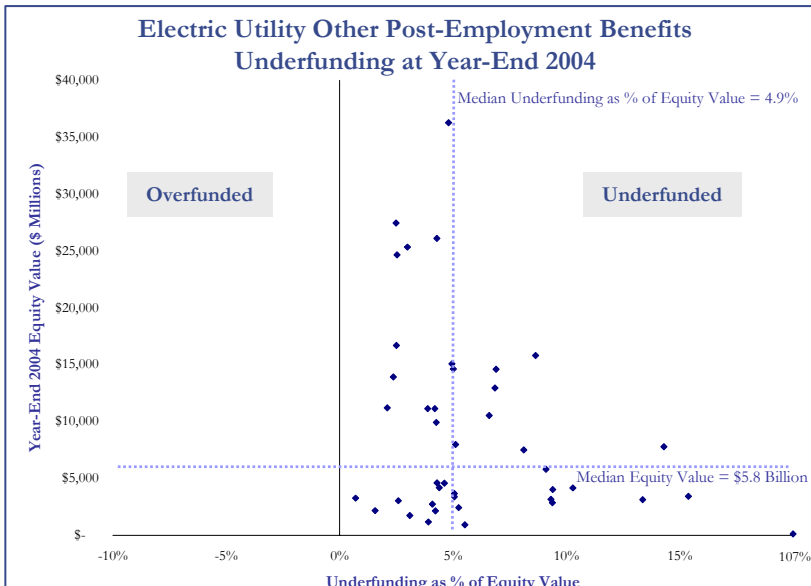
Utility Pensions, As In Other Industries, Need Funding...



Source: Merrill Lynch

...And Health and Other Benefits Funding Fares Worse

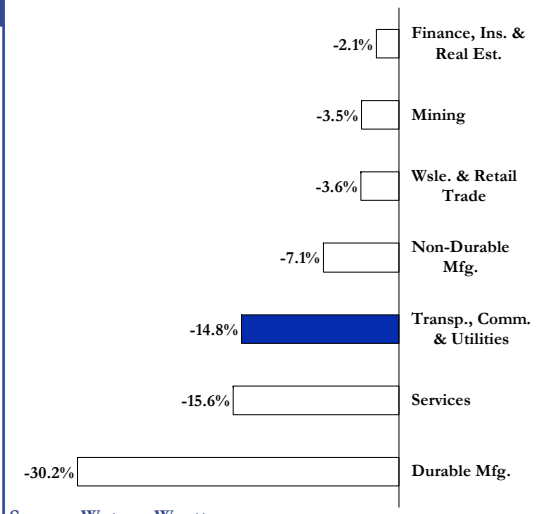


Source: Merrill Lynch

New FASB Standards May Impact Utility Equity

Proposed FASB standards, which could be effective as of the end of 2006, may require that pension and other post-employment benefit (largely health care) underfunding be reflected as a liability on the balance sheet. Currently it needs to be disclosed only in footnotes.

Possible Decline in Reported Equity as a Result of Proposed FASB Standard



Source: Watson Wyatt

Some Good News and Some Bad News for Utilities

Good News	⇧ Cash to meet underfunding may not be required right away; contributions may be deferred ⇧ Other post-employment benefit obligations are not as fixed as pensions; utilities may change or eliminate them ⇧ Gas and power utility funding is much better than airlines and automakers. For example, utilities do not have the automakers' high retiree-to-employee ratio (2-to-1 at GM)
Cutting Both Ways	⇔ Cost of services permits underfunding recoveries under tariff, <u>but</u> recovery is not automatic, especially for utilities under rate freezes ⇔ Funding in recent years has not been <u>legally</u> required by ERISA, <u>but</u> it has been done largely to avoid underfunding thresholds that would require a charge against "other consolidated income"
Reasons for Concern	⇩ Higher contributions are required at a time when production costs are rising, investment requirements are growing, and utilities are struggling to cut costs ⇩ Funding levels did not recover more substantially as one might have expected during the recent bull market ⇩ Benefits payments have far outstripped company contributions in recent years ($7 billion contributed in 2003-04 vs. $12 billion cash benefits paid out) ⇩ Cash benefits—as a result of rising health care costs—are expected to grow 9% to 10% over the next five to seven years, consuming free cash

Sources: FitchRatings; Merrill Lynch; Watson Wyatt; Hewitt Assocs.; *The Wall Street Journal*; *BusinessWeek*; FASB; ScottMadden analysis

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