

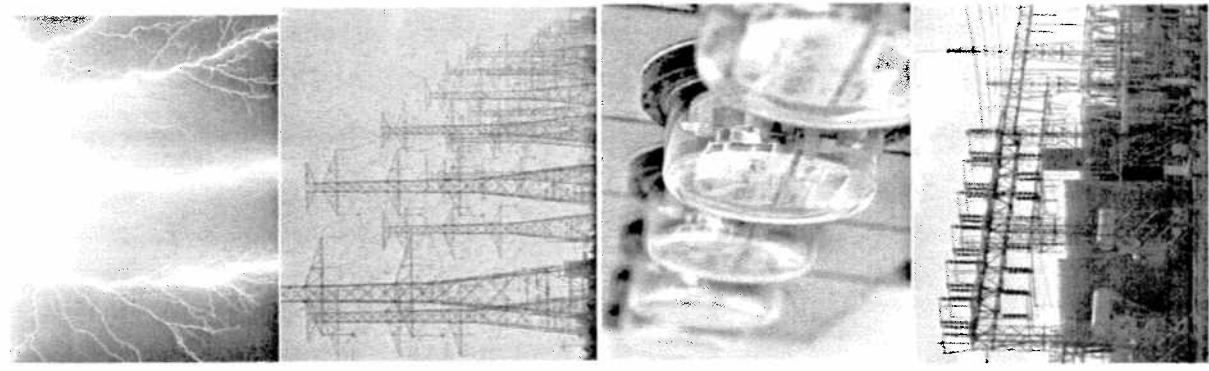


Financing for the Future – Can We Afford It?

Judah Rose
Managing Director

2009 Bonbright Conference

October 9, 2009



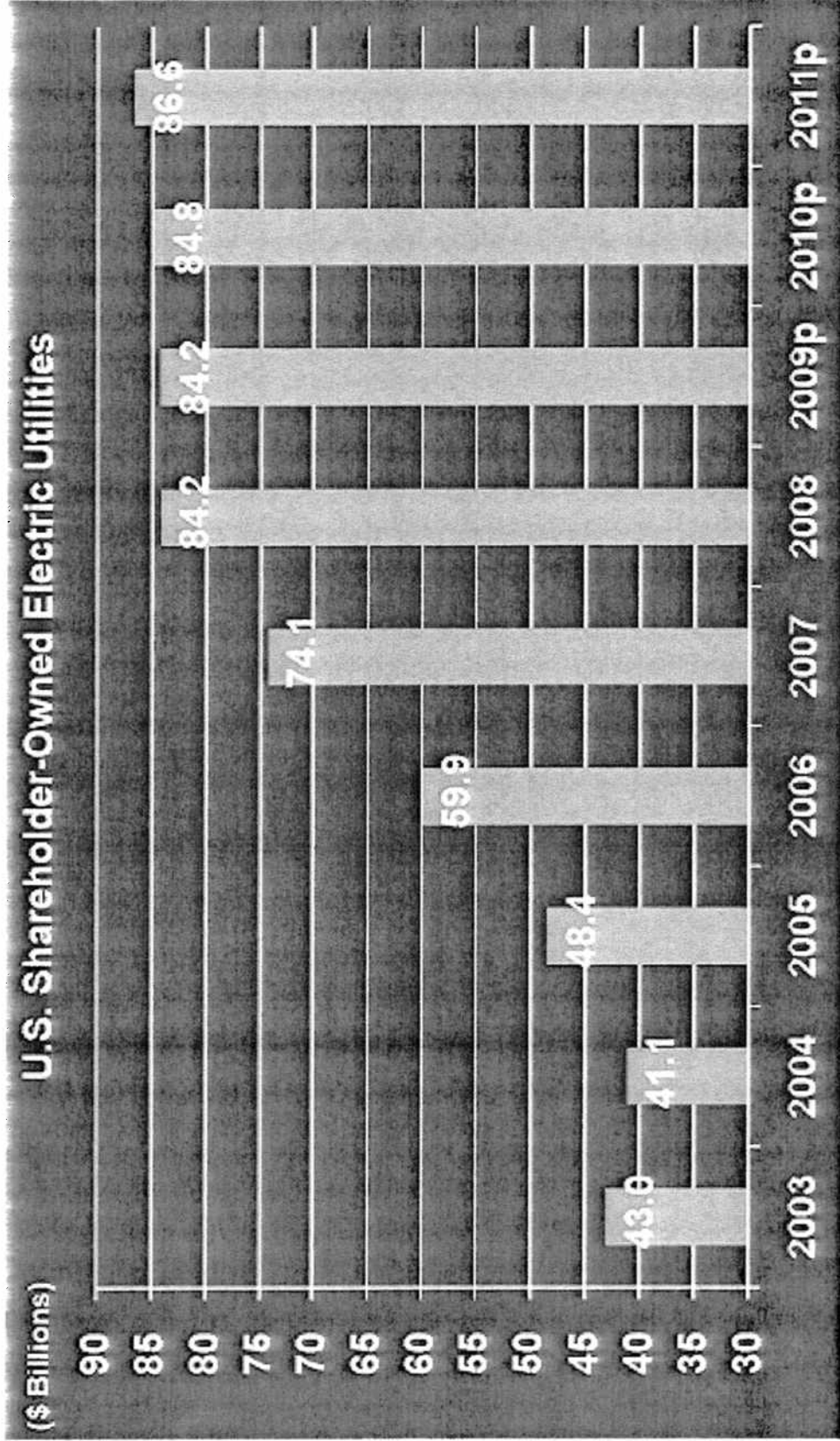
Introduction to ICF and Judah Rose

- ICF International is a 3600 employee Consulting Firm with 35 years experience in electric power.
- Mr. Rose has testified in over twenty states, at FERC and Internationally.
- ICF provides IRP, and Expert Witness Support Related to Capital Investments.
- 35 Years of Support to US EPA on Cap and Trade.
- Extensive Due Diligence and Financial Support to Financial Institutions.
- Extensive Valuation Capabilities.
- Extensive Transmission and Generation Experience.

Utility Financing

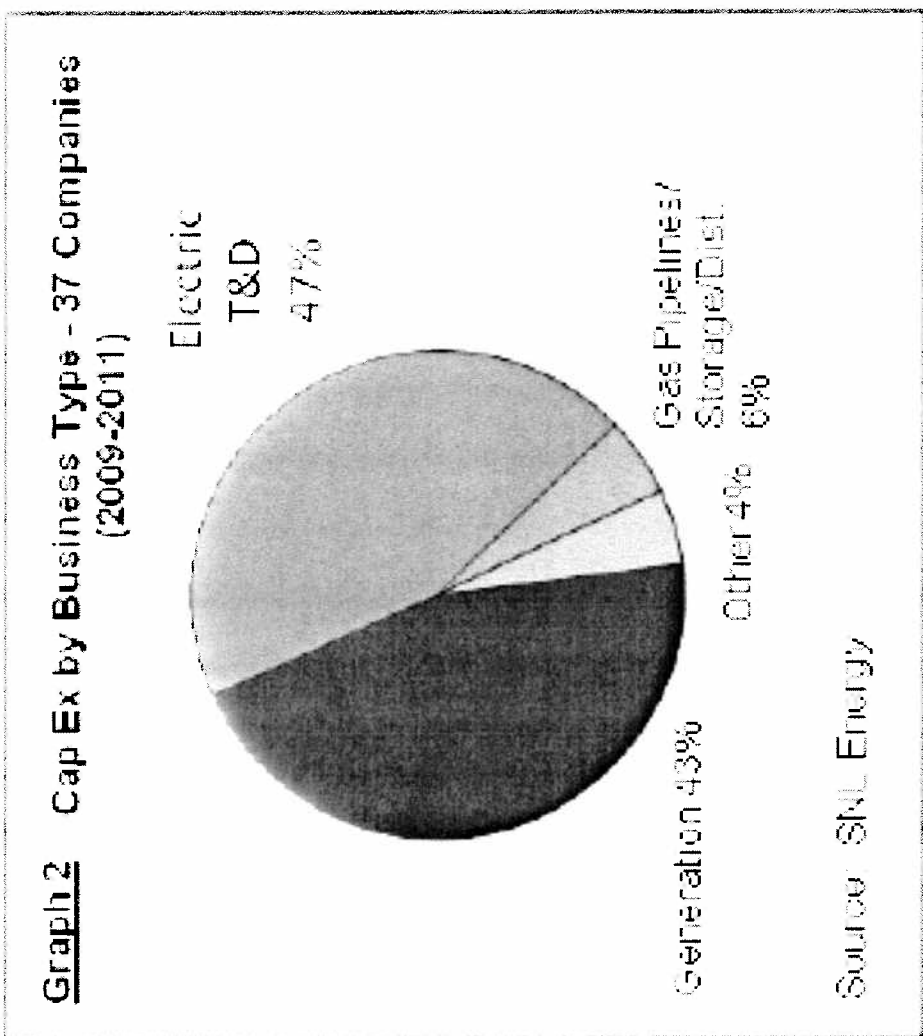
- Conjecture: Utilities are more successful than most realize at avoiding investments when financial incentives are adverse and vice versa.
- Key to determining investment climate is the combination of rate regulation, electricity demand growth and external conditions in financial markets.
- Conditions have been conducive to T&D investment especially until recession financial crisis. The fall off in investment since the recession also reflects utility ability to control investment level to a significant degree.
- Conditions are likely to recover, as demand growth resumes, and the financial crisis is over.
- Biggest threat is slowed demand growth due to higher costs (e.g. CO₂ controls) without commensurate increase in allowed ROEs.

Industry Capital Expenditures Have Slowed After Years of High Growth

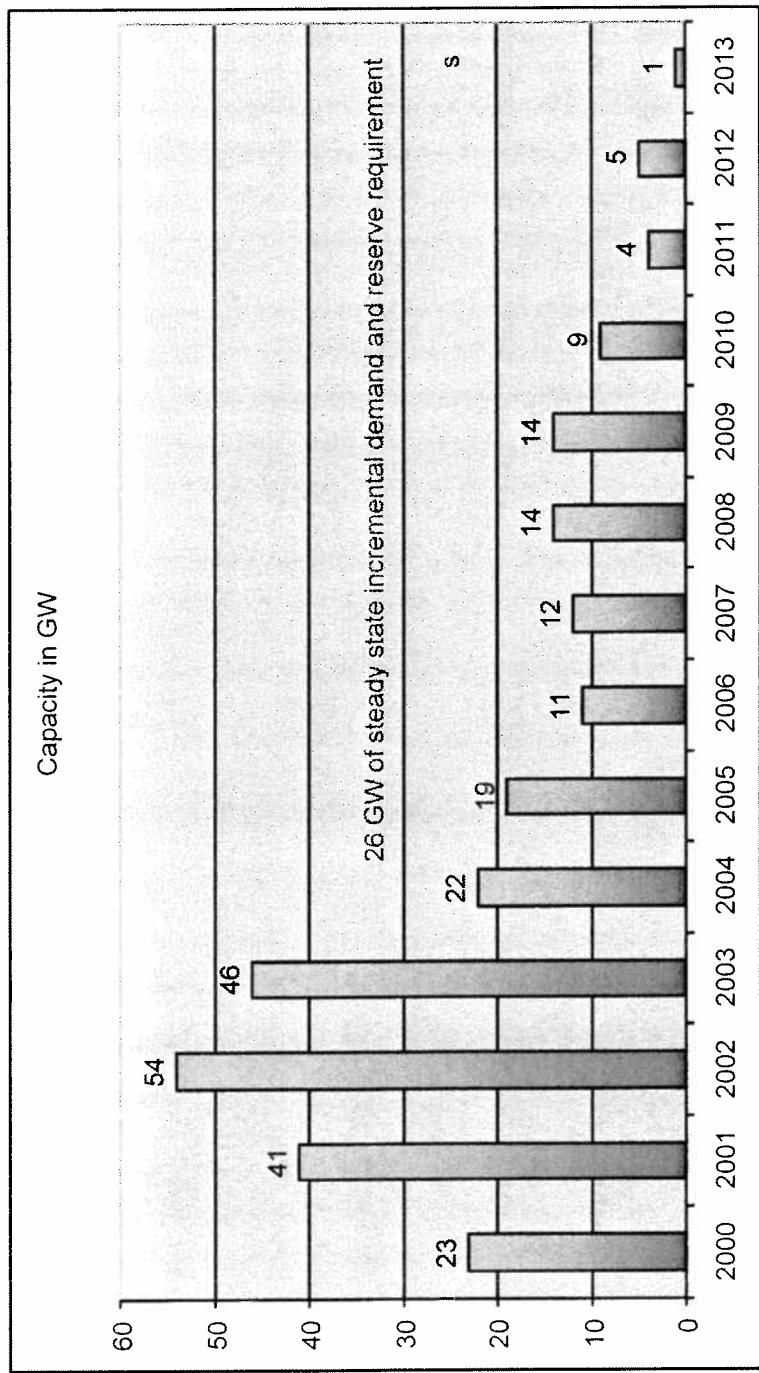


Source: SNL Financial, company reports and EEI Finance Dept. - approximately 70% of power industry.

Electric T&D Investment Now Exceeds Generation



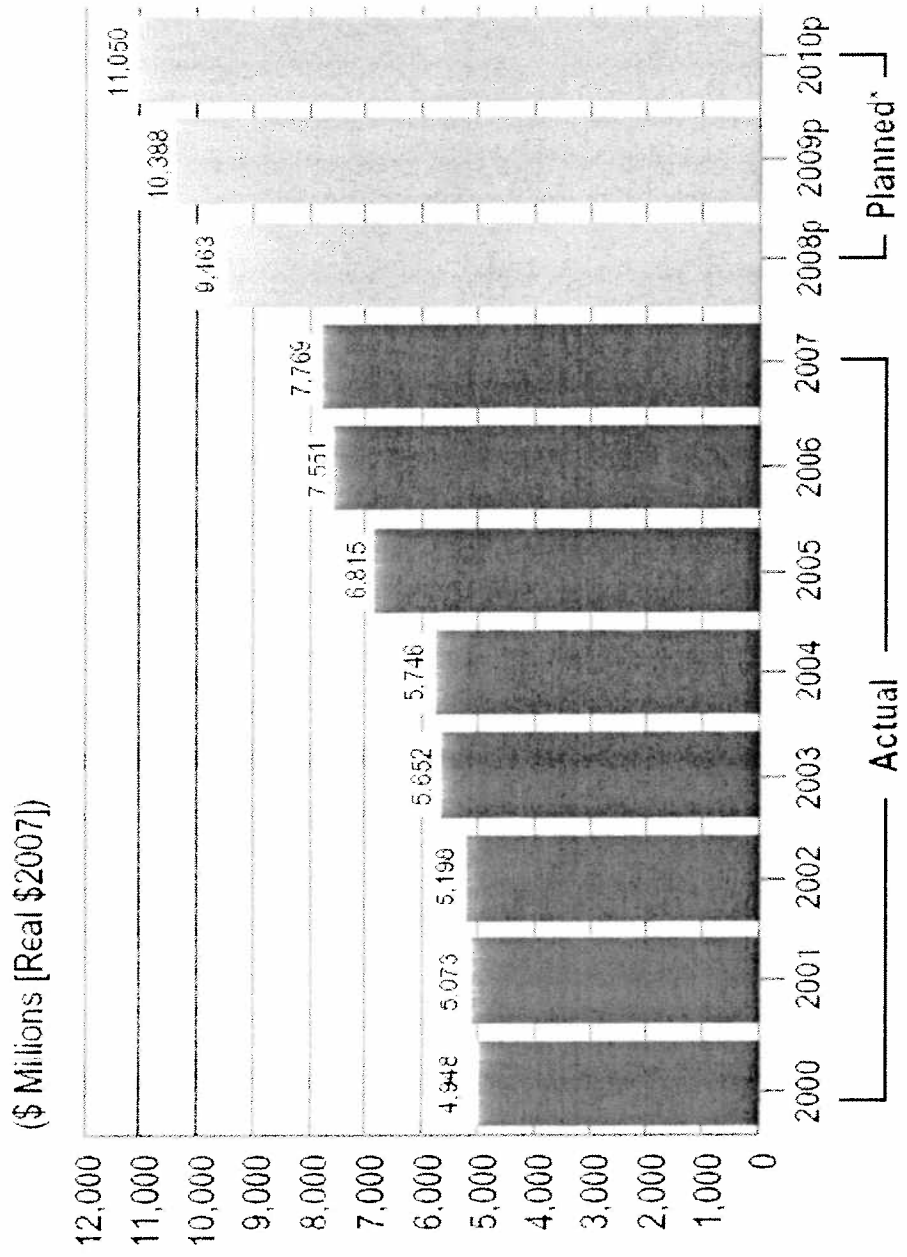
The Fall in New Capacity Additions is Part of the Trend of T&D Exceeding Generation Investment



Source: Ventyx Database

- 2.5 percent peak load growth adds approximately 18 GW of peak demand per year
- Reserve requirements add approximately 3 GW per year
- Retirements add approximately 5 GW per year (based on historical average)
- This results in 26 GW of demand per year for new capacity

Historical and Projected Transmission Investment Expenditures Are Strong In Part Due to High Incentive ROEs



p = preliminary

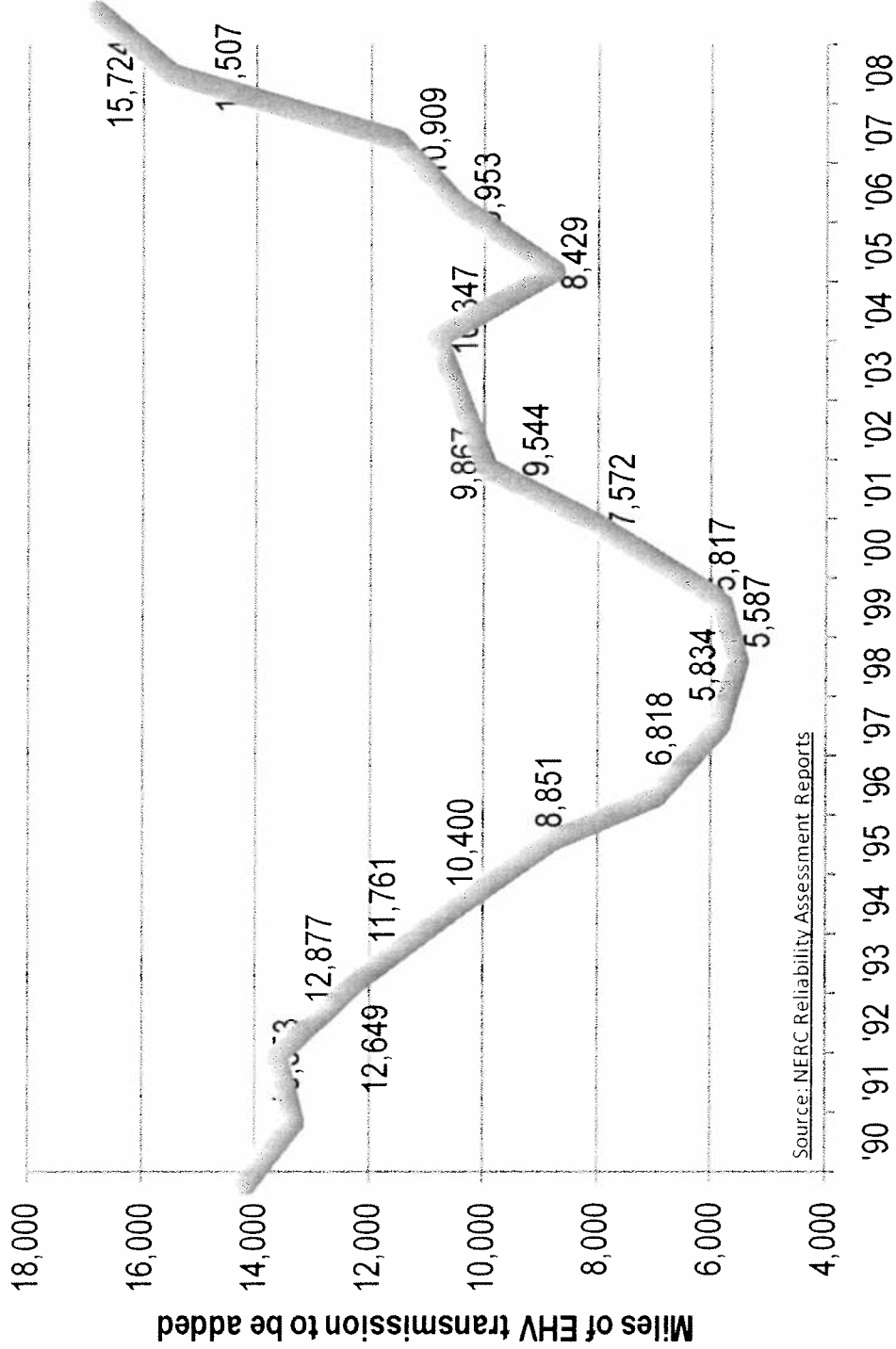
Note: The Henry-Watson Index of Public Utility Construction Costs used to adjust actual investment for inflation from year to year. Data represent both shareholder-owned utilities and standalone transmission companies.

*Planned total industry expenditures are preliminary and estimated from 85% response rate to EEI's Electric Transmission Capital Budget & Forecast Survey. Actual expenditures from EEI's Annual Property & Plant Capital Investment Survey & FERC Form 1s.

Source: Edison Electric Institute, Business Information Group.

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U.S. Transmission 10-Yr Plans Show Even Larger Growth



Reliability Assessment

US Electricity Demand Sales Growth Crucial – They Favored Investment until the Recession as Demand Grew 2002-2007

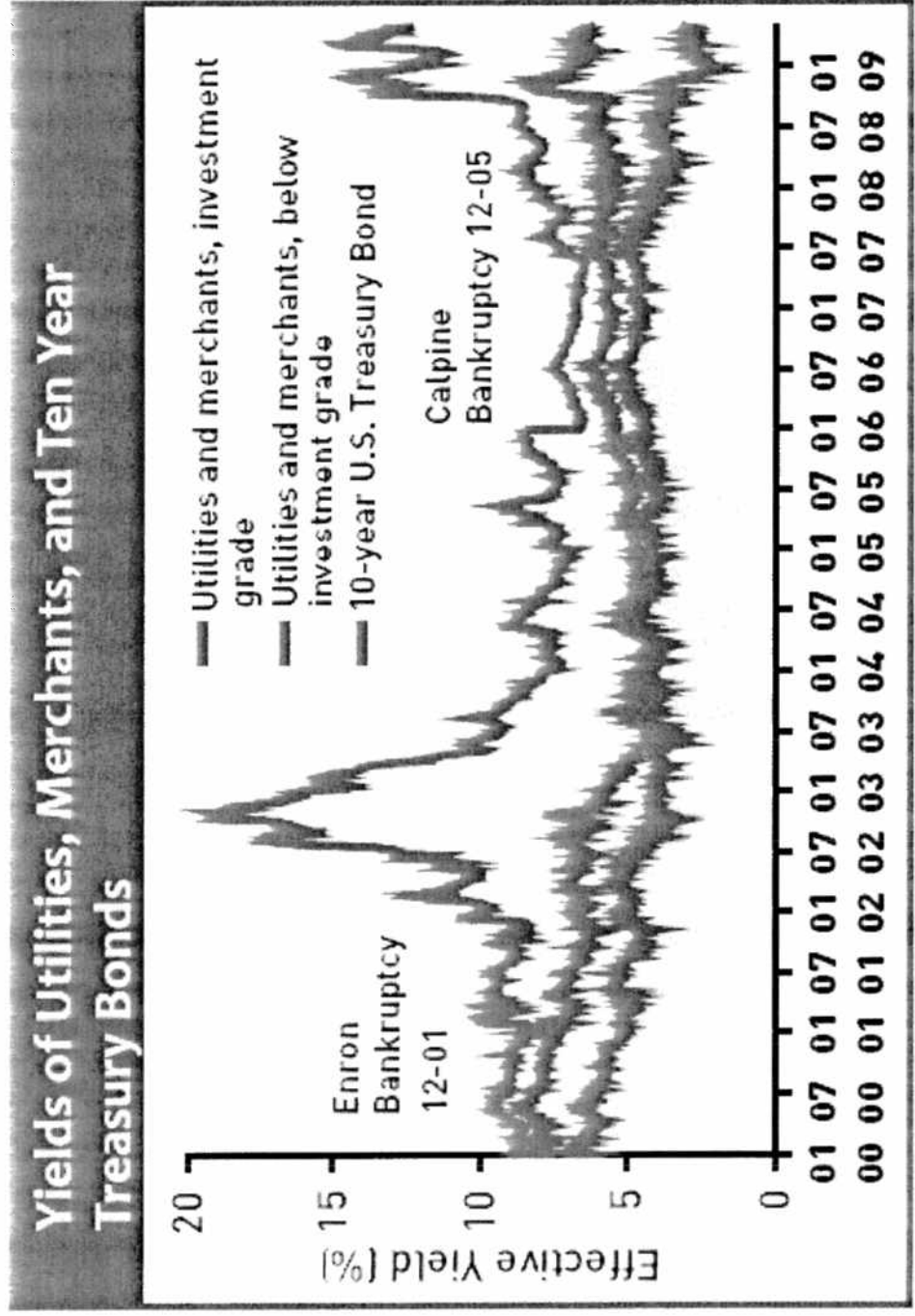
Year	Total Net Generation (TWh)	Annual Growth Over Previous Year (%)
2000	3,802	2.9
2001	3,737	-1.7
2002	3,858	3.3
2003	3,883	0.6
2004	3,971	2.2
2005	4,055	2.1
2006	4,065	0.2
2007	4,157	2.3
2008	4,110	-1.1
2009 (H1)	1,913	-4.4
CAGR: 2000-2008		1.0

Source: EIA total net generation data (available at <http://www.eia.doe.gov/emeu/aer/txt/stb0802a.xls> for years 2000-2008; first half 2009 data available at <http://www.eia.doe.gov/emeu/steo/pub/7atab.pdf>)

Electricity Demand Growth

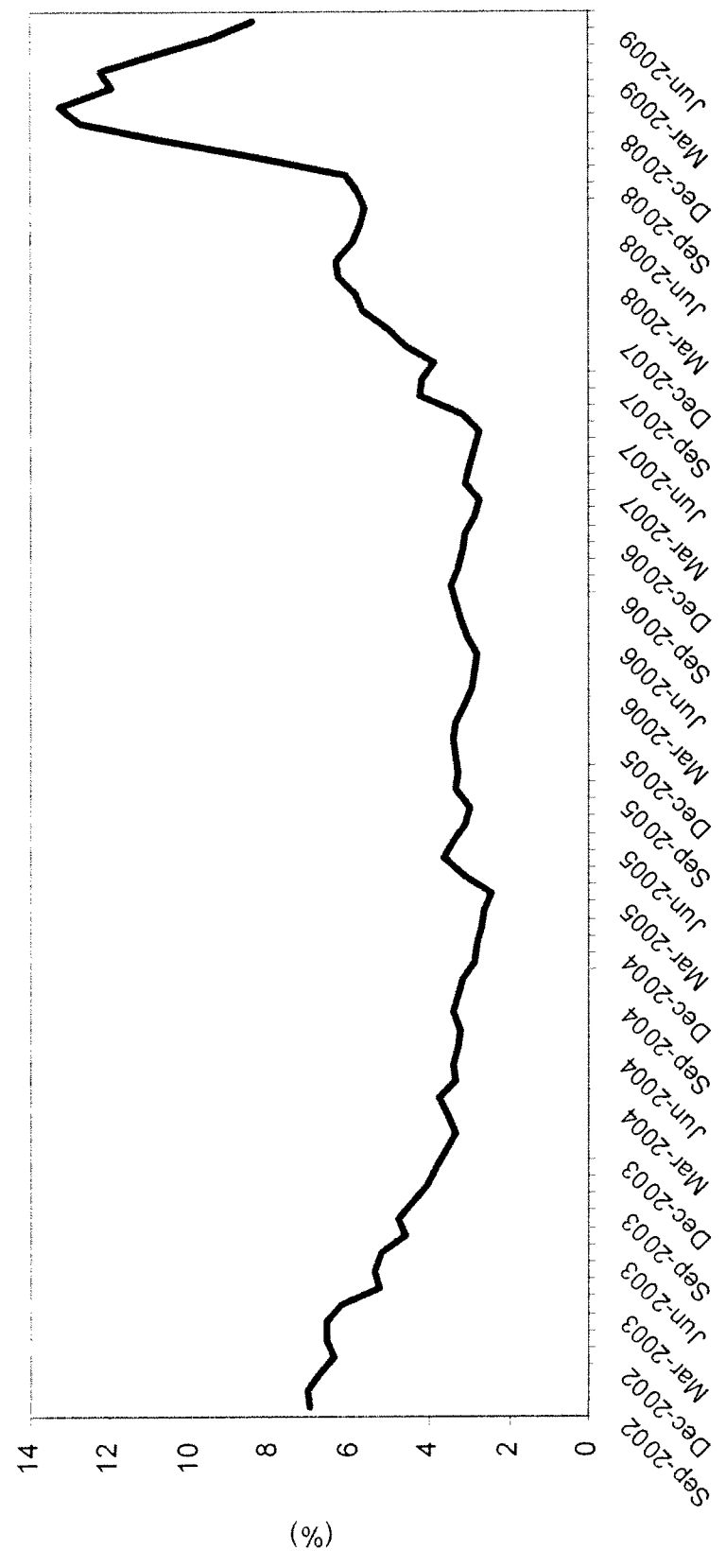
- Load growth allows utilities to collect more than authorized due to regulatory lag or lack of rate cases. This is crucial in many instances when the risks are high.
- This helps explain why ICF studies show there is a 99.99 percent chance that utilities forecasts will understate the level of future demand growth to allow for additional earnings.
- This under forecasting is abetted by regulators who are reluctant to acknowledge the potential for growth.

Tough Financial Markets Discouraged Investment – Recent Improvements Have Helped

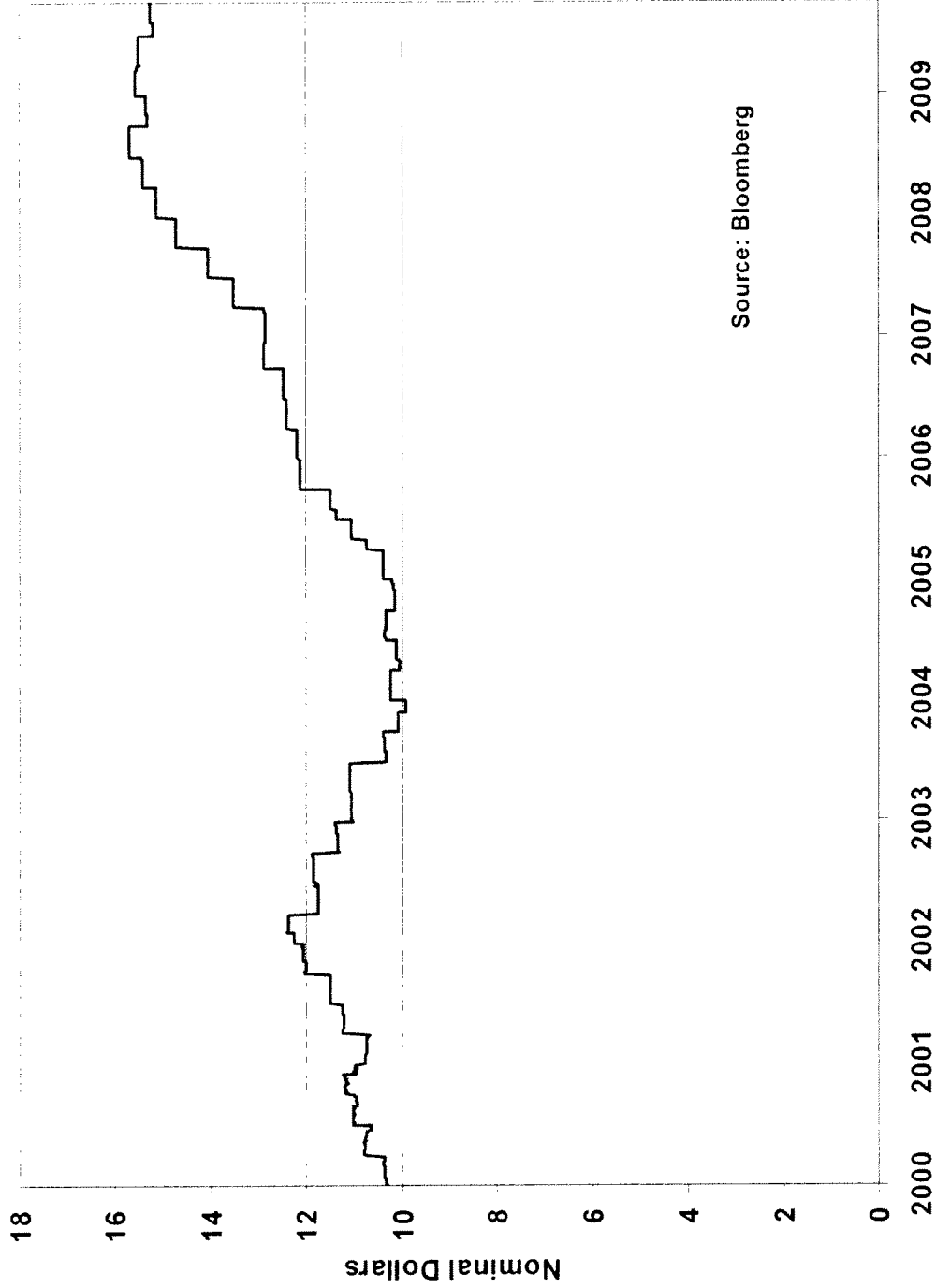


Source: Derived from Merrill Lynch Index U.S. Corporates, Gas and Electric Utilities and Bloomberg data.

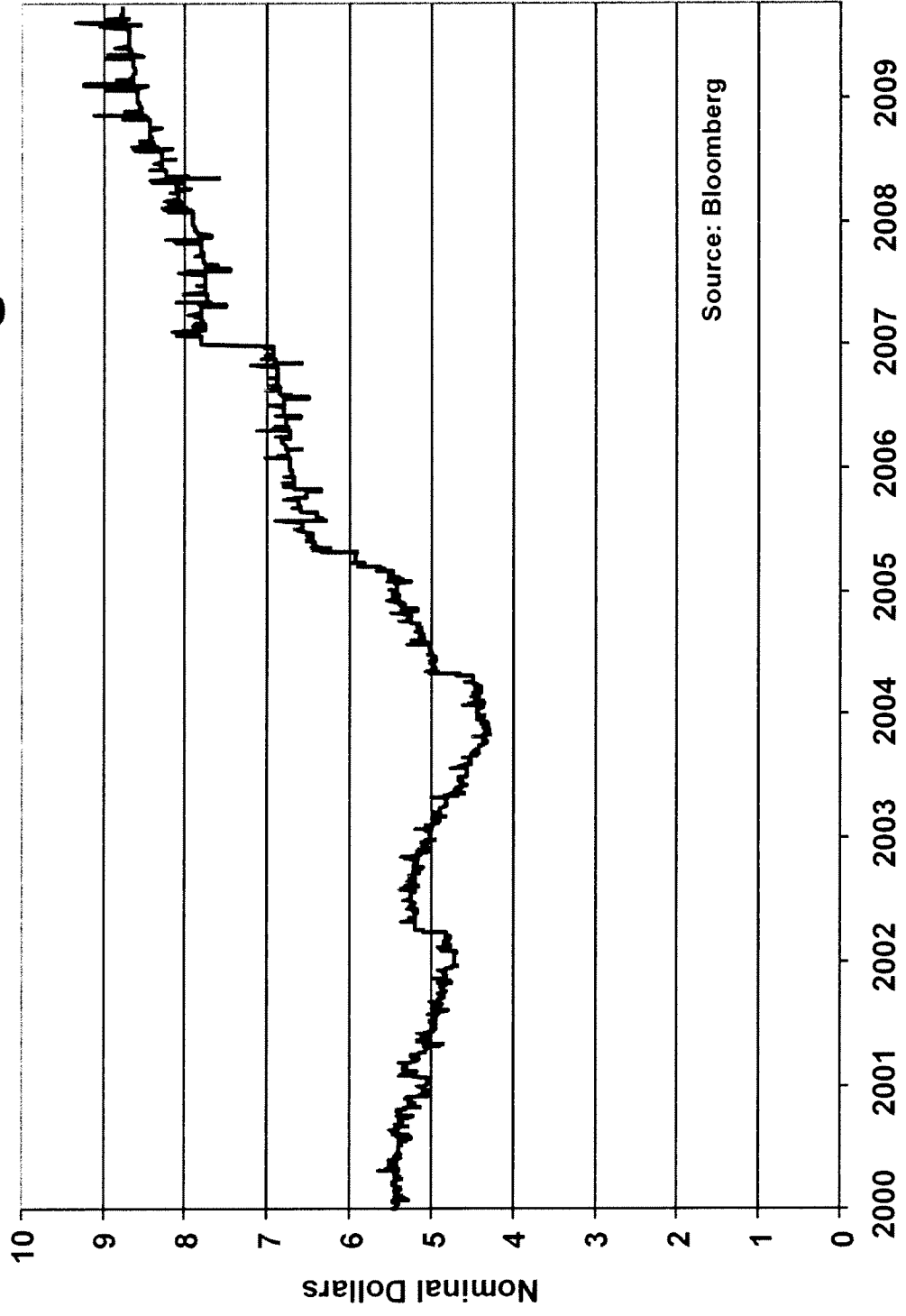
High Yield Bond Spread Is An Indicator of Adverse Financial Conditions



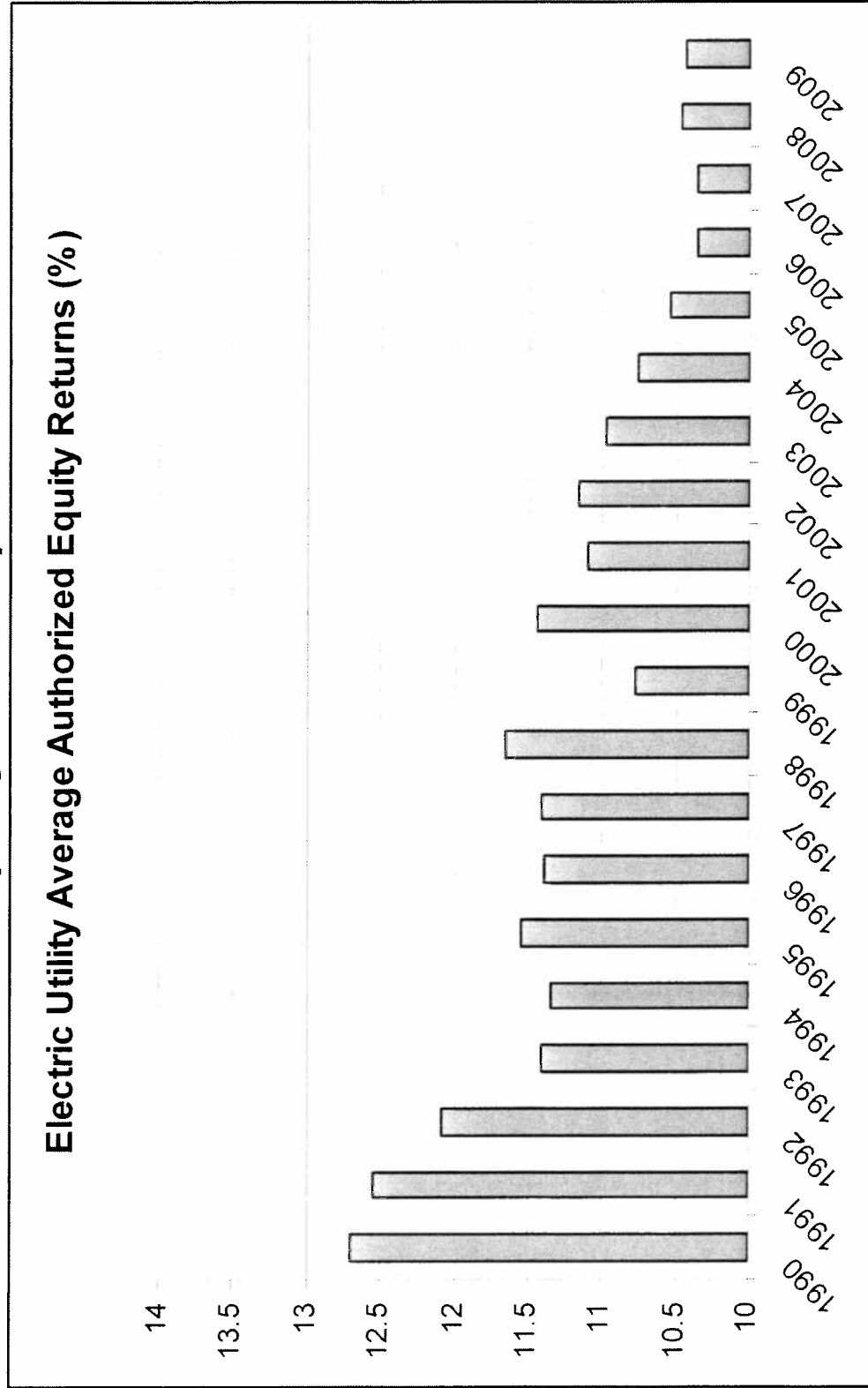
S&P 500 Electric Utilities Earnings Per Share Growth Slowing Hurting Investment



S&P 500 Electric Utilities Companies Net Dividends Per Share Growth Slowing



Authorized Returns are Declining Even in 2009 Year to Date (Sept 2009)



Authorized Returns

- Authorized Returns adequate for periods of growing electricity demand and normal financial conditions and a period with a low need for generation investment; it is not adequate for a period with large generation investment, the uncertainties associated with CO2 controls, and the potential for stagnant to declining load growth.

Credit Ratings are Falling

S&P Utility Credit Ratings Distribution by Company Category

U.S. SHAREHOLDER-OWNED ELECTRIC UTILITIES

	2003		2004		2005		2006		2007		2008	
	#	%	#	%	#	%	#	%	#	%	#	%
Regulated												
A or higher	6	17%	7	19%	7	19%	6	19%	5	13%	3	8%
A-	5	14%	4	11%	3	8%	1	3%	2	5%	4	10%
BBB+	6	17%	7	19%	8	22%	7	22%	10	26%	9	23%
BBB	6	17%	8	22%	9	25%	9	28%	8	21%	9	23%
BBB-	5	14%	5	14%	3	8%	3	9%	7	18%	9	23%
Below BBB-	8	22%	5	14%	6	17%	6	19%	6	16%	5	13%
Total	36	100%	36	100%	36	100%	32	100%	38	100%	39	100%

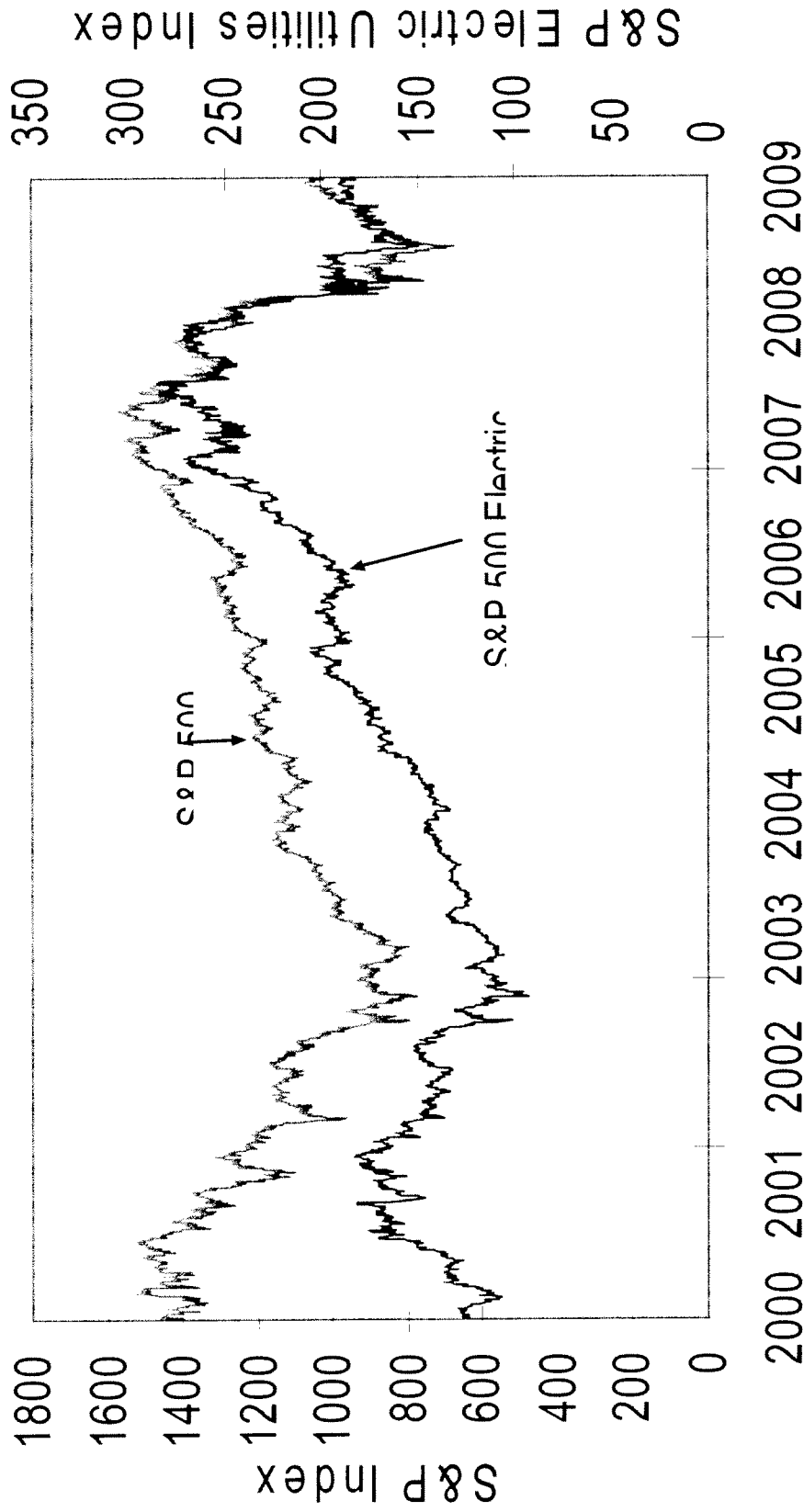
Mostly Regulated

A or higher	3	15%	2	9%	2	9%	1	4%	1	5%	1	5%
A-	2	10%	1	4%	0	0%	2	9%	3	16%	5	26%
BBB+	5	25%	6	26%	6	27%	3	13%	4	21%	2	11%
BBB	4	20%	7	30%	9	41%	11	48%	6	32%	8	42%
BBB-	2	10%	7	30%	0	0%	1	4%	4	21%	3	16%
Below BBB-	4	20%	0	0%	5	23%	5	22%	1	5%	0	0%
Total	20	100%	23	100%	22	100%	23	100%	19	100%	19	100%

Diversified

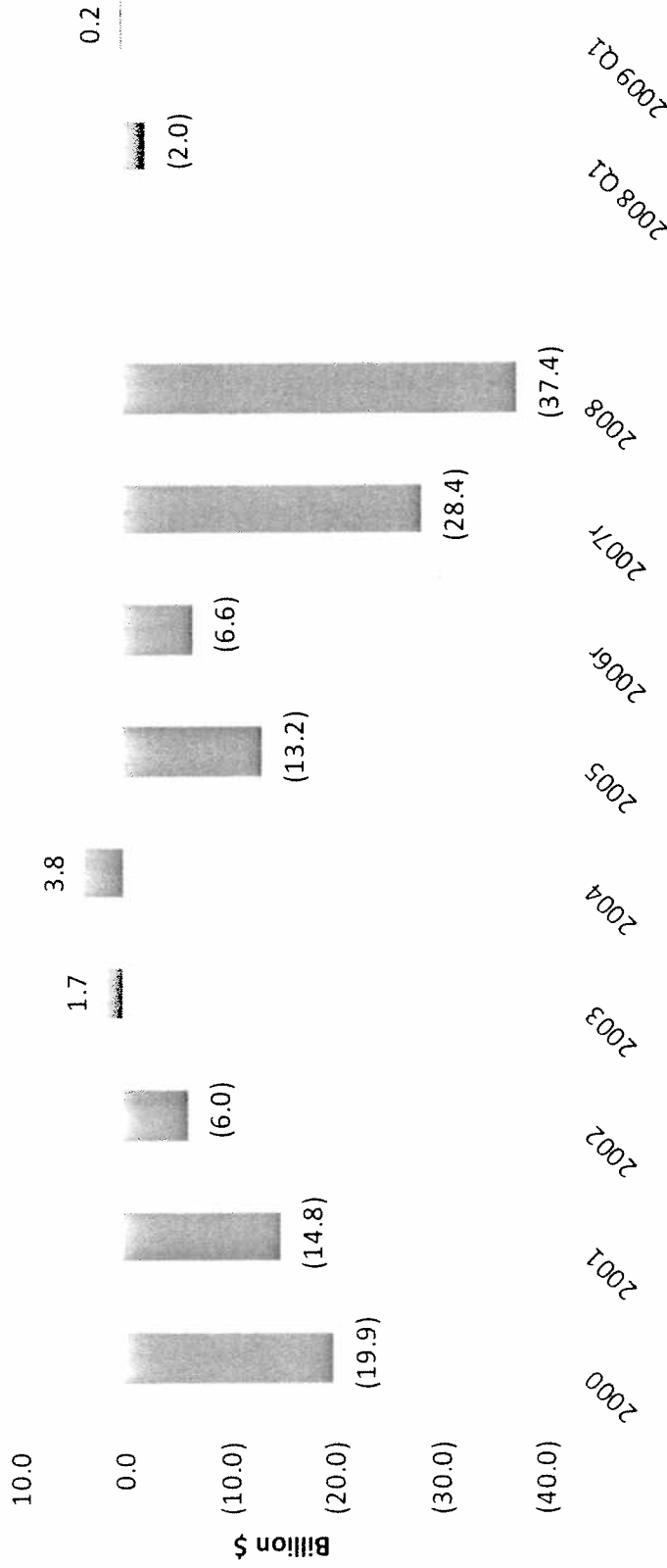
A or higher	0	0%	0	0%	0	0%	1	9%	0	0%	0	0%
A-	2	13%	1	9%	1	9%	0	0%	2	22%	0	0%
BBB+	4	27%	3	27%	2	18%	4	36%	3	33%	2	29%
BBB	5	33%	5	45%	5	45%	3	27%	1	11%	2	29%
BBB-	2	13%	1	9%	2	18%	2	18%	2	22%	2	29%
Below BBB-	2	13%	1	9%	1	9%	1	9%	1	11%	1	14%
Total	15	100%	11	100%	11	100%	11	100%	9	100%	7	100%

Utility Stocks Down – S&P 500 Index versus Electric Utility Index – Hurting Investment



Equity Markets Also Challenging

Free Cash Flow Situation Opposite of What is Needed in Tough Financing and Rate Regulation Environment; Cutbacks Needed Unless Regulation or Markets Change (2000 – 2009)



Free Cash Flow Less Dividends Less Than Capital Expenditures (2000 – 2009)

	2000	2001	2002	2003	2004	2005	2006r	2007r	2008	2008 Q1	2009 Q1
Net Cash Provided by Operating Activities	42.1	55.4	56.3	57.0	58.1	50.2	69.4	61.1	63.3	20.8	23.6
Capital Expenditures	(47.4)	(57.2)	(49.0)	(43.0)	(41.1)	(48.4)	(59.9)	(74.1)	(84.2)	(18.7)	(19.1)
Dividends Paid to Common Shareholders	(14.6)	(13.1)	(13.4)	(12.3)	(13.2)	(15.1)	(16.1)	(15.4)	(16.5)	(4.1)	(4.3)
Free Cash Flow	(19.9)	(14.8)	(6.0)	1.7	3.8	(13.2)	(6.6)	(28.4)	(37.4)	(2.0)	0.2

Source: SNL Financial and EEI Finance Department

U.S. Peak Demand Growth During Recessions – 2 to 3 Years of Weakness Followed by Strong Recovery – Silver Lining in Near-Term

Iranian Revolution – Worst Post-WWII Recession			Gulf War			9/11		
Year	Peak (GW)	Growth (%)	Year	Peak (GW)	Growth (%)	Year	Peak (GW)	Growth (%)
1980	427	N/A	1990	546	N/A	2000	678	N/A
1981	428	+0.2	1991	551	+0.9	2001	688	+1.4
1982	414	-3.3	1992	549	-0.4	2002	715	+3.9
1983	448	+8.2	1993	575	+4.7	2003	709	-0.8
1984	451	+0.7	1994	585	+1.7	2004	704	-0.7
1985	460	+2.0	1995	620	+6.0	2005	759	+7.7
1986	476	+3.5	1996	617	-0.5	2006	789	+4.0
Average	N/A	+1.8	Average	N/A	+2.1	Average	N/A	+2.6

- Negative growth was also observed during past recessionary periods, namely 1981-1982, 1991-1992, and 2001-2004.
- During these recessions, the average annual energy growth rate was 0.2%. Immediately following these periods, there was a period of recovery. During these recovery periods (1983-86, 1993-95, and 2005-06) the average annual growth rate was 4.3%.
- The average annual growth rate over all the recession and recovery-from-recession years was 2.3%.
- All national forecasts understate growth (see Appendix).

ICF Outlook for Near-Term Demand Growth

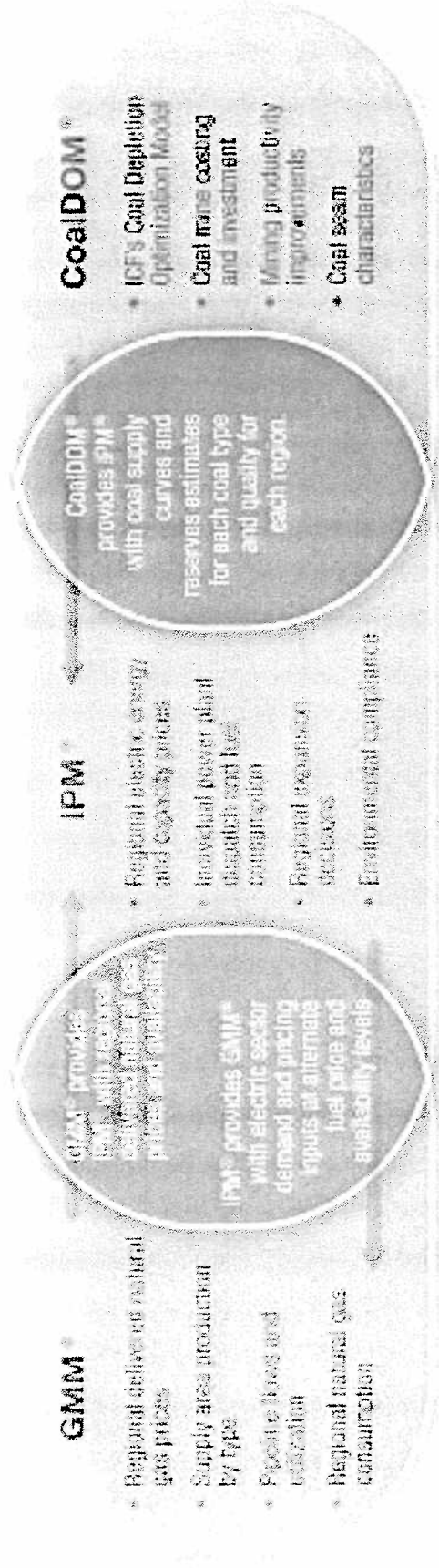
- Future of Demand Growth Positive in near term supporting a recovery in ability and desire to invest (pre-Co2 controls):
 - Industrial sector downturn explains current conditions and will explain rapid 2 to 3 year recovery in demand.
 - Energy efficiency activity growing. However, resistance to real time pricing and advanced time of day 2 way metering systems will help demand growth to continue.
 - More likely scenario is demand recovery and cycling around trend of fairly steady demand growth.
 - Under some scenarios PHEV/EV supports accelerated demand.

Environmental Future Crucial for Long-Term Capital Investment and Demand Outlook

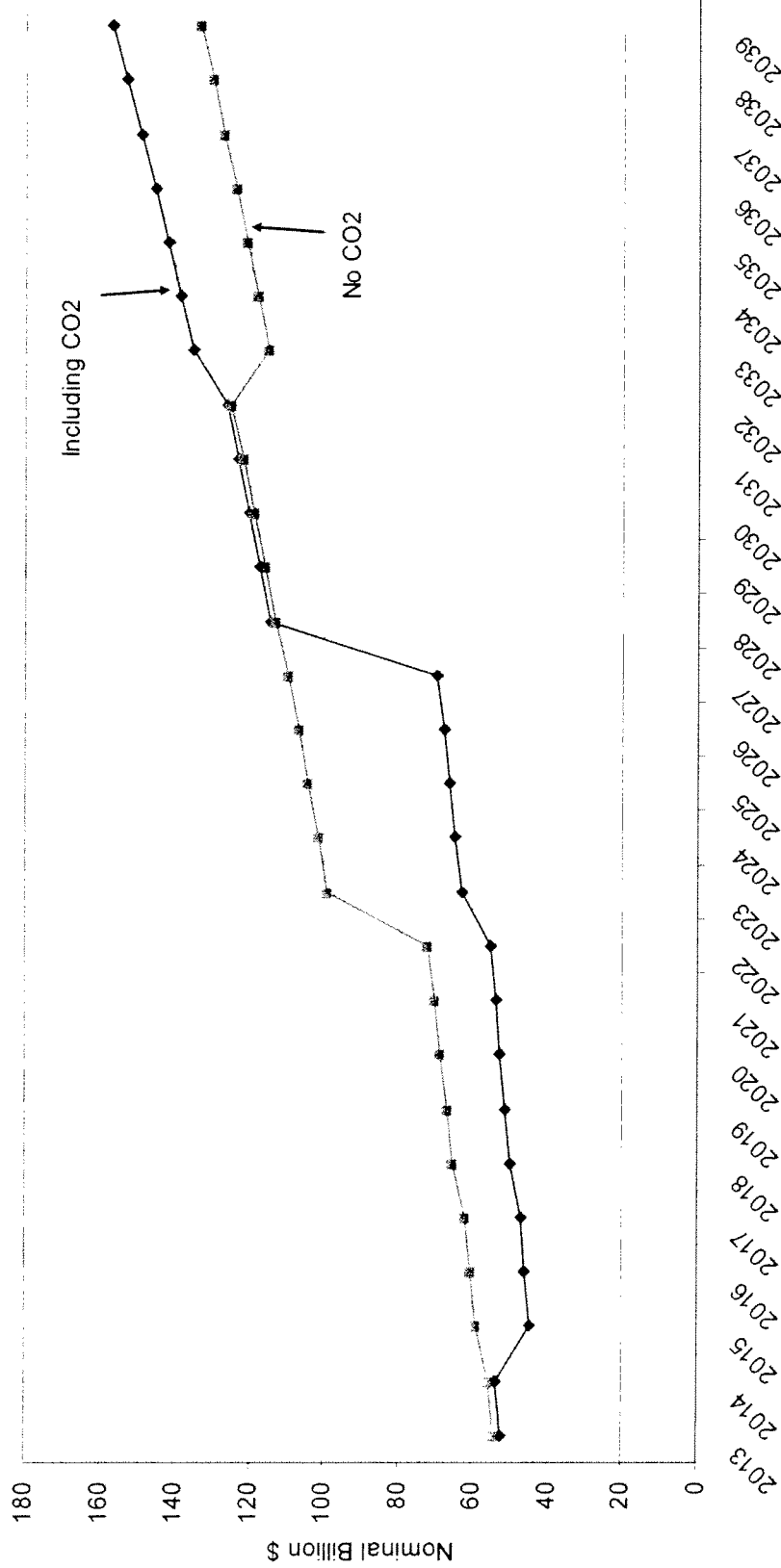


Integrated Planning Model Used To Analyze Moderate Scenarios

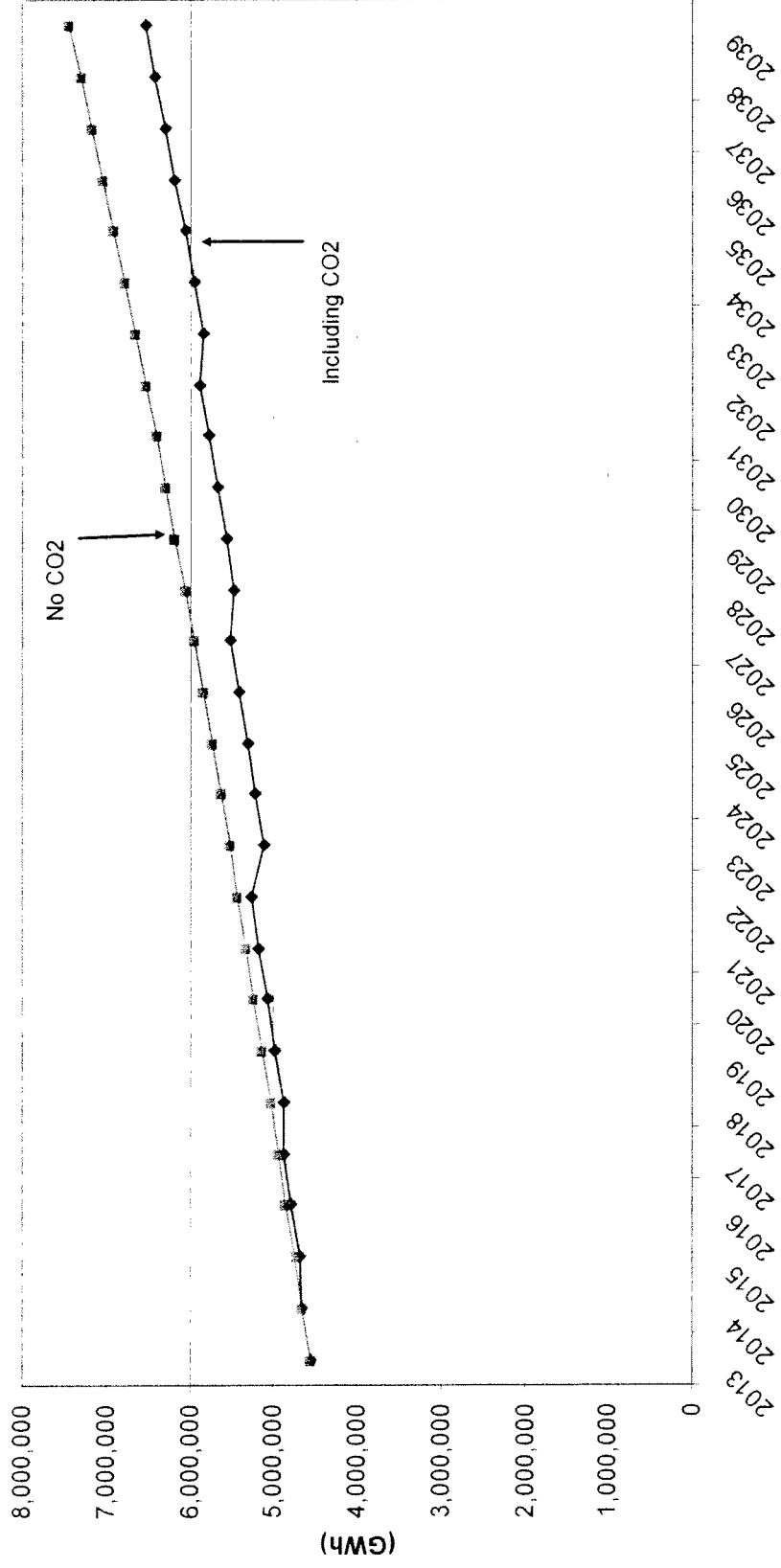
ICF uses a sophisticated modeling framework – the Integrated Planning Model (“IPM[®]”) – that has been used by multiple utilities as well as by the U.S. EPA and others. To develop a meaningful assessment of wholesale power, transmission, fuel, or emissions markets, one must have an integrated view of these markets.



ICF Forecast of US Capital Costs – Generation Only (5% Growth No CO2, Delayed with CO2)



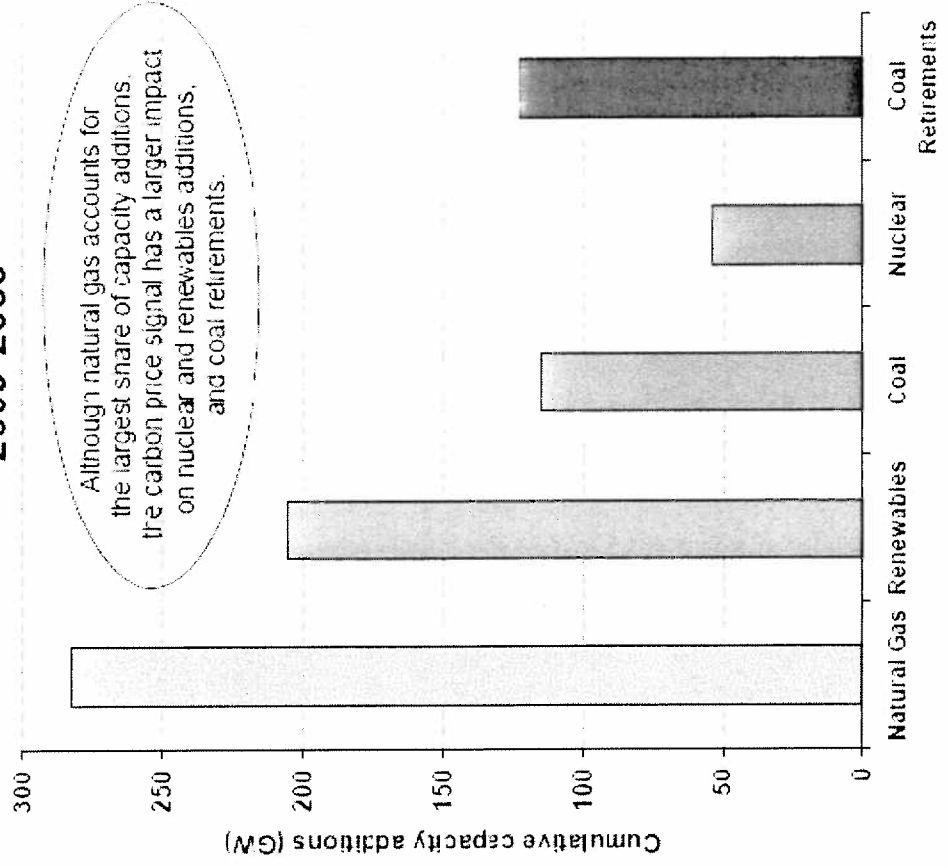
ICF Forecast of US Generation – ICF Expected CO₂ Case (Demand Growth Slower than Capital)



ICF W-M Projection: Electric Capacity Additions Even More Difficult to Accommodate Than in Moderate CO₂ Program

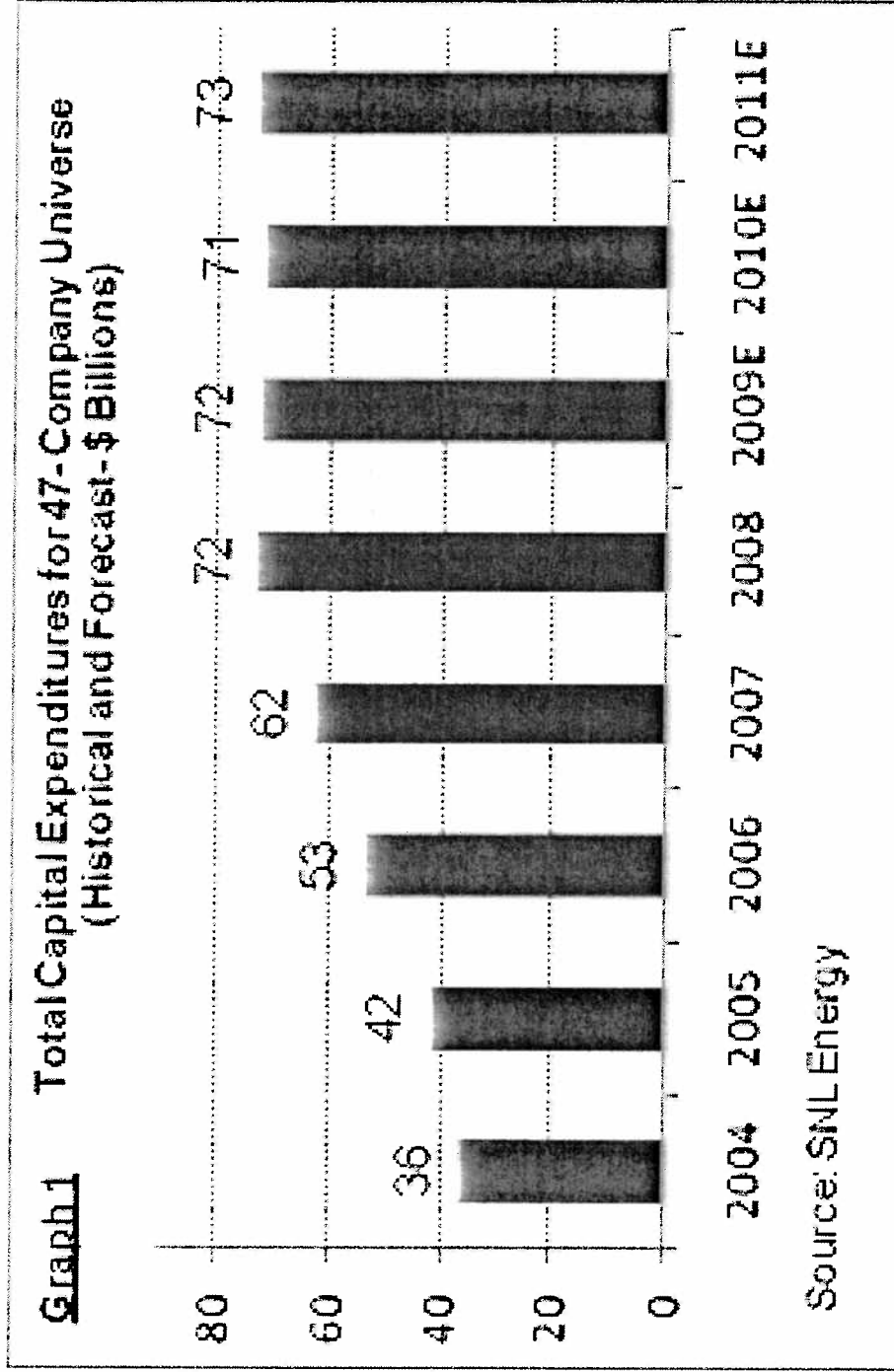
- * Under WM, cumulative coal retirements by 2036 are 122GW, well above levels in our Business-as-Usual scenario.
- * Coal additions stall through 2020, when more efficient coal plants become economic to build and run with carbon capture and storage. By 2036, 115GW of new CCS-equipped coal capacity is put online.
- * Nuclear and renewable capacity step up to fill in the gap and meet demand growth, with roughly 54GW and 205GW added respectively by 2036.
- * Natural gas-fired capacity additions decrease by 9 percent under the Waxman-Markey case relative to our Outlook Expected Case, but still represent the largest single addition

Cumulative Capacity Additions 2009-2036



Appendix

47 Companies Account for Most of These Expenditures



Electric Utilities--Summary Table*

Period	ROR % (# Cases)	Eq. as %		Amt.
		ROE % (# Cases)	Cap. Struc. (# Cases)	
1996	9.21 (20)	11.39 (22)	44.34 (20)	-5.6 (38)
1997	9.16 (12)	11.40 (11)	48.79 (11)	-553.3 (33)
1998	9.44 (9)	11.66 (10)	46.14 (8)	-429.3 (31)
1999	8.81 (18)	10.77 (20)	45.08 (17)	-1,683.8 (30)
2000	9.20 (12)	11.43 (12)	48.85 (12)	-291.4 (34)
2001	8.93 (15)	11.09 (18)	47.20 (13)	14.2 (21)
2002	8.72 (20)	11.16 (22)	46.27 (19)	-475.4 (24)
2003	8.86 (20)	10.97 (22)	49.41 (19)	313.8 (12)
2004	8.44 (18)	10.75 (19)	46.84 (17)	1,091.5 (30)
2005	8.30 (26)	10.54 (29)	46.73 (27)	1,373.7 (36)
2006	8.24 (24)	10.36 (26)	48.67 (23)	1,465.0 (42)
2007	8.22 (38)	10.36 (39)	48.01 (37)	1,401.9 (46)
2008				
1st Quarter	8.36 (9)	10.45 (10)	49.25 (8)	802.9 (9)
2nd Quarter	8.21 (7)	10.57 (8)	47.64 (7)	510.5 (8)
3rd Quarter	8.32 (10)	10.47 (11)	48.96 (10)	737.5 (13)
4th Quarter	8.09 (9)	10.33 (8)	47.58 (8)	848.5 (12)
Full Year	8.25 (35)	10.46 (37)	48.41 (33)	2,899.4 (42)
2009				
1st Quarter	8.19 (8)	10.29 (9)	48.52 (8)	857.0 (14)
2nd Quarter	8.05 (9)	10.55 (10)	47.66 (9)	1,425.7 (17)
3rd Quarter	8.48 (3)	10.46 (3)	47.20 (3)	317.1 (7)
Year-To-Date	8.17 (20)	10.43 (22)	47.94 (20)	2,599.8 (38)

ELECTRIC UTILITY DECISIONS

Order Date	Company (State)	ROR %	ROE %	Common Eq. as % Cap. Str.	Test Year & Rate Base	Amt. \$ Mil.
1/14/09	Public Service Oklahoma (OK)	8.31	10.50	44.10	2/08-E	59.3 (1)
1/21/09	Westar Energy (KS)	---	---	---	---	65.0 (B)
1/21/09	Kansas Gas & Electric (KS)	---	---	---	---	65.0 (B)
1/21/09	Cleveland Electric Illuminating (OH)	8.48	10.50 (E)	49.00	2/08-DC	29.2 (D)
1/21/09	Ohio Edison (OH)	8.48	10.50 (E)	49.00	2/08-DC	68.9 (D)
1/21/09	Toledo Edison (OH)	8.48	10.50 (E)	49.00	2/08-DC	38.5 (D)
1/30/09	Idaho Power (ID)	8.18	10.50	49.27	12/08-E	27.0 (R)
2/4/09	United Illuminating (CT)	7.59	8.75	50.00	12/07-A	6.8 (D,R,2)
2/4/09	Interstate Power & Light (IA)	---	10.10 (3)	---	---	---
2/5/09	Kentucky Utilities (KY)	---	---	---	---	-8.9 (B)
2/5/09	Louisville Gas & Electric (KY)	---	---	---	---	-13.2 (B)
2/10/09	Union Electric (MO)	8.34	10.76	52.01	3/08-E	161.7
3/4/09	Indiana Michigan Power (IN)	7.62	10.50	45.80 *	9/07-E	19.1 (4)
3/11/09	Entergy Texas (TX)	---	---	---	3/07	30.5 (B,I,5)
3/17/09	Southern California Edison (CA)	---	---	---	12/09-A	308.1 (6)
2009	1ST QUARTER: AVERAGES/TOTAL	8.19	10.29	48.52		857.0
	MEDIAN	8.33	10.50	49.00		---
	OBSERVATIONS	8	9	8		14

4/2/09	Entergy New Orleans (LA)	---	11.10	---	12/08-YE	-24.7 (B,7)
4/16/09	PacifiCorp (ID)	---	---	---	---	4.4 (B)
4/21/09	PacifiCorp (UT)	8.36	10.61	51.00	12/09-A	45.0 (B)
4/24/09	Consolidated Edison of New York (NY)	7.79	10.00	48.00	3/10-A	523.4 (D)
4/30/09	Tampa Electric (FL)	8.29 (R)	11.25	47.49 *(R)	12/09-A	147.7 (Z,R)
5/4/09	Minnesota Power (MN)	8.45	10.74	54.79	6/09-A	21.1 (I)
5/20/09	Oklahoma Gas & Electric (AR)	6.43	10.25	36.04 *	12/07-YE	13.3 (B)
5/20/09	NorthWestern Corp. (MT)	8.38	10.25	50.00	---	--- (8)
5/20/09	PacifiCorp (WY)	---	---	---	---	18.0 (B)
5/28/09	Public Service New Mexico (NM)	8.77	10.50	50.47	3/08-YE	77.1 (B,Z)
5/29/09	Idaho Power (ID)	---	---	---	---	10.5 (9)
6/2/09	Southwestern Public Service (TX)	---	---	---	12/07	57.4 (B,I)
6/9/09	Public Service Co. of Colorado (CO)	---	---	---	---	112.2 (B)
6/10/09	Kansas City Power & Light (MO)	---	---	---	12/07-YE	95.0 (B)
6/10/09	KCP&L Greater Missouri Oper-L&P (MO)	---	---	---	12/07-YE	15.0 (B)
6/10/09	KCP&L Greater Missouri Oper-MPS (MO)	---	---	---	12/07-YE	48.0 (B)
6/22/09	Central Hudson Gas & Electric (NY)	7.28	10.00	47.00	6/10-A	39.6 (D)
6/24/09	Nevada Power (NV)	8.66 (10)	10.80 (10)	44.15	6/08-YE	222.7 (Z)
2009	2ND QUARTER: AVERAGES/TOTAL	8.05	10.55	47.66		1,425.7
	MEDIAN	8.36	10.56	48.00		---
	OBSERVATIONS	9	10	9		17

Dividend Payout Ratio: Last Twelve Months

Category	2003	2004	2005	2006	2007	2008	2009*
EEI Index	63.7	67.9	66.5	63.3	62.1	66.8	67.1
Regulated	76.0	78.3	68.4	71.5	65.0	71.2	73.1
Mostly Regulated	56.1	59.0	65.0	56.6	63.5	66.7	61.2
Diversified	48.5	56.7	64.3*	54.5	45.5	44.6	50.3

Regulated: Greater than 80% of total assets are regulated.

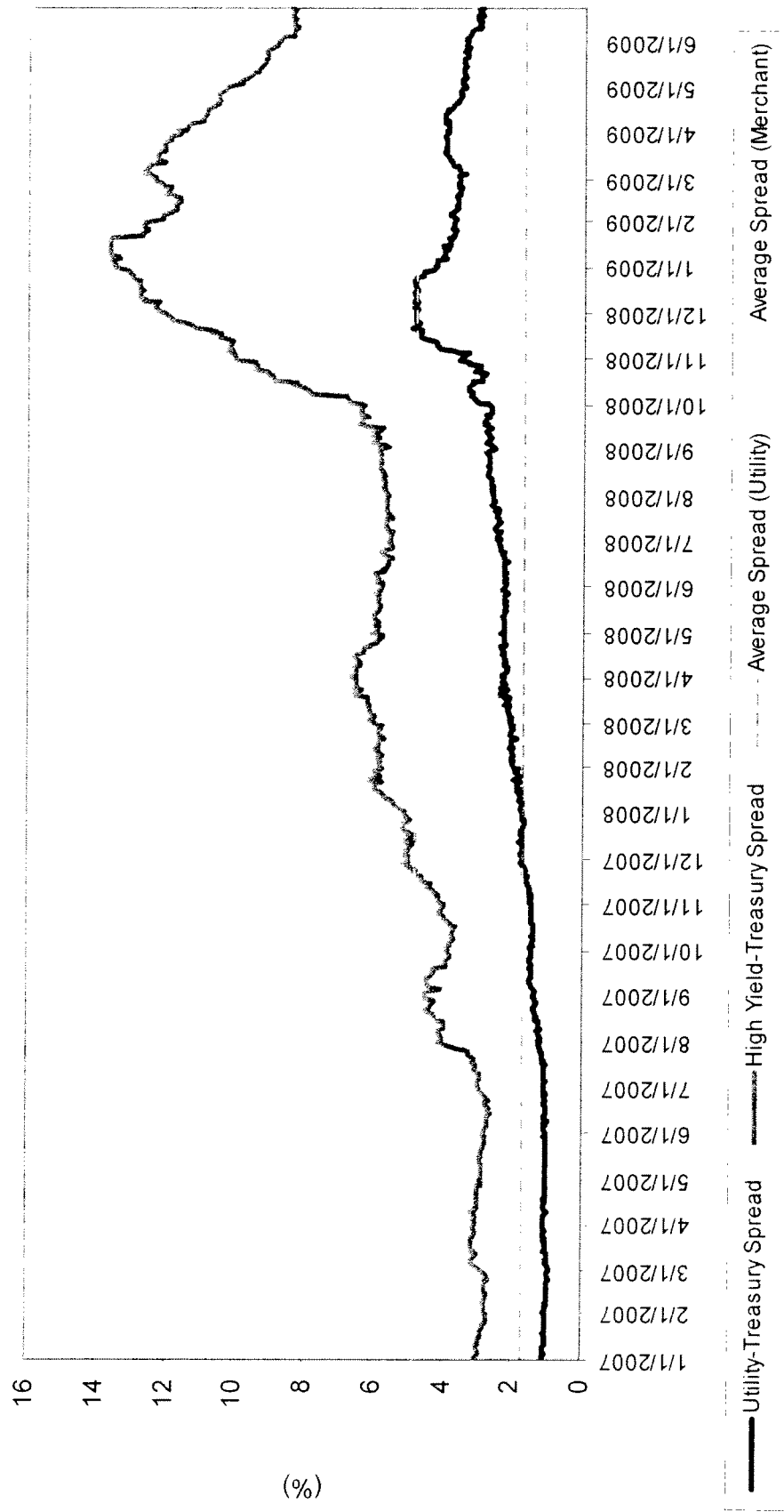
Mostly Regulated: 50 to 80% of total assets are regulated.

Diversified: Less than 50% of total assets are regulated.

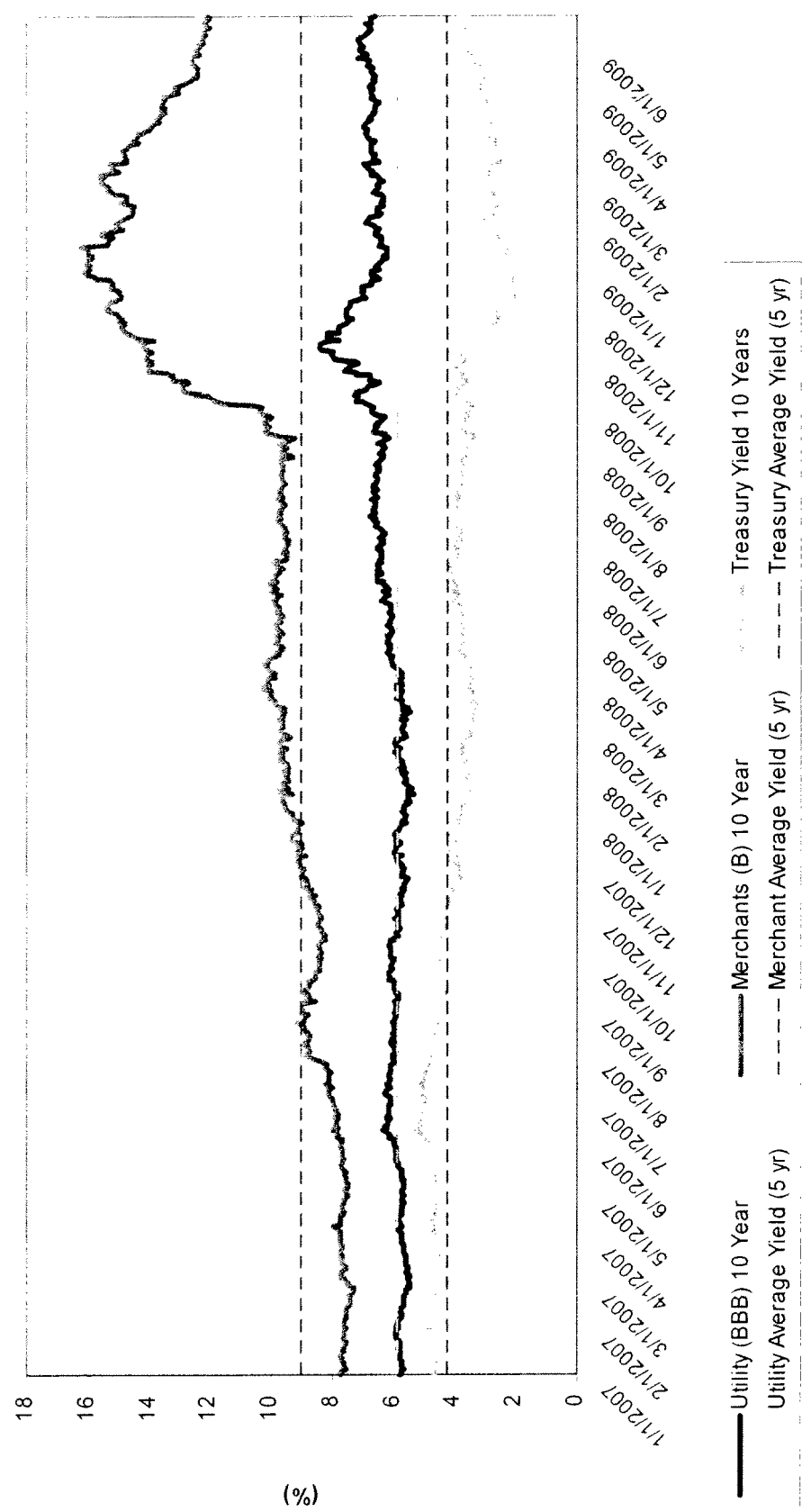
* 12 month period ending 3/31/09.

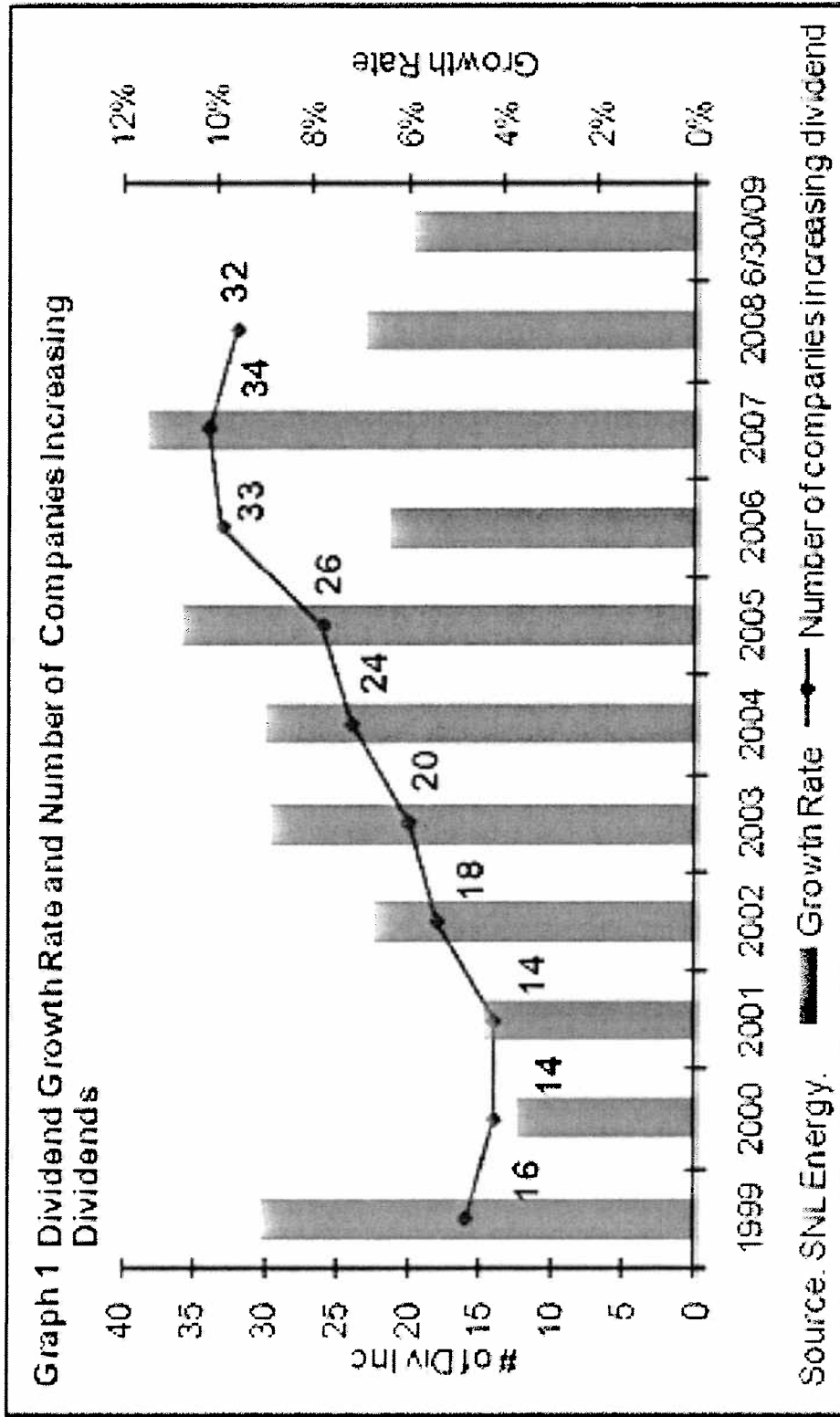
Source: SNL Financial, company reports and EEI Finance Department

Yield Expansion



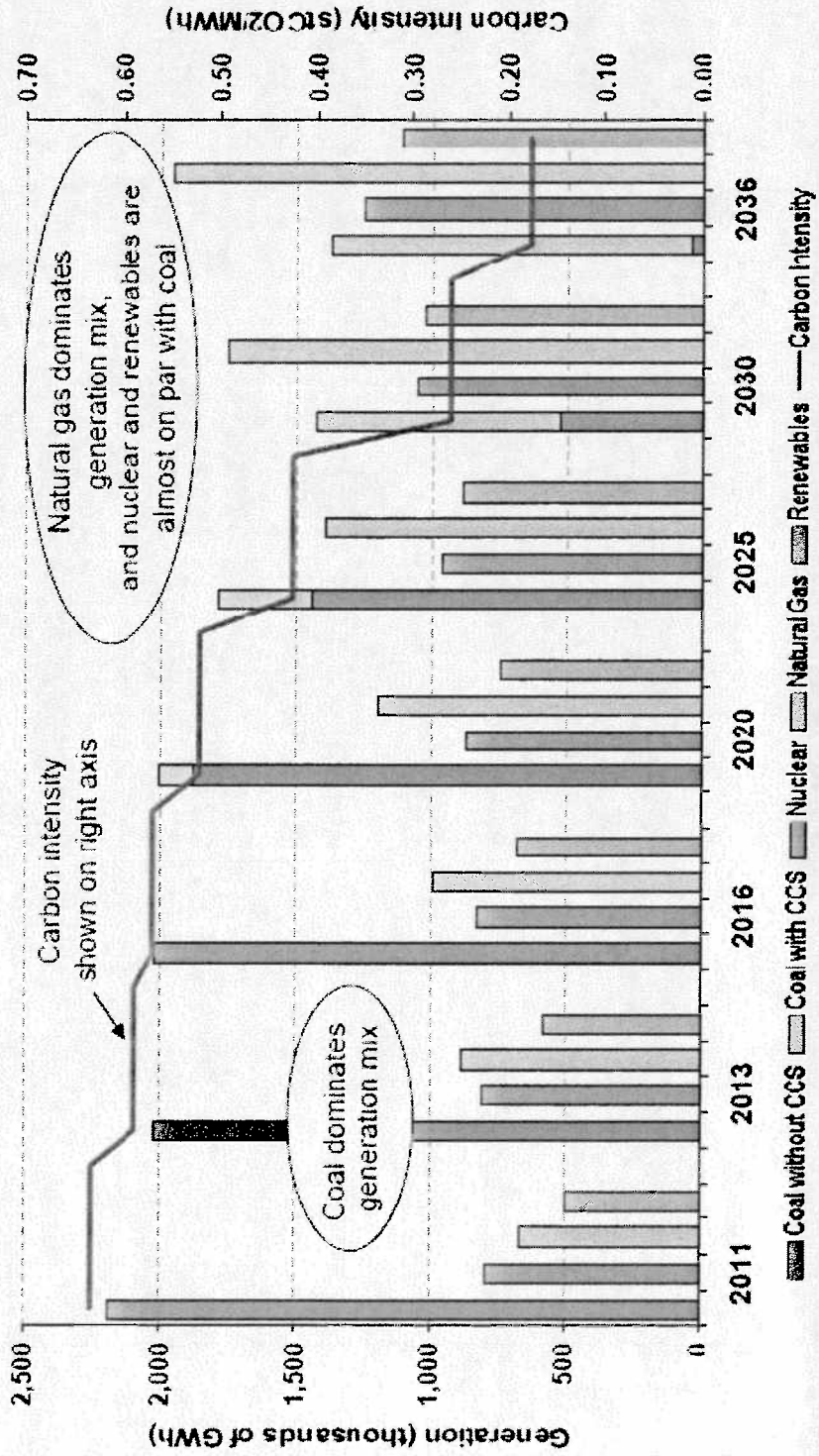
Expansion

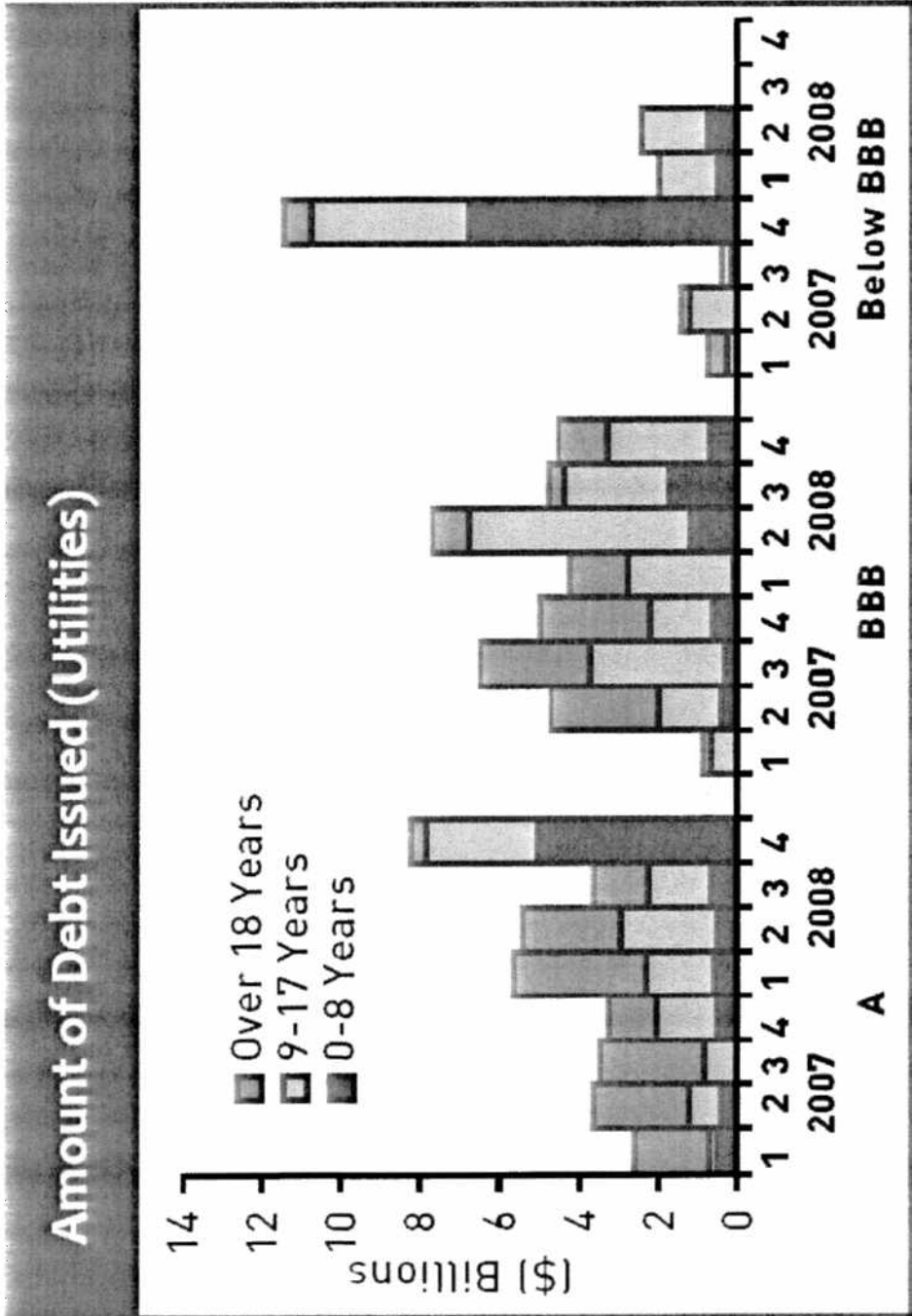




ICF W-M Projection: Electric Generation Mix and Carbon Intensity

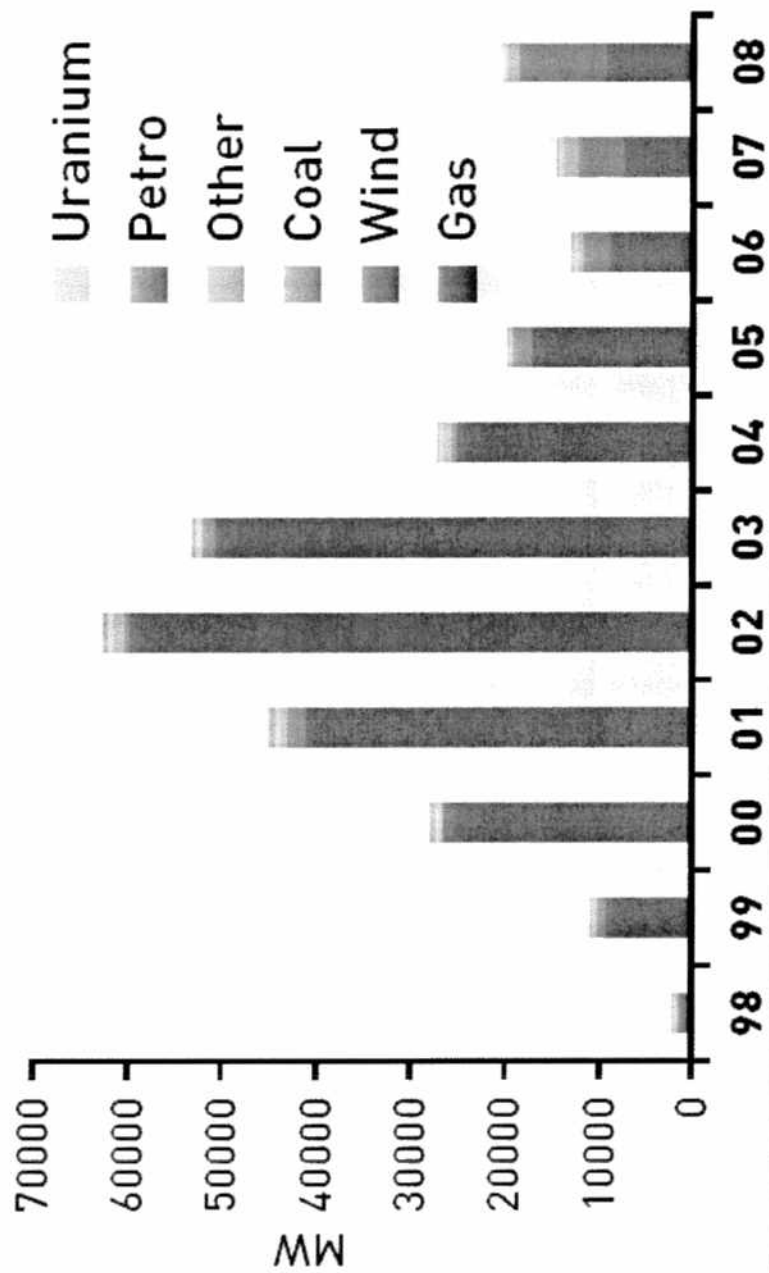
- By 2036, coal generation without CCS virtually eliminated
- CCS uncertainty very large on regulatory, legal, and liability front in addition to high costs





Source: Derived from Bloomberg data.

Electric Generation Capacity Additions



Source: Derived from Energy Velocity data.