#### **AES Corp**

#### www.aes.com

#### Please read Disclaimer at bottom of these notes!

"The AES Corporation is a Fortune 200 global power company with generation and distribution businesses. Through our diverse portfolio of thermal and renewable fuel sources, we provide affordable and sustainable energy to 28 countries. Our workforce of 29,000 people is committed to operational excellence and meeting the world's changing power needs. Our 2010 revenues were \$17 billion and we own and manage \$41 billion in total assets." AES 5/11

June 2, 2011 (12.61)

#### **Thesis:**

Buying a large power company at a fair price. AES should benefit as world continues to grow economically, and as undeveloped nations get greater penetration of power infrastructure. Diversified fuel base. Renewables are growing. Experienced and well thought of energy team. There is risk in debt levels, and that is obvious via their credit rating. Yet, credit agencies are understanding of their non-recourse nature. Catalysts include new power projects starting to come on line, which should benefit revenues, cash flow and earnings.

Worldwide Power Company. Diversified in fuel and energy types. 50% of business is supplying electricity generation to Utilities; the other 50% is traditional Utility Company. These are all large utility companies, and are located in USA, Chile and Brazil. High debt levels, yet most of which is nonrecourse to parent. They have made quite a bit of investments over the years, and fruits of that should start to show in F2011 or F2012 the latest. We have already seen book value increase, and debt levels improve. Ratings agencies still carry AES at below investment grade. The credit rating was reduced as metrics were improving, only because (speculation on my part) of the all cash purchase of DPL. I expect GAAP earnings of \$1.06 in F2011, and \$1.18 in F2012. We have owned shares since 2003, and operationally they have delivered as promised, or a logical reason why not during this time frame.

#### June 1, 2011 (12.96) <u>Observations:</u>

AES has not hit projections for some time. S&P indicated that they often have an excuse for such. One excuse has been cost over-runs. Another excuse has been investment in other opportunities. Hence, like S&P, I would like to see the results before making assumptions. Until then, I will attempt to remain conservative. AES has certainly not failed the investor operationally. They are in a difficult business, in a difficult environment.

Earnings for F2010 were a disappointing, and from what I see as an unexpected loss. Yet, there was an asset impairment of and loss on sale of \$1,313 (~\$1.71 per share). Most of the impairment was a write-off of Goodwill in North American assets.

I expect their normalized earnings going forward to be in the \$1.10 range. With an estimated earnings growth of 8% for 10 years, and 5% thereafter. Growth is higher than typical because of their use of leverage. This is a world wide power play, and based on continued use of power by developing and already developed nations.

Much of their debt is non-recourse.

	3/31/11	12/31/10
Long Term Debt – Non Recourse	\$12,492	\$12,544
Long Term Debt - Recourse	\$ 4,150	\$ 5,301
Total Long Term Debt	\$16,632	\$17,845
Short Term Debt – Non Recourse	\$2,610	\$2,567
Short Term Debt - Recourse	\$ 200	\$ 463
Total Short Term Debt	\$2,810	\$3,030

#### Total debt was as follows:

I recomputed their Altman Z score. The last time we did this was in October 2008. Certainly the score is much healthier now. Keep in mind, this is a debt intensive business, and much of the debt is non-recourse.

	3/31/11	10/30/08
Altman Z Score	1.37	0.78

#### March 31, 2011

Current Assets		\$8,746
<b>Current Liabilities</b>		\$7,551
Working Capital		\$1,195
Total Assets		\$40,500
Retained Earnings		\$11,042
Operating Income		\$2,265
Market Cap. + prefe	erred stock	\$10,138
Total Debt		\$19,442
Sales		\$16,647
Z-	score Results	1.37
What are the cha	ances of bankruptcy?	
1.80 or less	Very High	
1.81 to 2.7	High	
2.8 to 2.9	Possible	
3.0 or higher	Not Likely	

#### **Institutional Holders**

There have been consistent institutional holders. Legg Mason has backed down a bit. Interesting story as LM went through hell in the Value Trust. They claimed to not own stocks < \$10.00, when indeed they did own AES at sub \$10.00 prices during the financial crisis.

Institutional	Shares		Shares	
Holders	Owned	% of TSO	Owned	% of TSO
	31-Mar-11	31-Mar-11	31-Dec-09	31-Dec-09
FMR Corp.	77,127,097	9.86%	64,340,550	9.64%
OPPENHEIMER FUNDS INC	34,042,464	4.35%	17,971,461	2.69%
	,, . • .		,,	
PRICE T ROWE ASSOCIATES				
INC /MD/	33,300,105	4.26%	1,696,835	0.25%
STATE STREET CORP	30,597,033	3.91%	31,991,983	4.79%
LEGG MASON CAPITAL				
MANAGEMENT INC	24,670,995	3.15%	59,508,382	8.91%
VANGUARD GROUP INC	25,905,911	3.31%	24,781,657	3.71%

#### **Credit Rating**

Current Standard and Poors credit rating is BB-. This is below investment grade. This was downgraded to BB- from BB on May 17, 2011. S&P cited the DPL Inc. purchase, and subsequent raising of debt as the reason for the downgrade. "We also assigned a 'BB+' rating to AES's \$1.05 billion senior secured term loan facility. We also assigned a '1' recovery rating to the term loan facility, indicating very high (90% to 100%) recovery of principal if a default occurs."

DPL Inc.	\$1.25B
debt	
China Investment Corp. (CIC)	\$1.37B
AES Debt	\$680M
Cash on Hand and Asset Sales	\$350M

The \$3.5B acquisition of DPL Inc. is broken down as follows:

"In March 2010, AES received \$1.58 billion from CIC for a 15% stake in AES. AES has used about \$1.37 billion of those proceeds to temporarily pay down debt through 2010. While AES has represented its net debt will increase by \$680 million compared with 2009 levels, it will need to raise \$2.05 billion of new debt to finance the DPL acquisition. The present \$1.05 billion secured term loan facility represents the first of the financing. We expect the balance of \$1 billion financing at the AES level to be on an unsecured basis later in the year." **Standard and Poors 5/17/11** 

"While AES expects its financial measures to improve to a level that would support a 'BB' rating, we have noted that improvements in financial ratios as projected have not happened in the past, either because some projects did not perform as projected, or because the company found new projects to invest in that were substantially debt-funded. It is for these reasons that we do not give credit to the expected performance and will rely instead on financial performance actually reaching levels commensurate with a particular rating to assign that rating to AES. We expect AES to maintain POCF to interest ratios in the range of about 1.9x to 2.1x and POCF to debt of about 18% to 19% to maintain ratings. Lower-than-expected cash flow from substantial new investments that result in POCF to interest ratio declining below 1.7x will likely lead to a negative outlook and lower ratings may follow. There is no upside momentum until management better articulates its strategy relating to business growth, and defines policies relating to financing such growth." **Standard and Poors 5/17/11** 

#### **Bond Prices**

Bond Prices have certainly held their own during the last 9 months. Yet, the entire bond market is making trash look like lobster.

	6/1/11	10/19/10
AES.GM 8.86% 11/30/2025	8.856%	8.736%
AES.GO 9.20% 11/30/2029	8.977%	9.171%
AES.IJ 8.00% 10/15/2017	6.618%	6.465%
AES.IT 9.75% 04/15/2016	6.240%	6.415%

#### Stock Repurchase Program July 2010 Notes

1. During 4<sup>th</sup> Quarter 2010 AES purchased 6,841,345 shares at an average price of \$12.26. This totals \$83.9M. The repurchase plan effective 7/10 allowed purchases of \$500M. During F2010 AES purchased 8,382,825 shares at an average price of \$11.86. This totals \$99.4M.

2. During the 1<sup>st</sup> Quarter 2011 AES purchased 4,943,011 shares at an average price of \$12.68. This totals \$62.7M.

3. There is still \$338M on the stock repurchase program effective 7/10 (originally \$500M).

#### **Insider Activity**

There has been some insider selling. Yet, all option related. Hanrahan buys option shares and then seems to sell off for tax portion, keeping the rest. Typical is buy 28,100 shares at \$2.83, sell 19,400 shares at market price ( $\sim$ \$12.60 -  $\sim$ \$12.80), keeping the difference of 8,700 shares.

Some other insider selling occurred in 2010. Nothing looks concerning. Looks like option shares.

#### Valuation Discussion:

Using traditional metrics, primarily Net Income to Enterprise value, AES would be considered over-valued. Yet, Net Income only tells part of the story. Subsidiary distributions are expected to be more than double Net Income. I have projected Net Income for 2011 to be \$840M. AES guidance suggests that AES subsidiary distributions will be \$1,200M (\$1,200M - \$1,300M). Hence, one can extrapolate that Net Income adjusted could be \$2.56 per share. Yet, I think we would be "double dipping" here, because some of the distributions might not be income related (i.e. projections that AES will lever up DPL with non-recourse debt.

Hence, in my valuation worksheets, I will look at Net Income traditionally, but also should add potential of recurring distributions. Very difficult to monitor and value. Yet, I think the difficulty gives value here, as others might be shunning this investment because of the difficulty to analyze, as well as the leverage ratio. Remember, the leverage ratio is mostly unsecured debt.

	4/1/11	10/1/10	7/4/08	7/7/06
	F2011E	F2011	F2008	F2006
Stock Price	12.47	11.38	19.16	18.06
Revenues	16,750	15,000	14,600	11,550
Revenues per Share	21.30	18.90	21.75	17.50
Cash Flow per Share	2.70	2.65	2.85	2.55
Earnings Per Share	1.13	1.10	1.25	1.10
CAPEX	3.10	2.75	3.15	1.45
Book Value	9.35	9.90	6.00	3.80
Intangibles	2.27	2.71	3.83	0
<b>Tangible Book Value</b>	7.08	7.19	2.17	3.80
<b>Common Shares O/S</b>	787	794.5	671.5	660.0
Depreciation	1,235	1,250	1,050	950
Tax Rate	35.0%	35.0%	37.5%	32.0%
Working Capital	1,360	3,365	2,680	300
Long-Term Debt	16,360	19,930	16,650	16,025
Shareholder Equity	7,345	7,835	4,015	2,520
ROE	12.0%	11.0%	21.5%	28.5%
<b>Financial Strength</b>	В	В	C++	C+
<b>5 Year Target Price</b>	\$25	\$25	\$30	\$25
<b>Estimated Growth Rates</b>	%	%	%	%
Revenues	2.0	0.5	5.0	3.5
Cash Flow	7.0	4.5	7.0	7.0
Earnings	11.0	7.0	12.0	14.0
Book Value	16.0	16.0	22.0	30.0

# Value Line Comparisons:

# **Fundamental Analysis:**

Company Name	AES Corp.
Symbol	AES
Date Worked On	1-Jun-11
Base Year	31-Dec-11
Price	\$12.84
Shares Outstanding	792

Market Capitalization	\$10,169
Cash and CE	\$2,520
Long Term Debt	\$16,642
Minority Interests	\$0
Goodwill	\$1,269
Intangibles	\$0
Other Intangibles	\$0
	<b>•</b> •••••
Enterprise Value	\$24,291
Short Term Debt	\$3,193
	¢0.700
Stockholders Equity	\$6,792
Depression and Americation	¢1.250
Depreciation and Amortization	\$1,350
СарЕх	\$950
	ψ930
Revenues	\$16,750
	<i>\\</i>
Total Assets	\$40,500
Net Income	\$840
Dividend Per Share	\$0.00
Interest Expense	\$1,600
Net Income Before Taxes	\$1,000
Enterprise Value Per Share	\$30.67
Price To Enterprise Value	41.86%
Total Debt	\$19,835
Total Debt / Net Income	2361.31%

Total Debt Per Share	\$25.04
Tangible Book Value	\$5,523
Book Value Per Share	\$8.58
Tangible Book Value Per Share	\$6.97
Price / Book Value	149.72%
Price / Tangible Book Value	184.13%
Price / Earnings Ratio	12.11
Enterprise Value / Earnings Ratio	28.92
Earnings Yield	8.26%
Earnings / Enterprise Value	3.46%
Price To Sales Ratio	60.71%
Net Income / Total Assets	2.07%
Total Assets / (Revenues/365)	882.54
Enterprise Value / Revenues	145.02%
Goodwill / Total Assets	3.13%
Goodwill / Stockholders Equity	18.68%
Debt / Equity	292.03%
Average P/E Last 10 Years	15.0
Operating Cash Flow	\$2,190
Operating Cash Flow Per Share	\$2.77
Free Operating Cash Flow	\$1,240
Free Operating Cash Flow Per Share	1.57
Free Operating Cash Flow Flow Yield	12.19%
Price / Free Operating Cash Flow	8.20

Revenues Per Share	\$21.15
Net Income Per Share	\$1.06
Doturn on Equity	12.37%
Return on Equity	12.37%
Bond Rating (S&P)	BB-
Growth Rate	6.00%
Dividend Yield	0.00%
Dividend / Net Income	0.00%
Dividend / Ocel, Flow	0.000/
Dividend / Cash Flow	0.00%
Interest Coverage Ratio	1.63
	1.00
Insider Activity	Neutral to ok
Buy-Backs	yes
Dilution	no
Monogoment Compensation	Foir
Management Compensation	Fair
Price to consider to buy more	\$13.00
	<b> </b>
Price to sell or consider reducing	\$19.00
Action (Buy, Hold or Sell)	Buy
Portfolio Allocation Suggestion	5%

As of Date	December 31, 2011
EV Analysis	
Date Worked On	June 1, 2011

Share Outstanding	792.00
Share Price	\$12.84
Market Capitalization	\$10,169.28
Less: Cash and Short Term	
Investments	(\$2,520.00)
Add: Long Term Debt	\$16,642.00
Minority Interest	\$0.00
Enterprise Value	\$24,291.28
EV per share	\$30.67
Stockholders' Equity	\$6,792.00
Adjustments:	
Goodwill	(\$1,269.00)
Tradenames	\$0.00
Other Intangibles	\$0.00
Net Stockholders' Equity	\$5,523.00
Adjusted Book Value per Share	\$6.97

Revenue	\$16,750.00
Net Margin % before tax	7.70%
Net Margin before taxes	\$1,289.75
Tax Rate	35.00%
Corporate Taxes	\$451.41
Net Income after Taxes	\$838.34
Net Margin %	5.01%
Shares Outstanding	792.00
eps	\$1.06

Adjusted Stockholder's Equity	\$5,523.00

Net Income after Taxes	\$838.34
Growth Rate of Net Profit for 10N	7.00%
Growth Rate of Net Profit after 10N through 15N	3.00%
FV of Net Profit in 10N	\$1,649.14
FV of Net Profit in 15N	\$1,911.80
FV of tangible book value plus Net Profits for 10N	\$22,447.42
FV of tangible book value plus Net Profits for years 11 - 15N	\$34,778.21
	¢04.004.00
Current Enterprise Value FV of tangible book value plus Net Profits for 10N	\$24,291.28 (\$22,447.42)
Years	(\$22,447.42)
ROI on tangible book value plus Net Profits for 10N	-0.79%
	0.1070
FV of tangible book value plus Net Profits for 10N	\$22,447.42
FV of tangible book value multiplier	3.00
, , , , , , , , , , , , , , , , , , ,	
FV of Tangible Book Value using BV multiplier in year 10	\$67,342.27
Current Enterprise Value	\$24,291.28
FV of tangible book value plus Net Profits for years 11 - 15N	(\$34,778.21)
Years	15
ROI on tangible book value plus Net Profits for 15N	2.42%
FV of tangible book value plus Net Profits for 15N	\$34,778.21
FV of tangible book value multiplier	3.0
	0.0
FV of Tangible Book Value using BV multiplier in year 15	\$104,334.62
	· · /· ·
Potential Future EV using BV multiplier above	
Current Enterprise Value	\$24,291.28
FV of Tangible Book Value using BV multiplier in year 10	(\$67,342.27)
Years	10
ROI on FV of Tangible Book Value using BV multiplier in year 10	10.73%
	<b>Ac</b> ·
Current Enterprise Value	\$24,291.28
FV of Tangible Book Value using BV multiplier in year 15	(\$104,334.62)
Years POL on EV of Tangible Book Value using BV multiplier in year 15	15
ROI on FV of Tangible Book Value using BV multiplier in year 15	10.20%

Sanity Checks:	
P/E in future	
FV of Net Profit in 15N	\$1,912
P/E estimate	15.00
Market Cap on above	-\$28,677
Years	15
Current Enterprise Value	\$24,291
ROI in 15N using above	1.06%
Potential Revenue Growth	
Current Revenues	\$16,750
Growth Rate of Revenues for 10N	7.00%
Growth Rate of Revenues after 10N through 15N	3.00%
FV of Revenues in 10N	(\$32,950)
FV of Revenues in 15N	\$38,198
FV of Revenues in 15N	\$38,198
Revenue Multiplier based on Al Meyer Rule of Thumb net margins	1
Possible Market Cap year 15	(\$38,198)
Years	15
Current Enterprise Value	\$24,291
ROI in 15N using above	3%

Report Date	02-Jun-11
Price	12.54
Growth Rate	7.00%
Price/Sales	0.59
Price/ Net Cash Flow	7.99
Price/ Net Book Value	1.80
P/E Ratio Current	11.83
P/E Ratio Year 2	10.63
Current Ratio	1.16
Quick Ratio	1.07
LT Debt / Shr. Equity	245.02%

LT Debt / Current Assets	190.28%
Return on Shr. Equity	12.37%
PEG Ratio (Current)	1.69
PEG Ratio Year 2	1.52
PEGY Ratio (Current)	1.69
PEGY Ratio Year 2	1.52
Graham Ratio (current)	21.28
Graham Ratio Year 2	19.12
Growth Flow Ratio	
(<12=nrml)	11.83
Cash King (s/b > 10 % )	7.37%
Flow Ratio (s/b < 1.25 )	1.26
Earnings Per Share	1.06
Projected EPS Year 2	1.18
Projected EPS Year 3	1.18
Projected EPS Year 4	1.18
Projected EPS Year 5	1.18
Intrinsic Value (current)	19.08
Intrinsic Value Year 2	21.24
Intrinsic Value Year 3	22.73
Intrinsic Value Year 4	24.32
Intrinsic Value Year 5	26.02
Intrinsic Value / Price	
(current)	52.15%
Intrinsic Value / Price Year	00.000/
2 Intrinsic Value / Price Year	69.38%
3	81.23%
Intrinsic Value / Price Year	01.23/0
4	93.92%
Intrinsic Value / Price Year	
5	107.50%

#### **AES Investor Day May 19, 2011**

#### Sum of the Parts Analysis<sup>1</sup> Indicates AES Share Price of \$14-\$16

\$ in Millions, Except Earnings Per Share	Basis	Unlisted Subs at 6.4x 2011 Proportional EBITDA <sup>2</sup>	Unlisted Subs at 7x 2011 Proportional EBITDA <sup>2</sup>	Unlisted Subs at 7.3x 2011 Proportional EBITDA <sup>2</sup>	Remarks
Enterprise Value of Unlisted Subs (Excluding Wind, Solar, Equity Earnings & Construction Projects of Listed Subs)		12,158	13,298	13,868	
Net Proportional Non-Recourse Debt as of 3/31/11		(6,036)	(6,036)	(6,036)	
Equity Value of Unlisted Subs (Excluding Wind, Solar, Equity Earnings & Construction Projects of Listed Subs)		6,122	7,262	7,832	
Equity Value of Listed Subs (Tiete, Eletropaulo & Gener)	Equity market cap as of 5/11/11	5,219	5,219	5,219	
Equity Value of Wind	Book value	997	997	997	
Equity Value of Solar JV	Book value	264	264	264	
Equity Earnings of Affiliates	11.4x AES share of 2010 after-tax earnings	454	454	454	Current 2011 market multiples
Projects Under Construction (Excluding Wind, Solar, Equity Earnings & Construction Projects of Listed Subs)	11.4x after-tax earnings	1,256	1,258	1,256	Maritza and Changuinola
Net Operating Losses (NOLs)	PV @ 10% discount rate	402	402	402	
Implied Equity Value Excluding Corporate Net Debt		14,714	15,854	16,424	
Corporate Net Debt as of 3/31/11		(3,695)	(3,695)	(3,695)	
Implied Equity Value		11,019	12,159	12,729	
Implied Equity Value Per Share		\$14.00	\$15.45	\$16.17	Based on 787 million shares

Note: Cash includes cash and cash equivalents, debt service reserves and short-term investments. 1. The process set forth do not reflect the Company's view of valuation. Rather, these numbers merety reflect the application of market multiples to certain of the Company's financial metrics. The resulting values do not include the value of the Company's exponent polenic. Anonge in control premium, or other factors relevant to the Company's view of its valuation. 2. A non-GAAP financial measure. Proportional EBITOA is calculated as proportional gross margin plus depreciation and amortization expense less general and administrative expense and is being used as a provy for sample before interest, taxes, depreciation and amortization. The Company's calculation does not include other expense income, gain on sale of newetiments. (loss) gain on sale of neutodiary stock. Impairment expense, threign currency transaction (losses) gains on net monetary calculation or dees not include offer expense). See Appendix for reconciliation. Midpoints of proportional EBITDA ranges have been used to calculate entreprive values. Proportional EBITDA is a same minetary position or other non-operating expense). See Appendix for reconciliation. Midpoints of proportional EBITDA ranges have been used to calculate enterprive values. Proportional EBITDA is asseen that adjusted fores Marging providee to nort 12 2011 earnings and on SHIPTICA ranges have been used to calculate enterprive values. The proprional EBITDA is asseen that adjusted fores Marging providee to nort 12 2011 earnings and on SHIPTICA ranges and ship of the company is a state of the company is

#### **Reconciliation of 2011 Guidance, Including Proportional Metrics**

	2011 Guidance (Given 4/20/11) <sup>1</sup>				
\$ in Millions, Except Earnings Per Share	Consolidated	Adjustment Factors <sup>2</sup>	Proportional <sup>2.8</sup>		
Income Statement Elements					
Gross Margin	\$4,000-\$4,200	\$1,550	\$2,450-\$2,650		
Adjusted Gross Margin <sup>3</sup>	\$4,850-\$5,050	\$1,850	\$3,000-\$3,200		
Diluted Earnings Per Share from Continuing Operations	\$0.93-\$0.99				
Adjusted Earnings Per Share Factors <sup>3</sup>	\$0.044				
Adjusted Earnings Per Share <sup>3</sup>	\$0.97-\$1.03 <sup>4</sup>				
Cash Flow Elements					
Net Cash from Operating Activities	\$2,650-\$2,850	\$1,250	\$1,400-\$1,600		
Operational Capital Expenditures (a)	\$775-\$850	\$250	\$525-\$600		
Environmental Capital Expenditures (b)	\$75-\$100	-	\$75-\$100		
Maintenance Capital Expenditures (a + b)	\$850-950	\$250	\$600-\$700		
Free Cash Flow <sup>3</sup>	\$1,750-\$1,950	\$1,000	\$750-\$950		
Subsidiary Distributions <sup>5</sup>	\$1,200-\$1,300				
Reconciliation of Free Cash Flow <sup>8</sup>					
Net Cash from Operating Activities	\$2,650-\$2,850	\$1,250	\$1,400-\$1,600		
Less: Maintenance Capital Expenditures	\$850-\$950	\$250	\$600-\$700		
Free Cash Flow <sup>3</sup>	\$1,750-\$1,950	\$1,000	\$750-\$950		
Reconciliation of Adjusted Gross Margin <sup>8</sup>					
Gross Margin	\$4,000-\$4,200	\$1,550	\$2,450-\$2,650		
Depreciation & Amortization	\$1,250-\$1,350	\$300	\$950-\$1,050		
General & Administrative	\$450	-	\$450		
Adjusted Gross Margin <sup>3</sup>	\$4,850-\$5,050	\$1,850	\$3,000-\$3,200		

1. 2011 guidance is based on expectations for future foreign exchange rates and commodity prices as of March 31, 2011, as well as other factors set forth in "Guidance" in the press release dated May 9, 2011.

dated May 9, 2011.
 The AES Corporation (the "Company") is a holding company that derives its income and cash flows from the activities of its subsidiaries, some of which are not wholly-owned by the Company. Accordingly, the Company has presented certain financial metrics which are defined as Proportional (a non-GAAP financial measure) to account for the Company's ownership interest. In many cases, the Company has no legal claim on these cash flows. See "definitions."
 A non-GAAP financial measure as reconsided above. See "definitions."
 Reconciliation of Adjusted EPS includes unrealized foreign currency losses of \$0.03, derivative losses of \$0.02, debt retirement losses of \$0.01 and gain on disposition of assets of \$0.02.

5. See "definitions."

#### **Reconciliation of 2012 Guidance, Including Proportional Metrics**

\$ in Millions, Except Earnings Per Share	2012 Guidance (Given 4/20/11) <sup>1</sup>					
s in minions, Except Lannings Fer Share	Consolidated	Adjustment Factors <sup>2</sup>	Proportional <sup>2.3</sup>			
Income Statement Elements						
Diluted Earnings Per Share from Continuing Operations	\$1.15-\$1.25					
Adjusted Earnings Per Share Factors <sup>3</sup>	\$0.124					
Adjusted Earnings Per Share <sup>3</sup>	\$1.27-\$1.374					
Cash Flow Elements						
Net Cash from Operating Activities	\$3,300-\$3,500	\$1,275	\$2,025-\$2,225			
Operational Capital Expenditures (a)	\$925-\$1,025	\$250	\$675-\$775			
Environmental Capital Expenditures (b)	\$100-\$150	\$25	\$75-\$125			
Maintenance Capital Expenditures (a + b)	\$1,025-\$1,175	\$275	\$750-\$900			
Free Cash Flow <sup>3</sup>	\$2,200-\$2,400	\$1,000	\$1,200-\$1,400			
Subsidiary Distributions <sup>5</sup>	\$1,400-\$1,600					
Reconciliation of Free Cash Flow <sup>8</sup>						
Net Cash from Operating Activities	\$3,300-\$3,500	\$1,275	\$2,025-\$2,225			
Less: Maintenance Capital Expenditures	\$1,025-\$1,175	\$275	\$750-\$900			
Free Cash Flow <sup>3</sup>	\$2,200-\$2,400	\$1,000	\$1,200-\$1,400			

2012 guidance is based on expectations for future foreign exchange rates and commodity prices as of March 31, 2011, except for Brazilian Real (BRL), as well as other factors set forth in "Guidance" in the press release dated May 9, 2011.
 The AES Corporation (the "Company") is a holding company that derives its income and cash flows from the activities of its subsidiaries, some of which are not wholly-owned by the Company. Accordingly, the Company has presented certain financial metrics which are defined as Proportional (a non-GAAP financial measure) to account for the Company as no legal claim on these cash flows. See "definitions."
 A non-GAAP financial measure as reconciled above. See "definitions."
 Reconciliation of Adjusted EPS includes unrealized foreign currency losses of \$0.03, derivative losses of \$0.01 and debt retirement losses of \$0.08.
 See "definitions."

# **Reconciliation of Subsidiary Distributions and** Parent Liquidity<sup>1</sup>

¢ in Milliona	Year Ended							
\$ in Millions		2009	2008	2007	2006	2005	2004	2003
Total Subsidiary Distributions1 to Parent & QHCs2	1,219	1,255	1,060	1,099	971	993	1,004	1,054
Total Return of Capital Distributions to Parent & QHCs <sup>2</sup>	171	167	150	106	72	57	126	242
Total Subsidiary Distributions <sup>1</sup> & Returns of Capital to Parent	1,390	1,422	1,210	1,205	1,043	1,050	1,130	1,296

\$ in Millions	March 31, 2011	December 31, 2010	September 30, 2010	June 30, 2010
Cash at Parent and QHCs <sup>2</sup>	546	1,122	1,418	1,776
Availability under Credit Facilities	772	715	679	458
Ending Parent Company Liquidity <sup>1</sup>	1,318	1,837	2,097	2,234

#### **Reconciliation of Full Year Capex**

	Consolidated Full Year			
\$ in Millions	\$ in Millions 2010			109
Operational Capex (a)	\$7	726	\$5	67
Environmental Capex (b)	\$71 \$55			
Maintenance Capex <sup>1</sup> (a + b)	\$7	'97	\$622	
Growth Capex <sup>1</sup> (c)	\$1,	535	\$1,916	
Total Capex <sup>2</sup> (a + b + c)	\$2,	332	\$2,538	
A := 1000	Consolidat	ed Full Year	Proportiona	I <sup>1,3</sup> Full Year
\$ in Millions	2010		2010	2009
Operating Cash Flow	\$3,510	\$2,202	\$1,901	\$1,331
Less Maintenance Capex1	\$797	\$622	\$557	\$438
Free Cash Flow <sup>1</sup>	\$2,713	\$1,580	\$1,344	\$893

#### Parent Sources & Uses of Liquidity

	First C	luarter
\$ in Millions		
Sources		
Total Subsidiary Distributions1	\$226	\$303
Proceeds from Asset Sales, Net	-	(\$1)
Refinancing Proceeds, Net	-	-
Increased/(Decreased) Credit Facility Commitments	-	-
Issuance of Common Stock, Net	\$1	\$1,571
Total Returns of Capital Distributions & Project Financing Proceeds	\$25	\$21
Beginning Parent Company Liquidity <sup>2</sup>	\$1,837	\$1,258
Total Sources	\$2,089	\$3,152
lses		
Repayments of Debt	(\$268)	-
Repurchase of Equity	(\$63)	-
Investments in Subsidiaries, Net	(\$301)	(\$217)
Cash for Development, Selling, General & Administrative and Taxes	(\$133)	(\$135)
Cash Payments for Interest	(\$43)	(\$54)
Changes in Letters of Credit and Other, Net	\$33	\$17
Ending Parent Company Liquidity <sup>2</sup>	(\$1,314)	(\$2,763)
Total Uses	(\$2,089)	(\$3,152)

### March 28, 2011 Review of VL 4/1/11 (12.64)

- 1.
- "Long-Term investors should take a look." "Plans to continue expanding in foreign markets is attractive, and at it's current equity price (12.47), above average 3 to 5 year returns." 2.

#### October 18, 2010 (12.46) J

Management estimate for 2010 adjusted eps is \$0.95. Using adjusted eps, the PE is 13.1. Diluted eps is estimated to be \$0.80-\$0.85. The company notes foreign currency adjustments but I am not inclined to consider as an adjustment since this is on-going and, in my opinion, a normal part of their business, so perhaps the \$0.85 is "normal" eps.

<u> </u>	more thanks serie an		
30 yr bond rate	6%	6.6%	6.6%
2010 eps est.	\$0.95	\$0.95	\$0.95
2011 eps est.	\$1.10	\$1.10	\$1.10
Growth rate	7%	7%	9.5%
Intrinsic value	\$15.68	\$14.25	\$17.42

#### Update of the intrinsic value schedule with assumptions and result:

The bond rate of 6.6% used is the approximate current yield on AES Corp. bonds due in 2017 and 2020. Value Line uses a growth rate of 7% and the growth rate of 9.5% is the Reuters consensus LT Growth rate.

#### Update of valuation analysis:

2010 est eps	\$0.95	\$0.95	\$0.95
10 yr growth rate	5%	10%	7.5%
15 yr growth rate	5%	7.5%	5%
Tangible book multiple	2	3	2.5
10 yr ROI using Tangible book	2.77%	10.80%	6.92%
15 yr ROI using tangible book	5.38%	11.76%	8.30%
15 yr ROI using 15 PE	-0.75%	3.13%	0.76%
15 yr ROI using Meyer rule of thumb	2%	6%	3%

#### John notes:

Book value at 6/30/10 – 6687/794 = \$8.42 per share

5 year average PE (from VL) is 16.4; assuming \$0.95 2010 eps and avg PE, the share price could be \$15.50 and using 2011 est eps of \$1.10, the price would be \$18.00.

I am inclined to hold the shares at this point. I like the geographic diversification the company offers. Of course, there are risks but overall, my impression is that some of the emerging markets (Asia and Brazil) will help results if other, more developed, areas continue to experience a weak recovery. For the first six months of 2010, North America generation and utility revenue increased 1% and 2% while Latin America generation was up16% and utility revenue was up 37%. At \$15. The shares offer about a 25% upside and I think that is worth holding.

There was one director purchasing shares (8,000) in May 2010. There have been no sales in 2010 according to form4oracle. On July 7, the company announced a \$500M share repurchase program.

Legg Mason sold 4.92% of its shares during the second quarter 2010 and now owns 7.13% to total shares. Fidelity Management increased their holdings by 22.1% during the second quarter 2010 and is now the largest shareholder, owing 9.86% of the total shares outstanding.

#### Other analyst notes:

**S&P** (9/1/10, price \$10.54) rates as a 4 star (out of 5) buy with a target of \$13. They project a 4% 3 yr eps growth rate, yet they see "above-average earnings growth and an improving balance sheet over the next couple of years." Their \$13 price is based on a PE of 11.3 on their 2011 eps estimate (\$1.15) – they note this PE is a 21% discount to its peers because of exchange rate risk and uncertainty in the global economy.

**Argus** (9/13/10, price \$11.19) has a buy with a \$16-\$17 target based on Price/sales and Price/book historical valuations. They project a 5 year eps growth rate of 11% and 2011 eps of \$1.25 (2010 estimate is \$0.99/share). Financial strength is medium-low and notes company is working to strengthen the balance sheet and conserve cash for debt service. Look for stronger growth internationally in 2011 and beyond.

I did check **Morningstar** and they had a FV of \$12 but the last report was dated 12/7/2009 which was prior to the CIC investment in March 2010. Given the material change with the CIC investment (for instance, much greater number of shares outstanding), the report has limited usefulness.

### September 28, 2010 (11.32) R Review of Value Line 10/1/10

- 3. Demand remains strong in Asia and Latin America...
- 4. Higher water flows and increased capacity. Construction in major plants in Vietnam, Chile and India, progressing well and on schedule.
- 5. EPS estimates stay at 0.95 for 2010. See John's notes on 4/6/10, where they were reduced to 1.00 from 1.10.
- 6. CIC got a 15% stake in AES. Yet, VL discusses that a JV has been scrapped due to US regulatory environment.
- 7. Company Financial Strength 'B.'
- 8. Untimely but above average appreciation potential.

#### September 23, 2010 R (11.10) Fitch Upgrades Eletropaulo's Ratings to 'BB+' and 'AA-(bra)'; Outlook Stable

"Fitch Ratings has upgraded Eletropaulo Metropolitana de Eletricidade de Sao Paulo S.A.'s (Eletropaulo) ratings. The Outlook remains Stable. The upgrade of Eletropaulo's ratings reflects Fitch's view on the strengthening of the Brazilian power sector fundamentals and the company's ability to keep a conservative credit profile...

The ratings reflect Eletropaulo's conservative financial profile based on its robust cash flow from operations, reduced financial leverage and strong liquidity position. The ratings also consider limited cash flow volatility in diverse economical scenarios and low risk of its regulated distribution business. Since 2006, the company's credit measures have remained strong and Fitch expects these to remain in line with the current rating category. Eletropaulo's ratings would be negatively affected by relevant changes to the hydrological and regulatory risks, which could significantly affect the industry fundamentals. The rating assigned to the 12th debenture issuance is one notch below the company's National Scale corporate rating, for being its sole subordinated debt.

*Leverage Should Remain Conservative, Despite the Aggressive Dividends Practice:* 

Eletropaulo presents a solid financial profile and its credit measures are consistent with the assigned ratings. On June 30, 2010, its BRL4.7 billion total debt was in line with previous periods, while leverage, measured by total debtto-EBITDA ratio, was virtually constant in relation to previous years. During the last 12 months (LTM) ended on June 30, 2010, Eletropaulo reported total debt-to-EBITDA of 2.7 times (x), net debt-to-EBITDA of 1.7x and Funds from Operations (FFO) adjusted leverage of 2.3x. Despite the practice of distributing 100% of net income as dividends, further to moderate investment growth, can put pressure on free cash flow (FCF), Fitch does not expect the net debt-to-EBITDA ratio to exceed 2.5x in the long-term. FCF was a negative BRL168 million during the 12 month-period ended on June 30, 2010.

#### Robust Debt Coverage Ratios:

Eletropaulo's liquidity position is strong and has been representing at least 1.5x short-term debt. Fitch expects a considerable reduction in Eletropaulo's liquidity position in the coming years, partially pressured by the aggressive dividends distribution practice. Nevertheless, the agency believes refinancing risk will remain low, based on the strength of its FFO and cash flow from operations (CFO), and the expectation that Eletropaulo will keep, at least, the minimum short-term debt coverage presented historically.

The company reported BRL1.8 billion of cash and marketable securities on June 30, 2010, which represents 9.2x the BRL194 million short-term debt. In this period the ratios cash + FFO/short-term debt was 18.7x; and cash + CFO/short-term debt was 16.8x. The company presents a favorable and well distributed debt maturity schedule, with a total BRL841 million coming due until 2012,

including Fundacao Cesp, and substantial amount of total debt with maturing from 2016 onward. The two debenture issuances held in 2010, with part of the resources used to the payment of BRL474 million of the Eurobond issuance in Reais, have lengthened the debt average tenor to 7.1 years and reduced the financial cost to CDI + 0.74% per year.

#### Increased Energy Consumption Should Continue Supporting Revenue Growth:

Eletropaulo's net revenue benefited from positive tariff readjustments and from increased energy consumption in its concession area. Tariff readjustments were 8.01% and 14.88% in July 2008 and July 2009, respectively, while energy consumption grew 0.1% in 2009, despite the global economic crisis, and 6.8% during the first semester of 2010 as compared to the same period in the previous year. The net revenue of BRL8 billion in 2009 was 6.9% above the previous year, while the net revenue of BRL8.6 billion recorded during the LTM ended on June 30, 2010 is 7.4% above that of 2009 and should be further favored by the 8% tariff readjustment of July 2010.

The operating cash generation, measured by EBITDA, was BRL1.7 billion during the LTM ended on June 30, 2010. As a result, EBITDA margin of 19.8% remained below that of other private power distribution companies in Brazil, although such indicator presents analytical limitations. Should the amount of BRL166 million, relative to expenses with Fundacao Cesp, be adjusted, EBITDA would then be BRL1.9 billion, the margin 21.7%, while net debt-to-EBITDA adjusted ratio would be 1.5x. There was a strong recovery in CFO, which reached BRL1.5 billion in the LTM ended on June 30, 2010. Fitch expects Eletropaulo's CFO to be moderately pressured after the next tariff review, scheduled for 2011.

Low Business Risk:

Eletropaulo's ratings incorporate the company's low business risk profile, resulting from its exclusive concession to operate within its service area; the monopolistic nature of the distribution companies; and its favorable concession area. Eletropaulo holds the exclusive concession for energy distribution in the metropolitan region of Greater Sao Paulo. This favors its credit profile, as this is one of the highest per capita income areas in Brazil.

#### Change of Control, Hydrological Risks:

Eletropaulo's ratings are based on its current shareholder structure, without considering the possibility for change of control. BNDESPar announced the intention to sell its participation in Companhia Brasiliana de Energia (Brasiliana) which, on its turn, indirectly controls Eletropaulo. Currently, BNDESPar, together with AES Corporation (Issuer Default Rating [IDR] 'B+' by Fitch), indirectly holds 35.3% of company's total capital. One clause in the Shareholders Agreement ensures AES Corporation the first refusal right to buy the shares owned by BNDESPar in Brasiliana. In case AES does not exercise its right it will be obligated to sell its participation in Brasiliana at the same time as BNDESPar. The risk of change of control to creditors is mitigated by covenants which shall force the buyer or the company to obtain a waiver from creditors or to refinance the debt, should the company's control be taken by any agent other than BNDESPar and AES Corporation.

Eletropaulo's ratings also incorporate the Brazilian power sector's exposure to hydrological risk since the country's generation matrix is highly dependent upon hydroelectric generation plants. Given that over 70% of the power generation installed capacity in Brazil is derived from hydroelectric power plants, severe droughts may expose distribution companies to rationing, which reduces power consumption and, as a consequence, creates negative impacts on their revenues. Current reservoirs' levels are favorable for this time of the year.

#### Key Rating Drivers:

The ratings could be negatively affected in case Eletropaulo starts performing with higher leverage and reduced liquidity. Fitch will also continue to monitor the outcome of legal issue involving the company and a possible debt with Centrais Eletricas Brasileiras S.A. (Eletrobras), which could lead to greater indebtedness. Improvement of the ratings depends on maintenance of strong operational cash flow generation and conservative credit metrics.

Fitch has upgraded the following ratings:

#### Eletropaulo

--Long-Term Foreign Currency Issuer Default Rating (IDR) to 'BB+' from 'BB';

--Long-Term Local Currency IDR to 'BB+' from 'BB';

--Long-Term National Rating to 'AA-(bra)' from 'A+ (bra)';

--Long-Term National Rating of the 9th issuance of debentures, in the amount of BRL250 million, maturing in 2018, to 'AA-(bra)' from 'A+(bra)';

--Long-Term National Rating of the 10th issuance of debentures, in the amount of BRL600 million, maturing in 2013, to 'AA-(bra)' from 'A+(bra)';

--Long-Term National Rating of the 11th issuance of debentures, in the amount of BRL200 million, maturing in 2018, to 'AA-(bra)' from 'A+(bra)';

--Long-Term National Rating of the issuance of the Bank Credit Certificate (Cedula de Credito Bancario-CCB), in the amount of BRL300 million, maturing in 2015, upgraded to 'AA-(bra)' from 'A+(bra)'; --Long-Term National Rating of the 12th issuance of subordinated debentures, in the amount of BRL400 million, maturing in 2014, to 'A+(bra)' from 'A(bra)'.

The Rating Outlook is Stable."

### 6/30/10 (9.35) R Review of Value Line

- 9. Lower NG prices reduced demand for coal generated electricity.
- 10. Quake in Chile reduced demand.
- 11. EPS estimates reduced to 0.95 for 2010. See John's notes on 4/6/10, where they were reduced to 1.00 from 1.10.
- 12. CIC gets a 15% stake in AES.
- 13. Untimely but above average appreciation potential.

### 5/19/10 AES (10.00) J

Current year consensus estimate of 1.00 but I think will be .88 due to CIC transaction so I will use .88, PE of 11.4; next year estimate of 1.05, PE of 10.5. There is no dividend. Global power provider but if we suspect global slowdown, these shares will be hurt. A decline of 40% would not surprise me. I would sell the position for re-allocation to fixed income.

## 4/6/10 (11.67) (J)

During March, AES sold 125.5M shares at \$12.60 per share to Terrific Investment Corp – a subsidiary of China Investment Corp. Proceeds totaled \$1.58B and CIC owns 15% of company. CIC is prohibited from selling the shares for 12 months.

### From the 4/2/10 Value Line:

- a. AES will begin deploying new capital expeditiously.
- b. Much of the development will probably be focused on Brazil.
- c. Reduced 2010 eps by .10 to \$1.
- d. Earnings should resume growth in 2011.

e. Lowered timeliness rank; now expected to mirror broader market this year.

f. They think shares offer above-average recovery 2013-2015.

AES had an investor meeting 4/5/10. The presentation for the meeting outlined management's reasons for thinking shares are under-valued. Including the CIC cash, AES's presentation indicates that shares are 17%-34% undervalued. The company's estimate is based on 2010 EBITDA multiples. The company contends that shares are now valued at 6.1 times EBITDA, while the market multiple is 6.8 times and historic multiple was 8.2 times. At 8.2 times EBITDA, AES says shares are worth \$16.66.

AES is largest holding in Legg Mason Value Trust, representing 8.3% of assets as of 12/31/09. In a Morningstar note on the fund, it noted that Bill Miller said he may sell some shares to reduce the allocation, as the allocation has risen due to price appreciation.

I ran the valuation schedule using the 12/31/09 numbers and then a second analysis that includes the additional shares issued to CIC. In the second analysis, I increased the 12/31/09 cash and equity by \$1.58B, representing the CIC investment. Whether the investment by CIC leads to access to development in China is a question yet to be answered and there are a number of very bright people that believe China's continuing growth is not a sure thing. Including the CIC investment, AES has a book value of \$7.88/share (\$5.60 tangible book).

A summary of the results and my assumptions:

	Low	High	Average
2010 estimated eps	1.05	1.05	1.05
10 yr growth eps	5.00%	10.00%	7.50%
15 yr growth eps	5.00%	7.50%	5.00%
Tangible book	2	3	2.5
multiple			
10 yr ROI	.33%	7.90%	4.25%
15 yr ROI	4.00%	10.18%	6.84%

#### Based on 12/31/09 – NOT adjusted for CIC investment

#### Based on 12/31/09 - adjusted for CIC investment

	Low	High	Average
2010 estimated eps	.88	.88	.88
10 yr growth eps	5.00%	10.00%	7.50%
15 yr growth eps	5.00%	7.50%	5.00%
Tangible book	2	3	2.5
multiple			
10 yr ROI	2.15%	10.13%	6.27%
15 yr ROI	4.95%	11.30%	7.86%

Using the 5% growth rate, there is nothing to get excited about, but the returns improve a great deal at a 10% and 7.5% growth rate. The issue is whether AES will be able to attain those growth rates. AES reported diluted eps of .98/share in 2009 and projected 2010 diluted eps to be .95-\$1.00/share (previous estimate of .95-1.05) and 2011 diluted eps of \$1.10-\$1.20. Assuming the lower end for 2010 and 2011, the company is projecting 15.8% eps growth. I think the company's estimate may be conservative, yet they are subject to factors such as commodity price and currency fluctuation that cannot be forecast with pinpoint accuracy.

12/31/09 Generation capacity 40,334MW 2010 additions 1,476MW (+3.7%) 2011 additions 790MW (+1.9%) AES says earnings growth will come from increased capacity/construction. They have plans for substantial increase in wind generation in China by 2020.

AES has a well-diversified power generation mix: Natural Gas -36%Coal -34%Renewables (hydro, solar, wind) -23%Oil -4%Diesel & Pet Coke -3%

Construction is financed with debt. The company can scale back construction projects if cost of debt increases or becomes hard to issue, as it did during 2009. Schedule of debt maturities (M) as of 12/31/09:

Year	Non-recourse	Recourse	Total
2010	\$1,771	\$214	\$1,985
2011	1,266	468	1,734
2012	867	0	867
2013	1,054	690	1,744
2014	1,458	500	1,958
Thereafter	7,985	3,677	11,662

Revenue and gross margin detail:

Revenue	2009	2008	% change	2009 % of total
Latin Amer	\$3,651	\$4,468	-18.3%	25.9%
Gen				
Latin Amer Util	6,092	5,907	+3.1%	43.2%
North Amer	1,940	2,234	-13.2%	13.7%
Gen				
North Amer	1,068	1,079	-1.0%	7.6%
Util				
Europe Gen	720	1,096	-34.3%	5.1%
Asia Gen	643	553	+16.3%	4.6%
Corp/other	5	21		
Total	14,119	15,358	-8.1%	

<b>Gross Margin</b>	2009	2008	% change	2009 % of total
Latin Amer	\$1,357	\$1,398	-2.9%	38.8%
Gen				
Latin Amer Util	918	886	+3.6%	26.3%
North Amer	477	660	-32.2%	13.6%

Gen				
North Amer	239	261	-8.4%	6.8%
Util				
Europe Gen	189	260	-27.3%	5.4%
Asia Gen	179	67	+67.2%	5.1%
Corp/other	136	100		
Total	\$3,495	\$3,632	-3.8%	

I still like the global diversification that this offers. I would buy at these levels for new accounts. Current accounts already have a full position. If the price was at \$16 or \$17, and nothing changed, I'd reduce the position as that is probably close to fairly valued. I would love to see management buy shares but that hasn't happened recently. The big risk with this is the possibility of another global slowdown. The share price went down to mid-single digits last year when fear was at its highest.

#### **Other analysts**:

**S&P** rates as 4 stars and buy as of 3/18/10 when price was \$11.56. AES is a superior independent power producer. They see above-average earnings growth and an improving balance sheet., partly due to expansion. Project revenue increase of 5% in 2010 and 6% in 2011. They see 2010 eps of \$1.21 and 2011 eps of \$1.32 (9.1% increase). (J-I don't believe they are including CIC shares in eps estimates but the report was written after that event so maybe my estimates are way to harsh.)

**Morningstar** rates as 3 stars and a fair value of \$12. They do not think the CIC deal was essential to AES and could be quid pro quo for entry in China. In order to enter Chinese markets, this might have been the price AES had to pay.

#### 10/2/09 (13.78) (J)

Review of Value Line (10/2)

Timeliness was upgraded to "1" on 8/28 and technical was lowered to "3" on 7/31.

- AES reported solid 2<sup>nd</sup> qtr results. Strong performance in China offset weakening demand in North America.
- Bottom line was helped by lower operating expenses and a more favorable tax rate related to U.S. subsidiary restructuring.
- Construction was completed on 374MW of generation facilities.
- Secured long-term, non-recourse financing for two more wind projects, 101MW facility in Armenia and 35MW in France, significantly adding to its renewable energy pipeline.
- Generating strong and improved levels of free cash flow. This will give AES opportunity to pursue future development projects and likely allow AES to further pay down debt.

- Preliminary talks held with China Investment Corp but no deal appears imminent.
- Share price has increased more than 50% since last report and now trades close to target price range, limiting recovery potential out to 2012-2014 (range of \$16-\$31).
- Revenue sources by geographic area: 65% from Latin America, 21% from North America, 12% from Europe and Africa and 8% from Asia.
- VL projects revenue growth of 4%, cash flow growth of 7% and earnings growth of 9% to 2014.

10 yr average annual PE is 19 and assuming \$1.1 eps (VL estimate), share price is \$20.90 so there still is upside to these shares even at a PE of 15. In August, AES raised its 2009 full year estimate for diluted eps from continuing operations to \$1.15-\$1.20 from earlier estimates of \$1.03-\$1.13.

In addition, I like the geographic diversification that this company offers and would continue to hold it as we have a full position (5%-6%).

### 5/8/09 (9.42) up 15% today (John)

AES reported first qtr results today. .33eps vs. .27 consensus. Company also reaffirmed guidance for the year. Tax rate was only 26% this qtr, expect mid 30's for the year. Revenues were as expected. Ceo noted emerging markets seemed to have bottomed. During qtr. Industrial demand was down around 10% but was offset by residential and commercial demand.

Still stressing liquidity and they have restructured debt so that only have \$154M due in Sept and that represents total liability in 2009 and \$789M due in March 2010.

In response to stock price, Ceo noted that he thought people were missing the free cash flow of the company. The company defines free cash flow as operating cash flow less maintenance cap ex. In addition, the company started breaking out proportional cash flow—this represents aes's ownership percentage in operations. Their proportional free cash flow increased to \$203M in 1Q09 vs. \$163M in 1Q08.

### 4/1/09 (5.74) (Ron) Review of Value Line

- 1. timeliness and safety lowered 3/13 and 4/1 respectively
- 2. Target price range 16 32
- 3. Legg Mason owns 13.5% (3/09 proxy)
- 4. Claims eps decline was shortfall in revenues, currency translation and flight to safety.
- 5. Strong dollar could hurt earnings. (Yet, this is a counter dollar play and hence positioning for us has buffer potential.)
- 6. Commodity price risks and currency risks.
- 7. Suspended share buy backs to preserve liquidity.
- 8. Lots of risks, lots of potential rewards.

#### 1/26/09 (8.58) (Ron) Review of Morningstar report dated 1/2/09

- 1. 3 Star hold rating, no moat, and 11 fair value, no buy or sell price.
- 2. Likes that company can take advantage of growth opportunities in South America. For this reason, M\* appreciates the lack of dividend.
- 3. Likes the diversification of 28 countries and use of long-term contracts.
- 4. Aggressive and wind and other renewable sources. Focused on low carbon output.
- 5. History of shaky accounting gives them pause.
- 6. Cash is tough as AES looks to bring down debt as planned, and as they continue with Capital Expansion.
- 7. Believes lack of dividend for debt pay-down and capital expansion could create future entity strength.
- 8. Expects robust double digit earnings growth, although world-wide recession. They project a 10% eps growth for 5 years.
- 9. Biggest risk is political instability in countries it works in.
- 10. Currency play in South America. Believes AES will weaken with low emerging market currency.
- 11. 2/3rds of debt is non-recourse.
- 12. Largest market is USA, followed by Brazil.
- 13.

### 11/11/08 (7.14) (John)

AES reported 3<sup>rd</sup> qtr earnings last week. Diluted earnings per share were .22. This included .09 foreign currency translation losses. Revenue grew 25% over last year and gross margin increased 13%. The tax rate declined to 32% versus 39% in 2007 due to a lower effective tax rate in Mexico. The company also lowered eps guidance for 2008 from \$1.16/share to \$1.09/share and lowered 2009 guidance from \$1.20-\$1.25 by .05 to \$1.15-\$1.20.

The company repurchased \$143.3M of shares (10,691,267 shares) during the  $3^{rd}$  quarter. There is still \$256.7M remaining of the \$400M authorized by the board and announced during the  $2^{nd}$  qtr call.

During the conference call management spoke at length about its liquidity. CEO mentioned that they focus more on cash than any other metric. Cash is relied on to repay debt, or in today's environment "buy back stock at prices which creates an incredible amount of value for our shareholders." The first priority is to ensure that they can pay down debt when it matures.

The company next focuses on projects already under construction. Currently operating under the premise that any additional growth must be funded by cash flows that remains. Reducing the amount invested in growth capex in the near term by deferring or canceling projects in the growth pipeline. They are reviewing growth projects and will comment more during 4<sup>th</sup> qtr call.

CEO noted that "if the economy grows 4% you might see power demand increase 5%." Interesting and I wonder if that can be verified historically.

Overall, I thought this was a good report and I think management said all the right things as they addressed debt and cash flow in depth. I would continue to purchase shares at these prices.

#### 11/4/08 (7.72) (John)

The bonds that I track seem to have stabilized recently. The 2010 and 2011 are both trading at around 95 yielding around 11.5% and 12%. These had traded around 105 and in the mid-80s within the past 2 months.

Using an average PE over the past 10 years against 2008 earnings, one arrives at a share price of \$20.39 and using the 5 year average, the share price is \$19.14. Cutting that 10 year average in half, the share price would be around \$12. I continue to think that these are being priced for a depression. There seems to be a margin of safety built into these prices. I would not add to position at this point as I think it is important to hear what management says on the 3<sup>rd</sup> qtr call and that should occur in the next two weeks.

Management buying shares on the open market last month is a positive sign, as that was absent for a while. In describing the company's moat, Morningstar says "none". It would seem that the company's operations would be hard to duplicate and perhaps "none" is too harsh. With the geographic diversity, comes political risk. Much of AES's coverage area has been going through booming times recently. How will these governments react when faced with a slowdown?

I will hold the current 5% and see what the 3<sup>rd</sup> quarter holds along with any cutbacks to the company's previously announced growth plans. Any new accounts should have this as a position, a 5% position could be built as the stock has been volatile recently.

### 10/30/08 (8.02) (John)

At Ron's suggestion I ran the "Altman Z score" using 2007 year end numbers and the score was 1.06 which is extremely low and indicates much stress. Above 3 is very good and below 1.8 is very poor. I am not very familiar with this ratio but on the face of it, this is disappointing. I compared to Mirant (AES competitor) and Mirant received a 1.17-still a poor score. Perhaps the ratio does not compute accurately for utilities? XOM received a score in the high 20s.

#### 10/29/08 (7.45) Ron email suggestions

1. Q: Read Citi report. They seem to have addressed Free Cash flow available for debt payments etc, Blend these into your own thoughts.

A: Citi's 10/28/08 report lowered their eps to 1.09 from 1.26. Also decreased target price to \$9 from \$21 and cited substantially increased risks in AES's markets. They are now projecting earnings to grow 13.7% in 2009 and 17.7% in 2010. We are projecting 10% in our mid-range estimate and have projected 1.12 eps in 2008.

In discussing the free cash flow, Citi is projecting an 8.7% increase in operating cash flow. Also addressed is AES repayment of debt, which the company does not include in its calculation of FCF. The company has \$800M and \$1.4B loans due in 2009 and 2010. These will be able to be repaid from operations based on projected cash flows and current cash in hand. As noted in our work, Citi also indicates that the company's projected growth is dependent upon debt financing and that market is quite difficult at the moment. Again, as we indicated, the company has the option to buy back shares and delay expansion plans if financing is not possible or if project costs increase substantially.

2. Q: Can you find more on level 2 assets. Could this at all be reason for price drop. Maybe call or email IR.

A: From the 10-Q, "fair value is determined based on comparisons to market data obtained for similar assets and are considered Level 2 inputs...The investments consist of certificates of deposit, gov't debt securities and money market funds held by our Brazilian subsidiaries...investments are held by highly rated institutions and governmental agencies..." Derivatives are primarily interest rate swaps and foreign currency swaps as the company attempts to minimize risk from interest and foreign currency exchange rate and commodity price fluctuations. I am not too concerned with this categorization but will try to remember to compare to future results.

3. Q: I think my table on item 8 (10/27/08) should remove deferred taxes. Interesting , liability could be punishing on balance sheet, and perhaps incorporated in one of Munger's items on check list (page 2 of checklist I sent , whereas liabilities could be a positive (think insurance float), just rambling here, but a thought.

A: Maybe we leave note as is just to note that it was looked into? It does appear to be punishing to book value but I would leave as is to be on conservative side. Yet, no real allegiance to the note at all and if you want to delete note, I'd have no problem.

4. Q: Please give various analysis and maybe cut and paste some of our worksheets to help us visualize what expected earnings, cash flow and valuations could be, ROI, etc. Some type of road map. I think one example might be from our notes, and my old report, page 29,30,31, 34,35 and 36. Please incorporate and comment items not yet addressed if material from page 32 - 33.

A: The stock is currently trading at its low average PE ratio for the 10 years ending 12/31/07. Below, I have calculated an estimated share price based on

current eps at the low P/E, the high P/E and the 10 yr avg P/E. I have also increased eps 4% per year and calculated a price using the same average P/E ratios.

Avg PE from Value	
Line	
1998	26.5
1999	27.2
2000	33.4
2001	27.1
2002	7.2
2003	11.2
2004	
2005	16.5
2006	18.5
2007	21.8
Average	20.39
2008 est eps	1.16
Potential Price using:	
High PE	38.744
Low PE	8.352
Avg PE	23.6524
2012 est eps	1.357036
Potential Price using:	
High PE	45.325
Low PE	9.770659
Avg PE	27.66996

The intrinsic value analysis calculates a current value of 16.13 per share. This is based on a growth rate of 8.5%. Using a 4% growth rate would give a current value of 10.44 and a year 5 value of 12.76 (vs. 22.39 using 8.5%).

Intrinsic Value (current)	16.13
Price / Intrinsic Value(current)	49.23%
Intrinsic Value Year 2	17.53
Price / Intrinsic Value Year 2	45.29%
Intrinsic Value Year 3	19.02
Intrinsic Value Year 4	20.64

**Estimate of eps**—these growth rates are well below the company's projections. The company's projections are based on the ability to finance growth with debt. As the credit markets are only now beginning to thaw, the ability to finance growth seems to be a difficult task. Perhaps this will be addressed by the company when the 3<sup>rd</sup> quarter results are reported.

1.46

1.52

#### **Projected eps Earnings growth rate** 4% 6% 7% 2008 1.16 1.16 1.16 2009 1.21 1.23 1.24 2010 1.25 1.30 1.33 2011 1.30 1.38 1.42

1.36

#### 10/27/08 (7.34) (Ron)

2012

1.Q: Spoke with John regarding valuation analysis 20081026. I had asked John to run some punishing numbers, and John used growth rates for 15N of 5%. John mentioned this is well below company guidance. John is not so sure company guidance will turn into reality. John will document a worksheet of perhaps what he considers to be an achievable target. At the same time recognizing that NI and CF are not that close to each other. I would suggest John consider using both methods, and reconcile NI to CF and indicate why he thinks there will be differences going forward. John, please comment on your expected FCF going forward.

**A:** AES is currently projecting eps increases of 14%-17% through 2012. This appears to be beyond reality. Re-ran the valuation analysis using different growth rates.

Y1-Y10 eps	Y11-Y15 eps	Y1-Y10 fcf	Y11-Y15 fcf		
growth	growth	growth	growth	ROI Y 10	ROI Y15
14%	7%		-	9%	11%
10%	5%			6.4%	8.7%
3%	3%			1.9%	4.6%
		10%	5%	11.3%	12.4%
		7%	7%	9.4%	11.5%
		3%	3%	7.1%	8.3%

Growth expectations will probably be somewhere in the middle of the above chart, with probably an average 7% growth with an ROI around 7%-10%. Much of the forecasted growth is from scheduled plant expansions, especially in Latin and South America. AES is projecting 4,100 MW additional generation by

2012. Total current generation is about 43,000 MW. Growth could be inhibited by credit market and also slow downs in their markets. Latin America and Mexico represent about 30% of generation, Europe 30%, North America 32% and Asia 8%. This geographic diversity may not be a benefit in the face of a global slowdown.

- 2. I had sent John an email on  $\frac{10}{25}$ , all items were answered.
  - A. Subsidiary distributions are outlined in company presentations. Other than that all operations are consolidated. John, please confirm my comment. This is correct. The company provides this information to show "parent" liquidity.
  - B. In regards to Capex, John used maintenance cap ex. versus total capex which includes growth. Theory being if financing does not come in, expenditure will not occur. Hence, in bad credit environment, perhaps capex can be postponed or eliminated. Capex and other cash flows were indicated below on 10/24/08.
- 3. I noticed that MW's went up since 2005 report, yet headcount went down. Just mentioning.
- Q: John please confirm. FCF as discussed by AES, does not reduce for debt repayments or share buybacks. Yet, we should consider as debt repayments are not contingent.
  A: This is also true. AES reduces operating cash flows by maintenance cap ex to arrive at FCF.
- 5. Level 2 assets and exposure, or concerns as indicated in 2Q08 10-Q. On page 37 of 2Q08 10-Q we see that of the \$1,839, most are level 2, with a small portion of Level 3. Just something to watch for possible future balance sheet impairment (or mark-up).
- 6. AES has sold off in a big way this year. Perhaps reasoning is as follows:
  - a. General Utility trends. DJUA is down about 37% YTD. Yet AES is down over 60%.
  - b. Emerging markets getting hit.
  - c. Leveraged companies getting hit.
  - d. AES has large presence in South America, which is getting hit in both currency and in valuations.
  - e. Is Bill Miller from Legg Mason a big seller?

- 7. Egan Jones Notes to 5/9/08 report:
  - A. Spread over treasuries as of (John, please look at Egan RV analysis or whatever SPOB) as of 9/17/08, EJ relative value indicates that AES debt was "slightly rich". Since then, price has come down more than "slightly".

	Price 9/17/08	Price 10/28/08
Aes.hu (2010)	105.96	93.96
Aes.gi (2011)	106.33	89.06

- B. One rating better than S&P. EJ rates it BB.
- C. Major risks include drop in operating income, share repurchases and M&A events.
- D. Interest Coverage getting slightly better with time.
- E. Cash ratios improving. Cash to indebtedness has risen to 18.7%. Current ratio reasonably strong at 1.5:1.
- F. Expects future revenue growth of 15% over the next couple of years.
- G. Expects gross margin to stay in area of 68.0%.
- H. Expected EPS:

Year	EPS	Shares Out	Equity
2008	1.21	674	7,273
2009	1.78	677	8,541
2010	2.47	677	10,205

8. John , Please comment on the following Table:

Shareholder Equity	\$3,164
Less:	
Goodwill	(1,416)
Deferred Taxes	( 900)
Adjusted Tangible	\$848
Equity	

I will note that there was a deferred tax liability of \$1,197 as of Dec. 31, 2007 and perhaps we should net the deferred asset and liability.

Note on deferred tax assets from the 10-K: *This asset is offset by a deferred tax liability and is expected to be recovered, without interest, over the period book-tax timing differences reverse and become current taxes.* 

9. Just a mention, the 2007 10-K indicated ROI assumptions on page 179 of 8.00% USA and 12.41% Foreign. I mentioned this previously, find it potentially aggressive, but not much one can do about that, other than monitor it, and perhaps model less net income based on potentially greater benefit contribution required in future.

2008	1,142
2009	623
2010	1,087
2011	1,177
2012	751
Thereafter	7,659

10. Long-Term Debt Maturities from 10-K

The above certainly looks manageable on the face.

 John, please review my 2005 presentation and comment on positive and negative developments since then. One positive since 2005 is the bond rating increase.

AES generation capacity has increased from 35,320 Gross MW capacity to 43,129 MW as of June 2008, an increase of 22%, with an additional 3,029 MW under construction. 56% of the MW under construction is in Latin America. This area has recently been under pressure as it is heavily tied into commodities.

# Ron's projected revenue comparison

-	Est	Actual	
2004	8900	8745	-1.74%
2005	9600	10247	6.74%
2006	10500	11576	10.25%
2007	11000	13588	23.53%

<b>EBIDTA comparis</b>	on	
Actuals	2004 2007	
Net income	374 -95	
Add:		
Int exp	1,585 1,788	
Inc tax	275 685	
Deprec	767 942	
EBITDA	3,0013,32010.63%	ó

AES is currently trading at, arguably, a more attractive price than in 2005. A current PE of around 7 vs. an avg 2005 PE of 16.5. Book value has increased from \$2.51/share at 12/31/05 to \$4.72/share at 12/31/07 and a value line year end estimate of \$5.85/share at 12/31/08.

Total debt has decreased from \$18,588M at 12/31/04 to \$\$17,994M at 12/31/07. A small decrease but significant in that the company has increased generation capacity by 22% without increasing the debt burden.

#### 12. Bond Analysis:

- A. AES.HU . 9.375's 9/15/2010, Egan Jones on 9/17/08 claimed price of 105.96 and yield of 6.18%. Finra on 10/27/08 shows price of 87.00 and yield of 17.81%. Hopefully this is not a sign of hell to come. Looks like "1MM+" traded. Interesting that John tracked this as of 10/24 and yield was 9.94%
- B. AES.GI . 8.875's 2/15/2011, Egan Jones on 9/17/08 claimed price of 106.33 and yield of 6.02%. Finra on 10/27/08 shows price of 97.00 and yield of 10.36%. Last trade 10/22/08. Interesting that John tracked this as of 10/24 and yield was 10.36%
- C. AES.HLI . 8.275's 11/14/2011, Egan Jones on 9/17/08 claimed price of 104.55 and yield of 7.00%. Finra on 10/27/08 shows price of 90.00 and yield of 12.66%. Last trade 10/20/08.
- D. AES.HT . 7.75's 3/1/2014, Egan Jones on 9/17/08 claimed price of 98.29 and yield of 8.15%. Finra on 10/27/08 shows price of 80.05 and yield of 12.91%. Last trade 10/27/08. 500K traded.
- 13. John, please elaborate on the NOL. Has it grown, evolved, etc? The NOL at 12/31/07 was \$2B vs. \$1.8B in 2006 and \$1.9B in 2005. \$33M expires between 2009 and 2011 and \$1.9B expires between 2018 and 2027.

14. John, please write your thesis. Incorporate reasons for ownership, etc.

AES is a global power generator and distributor. Most of the projected growth is from emerging markets—57% in Latin America. These markets have been booming recently. Unknown is whether that boom was due solely to the cheap cost of credit available for the past several years. Another potential issue relates to how much of the growth was fueled by the commodity bubble. The company is trading at about 2 times tangible book with a PE of around 4. It seems that the market is pricing in a great deal of bad news. While growth is unlikely to be at the company's projections, the company has made comments about future investments needing to make financial sense before the company moves ahead with the project.

The share price has fallen 70% this year and that is a great concern. Speculation of hedge fund selling and thought that Bill Miller has probably reduced his position (he made comments about becoming more diversified) during the 3<sup>rd</sup> qtr. Bond prices have fallen and need to be watched but that may be due to illiquidity and lack of buyers (or forced selling).

I think there is great potential for this investment but it is not without risk. The company is diversified around the world—hopefully, this is a positive, but one can't tell. The company will report earnings within a few weeks and it will be interesting to see if projections are lowered and the impact of the global crisis on operations. At this point, I would recommend we hold the position (currently 5% +/-) and wait for  $3^{rd}$  qtr results within the next couple of weeks and see how results were and what the future holds for the company's expansion plans.

#### 10/24/08 (7.65) (John)

#### Valuation analysis-updated

The valuation analysis, revised to show a lowered growth rate, calculates returns of 3% and 6% if using a 5% growth rate for the 15 year period. If rates are increased to 7%, the returns are increased to 4% and 8%. I think I read or heard Buffett or John Bogle talking about going forward long term growth of 7% is reasonable. AES is projected earnings growth of 14%-17% over the next five years (through 2012).

The company's growth is dependent upon expansion. Can the company obtain the financing necessary for the expansion? AES's Chilean sub was able to obtain \$1B in financing last week for the development of 518MW facility in Chile. At Sept 24, 2008 conference AES noted that "commercial lenders continue to finance well structured/competitive projects on a non-recourse basis". Also noted that projects in early development can be re-deployed or postponed.

	<u>2Q 20081</u>	<u>Q 2008 2</u>	<u>2007 total</u>	<u>4Q073</u>	<u>3Q07 :</u>	2 <b>Q07</b> 1	LQ072	2006 total
North America Utilities	43	19	170	54	42	74	0	142
Latin America Utilities		5	215	41	57	118	0	142
Europe & Africa Utilities			33	31	0	0	1	25
North America Generation	42	119	316	48	150	32	85	353
Latin America Generation	84	22	93	54	24	11	3	142
Europe & Africa Generation	60	30	177	76	45	13	44	73
Asia Generation	27	1	72	29	35	8	1	85
Other (wind & other alternatives)	<u>13</u>	<u>25</u>	<u>23</u>	<u>10</u>	<u>8</u>	<u>3</u>	<u>3</u>	<u>9</u>
Total	269	221	1099	343	361	259	137	971

AES Subsidiary distributions (\$M)

#### Update on other analysts:

Morningstar (10/6/08) raised their uncertainty rating and lowered fair value to \$14 (still 3 stars) due to their concerns with currency fluctuations in Brazil and Chile. They also noted concerns with slowing economic growth in key markets.

Value Line (10/3/08) lowered the technical rating to 4. Appreciation potential is below market average and suggested that investors wait until the pricing environment improves. Price was 12.82 at time of report.

#### **Cash flow**

The company attempts to fund its maintenance capital expenditures via cash generated from operations. The company noted that growth cap ex would be funded through operations, project level financing or possibly parent company debt.

The subsidiary distributions noted above are distributions to the parent company. The subsidiary results are included in AES's consolidated financial statements. These distributions should not be added to the operating cash flow. Footnote in 8K explaining distributions:

Subsidiary distributions should not be construed as an alternative to Net Cash Provided by Operating Activities which are determined in accordance with GAAP. Subsidiary distributions are important to the Parent Company because the Parent Company is a holding company that does not derive any significant direct revenues from its own activities but instead relies on its subsidiaries' business activities and the resultant distributions to fund the debt service, investment and other cash needs of the holding company. The reconciliation of difference between the subsidiary distributions and the Net Cash Provided by Operating Activities consists of cash generated from operating activities that is retained at the subsidiaries for a variety of reasons which are both discretionary and non-discretionary in nature. These factors include, but are not limited to, retention of cash to fund capital expenditures at the subsidiary, cash retention associated with non-recourse debt covenant restrictions and related debt service requirements at the subsidiaries, retention of cash related to sufficiency of local GAAP statutory retained earnings at the subsidiaries, retention of cash for working capital needs at the subsidiaries, and other similar timing differences between when the cash is generated at the subsidiaries and when it reaches the Parent Company and related holding companies.

\$M	(Actual)20 07	2008	2009	2010	2011	2012
Cash from operating activities	\$2,356	\$2,20 0	\$2,200- \$2,500	\$2,300- \$2,900	\$2,900- \$3,600	\$3,300- \$4,100
Maint cap ex	\$984	\$800	\$800	\$700	\$800	\$800
Free Cash flow	\$1,372	\$1,40 0	\$1,400- \$1,700	\$1,600- \$2,200	\$2,100- \$2,800	\$2,500- \$3,300

Projected cash flows from the company:

Whether the company can achieve this cash flow growth is debatable as the growth is dependent on power growth estimates. AES has said that they will have 4,100MW additional capacity by 2012. The Chilean project that AES received the \$1B financing for had not been announced previously (if I am interpreting correctly). As of the end of September, the company has now announced 1,676MW of that 4,100MW projection through 2012.

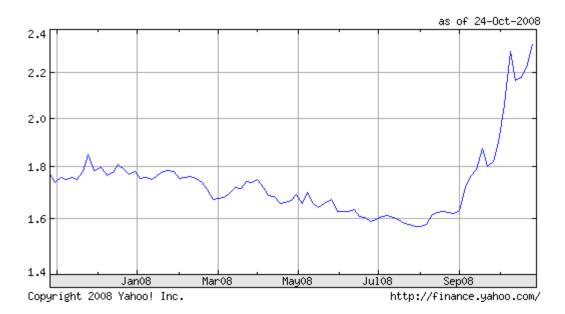
#### Other info:

Noted in 10-K—"factors that could IMPAIR future value included higher oil prices and a strong U.S. dollar." While the price of oil has fallen by about 50% since July, the U.S. dollar has been on a tear, rising by about 50% since July. The question is whether the decrease in oil and increase in the dollar will offset each other equally.

#### U.S. Dollar to Brazilian Real Exchange Rate

Range: <u>1d 5d 3m</u> **1y** <u>2y 5y</u>

**Invert Currencies** 



Insider transactions—insiders have purchased over 100K shares in the market since Sept 1, most coming in Oct at prices between \$8 and \$9 per share. President and CEO accounted for about half of those purchases. Not a significant amount but significant in that purchases consisted of several individuals and some of those had not made market purchases in over a year.

The price on the bonds have declined since the beginning of Sept. and are now yielding in the 10% range—which is my unofficial market price since that is what Buffett received from GS and GE.

The AES.GI (2011 maturity) are priced at 97 for a yield of 10.36% and the aes.hu(2010 maturity) are priced at 99.03, yielding 9.94%.

During the recession of the early 2000s, the share price of AES traded between \$1 and \$2 for several months in 2002. Could it go back to those levels? I don't have the answer. From a Reuters article, *Some Latin American governments are better prepared than others to weather the turmoil. But fund managers would do well to keep an eye on even the best-prepared countries, such as Chile, Mexico, Colombia and Brazil, for policy slippage as their economies slow....Mexico, Brazil, Chile and Peru have embraced fiscal and monetary policies meant to provide long-term stability...These countries have less flexibility going into the downturn in oil and grain prices. If they stick with their current policies, which is likely for ideological reasons, their economies will underperform, Ramos said.* 

"This tougher environment will differentiate those countries that have a powerful engine and those who were going fast just because they were driving downhill," Ramos

*said.<u>http://www.reuters.com/article/forexNews/idUSTRE49J5HG20081020</u> ?pageNumber=2&virtualBrandChannel=0* 

#### 9/9/08 (13.89) (John)

AES hit a 52 week low today (13.85), down 7% today with no news. The bonds are still performing well although the last trade was 9/4/08.— AES.GI last trade at 105.43, yielding 6.425% vs. coupon of 8.88%; aes.hu last trade at 106.25, yielding 6.031% vs. coupon of 9.38%.

2<sup>nd</sup> quarter institutional holder activity: Legg Mason remains largest holder, 16.4% of shares outstanding (110.6M shares). During the 2<sup>nd</sup> qtr Legg reduced holding by 2.6M shares (2.3%). Davis Advisors increased holdings by 1,183% or 6.9M shares in 2<sup>nd</sup> qtr and now owns 7.5M shares. The top 10 holders own 51% of shares outstanding.

Little insider activity in 2008: SVP sold 10K shares @ 15.46 8/29/08 from his wife's(?) revocable trust. Director purchase of 2K shares @15.80 8/14/08 and COO purchase of 6.2K shares @16.63 3/25/08. One needs to question why insiders have not been buying shares as they have fallen this year from low 20's—especially given CEO remark during  $2^{nd}$  qtr call referring to \$15 share price as "stupid". Hopefully, we will see some insider purchases.

The company also announced a buyback of up to \$400M of shares. At \$15/sh, this would represent about 4% of outstanding shares.

#### **Subsidiary distributions**

In 2005, Ron projected future subsidiary distributions of \$1B annually. Actual subsidiary distributions were \$971M in 2006 and \$1,099M in 2007 (+13%). YTD through June 30, 2008, actual distributions were \$490M compared to YTD 6/30/07 of \$396M, an increase of 24%.

#### **Debt/interest coverage**

\$ millions	Non-recourse	Recourse	Total
Current (6/30/08)	\$1,043	\$154	\$1,197
Long-term (6/30/08)	12,817	5,088	17,905
	\$13,860	\$5,242	\$19,102

The following debt/maturity information is from Reuters as of 9/10/08: **Debt Structure** 

		Amount	Amount
Name	#	Issued	Outstanding
Loans	63,0	28,000,000	
Bonds	13 8,	772,133,322	6,384,984,322
Total	19 11,8	800,133,322	

Maturity					
2009					
Description	Maturity Date Amount Outstanding (USD)				
AESC / AES 9.50000 /01/09	01-Jun-2009	153,537,000			
2010					
Description	Maturity Date Amou	unt Outstanding (USD)			
AESC / AES 9.37500 /15/10	15-Sep-2010	213,609,000			
2011					
Description	Maturity Date Amou	unt Outstanding (USD)			
AESC / AES 8.87500 /15/11	15-Feb-2011	129,340,000			
AESC / AES 8.37500 /01/11	01-Mar-2011	237,133,322			
2013					
Description	Maturity Date Amou	unt Outstanding (USD)			
AESC / AES 8.75000 /15/13 '08	15-May-2013	690,254,000			
AESC / AES 8.75000 /15/13	15-May-2013	1,200,000,000			
AESC / AES 7.37500 /15/13 '03 PUT	15-Jun-2013	26,111,000			
2014					
Description	Maturity Date Amou	int Outstanding (USD)			
AESC / AES 7.75000 /01/14	01-Mar-2014	500,000,000			
2015					
Description	Maturity Date Amou	int Outstanding (USD)			
AESC / AES 9.00000 /15/15	15-May-2015	600,000,000			
AESC / AES 7.75000 /15/15	15-Oct-2015	500,000,000			
2017					
Description	Maturity Date Amou	int Outstanding (USD)			
AESC / AES 8.00000 /15/17	15-Oct-2017	1,500,000,000			
2020					
Description	Maturity Date Amou	unt Outstanding (USD)			
AESC / AES 8.00000 /01/20	01-Jun-2020	625,000,000			
2023					
Description	Maturity Date Amou	int Outstanding (USD)			
AESC / AES 7.80000 /09/23 '08 MTI	N 09-Feb-2023	10,000,000			

AES intere	est coverage	)			
	-		YTD	YTD	
			6/30/2008		6/30/2007

1136	-207
557	450
1693	243
904	836
t 2597	1079
2.872788	1.29067
YTD	
6/30/2008	
1136	
557	
-669	(see note below)
1024	
904	
t 1928	
2.132743	
	557 1693 904 t 2597 2.872788 YTD 6/30/2008 6/30/2008 1136 557 -669 1024 904 t 1928

The second calculation attempts to show interest coverage based on continuing operations by backing out \$912M gain on sale of investments (net of tax). The ratio still shows improvement over the prior year even with this adjustment. Even with the improvement, the ratio is still below the 4X that we like to see.

That said, the debt is not showing stress and is yielding a rate less than indicated by its ratings.

#### **Revenue/margins**

Revenue increased 28% for the six months ended 6/30/08 vs 2007 six month revenue. Excluding foreign currency translation effect, revenue grew 19% for the period.

Gross margin increased 18% over 2007. As a percentage of revenue, margins were 24% for six months ending 6/30/08 and 27% for six months ending 6/30/07. The margins were impacted by tariff resets at Eletropaulo (Brazil) and also higher costs in Brazil and one time charge at Indianapolis Power for the establishment of a regulatory reserve.

#### Free Cash Flow (FCF)

AES presents free cash flow as management believes it is presents a better picture of its operations. FCF is defined as Net cash from operations less maintenance

capital expenditures. This amount represents the amount that may be available for investing or for repaying debt.

(\$ millions)	2Q08	2Q07	1Q08	1Q07
Cash fr Ops	\$320	\$514	\$471	\$600
Maint cap ex	185	307	179	204
FCF	\$135	\$207	\$292	\$396
Growth cap ex	609	337	463	276
Adjusted FCF	\$(474)	\$(130)	\$(171)	\$120

Note that 2007 includes \$151M of cash from ops and \$107M FCF which was from EDC, a business that was sold in 2007.

During 2<sup>nd</sup> qtr earnings report, AES reaffirmed FCF of \$1.4B for 2008 which was at the low end of previous guidance of \$1.4-\$1.6B. In May 2007, the guidance for FCF was \$1.5B-\$1.8B.

#### **Other reports**

Morningstar (8/8/08) rates at 3 stars and a fair value of \$19. Buy back announcement indicates company's strengthening liquidity. Signals management will not pursue growth at any cost.

S&P rates (2/1/08) as buy with a \$22 target price. AES is superior independent power producer. Above-average earnings growth and improving balance sheet. Revenues rising 20% in 2008 and 9% in 2009.

Argus (8/8/08) rates a buy and \$29 price target. Accelerating earnings growth, well-managed.

#### Summary

Share price is down about 40% this year. Seems disconnected with results as revenue is growing and company is in growing areas of the world. Those areas also present risk associated with rapidly growing economies. Perhaps some of sell-off is due to anticipation of slowing growth in those regions. The sell off is concerning. There is significant debt (most is non-recourse) and credit markets are not functioning, which may affect future growth.

I am comfortable with position as is (5% or so). Debt is concerning but not overly so. Perhaps consider adding to positions at some point if markets start to function.

#### 8/13/08 (15.60)

AES reported 2<sup>nd</sup> qtr earnings on 8/8/08. They also announced a \$400M buyback over the next six months. During the conference call, the CEO referred to the \$15 price as "stupid". The buyback could be extended or enlarged if the price remains so "stupid". During the call, management seemed to indicate they would not grow at any cost. Any growth/expansion must make financial sense and I am surmising that they perceive a buyback of shares at \$15 to be a better return for investors than expansion just for expansion's sake.

Revenue was \$4,146M, up 1% vs 1Q08 and up 24% vs. 2Q07. Operating EPS was .17, down 56% from 1Q08 and down 35% from 2Q07. EPS includes negative foreign exchange items .08/share. Management also increased estimated operating eps for 2008 to \$1.16/share vs. \$1.14/share.

Management lowered guidance for operating cash flow to \$2.2B from \$2.3-\$2.4B previous guidance. Narrowed projected free cash flow to \$1.4B from previous guidance of \$1.4-\$1.6B.

# 7/29/08 (16.48)

Bonds are still strong – AES.GI at 105 yielding 6.7% vs. coupon of 8.88% and aes.hu at 105.75 yielding 6.4% vs. coupon of 9.38%.

# 3/20/08 (15.88)

2007 10-K was released on 3/17. Will it be amended? Only time will tell as accounting difficulties in the past have lead to restatements. (The restatement comment was made tongue in cheek and the recent restatements appear to have been minor.) The stock has sold off in the past week based on an earnings miss (versus the company's own forecasts) in the  $4^{th}$  qtr and also a lowering of 2008 expectations (versus the company's previous forecasts).

Bonds still long strong since I looked at in Jan. – 2009s trading today at 102.00 vs. 102.07 in Jan; 2010s trading at 105.50 vs. 105.25 in Jan; 2011s at 104.261 vs. 105. In Jan. Ratings have remained the same.

# 1/8/08 (22.25)

Revisited the bond prices. Prices changed slight since November—2009s trading at 102.07 (vs. 104.25 in Nov.), 2010s at 105.25 (vs. 104.70 in Nov.) and the 2011s are at 105.00 (vs. 103.875 in Nov.). S&P and Morningstar reports indicated that the company's debt picture had improved and debt was manageable.

Company has been noted more recently for its development of wind energy and its potential effect on future earnings. The company seems to be a leader in alternative energy movement and this should prove beneficial in the long-term. Given that it is a long-term solution, the company does operate in some risky markets but there is great potential in areas like Latin America and Asia. AES's knowledge of the Latin American market could lead to substantial profit improvement in the future. Company-wide gross margins have been 29.38%, 28.37%, and 29.25% of revenues in 2006, 2005 and 2004, respectively. The Latin American gross margins have been 40.29%, 39.95%, and 38.89% of revenues during 2006, 2005 and 2004, respectively.

I came across an article relating to the selling price of a 170MW plant from Calpine to BG America LLC in Sept 2006. The selling price was \$90.2M which works out to about \$531,000 per MW. AES has an equity ownership interest in approx. 30,000 MW – assuming a similar selling price, plants would be worth about \$15.9B. Current market cap is \$14.4B. Just as a reference point, AES probably undervalued by at least 10% on assets alone, not taking into account the expansion potential that is present.

#### 11/19/07 (21.82)

AES is one of the world's largest global power companies, with 2006 revenues of \$11.6 billion. With operations in 28 countries on five continents, AES's generation and distribution facilities have the capacity to serve 100 million people worldwide. AES's 13 regulated utilities amass annual sales of over 73,000 GWh and its 121 generation facilities have the capacity to generate approximately 43,000 megawatts. AES's global workforce of 30,000 people is committed to operational excellence and meeting the world's growing power needs.

AES had its 3<sup>rd</sup> qtr conference call 11/7. Re-affirmed its guidance for the year.

Revenue was \$3.471M vs. an estimate of \$3.328M (4.3% above est.) EPS came in at .15/diluted share vs. .27 est (33% below est.) – not sure what was in estimates vs. actuals. Gross margins for 3 mos declined to 24.2% of revs vs. 28% of revs for 9/30/06.

Free cash flow for 9 mos. was \$1,169M vs. \$1,304M in 2006. AES defines FCF as Net Cash from Operations less Maintenance Capital Expenditures. Full year guidance is for FCF of \$1.2B to \$1.4B

Legg Mason (as of 9/30/07) reported ownership of 126,145,240 shares, a decline of 1,647,535 shares versus March 31, and as of 9/30 owned 18.9% of outstanding shares (19.13% a/o March 31).

1. Here is some recent bond info, which compares bonds from 1/05 to current. Notice the bond rating upgrades from 2005. Notes from Ron mentioned in January 2005, that upgrades would be a potential positive:

Issue	Bond	Price	YTM	Bond	Price	YTM	Bond	Price	YTM
	Rating	1/14/05	1/14/05	Rating	6/21/07	6/21/07	Rating	11/19/07	11/19/07
	1/14/05			6/21/07			11/19/07		
AES	B2/B-	115	5.577	B1/B	106.25	6.018	B1/B	104.25	7.045
9.50									
6/01/09									
AES	B2/B-	115.25	6.138	B1/B	108.75	6.322	B1/B	104.70	7.485
9.375									
9/15/10									
AES	B2/B-	115	??	B1/B	107	6.671	B1/B	103.875	7.497
8.875									
2/15/11									

Interest coverage ratio is improving but is still low. The ratio for 9 mos. ending 9/30/07 was 2.26 versus a 9/30/06 ratio of 1.65. Ben Graham used 4 as a minimum.

Ratio of debt to equity was 5.38 at 9/30/07 vs. 5.41 at 12/31/06. Non-recourse debt as a % of total debt increased to 71.5% at 9/30 vs. 70.1% at 12/31/06. This appears to be a positive in that more of the debt is secured by the assets of distinct divisions/segments and not secured by the parent company.

Revenue has been increasing as detailed below. 2006 revenue increased 12% over 2005 and revenue for the nine months ending 9/30/07 was 15% higher than nine months ending 9/30/06. Revenues from non U.S. sources has been increasing and as of 12/31/06 represented 78% of total revenue. The non U.S. source income is not relegated to emerging markets and is a good way to have worldwide exposure to the potential growth as more power is needed by the expanding economies. This exposure is certainly not without risk—as witnessed by the loss incurred by the nationalization of the Venezuela segment and its reulting loss.

	Tota	Nine months ending			
	2006	2005	2004	9/30/2007	9/30/2006
Revenue					
	0.010.0	0145 0	1 504 6	1 0 0 0	<b>1 010</b>
Latin America-Generation \$	2,616 \$	2,145 \$	1,584 §	5 1,836 S	\$ 1,318
YOY % change	21.96%	35.42%		39.30%	
Latin America-Utilities	4,595	4,161	3,205	3,778	3,430
YOY % change	10.43%	29.83%		10.15%	
North America-Generation	1,871	1,785	1,676	1,622	1,444

YOY % change	4.82%	6.50%		12.33%	
North America-Utilities	1,032	951	885	796	780
YOY % change	8.52%	7.46%		2.05%	
Europe & Africa-Generation	852	735	697	682	590
YOY % change	15.92%	5.45%		15.59%	
Europe & Africa-Utilities	571	505	463	482	419
YOY % change	13.07%	9.07%		15.04%	
Asia-Generation	785	600	570	686	611
YOY % change	30.83%	5.26%		12.27%	
Corp/Other & eliminations	(758)	(562)	(335)	42	23
Total Revenue \$	11,564 \$	10,320 \$	8,745 \$	9,924 \$	8,615
YOY % change	12.05%	18.01%		15.19%	

	Revenues				
		2006	2005	2004	
			(in i	millions)	
United States	\$	2,516 \$	2,311 \$	2,185	
Non-U.S.					
Brazil		4,161	3,823	2,925	
Argentina		542	438	320	
Chile		595	542	436	
Dominican Republic		357	231	168	
El Salvador		437	377	356	
Pakistan		318	177	210	
United Kingdom		222	208	215	
Cameroon		302	288	272	
Mexico		185	226	186	
Puerto Rico		234	213	188	
Hungary		304	230	192	
Ukraine		269	217	190	
Qatar		169	165	129	
Colombia		184	182	132	
Panama		144	134	117	
Oman		114	113	110	
Kazakhstan		215	158	137	
Other Non-U.S.		296	287	277	
Total Non-U.S.	\$	9,048 \$	8,009 \$	6,560	
Total	\$	11,564 \$	10,320 \$	8,745	
U.S. %		21.76%	22.39%	24.99%	
Non U.S. %		78.24%	77.61%	75.01%	

Valuation schedule assuming 2.5 times book and 10%/6% revenue increases result in ROI of 5.5% and 8.9% after 10 and 15 years, respectively. These assumptions are somewhat more conservative than recent results and also forecasts.

Also, although we don't use discounted cash flow models, I toyed with a model from aaii site and came up with a value of about \$26/share. Certainly nothing to use as a concrete valuation but there was some comfort in coming to a realistic value. That being said, I am no expert using dcf and my assumptions could be totally wrong. Incidentally (ironically?), this was the 12 mo target price from S&P as of 11/24.

Downsides to this investment include numerous restatements of the issued financials. At least in the recent history, these re-statements seem to involve minor issues mainly, I think, due to the international exposure of the company. Due to the international exposure, there are risks in dealing with foreign governments (e.g. Venezuela). The company has quite a bit of debt and the interest coverage, while improving, is not where we would like it to be.

Misc notes from 3<sup>rd</sup> qtr earnings call: Due to loan covenants, AES presently cannot buy back shares. Once these covenants are met, share repurchases could be considered. Chile is looking for other sources of fuel, as they can't rely on imports. There is opportunity for AES to expand presence. Also noted that company is on pace to provide 2100 MW from wind (Buffalo gap) by year 2011. This could grow but decision needs to be made in advance in order to order wind turbines.

June 21, 2007 (20.89) (Ron)

- 2. When doing valuation analysis, using eps models, could prove terribly conservative. AES projects free cash flow of \$1.2B in F2007, and on the low side of their 5/25/07 projection, \$2.3B in 2011. Subsidiary distributions during the same period are expected to be \$1.1B in F2007, and on the low side of their 5/25/07 projection, \$1.5B in 2011.
- 3. On the other hand, one must be cognizant that market cap is around \$14B and Enterprise Value is around \$31B.
- 4. Table of Guidances given on 5/25/07

#### THE AES CORPORATION LONG TERM FINANCIAL GUIDANCE ELEMENTS

	20	007 Guida nce	20	008 Guida nce	20	009 Guida nce	2	010 Guida nce	20	11 Guidan ce
Income Statement Elements										
Diluted Earnings Per Share From Continuing				1.12 to		1.25 to		1.55 to		1.75 to
Operations	\$	1.04	\$	\$1.20	\$	\$1.45	\$	\$1.85	\$	\$2.15
Cash Flow Elements										
Net Cash From Operating Activities	\$	2.2 to 2.3 billion	\$	2.3 to 2.5 billion	\$	2.4 to 2.7 billion	\$	2.5 to 3.3 billion	\$	3.0 to 4.0 billion
Maintenance Capital Expenditures	\$	0.9 to \$1.0	\$	0.8 to 0.7	\$	0.8 to 0.7	\$	0.7	\$	0.7
Free Cash Flow (1)	\$	1.2 to 1.4 billion	\$	1.5 to 1.8 billion	\$	1.6 to 2.0 billion	\$	1.8 to 2.6 billion	\$	2.3 to 3.3 billion
Subsidiary Distributions (2)	\$	1.1 billion	\$	1.2 to 1.4 billion	\$	1.2 to 1.6 billion	\$	1.4 to 2.1 billion	\$	1.5 to 2.5 billion

- (1) Free cash flow (a non-GAAP measure) is defined as net cash from operating activities less maintenance capital expenditures. AES believes that free cash flow is a useful measure for evaluating our financial condition because it represents the amount of cash provided by operations less maintenance capital expenditures as defined by our businesses, that may be available for investing or for repaying debt.
- (2) Subsidiary distributions (a non-GAAP financial measure) is defined as cash distributions (primarily dividends and interest income) from subsidiary companies to the parent company and qualified holding companies. These cash flows are the source of cash flow to the parent. Subsidiary distributions from 2007 include \$99 million in dividends from EDC.
- 5. Legg Mason owns 127,792,775 shares as of 3/31/07. This is 19.13% of the company as of 3/31/07 (using shares o/s of 668,178,608). In our note dated 1/15/05, legg mason owned 11%.
- 6. Here is some recent bond info, which compares bonds from 1/05 to current. Notice the bond rating upgrades. We mentioned in January 2005, that upgrades would be a potential positive:

Issue	Bond	Price	YTM	Bond	Price	YTM
	Rating	1/14/05	1/14/05	Rating	6/21/07	6/21/07
	1/14/05			6/21/07		
AES 9.50	B2/B-	115	5.577	B1/B	106.25	6.018
6/01/09						
AES 9.375	B2/B-	115.25	6.138	B1/B	108.75	6.322
9/15/10						
AES 8.875	B2/B-	115	??	B1/B	107	6.671
2/15/11						

- 7. I did some quick calculations of ROE at 12/31/06. ROE on our note dated 1/15/05 was 25.77%, I now show it as 8.50% at 12/31/06. Just something to watch.
- 8. Interest Coverage and Times interest earned is still not as favorable as I would like. Being a utility and one that requires excess capital expenditures, I am not sure how good these ratios will get. Again, good to watch the bond ratings.
- 9. Earnings did come out today. We were fully expecting earnings as they were reported. They previously indicated that there would be a \$638M non cash loss on Venezuala, and that is what occurred. We used current stockholder's equity, which took into account that reduction in our analysis.

10.

**January 15, 2005** 

#### www.aes.com Presentation to AAII-SIG Central NJ Chapter January 15, 2005

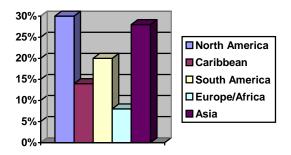
#### **Company Description**

Global power company with 35,320 megawatts of total net owned generation capacity, with another 1,037 under construction.

#### **Breakdown of Operating Capacity (Gross MW) in operation**

<b>Contract Generation</b>	15,760
<b>Competitive Supply</b>	13,222
Large Utilities	5,488
Growth Distribution	850
<b>Total Net Capacity</b>	35,320

# Breakdown by Region of Capacity (not all AES owned) (Gross MW) in operation



# **Operating Capacity (MW) by Fuel Mix**

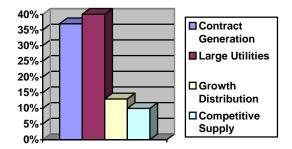
Coal	41%
Natural Gas	39%
Hydro and Other	16%
Oil	4%

AES has over 30,000 employees

# Annual Revenues of almost \$9.0 Billion.

#### 111 Plants and 17 distribution Companies

#### **Businesses in 27 Countries**



#### 2003 Sales By Business Segment :

The following is a blurb from the AES website, "AES was added to the S&P 500 in 1998, and in 2000 the stock price **exceeded \$70** per share. The period was characterized by unprecedented growth, including the acquisition of Electricidad de Caracas in Venezuela and Gener in Chile, and assuming control of two regional electricity distribution companies in Kazakhstan.

2001 and 2002 brought numerous challenges, including the global markets downturn and the collapse of many in the sector. AES responded by launching a turnaround program, and by 2003, was on sound financial footing and looking toward the future.

AES today still seeks to be the world's best power company, now generating and distributing electric power to 11 million people, with generation facilities in 27 countries around the globe."

This is how AES describes their business operations:

"Every electric power plant turns some form of energy into electricity. Our power plants run on diverse fuels -- from natural gas and coal to biomass (agricultural and wood waste) and water. We choose the method that makes the most sense for a particular situation, based on prevailing regulations, fuel availability and other factors.

In some circumstances we sell power as a wholesaler, producing energy that other companies deliver; in other cases we act as the retailer and distribute the power directly to the consumer. We divide our businesses into four categories – Contract Generation,

Competitive Supply, Large Utilities and Growth Distribution – based on the scope, customer base, delivery mechanisms or market dynamics involved."

#### **Business Segments**

#### **Sales by Business Segment**

Coal	41%
Natural Gas	39%
Hydro and Other	16%
Oil	4%

<u>**Contract Generation</u></u> - This segment is essentially "generation for hire" in which AES creates electricity and sell the majority of it to a customer who then distributes it. <u>Contract Generation</u> (37% of F2003 Sales) and <u>Competitive Supply Segments</u> (10% of F2003 Sales) accounted for 47% of F2003 Sales. 80% of these revenues are Long-Term contracts. 20% of the revenue is Merchant / Short Term Contracts. Generally these are sales to Local Utilities or Wholesale customers. Typically the cash flows are stable, the customer takes the fuel cost and demand risks. The plants are capital intensive and require debt. AES has been prioritizing the debt as non-recourse. Non-recourse debt possibilities increase with the projects credit quality.</u>** 

AES owns and operates contract generation plants that sell electricity to utilities or other customers under long-term contracts (minimum five years and more typically 15 to 30 years). Fuel supply is usually hedged consistent with the power sales contract.

New projects are on line in Asia, Caribbean and USA.

2003 Fleet additions created \$500M in new revenues.

72% of generation capacity are in emerging markets.

**<u>Competitive Supply</u>**: are Sales to local utilities or wholesale customers under short term (spot) contracts. There is higher return potential here, because AES absorbs the

demand and fuel risks. Sales and cash flow are variable and less predictable than other segments.

AES highlights that sales growth has been driven by Argentina demand and favorable pricing. Yet, I recently read that there are gas shortages in Argentina, and AES is being forced to buy electricity on the spot market. Supposedly the spot prices are above AES' marginal costs. Certainly something to monitor. Perhaps this could create an earnings shortfall, which in turn, could perhaps create a buying opportunity, if share prices were to drop.

Most of Competitive supply is coal generated. It is certainly affected by commodity prices.

**Large Utilities** - Large Utilities are their "heavy hitters" in the electric power arena: Indianapolis Power & Light (IPL) in the U.S., Eletropaulo Metropolitana Electricidad de Sao Paulo S.A. (Eletropaulo) in Brazil, and La Electricidad de Caracas (EDC) in Venezuela. In most cases large utilities combine generation, transmission and distribution - covering the entire supply chain. These giant utilities, of which AES is majority owners, maintain monopolies with defined service areas selling electricity under regulated tariff agreements. They each have transmission and distribution capabilities (IPL and EDC also have generation plants).

<u>Large Utilities</u> (40% of F2003 Sales) and <u>Growth Distribution</u> (13% of F2003 Sales) accounted for 53% of F2003 Sales. The business driver for Large Utilities is monopoly positions, regulated prices; demand is determined by local economy. AES has 17 Utilities in 8 different countries.

The following are 3 of AES utilities:

Indianapolis Power and Light (IPALCO)	100% ownership
Eletropaulo in Brazil	32% ownership
C.A. LaElectricidad de Caracas (EDC) Venezuela	86% ownership

a. IPALCO is holding company for Indianapolis Power and Light (IPL).

- b. They generate and sell electricity to 450,000 customers. 3,300 of capacity, of which 99% is coal fired. IPL has \$690M in cumulative net operating income deficiencies, hence must inform utility commission if dividends are planned.
- c. EDC has 1M customers. 2600 MW of capacity.
- d. Eletropaulo has 5m customers. 30-year concession contract with National Electric Energy Agency (ANEEL). Tariffs are increased to

reflect ROE. Negotiated every 4 years. Next pricing negotiations are 2007.

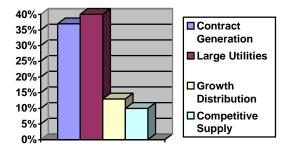
**Growth Distribution** - distributes power in developing countries or regions where the demand for electricity is expected to grow faster than in more developed parts of the world. They are smaller businesses than the integrated utilities businesses, serve a smaller service area, and generally need substantial infrastructure improvements. However, they also have the opportunity to benefit from operating improvements that may stimulate above average growth in earnings and cash flow performance. Electricity sales are made under regulated tariff agreements or under existing regulatory laws and provisions. Distribution facilities in this line of business may include integrated generation, transmission, distribution or related services companies.

The following are some tables I constructed which highlights some financial data.

Contract Generation	47.2%
Large Utilities	33.7%
Growth Distribution	9.9%
Competitive Supply	7.7%
Corporate and others	1.5%

#### 2004 Projected ebitda breakdown :

#### 2003 Sales By Business Segment :



2003 Operating Capacity (MW) Fuel Mix :



Natural Gas	39%
Hydro and Other	16%
Oil	4%

#### Notes and Observations:

- 1. AES has non-fired gas capacity, they will benefit most from increased electricity demand. As prices increase, their costs are not as associated with fuel price increases.
- 2. AES had an action plan going into 2004. This plan was aimed at debt reduction, strengthening the balance sheet, improve their credit quality and begin the process of improving margins.
- 3. During F2004 recourse debt was reduced by \$800M. Both S&P and Moody's raised their credit quality. S&P rates debt at B+ and Moody's rates debt as B1 (highly speculative). Both agencies have AES on positive outlook. Management goal is BB level (low grade speculative).
- 4. 86% of cash flows from regulated utilities and contract generation.
- 5. 18.1B in total debt. \$13B of that is non-recourse.
- 6. Potential debt to equity level of 76% by 2007. Current debt to equity of 86%.
- 7. Interest Coverage ratio is 1.9X (I like to see that at 4 or greater, maybe one day for AES).
- 8. Morningstar calls Duke Energy, Calpine and Reliant Energy as its peers.
- 9. Sales growth dropped in 2002 and 2003 because of asset sales to restore finances. 2004 growth is coming from tariff increases, higher wholesale prices and increased energy demand.
- 10. Interest expense consumed 25% of revenue in 2003. This should drop with debt pay-downs in 2004.

11. In 2001 AES reached 50,700MW. In 2002 the US merchant industry melted down and devaluation of Argentina peso caused a severe crisis for AES. Two years of divestitures left AES with 34,500 MW.

#### What I see as potential positives:

- 1. Possible refinancing in emerging debt market. AES was shut out of debt markets for a number of years. Refinancing would be done at more favorable terms.
- 2. Debt upgrades important. One reason I see is the capital intensity of the business requires financing. Nature of the business. Hence, demands and costs are much less with higher debt grades. AES if upgraded can further refinance existing debt on more favorable terms.
- 3. Management appears focused and competent in their mission. They realize that AES is a "show me" company. They are focused on debt reduction, credit quality enhancement, margin expansion, strategic acquisitions and increased Return on Capital (ROC).
- 4. Worldwide demand in power, there is a growing demand for electricity.
- 5. World bank has supposedly been favoring AES in lending and in influencing potential customers to partner with AES. AES appears to be a proven and respected force.
- 6. Competition has been reduced as several companies have exited the industry.
- 7. Bonds are showing pricing strength. This signifies that Wall Street believes in AES.
- 8. Grants Interest Rate Observer on March 15, 2002, mentions that there is potentially \$10 \$12B in assets on the books. I spoke with a researcher yesterday and he remembered \$13B.
- 9. 3 subsidiaries have publicly exchange-traded shares. I have not verified this, nor have I looked at them. EDC in Venezuela, Eletropaulo in Brazil and Gener in

Chile. These 3 subsidiaries are valued at approx \$1.5B or \$2.40 per share. S&P expects these 3 subs to pay dividends of \$160M to AES in 2004. All subs are expected to pay in area of \$800M. Eletropaulo is expected to pay down debt and not dividends.

- 10. Subsidiary distributions are in the annual \$1B range. This is expected to stay the same or improve over the next 5 years.
- 11. AES is a holding company. Because there are such a great amount of subsidiaries, it is important to look at operating cash flow. It is very important to recognize the dividend contribution from the subsidiaries. This is currently in the \$1billion annual range.
- 12. AES announced on January 11, 2005, an agreement to acquire SeaWest Holdings. SeaWest is a wind power operator and developer. This is the first major growth project fro AES, since problems of 2001. I recently read an analyst report, whereas a material financial event is not expected over the near term. Cost is \$60M in cash. Currently SeaWest is producing revenues of \$20M. This will give AES production of 500 MW of capacity. Supposedly one of the largest US providers of wind power.
- 13. Morningstar indicated that more than 80% of energy in its competitive supply business is generated through low cost coal and hydro, giving cost advantage over gas fired competitors.
- 14. AES looks to curb currency fluctuations by employing more debt in local currencies, rather than in USD.
- 15. Management expects growth in Eastern Europe, Middle East, India, China and California. No plans to expand in Latin America in near term. Growth expected in contract generation. Southern California is supposedly the most generation-constrained region in US.
- 16. Legg Mason owns over 11% of AES.
- 17. Recent guidance reaffirmed Goal of \$500 600M debt reduction in 2005.
- 18. Return on Equity is greater than 25%. Part of the reason is because of the leverage on the company.

### What I see as potential negatives:

- 1. Insider selling Not necessarily bad, and Wall Street is defending the selling. Founder of company, Roger Sant, is doing most of the selling. He founded the company in 1981. He currently owns 11,339,005 shares. He seems to be selling off small portions systematically.
- 2. Restatements have occurred. Makes comps more difficult. General rule of thumb is that restatements are always bad. In this case it is a bit more difficult to determine, as restatements are for discontinued operations. My gut (which certainly should not be relied upon) is that this is not a typical restatement, and hence not a negative. Nevertheless, it will be something I will be watching.
- 3. Slowdown in privatization of Plants.
- 4. Emerging Market politics and regulations.
- 5. Currency exposure in Central America.
- 6. execution of margin improvements and deregulation.
- 7. Rising worldwide interest rates.
- 8. Watch the debt levels. Some debt has been pushed out several years. Some of the debt has deferred payment obligations until 2007. This needs to be watched.
- 9. 22% of AES debt is at variable rates. Need to watch this if interest rates rise.
- 10. Legg Mason owns over 11% of AES.
- 11. Debt levels are high and will remain high.

#### Some Financial Data:

1. Cash flow is strong. I constructed this quick table. I took a lot of liberties and really didn't construct guided estimates. Borrowed estimates from several reports, etc. Cash flow will be stronger from option exercising. Generally I don't like this, but here cash generation is crucial.

	2003	2004e	2005e	2006e	2007e
Revenues	8,415	8,900	9,600	10,500	11,000
<b>Operating Cash Flow (OCF)</b>	1,576	1,450	1,600	1,700	1,800
Net Income	316	374	565	714	725
OCF/ Revenues	18.73	16.29	16.67	16.19	16.36
Capex	1228	1050	750	720	770
Depreciation	781	767	780	800	830

#### **Projected Cash Flow Table:**

2. I constructed the following table on expected interest expense going forward. This is merely a roadmap, and the use of numbers was performed quickly. This can be refined as time goes on.

#### **Estimated Interest Expense:**

2004	1585
2005	1460
2006	1430
2007	1350

3. Five – Year Growth Metrics (2004 – 2008) Company Guidance on December 7, 2004

Gross Margin Expansion	200+ bp
After Tax ROIC Improvement	50 bp/ year
Corporate Debt Reduction	\$2.3B
<b>Corporate Interest Expense Reduction</b>	40%

4. Some guesstimates of Subsidiary Distributions. I used collection of reports and threw together quickly. This could be materially incorrect, yet this might start my road map for future.

Gener ( Chile)	\$117
IPALCO (IL)	102
EDC (Venezuela)	93
Eastern Energy (NY)	92
Shady Point (OK)	50
Hawaii (US)	44
Southland (CA)	35
Ebute (Nigeria)	33
Argentine Gencos	25
Ras Laffan (Qatar)	25
Barka (Oman)	21
Puerto Rico	18
Panama	17
Warrior Run (MD)	16
Chigen (China)	15
CTSN	3
<b>Tax Sharing Payments</b>	56
Other	238
Total	1,000

#### **Subsidiary Distribution Guesstimates (\$millions)**

5. Some eps estimates I am using. Again, these are not scientific. I would venture to guess that these eps estimates are on the conservative side. Once again, merely a road map for the future.

#### **Eps estimates:**

2004e	\$0.68
2005e	\$0.80
2006e	\$1.00
2007e	\$1.17
2008e	\$1.37

6. Calculation of estimated Interest Coverage Ratio

Net Income after tax	\$ 374
Add : Income Taxes	\$ 275
Net Income pre tax	\$ 649
Add: Interest expense	\$1,585

Total NI after tax and Interest expense	\$2,234
Divide by Interest expense	\$1,585
Interest Coverage Ratio	1.41X

7. Return on Shareholder Equity.

#### **Estimates for F2004**

Net Income	\$ 374	
Sales	9,400	
<b>Total Assets</b>	30,000	
Equity	1,450	

ROE = NI/Sales \* Sales/Total Assets \* Assets/ Equity

ROE = (374/9,400) \* (9,400/30,000) \* (30000/1,450)

ROE = .0398 \* .3133 \* 20.6897 **ROE = 25.77%** 

#### Items to Look for as Time Goes on :

- 1. Profit margin improvement.
- 2. Acquisitions AES recently entered into an agreement to purchase a Wind
- 3. Watch the political and economic climate in Central America.
- 4. Watch the debt levels. Watch the debt payment intentions, especially going forward to 2007. That is the year that some debt repayments were deferred to.
- 5. Get better understanding of "maintenance capex".
- 6. Monitor acquisitions and their future cash flow effect. SeaWest acquisition was the first acquisition since 2001.
- 7. Monitor the loan covenants.

- 8. Look at pension funding. I believe that AES has a partially employee contributory plan. I'm not certain of this, and need to look at in future (perhaps when 10K) is released. How much has pension been funded? I read \$970M needed over next 5 years.
- 9. Watch the dilution. Watch especially for any dilution caused by converts, renegotiations or covenants.
- 10. Earnings are sensitive to international regulatory actions. Earnings can be impacted by rate change delays.
- 11. 22% of AES debt is at variable rates. Need to watch this if interest rates rise.
- 12. Look for increased eps via lower interest expense and growth of MW's.

#### Valuation Scenarios and Calculations :

1. Projected F2004e ebitda

Net Income (after tax)	\$ 374
Add:	
Interest Expense	\$1,585
Income Taxes	\$ 275
Depreciation	\$ 767
Ebitda	\$3,001

# 2. Valuation Metrics – This is a spreadsheet used for AAII-SIG

# **AAII-SIG Valuation Metrics**

# AES Valuation metrics

Recent price 52-week range Dividend Yield Dividend payout Shares outstanding Market cap.	\$ \$ \$	13.45 7.56 - 0.00% 0.0% 648.8 8,726.4	14 millions
ttm 2004E		EPS 0.56 0.68	PE 24.0 19.8
2005E	Pe	0.80 er Share	16.8 Multiple
Free cash flow	\$	0.62	21.8
Book value	\$	2.21	6.1
Tangible book	\$	0.08	0.12
Sales (ttm)	\$	14.48	0.9
Enterprise value Debt Minority Interests Less: Cash Equity Total enterprise value % debt		Book 18,146 1,226 (1,582) 8,726 26,516 68.4%	18,146 1,226 (1,582) 8,726 26,516 68.4%
		Book	Multiple
EBITDA		3,001	8.8
Sales		9,400	2.8

3. This is a valuation metric I often use as part of my analysis. It is based on expected eps growth rates. In this situation, one needs to consider the enterprise value. The debt would certainly reduce intrinsic value. I really need to examine this further to determine the usefulness of this model. This is intended as a future earnings model, and not designed for enterprise value.

Company	AES	
Report Date		15-Jan-05
Price		13.45
Growth Rate		20.00%
Price/Sales		0.93
Price/ Net Cash Flow		21.35
Price/ Net Book Value		5.60
P/E Ratio Current		19.78
P/E Ratio Year 2		16.81
Current Ratio		0.90
Quick Ratio		0.83
LT Debt / Shr. Equity		1031.94%
LT Debt / Current Assets		313.01%
Return on Shr. Equity		25.77%
PEG Ratio (Current)		0.99
PEG Ratio Year 2		0.84
Growth Flow Ratio (<12=nrml)		19.78
Cash King $(s/b > 10 \%)$		4.36%
Flow Ratio $(s/b < 1.25)$		0.71
Intrinsic Value (current)		25.24
Intrinsic Value Year 2		29.69
Intrinsic Value Year 3		35.63
Intrinsic Value Year 4		42.75
Intrinsic Value Year 5		51.31
	、	07 000/
Intrinsic Value / Price (current	)	87.63%
Intrinsic Value / Price Year 2		120.75%
Intrinsic Value / Price Year 3		164.90%
Intrinsic Value / Price Year 4		217.88%
Intrinsic Value / Price Year 5		281.45%

Using the above example, we can extrapolate a bit. If we look at year 2 (2005), we actually have **no** current investment value.

Intrinsic Value year 2	29.69
Shares outstanding	648.8
Total Intrinsic Value	19,263
Less: Enterprise Value	26,516
Net Intrinsic Value year 2	(7,253)

If we look further at year 5 (2008), we come up with the following. For this example I will use the same shares outstanding (poor assumption) and I will decrease enterprise value by \$1B for future debt reductions. Keep in mind, this is merely an illustration and could certainly be filled with errors (It is also getting a touch late on a Friday night, so, please understand this is merely being presented for discussion purposes only). The Net Intrinsic Value using this methodology would still be only \$12.00 per share. This is less than today's price of \$13.45.

Intrinsic Value year 5	51.31
Shares outstanding	648.8
Total Intrinsic Value	33,290
Less: Enterprise Value	25,516
Net Intrinsic Value year 5	7,784

As I construct the above model, I certainly see that when using enterprise value for AES, one would not be rushing to invest.

This is certainly where investment decisions become difficult. Of course if you look at nearly any utility company, you will see that enterprise value is not a concept you would be basing your investment decisions on.

#### **Conclusions**

1. Let me start by saying that this is a work in progress. If you were to use this in helping you make an investment decision, you would only want to use it as a source for your own due diligence. Secondly, information and business fundamentals change quickly. Hence, if one were to invest in AES or any situation for that matter, they need to be able to competently track developments, sort through data, and understand that reasons for investing can change quickly. With that said, I will proceed. Please understand that I am in no shape or fashion suggesting that anyone buy AES. Nor am I hinting that AES should be bought either. I never feel comfortable giving advice of buys or sells. I manage portfolios based on specific needs, and all portfolios have different needs and tolerances.

- 2. AES by nature is a high-risk investment. It was nearly bankrupt during 2002. It hit the perfect storm and it has not yet recovered from that storm. You must understand that AES is not your typical sleep at night utility company.
- 3. I was actively buying AES between the area of \$7.25 and \$9.00. The price has increased by over 37% within the last 4 months. Personally, as a shareholder, I would welcome a major correction. I would not at all be upset if I saw prices reach the mid single digits again. Of course if that were to happen, I would be monitoring the reasons why, the business climate, the ratings agencies and other resources. If I found a price retrenchment, with no accompanying material financial explanation, I would probably be an active buyer of shares. Again, I remind you that I can tolerate risk, and recognize that AES could theoretically become bankrupt.

- 4. Keeping all of the above in mind, I will proceed with a few more comments. I would consider AES as an investment at this level for a portfolio. Because of the price change in such a short span (and that has happened with many conservative utilities), I am not as cognizant of what I consider to be the perceived intrinsic value. The following are a few reasons why I would possibly consider AES as a core holding:
  - a. Diversification of ones portfolio to an international power company. You would own one of the largest power companies in the world.
  - b. AES has a major presence in emerging markets as well as developed markets. You would have diversification away from US dollar based multinationals.

- c. AES is tiptoeing into alternative energy sources. SeaWest could be the start of something interesting. I am clueless if the entry into this market is a smart one, but I do like the thought of a potentially cleaner energy source.
- d. AES is a holding company. Much of their possible value is not reflected in the financial statements. They generate dividends from subsidiaries of nearly \$1 billion per year. They generate cash flow in excess of \$1 billion per year. It looks as though that free cash flow might start approaching the \$1 billion per year run rate.
- e. AES could be a turnaround play. Their bonds have recovered a great deal. The bond rating agencies have upgraded AES and have them on credit watch positive.
- f. Return on Equity is greater than 20%. AES via their leveraged balance sheet can show excessive ROE's over time.
- g. Some analysts believe that an AES growth rate of 20% could prove to be conservative. Granted, one must look at analysts with skepticism and doubt.
- h. Please read the disclaimer on the last page. Please also re-read the introductory paragraph.

January 14, 2005

This is how Smith Barney described AES in a report dated January 5, 2005: "AES corporation is a global power company with 34,500 megawatts of generation capacity and operations in 24 countries. The company aims to enter generation and utility businesses in emerging markets. 27% of AES's capacity is located in North America, 33% in Asia, 23% in South America, 8% in Europe & Africa and 9% in the Caribbean. AES operates four main business segments: contracted generation, competitive supply, large utilities and growth distribution. Contracted generation and large utilities accounted for roughly 80% of EBITDA in 2003 and 2004. AES's capacity portfolio breakdown by fuel type is: 41% coal, 39% gas, 16% hydro and 4% oil."

- 1. Grants 3/15/02, mentions that there is potentially \$10 \$12B in assets on the books. I spoke with a researcher yesterday and he remembered \$13B. Hence assets to recourse (around \$5b?), not so bad.
- 2. 3 subsidiaries have traded shares, which I need to look at. EDC in Venezuela, Eletropaulo in Brazil and Gener in Chile. These 3 subs are valued at approx \$1.5B or 2.40 per share. S&P expects these 3 subs to pay dividends of \$160M to AES in 2004. All subs are expected to pay in area of \$800M. Eletropaulo is expected to pay down debt and not dividends.
- 3. AES uses project level debt in a non recourse nature. Hence they can walk away from underperforming businesses and negotiate better terms for turnaround candidates.
- 4. Because AES has non fired gas capacity, they will benefit most from increased electricity demand. As prices increase, their costs are not as associated with fuel price increases.
- 5. Risks
  - a. Currency exposure in Central America
  - b. Political and regulatory in emerging markets
  - c. execution of margin improvements and deregulation
- 6. Things to watch for:
  - a. Profit margin improvement and deleveraging.
  - b. Acquisitions. Just started again with SeaWest. This is what caused much of the trouble in the first place.
  - c. Tax rate
  - d. Share count
  - e. Cash dividends from subsidiaries to parent
- 7. Gas shortages in Argentina, which are occurring now, are forcing AES to buy electricity on the spot market. They are buying above marginal costs.
- 8. Current Corp bond quotes: These are nice to monitor for future. I only took a few of them.

50		Aes Corp Cont Callable, Next Call 02-13-2005 @ 101.417, Spec Redemp	8.500 11-01 20070	
10	0 B2/B Utilit		9.500 06-01-2009	115.000 5.577 Mat
155 5	5 B2/B- 5 Utility		9.375 09-15-2010	115.250 6.138 Mat

- 9. I just saw pricing of the AES 2011's from March 2003, not mentioned above. The price was 66.50 on the 8.875%. These have obviously strengthened a great deal since. I also saw Merrill pricing from 2/04, on the 09's. They were priced at 109.5 on 2/04. During 9/03 I see they were priced at 100. Now they are 115.
- 10. IPALCO is rated BB+. This was raised by S&P during September 2004. AES bought IPALCO during 2001. The next level for IPALCO would be investment grade (if it were to be raised).
- 11. The following is a blurb I found in regards to S&P upgrades. "

AES CORP: Improving Credit Matrix Cues S&P to Affirm Low-B Ratings

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Standard & Poor's Ratings Services revised its outlook on The AES Corp. (AES; B+/Positive/--) to positive from stable following a periodic review of the Arlington, Virginia-based company. At the same time Standard & Poor's affirmed its 'B+' corporate credit rating on AES, its 'BB' rating on AES's senior secured exchange notes, its 'B-' rating on AES's senior unsecured and subordinated debt, and its 'CCC+' rating on AES's preferred stock.

The outlook revision reflects a trend of improving credit metrics both at the parent level and on a consolidated basis over the past year -- a trend that Standard & Poor's expects to continue based on management's public statements regarding its goals for debt reduction, and Standard & Poor's expectations of future portfolio performance.

A positive outlook means that Standard & Poor's expects that the rating is more likely to improve than to deteriorate or remain the same over a one-to-three-year time horizon. "Standard & Poor's believes that AES will maintain or improve the cash flow quality of its portfolio, and that it will be able to reduce parent level debt to about \$4.5 billion over the next 18 to 24 months," said credit analyst Scott Taylor. "If the company can accomplish this while maintaining its target liquidity of \$400 million to \$600 million, Standard & Poor's is likely to upgrade the company to 'BB-'".

The rating on AES reflects the risks of its reliance on substantive distributions from jurisdictions where considerable regulatory and operating uncertainties exist to support its parent-level debt, some exposure to merchant power markets, and a

highly leveraged, though improving, balance sheet. These risks are tempered by the diversification of AES's portfolio, a stable base of cash flow coming from its contractual generation businesses and its regulated utility, Indianapolis Power & Light Co., and a history of strong operations at its generation and distribution businesses.

AES's management team has demonstrated a commitment to restoring the company's credit quality, and moved it away from a strategy of aggressive expansion toward a focus on its core competency of operations. AES will need to invest in new businesses to maintain and grow its dividend stream, and the positive outlook is predicated on such investments being credit neutral or enhancing.

12. Some guesstimates at Subsidiary Distributions. I used collection of reports and threw together quickly. This could be materially incorrect, yet this might start my road map for future.

0

January 13, 2005

- 8. Look at share count
- 9. Consider ebitda calculations. Also project eps with interest expense, etc. Determine what debt reduction did for interest expense.
- 10. When you look at metrics, see if debt can waste and perhaps enterprise value decreases.

- 11. Why the insider selling
- 12. Try to model interest expense in future, to account for Brasiliana Energy. AES will not pay interest on converts for first two years and principal starts in 3 years.
- 13. Watch Central America.
- 14. How much is equity increasing. Analyze this.
- 15. Debt upgrades important. One reason I see is the capital intensity of the business requires financing. Nature of the business. Hence, demands and costs are much less with higher debt grades. Lots of debt here, and what appear to be lots of deferred debt.
- 16. Contingent contractual obligations are 41.2B. Take or pay obligations are 18.8B included in the 41.2B. I think the take or pays are like an operating lease obligation, a purchase cost perhaps?
- 17. How much has pension been funded? I read \$970M needed over 5N.
- 18. Interest expense projected as follows

2004	1585
2005	1460
2006	1430
2007	1350

- 19. Restatements have occurred. Makes comps more difficult. General rule of thumb is that restatements are always bad. Why is that not the case here?
- 20. Show me stock. Can't believe the numbers. Yet, that could be reason for stock price. Yet, look at enterprise value and that could be reason for stock price ;-)
- 21. Cash flow is strong. I constructed this quick table. I took lots of liberty and really didn't construct estimates. Borrowed ests from several reports, etc. Cash flow will be stronger from option exercising. Generally I don't like this, but here cash is crucial. More I read, more I see the future risk. Seems very interest sensitive, especially with debts being shifted forward. This could give a false sense of safety. Really need to watch this close. If interest rates and business environment stays in this range, then things could be okay. Still need to watch cash balances for debt due as time elapses.

	2003	2004e	2005e	2006e	2007e
Revenues	8,415	8,900	9,600	10,500	11,000
OCF	1,576	1,450	1,600	1,700	1,800
NI	316	374	565	714	725
OCF/ Revs	18.73	16.29	16.67	16.19	16.36
Capex	1228	1050	750	720	770
Depn	781	767	780	800	830

22. Get better understanding of maintenance capex.

- 23. Remember to model potential for acquisitions in CF.
- 24. 2ndOR mentions that \$2.3B of non-recourse debt is in technical default. Mentions that management expects to receive wavers.
- 25. Risks of restatements continue. Look for off balance sheet risk and recharactarization.

#### **Grants Interest Rate Observer**

James Grant has written about AES several times over the last few years. He basically has been saying the same thing all along. He started discussing it when bonds were priced for bankruptcy.

Here is a chronological quick summation of his discussions.

1. 3/15/02 - discusses that they liked it a lot about 10 days prior. I guess price rose substantially during Grant's gathering period. Says they are starting to get their leverage via a stronger balance sheet and liquidity position. Claims AES has financial flexibility to service fixed charges and pay off maturing debts. They discussed that a cash crisis would also cause massive dilution because of covenants. They think a cash crisis, although possible will not materialize. Incidentally stock price almost doubled from March 1, 2002 through March 21, 2002.

2. 8/2/02 - called AES a brilliant opportunity as they were writing 3/15/02 report. Fully noting that brilliant opportunity was washed away via price increase, before 3/15/02 report was issued. Called price at time of report issuance (near \$8.00) to be "interesting business opportunity. At time of 8/2/02 report, AES was selling for near \$2.00 per share. They were "ardent" in their positive views of AES. They felt they were being priced for bankruptcy, yet did not see bankruptcy in their future. They did not see why AES was being priced for bankruptcy. They were being tossed into the same pile as Enron and Williams, yet Grant's did not see AES in that similar light. Claims that purchaser of stock was certainly being paid for the risk, nevertheless, still a speculator.

Here is an interesting bankruptcy and bonds piece I wrote in 10/02, where I discussed how Lucent bonds were being priced at the time <a href="http://www.rbcpa.com/companies/Lucentdiscussionof%20bonds%20on%20October%202,%202002.htm">http://www.rbcpa.com/companies/Lucentdiscussionof%20bonds%20on%20October%202,%202002.htm</a>

3. 5/9/03 - price \$6.55 Claims that "AES is riding the comeback trail". Claimed that AES was a much easier purchase at \$0.95 per

share. At \$6.00 per share, "it is an option for prosperity." At current prices, they are no longer "ardent" on the company, but they still see it as "an interesting speculation" Claims that liquidity crisis is ending and probably shouldn't be a concern. Where they loved the bonds, I think they mentioned that the bonds were fully valued, hence look at common and preferreds. Calls AES a holding company, like Berkshire Hathaway. Claims that with such a holding company, the best metric might be POCF, "Parent Operating Cash Flow". Dividends from the subsidiaries are important. Spending by AES on the subs is "discretionary". Estimated POCF for 2003 to be \$1.07B Says reinstatement of EDC Venezuelan business would be a great start. Projects \$100m to \$200M after 2004 in annual future dividends from this segment. Says strengthening operations and executions could lead to upside in prices as well. Mentions that Ken Woodcock owns 6.9M shares. Says that AES needs to grow its corporate infrastructure. Made it sound like corporate machine was very inefficient, but hints at growing corporate efficiencies. Claims that AES at \$6.17 per share, AES was priced at 9.3X POCF, whereas at 2000 peak, it was selling at 40X POCF.

4. 9/12/03 \$7.09, still bullish. Claims there is a lot to the puzzle. Leon Cooperman who owns 1.0% mentioned that there are a lot of moving parts in AES and asked management if a doubling of eps was possible over the next 3 years. No answer provided, yet the author seemed to think the question offered bullishness. Grants went on with an interesting sentence..."If I were an owner of the common, which I am, I would not sell, which I haven't. Prospective investors should know the company has a strong base case with free upside on a growth scenario." Mentions again the Enron comparison, yet explains that Enron was an energy trader, whereas AES is a Contract Generator. Explaining that Contract generation gives you the ability to know what your revenues and expenses will be into the future, and you make money on the financial leverage.

Goes onto a bunch of calculations, which I need to re-review over the coming days. In summary author seems to be saying that at price of \$7.00 per share you are getting a "stress tested business". The best-case scenario projects a global recovery and cost efficiencies. Claims that company hinted that eps will possibly double earnings in 4 to 5 years, not 3 years. Says that focus continues on debt pay downs, and that one-day, shareholders will "own a collection of debt free power plants."

Grants summed it up, that the risk reward of AES were much greater when the bonds were 40 cents on the dollar, nevertheless, they still like the stock at these levels. Mentions a joke that ends with the saying, "take a peek, It's a good one."

#### January 12, 2005 13.27

- 1. Utility Forecaster January 2005, says, "2005 regulatory challenge is "Venezuela politics". They have a Buy at 13, and state the following, " Moody's puts rating on review for upgrade, and Venezuela may boost rates." They give it a safety rating of "3" (8 is safest, 0 is lowest). Type of UTE is "M", which is merchant utility, "almost all revenue coming from volatile unregulated businesses". Incidentally, Calpine has a 0 M rating, Dynegy is not mentioned.
- 2. 2<sup>nd</sup> Opinion Research in January writing says, "Turnaround in full swing, promises above average long term returns.
- 3. Standard and Poors reaffirmed credit rating in September 2004. At that time they upgraded the outlook from stable to positive.
- 4. 2<sup>nd</sup> opinion has eps estimates for 2004, 2005 and 2006 at \$0.59, \$0.87 and \$1.08 respectively.
- 5. November 19, 2004, announced the pay-down of \$331.4M in debt. This completed goal of retiring \$800M in 2004. Retired debt included all o/s 10% Senior Secured due in 2005, which was \$152.6m, all o/s of 8 3/8s due 2007, which was \$113.3m and 8 ½% due 2007 for \$65.5M.
- 6. November 29, 2004, opened first independent power facility in State of Qatar. This has natural gas and water desalinization. Payment guaranteed by State of Qatar for 25N.
- 7. December 2, 2004, Chivor Columbia facility refinanced \$253m. This facility generates 11% of Columbia electricity.
- 8. Extended \$136m debt by 6 years to 2014 on December 13, 2004.
- 9. Bidding for Bulgaria's 3 largest power facilities. One of 14 companies. Results expected by 3/25/05.
- 10. Review of Value Line dated 1/7/05
  - a. Interest expense reduced to \$1.4B for the first 9 months. This is a decrease of 6% YoY.
  - b. Estimates that LTD will be just under \$16B at finish of F2004. LTD was \$20.6B at end of 2001.
  - c. Still considers debt as "dangerously high".
  - d. Interest coverage is 1.3X
  - e. 30,000 employees
  - f. Price to Sales approx 0.94X. Previously was often over 4X, yet net profit margin was previously higher than 10%, whereas now it is projected at 4.7% for 2004. Really need to look at enterprise value, which is approx \$25B. I will have to compare that to prior years.
  - g. Book value growing at around 10% annually.
  - g. Book value growing ah. ROE is approx 28%.
  - i. Projected shares o/s is 655M for F2005.

- 11. AES announced on 1/11/05 an agreement to acquire SeaWest Holdings. SeaWest is a wind power operator and developer. First major growth project since problems of 2001. I read an analyst report, whereas a material financial event is not expected over the near term. Cost is \$60M in cash. Currently producing revenues of \$20M. This will give AES production of 500 MW of capacity. Supposedly one of the largest US providers.
- 12. Market cap is approx \$8.6B, revenues for 2004 expected to be \$9.4B.
- 13. Williams Capital Group wrote in a report dated 1/12/05, that AES expects \$1.0 1.1B in annual free cash flow. Calls 20% base case of eps growth, as conservative.
- 14. Earnings are sensitive to international regulatory actions. Earnings can be impacted by rate change delays.
- 15. 22% of AES debt is at variable rates. Need to watch this if interest rates rise.
- 16. Morningstar discussed AES on 12/6/04.
  - a. Calls it the world's largest independent power company.
  - b. Calls Duke Energy, Calpine and Reliant Energy as its peers.
  - c. <sup>1</sup>/<sub>2</sub> of revenues are from regulated utility business, however only 20% of this is from North America. Most of the rest is in Latin America. Subject to fluctuating Latin American currencies.
  - d. Most sales made on the spot market or short term markets.
  - e. Little margin of error with 93% debt to capital ratio.
  - f. \$11.00 price target, raised from \$8.
  - g. Claims management expects 200bp in margins, whereas Morningstar uses 100bp. They are concerned with various political and emerging market financial risks.
  - h. Bullish argument are the emerging markets offer growth potential, reduced debt loads, continued cash flow to deleverage balance sheet, more than 80% of energy in its competitive supply business is generated through low cost coal and hydro, giving cost advantage over gas fired competitors.
  - i. Bearish arguments are, no dividend, emerging markets, political and foreign risks, merchant generating industry is challenging and volatile.
  - j. Sales growth dropped in 2002 and 2003 because of asset sales to restore finances. 2004 growth is coming from tariff increases, higher wholesale prices and increased energy demand.
  - k. Interest expense consumed 25% of revenue in 2003. This should drop with debt pay-downs in 2004.
  - l. Restructuring almost finished.
- 17. Smith Barney considers AES as a global generator as opposed to an energy merchant. Expects earnings growth of 17% through 2007.

- a. In 2001 AES reached 50,700MW. In 2002 the US merchant industry melted down and devaluation of Argentina peso caused a severe crisis for AES. Two years of divestitures left AES with 34,500 MW.
- b. AES allegedly looking for more selective and focused growth strategy. Expanding in established markets rather than entering new markets.
- c. AES looks to curb currency fluctuations by employing more debt in local currencies, rather than in USD.
- d. Management expects growth in Eastern Europe, Middle East, India, China and California. No plans to expand in Latin America in near term. Growth expected in contract generation. Southern California is supposedly the most generationconstrained region in US.
- e. Legg Mason owns 11.7% of AES.
- 18. 2004 EBITDA Breakdown

Contract Generation	47.2%
Large Utilities	33.7%
Growth Distribution	9.9%
Competitive Supply	7.7%
Corporate and others	1.5%

- 19. 72% of generation capacity is in emerging markets.
- 20. Contract Generation plants have relatively stable and predictable cash flows, with limited commodity exposure. Long-term contracts typically signed with one large customer, generally an electric utility. 64% of total MW portfolio is under long-term contracts.
- 21. AES has ownership in 3 large utilities:

Indianapolis Power and Light (IPALCO)	100% ownership
Eletropaulo in Brazil	32% ownership
C.A. LaElectricidad de Caracas (EDC) Venezuela	86% ownership

e. IPALCO is holding company for Indianapolis Power and Light (IPL).

- f. They generate and sell electricity to 450,000 customers. 3,300 of capacity, of which 99% is coal fired. IPL has \$690M in cumulative net operating income deficiencies, hence must inform utility commission if dividends are planned.
- g. EDC has 1M customers. 2600 MW of capacity.
- h. Eletropaulo has 5m customers. 30-year concession contract with National Electric Energy Agency (ANEEL). Tariffs are increased to reflect ROE. Negotiated every 4 years. Next pricing negotiations are 2007.

- 22. Competitive Supply exposed to commodity risk and more volatile cash flows. Mostly coal generated.
- 23. Growth Distribution is basically facilities located in emerging markets where AES expects demand for electricity to grow at a greater pace than in developed countries.
- 24. Earnings drivers
  - a. Lower interest expense
  - b. Added MW's
- 25. Brazilian debt reduced to \$2.7B from \$3.8B in 2003.
- 26. Debt Levels and discussion:
  - a. \$18.1B in total debt. \$13B of that is non-recourse. Potential debt to equity level of 76% by 2007. Current debt to capital of 86%.
  - b. S&P rates debt at B+ and Moody's rates debt as B1 (highly speculative). Both agencies upgraded in 2004 and have AES on positive outlook. Management goal is BB level (low grade speculative).
  - c. 1.9X interest coverage ratio
  - d. 86% of cash flows from regulated utilities and contract generation.
  - e. Possible refinancing in emerging debt market. AES was shut out of debt markets for a number of years. Refinancing would be done at more favorable terms.
  - f. I have seen capex projected in the \$750M range annually through 2007.
  - g. Goal of \$500 600M debt reduction in 2005 (this was as of 10/29/04)

#### September 30, 2004

From Utility Investor

Company (Symbol)	Phone	Yield	Q2 Payout	Int Exp	S&P Rate (Bus Pos, Otlk, Moody's)	Safety Rating	Type Ute	Comment	Advice
AES Corp (AES)	703- 522- 1315	0.0%	0.0%	- 15.6%	B+(none,stable,Ba3/stbl)	2	М	Q2 net down on charges but sales	Buy @10

			up 14% and margins rise globally.
			rise globally.

April 26, 2004

I just finished reading the annual report. What an interesting business. Lots of possible clouds as well. Here are some quick notes. Have these items been discussed before?

1. Energia Paulista Particpacoes notes are due on 8/11/05. Interest rate increased from 12 to 14%. 8/04 interest deferred till 8/05. Any comments. That is a real hefty rate. What is AES stand on debt of subs.

2. Actuarial assumptions for retirements are way to aggressive imo. I think they are using an 8.75% expected return. Each 1% change in that rate would cost approx 2.6m. I like using a 6.50% rate. Granted, not many companies are using that rate, yet.

3. Brazilian pension plan assumptions blew me away. Expected rate of return is 14%. The plan is expected to be invested 76% fixed income, 20% equities and the difference in real estate. What am I missing that a company and the actuaries can find comfort in such an exorbitant rate? Discount rate is 12%, and that sounds awfully high as well. Each 1% change is equal to 8m.

Between both of the above, I am going to model for additional expenses of 8.0m on US plan, and 68 mil of expense on Brazil plan.

I am also wondering how aggressive AES may be on the recording in the balance sheet of "contingent contractual obligations". Theoretically there could be 400m of debt, but of course it is not 100% uncollectible and default able, but still something to watch.

Anyone know if any of the lawsuits are concerning.

Any covenants concerning?

At this point, I am going to model a total of 100m as additional expense.



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