

Yale School of Management

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Applied Financial Analysis Workshop

Fall Semester 2001



FPL Group Inc.

NYSE: FPL

Price as of 10/11/01: \$ 52.99

52-week high: \$ 73.00

52-week low: \$ 51.21

13 October 2001

Electric Distribution Industry

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Rating: Buy

Highlights:

- We initiate coverage of FPL with a BUY rating.
- We view Florida's strong population and electricity usage growth, and non-active deregulation process as favorable conditions to FPL's core regulated businesses.
- FPL Energy, FPL's IPP subsidiary, is expanding rapidly into different geographical areas. We view their focus in clean fuel technology and diversified geographical locations as positive factors.
- FPL FiberNet, FPL's telecom venture, was profitable in its first year of operation. We applaud FPL FiberNet's effort and expect strong revenue growth in the near future.

(c) 2001, Peter Ho, Manuel Ramos, Jean-Francois Tremblay and Brian Yiu of Yale School of Management

COMPANY DESCRIPTION

FPL Group, Inc. is a public utility holding company. FPL Group's principal subsidiary, Florida Power & Light Company (FPL), is engaged in the generation, transmission, distribution and sale of electric energy in the state of Florida. It currently serves more than seven million customers along the east and west coasts of Florida. Its Independent Power Producer (IPP) subsidiary, FPL Energy is involved in independent power projects in 12 states. FPL is actively expanding into telecommunications through its FPL FiberNet subsidiary.

ANALYSIS

Impact of Deregulation

Florida has not yet committed to deregulation and is still studying that option. An interim report released by the Energy 2020 Study Commission recommended that the state remove barriers to entry for pure generators andrequire utilities to acquire energy resources through a competitive acquisition process. It also suggested that utility companies should be allowed to assume ownership of existing generators and build new ones. As such, FPL plans to add over 7,000 megawatts of generating capability on top of its current capacity of 17,500 megawatts. The company expects approximately 2,700 megawatts of new generation to be available by 2004. ¹

We believe the effect of deregulation on FPL will be minimal due to the following reasons:

- There has been a lack of consumer interest in the restructuring proposal. A previous effort to deregulate the industry faced strong opposition and died at an early stage.
- Based on the Energy 2020 interim report, current distributors like FPL will not be required to divest their generating capacity even if restructuring occurs. Impacts will probably be relatively small and gradual.
- FPL has diversified to other businesses such as intra-city wholesale fiber optic service. It is
 considered to be a promising investment because inner city fiber optic networks are still
 underdeveloped, unlike the intertstate networks which are over supplied.

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¹ Source: Energy Information Administration

Electricity Demand in Florida – Expecting Growth for the Next Ten Years

Florida's population has grown at an annual rate of 2.35% over the past 10 years, which is much higher than the national average of 1.31%. The annual growth rate is expected to stay close to 1.43% for the next 15 years. Total sales of electricity in megawatts increased by 3.7% per year from 1988 to 1998.² Growth has been especially strong in the costal area, which is served by FPL. Last year, FPL experienced the biggest increase ever in its client base.

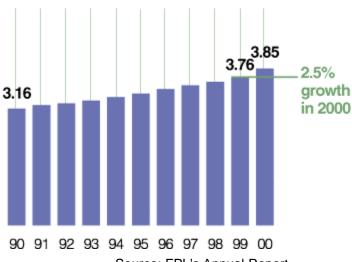
Utility Retail Sales by Sector, 1988, 1993, and 1998 (Megawatthours)									
				Annual					
				Growth					
				Rate					
				1988-					
				1998	Percentage	Percentage	Percentage		
Sector	1988	1993	1998	(Percent)	Share 1988	Share 1993	Share 1998		
Residential	63,971,848	76,827,417	95,768,182	4.1	49.1	50.3	51.1		
Commercial	45,892,365	54,875,680	67,346,460	3.9	35.2	35.9	35.9		
Industrial	16,355,592	16,297,722	18,448,021	1.2	12.6	10.7	9.8		
Other	4,020,963	4,747,000	5,791,929	3.7	3.1	3.1	3.1		
Total	130,240,769	152,747,819	187,354,592	3.7	100.0	100.0	100.0		

Source: Energy Information Administration

² U.S. Census Bureau







Source: FPL's Annual Report

Electricity Supply in Florida – FPL's advantage to persist

The five largest utility companies make up 82% of sales of electricity in Florida, and FPL is the largest distributor with 47% of sales. Compared to its peers, FPL is in a very strong position because it serves the biggest markets, which are also the highest growth regions. Considering the slow pace of the deregulation process, we expect this location advantage to remain at least in the medium term. FPL also has the advantage in its power generation capacity. Currently, FPL produces 83% of its total electricity sales, and the situation is expected to persist in the near future.

Top Five Utilities Ranked by Retail Sales Revenue Within the State, 1998 (Million Dollars)									
Utility	All Sectors	Residential	Commercial	Industrial	Other				
A. Florida Power & Light Company	6,097	3,579	2,239	197	82				
B. Florida Power Corporation	2,390	1,425	609	214	142				
C. Tampa Electric Company	1,098	563	335	113	87				
D. Jacksonville Electric Auth	608	315	181	105	6				
E. Gulf Power Company	509	276	161	70	2				
Total	10,702	6,158	3,525	700	319				
Percentage of Utility Sales	82	81	82	79	83				

Source: Energy Information Administration

Recent Developments

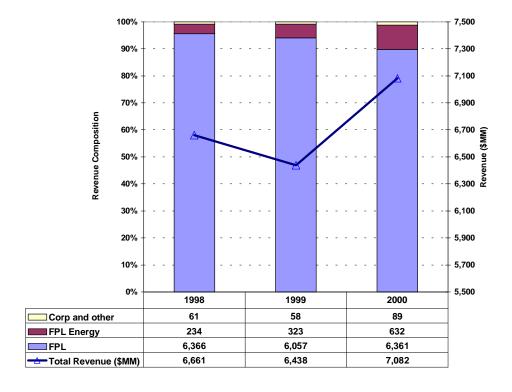
FPL FPL Energy FPL FiberNet July 20, 2001 June 13, 2001 July 24, 2001 Reaffirmed that it Announced that it will construct, Announced completion of a fiber-optic project in the West expects a 7% increase in operate and own a 517-megawatt, earnings per share for natural gas-fired power plant in Palm Beach and Boca Raton the fiscal year 2001. Blythe, California. Commercial metropolitan areas. April 11, 2001 Wall Street analysts on operation is anticipated to begin in average are expecting early 2003. Announced an agreement to the Company to earn June 7, 2001 lease a portion of its fiber \$4.69 per share in the Announced the commercial startup optic network in Florida to same period. of a 171-megawatt expansion of its BellSouth. FPL FiberNet will April 2, 2001 Doswell combined-cycle electric be one of the providers of FPL Group and Entergy generation facility in Ashland, dark fiber to connect Corporation announced Virginia. Virginia Power will BellSouth's FloridaMIX highthe termination, by purchase the output under a multispeed Internet exchange, or mutual decision, of the year agreement. network access point, to May 16, 2001 merger agreement they connection points throughout signed last July. Miami-Dade, Broward and Announced that it will build, own and operate the largest wind project Palm Beach counties within the State of Florida. in Kansas and will sell the electricity output to UtiliCorp United under a multi-year contract. The turbines will have a generating capacity of 110 megawatts April 10, 2001 Announced that it will build, own and operate a 624-megawatt, natural gas-fired power plant in Calhoun County in northeastern Alabama. Electricity will be sold primarily under contract to Alabama Power Company, a subsidiary of Southern Company.

Source: Business Browser and Yahoo Finance

Segment Performance

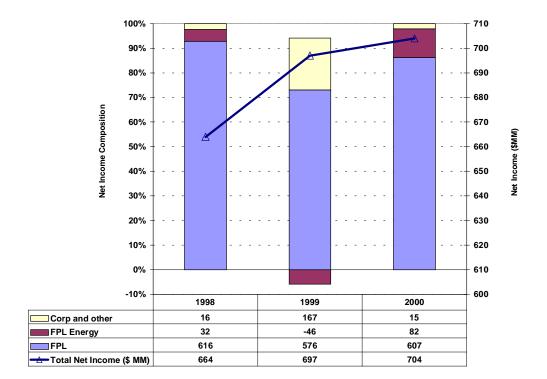
Historically, the regulated utility segment was the biggest revenue contributor to the firm, making up more than 95% of the total revenue in 1998. Due to FPL's aggressive expansion into non-regulated business, revenue and net income contribution from the regulated utility segment decreased to 90% and 86%, respectively.

In 1999, FPL Energy acquired Central Maine Power Company's (CMP) non-nuclear generating assets for \$866 million. The FERC rulings regarding transmission, as well as the announcement of new entrants into the market and changes in fuel prices since January 1998, resulted in FPL Energy recording a \$176 million pre-tax impairment loss to write-down the fossil assets to their fair value. As discussed in later sections, we believe that FPL's non-regulated subsidiary will grow significantly faster than the regulated segment.³



³ Data Source: FPL annual report

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FPL's Outlook

We believe that FPL is well positioned to maintain a stable revenue growth due to the following factors:

- FPL serves some of the fastest growing communities in the US such as Fort Lauderdale and Orlando. In 2000, FPL customer growth was the highest in a decade (2.5% in 2000). As discussed earlier, we believe the strong growth will continue in the near future.
- The company expects 41% growth in total megawatts in operation (including FPL Energy) by 2004.
- FPL achieved and expects to maintain combined customer and usage growth by more than 4% per year.
- In 1999, the FPSC approved a three-year agreement among FPL, Public Counsel, FIPUG and Coalition regarding FPL's retail base rates, authorized regulatory ROE, capital structure and other matters. Revenues from retail base operations in excess of a threshold are required to be refunded 100% to retail customers. However, there will be no additional base rate reductions during the three-year term of the agreement unless such reduction is initiated by FPL. The agreement also lowered FPL's authorized regulatory ROE range to 10% 12%.
- Florida's electricity deregulation process is moving at a slow rate, and there is a good chance that major restructuring will not happen in the foreseeable future.
- FPL was able to reduce its operation cost by over 40% in the last decade.
- FPL is targeting 5% or more earnings growth in 2001. Historically, FPL's plow back ratio was around 50%. Since the median regulated ROE is 11%, we believe that FPL should have no problem meeting its 5% growth target.
- Our one concern: FPL is alleged to be over-earning and rate review is currently underway.
 FPL is working with local authorities to develop a new set of long-term agreement.
 However, market consensus suggests that the chance of a forced real rate cut is slim.

FPL Energy's Outlook

Operating power plants in 12 states, FPL Energy is FPL Group's energy generating subsidiary. In 2000, the subsidiary grew its portfolio by nearly 40 percent in 2000 to more than

4,400 total net megawatts. In addition, there is a strong pipeline of projects in development. Approximately 6,000-7,000 megawatts of capacity is currently under construction⁴.

Most of the energy produced in 2000 by FPL Energy's independent power projects was sold through long-term agreements with utilities that expire between 2001-28. As competition increases, FPL Energy expects that more of the energy produced will be sold through shorter-term contracts and competitive wholesale (spot) markets.

Competitive wholesale markets continue to evolve and vary by geographic region. Revenues from electricity sales in these markets will vary based on the prices obtainable for energy, capacity and other ancillary services. Some of the factors affecting success in these markets include the ability to operate generating assets efficiently, the price and supply of fuel, the constraints in transportation, the competition from new generators, the growth in demand and the exposure to legal and regulatory changes.

Between 1978 and 1992, America's utilities' capacity margins averaged between 25 and 30 percent. Since 1992, the capacity margins have declined to less than 15 percent nationwide. However, in 2001, the decline is expected to reverse, as capacity margins reach 15.6 percent nationwide, with planned capacity expected to grow by 27.1 gigawatts and demand by 15.8 gigawatts.

The national capacity margin is expected to reach 18.4 percent in 2004 with electric generating capacity expected to reach 870.0 gigawatts, while electricity demand is projected to reach 709.6 gigawatts. The expected margin, which is an important measure to show whether the nation has the capability to satisfy peak demand, is still significantly smaller than that in the last two decades. We conclude that the pace of current investment on power generation facilities should not result in an excess in supply, unless substaintial amount of additional investment is announced in the near future.

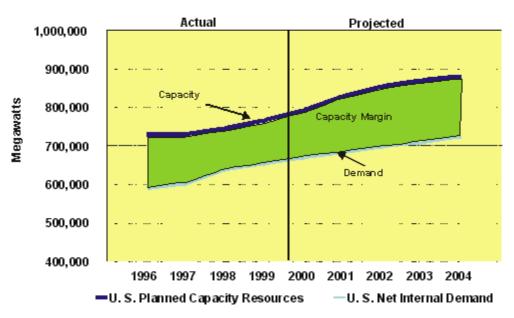
Analysis:

- FPL Energy continues to focus on the generation of electricity using clean technologies and fuels such as natural gas and renewable resources, including wind, solar and hydro energy.
 - FPL is the nation's largest producer of wind-generated electricity

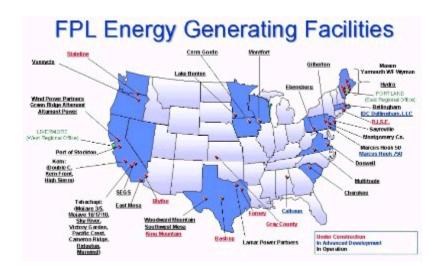
⁴ Source: Deutsche Banc Alex. Brown, Electric Power Conference, June 13, 2001 and FPL's annual report

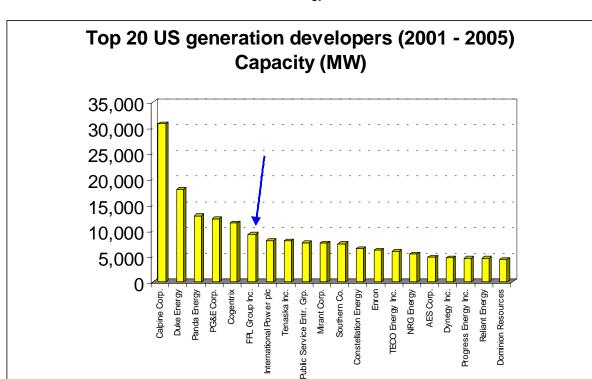
- FPL operates the largest solar field in the world
 - Approximately 80 percent of FPL Energy's electricity is generated by clean fuels (wind, solar and gas).
- FPL is diversified in terms of region and fuel source
- The company targets 20-30% earnings growth in 2001.

U.S. Net Internal Demand and Planned Capacity, 1996-2004



Source: Energy Information Administration





Source: FPL Energy Website

FPL FiberNet

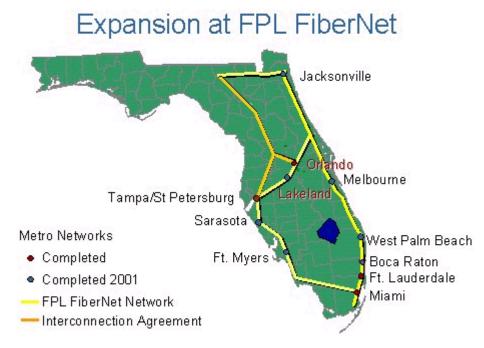
Formed as a subsidiary of FPL Group in January 2000, FPL FiberNet has grown its portfolio from 1,600 inter-city route miles to almost 2,300, representing nearly 200,000 fibermiles. FPL FiberNet is investing about \$350 million to augment the inter-city network with intracity builds in major metropolitan areas in Florida. Its customers include Internet service providers, as well as telephone, cable TV and other telecommunications companies. FPL FiberNet provides wholesale fiber-optic service to Internet service providers, telephone and cable companies, and other telecommunications businesses in Florida and the Southeast. We applauded FPL FiberNet's effort due to the following reasons:

- Unlike other telecom ventures, FPL FiberNet was profitable in its first year of operation.
- FPL FiberNet has recently completed the deployment of fiber optics services to most metroareas in Florida.
- FPL FiberNet is well-positioned in a niche market: inner city fiber optics services⁵. While there is excessive capacity for inter-state fiber optics route, inner city fiber optics services

⁵ Washington Post, April 10, 2001

remained under-served. FPL management expects a 50 - 80% earnings growth in 2001, which we consider conservative.

 We viewed its recent agreement with BellSouth as a strong endorsement of its expansion effort.



Source: FPL Fiber Net website

COMPANY VALUATION

Comparable companies

The following table shows different price multiples for our universe of electric distribution companies. On average, these companies trade at a price of 1.6x book value, 13.4x earnings, 0.9x sales and 3.5x EBITDA. The P/E ratios are expected to fall to 12.8x and 11.4x in 2001 and 2002, respectively. FPL's Price/Book, Price/Sales and P/EBITDA ratios place the company as above average in value relative to our universe, while the P/E indicates that the company is under-valued.

Electric Distribution - Valuation								
Company (by market value)	Ticker	Price (10/3/01)	P/B	P/E	P/S	P/EBITDA	P/E 2001	P/E 2002
SOUTHERN CO	so	\$25.55	2.34	16.59	1.67	4.91	15.7	14.9
AMERICAN ELECTRIC POWER	AEP	\$45.76	1.81	NA	NA	na	12.8	11.8
TXU CORPORATION	TXU	\$49.88	1.74	14.63	0.47	3.43	13.5	10.8
XCEL ENERGY INC	XEL	\$28.95	1.65	16.26	0.67	3.91	12.9	11.8
FPL GROUP INC	FPL	\$54.07	1.65	12.97	1.14	4.19	11.5	10.8
CONSOLIDATED EDISON INC	ED	\$41.80	1.43	14.67	0.88	4.39	12.9	12.4
PROGRESS ENERGY INC	PGN	\$44.47	1.68	13.94	1.22	4.68	13.2	11.5
FIRSTENERGY CORP	FE	\$36.88	1.76	14.08	1.08	3.43	13.0	11.2
WISCONSIN ENERGY CORP	WEC	\$22.81	1.29	13.91	0.65	3.08	10.9	9.7
NIAGARA MOHAWK HOLDINGS INC	NMK	\$16.93	1.01	NA	0.57	2.53	NA	NA
POTOMAC ELECTRIC POWER	РОМ	\$22.10	1.30	6.35	0.80	2.08	11.8	10.7
NSTAR	NST	\$43.20	1.85	NA	0.77	3.04	12.3	11.5
ALLETE INC	ALE	\$25.60	1.90	14.30	1.19	5.48	13.7	12.3
KANSAS CITY POWER & LIGHT	KLT	\$26.09	1.78	12.13	1.28	3.72	16.0	13.3
WESTERN RESOURCES INC	WR	\$16.55	0.63	NA	0.48	2.11	9.1	9.0
DQE INC	DQE	\$19.60	1.77	NA	0.87	3.16	15.4	11.6
EL PASO ELECTRIC COMPANY	EE	\$13.21	1.55	10.48	0.89	2.57	10.2	9.4
Source: Yahoo! Finance, FirstCall Average			1.60	13.36	0.92	3.54	12.8	11.4

The companies in our universe differ in some elements that we consider worth pointing out when comparing multiples. In order to account for these factors, we computed the price multiples for 3 different sub-groups, using those companies that compare similarly to FPL in terms of market capitalization capitalization (\$8.0 to \$15.0 billion), sales (\$6.0 to \$15.0 billion) and percentage of revenue from retail sales of electricity (50% to 80%). The following table summarizes our results:

P/EBITDA P/E 2001* Summary of multiple comparisons P/E P/S P/E 2002* All (17 companies) Average 13.36 0.92 3.54 12.81 11.44 FPL 12.97 1.14 4.19 11.50 10.80 Difference -0.39 0.22 0.65 -1.31 -0.64 Market capitalization (7) Average 0.91 4.01 14.43 12.82 11.50 FPL 12.97 1.14 4.19 11.50 10.80 Difference 0.23 0.18 -1.32 -0.70 -1.46 Sales (7) Average 14.76 1.11 4.25 13.13 12.08 FPL 12.97 1.14 4.19 11.50 10.80 Difference -1.79 0.03 -0.06 -1.63 -1.28 % revenue from retail elect (10) Average 13.10 0.93 3.38 12.55 11.38 FPL 12.97 4.19 11.50 10.80 1.14 Difference -0.13 0.21 0.81 -1.05 -0.58

Source: First Call and Yahoo! Finance

The table above shows that regardless of the reference group used, FPL is undervalued relative to its peers on a P/E basis. Average P/E multiples in our universe imply higher valuations for FPL.

Valuation – Discounted Dividend Model

A discounted dividend model using growing pertuity formula is used to determine FPL's fair value. The following parameters are used in the model.

- Dividend is assumed to grow at 3.75%, the historical growth rate for the past 5 years. Given a median ROE of 11% and a historical plow-back ratio of 50%, the earnings should grow at 5.5%. We anticipate FPL can easily sustain or exceed the historical pace, particularly if we include the higher growth rate of the non-regulated segments into consideration.
- Beta calculation: FPL's weekly return is regressed against S&P 500 to determine its equity beta. Using 17 years of historical data, we found out that FPL's beta is about 0.3.
- An Equity Risk Premium (ERP) of 8% is assumed in the model.
- A 10-year Treasury bond of 4.7% is used for the risk-free interest rate.

With the above assumptions, the fair value of FPL is \$66.87. We also compute FPL stock price under different growth rate and beta scenarios. We found a significant upside potential if FPL's growth rate exceeds 3.75%.

Dividend	2.24
ERP	8.00%
Risk-free rate	4.70%
beta	0.3
r _e	7.10%
growth rate	3.75%

Price/Share \$ 66.87

	Beta										
			0.1		0.2		0.3		0.4		0.5
growth rate	2.00%	\$	64.00	\$	52.09	\$	43.92	\$	37.97	\$	33.43
	3.00%	\$	89.60	\$	67.88	\$	54.63	\$	45.71	\$	39.30
	3.75%	\$	128.00	\$	87.84	\$	66.87	\$	53.98	\$	45.25
	4.00%	\$	149.33	\$	97.39	\$	72.26	\$	57.44	\$	47.66
	5.00%	\$	448.00	\$	172.31	\$	106.67	\$	77.24	\$	60.54

Conclusion

Based on the analyses on FPL's different business segments, we are confident that FPL's earnings growth will meet or exceed the forecast provided by its management. Our valuation analyses using comparable companies and the discounted dividend model both indicate that FPL is under-valued compared to its peers. We are issuing a buy recommendation to start our coverage on FPL.



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