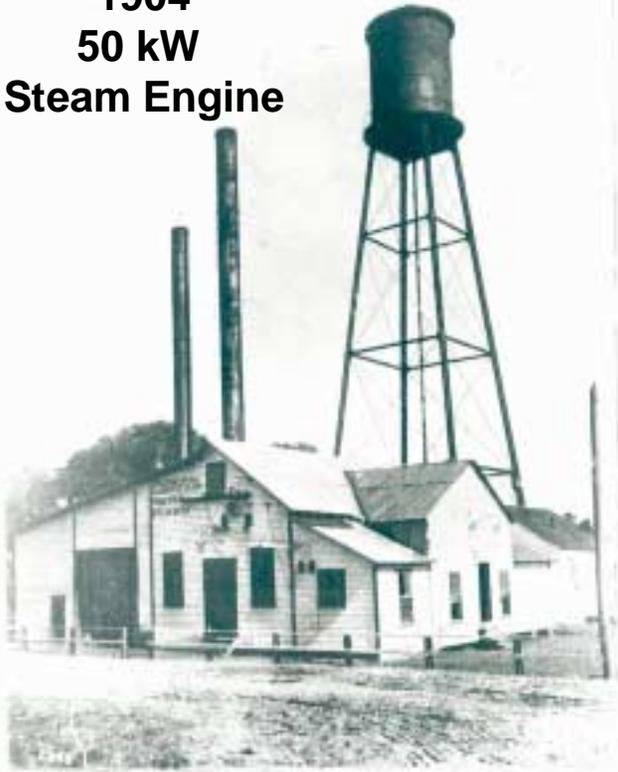


1904
50 kW
Steam Engine



96 Years Of Change, Challenge, Technology, Progress

2000
253,000kw S-W W501G
CT



DOE ATS
Annual Program Review
12 / 5 / 00
Bob Siegel





Lakeland Electric Utilities

- **256 Square Mile Service Territory**
- **Over 104,000 Customers**
- **3rd Largest Municipal Electric Utility in Florida**
- **22nd Largest Municipal Electric Utility in USA**
- **1026 MW System**
 - ◆ **5.5 MW Diesel Engine**
 - ◆ **153 MW Natural Gas or Diesel (CT / CC)**
 - ◆ **251 MW Natural Gas or #6 Oil (ST)**
 - ◆ **364 MW Coal, Petroleum Coke, and RDF (ST)**
 - ◆ **Jointly Owned With OUC**
 - ◆ **253 - S-W W501G SC Natural Gas or Diesel (CT)**



Why Lakeland Needs New Generation

- **Need Capacity to Replace Unit Retirements and Meet Increasing Demand**
 - * **Electrical Demand Increasing at 20-25 MW Annually**
- **Need High Efficiency Generation and Fuel Flexibility to Compete in Current and Future Marketplace**
- **Have Studied Over 50 Options to Meet Demand for Next 10 Years**



Florida Rates

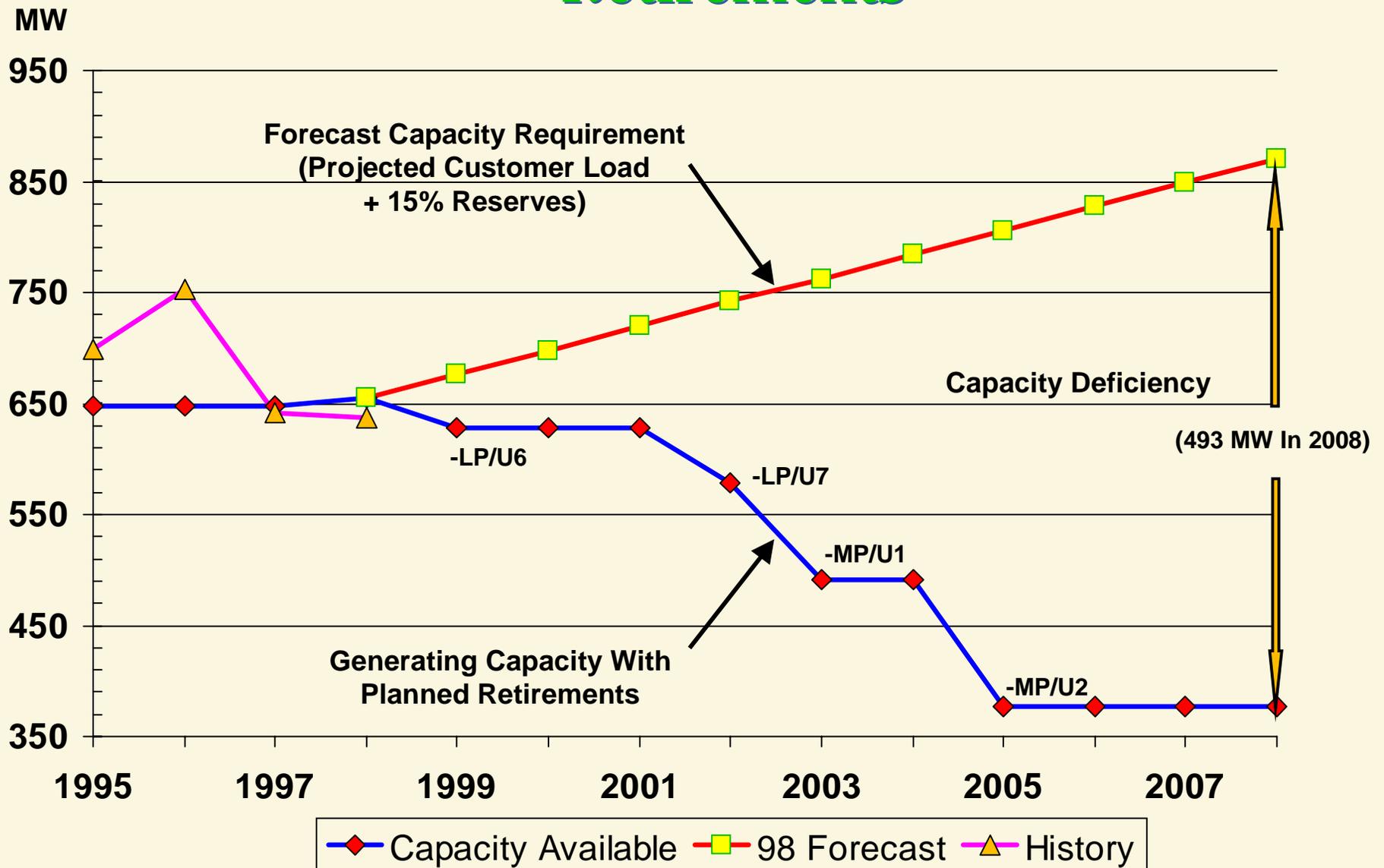
Residential \$ / 1000 kwh									
UTILITY	JAN. 1997		OCT. 1998		NOV. 1999		OCT. 2000		
	Rank	Price	Rank	Price	Rank	Price	Rank	Price	
JEA	1	\$ 68.15	1	\$ 68.15	1	\$ 68.15	1	\$68.15	
COL	2	\$ 75.10	4	\$ 76.10	4	\$ 76.10	3	\$79.10	
GRU	3	\$ 76.40	2	\$ 72.75	3	\$ 75.05	6	\$83.60	
FPL	4	\$ 76.85	3	\$ 74.36	2	\$ 69.93	2	\$73.37	
OUC	5	\$ 77.47	5	\$ 77.47	6	\$ 77.47	4	\$79.54	
TECO	6	\$ 78.37	6	\$ 78.02	7	\$ 77.88	5	\$79.99	
FPC	7	\$ 81.31	8	\$ 83.58	9	\$ 82.76	9	\$84.55	
KUA	8	\$ 85.61	7	\$ 79.08	5	\$ 77.42	8	\$87.61	
TAL	9	\$ 89.24	9	\$ 84.84	10	\$ 89.44	10	\$94.14	
FTPierce	10	\$ 89.90	10	\$ 85.10	8	\$ 80.79	7	\$84.32	

National Average

\$ 67.40



Retirements



With Winter Peak Demand



What Is Our Goal?

- **Provide Fuel Diversity**
- **Avoid Long Term Debt**
- **Exceed Environmental Standards**
- **Use New Technology To Assure Most Efficient and Competitive Generation**
- **Lower Energy Costs Below Projected Market Prices**
- **Strategy to Accomplish:**
 - **Retire Old, Inefficient, and High Maintenance Units**
 - **Build State-of-the-art Natural Gas Based Generator**
 - **Build State-of-the-art Clean Coal Based Generator**
 - **Phased Construction, Constantly Evaluating Options**



Efficiency Comparison

<u>DATE</u>	<u>UNIT</u>	<u>MW</u>	<u>Effic %</u>
1969	MPP-1	95	30
1976	MPP-2	115	32
1982	MPP-3	365	34
1992	LPP-8	110	37
2000	U5-SC	253	39
2002	U5-CC	365	58

