

RECEIVED-FPSC
09 JUL 16 PM 4:24
COMMISSION
CLERK

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
DIRECT TESTIMONY OF
RUSSELL L. KLEPPER
ON BEHALF OF AFFIRM FLORIDA
DOCKET NO. 080667-EI

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is Russell L. Klepper. I am a Principal of Energy Services Group, LLC, an energy and utility consulting firm that I helped to found. Our business address is 316 Maxwell Road, Suite 400, Alpharetta, Georgia 30009.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL EXPERIENCE.

A. I hold a Bachelor of Science in Business Administration with a major in Economics and a Master of Business Administration with a major in Finance, both from the University of Florida, and a Master of Professional Accountancy from Georgia State University. I have over thirty-two years of applicable utility experience, the first seven of which were spent in the financial areas of Georgia Power Company. During my last three years of employment by that electric utility, I held the title of Manager of Financial Services. For the past twenty-five years, the preponderance of my time has been spent as an independent consultant on utility finance, rates and regulation, and regulatory transition

COM 5
ECR 4
SCL 2
DPC
RCP
SC
GA
ADM
CLK G. Rep.

1 issues, as well as certain facets of the economics of both regulated utilities and
2 unregulated firms that produce, sell, and distribute energy for consumption by ultimate
3 consumers. I have provided professional services to both investor owned and
4 governmental utilities, to private companies that have significant interests in the energy
5 industry, and to entities such as the World Bank, the United States Energy Association,
6 and the Edison Electric Institute. As a consultant, I have developed and presented two
7 national seminars and numerous in-house seminars that focus on different aspects of
8 utility planning and decision-making. A more detailed Summary of Professional
9 Credentials is attached as an Exhibit RLK-1 to this direct testimony.

10
11 **Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

12
13 A. I am here on behalf of Florida AFFIRM (the "Association For Fairness In Rate Making"
14 or "AFFIRM"), a coalition of quick serve restaurants that have substantially similar
15 electrical usage characteristics. The Members of AFFIRM are the corporations and the
16 corporations' franchisees that own and operate over 500 business locations served by
17 Florida Power & Light Company ("FPL" or the "Company") under the following brand
18 names: Waffle House, Wendy's, Arby's, and YUM! Brands, doing business as Pizza Hut,
19 Kentucky Fried Chicken, Taco Bell, Long John Silver's, and A&W.

20
21 **Q. PLEASE BRIEFLY SUMMARIZE THE PURPOSE OF YOUR TESTIMONY.**

1 A. As explained in detail below, the AFFIRM Members are economically disadvantaged in
2 the purchasing of electric service from FP&L because the pricing alternatives currently
3 available to such multi-location customers do not reflect the economies of scale to FP&L
4 that result from providing such service and because the load characteristics of the
5 AFFIRM Members are not effectively captured by FPL's currently available rates.
6 Accordingly, this testimony will propose that the Florida Public Service Commission (the
7 "Commission") direct the Company to establish one or more new rates to be available to
8 commercial customers that will (1) more effectively reflect the beneficial cost causation
9 characteristics of the AFFIRM Members and similarly situated FPL customers, and (2)
10 provide a realistic, cost based economic incentive for commercial customers to undertake
11 load shifting and other voluntary measures to control loads and associated costs

12

13 **Q. HOW ARE THE AFFIRM MEMBERS ECONOMICALLY DISADVANTAGED**
14 **IN PURCHASING ELECTRIC SERVICE FROM THE COMPANY?**

15

16 A. There are two distinctly different ways in which the AFFIRM Members are economically
17 disadvantaged in such purchases. First, the electrical usage characteristics of the
18 AFFIRM Members reflect consumption patterns that materially differ from the majority
19 of commercial customers. Most AFFIRM Members (1) open in the morning, and
20 business activity starts in earnest before the stores open; (2) remain open until late in the
21 evening, and some remain open twenty-four hours per day; (3) are open for business
22 every weekend day and every holiday, with the possible exception of Christmas; (4) have
23 a significant percentage of their load in exterior lighting, with the preponderance of such

1 loads occurring during off-peak hours, and (5) have significant around-the-clock
2 refrigeration loads that are not typical for commercial customers except for restaurants.
3 Most AFFIRM Members will peak during the Company's designated peak hours, but
4 because exterior lighting is a significant portion of the loads, almost none of the AFFIRM
5 Members will peak in the specific hours during which the Company will experience its
6 monthly peak loads. Typically, the peaks of the individual stores will occur during the
7 lunch rush or after sunset, during the hours that many utilities will designate as either off-
8 peak hours or "shoulder hours" rather than on-peak hours. Based on the electric usage
9 characteristics set forth in this paragraph, when compared to the majority of commercial
10 customers, the AFFIRM Members cause a disproportionately smaller contribution to the
11 Company's monthly system peaks, and also use a disproportionately greater percentage
12 of total energy consumption during off-peak periods.

13
14 Almost all of the individual locations of the AFFIRM Members are served under GSD-1.
15 (The very few exceptions are generally smaller stores that are located in shopping mall
16 food courts.) The structure of GSD-1 is highly unfavorable, for several reasons, to any
17 commercial customers, including the AFFIRM Members, that have the electrical usage
18 characteristics described in the previous paragraph.

19
20 **Q. WHY DO YOU CONTEND THAT GSD-1 IS UNFAVORABLE TO THE**
21 **MEMBERS OF AFFIRM?**

1 A. First, GSD-1 assumes that all customers served under this rate will make approximately
2 the same contribution to the system peak. But as explained above, this assumption is
3 incorrect with respect to the AFFIRM Members, whose monthly peaks typically occur
4 during what most utilities deem to be either off-peak hours or shoulder hours rather than
5 on-peak hours. Second, GSD-1 sets forth a base energy charge for all hours of 1.390
6 cents per kWh, based upon an assumption that the allocation of energy usage between on-
7 peak and off-peak hours is approximately the same for all commercial customers. But as
8 explained above, this assumption is incorrect with respect to the AFFIRM Members,
9 whose pattern of energy consumption is disproportionately higher during off-peak hours
10 compared to the commercial class as a whole. Third, GSD-1 provides that during the five
11 winter months, the period from 6:00 PM to 10:00 PM will be a peak period. Because of
12 the outdoor lighting loads of most AFFIRM Members, the monthly peaks for these
13 customers will almost always occur during these hours. But data produced by the
14 Commission Staff published in the February 2009 Annual Report on Activities Pursuant
15 to the Florida Energy Efficiency and Conservation Act (FEECA), attached hereto as
16 Exhibit RLK-2 and entitled "Typical Florida Daily Electric Load Shapes", shows that the
17 winter peaks during the PM hours are no more than 82% of the corresponding winter
18 peaks during the AM hours. Based on such data, customers that peak during the winter
19 PM hours are unjustifiably penalized.

20
21 In summary, GSD-1 is made available as a "one size fits all" rate for commercial
22 customers, but the AFFIRM Members have usage characteristics that make GSD-1
23 particularly ill-suited. Regrettably, notwithstanding the very poor correlation between the

1 structure of GSD-1 and the usage characteristics of the AFFIRM Members, there is no
2 other rate that provides a better economic result to the individual locations of the
3 AFFIRM Members.

4
5 **Q. PLEASE EXPLAIN WHY NO RATE OTHER THAN GSD-1 WOULD PROVIDE**
6 **A BETTER ECONOMIC RESULT TO THE AFFIRM MEMBERS.**

7
8 A. There are only two rates and one rate rider available from FPL to commercial customers
9 with loads between 20 kW and 500 kW. These rates are GSD-1 (General Service
10 Demand), as discussed above, and GSDDT-1 (General Service Demand – Time of Use).
11 The Company also offers a Seasonal Demand - Time of Use Rider, but this rider has little
12 value to a business that is not seasonal in nature.

13
14 In its present form, GSDDT-1 is a highly ineffective rate. From a technical standpoint, the
15 structure of this rate is deficient because the generally higher cost incurred under GSDDT-
16 1 weighs against the use of this rate and thereby precludes any benefits that might
17 otherwise be obtained through the rate incentive offered by a time of use rate. Under the
18 rate structure of GSDDT-1, it is nearly impossible for any commercial customer to obtain a
19 better economic outcome by using the GSDDT-1 rate instead of the GSD-1 rate. This
20 situation exists because the around the clock base energy charge under GSD-1 is 1.390
21 cents per kWh, while under GSDDT-1, the base energy charge under GSDDT-1 is 3.244
22 cents per kWh during the peak hours and 0.892 cents per kWh during the off-peak hours.
23 Accordingly, in order to achieve a lower cost under the commercial time of use rate, the

1 customer can consume no more than 21.2% of its total energy usage during on-peak
2 hours. By way of comparison, the number of on-peak hours during a calendar year is
3 about 25% of the total hours, and the total energy provided by FPL during on-peak hours
4 is in the neighborhood of 45% of all energy provided by FPL. To place these percentages
5 into perspective, a typical AFFIRM Member consumes about 32% of its total energy
6 usage during on-peak periods, compared to around 45% for the total system, so the load
7 pattern of the AFFIRM Members is clearly more favorable than the Company's total load
8 because the costs incurred in serving off-peak loads are substantially lower than the
9 corresponding costs incurred in serving on-peak loads.

10
11 The inferior nature of FPL's commercial time of use rate (GSDT-1) can be amply
12 illustrated by simply looking at the practical aspects of FPL's offering of this rate.
13 Information obtained from FPL's Sales of Electricity by Rate Schedules, a component of
14 FPL's filing of the 2007 FERC Form No. 1, reflects that only 1.63% of commercial
15 customers (other than those using the season rate rider) were billed under GSDT-1. Only
16 1.28% of all energy sales to commercial customers were billed under this rate, meaning
17 that the average customer using GSDT-1 consumed about 20% less energy than the
18 average commercial customer. And worst of all, customers being served under GSD-1
19 (the "one size fits all" rate) paid an average revenue to FPL of 10.00 cents per kWh,
20 while customers under the GSDT-1 (time of use) paid an average revenue to FPL of
21 10.75 cents per kWh, a cost 7.5% higher than customers served under the plain vanilla
22 rate.

1 **Q. DO YOU BELIEVE THAT A NEW COMMERCIAL TIME OF USE RATE**
2 **SHOULD BE DEVELOPED AND IMPLEMENTED, AND IF SO, WHY?**

3

4 A. Yes, a new commercial time of use rate should be developed and implemented. The
5 existing time of use rate (GSDT-1) is so badly structured that for most customers, it
6 results in a total cost that exceeds the total cost that would be realized by that same
7 customer under the plain vanilla rate (GSD-1). Accordingly, commercial customers
8 (including the AFFIRM Members) who wish to become more energy efficient by
9 responding to electric price signals are denied the realistic opportunity to do so. For this
10 reason, the Commission should instruct the Company to develop a new commercial time
11 of use rate that would be more effective by providing periodic price signals that would in
12 turn provide an incentive to customers to actively endeavor to control their energy costs.

13

14 **Q. DOES THE COMPANY SUPPORT THE CONCEPT THAT RATES SHOULD**
15 **PROVIDE APPROPRIATE PRICE SIGNALS TO CUSTOMERS?**

16

17 A. It appears so. The testimony of FPL Witness Deaton states in relevant part, at page 6,
18 line 9 of direct testimony, that “The Commission should approve FPL’s rate proposals
19 and continuation of the GBRA mechanism as presented in this testimony because they
20 are reasonable, cost-based and send the appropriate price signals to customers (emphasis
21 added).”

22

1 AFFIRM fully supports the ratemaking objectives set out by Witness Deaton, and agrees
2 that the rates approved by the Commission in this ratemaking proceeding should be
3 reasonable, cost-based and send the appropriate price signals to customers.
4 Unfortunately, while the GSD-1 rate may be just and reasonable as required by applicable
5 statutes, the indiscriminate application of GSD-1 to a group with widely differing load
6 characteristics does not produce just and reasonable charges to all electric customers
7 within the GSD-1 rate class. As discussed above, because the electric characteristics of
8 the AFFIRM Members are different from the assumptions upon which the GSD-1 rate is
9 based, the AFFIRM Members are the most disadvantaged customers within the GSD-1
10 rate group. Further, the only commercial rates available from FPL to the AFFIRM
11 Members are not reasonable because they are not based on the cost causation
12 characteristics of the AFFIRM Members, and further because such rates do not send the
13 appropriate price signals to the AFFIRM Members or other similarly situated customers.

14

15 **Q. ARE YOU ABLE TO CITE ADDITIONAL AUTHORITY PROVIDING FOR THE**
16 **DEVELOPMENT AND IMPLEMENTATION OF COST BASED TIME OF USE**
17 **RATES FOR AFFIRM MEMBERS AND SIMILARLY SITUATED**
18 **CUSTOMERS?**

19

20 A. Yes, I am. The Energy Policy Act of 2005 was enacted by Congress and became federal
21 law on August 8, 2005. Section 1252 of the Energy Policy Act, "Smart Metering",
22 amended Section 111(d) of the Public Utilities Regulatory Policy Act of 1978 by adding
23 the following:

1 “(14) TIME BASED METERING AND COMMUNICATIONS. – (A) Not later than 18
2 months after the date of enactment of this paragraph, each electric utility shall offer each
3 of its customer classes, and provide individual customers upon customer request, a time-
4 based rate schedule under which the rate charged by the electric utility varies during
5 different time periods and reflects the variance, if any, in the utility’s cost of generation
6 and purchasing electricity at the wholesale level. The time-based rate schedule shall
7 enable the electric consumer to manage energy use and cost through advanced metering
8 and communications technology.”

9
10 By submission of this direct testimony in this proceeding, the Members of AFFIRM
11 hereby request that the Commission direct the Company to develop, within the context of
12 this proceeding, a newly developed commercial time of use rate that will satisfy the
13 above cited objective set forth in the Energy Policy Act of 2005.

14
15 **Q. WHAT IS THE SECOND WAY IN WHICH THE AFFIRM MEMBERS ARE**
16 **ECONOMICALLY DISADVANTAGED IN PURCHASING ELECTRIC**
17 **SERVICE FROM THE COMPANY?**

18
19 **A.** The AFFIRM Members are multi-location customers that receive none of the rate
20 benefits that are extended to their single location counterparts with loads of similar size,
21 notwithstanding the economies of scale in generation, transmission, and administrative
22 functions enjoyed by the Company in serving the large multi-location loads of the
23 AFFIRM Members. Currently, FPL does not make available to its customers any

1 multiple location rate that recognizes that multi-location customers may have aggregate
2 electric load and usage characteristics that are similar to large single location loads served
3 by the Company.

4
5 By way of illustration, each of Wendy's/Arby's Group and YUM! Brands has over two
6 hundred locations served by FPL, with each having an aggregate load of approximately
7 16,000 kW. Under the existing FPL rates, a single location customer with a measured
8 demand of 2,000 kW or more is entitled to be served under the "General Service Large
9 Demand – Time of Use" rate. A customer at a single location with the exact same
10 electrical billing determinants as 200 individual Wendy's stores would be billed under
11 GSLDT-3 and would pay annual base charges (the customer charge, base demand charge,
12 and base energy charges for on-peak and off peak energy consumption) totalling
13 approximately \$1,537,425. By contrast, the 200 individual Wendy's stores would each
14 be billed under GSD-1 (a less expensive rate than GSDT-1) and would pay in the
15 aggregate the sum of \$2,084,412, an annual difference of \$546,987.

16
17 The primary reason for this cost difference is that the AFFIRM Members are treated for
18 rate making purposes as if they were hundreds of unaffiliated small retail customers.
19 This treatment as individual customers is inconsistent with the collective manner in
20 which the AFFIRM Members are treated in competitive markets by almost all energy
21 suppliers, and is further inconsistent with the collective treatment that the AFFIRM
22 Members enjoy from the suppliers of almost all other products purchased by such
23 companies..

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

In fairness, it should be acknowledged that electric service to the individual locations versus the single location with a similar electric load will reflect very little difference in cost causation attributable to generation, transmission, or administration, but cost differences will result from distribution investment and from distribution operations and maintenance costs. However, the distribution related costs should be nowhere near the magnitude of the \$546,987 difference in costs to the AFFIRM Members under my example. Moreover, it should be recognized that the base demand charges that would be paid by the AFFIRM Members under this circumstance would be based on the sum of the individual peak demands at each location rather than the coincident peak of all of the related retail entities, which is the load that the Company provides to the AFFIRM Members during any given hour.

Q. WHAT ACTION DOES AFFIRM ASK OF THE COMMISSION WITH RESPECT TO THE ISSUE OF THE DEVELOPMENT OF MULTI-LOCATION RATES?

A. The Commission is aware that a primary purpose of rate regulation is to attempt to create, in the absence of competition for the regulated entity, the same competitive pressures that would exist if competition were present. The Commission should take notice that in states where electric service or natural gas service has been deregulated, it is common for energy suppliers actively to seek to provide service to multi-locations customers. For that reason, AFFIRM requests that the Commission direct the Company to engage in good faith negotiations with representatives of AFFIRM such that multi-location rates can be

1 developed and considered in this rate proceeding or in subsequent rate proceedings of the
2 Company.

3

4 Q. ARE THERE OTHER ASPECTS TO THE DEVELOPMENT OF MULTI-LOCATION
5 RATES THAT THE COMMISSION, AND IN TURN THE COMPANY, SHOULD
6 CONSIDER?

7

8 A. Yes. Another important aspect of the consideration of multiple location rates is that the
9 customers to whom such rates would be available should be defined as all premises
10 operated as a single brand under common ownership or under common control via
11 written franchise agreements with a single controlling entity.

12

13 Q. **WHY SHOULD ALL PREMISES THAT ARE OPERATED AS A SINGLE**
14 **BRAND UNDER COMMON CONTROL PURSUANT TO FRANCHISE**
15 **AGREEMENTS WITH A SINGLE CONTROLLING ENTITY BE ALLOWED TO**
16 **USE A MULTIPLE LOCATION RATE/**

17

18 A. The operation of certain premises under franchise agreements is an integral component of
19 the business operation of many recognized brands, including all of the AFFIRM
20 Members. Franchise holders operate their premises subject to the same degree of
21 operational control by the controlling entity as the controlling entity exercises over its
22 company-owned premises. Such controls include, but are not limited to, signage,
23 appearance of premises, training of employees, products offered, product pricing, and

1 adherence to the policies and rules of the controlling entity as set forth in written
2 documents. In essence, the controlling entity holds every incidence of ownership in the
3 premises, with the exception of title to the premises. This is the reason that customers are
4 unable to distinguish between stores operated by the company versus stores operated by
5 franchisees.

6
7 The existence of a franchise arrangement should properly be viewed not as an ownership
8 issue, but rather as an alternative form of financing. The franchisee provides the initial
9 financing, and earns a return on that investment. The controlling entity (the franchisor) is
10 relieved of the burden of financing, and receives revenues from franchise fees and
11 royalties instead of through the direct operation of the premises. One of the elements of
12 the value of a franchise or brand, which value is directly reflected in the level of franchise
13 fees collected by the controlling entity, is the ability to realize reduced operational costs
14 through widespread economies of scale, including the collective purchase of goods and
15 services such as energy products and services.

16
17 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

18
19 **A.** Yes, it does.
20
21

Russell L. Klepper

Energy Services Group, LLC

Summary of Professional Credentials

770-751-8379

Mr. Klepper is a founder and principal of Energy Services Group, LLC, a utility and energy consulting services firm established in 1998. In 1984, Mr. Klepper established Rawson, Klepper & Company, the predecessor to ESG. With a strong academic background and more than thirty-two years of experience as a utility practitioner and consultant, Mr. Klepper specializes in the areas of energy economics, utility expenditure planning and cost control, ratemaking, negotiation of contracts for energy and energy transportation, and strategic analysis, planning and decision making in a regulated or transitory energy environment.

PROFESSIONAL INTERESTS

Mr. Klepper prepares and presents public and in-house seminars, serves as an expert witness on energy related economic and regulatory issues, and advises large energy consumers, regulatory intervention groups, trade associations, public policy foundations and other energy industry participants on matters related to analysis of capital expenditure alternatives, acquisition and allocation of capital, strategic, financial, and integrated resource planning, and determination of revenue requirements and rate structuring in an increasingly competitive energy industry. He is a noted writer and speaker in the areas of privatization of utility operations and the impacts arising from federal participation in the electric industry.

In addition, Mr. Klepper has prepared and presented reports on topics such as Strategic Issues in Utility Planning, Utility Service Obligations in a Changing Environment, Competition within the Utility Industry, Co-Ownership of Utility Assets, Resource Recovery and Waste Utilization, Cogeneration and Independent Power Production, Transmission Access and Pricing, Determination of Costs in Railroad Ratemaking, and Fuel Acquisition and Transportation.

PROFESSIONAL ACTIVITIES

Instructor of Economics and Money and Banking, American Institute of Banking, 1974-75.

Expert Witness on Financial and Regulatory Matters.

- ◆ Interstate Commerce Commission, 1979-81.
- ◆ Utah Public Service Commission, 1985-86.
- ◆ Kentucky Public Service Commission, 1993-98, 2000-2001, 2003.
- ◆ Florida Public Service Commission, 1994, 1996-1997.
- ◆ Georgia Public Service Commission, 2004.

Russell L. Klepper

Energy Services Group, LLC

Summary of Professional Credentials

770-751-8379

Southeastern Electric Exchange. Member, Finance Committee, 1982-83.

Financial Management Association. Industry Reviewer of utility related presentations. 1983 Southeastern Conference.

Edison Electric Institute. Member, Committee on Electric Power Ownership Alternatives, 1983-84. Presenter of "A Strategic View of the 1990s" to EEI Strategic Planning Committee, 1989.

Southeastern Regional Public Utilities Conference. Presenter of "A Viewpoint on Utility Privatization". 1990.

The Management Exchange, Inc., faculty member, 1982-92.

- ◆ Co-Developer and Co-Presenter of national seminar "Capital Expenditure Analysis for Utilities."
- ◆ Developer and Presenter of national seminar "Financial Planning for Utilities."

Energy Bureau. Presenter of "Evaluating Financing Techniques." Conference on "Utility Financing for a Beleagured Industry." 1984.

Public Utility Reports. Conference Moderator and Discussion Group Leader. "Managing Utilities in a Changing Environment." 1984.

The World Bank

- ◆ Consulting Member of the Power Section Mission to PLN, the National Electric Utility of the Republic of Indonesia, specializing in utility financial and strategic planning. 1987.
- ◆ Developer and Presenter of internal seminar "Financial Planning and Analysis for Underdeveloped Countries." 1989.
- ◆ Developer and Presenter of materials for "Seminar on Energy Policy and the Environment", presented in Ethiopia in collaboration with the United Nations Economic Commission for Africa and in Egypt in collaboration with the Organization of Energy Planning. 1992.

United States Energy Association. Developer and Presenter of Materials at "Seminar on Natural Monopolies: Regulation, Structure and Pricing Decisions", a conference conducted in Vienna, Austria, for electric utility executives from Hungary, Poland, and the Czech and Slovak Republics. Jointly sponsored by the World Bank and the U.S. Agency for International Development. 1992.

The Cato Institute and the Institute for Energy Research. Presenter of "Federal Participation in the Electric Industry; A Review and Assessment of the Implications Upon Industry Restructuring". Conference on "New Horizons in Electric Power Deregulation". 1995.

Russell L. Klepper

Energy Services Group, LLC

Summary of Professional Credentials

770-751-8379

National Rural Utilities Cooperative Finance Corporation. Presenter of "Federal Participation in the Electric Industry; A Focus on the Rural Utilities Service". Cooperative Financing Forum. 1995.

The World Research Group. Presenter of "The Impact of Federal Participation in the Power Industry". Conference on "Public Power in a Restructured Electric Industry". 1995.

Kentucky Industrial Utility Customers, Inc. Presenter of "Economic Underpinnings to the Changing Regulatory Environment". Annual Conference. 1996.

MONOGRAPHS

The Utah Transmission Proceeding: Public vs. Private Ownership - A Case Study. Prepared under contract with the Economics Division of the Edison Electric Institute. 1987.

Privatization: An Overview of Worldwide Experience with Implications for the Electric Utility Industry in the United States. Prepared under contract with the Public Policy Analysis Division of the Edison Electric Institute. 1988-89.

Discussion of Considerations and Recommendations for Appropriate Methodologies for Determining the Cost of Equity Capital for Independent Telephone Systems. Co-authored with Roger A. Morin. Prepared under contract with the Ontario Telephone Service Commission. 1989.

Review and Assessment of Recent Executive Branch Initiatives with Ownership Implications for the Electric Utility Industry in the United States. Prepared under contract with the Bulk Power Policy Group of the Edison Electric Institute. 1993.

An Overview of the Bonneville Power Administration: Its Purpose, Performance, and Prospects. Prepared under contract with the Bulk Power Policy Group of the Edison Electric Institute. 1994.

Federal Participation in the Electric Industry; A Review and Assessment of the Implications Upon Industry Restructuring. Prepared for publication of proceedings on "New Horizons in Electric Power Deregulation", a conference cosponsored by the Cato Institute and the Institute for Energy Research. 1995.

Russell L. Klepper
Summary of Professional Credentials

Energy Services Group, LLC
770-751-8379

EDUCATIONAL HISTORY

Bachelor of Science in Business Administration,
Major in Economics, University of Florida, 1971.

Master of Business Administration, Major in Finance,
University of Florida, 1972.

Master of Professional Accountancy,
Georgia State University, 1980.

Member, MBA Advisory Board, Warrington College of Business Administration, University of Florida, 1995 to 2001.

EMPLOYMENT HISTORY

First National Bank of Florida in Tampa, Investment Division.

Employed 1972. Assistant Cashier 1973-74. Assistant Vice President 1974-76.

Exercised responsibilities for liabilities, portfolio management, analysis of bank operations, and pricing of deposit related bank services.

Georgia Power Company, Corporate Finance Department.

Financial Analyst 1977-81. Financial Services Manager 1981-84.

Participated in the financial planning process, special financial projects, and the development and preparation of rate filings. Later directed the evaluation of capital expenditure alternatives, managed the administration of the portfolio of outstanding capital instruments, and coordinated the financial, regulatory, legal and marketing aspects of raising over \$1.2 billion in capital through the issuance of preferred stock, first mortgage and pollution control bonds, and other debt instruments.

Section 1. Overview of Florida's Electricity Market

1.1 Energy Demand in Florida

Understanding customer electrical demand in Florida is essential to comprehending the importance of conservation. Florida's electrical demand and energy usage patterns are somewhat unique because the state's customer base is heavily weighted toward residential customers, due in part to high air-conditioning use during hot summer months and widespread use of electricity for home heating during winter months. Table 1 illustrates that residential customers make up nearly 89 percent of Florida's electricity customers. These customers purchase about 52 percent of the state's total electrical energy. Florida's commercial electrical energy usage is approximately 37 percent, while industrial customers account for the balance of 10 percent of total Florida energy sales.

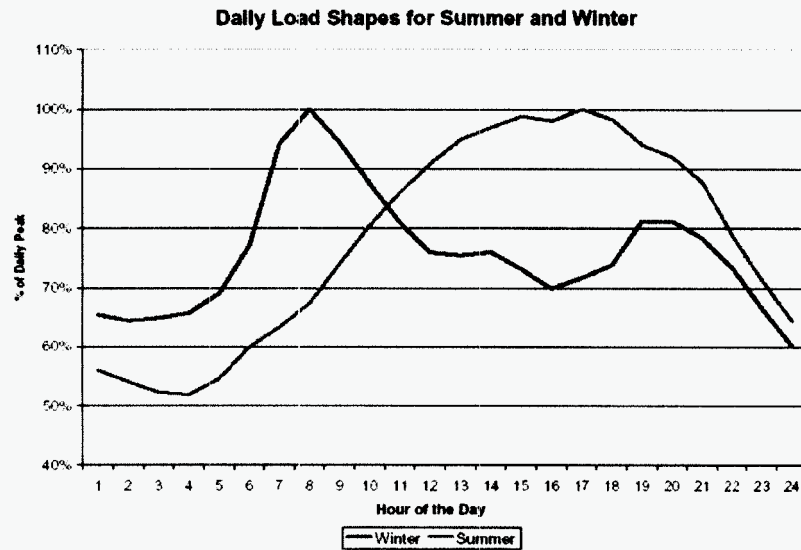
Table 1. Florida's Electric Customers by Class and Consumption in 2007

Customer Class	Number of Customers	% of Customers	Energy Sales (gigawatt-hours)	% of Sales
Residential	8,318,132	88.6	116,132	52.3
Commercial	1,029,331	11.0	82,758	37.3
Industrial	35,733	0.4	23,107	10.4
Total	9,383,196	100.0	221,997	100.0

Florida's warm and humid climate has a profound effect on residential electric usage. A typical residential customer's electrical usage varies more throughout the day than a commercial customer's usage and shows more pronounced peaks in the early evening in the summer and in the mid-morning and late evening in the winter. Electric energy usage in the industrial sector, however, is more uniform throughout the day. Compared to a state with a higher proportion of industrial customers, the summer and winter peak demands in Florida are more pronounced due to the patterns of energy use by residential customers.

Figure 1 depicts the daily load shape curves for typical summer and winter days in Florida. In the summer, customer demand begins to climb in the morning and peaks in the early evening, a pattern which corresponds to the sun heating buildings and the resulting air conditioning loads. In contrast, the winter load curve has two peaks, the largest in mid-morning, followed by a smaller peak in the late evening. Both correspond to heating loads.

Figure 1. Typical Florida Daily Electric Load Shapes



Historically, Florida's electric demand has been highest in the summer. In 2007, peak electric demand reached 49,391 megawatts (MW) in the summer and 44,240 MW in the winter. In 2017, Florida's peak electric demand is projected to increase to 57,305 MW in the summer and 58,953 MW in the winter, indicating a reversal of the historic trends.