



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M

DATE: FEBRUARY 4, 1999

TO: DIRECTOR, DIVISION OF RECORDS AND REPORTING (BA)

FROM: DIVISION OF ELECTRIC AND GAS (JENKINS, BALLINGER)
DIVISION OF LEGAL SERVICES (JAYE) *RJE*

RE: DOCKET NO. 990002-EI - ENERGY CONSERVATION COST RECOVERY
CLAUSE.

AGENDA: 02/16/99 - REGULAR AGENDA - PROPOSED AGENCY ACTION -
INTERESTED PERSONS MAY PARTICIPATE

CRITICAL DATES: NONE

SPECIAL INSTRUCTIONS: NONE

FILE NAME AND LOCATION: S:\PSC\EAG\WP\990002.RCM

CASE BACKGROUND

Pursuant to Order No. PSC-96-0468-FOF-EG, issued April 4, 1996, in Docket No. 960130-EG the Commission granted FPL's request to limit the availability of its CILC program to existing customers and those which had entered into a CILC agreement as of March 19, 1996. Section seven of the CILC agreement states:

Within two (2) years of this Agreement, the Customer agrees (i) to perform necessary changes to allow control of a portion of the Customer's load and/or (ii) to install or have in place backup generation equipment to contribute to the Controllable Demand level. Schedule CILC-1 cannot apply earlier than this date unless the Company so agrees. Should the Customer fail to complete the above work by the above-specified date, or should the customer fail to begin taking service under Schedule CILC-1 during that year, this Agreement shall become null and void unless otherwise agreed by the Company.

DOCUMENT NUMBER-DATE

~~01055~~ FEB-3 99

REC'D - RECORDS / REPORTING

RECEIVED
 REPORTING
 DIVISION
 FEB 11 9:31 AM '99
 PSC

Staff contends that the CILC program should have been completely closed within two years of the March 19, 1996 vote. The two years gives customers time to install or adopt whatever measures allowing them to withstand interruptions and receive the lower rate.

Staff raised this issue with FPL during the November 1998 ECCR proceedings. Since discovery was still pending, the issue was deferred from that proceeding and staff was directed to pursue this issue in an expedited manner. The following recommendation is based on both formal discovery and informal meetings between the staff and FPL.

To expediate the matter, staff's recommendation relies in part, on FPL verbal statements and not on formal interrogatories. Should FPL change its verbal statements prior to or at the Agenda, staff will ask for a deferral to allow time for formal discovery.

DISCUSSION OF ISSUES

ISSUE 1: Should Florida Power and Light Company's (FPL) Commercial/Industrial Load Control (CILC) program be completely closed to new customers?

PRIMARY RECOMMENDATION: Yes, adding approximately 100 customers, approximately 38 MWs, to the CILC rate fails the Ratepayer Impact Measure (RIM) cost-effectiveness test because there is no generating unit is avoided for the expenditure of roughly \$ 2.4 million per year. These customers are singled out because the program was to be closed as of March 1998 pursuant to Order No. PSC-96-0468-FOF-EG issued April 4, 1996 in Docket No. 960130-EG. As a compromise, staff also recommends that any of these customers who expended money for studies or equipment within the last 12 months be allowed on the rate and FP&L be allowed to recover the additional expenditures through the conservation cost recovery clause even though no additional benefit is conveyed to customers. Primary staff is unsure whether the CILC rate increases or decreases peak demand and whether electric reliability will be improved or made worse due to the rate.[Jenkins]

ALTERNATIVE RECOMMENDATION: While the incremental amount of CILC may not be cost-effective, staff would not want to impair reliability for either FPL's system or Peninsular Florida for the years 1999 and 2000. Therefore, the current CILC rate and associated Agreements, totaling approximately 38 MWs, should remain in effect until December 31, 2000. FPL has agreed to reduce the level of CILC in the future. [Ballinger]

PRIMARY STAFF ANALYSIS: When the Commission granted FPL's petition in 1996, staff was under the impression that all existing CILC Agreements would be finalized within two years pursuant to section seven of the Agreement. To date, there remain over 100 outstanding customer Agreements with some dating back to 1991. According to FPL, these Agreements represent approximately 38 MW of controllable load. These customers are not currently taking service under the CILC rate schedule. Attachment 1 is a summary of information for each customer. Although FPL has never before requested confidentiality for the identities of its customers on the CILC rate, it requested confidentiality for the names of non-governmental customers this year.

In response to a staff interrogatory, FPL stated two reasons for extending the time frame of the Agreement. First, FPL stated that some customers had commitments, such as the purchase of backup generation. As shown in Attachment 2, only 19 out of the over 100 customers have actually spent any money in anticipation of taking service under the CILC rate. Staff is uncertain whether this money was spent on equipment or studies to determine the cost-effectiveness of the CILC rate to the particular customer or whether the customer spent the money recently and still intends to opt for the CILC rate. These Agreements amount to approximately 16 MW of controllable load.

Second, FPL stated that it was concerned about achieving its conservation goals. Achievement of its goals was touted as "FPL's primary reason" for not rendering the Agreements "null and void". However, FPL is currently exceeding its Commercial/Industrial conservation goals by approximately 60 MW for the winter and 100 MW for the summer. FPL is scheduled to file new DSM goals next month. FPL has also conveyed to staff that these new goals will be less than the current goals and that the amount of CILC will be less as well.

In a meeting with FPL, the company stated that continuing the CILC program would allow FPL to reach the most cost-effective level of CILC. However, FPL also admitted that the incremental amount in isolation, approximately 38 MW, would not change any generation

expansion plans currently anticipated. Therefore, it appears that there will be additional costs with no corresponding benefits for this incremental amount. The primary recommendation is based on this verbal statement by FPL. Should FPL change this statement prior to or at Agenda, staff will ask for a deferral to allow time for formal discovery.

In order to establish a maximum level of cost-effectiveness for the CILC program, it is necessary to evaluate the program in isolation from other DSM programs. Removing approximately 38 MW of non-firm load from FPL's system is a step towards reducing the state's dependence on non-firm load from a Peninsular Florida basis.

The amount of Peninsular Florida non-firm load is an issue in the reserve margin docket, Docket No. 981890-EU, scheduled for a September 22-23, 1999, hearing. The issue arises because of the uncertainty surrounding the adequacy of planned generating reserve margin. The thinner the planned reserve margins, the more concern as to how much of that reserve margin consists of non-firm load. Currently, non-firm load is planned to consist of approximately 58% of the winter peninsular reserve margin. For FPL, non-firm load is currently planned to be approximately 41% of its winter reserve margin.

The alternate recommendation argues that 38 MWs of non-firm load, if all 100 customers sign-up, is better than no additional non-firm load. Primary staff disagrees because of the uncertainty of whether the CILC rate deters customers from switching to natural gas, including cogeneration. That is, the CILC rate may be making the reserve margin worse, not better. Attachment 3 contains excerpts of the Division of Research and Regulatory Review's report on commercial and industrial DSM programs, including some FPL advertisements for the CILC program. These advertisements demonstrate that at least recently, FPL has used DSM as a competitive marketing tool.

FPL has offered to completely close the CILC tariff as of December 31, 2000, and to begin moving away from load management type programs in the future. This may help reduce the potential competitive applications of CILC and corresponding advertisements as shown in Attachment 3. However, primary staff contends that this program should have been completely closed out as of March 19, 1998. Therefore, primary staff recommends that the current CILC rate be discontinued as of the date of the Commission vote in the instant docket. However, as a compromise, if a customer can provide primary staff with verification of a purchase order for equipment

or studies dated 12 months prior to and including the date of the Commission vote, primary staff will administratively approve these customers for eligibility under the CILC rate. This administrative approval will be with the understanding that FPL will recover its costs notwithstanding the fact that adding the approximate 100 customers to the CILC rate fails the RIM screening test.

ALTERNATIVE STAFF ANALYSIS: Alternate staff concurs with the primary staff that the incremental amount of CILC, approximately 38 MWs, may not be cost-effective and that Peninsular Florida utilities may be too dependent on non-firm load. Alternate staff also shares the same belief that Order PSC-96-0468-FOF-EG issued April 4, 1996, in Docket No. 960130-EG, required that the CILC rate be closed as of March 19, 1998, unless FPL could demonstrate that it was prudent to extend the deadline to certain customers. Times have changed since 1996 and cost-effectiveness is not the primary reason for continuing the current CILC program.

The 38 MWs remaining of CILC may not materialize by the year 2000 as planned for by FPL. This is because it is in the control of the customer to make the decision and investments necessary to take service under the CILC rate. However, if the primary recommendation is approved, it is a certainty that these MWs will not be available for load control over the next two years. Staff has raised concerns about the reliability of Peninsular Florida's electric system in several forums. While the 38 MWs are minimal from a reliability standpoint, it would be better to at least have the opportunity to enhance reliability. In addition, FPL is already the least dependent, from a percentage basis, on non-firm load of the peninsular investor-owned utilities. FPL has indicated to staff that they are going to be moving away from load management programs. This will be reflected in their upcoming DSM goals filings and should allow for an orderly reduction in the amount of non-firm load as a percentage of reserve margin.

The primary recommendation is that staff administratively approve or deny customers wishing to take service under the CILC rate. The requirement to have a purchase order is not contained in the current CILC tariff. This would put the Commission squarely between a utility and its customers and could lead to prolonged litigation and complaints. FPL has agreed to inform its customers of the December 31, 2000, deadline by letter immediately following the Commission vote in this matter. While this probably should have been done in 1996, this will allow FPL to administer its tariff.

DOCKET NO. 990002-EI
DATE: February 4, 1999

Therefore, while the incremental amount of CILC may not be cost-effective, alternative staff would not want to impair reliability for either FPL's system or Peninsular Florida for the years 1999 and 2000. Given that FPL has agreed to reduce the level of CILC in the future and in order to avoid customer confusion, the current CILC rate and associated Agreements, totaling approximately 38 MW, should remain in effect until December 31, 2000. Any customer who is not taking service under the current CILC rate by this date would no longer be eligible for the current CILC rate.

DOCKET NO. 990002-EI
DATE: February 4, 1999

ISSUE 2: Should this docket be closed?

RECOMMENDATION: No. This docket should remain open for the Commission to continue to monitor both energy conservation programs and the associated costs of the affected utilities.

STAFF ANALYSIS: This docket should remain open for the Commission to continue to monitor both energy conservation and the associated costs of the affected utilities.

Attachment 1

STEEL ■
HECTOR
& DAVIS

REGISTERED LIMITED LIABILITY PARTNERSHIP

Steel Hector & Davis LLP
215 South Monroe, Suite 601
Tallahassee, Florida 32301-1804
850.222.2300
850.222.8410 Fax
www.steelhector.com

January 20, 1999

Charles A. Guyton
850.222.3423

Thomas Ballinger, Supervisor of
System Planning & Conservation
Division of Electric & Gas
Florida Public Service Commission
2540 Shumard Oak Boulevard
Gunter Building, Room 200
Tallahassee, Florida 32399-0850

BY HAND DELIVERY

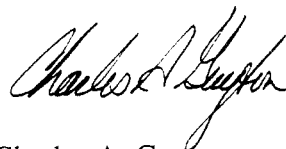
Re: Commercial/Industrial Load Control Program

Dear Mr. Ballinger:

Enclosed is the spreadsheet you requested regarding CILC. An unredacted version will be available in Miami for discussion.

If you have any questions regarding this letter or the spreadsheet, please give me a call.

Very truly yours,



Charles A. Guyton

CAG/ld

001 9

0010

Customer Name	Contract Execution Date	Date on CILC	Current Rate	Customer Investment Amount To-Date	Action Needed To Become CILC Customer	Controllable kWd @ Gen.
	11/29/94	05/17/96	CILC-1D			540
	11/29/94	06/04/96	CILC-1G			256
	07/24/92		GSD-1	N/A	Out of business	44
	01/18/96		GSD-1	N/A	Customer needs better payback	132
	06/18/93	12/18/95	CILC-1D	N/A	N/A	417
	02/05/96		GSD-1	N/A	Awaiting management decision	146
	09/02/93	11/21/95	CILC-1D	N/A	N/A	2,353
	02/21/92	10/20/94	CILC-1D	N/A	N/A	3,077
BCMC - Main Court House	06/13/95	04/25/96	CILC-1D			1133
	05/24/95	03/28/96	CILC-1G			256
	05/24/95	04/23/96	CILC-1G			200
	05/24/95	06/28/98	CILC-1G			208
	05/24/95	08/01/96	CILC-1G			152
	5/24/95	04/29/96	CILC-1G			252
	5/24/95	05/14/96	CILC-1D			356
	5/24/95	10/24/96	CILC-1G			237
	5/26/95	04/15/96	CILC-1G			357
	5/26/95	04/26/96	CILC-1G			208
	5/26/95	07/08/96	CILC-1G			185
	07/27/95	09/13/96	CILC-1D			412
	7/27/95	03/25/96	CILC-1G			249
	7/27/95	04/11/96	CILC-1G			314
	7/27/95	04/11/96	CILC-1G			190
	7/27/95	06/13/96	CILC-1D			389
	7/27/95	07/15/96	CILC-1G			268
	7/27/95	07/23/96	CILC-1G			194
Board of Palm Beach Co Commission	3/10/92	08/26/98	CILC-1D			526
Brevard Community College	10/25/95		GSLD-1	N/A	Awaiting management decision	402
Brevard Community College	10/25/95		GSLD-1	N/A	Awaiting management decision	345
	08/19/92		GSLD-2	N/A	Need to purchase gensets	1,433
Broward County	6/1/93		GSLDT-2	N/A	Customer decided not to participate	1,231
Broward County	12/1/92		GSD-1	N/A	Customer load not currently >200kw	231
Broward County	10/28/92		GSD-1	N/A	Customer load not currently >200kw	131
	06/29/92	08/09/94	CILC-1D	N/A	N/A	339
	01/12/96		GSLDT-1		Customer no longer interested	601

39		07/13/93		GSLD-1		Customer not interested	426
40		07/24/92	03/27/97	CILC-1D	N/A	N/A	457
41	Charlotte Co Utilities	06/19/95	07/22/96	CILC-1D			700
42		03/03/95		GSLDT-1	N/A	Customer load not currently >200kw	644
43	CITY OF BOCA RATON	11/29/93	12/04/97	CILC-1G	N/A	N/A	197
44	CITY OF CP CANAVERAL	01/30/96	10/08/98	CILC-1G	N/A	N/A	267
45	CITY OF HALLANDALE	04/18/95	05/28/97	CILC-1G	N/A	N/A	255
46	City of Hialeah	02/14/95		GSD-1	N/A	Customer load not currently >200kw	107
47	CITY OF LAKE CITY	08/12/92	06/19/98	CILC-1G	N/A	N/A	223
48	CITY OF PALM BAY	08/18/92	03/27/95	CILC-1G	N/A	N/A	169
49	CITY OF SARASOTA	08/20/92	06/20/96	CILC-1D	N/A	N/A	861
50	City of Titusville	10/25/95		GSD-1	\$235,000	Ready 1st Qtr 1999	263
51	City of Titusville	05/10/95		GSD-1	N/A	Customer load not currently >200kw	217
52	City of Titusville	11/03/95		GSD-1	N/A	Customer load not currently >200kw	64
53	City of Titusville	09/01/93	05/29/96	CILC-1G			296
54	Clearlake Middle School	01/15/96		GSD-1	N/A	Customer needs better payback	146
55		12/18/95		GSLDT-1	50,000	Insurance policy needed \$1MM	597
56	Collier County Utilities	12/20/94	07/01/96	CILC-1D			1083
57		06/15/95		GSLDT-2	N/A	Awaiting management decision	1,519
58	County of Sarasota	08/14/95		GSD-1	N/A	Customer problem with Trans. Sw.	85
59	County of Sarasota Utilities	06/30/95	09/27/96	CILC-1G			283
60	Dade Correctional	05/23/94		GSD-1	\$2,000	Installation in progress	204
61	Dade Correctional	05/23/94		GSD-1	\$2,000	Installation in progress	153
62	Dade Correctional	05/23/94		GSD-1	\$2,000	Installation in progress	146
63	Desoto County Sheriff's Dept	02/09/95		GSD-1	N/A	Customer load not currently >200kw	140
64		05/01/95	04/09/96	CILC-1D			631
65		08/02/93		GSLD-1	\$25,000	delivery of generator	395
66		11/02/95		GSLD-1		Customer not interest at this time	321
67		12/01/95	05/11/98	CILC-1D	N/A	N/A	1,665
68	Everglades Correctional Inst	08/19/92		GSD-1	\$2,000	Installation in progress	250
69	Everglades Correctional Inst	08/19/92		GSD-1	\$2,000	Installation in progress	171
70	Everglades Correctional Inst	08/19/92		GSD-1	\$2,000	Installation in progress	158
71	Federal Corrections Institution	03/18/93		GSLD-1		Customer not interested	757
72		07/22/92	02/15/96	CILC-1G	N/A	N/A	294
73		09/18/92		GSD-1	N/A	New building in design stage.	322
74		08/17/92		GSLDT-1	N/A	need to invest in equipment	687
75	FT DEPT OF CORR - COLUMBIA COR	05/31/91	11/17/95	CILC-1D	N/A	N/A	488
76		05/26/93		GSLDT-1	N/A	Awaiting management decision	867

77		05/22/92		GSLDT-1	N/A	Awaiting management decision	447
78		05/16/95	05/09/96	CILC-1G			254
79	Hendry Co. School Board	01/11/94		GSD-1	N/A	Customer undecided	254
80		10/06/95	04/30/96	CILC-1D			738
81		12/01/95		GSLDT-1	N/A	On rate 1/99	1,286
82		12/01/95		GSLDT-1	\$766,667	On rate 1/99	542
83		12/01/95		GSLDT-1	\$766,667	On rate 1/99	509
84		12/12/95	04/25/97	CILC-1G			242
85		12/12/95	05/02/97	CILC-1G			217
86	INDIAN RIVER COUNTY BOARD OF COUNTY	11/13/95	03/10/98	CILC-1G	N/A	N/A	146
87	Indian River County Utilities	11/13/95		GSLD-1	N/A	Preparing for CILC test	228
88	Indian River County Utilities	11/13/95		GSD-1	N/A	Customer replacing generator	146
89	Jackson Middle School	01/15/96		GSD-1	N/A	Customer needs better payback	146
90	Jackson Memorial Hosp	11/23/92	10/14/96	CILC-1D			952
91		05/13/94		GSLD-1	N/A	Facility under construction	461
92		05/13/94	10/23/96	CILC-1D	N/A	N/A	423
93		05/13/94	01/25/97	CILC-1D	N/A	N/A	480
94		06/15/95		GSLDT-1	N/A	Customer needs financing	364
95		07/22/94	06/11/96	CILC-1D			450
96		02/14/94		GSLDT-1	N/A	Will have to install larger generator	701
97	Lee Co Commission	07/25/95	09/19/96	CILC-1D			373
98	Loxahatchee River	12/28/95	07/17/96	CILC-1D			417
99	Madison Middle School	01/15/96		GSD-1	N/A	Customer needs better payback	146
100	Manatee Co Bd Comm	05/09/95		GSLD-1	N/A	Customer undecided	1,008
101		12/12/95		GSLDT-1	\$400,000	Must Complete Energy Center	132
102	Metro Dade Aviation	07/24/92	12/21/98	CILC-1D	N/A	N/A	178
103	METRO DADE CO AVIATION DEPT	07/24/92	02/27/97	CILC-1D	N/A	N/A	239
104	Metropolitan Dade County	01/12/93		CST-1	\$1,500	Facility under construction	480
105	Metropolitan Dade County	01/12/93	12/23/98	CILC-1D	N/A	N/A	1,605
106	MIAD 2130	07/24/92		GSLD-1	N/A	Facility under construction	823
107	MIAD 2132	07/24/92		GSLD-1	N/A	Facility under construction	494
108	MIAD 2134	07/24/92		GSLD-1	N/A	Facility under construction	500
109	MIAD 2200/2206	07/24/92		GSD-1	N/A	Facility under construction	284
110	MIAD 2203/2207	07/24/92		GSLD-1	N/A	Facility under construction	329
111	MIAD 2205	07/24/92		GSLD-1	\$500	Facility under construction	796
112	MIAD 2208	07/24/92		GSLD-1	N/A	Facility under construction	557
113	MIAD 2212	07/24/92		GSLD-1	N/A	Facility under construction	494
114	MIAD 2214	07/24/92		GSLD-1	N/A	Facility under construction	691

00
12

ubs
MIAD 2130?

13

115	MIAD 2216	07/24/92		GSLD-1	N/A	Facility under construction	757
116	MIAD 2218	07/24/92		GSLD-1	N/A	Facility under construction	411
117	MIAD 2220	07/24/92		GSLD-1	N/A	Facility under construction	737
118	MIAD 2222	07/24/92		GSLD-1	N/A	Facility under construction	757
119	MIAD 2224	07/24/92		GSLD-1	N/A	Facility under construction	411
120	MIAD 2226	07/24/92		GSLD-1	N/A	Facility under construction	737
121	MIAD Conc H	07/24/92	12/21/98	CILC-1D	N/A	N/A	444
122	MIAD N Term Ex2	07/24/92		GSLD-1	N/A	Facility under construction	617
123	MIAD N808	07/24/92		GSLD-1	N/A	Facility under construction	467
124	MIAD N811	07/24/92		GSLD-1	N/A	Facility under construction	461
125	MIAD N817	07/24/92		GSLD-1	N/A	Facility under construction	461
126	MIAD N820	07/24/92		GSLD-1	N/A	Facility under construction	329
127	MIAD N823	07/24/92		GSLD-1	N/A	Facility under construction	461
128	MIAD N829	07/24/92		GSLD-1	N/A	Facility under construction	309
129	Miami Dade Wasad	01/12/93	08/03/98	CILC-1D			996
130	Miami Dade Wasad	10/08/93	08/15/97	CILC-1D			1,249
131	Miami Dade Wasad	10/08/93	10/10/97	CILC-1D			1,638
132	Miami Dade Wasad - SW Well fields	12/12/95		GSD-1	\$3,000	On rate 12/98	1,071
133		01/01/93	07/09/96	CILC-1D	N/A	N/A	704
134	MIAMI-DADE COMM COLLEGE KENDALL BR	08/23/95	08/03/98	CILC-1G	N/A	N/A	306
135	MIAMI-DADE WASAD	10/08/93	10/10/97	CILC-1D	N/A	N/A	1,249
136	MIAMI-DADE WASAD	10/08/93	08/19/98	CILC-1D	N/A	N/A	1,638
137	MIAMI-DADE WASAD #WP3039 629510	09/12/93	08/15/97	CILC-1D	N/A	N/A	996
138		09/11/95		GSLDT-1	N/A	Customer not interest at this time	613
139	NASA - C5 Substation	10/11/95		GSLDT-3	\$6,800,000	CILC in construction - May 99	5,550
140	NBHD #5001 SYST DATA	04/26/93	06/26/95	CILC-1D	N/A	N/A	525
141		07/31/95	09/03/96	CILC-1G			328
142	NORTH BREVARD HOSPITAL DISTRICT	08/01/92	12/30/94	CILC-1D	N/A	N/A	469
143	Okeechobee Correctional	07/27/95	08/28/96	CILC-1D			521
144	Palm Bay High School	01/15/96		GSLD-1	N/A	Customer needs better payback	132
145		07/30/92	01/13/99	CILC-1G	N/A	N/A	353
146		07/30/92		GSLD-1	N/A	Tested..exceeded firm demand	285
147		02/02/95	03/28/96	CILC-1D			363
148		05/16/94		GSLDT-1	N/A	Customer needs better payback	982
149		03/15/96	09/12/96	CLC-1G			270
150		03/15/96	02/17/97	CILC-1G			220
151		05/31/95		GSLD-1	N/A	New management, awaiting decision	905
152	Sarasota County	07/06/95		GSLD-1	N/A	Cust. repair problem w/ transfer Sw.	540

14

153		10/12/93		GSLDT-1	N/A	Purchasing Generators	1,051
154	School Board of Brevard County	12/15/92		GSLD-1	N/A	Customer needs better payback	626
155	So. Florida Water Mgmt Distr	12/31/91		GSLD-1	N/A	Awaiting management decision	532
156	So. Florida Water Mgmt Distr	12/31/91		GSLD-1	N/A	Awaiting management decision	478
157	SOUTH BROWARD HOSPITAL DISTRICT	10/21/94	06/30/97	CILC-1D	N/A	N/A	2,886
158	Southwest Fla Heart Group	12/13/93		GSLDT-1	N/A	Customer load not currently >200kw	145
159	SS County Govt CEP	08/01/95		GSLD-1	\$500,000	Installation in progress	1,239
160	St Fla Reception Center - Annex	07/30/92	11/24/98	CILC-1G	N/A	N/A	497
161	St Lucie County Board of County Comm	01/23/96	10/07/96	CILC-1G			222
162	Staff Leasing	08/29/95	04/30/96	CILC-1D			332
163	State of Florida Military Dept	12/08/95	02/28/97	CILC-1D			171
164		02/05/96		GSLD-1	N/A	Customer needs better payback	829
165		09/26/95		GSLDT-1	N/A	Customer needs better payback	351
166		06/12/95		GSD-1	N/A	Awaiting management decision	31
167		12/14/93		GSD-1	N/A	Customer load not currently >200kw	145
168		02/24/93		GSD-1	N/A	Customer load not currently >200kw	88
169		07/31/92	05/01/97	CILC-1T			5,381
170	U S DEPT OF COMMERCE NATIONAL HURR	12/11/95	08/23/97	CILC-1G	N/A	N/A	193
171	U S FEDERAL AVIATION ADMIN	08/25/95	10/07/97	CILC-1D	N/A	N/A	630
172	U S FEDERAL AVIATION ADMIN	08/25/95	10/07/97	CILC-1D	N/A	N/A	502
173	United Stated Post Office	03/18/96		GSLDT-1	N/A	Needs additional backup generation	851
174	USAF	10/11/95	11/21/98	CILC-1T	N/A	N/A	4,163
175	USAF	10/11/95		GSLDT-3	N/A	Awaiting management decision	12,210
176	USAF	10/11/95		GSD-1	N/A	Awaiting management decision	555
177	VA Medical Center	06/16/95		GSLDT-2	\$280,000	Delays in receiving switchgear	2,019
178		09/07/95	07/31/97	CILC-1D			335
179		03/26/93	11/17/95	CILC-1G	N/A	N/A	335
180		08/07/92		GSLD-1	N/A	Awaiting management decision	824
181		07/21/95	03/06/97	CILC-1D			1,094
182	Final Billed Accts						
183		4/15/94					355
184		12/11/95					263
185	USN Naval Security	8/11/92					92
186		9/26/94					762
187		2/28/92					801
188		3/14/94					185
189		10/6/93					1313
190		10/6/93					428

191		9/25/95					234
192		1/22/92					191
193	Indian River Co	6/21/93					N/A
194		6/4/92					439
195		4/24/91					364
196		2/5/96					344
197	Southern States Utility	7/23/93					177
198		6/1/93					308
199		7/23/93					221

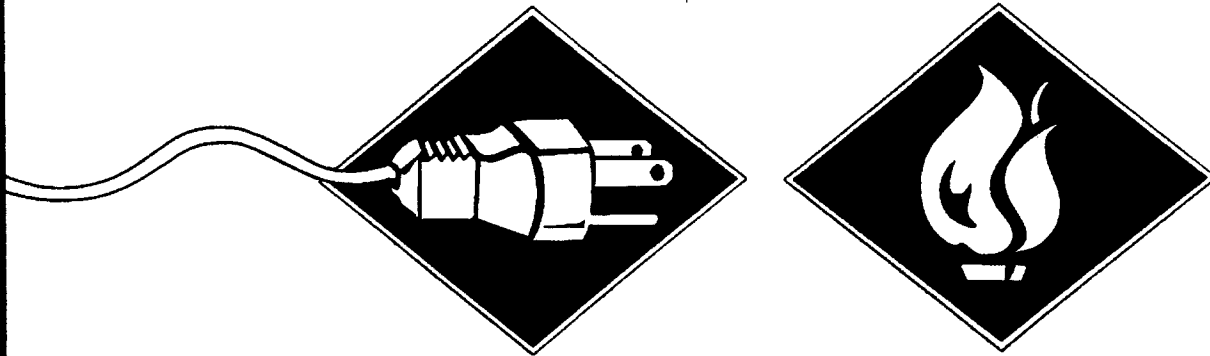
15

Attachment 2

Florida Power & Light Co.
Docket No. 980002-EG
Staff's Second Set of Interrogatories No. 8
Attachment No. III
Page 1 of 1

A	B
Customer Name	Customer Investment Amount To-Date
1 City of Titusville	\$235,000
2	
3	
4	
5	50,000
6 Dade Correctional	\$2,000
7 Dade Correctional	\$2,000
8 Dade Correctional	\$2,000
9	\$25,000
10 Everglades Correctional Inst	\$2,000
11 Everglades Correctional Inst	\$2,000
12 Everglades Correctional Inst	\$2,000
13	\$766,667
14	\$766,667
15	\$766,667
16	\$400,000
17 Metropolitan Dade County	\$1,500
18 MIAD 2205	\$500
19 Miami Dade Wasad - SW Well fields	\$3,000
20 NASA - C5 Substation	\$6,800,000
21 SS County Govt CEP	\$500,000
22 VA Medical Center	\$280,000

Attachment 3

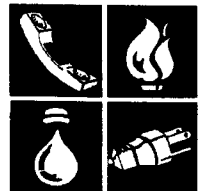


Review of
Commercial / Industrial
Demand-Side Management Programs
of Six Florida Utilities

SEPTEMBER 1996

UCR 19

By Authority of
The State of Florida for
The Public Service Commission
Division of Research and Regulatory Review
Bureau of Regulatory Review



4.0 FLORIDA POWER AND LIGHT COMPANY

4.1 *Commercial/Industrial DSM Programs*

Florida Power and Light's commercial/industrial DSM programs have been recognized as leaders in the electric industry. A survey by Oak Ridge National Laboratory ranked FPL sixth nationally in total demand reduction and third in energy savings. A national study, conducted in 1993, rated FPL as the top performer for both commercial and residential load control in terms of cost and impact.

The nine approved commercial/industrial DSM programs offered by Florida Power and Light (FPL) are:

- Business Energy Evaluation Program (BEE)
- Commercial/Industrial Heating/Ventilation/Air Conditioning Program (HVAC)
- Commercial/Industrial Efficient Lighting Program
- General Service Load Management Program
- Commercial/Industrial Load Control Program (CILC)
- Efficient Motors Program
- Off Peak Battery Charging Program
- Commercial/Industrial Building Envelope Program
- Business Customer Incentives Program (BCI)

Brief descriptions of the features and standards of these programs are presented in Appendix 11.2. In 1996 FPL closed the CILC program to new participants because the company stated it was approaching the participation level established for this program.

Highlights of FPL's DSM program results for the period 1991 through 1995 are described in section 4.1.1. In section 4.1.2, staff separately analyzed customer usage data from FPL's CILC program. This analysis was performed to identify any changes in patterns of customer behavior that result from participation in the program.

4.1.1 DSM Program Results

Total participation in commercial/industrial programs exceeded 10,000 customers during 1995, as shown in Exhibit 5. FPL's high levels of program participation reflect an effective and pro-active marketing effort. Among the most popular current programs are the Business Energy Evaluation Program with 6,453 participants in 1995, and C/I Efficient Lighting with 3,590 participants in 1995. The Efficient Motors program also increased strongly from just 88 participants in 1993 to 425 and 443 in 1994 and 1995. The largest single increase in number

of participants last year was experienced by the C/I HVAC Program, which more than doubled to 2,937 participants in 1995.

Calculated total kWh savings increased by 85%, from 77.4 million in 1993 to 143 million in 1994. In 1995, calculated kWh savings jumped another 46% to 209.1 million kWh. Nearly all of the energy savings have been contributed by the Commercial Lighting Program, which were calculated to have reduced consumption by 162 million kWh in 1995, and the combined C/I HVAC Programs, which saved nearly 42 million kWh during the year.

In terms of calculated demand reduction results, also shown in Exhibit 5, FPL's commercial/industrial programs reduced the 1994 summer peak by 60 MW, and the 1995 summer peak by over 120 MW. Of the calculated 1995 summer demand reductions, FPL attributed 59 MW to the CILC Program, and 44 MW to the C/I Efficient Lighting Program.

FLORIDA POWER AND LIGHT COMPANY COMMERCIAL/INDUSTRIAL DSM PROGRAM CALCULATED RESULTS 1993-1995													
Program	Annual Number of New Participants			KWH Savings (000,000)			MW Savings						
	93	94	95	93	94	95	Winter			Summer			
							93	94	95	93	94	95	
B.E.E.	4,676	7,209	6,453	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C/I H.V.A.C.	893	1,392	2,937	32.7	39.9	41.9	4.2	4.6	4.8	14.1	15.6	16.7	
C/I Load Control	NA	53	88	.8	0	2.6	60.7	17.1	42	60.7	17.1	59	
Bus. Custom Incentives	NA	NA	NA	NA	NA	2.1	NA	NA	.3	NA	NA	.5	
C/I Efficient Lighting	1,236	2,064	3,590	43.9	103	162.3	4.9	11.5	17.4	11.0	25.8	43.8	
C/I Efficient Motors	88	425	443	0	.2	.2	0	.2	.1	0	.2	.1	
C/I Off-Peak Battery Charge	NA	18	13	NA	0	0	NA	1.1	.8	NA	1.3	.9	
TOTAL	6,893	11,125	13,577	77.4	143.1	209.1	69.8	34.5	82.3	85.8	60.0	120.9	

EXHIBIT 5

Source: FPSC FEECA Reports, 1993-1995.

4.1.2 Analysis of Customer Participation in CILC Program

As previously noted, while the purpose of the CILC program is to reduce the utilities' peak demand, an examination of the customers' usage could assess whether this program also had the unintended side effect of increasing energy usage. A total of 295 customers began participation in FPL's CILC program between August 1991 and August 1994. More than fifty percent of the CILC customers are municipally-owned water & wastewater utilities, prisons, government offices, and educational facilities. Approximately fifteen percent of FPL's CILC customers are manufacturers, and ten percent are providers of health services. The remaining customers fall into such diverse categories as mining, communications, real estate, transportation, agriculture, and retail services.

The maximum number of control periods specified in participating customers' tariffs is 25 per year. However, since the program's inception, FPL has activated the program far less often than the upper limit specified in the tariff. Staff obtained the record of load control interruptions over the period 1989 to 1995. As shown in Exhibit 6, CILC customers experienced eight interruptions during 1989. Since then, program participants have been interrupted once or twice a year, and in 1994 there were no interruptions.

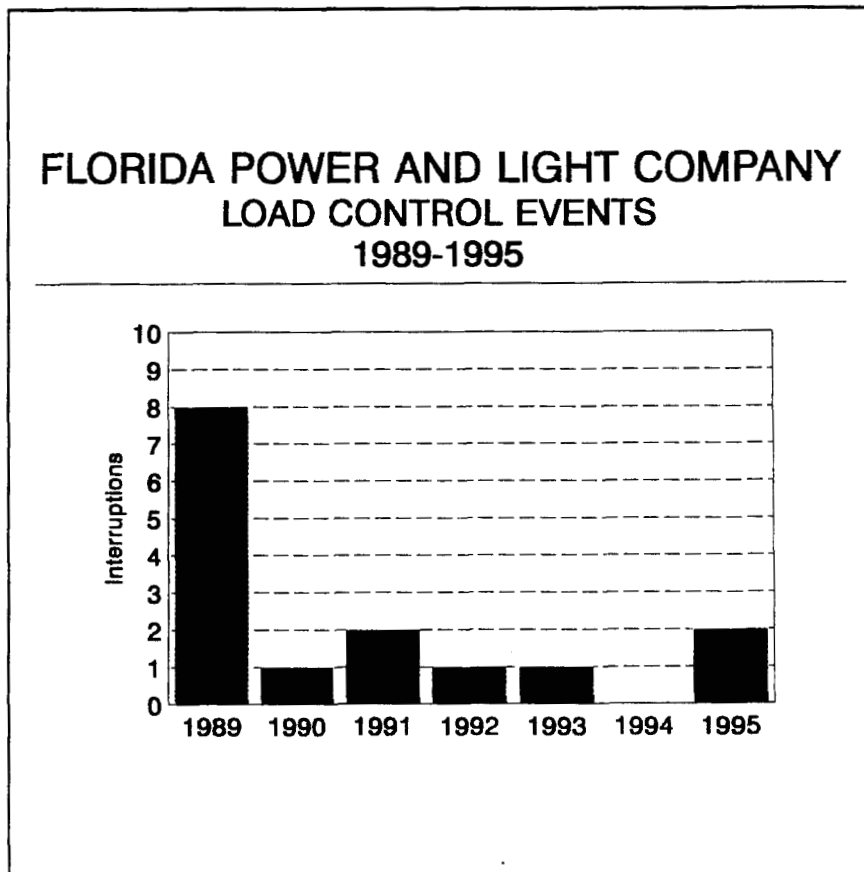


EXHIBIT 6

Source: FPL Document Request 1, Item 9.

For the analysis of individual customer usage, staff reviewed a sample of 159 customers. Of the 159 customers, 26% experienced little to no change in kWh over the period examined. Approximately 29% of the customers experienced a downward trend that preceded their joining the program. The largest group, comprising 43% of the customers, experienced growth that also preceded the customers joining the program. About 2% of the customers' usage was erratic and apparently unrelated to joining the program.

4.2 Organization

Florida Power and Light's Vice-President of Marketing is ultimately responsible for developing, operating, promoting, and evaluating FPL's DSM programs, as depicted in Exhibit 7. A staff support organization assists in administering the programs, while the actual delivery of the programs to customers is performed by C/I Customer Service personnel.

4.2.1 C/I Marketing Support Staff

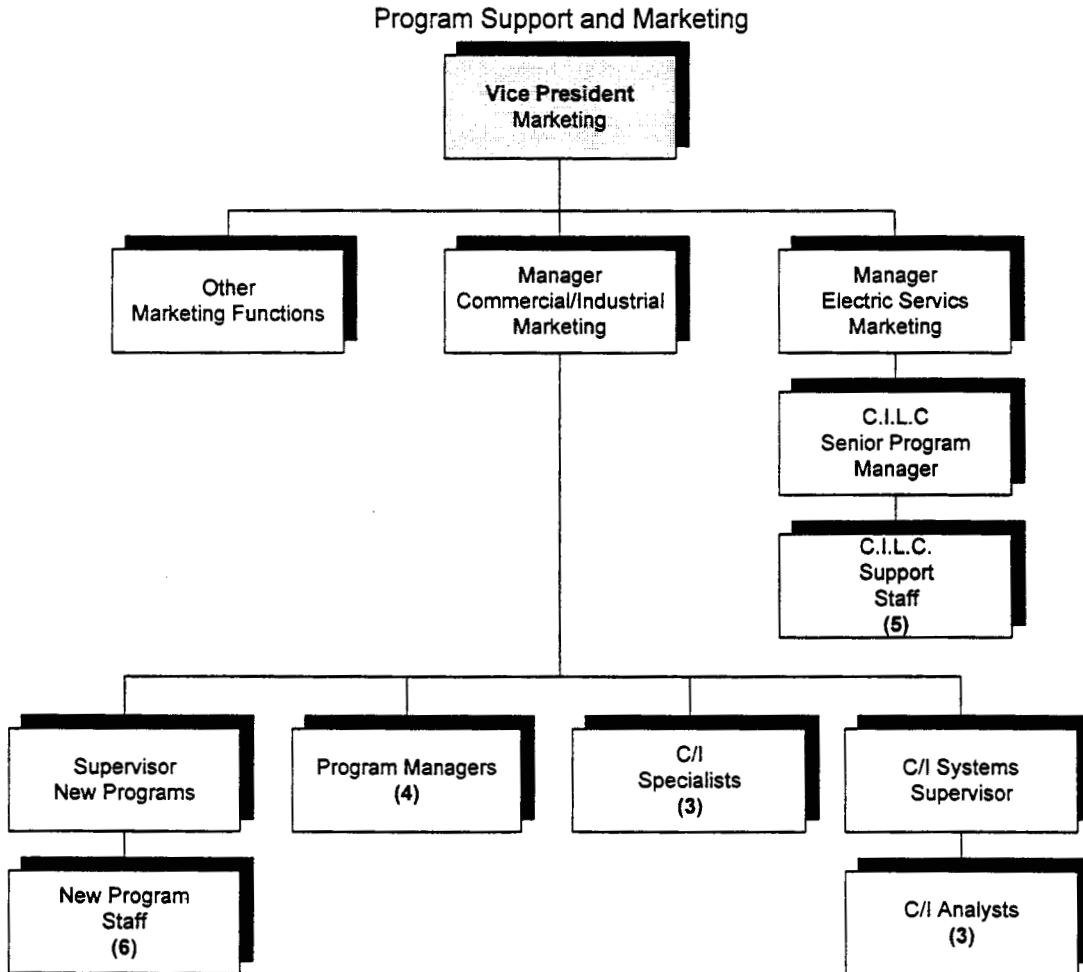
As shown in Exhibit 7, the Manager of C/I Marketing is responsible for maintaining the quality and effectiveness of C/I marketing efforts, and for managing the required personnel and resources. His staff includes Program Managers, each of whom provides information and administers delivery of a designated DSM program. The support staff includes C/I Specialists, who provide technical expertise and installation support to customers as well as FPL's Account Managers. Additionally, C/I Specialists assist customers in assessing the benefits of participation in a program. Also reporting to the Manager of C/I Marketing is the Supervisor of New Programs. This Supervisor supervises research and development of new C/I DSM technologies, and oversees the measurement and evaluation of C/I marketing programs.

The CILC program is separately supported within the Electric Services Marketing unit, under the direction of the ESM Manager, who like the Manager of C/I Marketing, reports to the Vice-President of Marketing. A separate CILC support staff of five is headed by a Senior Program Manager.

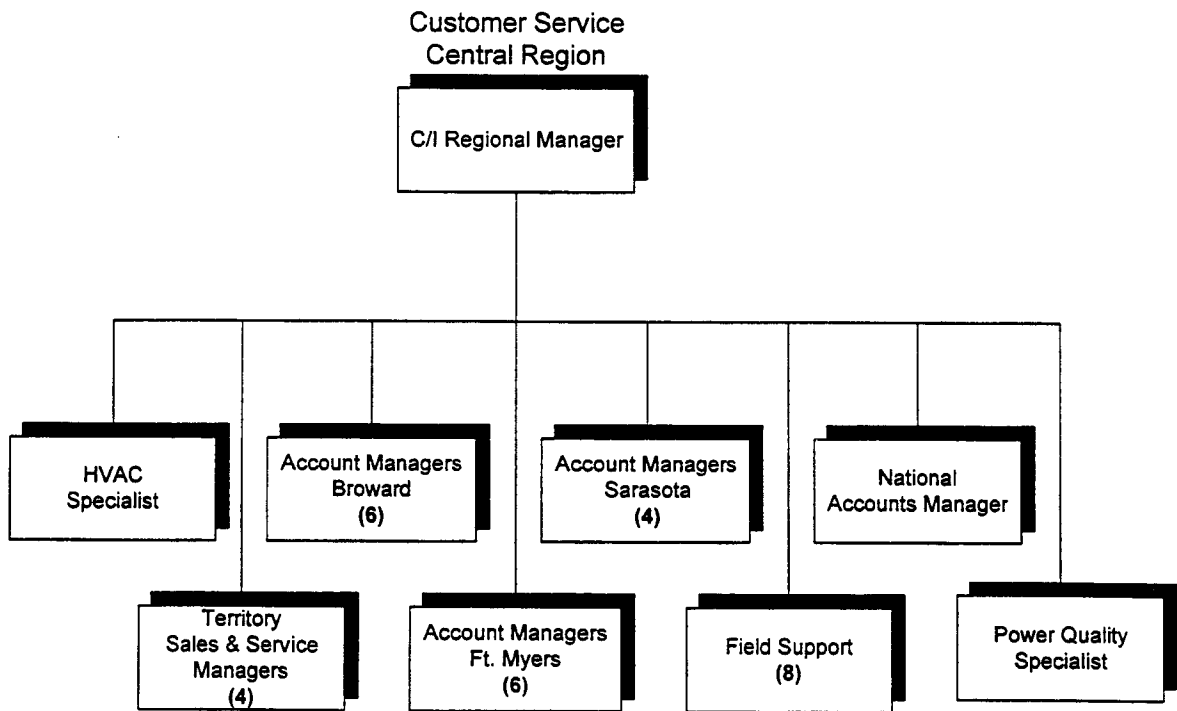
4.2.2 Customer Service Department

As shown in Exhibits 8, 9, and 10, Customer Service Department employees are responsible for promoting and bringing commercial/industrial DSM programs to the customers. Restructuring, completed in early 1996, created three geographical Customer Service Regions. The North, Central, and South regions replaced the old structure of 11 Customer Service Areas. Each region is headed by a Regional Manager, who directs a staff of Account Managers. These Account Managers generally serve customers from a specific market segment, such as hotels or mining companies. Some national accounts, such as Publix, may be assigned to a National Account Manager, who serves all of that customer's locations within FPL's service territory.

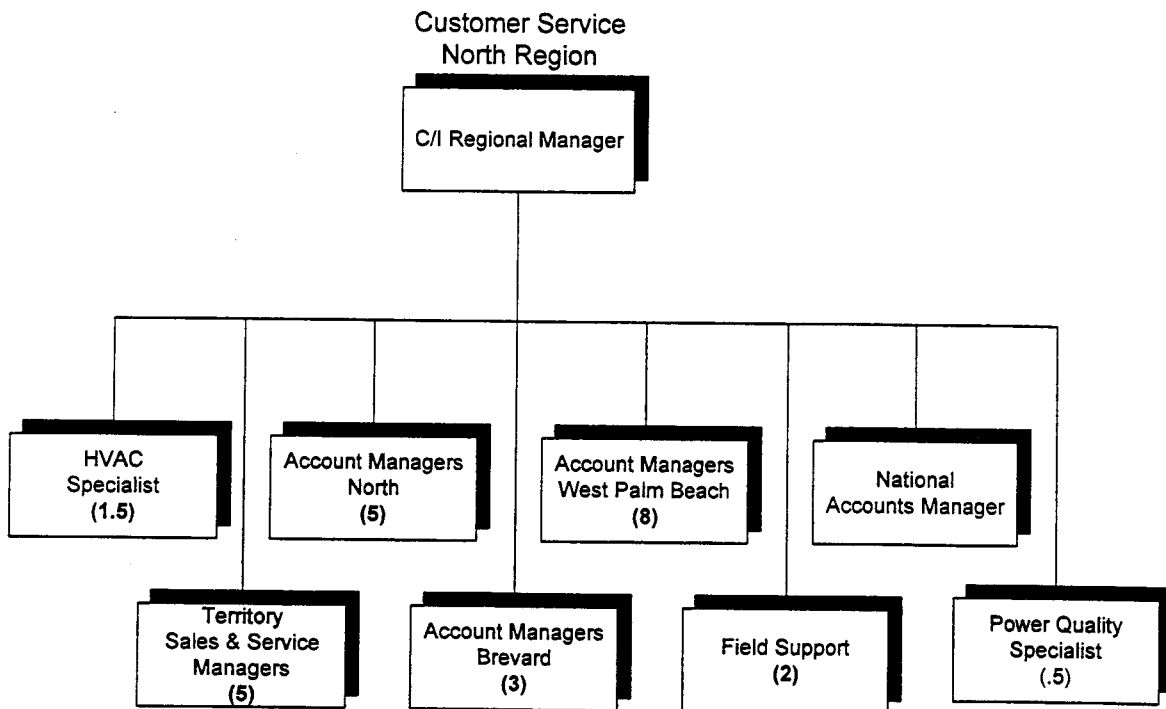
FLORIDA POWER & LIGHT COMPANY
Commercial/Industrial DSM Organization Chart
 1996



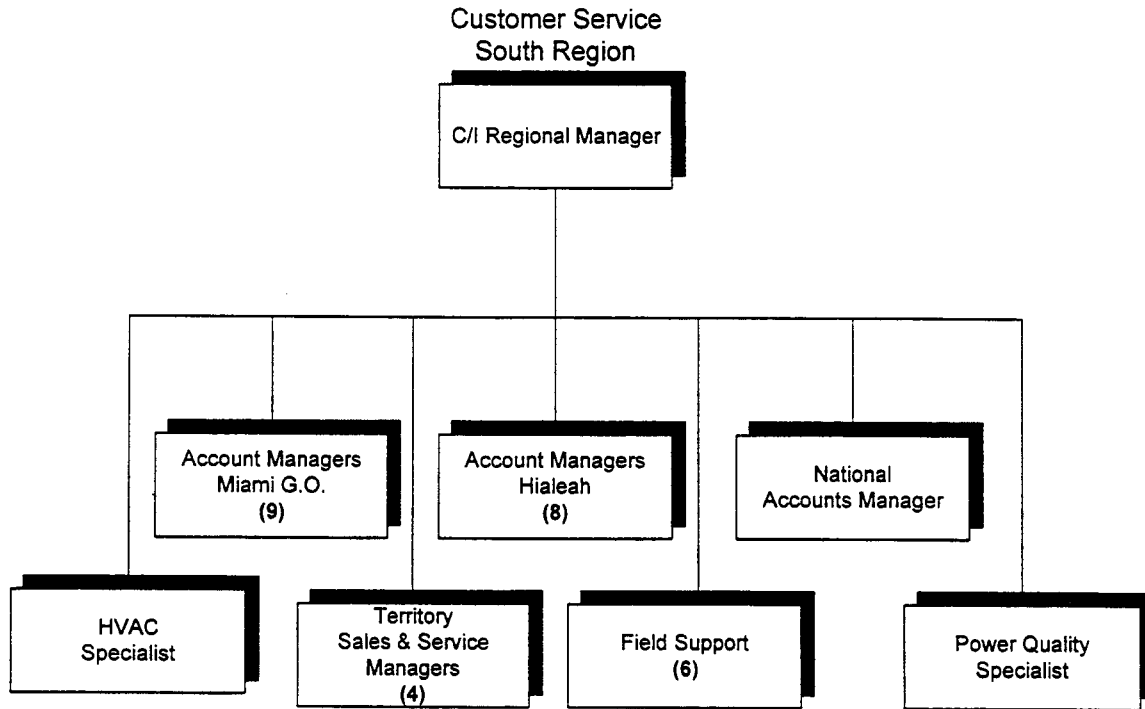
FLORIDA POWER & LIGHT COMPANY
Commercial/Industrial DSM Organization Chart
1996



FLORIDA POWER & LIGHT COMPANY
Commercial/Industrial DSM Organization Chart
1996



FLORIDA POWER & LIGHT COMPANY
Commercial/Industrial DSM Organization Chart
1996



Territory Sales & Service Managers serve smaller commercial customers, providing assistance as needed regarding DSM programs, power quality, or billing problems. As indicated by their title, they serve general business customers within a geographic territory, rather than specializing by market segment.

The regional Customer Service staffs also include at least one HVAC Specialist, who works with customers to evaluate the potential benefits of participating in the C/I Heating, Ventilation and Air Conditioning Program. In addition, the HVAC Specialist may assist in determining whether an air conditioning unit needs to be replaced, and if so, what equipment will most cost-effectively meet the customer's needs. He may then use his technical expertise and contacts with chiller manufacturers to assist customers with difficult decisions that arise only every 15 or 20 years, yet involve large investments.

A total of 1,795 customers (less than one-half of one percent of FPL's commercial and industrial accounts) are assigned to Account Managers, National Account Managers, and Territory Sales & Service Managers. This represents an average of about 28 customers per representative. A benchmarking study conducted by FPL to assess its account management efforts indicated a utility industry average of about 20 customers per representative, and a non-utility average of about 25 per representative.

4.3 DSM Standards and Procedures

In addition to the basic program standards filed with the Commission, FPL's DSM programs are guided by a comprehensive set of written procedures. These procedures address the marketing of each commercial/industrial DSM program, the steps required to determine program eligibility, and the steps to be taken to begin program participation. The procedures specify the tasks to be completed by the various FPL employees or groups likely to be involved, such as an Account Manager, Program Specialist, and Customer Service Area Office.

Although program participation frequently results from a Business Energy Evaluation, or a request for assistance in controlling energy costs, FPL's written procedures encourage a pro-active sales effort that goes beyond merely responding to customer inquiries. For example, procedure MKT CI 110 addresses the CILC Program sales process. It instructs Account Managers on identifying leads from CILC candidate lists, obtaining assistance from the C/I Marketing Support staff, and making a sales presentation to the customer. If the customer responds favorably, the Account Manager follows procedures MKT CI 111 through 113, which provide directions for the execution of a CILC Program Agreement, the installation of load control equipment, and placing the customer on the CILC-1 rate.

In addition to providing information about FPL's commercial/industrial DSM programs, the Account Manager provides a point of contact for meeting customer service needs ranging from resolving power quality problems to assisting in the cutover of service to new facilities. Encouraging and assisting customers with DSM program participation is just one of many roles played by Account Managers.

4.4 *DSM Goals and Objectives*

FPL's DSM-related goals and objectives are used to assist the company in meeting the Commission's goals for the sake of conservation. But, FPL's approach to goals and objectives and strategic planning also creates several areas of overlap between DSM and competition.

4.4.1 C/I Customer Service Business Plans

In recent years, FPL's strategic planning process points to DSM programs as a response to increasing competition. The 1994 Business Plan for the C/I Business Unit raises the following issue:

Alternative energy sources and end-use technologies are improving and are increasing in use. In addition, the public and regulators will continue to promote competition. As these trends continue, our customers will have more alternatives when making energy-related decisions.

In response, FPL's planned strategic actions include:

- A. Utilize segment teams to improve understanding of our customers' business and identify sources/types of competition.
- B. As alternative energy issues arise, respond with timely and professional analysis, work as a partner with customer.
- C. *Selectively utilize CILC and other rate options (existing and proposed) as alternatives to competition.*
- D. Work with Marketing in developing plans to offset inroads being made by the gas companies through their promotional campaigns.

The C/I Customer Service Mission Statement for 1994 also focuses upon DSM programs as a response to competition noting, "The Commercial/Industrial Group will aggressively promote an integrated focus with related departments on major accounts to achieve a superior level of customer satisfaction in order to remain the preferred provider.... *We will use conservation as the primary vehicle to improve satisfaction and add value.*"

FPL's 1995 Customer Service Department commercial/industrial Business Plan also displays a close linking of competition and the deployment of DSM programs. For example, the Plan identifies the following key issues:

Continuing changes in the external environment

- Continued gas competition (cogeneration, cooling, etc.)
- Retail wheeling (California and Michigan examples)
- Bidding for customers (Georgia, New Mexico)
- Increased ESCO activity
- DSM docket/expanded program offerings

FPL's Action Plan for addressing this issue consisted of the following:

- Evaluate results of cost competitive analysis study and develop plan to address issues
- Increase our knowledge of gas competition
- Continue use of DSM to improve customer satisfaction
- Develop and conduct HVAC seminar
- Pursue the applicability of long term service agreement contracts

The 1995 commercial/industrial Customer Service Mission Statement states, "We will market and deliver energy related products and services to commercial/industrial customers in a manner that differentiates FPL from other energy providers." Efforts to differentiate FPL from other energy providers have included doing so by using its DSM programs. For example, although no such arrangement currently exists, FPL has proposed that NASA agree to designate the company as the space agency's sole electrical supplier for 10 years in exchange for receiving FPL's load control rate and a 7 MW increase in backup generation capacity.

In late 1995, FPL consolidated its Marketing, Residential Customer Service, and C/I Customer Service units into a single reorganized Customer Service department. Therefore C/I Business Plans are no longer separately prepared.

4.4.2 Customer Service Management Incentive Plan

FPL's management incentive plan for the C/I Business Unit of the Customer Service Department emphasizes attainment of both the Commission's kW reduction goals and the goals from the company's internal strategic planning. Key employees in DSM program deployment can directly benefit through the incentive plan when DSM goals for their organizations are met or exceeded. These incentive payments are not recovered by FPL through ECCR. In the 1995 Incentive Plan for C/I Customer Service, the category of Operating Measures (two of which

were Conservation Goals and CILC Program) received a weight of 55% of the evaluation. Customer satisfaction ratings received a 20% weighting in the incentive program. As noted, the 1994 C/I Customer Service Business Plan called for the use of DSM programs as the primary vehicle to be used to improve customer satisfaction.

Lower level employees, such as Account Managers and HVAC Specialists may be assigned individual kW reduction goals, as well. However, these employees are compensated on a straight salary basis and, except in rare instances involving exceptional performance, do not participate in the management incentive plan. A portion of those salaries and benefits, associated with time spent on DSM activities, is recovered through ECCR.

4.5 DSM Marketing and Promotion

FPL's marketing and promotion of commercial/industrial DSM reflect the key role the programs are to play as set out in FPL's Business Plans. FPL promotes DSM programs through print advertising, the *Business Energy* quarterly newsletter targeted to large commercial customers, *Energy Notes*, a series of bill inserts for small business customers, the employee newsletter *Inside FPL*, brochures, trade ally meetings, and trade publicity and sales support materials. Total advertising expenditures (commercial/industrial and residential) were \$5,390,125 for the 12 months ending September 1994, and \$4,742,101 for the 12 months ending September 1995.

Staff requested copies of FPL advertising and promotional material used to market the company's Commercial/industrial DSM programs over the period 1989 through 1995. The company provided copies of 23 quarterly issues of the *Business Energy* newsletter containing more than 100 DSM-related articles, two 12-page DSM program overview folders, 10 press releases, 20 customer case study flyers promoting DSM programs, two bill inserts, two mass media print advertisements, two brochures promoting FPL's Energy Expo trade show, three descriptions of trade show displays, and a CILC program sales kit. These materials were reviewed to determine whether the company's marketing efforts were consistent with the Commission's policy on fuel neutrality. Specific discussion of this analysis is provided in section 4.6.

Account Managers and Technical Specialists are the primary means of promoting of the company's Commercial/industrial DSM programs. Through continuing contact with their accounts, they frequently either respond to requests for information regarding a program, or identify a potential need for program participation. Recent market planning efforts have addressed development of service delivery channels, appropriate market segmentation, increased emphasis on national accounts, controlling marketing expenses, and tracking customer contacts and updating customer information through the computerized Strategic Account Management

System. Certain Technical Specialists are designated to assess alternative energy options to identify any questionable aspects of a competitor's proposal and provide analyses to allow the customer to make the decision.

FPL assists customers facing large capital investments related to DSM program participation through referrals to its non-regulated energy services company, FPL Energy Services, Inc. Like other energy service companies (ESCOs), FPL Energy Services offers technical and financing assistance to customers installing new equipment such as high-efficiency chillers, backup generators, and load control equipment and related system modifications. The affiliation with FPL could provide an advantage to FPL Energy Services in competing with other ESCOs.

4.6 Analysis of Electric versus Gas Competition

FPL has prepared at least 50 comparative analyses of gas versus electric applications for customers considering these application alternatives. Staff's review of these gas versus electric studies conducted by FPL or its customers indicated these analyses to be reasonably objective and consistent. In many cases, the analysis was requested by the customer, and in some cases, the customer provided FPL with a copy of the gas company's proposal for analysis. It is understandable that customers who are not familiar with natural gas in general, or recently developed gas applications, may take advantage of established contacts with electric account managers to seek assistance.

Staff also asked FPL to identify instances where the company recommended that customers utilize a natural gas application (e.g., gas chillers, cogeneration) rather than the electric application equivalent. The specific cases involved gas cogeneration and a gas water-heater. In both cases, FPL's analyses concluded that the gas application would be more cost-effective. However, in the cogeneration case, the customer decided against the gas-fired option for production control reasons.

In some instances, FPL obtained proposals for gas chillers or cogeneration facilities, then conducted its own life cycle cost analyses to determine whether questionable assumptions and inputs were used. According to FPL, gas company proposals were found to overestimate the reliability of gas chillers, underestimate additional water requirements for cooling, and underestimate future growth in gas fuel costs. For example, an FPL study produced in January 1993 employed an assumed escalation rate of up to 10% for natural gas, while equivalent studies by gas companies assumed gas price growth as low as 3%.

In two instances, staff was able to obtain and compare competing studies presented by a gas company and FPL. In one instance, proposals were presented by both FPL and City Gas

Company, and in the other, opposing proposals were presented by FPL and Peoples Gas System. In both instances, the customer selected one of the options proposed by FPL, including participation in the company's CILC program. These cases are discussed in detail in sections 7.3, and 8.6.

4.6.1 Competition in Advertising

FPL's DSM programs do not operate in a vacuum. They are effected by competitive forces like any other service FPL offers. Some of the company's commercial/industrial DSM promotional materials illustrate the fine line between the impact these programs can have on customer satisfaction and their effect on competition.

An article in the July 1994 issue of *Inside FPL* tells the story of R.R. Donnelly & Sons, printers of mass circulation publications. Donnelly was seriously considering the addition of a gas-fired cogeneration facility. FPL analyses indicated Donnelly could reduce its rates through participation in the CILC program. Ultimately FPL retained the portion of load that was to be displaced by cogeneration. The article quotes FPL's Vice-President of Customer Service, "Keeping Donnelly as a customer of FPL is a perfect example of what competition is all about." The value of the CILC's low rates in this competitive situation is echoed by a Donnelly manager, who noted, "If your rates were not competitive, we would seek alternatives."

The fuel neutrality of some advertising is suspect, such as a piece titled "Electric vs. gas chillers: the cost-effective choice" that appeared in FPL's September 1993 *Business Energy* newsletter, shown as Exhibit 11. Although it makes some attempts to appear neutral in tone, the half-page article runs through a litany of disadvantages of gas chillers:

But electric cooling equipment is much cheaper on a first cost basis . . . gas chillers are usually one-and-a-half times as expensive as electric . . . businesses installing gas absorption chillers often require larger, more expensive cooling towers . . . gas absorption chillers are less efficient . . . Electric cooling can be up to 50 percent more efficient than gas . . . reliability long has been the Achilles heel of gas chillers . . . systems incorporate several parts that can break down . . . Maintenance costs . . . can be up to 30 percent of operating costs. One unscheduled maintenance call can increase costs by up to five percent . . . Many businesses using gas chillers complained about product support from gas equipment manufacturers . . . These problems don't exist with electric chillers . . . In most cases, FPL customers still find the payback on electric chillers faster than gas . . . the headaches of finding parts and service make gas chillers too costly and inconvenient for this area.

As noted in section 4.4.1, FPL has sought ". . . to offset inroads being made by the gas companies through their promotional campaigns." This direct approach is also evidenced in two

advertisements run in *Time*, *Newsweek*, *Nations Business* and other business publications during the summer and fall of 1993. Exhibit 12 depicts a diver looking down into a waterless swimming pool. Under the banner line, "Before you consider switching to gas, may we offer the most elementary advice: look before you leap," the advertisement warns:

A lot of companies might claim to offer a more cost-efficient alternative to electric power. What you're hearing may sound good, but it may not be the whole story . . . We'll analyze the real energy and money-saving potential in your current proposal. Or develop an alternate for you, including how your facility can qualify for our conservation incentives.

Exhibit 13 shows a photograph of apples and oranges with the heading that asks "Other energy sources may claim that they are saving you money, but what are they really comparing?" It also includes the wording about incomplete or misleading information provided by a gas company. Both advertisements recommend that FPL be allowed to review competitors' proposals and provides a toll-free number for information regarding incentives for energy-saving improvements. A total of \$262,000 was recovered through the Energy Conservation Cost Recovery clause for costs of these two advertisements.

Similarly, Exhibit 14 is a case study printed in the January 1995 issue of *Business Energy* which tells of an "unsolicited gas company proposal" received by a hospital promising substantial energy cost savings. Before making a commitment to the \$325,000 gas chiller, which would reportedly pay for itself in less than three years, the customer asked FPL to review the proposal. According to the advertisement, FPL's Technical Specialist was able to identify "overly optimistic" assumptions used in the gas company's analysis, leading to the rejection of the gas proposal. Subsequently, the hospital enrolled in FPL's CILC program.

4.6.2 Conclusion

FPL takes an aggressive stance that counters the gas industry's marketing of newly developed natural gas applications. This is evidenced by the promotion of its commercial/industrial CILC program. Much of the promotional materials provided to staff highlight this program, which as of 1995, had reached a participation level of 500 customers. Since then, the CILC program has been so successful in reaching its targeted participation level, that in 1996 FPL recommended it be closed to new participants. However, customers who had a signed CILC agreement with FPL at the time of the program closing will continue to be eligible to enter CILC participation. As noted in section 7.3.1, in the case of Cape Canaveral Air Force Station, FPL's CILC program has conflicted with the customer's planned use of natural gas for self-generation presenting a barrier to fuel switching.

Staff believes that some of the competitive advertising by FPL is not fuel neutral. FPL

Staff believes that some of the competitive advertising by FPL is not fuel neutral. FPL appears to believe some gas competitors have misled customers while switching them to gas applications. Though the advertisements cited may have some educational value, they also imply to customers that gas is not a viable alternative to electricity. Rather than specifically comparing costs and performance differences, the debate pits one fuel against another. Staff believes this use of conservation programs as a competitive tool was not intended by FEECA or the Commission.

Electric vs. gas chillers: the cost-effective choice

Remaining profitable in today's market means making the right financial decisions about energy equipment. With chillers, that means knowing installation costs and projecting operating and maintenance expenses over the life of your system. It also means choosing the right model and configuration, and determining whether an electric or gas unit is best for your building.

Despite the gas industry's attempts to increase its share of the chiller market, some 93 percent of commercial and industrial building owners in the United States have chosen electrically-powered equipment for their large-scale cooling needs.

Low first, maintenance and operating costs make electric chillers the right financial choice for many businesses. Their proven reliability, availability in a multitude of sizes and configurations, and the accessibility of service profes-

sionals make electric chillers a practical answer to commercial cooling needs.

First costs

"The gas industry is eager to point to low gas prices as evidence of lower chiller costs," said Matt Chwalowski, manager of energy use engineering at Edison Electric Institute. "But electric cooling equipment is much cheaper on a first cost basis. Large tonnage gas chillers are usually one-and-a-half times as expensive as electric. The price difference is even greater with smaller units."

In addition to higher equipment costs, businesses installing gas absorption chillers often require larger, more expensive cooling towers than those used for electric systems. Since gas absorption chillers are less efficient, they tend to exhaust more heat than electric units, requiring additional make-up water to cool the system.

The make-up water that gas absorption chillers require can be costly. With average water treatment, usage and disposal costs of \$4 per 1,000 gallons, water bills can run \$22,000 yearly on a 300-ton gas absorption unit. A comparable electric chiller will cost about half that amount.

In reviewing your chiller options, Chwalowski advised, consider the efficiency of electric vs. gas. "Electric cooling equipment can be up to 50 percent more efficient than gas cooling equipment including all losses in the process of generating and transmitting electricity," he said.

Reliability

While in recent years it has improved, reliability long has been the Achilles' heel of gas chillers. Comprised of compressors, complex circuitry and, often engines, these systems incorporate several parts that

can break down. Maintenance costs on gas chillers can be up to 30 percent of operating costs. One unscheduled maintenance call can increase costs by up to five percent.

"Many businesses using gas chillers complained about product support from gas equipment manufacturers," Chwalowski said. "Failure to support gas equipment in the 1960s and 1970s doomed many products. These problems don't exist with electric chillers due to their long history of development and use, and extensive dealer networks."

Payback

In marketing gas chillers, gas officials note that using gas equipment reduces the demand charge businesses pay for electric service. In most cases, however, FPL customers still find the payback on electric chillers faster than gas, according to Rex Noble, FPL program manager.

"Most businesses realize that the high initial costs, the price of maintenance and the headaches of finding parts and service make gas chillers too costly and inconvenient for this area," Noble said.

FPL can help

An FPL account manager can evaluate your facility to help you determine whether a high-efficiency electric chiller is the right choice. If you're considering competing proposals, FPL will help you make an informed decision.

Your account manager also will determine whether your building qualifies for financial incentives and technical assistance offered through FPL's Chiller Rebate programs.

For more information about FPL's Chiller Rebate programs, contact your account manager or area representative listed on page 4.

**BEFORE YOU CONSIDER SWITCHING TO GAS,
MAY WE OFFER THE MOST ELEMENTARY ADVICE:
LOOK BEFORE YOU LEAP.**

A lot of companies might claim to offer a more cost-efficient alternative to electric power. What you're hearing may sound good, but it may not be the whole story. Before you consider switching, we offer the following advice: Call us.

We'll analyze the real energy and money-saving potential in your current proposal. Or develop an alternate for you, including how your facility can qualify for our conservation incentives. We'll review your energy usage patterns, month by month load, cooling requirements, and load profiles by time of day. We'll calculate comparable capital improvement, financing and operating costs. If their proposal is sound, we'll tell you so. Either way, you'll know you're not jumping to the wrong conclusion.

To schedule an appointment, or to learn whether your facility qualifies for any of our incentives for making energy-saving improvements, call your Florida Power & Light account manager or 1-800-FPL-5566.

**THE POWER TO IMPROVE
YOUR BUSINESS™**



FPL

an FPL Group company

EXHIBIT 12

Source: FPL Document Request 1, Item 10.

OTHER ENERGY SOURCES MAY CLAIM THAT THEY ARE SAVING YOU MONEY, BUT WHAT ARE THEY REALLY COMPARING?

Before you consider switching to gas-fired air conditioning equipment, be sure you are comparing apples to apples. What you're hearing from the gas company may sound good, but it may not be the whole story.

So before you make a decision, call us. We'll analyze the real energy and money-saving potential in your current proposal. Or develop an alternate for you, including how your facility can qualify for our conservation incentives. We'll review your energy usage patterns, month-by-month load, cooling requirements, and load profiles by time of day. We'll calculate comparable capital improvement, financing and operating costs. If their proposal is sound, we'll tell you so. Either way, you'll know you're making a fair comparison.

To schedule an appointment, or to learn whether your facility qualifies for any of our incentives for making energy-saving improvements, call your FPL account manager or 1-800-FPL-5566.

THE POWER TO IMPROVE
YOUR BUSINESS™



Florida Power & Light, an FPL Group company

Hospital receives gas chiller proposal; saves by switching to better electric rate

PALM BEACH GARDENS MEDICAL CENTER Palm Beach Gardens

PROBLEM

Palm Beach Gardens Medical Center is a 204-bed hospital owned by American Medical International in fast-growing north Palm Beach County.

Because the area's health care market is becoming increasingly competitive, the hospital's managers are pushing to improve the quality and cost effectiveness of day-to-day operations.

In July 1992, Clint Clark, director of engineering for the 190,000-square-foot facility, listened to an unsolicited gas company proposal that sounded almost irresistible.

The proposal recommended installation of a 380-ton gas engine-driven chiller for use in conjunction with two existing 300-ton electric chillers. The plan was to load with the gas-driven chiller, using the electric chillers to supplement the load and as backup. The proposal also called for replacement of an existing cooling tower.

This \$325,000 investment was to generate annual savings of \$123,000. Payback was estimated at only 2.6 years.

According to the proposal, a gas-driven chiller would be sufficient to meet the air conditioning needs of a 50,000-square-foot addition then on the drawing board – and additionally would produce hot water for hospital use.

Clark found the gas proposal intriguing. But before making



Officials at Palm Beach Gardens Medical Center asked FPL for a second opinion on an unsolicited gas proposal and decided to save money by changing to a lower electric rate.

a commitment, he asked his FPL account manager for a second opinion.

ANALYSIS

FPL Account Manager Peter Bloch and Technical Support Specialist Blake Morrison studied the gas proposal and discovered three assumptions which resulted in overly optimistic estimates:

- That the hospital's current chiller efficiency was 1.0 kilowatt (kw)/ton. Actually, it was more efficient: 0.8 kw/ton.
- That the electric chillers operated at full load almost every hour of the day, every day of the year. Actual full load hours were approximately 4,000 – not the 7,500 estimated. The higher assumption led to exaggerated cooling and water heating savings estimates.



Mike Murphy, medical center air conditioning supervisor (left), and Peter Bloch, FPL account manager, examine the emergency generator which has allowed for load control savings.

• That gas chiller maintenance would cost \$28,500 a year. However, standard engineering reference handbooks estimate that annual cost to be more than \$59,000.

Based principally on these observations, FPL's Morrison estimated that adding the gas chiller would pay for itself in savings not in 2.6 years, but in 34.5 years, assuming current electric rates and chiller efficiencies at the medical center.

SOLUTION

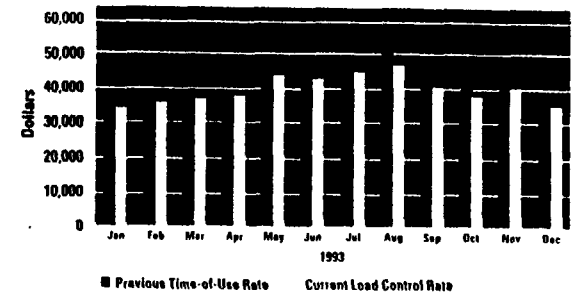
FPL's analysis indicated that not only did Palm Beach Gardens Medical Center not need a gas chiller, but that its current electric chillers had five to seven years of useful life remaining. That was reason enough to abandon the gas proposal. However, had the decision been less clear, Clark had additional reasons:

- Gas-driven chillers are expensive – in this case, more than twice as expensive as comparable electric chillers.
- Gas engines generate noise that might have annoyed the hospital's residential neighbors.
- Gas equipment has what Clark calls a "limited track record."
- Hot water would be produced at the wrong time of day, meaning that most would be wasted.

Knowing Clark's interest in savings, FPL's Bloch looked beyond air conditioning. He showed Clark how the medical center could save money on energy bills – more easily and with less risk – without having to purchase new equipment.

Simply by changing from a time-of-use to a load control rate, the hospital would save an estimated \$19,784 a year.

PALM BEACH GARDENS MEDICAL CENTER
Effect of Rate Change on Monthly Bill



To qualify, the hospital would agree to allow FPL to switch power from one of its two chillers to the hospital's emergency generator for short, infrequent intervals when required due to weather extremes or plant outages.

BENEFITS

Going on the load control rate involved no costly capital expenditures nor adoption of an unfamiliar energy source.

"I had only to install some wiring for meters. It cost me hardly anything," Clark said.

He figures that load control is a better bargain than ever. "FPL has made the program more flexible and consumer-oriented."

And load control not only benefits the medical center, but all FPL customers. It helps defer the need for future power plant construction, helping FPL hold down electric rates.

Based on what he's learned from this experience, Clark is convinced that when it's time to replace his chillers, high-efficiency electric would be the right choice. Clark's plan also includes a generator that can become the primary backup power source. By running the

generator during peak summer demand periods, he will be able to take full advantage of FPL's load control program. Clark intends to pay for the generator through load control savings.

"FPL works closely with us, communicates well and responds quickly when there are problems. They've made a lot of sensible recommendations with reasonable payback periods that my management has had an easy time saying 'yes' to," Clark said.

WHAT FPL CAN DO FOR YOU

An FPL representative can evaluate your facility to help you determine whether a high-efficiency electric chiller will save on installation, energy and maintenance costs. If you're considering other proposals, FPL will help you make an informed decision.

Your representative also will determine whether your building qualifies for FPL financial incentives.

TAKE THE NEXT STEP

Call FPL toll-free at 1-800-FPL-5566 and ask about a free Business Energy Evaluation for your facility.

10.0 COMPANY COMMENTS

10.1 FPL Comments

FPL has reviewed the August 29, 1996 Final Draft Report and, while it may have some disagreements will limit its comments to two specific troubling areas: Staff's characterization of a "Policy of Fuel Neutrality" and an apparent misunderstanding of FPL's response to Staff's data requests.

First, FPL respectfully disagrees with the characterization of the Policy of Fuel Neutrality and, as characterized and applied in the Audit Report this policy might be subject to evaluation under the APA. Staff does not support its characterization with references to specific Commission decisions.

The combination of the Policy of Fuel Neutrality, as presented, with the "accepted" role of conservation activities by gas utilities establishes a conflict. The Report does not address how the "accepted" gas utility conservation role relates to the Policy of Fuel Neutrality. Instead, the focus appears to be how the electric utility DSM programs might provide a "barrier".

Concerning the apparent misunderstanding of FPL's response, at page 37 of the Report, it is stated that "FPL's CILC program has conflicted with the customer's planned use of natural gas for self-generation presenting a barrier to fuel switching".

Some explanation for this conclusion is provided in Section 7.3 of the Report at p. 64 where the following is stated:

According to FPL if the customer self-generates, its Supplemental Service rate, instead of the lower CILC rate, would apply. According to FPL, this is because "the CILC rate applies to those who use FPL as their service provider whenever [service] is available."

Finally the conclusion on this point stated in Section 7.3.1 at p. 65 (which is referred to in the previous quote from page 37 of the Report) is presented:

In the case of Cape Canaveral Air Force Station, the customer's planned use of natural gas for self-generation conflicts with FPL's CILC program. The restrictions regarding the combination of self-generation and receiving the CILC rate present a barrier to fuel switching.

FPL respectfully suggests that its response to Question No. 5 of Staff's Audit Request 4 was misunderstood. The rate for interruptible supplemental service under the Interruptible Standby and Supplemental Service Rate is the CILC rate. Thus, the CILC Rate cannot be lower.

The actual charges for the interruptible standby portion of service (as opposed to the supplemental service portion) may exceed charges [sic] for CILC service due to usage characteristics (they may also be lower). This was precisely the point addressed by the Commission in Order No. 17159 where at p. 5 it stated:

Based upon the record in this case, we believe and find that the expected load characteristics of self-generating customers are sufficiently different to justify different rates for backup and maintenance power. This is so because backup and maintenance services are expected to be relatively low load-factor service reflecting the low forced and scheduled outage rates expected from the self-generating customers.

Based on the Commission's own findings it would be inappropriate to construe a legitimate cost difference as a "barrier." It is the usage characteristics of the customer that may impose higher costs on the utility which drive the cost difference.

Finally, FPL commends Staff for recognizing that C/I customers are sophisticated enough to deal with the complex decisions on energy usage and that the appropriate pursuit of Commission prescribed DSM goals will unescapably at times result in competition with alternative energy sources. However, FPL believes it is clear that the zealous pursuit of DSM goals is not in conflict with fair competition.

Staff Comments:

Staff's Audit Request 4, Question 5d asked:

"Is there any restriction from CILC participation related to their planned on-site generation?" (Something that could prevent them from being on CILC that CCAFS is not allowed to do?)

FPL's response stated:

"Yes. The CILC rate applies to those who use FPL as their service provider whenever FPL power is available. If the on-site generation is operated for other than emergency situations - CILC event or FPL outage - and maintenance testing, the Interruptible Standby and Supplemental Service rate would apply instead of CILC."