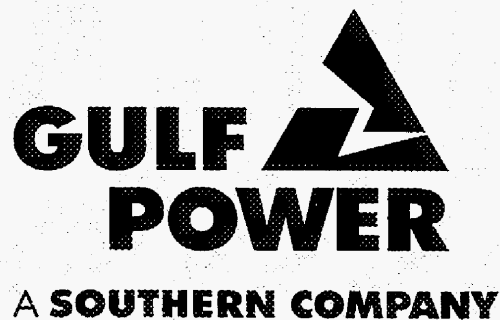


702
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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 040032-EG

**PREPARED DIRECT TESTIMONY AND
EXHIBIT OF
ANGELA T. CARTER**

JUNE 1, 2004



DOCUMENT NUMBER-DATE
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FPSC-COMMISSION CLERK

1 Gulf Power Company

2 Before the Florida Public Service Commission
3 Prepared Direct Testimony of
4 Angela T. Carter
Docket 040032-EG
June 1, 2004

5 *

6 Q. Will you please state your name, business address,
7 employer and position?

8 A. My name is Angela T. Carter and my business address is
9 One Energy Place, Pensacola, Florida 32520. I am
10 employed by Gulf Power Company as the Economic
11 Evaluation and Market Reporting Team Leader.

12 Q. Please summarize your educational background and
13 professional experience.

14 A. I have been employed by Gulf Power Company since 1983.
15 In 1988 I graduated from Troy State University in
16 Pensacola, Florida with a Bachelor of Science Degree
17 with majors in Accounting and Business Administration.
18 I have held various positions of increasing
19 responsibility with Gulf Power in Customer Service,
20 Tax Accounting, Auditing, Corporate Accounting and
21 Customer Accounting. Currently, I am the Economic
22 Evaluation and Market Reporting Team Leader.

23

24

1 Q. Have you previously testified before this Commission?

2 A. Yes, I have testified for Gulf Power Company in the
3 Energy Conservation Cost Recovery (ECCR) docket.

4

5 Q. What is the purpose of your testimony?

6 A. The purpose of my testimony is to propose seasonal
7 peak demand and annual energy conservation goals for
8 Gulf Power for the period 2005 through 2014 and to
9 provide 10-year projections of the total cost-
10 effective winter and summer peak demand (kW) and
11 annual energy (kWh) savings reasonably achievable in
12 the residential and commercial/industrial classes
13 through demand side management.

14

15 Q. Have you prepared an exhibit in support of your
16 testimony?

17 A. Yes, I have.

18

19 Counsel: We ask that Ms. Carter's exhibit consisting
20 of 3 schedules be marked for
21 identification as:

22 Exhibit No. _____ (ATC-1)

23

24 Q. What goal levels are appropriate and reasonably
25 achievable for Gulf Power Company for seasonal peak

1 demand and annual energy conservation for the period
2 2005 - 2014?

3 A. The Company's proposed seasonal peak demand and annual
4 energy conservation goals for the period 2005 through
5 2014 are contained in Schedule 1 of my exhibit
6 (ATC-1). These goals, based upon Gulf's most recent
7 planning process, are the total cost-effective winter
8 and summer peak kW demand reductions and the annual
9 kWh savings which are reasonably achievable through
10 implementation of demand side programs in Gulf Power's
11 service area for the residential and
12 commercial/industrial classes. The basis for the
13 goals is the maximum kW and kWh associated with all
14 measures that passed both the Rate Impact Measure
15 (RIM) and participant's test.

16
17 Q. What portfolio of residential measures provides the
18 basis for the proposed goals?

19 A. The final portfolio of residential market measures are
20 contained in Schedule 2 of my exhibit (ATC-1) and
21 consists of the following: ground source heat pumps,
22 high efficiency room air conditioners, best current
23 refrigerators - frost free and manual defrost and
24 GoodCents Select.

25

1 Q. What portfolio of commercial and industrial measures
2 provides the basis for the proposed goals?

3 A. The final portfolio of commercial and industrial
4 demand side measures are contained in Schedule 3 of my
5 exhibit (ATC-1) and consists of the following: high
6 efficiency room air conditioners (PTAC), heat pump
7 water heaters, energy efficient electric fryers,
8 commercial GoodCents buildings and real time pricing.

9

10 Q. Please summarize the process used to determine the
11 proposed goal levels.

12 A. Gulf reviewed the 120 measures analyzed in Docket No.
13 971006-EG and determined there were no changes in
14 technology or market conditions that warranted further
15 analyses for inclusion in this goal setting process.
16 Gulf then undertook an assessment of the market
17 segments and major end-use categories listed in Rule
18 25-17.0021 that were cost effective in the goals
19 established by the Commission by Order No.PSC-99-1942-
20 FOF-EG. In addition, Gulf evaluated measures
21 contained in the Company's approved ECCR programs.
22 The demand side measures were analyzed for cost
23 effectiveness and those passing both the RIM test and
24 participant's test were used to determine the proposed
25 goals.

1 Q. Was there any measure in the numeric goals established
2 by the Commission by Order No.PSC-99-1942-FOF-EG that
3 is not included in the proposed goals?

4 A. Yes. Interruptible service is not currently
5 considered as either a supply or demand side resource
6 and is not included in the proposed goals.

7

8 Q. Have there been any changes in Gulf's integrated
9 planning processes since the last conservation goals
10 setting process?

11 A. No. Gulf continues to conduct integrated resource
12 planning in conjunction with the other Southern
13 electric system operating companies. The Company's
14 planning process evaluates the cost of new generating
15 capacity additions after incorporating the effects of
16 its approved conservation and energy efficiency
17 programs in order to produce an integrated resource
18 plan that will provide adequate and reliable service
19 to its electric customers at the lowest cost.

20

21 Q. The Commission last established numeric goals,
22 pursuant to Rule 25-17.0021, by Order No. PSC-99-1942-
23 FOF-EG issued October 1, 1999. How do the proposed
24 goals for the period 2005-2014 compare with the

1 current goals established by Order No. PSC-99-1942-
2 FOF-EG?

3 A. The proposed goals are lower than the goals
4 established by Order No. PSC-99-1942-FOF-EG. Since
5 the last goals proceeding, Gulf has gained valuable
6 experience with and knowledge of market conditions and
7 customer demand and energy response to conservation
8 programs. This experience has enabled us to project
9 customer participation levels and demand and energy
10 responses to our conservation programs with a greater
11 degree of certainty in this filing. In some cases,
12 such as GoodCents Select, projected participation
13 levels are lower than earlier market response
14 estimates that were available at the time of the last
15 filing. Additionally, some demand and energy response
16 estimates were updated to lower values as a result of
17 information learned through our program monitoring and
18 evaluation efforts over the last five years. The net
19 effect of the application of this improved experience
20 and knowledge is an overall lower goal level.

21

22 Q. Does this conclude your testimony?

23 A. Yes, it does.

24

AFFIDAVIT

STATE OF FLORIDA)
)
COUNTY OF ESCAMBIA)

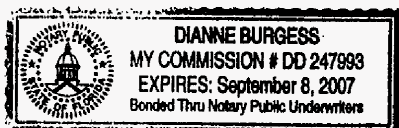
Docket No. 040032-EG

Before me the undersigned authority, personally appeared Angela T. Carter, who being first duly sworn, deposes and says that she is the Economic Evaluation and Market Reporting Team Leader of Gulf Power Company, a Maine Corporation, that the foregoing is true and correct to the best of her knowledge, information and belief. She is personally known to me.

Angela Carter
Angela T. Carter
Economic Evaluation and Market
Reporting Team Leader

Sworn to and subscribed before me this 28th day of May, 2004.

Dianne Burgess
Notary Public, State of Florida at Large



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| 2 | Residential Proposed Goals and Measures | 2 - 7 |
| 3 | Commercial and Industrial Proposed Goals and Measures | 8 - 13 |

GULF POWER COMPANY
Total Residential, Commercial & Industrial Markets
New and Existing Structures

24.

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|---------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| Total All Markets | 2005 | (16,641) | (21,858) | (12,459) | (16,365) | (5,146) | (5,609) | (5,609) |
| Total All Markets | 2006 | (29,279) | (38,456) | (22,915) | (30,097) | (10,286) | (11,211) | (16,820) |
| Total All Markets | 2007 | (40,025) | (52,570) | (32,399) | (42,555) | (15,742) | (17,159) | (33,979) |
| Total All Markets | 2008 | (46,771) | (61,431) | (39,884) | (52,386) | (21,200) | (23,108) | (57,087) |
| Total All Markets | 2009 | (53,517) | (70,292) | (47,369) | (62,217) | (26,661) | (29,060) | (86,147) |
| Total All Markets | 2010 | (59,829) | (78,583) | (54,285) | (71,300) | (31,520) | (34,357) | (120,504) |
| Total All Markets | 2011 | (66,142) | (86,874) | (61,201) | (80,384) | (36,382) | (39,657) | (160,160) |
| Total All Markets | 2012 | (72,455) | (95,166) | (68,117) | (89,469) | (41,247) | (44,959) | (205,120) |
| Total All Markets | 2013 | (78,768) | (103,458) | (75,034) | (98,554) | (46,114) | (50,264) | (255,384) |
| Total All Markets | 2014 | (85,082) | (111,751) | (81,952) | (107,640) | (50,984) | (55,572) | (310,956) |

| | RIM | Participant | TRC |
|---------------------------|-----------|-------------|-----------|
| NPV Benefits (\$000s) | \$122,771 | \$78,283 | \$117,323 |
| NPV Costs (\$000s) | \$107,859 | \$26,108 | \$46,812 |
| NPV Net Benefits (\$000s) | \$14,912 | \$52,175 | \$70,511 |
| Benefit/Cost Ratio | 1.138 | 2.998 | 2.506 |

Florida Public Service Comm
 Docket No. 040032-EG
 Gulf Power Company
 Witness: Angela T. Carter
 Exhibit No. _____ (ATC-
 Schedule 1
 Page 1 of 1

**GULF POWER COMPANY
Residential Measures
Total New and Existing Structures**

24.

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|----------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| Residential Measures | 2005 | (5,907) | (7,759) | (7,223) | (9,488) | (3,080) | (3,357) | (3,357) |
| Residential Measures | 2006 | (11,815) | (15,518) | (14,447) | (18,975) | (6,160) | (6,714) | (10,072) |
| Residential Measures | 2007 | (17,722) | (23,277) | (21,670) | (28,463) | (9,240) | (10,072) | (20,143) |
| Residential Measures | 2008 | (23,629) | (31,036) | (28,893) | (37,950) | (12,320) | (13,429) | (33,572) |
| Residential Measures | 2009 | (29,536) | (38,794) | (36,117) | (47,438) | (15,400) | (16,786) | (50,358) |
| Residential Measures | 2010 | (35,009) | (45,982) | (42,770) | (56,176) | (17,876) | (19,485) | (69,843) |
| Residential Measures | 2011 | (40,481) | (53,169) | (49,423) | (64,915) | (20,353) | (22,184) | (92,027) |
| Residential Measures | 2012 | (45,953) | (60,357) | (56,077) | (73,654) | (22,829) | (24,884) | (116,911) |
| Residential Measures | 2013 | (51,425) | (67,545) | (62,730) | (82,393) | (25,305) | (27,583) | (144,493) |
| Residential Measures | 2014 | (56,898) | (74,732) | (69,384) | (91,132) | (27,782) | (30,282) | (174,776) |

| | RIM | Participant | TRC |
|---------------------------|----------|-------------|----------|
| NPV Benefits (\$000s) | \$74,196 | \$49,729 | \$75,537 |
| NPV Costs (\$000s) | \$70,243 | \$17,921 | \$36,352 |
| NPV Net Benefits (\$000s) | \$3,953 | \$31,808 | \$39,185 |
| Benefit/Cost Ratio | 1.056 | 2.775 | 2.078 |

2

**GULF POWER COMPANY
RSC - 2
Ground Source Heat Pump**

24.

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|----------------------------------|------|------------------|--------------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| RSC - 2 | 2005 | (435) | (571) | (570) | (749) | (604) | (658) | (658) |
| RSC - 2 | 2006 | (870) | (1,143) | (1,140) | (1,497) | (1,207) | (1,316) | (1,974) |
| RSC - 2 | 2007 | (1,305) | (1,714) | (1,710) | (2,246) | (1,811) | (1,974) | (3,948) |
| RSC - 2 | 2008 | (1,740) | (2,285) | (2,280) | (2,995) | (2,414) | (2,632) | (6,579) |
| RSC - 2 | 2009 | (2,175) | (2,857) | (2,850) | (3,743) | (3,018) | (3,290) | (9,869) |
| RSC - 2 | 2010 | (2,175) | (2,857) | (2,850) | (3,743) | (3,018) | (3,290) | (13,158) |
| RSC - 2 | 2011 | (2,175) | (2,857) | (2,850) | (3,743) | (3,018) | (3,290) | (16,448) |
| RSC - 2 | 2012 | (2,175) | (2,857) | (2,850) | (3,743) | (3,018) | (3,290) | (19,738) |
| RSC - 2 | 2013 | (2,175) | (2,857) | (2,850) | (3,743) | (3,018) | (3,290) | (23,027) |
| RSC - 2 | 2014 | (2,175) | (2,857) | (2,850) | (3,743) | (3,018) | (3,290) | (26,317) |
| | | RIM | Participant | TRC | | | | |
| NPV Benefits (\$000s) | | \$3,877 | \$4,420 | \$5,218 | | | | |
| NPV Costs (\$000s) | | \$3,593 | \$2,606 | \$3,120 | | | | |
| NPV Net Benefits (\$000s) | | \$284 | \$1,814 | \$2,098 | | | | |
| Benefit/Cost Ratio | | 1.079 | 1.696 | 1.673 | | | | |

3

**GULF POWER COMPANY
RSC - 24A
High Efficiency Room Air Conditioner**

26.

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|---------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| RSC - 24A | 2005 | (229) | (301) | 0 | 0 | (119) | (130) | (130) |
| RSC - 24A | 2006 | (458) | (601) | 0 | 0 | (238) | (259) | (389) |
| RSC - 24A | 2007 | (687) | (902) | 0 | 0 | (357) | (389) | (778) |
| RSC - 24A | 2008 | (916) | (1,203) | 0 | 0 | (476) | (519) | (1,297) |
| RSC - 24A | 2009 | (1,145) | (1,503) | 0 | 0 | (595) | (649) | (1,946) |
| RSC - 24A | 2010 | (1,373) | (1,804) | 0 | 0 | (714) | (778) | (2,725) |
| RSC - 24A | 2011 | (1,602) | (2,105) | 0 | 0 | (833) | (908) | (3,633) |
| RSC - 24A | 2012 | (1,831) | (2,405) | 0 | 0 | (952) | (1,038) | (4,671) |
| RSC - 24A | 2013 | (2,060) | (2,706) | 0 | 0 | (1,071) | (1,168) | (5,838) |
| RSC - 24A | 2014 | (2,289) | (3,006) | 0 | 0 | (1,190) | (1,297) | (7,136) |

| | RIM | Participant | TRC |
|---------------------------|---------|-------------|---------|
| NPV Benefits (\$000s) | \$2,823 | \$861 | \$2,823 |
| NPV Costs (\$000s) | \$861 | \$298 | \$298 |
| NPV Net Benefits (\$000s) | \$1,962 | \$563 | \$2,525 |
| Benefit/Cost Ratio | 3.280 | 2.888 | 9.473 |

Florida Public Service Commission
 Docket No. 040032-EG
 Gulf Power Company
 Witness: Angela T. Carter
 Exhibit No. _____ (ATC-1)
 Schedule 2
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**GULF POWER COMPANY
RF - 1
Best Current Refrigerator (Frost-Free)**

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|---------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| RF - 1 | 2005 | (25) | (33) | (25) | (33) | (45) | (49) | (49) |
| RF - 1 | 2006 | (50) | (66) | (50) | (66) | (90) | (98) | (146) |
| RF - 1 | 2007 | (75) | (99) | (75) | (99) | (134) | (146) | (293) |
| RF - 1 | 2008 | (100) | (131) | (100) | (131) | (179) | (195) | (488) |
| RF - 1 | 2009 | (125) | (164) | (125) | (164) | (224) | (244) | (732) |
| RF - 1 | 2010 | (150) | (197) | (150) | (197) | (269) | (293) | (1,024) |
| RF - 1 | 2011 | (175) | (230) | (175) | (230) | (313) | (341) | (1,366) |
| RF - 1 | 2012 | (200) | (263) | (200) | (263) | (358) | (390) | (1,756) |
| RF - 1 | 2013 | (225) | (296) | (225) | (296) | (403) | (439) | (2,195) |
| RF - 1 | 2014 | (250) | (328) | (250) | (328) | (448) | (488) | (2,683) |

| | RIM | Participant | TRC |
|---------------------------|-------|-------------|-------|
| NPV Benefits (\$000s) | \$420 | \$315 | \$420 |
| NPV Costs (\$000s) | \$334 | \$146 | \$165 |
| NPV Net Benefits (\$000s) | \$86 | \$169 | \$255 |
| Benefit/Cost Ratio | 1.257 | 2.157 | 2.544 |

GULF POWER COMPANY
RF - 2
Best Current Refrigerator (Manual Defrost)

24.

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|---------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| RF - 2 | 2005 | (28) | (37) | (28) | (37) | (27) | (29) | (29) |
| RF - 2 | 2006 | (57) | (74) | (57) | (74) | (53) | (58) | (87) |
| RF - 2 | 2007 | (85) | (112) | (85) | (112) | (80) | (87) | (174) |
| RF - 2 | 2008 | (113) | (149) | (113) | (149) | (106) | (116) | (290) |
| RF - 2 | 2009 | (142) | (186) | (142) | (186) | (133) | (145) | (435) |
| RF - 2 | 2010 | (170) | (223) | (170) | (223) | (160) | (174) | (609) |
| RF - 2 | 2011 | (198) | (261) | (198) | (261) | (186) | (203) | (812) |
| RF - 2 | 2012 | (227) | (298) | (227) | (298) | (213) | (232) | (1,044) |
| RF - 2 | 2013 | (255) | (335) | (255) | (335) | (239) | (261) | (1,304) |
| RF - 2 | 2014 | (284) | (372) | (284) | (372) | (266) | (290) | (1,594) |

| | RIM | Participant | TRC |
|---------------------------|-------|-------------|-------|
| NPV Benefits (\$000s) | \$391 | \$168 | \$391 |
| NPV Costs (\$000s) | \$179 | \$41 | \$51 |
| NPV Net Benefits (\$000s) | \$213 | \$127 | \$340 |
| Benefit/Cost Ratio | 2.190 | 4.107 | 7.635 |

9

**GULF POWER COMPANY
GCS
GoodCents Select**

24.

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|---------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| GCS | 2005 | (5,190) | (6,817) | (6,600) | (8,669) | (2,286) | (2,492) | (2,492) |
| GCS | 2006 | (10,380) | (13,634) | (13,200) | (17,338) | (4,572) | (4,983) | (7,475) |
| GCS | 2007 | (15,570) | (20,450) | (19,800) | (26,006) | (6,858) | (7,475) | (14,950) |
| GCS | 2008 | (20,760) | (27,267) | (26,400) | (34,675) | (9,144) | (9,967) | (24,917) |
| GCS | 2009 | (25,950) | (34,084) | (33,000) | (43,344) | (11,430) | (12,459) | (37,376) |
| GCS | 2010 | (31,140) | (40,901) | (39,600) | (52,013) | (13,716) | (14,950) | (52,327) |
| GCS | 2011 | (36,330) | (47,718) | (46,200) | (60,681) | (16,002) | (17,442) | (69,769) |
| GCS | 2012 | (41,520) | (54,534) | (52,800) | (69,350) | (18,288) | (19,934) | (89,703) |
| GCS | 2013 | (46,710) | (61,351) | (59,400) | (78,019) | (20,574) | (22,426) | (112,128) |
| GCS | 2014 | (51,900) | (68,168) | (66,000) | (86,688) | (22,860) | (24,917) | (137,046) |

| | RIM | Participant | TRC |
|---------------------------|----------|-------------|----------|
| NPV Benefits (\$000s) | \$66,685 | \$43,965 | \$66,685 |
| NPV Costs (\$000s) | \$65,277 | \$14,830 | \$32,718 |
| NPV Net Benefits (\$000s) | \$1,408 | \$29,134 | \$33,967 |
| Benefit/Cost Ratio | 1.022 | 2.965 | 2.038 |

7

GULF POWER COMPANY
Commercial & Industrial Measures
Total New and Existing Structures

24

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|-------------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| Commercial & Industrial | 2005 | (10,734) | (14,099) | (5,236) | (6,877) | (2,066) | (2,251) | (2,251) |
| Commercial & Industrial | 2006 | (17,464) | (22,938) | (8,468) | (11,122) | (4,126) | (4,497) | (6,749) |
| Commercial & Industrial | 2007 | (22,303) | (29,294) | (10,729) | (14,092) | (6,502) | (7,087) | (13,836) |
| Commercial & Industrial | 2008 | (23,142) | (30,395) | (10,990) | (14,435) | (8,880) | (9,679) | (23,515) |
| Commercial & Industrial | 2009 | (23,981) | (31,498) | (11,252) | (14,779) | (11,261) | (12,274) | (35,789) |
| Commercial & Industrial | 2010 | (24,821) | (32,601) | (11,515) | (15,124) | (13,644) | (14,872) | (50,661) |
| Commercial & Industrial | 2011 | (25,661) | (33,704) | (11,777) | (15,469) | (16,030) | (17,472) | (68,133) |
| Commercial & Industrial | 2012 | (26,502) | (34,808) | (12,041) | (15,815) | (18,418) | (20,076) | (88,209) |
| Commercial & Industrial | 2013 | (27,343) | (35,913) | (12,304) | (16,161) | (20,809) | (22,682) | (110,891) |
| Commercial & Industrial | 2014 | (28,184) | (37,019) | (12,568) | (16,508) | (23,202) | (25,290) | (136,181) |

| | RIM | Participant | TRC |
|---------------------------|----------|-------------|----------|
| NPV Benefits (\$000s) | \$48,575 | \$28,554 | \$41,786 |
| NPV Costs (\$000s) | \$37,616 | \$8,188 | \$10,460 |
| NPV Net Benefits (\$000s) | \$10,959 | \$20,367 | \$31,326 |
| Benefit/Cost Ratio | 1.291 | 3.488 | 3.995 |

Florida Public Service Comm
 Docket No. 040032-EG
 Gulf Power Company
 Witness: Angela T. Carter
 Exhibit No. _____ (ATC-
 Schedule 3
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GULF POWER COMPANY
SC-D-4
High Efficiency Room Air Conditioner - PTAC

24,

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|---------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| SC-D-4 | 2005 | (4) | (5) | 0 | 0 | (5) | (5) | (5) |
| SC-D-4 | 2006 | (7) | (9) | 0 | 0 | (8) | (9) | (14) |
| SC-D-4 | 2007 | (10) | (14) | 0 | 0 | (12) | (13) | (28) |
| SC-D-4 | 2008 | (14) | (18) | 0 | 0 | (16) | (18) | (45) |
| SC-D-4 | 2009 | (17) | (22) | 0 | 0 | (20) | (22) | (67) |
| SC-D-4 | 2010 | (20) | (27) | 0 | 0 | (24) | (26) | (93) |
| SC-D-4 | 2011 | (24) | (31) | 0 | 0 | (28) | (30) | (124) |
| SC-D-4 | 2012 | (27) | (35) | 0 | 0 | (32) | (35) | (158) |
| SC-D-4 | 2013 | (30) | (40) | 0 | 0 | (36) | (39) | (197) |
| SC-D-4 | 2014 | (34) | (44) | 0 | 0 | (40) | (43) | (240) |

| | RIM | Participant | TRC |
|---------------------------|-------|-------------|-------|
| NPV Benefits (\$000s) | \$49 | \$20 | \$49 |
| NPV Costs (\$000s) | \$20 | \$12 | \$12 |
| NPV Net Benefits (\$000s) | \$29 | \$8 | \$37 |
| Benefit/Cost Ratio | 2.458 | 1.678 | 4.061 |

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**GULF POWER COMPANY
W-D-11
Heat Pump Water Heater**

24,

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|---------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| W-D-11 | 2005 | (5) | (6) | (5) | (6) | (25) | (27) | (27) |
| W-D-11 | 2006 | (9) | (12) | (9) | (12) | (52) | (57) | (84) |
| W-D-11 | 2007 | (15) | (20) | (15) | (20) | (82) | (90) | (174) |
| W-D-11 | 2008 | (21) | (27) | (21) | (27) | (115) | (125) | (299) |
| W-D-11 | 2009 | (27) | (35) | (27) | (35) | (150) | (163) | (462) |
| W-D-11 | 2010 | (34) | (44) | (34) | (44) | (187) | (204) | (665) |
| W-D-11 | 2011 | (41) | (54) | (41) | (54) | (227) | (247) | (913) |
| W-D-11 | 2012 | (49) | (64) | (49) | (64) | (269) | (293) | (1,206) |
| W-D-11 | 2013 | (57) | (74) | (57) | (74) | (314) | (342) | (1,548) |
| W-D-11 | 2014 | (65) | (86) | (65) | (86) | (361) | (394) | (1,942) |

| | RIM | Participant | TRC |
|---------------------------|-------|-------------|-------|
| NPV Benefits (\$000s) | \$188 | \$184 | \$188 |
| NPV Costs (\$000s) | \$186 | \$62 | \$64 |
| NPV Net Benefits (\$000s) | \$2 | \$122 | \$124 |
| Benefit/Cost Ratio | 1.012 | 2.973 | 2.942 |

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**GULF POWER COMPANY
C-D-19
Energy Efficient Electric Fryers**

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|---------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| C-D-19 | 2005 | (35) | (45) | (35) | (45) | (59) | (64) | (64) |
| C-D-19 | 2006 | (65) | (85) | (65) | (85) | (111) | (121) | (185) |
| C-D-19 | 2007 | (92) | (121) | (92) | (121) | (157) | (172) | (357) |
| C-D-19 | 2008 | (119) | (156) | (119) | (156) | (203) | (222) | (579) |
| C-D-19 | 2009 | (146) | (191) | (146) | (191) | (249) | (272) | (850) |
| C-D-19 | 2010 | (173) | (227) | (173) | (227) | (296) | (322) | (1,173) |
| C-D-19 | 2011 | (200) | (262) | (200) | (262) | (341) | (372) | (1,545) |
| C-D-19 | 2012 | (227) | (298) | (227) | (298) | (388) | (422) | (1,967) |
| C-D-19 | 2013 | (254) | (333) | (254) | (333) | (434) | (473) | (2,440) |
| C-D-19 | 2014 | (281) | (369) | (281) | (369) | (480) | (523) | (2,963) |

| | RIM | Participant | TRC |
|---------------------------|-------|-------------|-------|
| NPV Benefits (\$000s) | \$468 | \$349 | \$468 |
| NPV Costs (\$000s) | \$353 | \$54 | \$58 |
| NPV Net Benefits (\$000s) | \$115 | \$295 | \$410 |
| Benefit/Cost Ratio | 1.325 | 6.476 | 8.020 |

**GULF POWER COMPANY
GCCOM
GoodCents Commercial Building**

24.

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|---------------------|------|------------------|--------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| GCCOM | 2005 | (691) | (908) | (197) | (259) | (1,977) | (2,155) | (2,155) |
| GCCOM | 2006 | (1,383) | (1,816) | (394) | (517) | (3,954) | (4,310) | (6,465) |
| GCCOM | 2007 | (2,185) | (2,870) | (622) | (817) | (6,250) | (6,812) | (13,277) |
| GCCOM | 2008 | (2,988) | (3,925) | (851) | (1,118) | (8,546) | (9,315) | (22,592) |
| GCCOM | 2009 | (3,791) | (4,979) | (1,080) | (1,418) | (10,842) | (11,818) | (34,410) |
| GCCOM | 2010 | (4,594) | (6,034) | (1,308) | (1,718) | (13,138) | (14,320) | (48,730) |
| GCCOM | 2011 | (5,397) | (7,088) | (1,537) | (2,018) | (15,434) | (16,823) | (65,552) |
| GCCOM | 2012 | (6,199) | (8,143) | (1,765) | (2,319) | (17,729) | (19,325) | (84,878) |
| GCCOM | 2013 | (7,002) | (9,197) | (1,994) | (2,619) | (20,025) | (21,828) | (106,705) |
| GCCOM | 2014 | (7,805) | (10,251) | (2,223) | (2,919) | (22,321) | (24,330) | (131,035) |

| | RIM | Participant | TRC |
|---------------------------|----------|-------------|----------|
| NPV Benefits (\$000s) | \$15,942 | \$11,389 | \$15,942 |
| NPV Costs (\$000s) | \$14,110 | \$1,271 | \$3,992 |
| NPV Net Benefits (\$000s) | \$1,832 | \$10,118 | \$11,949 |
| Benefit/Cost Ratio | 1.130 | 8.961 | 3.993 |

**GULF POWER COMPANY
RTP
Real Time Pricing**

| Demand Side Measure | Year | Annual Summer kW | | Annual Winter kW | | Annual kWh Savings (000) | | |
|---------------------------|------|------------------|--------------------|------------------|--------------|--------------------------|------------|-----------------------|
| | | at Meter | at Generator | at Meter | at Generator | Customer | Generation | Cumulative Generation |
| RTP | 2005 | (10,000) | (13,135) | (5,000) | (6,567) | | | |
| RTP | 2006 | (16,000) | (21,015) | (8,000) | (10,508) | | | |
| RTP | 2007 | (20,000) | (26,269) | (10,000) | (13,135) | | | |
| RTP | 2008 | (20,000) | (26,269) | (10,000) | (13,135) | | | |
| RTP | 2009 | (20,000) | (26,269) | (10,000) | (13,135) | | | |
| RTP | 2010 | (20,000) | (26,269) | (10,000) | (13,135) | | | |
| RTP | 2011 | (20,000) | (26,269) | (10,000) | (13,135) | | | |
| RTP | 2012 | (20,000) | (26,269) | (10,000) | (13,135) | | | |
| RTP | 2013 | (20,000) | (26,269) | (10,000) | (13,135) | | | |
| RTP | 2014 | (20,000) | (26,269) | (10,000) | (13,135) | | | |
| | | RIM | Participant | TRC | | | | |
| NPV Benefits (\$000s) | | \$31,927 | \$16,612 | \$25,138 | | | | |
| NPV Costs (\$000s) | | \$22,946 | \$6,789 | \$6,333 | | | | |
| NPV Net Benefits (\$000s) | | \$8,981 | \$9,823 | \$18,805 | | | | |
| Benefit/Cost Ratio | | 1.391 | 2.447 | 3.969 | | | | |