# GULF POWER COMPANY

# TEN YEAR SITE PLAN

## FOR ELECTRICAL GENERATING FACILITIES

## AND

## ASSOCIATED TRANSMISSION LINES

Submitted to the
State of Florida
Department of Community Affairs
Division of Local Resource Management
Bureau of Land and Water Management
Power Plant Siting Program

**APRIL 1, 1985**

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# CHAPTER 1

# DESCRIPTION OF EXISTING FACILITIES

FCG Form 1A

UTILITY GULF POWER COMPANY

EXISTING GENERATING FACILITIES

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fuel | | Com'l In-Service | Exptd Retrmnt | Gen Max Nameplate | Net Capability Summer | Net Capability Winter | Fuel Transp | |
| Plant | Unit No. | Location | Type | Pri | Alt | Mo/Yr | Mo/Yr | KW | MW | MW | Pri | Alt |
| | | | | | | | | 1,229,000 | 1083.2 | 1083.2 | | |
| Crist | 1 | Pensacola | FS | NG | HO | 1/45 | 1990 | 28,125 | 21.9 | 21.9 | PL | TK |
| | 2 | 25/IN/30W | FS | NG | HO | 6/49 | 1990 | 28,125 | 21.0 | 21.0 | PL | TK |
| | 3 | | FS | NG | HO | 9/52 | 1990 | 37,500 | 37.8 | 37.8 | PL | TK |
| | 4 | | FS | C | NG | 7/59 | 1996 | 93,750 | 85.2 | 85.2 | WA | PL |
| | 5 | | FS | C | NG | 6/61 | 1996 | 93,750 | 88.2 | 88.2 | WA | PL |
| | 6 | | FS | C | NG | 5/70 | 2005 | 369,750 | 327.6 | 327.6 | WA | PL |
| | 7 | | FS | C | no | 8/73 | 2008 | 578,000 | 501.5 | 501.5 | WA | -- |
| | | | | | | | | 381,850 | 387.7 | 391.2 | | |
| Lansing Smith | 1 | Panama City | FS | C | no | 6/65 | 2002 | 149,600 | 164.5 | 164.5 | WA | -- |
| | 2 | 36/2S/15W | FS | C | no | 6/67 | 2004 | 190,400 | 191.9 | 191.9 | WA | -- |
| | A | | CT | LO | no | 5/71 | 1991 | 41,850 | 31.3 | 34.8 | TK | -- |
| | | | | | | | | 98,000 | 93.6 | 93.6 | | |
| Scholz | 1 | Sneads | FS | C | no | 3/53 | 1990 | 49,000 | 46.7 | 46.7 | RR | WA |
| | 2 | 12/3N/7W | FS | C | no | 10/53 | 1990 | 49,000 | 46.9 | 46.9 | RR | WA |
| | | | | | | | | 548,250 | 510.5 | 510.5 | | |
| Daniel | 1 | Jackson County,MS | FS | C | HO | 4/77 | 2017 | 274,125 | 255.1 | 255.1 | RR | TK |
| | 2 | 42/5S/6W | FS | C | HO | 6/81 | 2021 | 274,125 | 255.4 | 255.4 | RR | TK |
| | | | | | | Total System as of December 31, 1984 | | | 2075.0 | 2078.5 | | |



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UTILITY GULF POWER COMPANY

EXISTING GENERATING FACILITIES
LAND USE AND INVESTMENT

| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|
| | Land Area | | Plant Capital Investment in ($1,000) | | | |
| Plant Name | Total Acres | In Use Acres | Land | Site Improvements[1] | Buildings & Equipment[2] | Total |
| Steam Total | | | 5,472 | 96,353 | 476,115 | 577,941 |
| Crist | 677.99 | 240 | 1,783 | 43,221 | 227,617 | 272,621 |
| Lansing Smith | 864.70 | 270 | 221 | 11,711 | 63,250 | 75,182 |
| Scholz | 293.15 | 168 | 45 | 5,251 | 19,719 | 25,015 |
| Daniel | 2,657.00[3] | 500[3] | 3,424[4] | 36,160[4] | 165,336[4] | 204,920[4] |
| Caryville (Weather Station) | | | | 10 | 193 | 203 |
| Combustion Turbine Total | | | | 645 | 3,553 | 4,198 |
| Lansing Smith CT | | | | 645 | 3,553 | 4,198 |

(1) Includes Buildings.

(2) Buildings excluded due to inclusion in Col. 5.

(3) Daniel Plant information refers to total area owned jointly by Gulf and Mississippi Power.

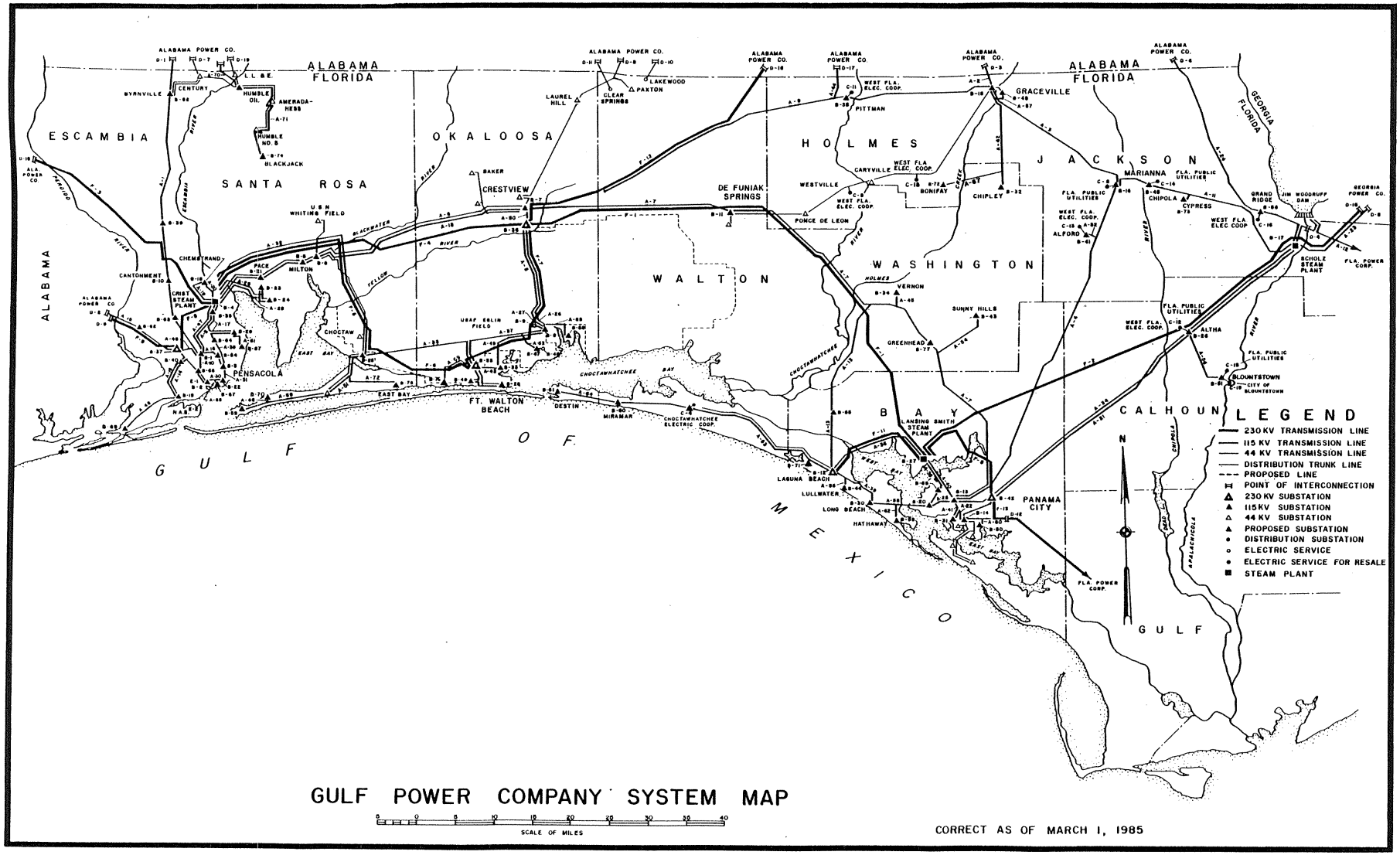
(4) Gulf Power's portion of Plant Daniel only.

UTILITY GULF POWER COMPANY

FCG Form 1C

**EXISTING GENERATING FACILITIES**
**ENVIRONMENTAL CONSIDERATIONS FOR STEAM GENERATING UNITS**

| (1) Plant Name | (2) Unit | (3) Flue Gas Cleaning Particulate | (4) Flue Gas Cleaning SOx | (5) Flue Gas Cleaning NOx | (6) Cooling Type |
|---|---|---|---|---|---|
| Crist | 1 | no | no | no | WCTM |
| | 2 | no | no | no | WCTM |
| | 3 | no | no | no | WCTM |
| | 4 | EP | no | no | WCTM |
| | 5 | EP | no | no | WCTM |
| | 6 | EP | no | no | WCTM |
| | 7 | EP | no | no | WCTM |
| Lansing Smith | 1 | EP | no | no | OTS |
| | 2 | EP | no | no | OTS |
| Scholz | 1 | EP | no | no | OTF |
| | 2 | EP | no | no | OTF |
| Daniel | 1 | EP | no | no | CP |
| | 2 | EP | no | no | CP |




# GULF POWER COMPANY SYSTEM MAP

CORRECT AS OF MARCH 1, 1985

# CHAPTER II

# FORECAST OF ELECTRIC POWER DEMAND

UTILITY GULF POWER COMPANY



HISTORY AND FORECAST OF ENERGY CONSUMPTION AND NUMBER OF CUSTOMERS BY CUSTOMER CLASS

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|---|---|---|---|---|---|---|---|---|
| | | | RURAL AND RESIDENTIAL | | | | COMMERCIAL | |
| YEAR | * POPULATION | MEMBERS PER HOUSEHOLD | GWH | AVERAGE NO. OF CUSTOMERS | AVERAGE KWH CONSUMPTION PER CUSTOMER | GWH | AVERAGE NO. OF CUSTOMERS | AVERAGE KWH CONSUMPTION PER CUSTOMER |
| 1975 | 551,265 | 3.58 | 1,889 | 154,170 | 12,252 | 1,041 | 19,769 | 52,642 |
| 1976 | 556,343 | 3.51 | 2,047 | 158,492 | 12,913 | 1,128 | 20,364 | 55,376 |
| 1977 | 567,820 | 3.48 | 2,156 | 163,121 | 13,220 | 1,207 | 20,964 | 57,559 |
| 1978 | 574,860 | 3.42 | 2,243 | 168,156 | 13,342 | 1,254 | 21,567 | 58,124 |
| 1979 | 580,388 | 3.36 | 2,225 | 172,906 | 12,868 | 1,269 | 21,949 | 57,832 |
| 1980 | 587,048 | 3.26 | 2,335 | 180,166 | 12,959 | 1,293 | 22,459 | 57,564 |
| 1981 | 600,809 | 3.20 | 2,361 | 187,489 | 12,591 | 1,352 | 23,243 | 58,190 |
| 1982 | 614,920 | 3.17 | 2,364 | 194,228 | 12,169 | 1,432 | 23,962 | 59,748 |
| 1983 | 632,723 | 3.14 | 2,472 | 201,714 | 12,254 | 1,499 | 25,487 | 58,805 |
| 1984 | 643,221 | 3.03 | 2,561 | 212,379 | 12,057 | 1,559 | 27,336 | 57,044 |
| 1985 | 654,137 | 2.96 | 2,688 | 220,894 | 12,167 | 1,611 | 28,307 | 56,917 |
| 1986 | 670,376 | 2.91 | 2,768 | 230,005 | 12,033 | 1,640 | 29,247 | 56,070 |
| 1987 | 686,373 | 2.88 | 2,855 | 238,214 | 11,984 | 1,644 | 29,687 | 55,383 |
| 1988 | 702,024 | 2.84 | 2,937 | 246,797 | 11,900 | 1,652 | 30,339 | 54,450 |
| 1989 | 716,323 | 2.81 | 3,027 | 255,277 | 11,856 | 1,664 | 30,976 | 53,705 |
| 1990 | 728,629 | 2.77 | 3,106 | 263,117 | 11,804 | 1,676 | 31,560 | 53,094 |
| 1991 | 739,266 | 2.74 | 3,176 | 270,175 | 11,757 | 1,688 | 32,062 | 52,655 |
| 1992 | 749,091 | 2.70 | 3,240 | 277,001 | 11,695 | 1,695 | 32,491 | 52,156 |
| 1993 | 758,587 | 2.67 | 3,309 | 283,806 | 11,661 | 1,702 | 32,890 | 51,762 |
| 1994 | 767,758 | 2.64 | 3,369 | 290,588 | 11,592 | 1,710 | 33,284 | 51,388 |

* HISTORICAL AND PROJECTED POPULATION FIGURES INCLUDE ESCAMBIA, SANTA ROSA, OKALOOSA, WALTON, BAY, WASHINGTON, HOLMES, AND JACKSON COUNTIES.

HISTORY AND FORECAST OF ENERGY CONSUMPTION AND NUMBER OF CUSTOMERS BY CUSTOMER CLASS

| (10) | (11) | (12) INDUSTRIAL | | (13) | (14) | (15) | (16) |
|---|---|---|---|---|---|---|---|
| YEAR | GWH | AVERAGE NO. OF CUSTOMERS | AVERAGE KWH CONSUMPTION PER CUSTOMER | STREET AND HIGHWAY LIGHTING GWH | OTHER SALES TO ULTIMATE CONSUMERS GWH | TOTAL SALES TO ULTIMATE CONSUMERS GWH |
| 1975 | 1,340 | 160 | 8,372,019 | 13 | 0 | 4,282 |
| 1976 | 1,435 | 154 | 9,321,214 | 13 | 0 | 4,623 |
| 1977 | 1,494 | 156 | 9,577,808 | 14 | 0 | 4,871 |
| 1978 | 1,530 | 160 | 9,560,894 | 14 | 0 | 5,041 |
| 1979 | 1,552 | 164 | 9,465,628 | 14 | 0 | 5,061 |
| 1980 | 1,494 | 166 | 9,002,560 | 14 | 0 | 5,136 |
| 1981 | 1,482 | 165 | 8,983,485 | 14 | 0 | 5,209 |
| 1982 | 1,432 | 170 | 8,421,988 | 14 | 0 | 5,241 |
| 1983 | 1,612 | 176 | 9,161,324 | 14 | 0 | 5,597 |
| 1984 | 1,771 | 182 | 9,731,324 | 14 | 0 | 5,905 |
| 1985 | 1,634 | 188 | 8,691,468 | 14 | 0 | 5,946 |
| 1986 | 1,655 | 192 | 8,622,172 | 14 | 0 | 6,077 |
| 1987 | 1,691 | 195 | 8,674,195 | 14 | 0 | 6,204 |
| 1988 | 1,710 | 199 | 8,593,714 | 14 | 0 | 6,313 |
| 1989 | 1,724 | 203 | 8,494,493 | 14 | 0 | 6,429 |
| 1990 | 1,773 | 205 | 8,650,010 | 14 | 0 | 6,569 |
| 1991 | 1,836 | 207 | 8,867,932 | 15 | 0 | 6,715 |
| 1992 | 1,900 | 209 | 9,088,842 | 15 | 0 | 6,848 |
| 1993 | 1,965 | 211 | 9,311,246 | 15 | 0 | 6,991 |
| 1994 | 2,031 | 213 | 9,537,498 | 15 | 0 | 7,125 |



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UTILITY GULF POWER COMPANY



HISTORY AND FORECAST OF ENERGY CONSUMPTION AND NUMBER OF CUSTOMERS BY CUSTOMER CLASS

| (17) | (18) | (19) | (20) | (21) | (22) |
|---|---|---|---|---|---|
| YEAR | SALES FOR RESALE GWH | UTILITY USE AND LOSSES GWH | NET ENERGY FOR LOAD GWH | OTHER CUSTOMERS (AVERAGE NO.) | TOTAL NO. OF CUSTOMERS |
| 1975 | 506 | 361 | 5,148 | 59 | 174,158 |
| 1976 | 519 | 334 | 5,475 | 60 | 179,070 |
| 1977 | 552 | 401 | 5,823 | 60 | 184,301 |
| 1978 | 569 | 434 | 6,043 | 59 | 189,942 |
| 1979 | 558 | 411 | 6,030 | 59 | 195,078 |
| 1980 | 574 | 438 | 6,148 | 60 | 202,851 |
| 1981 | 400 | 395 | 6,004 | 57 | 210,954 |
| 1982 | 313 | 305 | 5,859 | 59 | 218,419 |
| 1983 | 336 | 351 | 6,284 | 62 | 227,439 |
| 1984 | 364 | 433 | 6,702 | 63 | 239,960 |
| 1985 | 360 | 442 | 6,748 | 63 | 249,452 |
| 1986 | 369 | 458 | 6,903 | 63 | 259,507 |
| 1987 | 378 | 469 | 7,051 | 63 | 268,159 |
| 1988 | 388 | 478 | 7,178 | 63 | 277,398 |
| 1989 | 398 | 487 | 7,313 | 63 | 286,519 |
| 1990 | 407 | 497 | 7,474 | 63 | 294,945 |
| 1991 | 418 | 508 | 7,641 | 63 | 302,507 |
| 1992 | 428 | 519 | 7,796 | 63 | 309,764 |
| 1993 | 439 | 531 | 7,961 | 63 | 316,970 |
| 1994 | 451 | 540 | 8,117 | 63 | 324,148 |

NOTE: SALES FOR RESALE AND NET ENERGY FOR LOAD INCLUDE CONTRACTED ENERGY ALLOCATED TO CERTAIN CUSTOMERS BY SOUTHEASTERN POWER ADMINISTRATION (SEPA)



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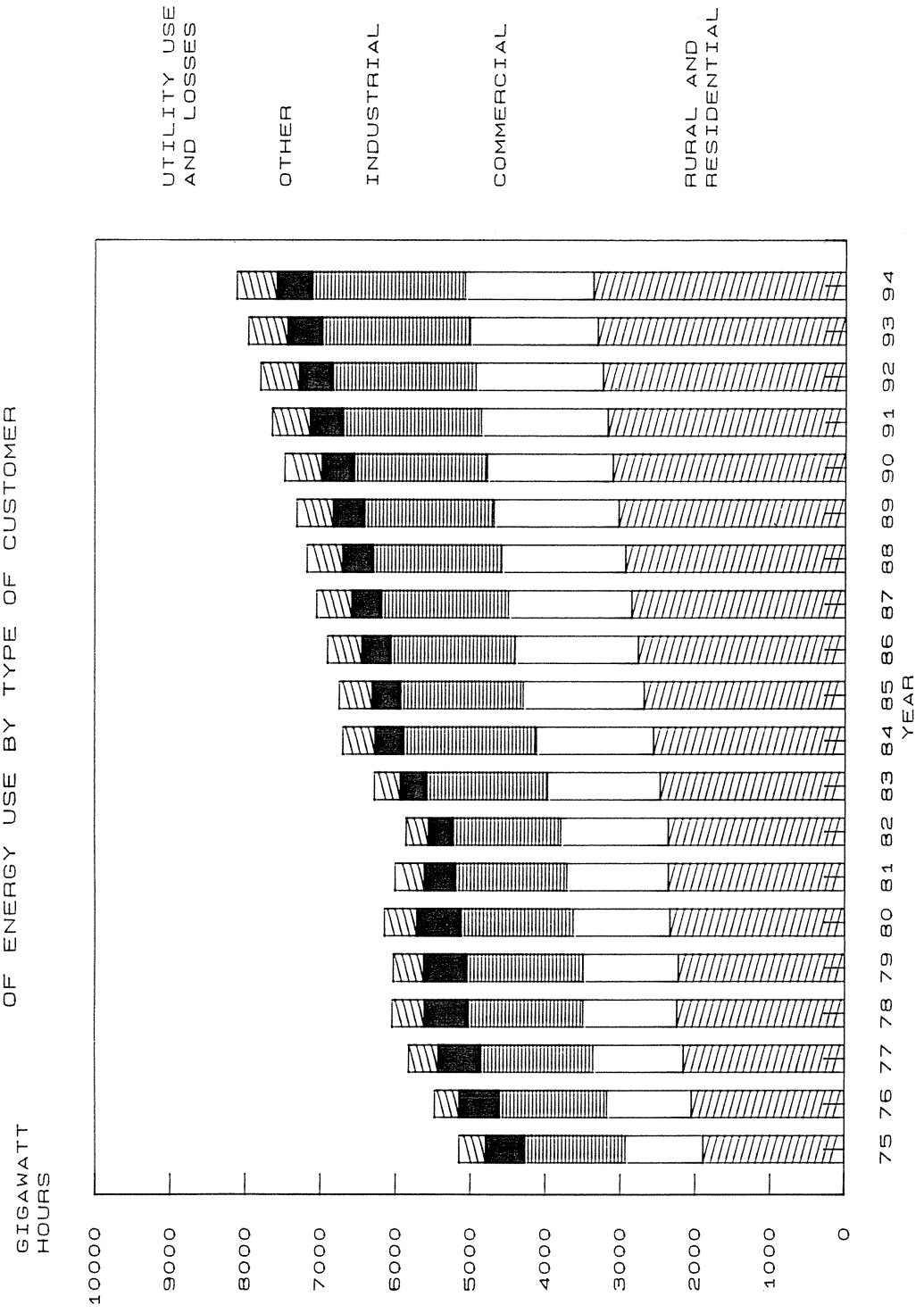
GRAPH 1

HISTORY AND FORECAST
OF ENERGY USE BY TYPE OF CUSTOMER



UTILITY GULF POWER COMPANY

ENERGY SOURCES[a][b]

| Energy Sources | | | Actual 1983 | Actual 1984 | 1985 | 1986 | 1987 | 1988 |
|---|---|---|---|---|---|---|---|---|
| ANNUAL ENERGY INTERCHANGE | | GWH | (1427) | (1561) | (2220) | (1340) | (2168) | (1700) |
| NUCLEAR | | GWH | None | None | None | None | None | None |
| COAL | | GWH | 7660 | 8242 | 8913 | 8188 | 9206 | 8869 |
| RESIDUAL | -TOTAL | GWH | None | None | None | None | None | None |
| | Steam | GWH | None | None | None | None | None | None |
| | CC | GWH | None | None | None | None | None | None |
| | CT | GWH | None | None | None | None | None | None |
| | Diesel | GWH | None | None | None | None | None | None |
| DISTILLATE | -TOTAL | GWH | 0 | 0 | 3 | 4 | 1 | 1 |
| | Steam | GWH | None | None | None | None | None | None |
| | CC | GWH | None | None | None | None | None | None |
| | CT | GWH | 0 | 0 | 3 | 4 | 1 | 1 |
| | Diesel | GWH | None | None | None | None | None | None |
| NATURAL GAS | -TOTAL | GWH | 51 | 22 | 52 | 51 | 12 | 8 |
| | Steam | GWH | 51 | 22 | 52 | 51 | 12 | 8 |
| | CC | GWH | None | None | None | None | None | None |
| | CT | GWH | None | None | None | None | None | None |
| | Diesel | GWH | None | None | None | None | None | None |
| OTHER | | GWH | None | None | None | None | None | None |
| NET ENERGY FOR LOAD | | GWH | 6284 | 6703 | 6748 | 6903 | 7051 | 7178 |

**(a)** Includes contracted energy allocated to certain resale customers by Southeastern Power Administration (SEPA).

**(b)** Includes energy generated from the capacity sold under existing Unit Power Sales contracts.

UTILITY GULF POWER COMPANY

## ENERGY SOURCES[a][b]

| Energy Sources | | | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|---|---|---|---|---|---|---|---|---|
| ANNUAL ENERGY INTERCHANGE | | GWH | (706) | (423) | (143) | 341 | 1282 | 1720 |
| NUCLEAR | | GWH | None | None | None | None | None | None |
| COAL | | GWH | 8014 | 7895 | 7784 | 7455 | 6679 | 6397 |
| RESIDUAL | -TOTAL | GWH | None | None | None | None | None | None |
| | Steam | GWH | None | None | None | None | None | None |
| | CC | GWH | None | None | None | None | None | None |
| | CT | GWH | None | None | None | None | None | None |
| | Diesel | GWH | None | None | None | None | None | None |
| DISTILLATE | -TOTAL | GWH | 1 | 1 | 0 | 0 | 0 | 0 |
| | Steam | GWH | None | None | None | None | None | None |
| | CC | GWH | None | None | None | None | None | None |
| | CT | GWH | 1 | 1 | 0 | 0 | 0 | 0 |
| | Diesel | GWH | None | None | None | None | None | None |
| NATUAL Gas | -TOTAL | GWH | 4 | 0 | 0 | 0 | 0 | 0 |
| | Steam | GWH | 4 | 0 | 0 | 0 | 0 | 0 |
| | CC | GWH | None | None | None | None | None | None |
| | CT | GWH | None | None | None | None | None | None |
| | Diesel | GWH | None | None | None | None | None | None |
| OTHER | | GWH | None | None | None | None | None | None |
| NET ENERGY FOR LOAD | | GWH | 7313 | 7473 | 7641 | 7796 | 7961 | 8117 |

**(a)** Includes contracted energy allocated to certain resale customers by Southeastern Power Administration (SEPA).

**(b)** Includes energy generated from the capacity sold under existing Unit Power Sales contracts.

UTILITY GULF POWER COMPANY

FUEL REQUIREMENTS

| Fuel Requirements | | | Actual 1983 | Actual 1984 | 1985 | 1986 | 1987 | 1988 |
|---|---|---|---|---|---|---|---|---|
| NUCLEAR | | BTUx10^12 | None | None | None | None | None | None |
| COAL | | 1000 TON | 3394 | 3637 | 3991 | 3692 | 4106 | 3951 |
| RESIDUAL | -TOTAL | 1000 BBL | None | None | None | None | None | None |
| | Steam | 1000 BBL | None | None | None | None | None | None |
| | CC | 1000 BBL | None | None | None | None | None | None |
| | CT | 1000 BBL | None | None | None | None | None | None |
| | Diesel | 1000 BBL | None | None | None | None | None | None |
| DISTILLATE | -TOTAL | 1000 BBL | 30 | 27 | 42 | 59 | 66 | 67 |
| | Steam | 1000 BBL | 28 | 26 | 36 | 48 | 63 | 64 |
| | CC | 1000 BBL | None | None | None | None | None | None |
| | CT | 1000 BBL | 2 | 1 | 6 | 11 | 3 | 3 |
| | Diesel | 1000 BBL | None | None | None | None | None | None |
| NATURAL | -TOTAL | 1000 MCF | 853 | 283 | 716 | 697 | 167 | 115 |
| | Steam | 1000 MCF | 853 | 283 | 716 | 697 | 167 | 115 |
| | CC | 1000 MCF | None | None | None | None | None | None |
| | CT | 1000 MCF | None | None | None | None | None | None |
| | Diesel | 1000 MCF | None | None | None | None | None | None |
| OTHER | | BTUx10^6 | None | None | None | None | None | None |
| ANNUAL AVG. FOSSIL NET H.R. | | BTU/KWH | 10,721 | 10,639 | 10,803 | 10,849 | 10,754 | 10,745 |

UTILITY GULF POWER COMPANY

FUEL REQUIREMENTS

| Fuel Requirements | | | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|---|---|---|---|---|---|---|---|---|
| NUCLEAR | | BTUx10^12 | None | None | None | None | None | None |
| COAL | | 1000 TON | 3565 | 3550 | 3492 | 3354 | 3030 | 2908 |
| RESIDUAL | -TOTAL | 1000 BBL | None | None | None | None | None | None |
| | Steam | 1000 BBL | None | None | None | None | None | None |
| | CC | 1000 BBL | None | None | None | None | None | None |
| | CT | 1000 BBL | None | None | None | None | None | None |
| | Diesel | 1000 BBL | None | None | None | None | None | None |
| DISTILLATE | -TOTAL | 1000 BBL | 68 | 1 | 1 | 0 | 0 | 0 |
| | Steam | 1000 BBL | 67 | 0 | 0 | 0 | 0 | 0 |
| | CC | 1000 BBL | None | None | None | None | None | None |
| | CT | 1000 BBL | 1 | 1 | 1 | 0 | 0 | 0 |
| | Diesel | 1000 BBL | None | None | None | None | None | None |
| NATURAL GAS | -TOTAL | 1000 MCF | 52 | 1 | 0 | 0 | 0 | 0 |
| | Steam | 1000 MCF | 52 | 1 | 0 | 0 | 0 | 0 |
| | CC | 1000 MCF | None | None | None | None | None | None |
| | CT | 1000 MCF | None | None | None | None | None | None |
| | Diesel | 1000 MCF | None | None | None | None | None | None |
| OTHER | | BTUx10^6 | None | None | None | None | None | None |
| ANNUAL AVG. FOSSIL NET H.R. | | BTU/KWH | 10,730 | 10,782 | 10,765 | 10,795 | 10,871 | 10,886 |

UTILITY GULF POWER COMPANY

HISTORY AND FORECAST OF SEASONAL PEAK DEMAND AND ANNUAL NET ENERGY FOR LOAD

| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|---|---|---|---|---|---|---|---|---|---|
| | Summer Peak Demand - MW | | | | | Annual Net Energy for Load | | | |
| | Firm | | | | | GWH | | | Load Factor |
| Year | Retail | Wholesale | TOTAL | Interrupt | TOTAL | Retail | Wholesale | TOTAL | % |
| 1975 | 978 | 100 | 1,078 | | 1,078 | | | 5,148 | 54.52 |
| 1976 | 1032 | 108 | 1,140 | | 1,140 | | | 5,475 | 54.65 |
| 1977 | 1063 | 117 | 1,180 | | 1,180 | | | 5,823 | 56.33 |
| 1978 | 1138 | 119 | 1,257 | | 1,257 | | | 6,043 | 54.88 |
| 1979 | 1115 | 117 | 1,232 | | 1,232 | | | 6,030 | 55.87 |
| 1980 | 1259 | 133 | 1,392 | | 1,392 | | | 6,148 | 50.28 |
| 1981 | 1231 | 78 | 1,309 | | 1,309 | | | 6,004 | 52.36 |
| 1982 | 1166 | 66 | 1,232 | | 1,232 | | | 5,859 | 54.28 |
| 1983 | 1279 | 76 | 1,355 | | 1,355 | | | 6,284 | 52.94 |
| 1984 | 1315 | 80 | 1,395 | | 1,395 | | | 6,703 | 54.70 |
| 1985 | 1367 | 48 | 1,415 | | 1,415 | | | 6,748 | 54.4 |
| 1986 | 1397 | 49 | 1,446 | | 1,446 | | | 6,903 | 54.5 |
| 1987 | 1429 | 50 | 1,479 | | 1,479 | | | 7,051 | 54.4 |
| 1988 | 1466 | 50 | 1,516 | | 1,516 | | | 7,178 | 53.9 |
| 1989 | 1502 | 51 | 1,553 | | 1,553 | | | 7,313 | 53.7 |
| 1990 | 1543 | 51 | 1,594 | | 1,594 | | | 7,473 | 53.5 |
| 1991 | 1583 | 52 | 1,635 | | 1,635 | | | 7,641 | 53.3 |
| 1992 | 1617 | 52 | 1,669 | | 1,669 | | | 7,796 | 53.2 |
| 1993 | 1653 | 53 | 1,706 | | 1,706 | | | 7,961 | 53.3 |
| 1994 | 1690 | 53 | 1,743 | | 1,743 | | | 8,117 | 53.2 |

**NOTE:** Includes contracted capacity and energy allocated to certain resale customers by Southeastern Power Administration (SEPA)

UTILITY GULF POWER COMPANY

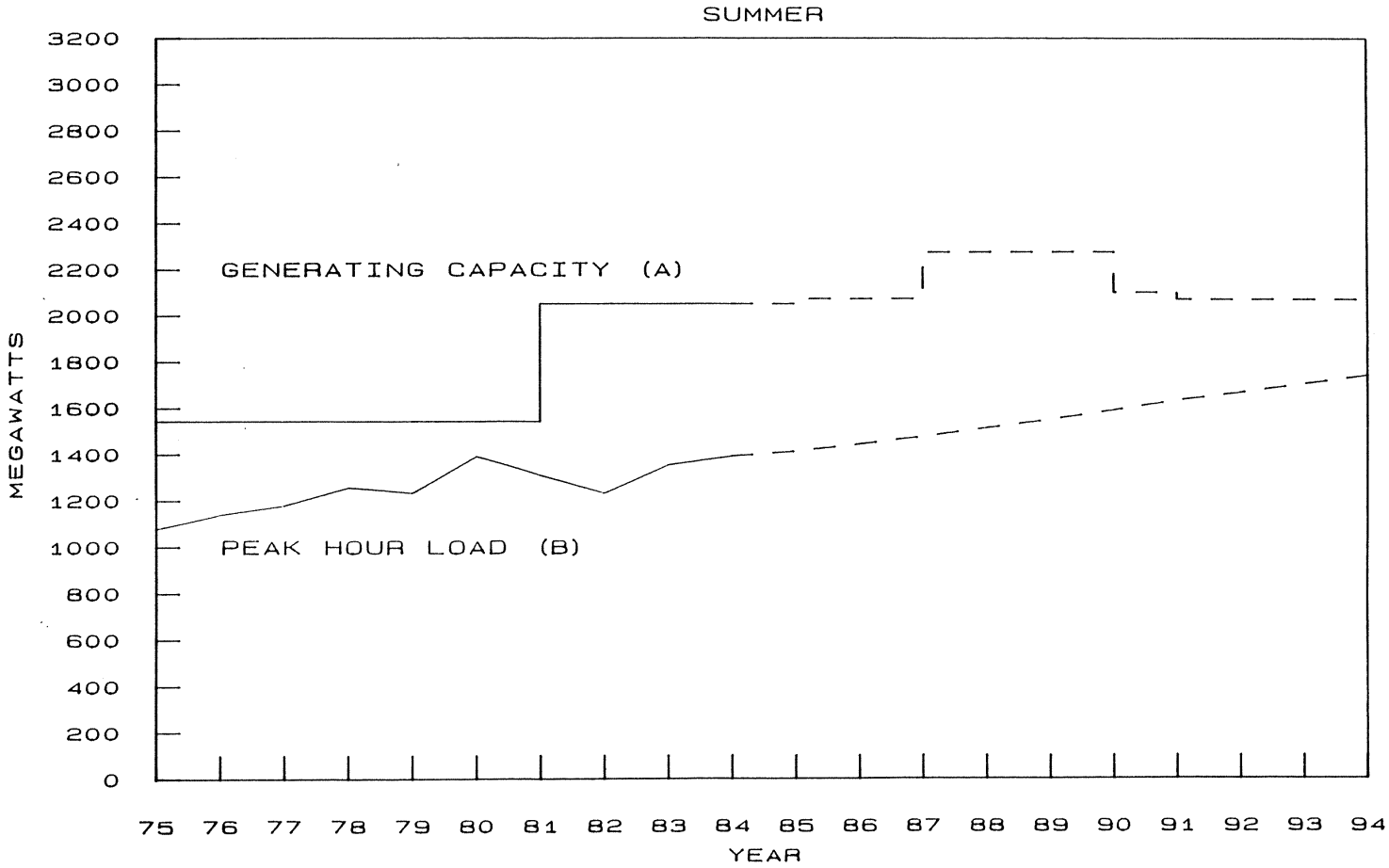
HISTORY AND FORECAST OF SEASONAL PEAK DEMAND AND ANNUAL NET ENERGY FOR LOAD

| (11) | (12) | (13) | (14) | (15) | (16) |
|---|---|---|---|---|---|
| | Winter Peak Demand - MW | | | | |
| | Firm | | | | |
| Year | Retail | Wholesale | Total | Interrupt | Total |
| 1975-76 | 892 | 84 | 976 | | 976 |
| 1976-77 | 1027 | 94 | 1121 | | 1121 |
| 1977-78 | 967 | 105 | 1072 | | 1072 |
| 1978-79 | 1041 | 113 | 1154 | | 1154 |
| 1979-80 | 1022 | 110 | 1132 | | 1132 |
| 1980-81 | 1083 | 106 | 1189 | | 1189 |
| 1981-82 | 1149 | 68 | 1217 | | 1217 |
| 1982-83 | 978 | 59 | 1037 | | 1037 |
| 1983-84 | 1234 | 72 | 1306 | | 1306 |
| 1984-85 | | | 1234 | | 1234 |
| 1985-86 | | | 1264 | | 1264 |
| 1986-87 | | | 1291 | | 1291 |
| 1987-88 | | | 1310 | | 1310 |
| 1988-89 | | | 1323 | | 1323 |
| 1989-90 | | | 1340 | | 1340 |
| 1990-91 | | | 1374 | | 1374 |
| 1991-92 | | | 1404 | | 1404 |
| 1992-93 | | | 1435 | | 1435 |
| 1993-94 | | | 1464 | | 1464 |
| 1994-95 | | | 1495 | | 1495 |

NOTE: Includes contracted capacity and energy allocated to certain resale
4-1-85 customers by Southeastern Power Administration (SEPA)

GRAPH 2

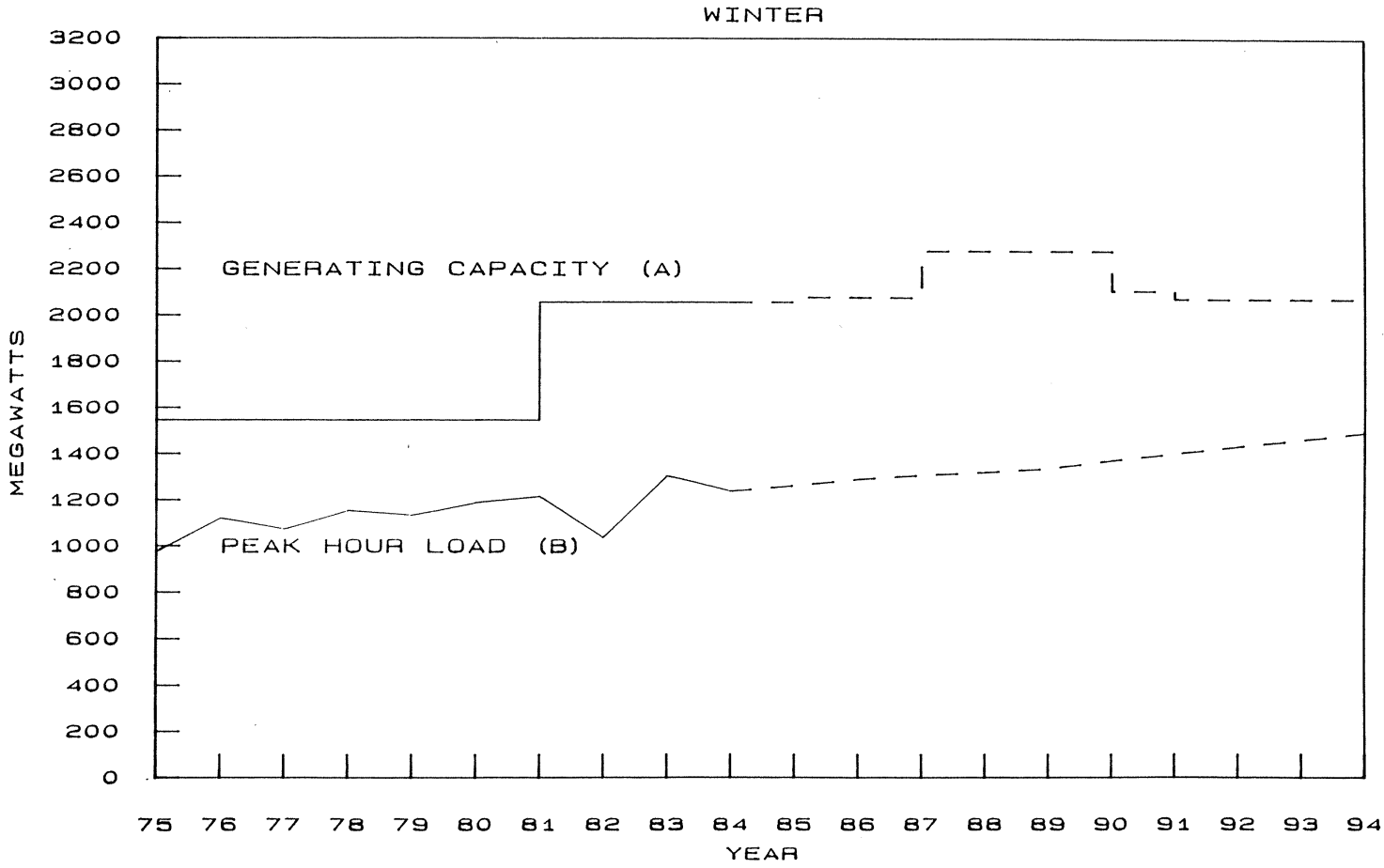
HISTORY AND FORECAST OF LOAD AND
CAPACITY ADDITIONS




NOTE: (A) SHOWS INSTALLED GENERATING CAPACITY ONLY: REFER TO FORM 7A FOR NET AVAILABLE CAPACITY.
(B) INCLUDES CAPACITY ALLOCATED TO CERTAIN RESALE CUSTOMERS BY SEPA.

GRAPH 2

HISTORY AND FORECAST OF LOAD AND
CAPACITY ADDITIONS




NOTE: (A) SHOWS INSTALLED GENERATING CAPACITY ONLY; REFER TO FORM 7B FOR NET AVAILABLE CAPACITY.
(B) INCLUDES CAPACITY ALLOCATED TO CERTAIN RESALE CUSTOMERS BY SEPA.

FCG Form 5

UTILITY GULF POWER COMPANY

PREVIOUS YEAR ACTUAL AND TWO-YEAR FORECAST OF PEAK DEMAND
AND NET ENERGY FOR LOAD BY MONTH

| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|
| | ACTUAL | | FORECAST | | | |
| | 1984 | | 1985 | | 1986 | |
| Month | Peak Demand MW | NEL GWH | Peak Demand MW | NEL GWH | Peak Demand MW | NEL GWH |
| JAN | 1223 | 567 | 1234 | 626 | 1264 | 643 |
| FEB | 1198 | 485 | 1081 | 479 | 1107 | 492 |
| MAR | 1088 | 470 | 932 | 467 | 953 | 479 |
| APR | 849 | 452 | 801 | 430 | 820 | 440 |
| MAY | 1099 | 555 | 1156 | 553 | 1184 | 566 |
| JUN | 1351 | 647 | 1330 | 678 | 1363 | 695 |
| JUL | 1395 | 703 | 1415 | 698 | 1446 | 714 |
| AUG | 1328 | 698 | 1390 | 732 | 1420 | 748 |
| SEP | 1276 | 604 | 1276 | 631 | 1302 | 643 |
| OCT | 1057 | 563 | 1044 | 468 | 1063 | 477 |
| NOV | 984 | 482 | 874 | 445 | 889 | 453 |
| DEC | 1175 | 478 | 1070 | 543 | 1087 | 553 |
| TOTAL | | 6,703 | | 6,748 | | 6,903 |

NOTE: Includes contracted capacity and energy allocated to certain resale customers by Southeastern Power Administration (SEPA).

# FORECASTING DOCUMENTATION

## OVERVIEW

Gulf Power Company views the forecasting effort as a dynamic process requiring ongoing efforts to ensure that the methods being used yield results which allow proper planning at the corporate level. The total forecast is an integration of different techniques and methodologies, each applied to the task for which it is best suited. Many of the techniques take advantage of the extensive data made available through the Company's marketing efforts, which are predicated on the philosophy of knowing in detail the characteristics of the customers being served and actively promoting wise decisions relative to their use of energy. This philosophy entails direct contact with the customers and provides the opportunity to gain firsthand knowledge of even subtle changes occurring in the market.

The Forecasting and Marketing Planning section of the Marketing and Load Management Department is responsible for preparing forecasts of customers, energy sales and base rate revenues. Forecasts of monthly customers and energy sales are produced for both the short-term (0-5 years) and long-term (6-25 years). Base rate revenue projections are prepared for the short-term horizon.

The Power Delivery Department, using inputs from the customer and energy forecasts, then prepares the forecast of peak-hour demand. A description follows of each method used for residential and commercial customers and energy and demand by each customer class.

## I. ENERGY SALES FORECAST

### A. Residential Sales Forecast

The short-term residential sales forecast is based on a disaggregated end use approach. This approach has strong intuitive appeal due to the fact that energy consumption is directly associated with appliance activities. Moreover, the detail typical in end-use models provides an excellent basis for imposing structural restrictions on the forecast and evaluating their reasonableness.

The detail of end-use models, in addition to the advantages it offers, is also generally recognized as the source of major limitations to this approach. Extensive information about current and projected appliance market penetration and usage rates is required. The automated reporting systems which play a vital role in the monitoring and management of Gulf's marketing programs help meet many of the data requirements associated with end-use models. Additionally, detailed personal interview surveys are administered biannually to a random sample of residential customers, providing a portfolio of construction characteristics, appliance stocks and efficiencies, and demographics for specific segments of the residential market.

The residential end-use model produces a forecast for the following eleven (11) end-use loads within each of the three dwelling type classifications (detached, attached, mobile home):

1. Air Conditioning
2. Electric Resistance Heating
3. Electric Heat Pump Heating
4. Electric Water Heating
5. Refrigerator - Standard
6. Refrigerator - Frost Free
7. Freezer - Standard
8. Freezer - Frost Free
9. Electric Clothes Dryer
10. Electric Range/Oven
11. Miscellaneous Base Loads

The model structure is straightforward and can be represented in equation form as:

$$E_t = \sum_{d=1}^{3} \sum_{i=1}^{11} \sum_{m=1}^{12} N_{t,d,i,m} \, U_{t,d,i,m}$$

where: $E_t$ = Energy sales to residential customer in year $t$.

$N_{t,d,i,m}$ = Number of end use appliance $i$, dwelling type $d$, year $t$, month $m$.

$U_{t,d,i,m}$ = Amount of energy consumed by average unit of appliance $i$ in dwelling type $d$, year $t$, month $m$.

The number of end use appliances $i$ in dwelling type $d$, year $t$, month $m$ is based on the forecasts of residential customers and appliance saturations. The amount of energy consumed by the average appliance $i$ in dwelling type $d$, year $t$, month $m$ is determined by the base year monthly unit energy consumption (UEC) estimates and other factors, including appliance efficiencies and the size and thermal integrity of the average dwelling.

The residential customer forecast is discussed in detail in a later section. The appliance saturation forecast is based primarily on the results of the Residential End Use Energy Planning System (REEPS) appliance investment subsystem, developed by Cambridge Systematics. Although the general logic of the appliance subsystem is straightforward, its implementation is relatively

complex due to the diversity of appliance purchase decisions and important structural considerations surrounding each of them. Both initial and replacement investment decisions are simulated, as well as unit failures. All of the behavioral models that are the bases for the simulations are discrete choice models, meaning they describe the selection of one alternative from a limited set of appliance options. More detail on the appliance choice models can be found in EPRI EA-2512, final report on the REEPS project (1211-2).

Major appliance base year unit energy consumption (UEC) estimates were developed using conditional energy demand regression analysis. This procedure can be employed to disaggregate total household demand for electricity into appliance specific demand functions, in the absence of metered observations on individual appliance energy usage.

Conditional energy demand models are multivariate regressions which explain residential customers' demands for electricity as functions of the energy-using equipment that they own, weather conditions, demographic and dwelling characteristics, and other factors playing a major role in total household energy consumption. The mathematics underlying this method rely upon the rather simple idea that consumption through a particular end use must be zero if the end use if not present, and if the end use is present, energy consumption levels might be viewed as dependent on weather, demographics, income and other variables.

The total electrical energy consumption, E, of a household can be represented as:

$$E = E_o + \sum_{i=1}^{N} E_i$$

Where $E_i$ is the electrical energy consumed by a specified major appliance $\underline{i}$, and $E_o$ is the electrical energy consumed by the remaining, unspecified set of appliances. The methodology of conditional energy demand analysis produces cross sectional, ordinary least square regression estimates of the appliance coefficients. The regressions were performed using input data from the Gulf Power Company 1982 Residential Market Survey, billing cycle monthly energy data, and billing cycle monthly weather data.

The long-term residential sales forecast is based on the results produced by the REEPS model. This is consistent with the short-term forecast in that REEPS exhibits the structural detail of the end-use approach, while maintaining firm behavioral foundations in the theory of consumer choice and observed data on household decisions.

B. Commercial Sales Forecast

The short-term commercial energy sales forecast is based on a monthly billed energy per customer model. Weather variables (heating and cooling degree hours), and monthly variables which are used to incorporate seasonal patterns, provide the data base for the multiple regression analysis. The resulting regression equation is used to forecast monthly billed energy per customer using expected

weather conditions and the monthly variables, as well as adjustments reflecting the impact of Gulf's commercial programs.

The long-term commercial energy sales forecast model is an extension of the capital-stock approach used in most econometric studies. This approach views the demand for energy as a product of three factors. The first of these factors is the physical stock of energy-using capital, the second factor is base year energy use, and the third is a utilization factor representing utilization of equipment relative to the base year.

COMMEND, a commercial end-use model developed through EPRI research project 1216-06, serves as the basis for Gulf's long-term commercial energy sales forecast. Changes in equipment utilization are modeled using short-run econometric fuel price elasticities. Fuel choice is forecast with a life-cycle cost/behavioral microsimulation submodel, and changes in equipment efficiency are determined using engineering and cost information for space heating, cooling, and ventilation equipment and econometric elasticity estimates for the other end uses (lighting, water heating, ventilation, cooking, refrigeration, and others).

A pilot commercial market survey conducted in 1981 provided much of the input data required for the COMMEND model. The model produces forecasts of energy use for the end uses mentioned above, within each of the following business categories:

1. Food Stores
2. Offices
3. Retail and Personal Services
4. Public Utilities
5. Automotive services
6. Restaurants
7. Elementary/Secondary Schools
8. Colleges/Trade Schools
9. Hospitals/Health services
10. Hotels/Motels
11. Religious Organizations
12. Miscellaneous

The annual growth rates in commercial sector energy use produced by the COMMEND model are applied to arrive at annual commercial energy sales. Monthly energy sales are based on historical ratios of monthly to annual sales. One of the primary advantages of this disaggregated end-use approach is that the engineering relationships used to determine future heating and cooling efficiency provide a more sound basis for forecasting long-run changes in weather-sensitive energy use requirements than econometric analysis alone can generally supply. In addition, the engineering data and end use detail inherent in the model provide a frame work for evaluating building performance standards, conservation programs, load management strategies or emerging technologies which impact individual end uses and subsectors.

C. Industrial Sales Forecast

The short-term industrial energy sales forecast is developed using a combination of on-site surveys of major industrial customers, trending, and multiple regression analysis. Thirty-seven of Gulf's largest industrial customers are interviewed to identify load changes due to equipment addition or replacement or changes in operating characteristics. The short-term forecast of monthly sales

to these major industrial customers is a synthesis of the detailed survey information and historical monthly load factor trends. The forecast of short-term sales to the remaining smaller industrial customers is developed using multiple regression analysis.

The long-term forecast of industrial energy sales is based on econometric models of the manufacturing, non-manufacturing, chemical and paper sectors.

D. Street Lighting Sales Forecast

The forecast of monthly energy sales to street lighting customers is based on projections of the number of fixtures in service, for each of the following fixture types:

| HIGH PRESSURE SODIUM VAPOR | MERCURY VAPOR |
|---|---|
| 5,400 Lumen | 3,200 Lumen |
| 8,800 Lumen | 7,000 Lumen |
| 20,000 Lumen | 9,400 Lumen |
| 25,000 Lumen | 17,000 Lumen |
| 46,000 Lumen | 48,000 Lumen |

The estimated monthly kilowatt-hour consumption for each fixture type is multiplied by the projected number of fixtures in service to produce total monthly sales for a given type of fixture. This methodology allows Gulf to explicitly evaluate the impacts of lighting programs, such as mercury to high pressure sodium conversions.

E. Wholesale Forecast

The short-term forecast of energy sales to wholesale customers is based on interviews with these customers, as well as recent historical data. A forecast of total monthly energy requirements at each wholesale delivery point is produced. Energy requirements purchased from the Southeastern Power Administration (based on current contracts) by our wholesale customers are then removed from the total requirements to arrive at sales for resale.

The long-term forecast is based on estimates of annual growth rates for each delivery point, according to historical patterns and future growth potential.

## II. CUSTOMER FORECAST

### A. Residential Customer Forecast

The immediate short-term forecast (0-2 years) of customers is based primarily on preliminary forecasts prepared by division personnel. The divisions are very familiar with economic conditions specific to their service territories through direct contact with developers, builders, lending institutions and other key contacts. The immediate short-term forecasts prepared by the divisions, which are developed through various forecasting methods, are analyzed for consistency and the incorporation of major construction projects and business developments is reviewed. The end result is a near-term forecast of residential customers by type of dwelling.

For the remaining forecast horizon (3-25 years), the residential customer forecast is a function of adult population and real per capita disposable income. The population forecast is produced using an age and sex cohort component model, developed for each county in Gulf's service area. Net migration projections, based on historical trends and future growth potential within each county, are factored into this process. The residential customer model provides quarterly estimates which are translated to a monthly basis using historical ratios. Long-term housing stock breakdowns are based on the Data Resources, Inc. (DRI) long-term forecast of housing starts by type of dwelling.

B. Commercial Customer Forecast

The immediate short-term forecast (0-2 years) of commercial customers, as in the residential sector, is prepared by the divisions. A review of the assumptions, techniques and results for each division is undertaken, with special attention given to the incorporation of new major commercial establishments.

Beyond the immediate short-term period, commercial customers are forecast as a function of residential customers, reflecting the opening of commercial ventures to meet the needs of new residents. Implicit in the commercial customer forecast is the relationship between growth in total real disposable income and growth in the commercial sector. The seasonal pattern observed due to the "tourist-oriented" nature of many commercial businesses is captured through the use of a binary shift variable in the regression equation.

## III. SUMMER PEAK-HOUR DEMAND

### A. Econometric Model Overview

Beginning in 1976, Southern Company Services developed an econometric model for Gulf and has produced forecasts each year of customers, energy and peak demand. This econometric model is reevaluated annually, updated, and enhanced to improve its performance and to incorporate new trends and explanatory factors. The demand portion of the econometric model was employed to develop the Company's official 1985 peak-hour demand forecast using the customer levels and disaggregated energy sales projections from Gulf's approved 1985 energy and customer forecasts.

The residential term is dependent on appliance saturation levels, number of customers, and the price of electricity. The effects of conservation are included in the price variable, the appliance saturation equation, and the conservation factors which incorporate the effect of changing customer characteristics such as house size and occupants per household. The commercial term of the demand model relies on energy as an input but also incorporates the effect of the price of electricity.

The wholesale term of the model is separated between the Rural Electric Cooperatives (REC) and the Florida Public Utilities Company (FPU) in order to obtain a better correlation with historical demands for these customers. This split also allows us to more readily adjust the wholesale term to reflect known REC terminations.

The industrial term depends solely on third quarter (July-September) industrial billed energy sales.

The customer levels and class energy projections from Gulf's disaggregated end-use models were adopted this year by Gulf and were utilized as the respective inputs for the demand portion of the econometric model.

The projections of the variables used in the model to calculate the class demands and the total demand were adjusted to account for known or expected variations from historical patterns.

The following paragraphs detail the format of each class equation in the summer peak-hour demand econometric model:

B. Residential and Commercial Demand

1. Residential and Commercial Demand

RES/COM-MW = f(RD, RC, CE, PT)

Where RD = Residential Demand per Customer (MW's)

RC = Number of Residential Customers - 3rd Quarter Average

CE = Commercial Energy - 3rd Quarter (MWH's)

PT = Price Term

The residential demand per customer is derived by multiplying the projected residential appliance saturation for each of ten appliances by the expected demand contribution for the appliance and then by summing these together. The demand contributions for air conditioning, spaceheating, and water heating are adjusted by conservation factors which account for changes in house size, thermal efficiency, and the number of

occupants per household. These changing customer characteristics are expected to decrease the average demand per appliance an additional amount over the reductions expected due to price reaction.

The number of residential customers is taken from Gulf's approved 1985 customer forecast. The commercial energy is from Gulf's approved 1985 energy budget.

The price term is comprised of the basic price variable which consists of the weighted average price of residential and commercial energy. The natural log of the basic variable is then lagged four years in a polynomial distribution.

2. Industrial Demand

IND-MW = f(IE)

Where IE = Industrial Energy - 3rd Quarter

The industrial demand is calculated directly from the third quarter (summer) industrial billed energy from Gulf's approved 1985 energy budget.

3. Wholesale Demand

WHSL-MW = REC-MW + FPU-MW (REC Demand Plus FPU Demand)

REC-MW = f(RE)

Where RE = REC Energy with SEPA - 3rd Quarter

FPU-MW = f(FE)

Where FE = FPU Energy - 3rd Quarter

The REC and FPU demands are calculated directly from the REC and FPU third quarter (summer) billed energies from Gulf's approved 1985 energy budget. The wholesale demand is the sum of the REC and FPU demands.

4. Total Territorial Demand

Total-MW (without Losses) = RES/COM-MW + IND-MW + WHSL-MW + EV-MW - PV-MW

Where EV-MW = Megawatt Contribution for Electric Vehicles

PV-MW = Megawatts Produced by Photovoltaics

Total-MW (with Losses) =

[Total-MW (W/O Losses) - SEPA] x LF + SEPA

Where LF = Annual Loss Factor

Electric vehicles are expected to have a small, positive effect on demand toward the end of the forecast period, while photovoltaics are projected to reduce the peak demand slightly in the last decade of the forecast.

## IV. WINTER PEAK DEMAND REGRESSION MODEL AND METHODOLOGY

This year's winter demand forecast was derived using a regression model which was developed for Gulf by Southern Company Services. The winter demand is not segregated by customer class, but does incorporate projections from each customer class. The projected energies and customers are from Gulf's approved 1985 customer and energy forecasts.

The basic form of the winter demand model is:

Winter Peak Demand (MW) = f(RC, RD, CE, WE, IE)

Where RC = Residential Customers - 1st Quarter Average

RD = Residential Demand per Customer (MW's)

CE = Commercial Energy - 1st Quarter (MWH's)

WE = Wholesale Energy - 1st Quarter (MWH's)

IE = Industrial Energy - 1st Quarter (MWH's)

The Residential Demand per customer is derived using the same methodology as in the Summer model.

## V. MONTHLY PEAK-HOUR DEMAND METHODOLOGY

The monthly peak-hour demands are derived from monthly load factor projections which are applied directly to the monthly total territorial supply energies from the approved energy forecast.

The load factor projections are based on trend analysis of each month's ten-year historical load factors and their relationship to the summer and winter peak-hour demand load factors.

The forecasted summer peak-hour demand is used for the July monthly peak, and the winter forecasted peak-hour demand is utilized for the January peak forecast, since the actual seasonal peaks of recent years have occurred most frequently in these months.

# CHAPTER III

# FORECAST OF FACILITIES REQUIREMENTS

UTILITY GULF POWER COMPANY FCG Form 6

## PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

| (1) Plant Name | (2) Unit No. | (3) Location | (4) Type | (5) Fuel Pri | (6) Fuel Alt | (7) Const Start Mo/Yr | (8) Com'l In-Service Mo/Yr | (9) Gen Max Nameplate KW | (10) Net Capability Summer MW | (11) Net Capability Winter MW | (12) Fuel Transp Pri | (13) Fuel Transp Alt | (14) Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Robert W. Scherer (25%) | 3 | Monroe Co. GA | | | | | 2/87 | | 202.0 | 202.0 | RR | - | U |
| Crist | 1r | Pensacola, FL | | | | | (1990) | | (21.9) | (21.9) | | | |
| | 2r | Pensacola, FL | | | | | (1990) | | (21.0) | (21.0) | | | |
| | 3r | Pensacola, FL | | | | | (1990) | | (37.8) | (37.8) | | | |
| Scholz | 1-2r | Sneads, FL | | | | | (1990) | | (93.5) | (93.5) | | | |
| Smith | A r | Panama City, FL | | | | | (1991) | | (31.3) | (34.8) | | | |
| | | | | | | | Total | | (3.5) | (7.0) | | | |

UTILITY GULF POWER COMPANY

FCG FORM 7A

FORECAST OF CAPACITY, DEMAND, AND SCHEDULED MAINTENANCE
AT TIME OF SUMMER PEAK (A)

| YEAR | TOTAL INSTALLED CAPACITY MW | FIRM CAPACITY IMPORT MW (B) | TOTAL AVAILABLE CAPACITY MW | FIRM PEAK DEMAND MW | MARGIN BEFORE MAINTENANCE MW | MARGIN BEFORE MAINTENANCE PER CENT OF PEAK | SCHEDULED MAINTENANCE MW | MARGIN AFTER MAINTENANCE MW | MARGIN AFTER MAINTENANCE PER CENT OF PEAK |
|---|---|---|---|---|---|---|---|---|---|
| 1985 | 2075 | -301 | 1774 | 1415 | 359 | 25.4% | | 359 | 25.4% |
| 1986 | 2074 | -400 | 1674 | 1446 | 228 | 15.8% | | 228 | 15.8% |
| 1987 | 2276 | -561 | 1715 | 1479 | 236 | 16.0% | | 236 | 16.0% |
| 1988 | 2276 | -624 | 1652 | 1516 | 136 | 9.0% | NONE | 136 | 9.0% |
| 1989 | 2276 | -160 | 2116 | 1553 | 563 | 36.2% | | 563 | 36.2% |
| 1990 | 2101 | -160 | 1941 | 1594 | 347 | 21.8% | | 347 | 21.8% |
| 1991 | 2070 | -176 | 1894 | 1635 | 259 | 15.8% | | 259 | 15.8% |
| 1992 | 2070 | -183 | 1887 | 1669 | 218 | 13.1% | | 218 | 13.1% |
| 1993 | 2070 | -127 | 1943 | 1706 | 237 | 13.9% | | 237 | 13.9% |
| 1994 | 2070 | -59 | 2011 | 1743 | 268 | 15.4% | | 268 | 15.4% |

NOTE: A. CAPACITY ALLOCATIONS AND CHANGES MUST BE MADE BY JUNE 30 TO BE CONSIDERED IN EFFECT AT THE TIME OF THE SUMMER PEAK. ALL VALUES ARE SUMMER NET MW.

B. INCLUDES ALL CAPACITY SOLD IN EXISTING UNIT POWER SALES CONTRACTS AND CONTRACTED CAPACITY ALLOCATED TO CERTAIN RESALE CUSTOMERS BY THE SOUTHEASTERN POWER ADMINISTRATION (SEPA).

4-1-85

UTILITY GULF POWER COMPANY

FCG FORM 7B

FORECAST OF CAPACITY, DEMAND, AND SCHEDULED MAINTENANCE
AT TIME OF WINTER PEAK (A)

| YEAR | TOTAL INSTALLED CAPACITY MW | FIRM CAPACITY IMPORT MW (B) | TOTAL AVAILABLE CAPACITY MW | FIRM PEAK DEMAND MW | MARGIN BEFORE MAINTENANCE MW | MARGIN BEFORE MAINTENANCE PER CENT OF PEAK | SCHEDULED MAINTENANCE MW | MARGIN AFTER MAINTENANCE MW | MARGIN AFTER MAINTENANCE PER CENT OF PEAK |
|---|---|---|---|---|---|---|---|---|---|
| 1985-86 | 2078 | -400 | 1678 | 1264 | 414 | 32.8% | | 414 | 32.8% |
| 1986-87 | 2077 | -605 | 1472 | 1291 | 181 | 14.0% | | 181 | 14.0% |
| 1987-88 | 2279 | -578 | 1701 | 1310 | 391 | 29.9% | | 391 | 29.9% |
| 1988-89 | 2279 | -624 | 1655 | 1323 | 332 | 25.1% | NOT | 332 | 25.1% |
| 1989-90 | 2279 | -160 | 2119 | 1340 | 779 | 58.1% | AVAILABLE | 779 | 58.1% |
| 1990-91 | 2105 | -160 | 1945 | 1374 | 571 | 41.5% | | 571 | 41.5% |
| 1991-92 | 2070 | -176 | 1894 | 1404 | 490 | 34.9% | | 490 | 34.9% |
| 1992-93 | 2070 | -159 | 1911 | 1435 | 476 | 33.2% | | 476 | 33.2% |
| 1993-94 | 2070 | -127 | 1943 | 1464 | 479 | 32.7% | | 479 | 32.7% |
| 1994-95 | 2070 | -59 | 2011 | 1495 | 516 | 34.5% | | 516 | 34.5% |

NOTE: A. CAPACITY ALLOCATIONS AND CHANGES MUST BE MADE BY NOVEMBER 30 TO BE CONSIDERED IN EFFECT AT THE TIME OF WINTER PEAK. ALL VALUES ARE WINTER NET MW.

B. INCLUDES ALL CAPACITY SOLD IN EXISTING UNIT POWER SALES CONTRACTS, AND CONTRACTED CAPACITY ALLOCATED TO CERTAIN RESALE CUSTOMERS BY THE SOUTHEASTERN POWER ADMINISTRATION (SEPA).

## AVAILABILITY OF PURCHASED POWER

Gulf Power Company coordinates its planning and operation with the other operating companies of the Southern electric system: Alabama Power Company, Georgia Power Company, and Mississippi Power Company. In any year an individual operating company may have a temporary surplus or deficit in generating capacity, depending on the relationship of its planned generating capacity to its load and reserve responsibility. Each company buys or sells its temporary deficit or surplus capacity from or to the pool. This is done through the mechanism of an Intercompany Interchange Contract among the companies which is reviewed and updated annually.

## OFF SYSTEM SALES

### Unit Power Sales

Gulf Power Company, along with the other Southern operating companies, have negotiated the sales of unit capacity and energy to several utilities outside the Southern system. The length of the contracts involves the year 1985 through the remaining years of the Ten Year Site Plan. Gulf's share of the capacity and energy sales varies from year to year and is reflected in the reserves on Forms 7A and 7B and the energy and fuel use on Forms 3A and 3B.

### Long Term Sales

Contracts have also been finalized for the sale of non-firm capacity and energy through 1992. Reserves shown in this filing have not been reduced for this capacity; however, the energy sales have been reflected on Forms 3A and 3B.

# CHAPTER IV

# SITE DESCRIPTION

# AND

# IMPACT ANALYSIS

UTILITY GULF POWER COMPANY

FCG Form 8A

STATUS REPORT
SPECIFICATIONS OF PROPOSED GENERATING FACILITIES

| | | |
|---|---|---|
| (1) | Plant Name & Unit | Robert W. Scherer Electric Generating Center |
| (2) | Status | This facility is not located in the State of Florida |
| (3) | Anticipated Construction Timing | |
| (4) | Capacity | Summer 202 MW(1)<br>Winter 202 MW |
| (5) | Type | |
| (6) | Primary and Alternate Fuel | |
| (7) | Air Pollution Control Strategy | |
| (8) | Cooling Method | |
| (9) | Total Site Area | |
| (10) | Anticipated Capital Investment | |
| (11) | Certification Status | |
| (12) | Status With Federal Agencies | |

(1) Gulf to acquire 202 MW of Unit 3 in February, 1987.

UTILITY GULF POWER COMPANY

FCG Form 8B

STATUS REPORT AND SPECIFICATIONS OF PROPOSED
DIRECTLY-ASSOCIATED TRANSMISSION LINES

(1) Point of Origin and Termination

No new directly-associated transmission lines in Florida are required.

(2) Number of Lines

(3) Right-Of-Way

(4) Line Length

(5) Voltage

(6) Anticipated Construction Timing

(7) Anticipated Capital Investment

(8) Substations

(9) Participation