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, 1984

TABLE OF CONTENTS

CHAPTER 1

DESCRIPTION OF EXISTING FACILITIES

FCG Form 1A

UTILITY GULF POWER COMPANY

EXISTING GENERATING FACILITIES

(1) Plant	(2) Unit No.	(3) Location	(4) Type	(5) Fuel Pri	(6) Fuel Alt	(7) Com'l In-Service Mo/Yr	(8) Exptd Retrmnt 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
								1,229,000	1067.7	1067.7		
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	84.3	84.3	WA	PL
	5		FS	C	NG	6/61	1996	93,750	87.0	87.0	WA	PL
	6		FS	C	NG	5/70	2005	369,750	322.3	322.3	WA	--
	7		FS	C	no	8/73	2008	578,000	493.4	493.4	WA	--
								381,850	381.5	385.0		
Lansing Smith	1	Panama City	FS	C	no	6/65	2002	149,600	164.7	164.7	WA	--
	2	36/2S/15W	FS	C	no	6/67	2004	190,400	185.5	185.5	WA	--
	A		CT	LO	no	5/71	1991	41,850	31.3	34.8	TK	--
								98,000	93.5	93.5		
Scholz	1	Sneads	FS	C	no	3/53	1990	49,000	46.6	46.6	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	--
	2	42/5S/6W	FS	C	HO	6/81	2021	274,125	255.4	255.4	RR	--
								Total System as of December 31, 1983 -	2053.2	2056.7		

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	88,289	465,422	559,183
Crist	677.99	230	1,783	35,472	220,611	257,865
Lansing Smith	864.70	270	221	11,464	59,649	71,335
Scholz	293.15	168	45	5,138	19,132	24,315
Daniel	2,657.00 (3)	500 (3)	3,424 (4)	36,215 (4)	165,837 (4)	205,476 (4)
Caryville (Weather Station)					193	193
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.

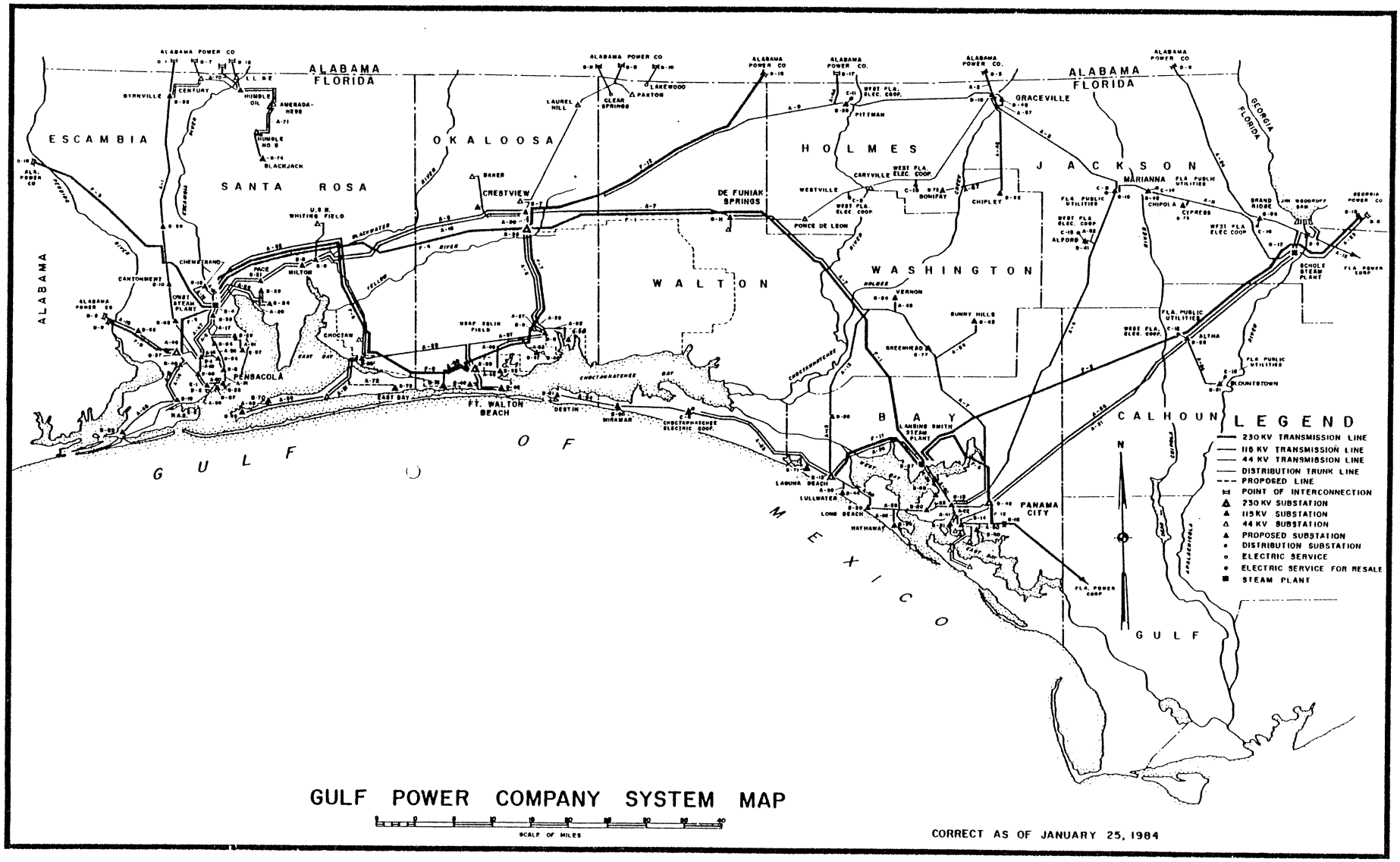
(4) Gulf Power's portion of Plant Daniel only.

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 JANUARY 25, 1984

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 (1)	MEMBERS PER HOUSEHOLD	GWH	AVERAGE NO. OF CUSTOMERS	AVERAGE KWH CONSUMPTION PER CUSTOMER	GWH	AVERAGE NO. OF CUSTOMERS	AVERAGE KWH CONSUMPTION PER CUSTOMER
1974	541100	3.04	1835	150257	12212	969	19589	49457
1975	559800	3.00	1889	154170	12253	1041	19769	52642
1976	572200	2.96	2046	158492	12913	1128	20364	55376
1977	581200	2.91	2156	163121	13220	1207	20964	57559
1978	586700	2.88	2243	168156	13342	1254	21567	58124
1979	595100	2.84	2225	172906	12868	1269	21949	57832
1980	596100	2.80	2335	180166	12959	1293	22459	57564
1981	598800	2.76	2361	187489	12591	1352	23243	58190
1982	602800	2.71	2364	194228	12169	1432	23962	59748
1983	607400	2.67	2472	201714	12254	1498	25487	58805
1984	612400	2.62	2529	208795	12114	1483	25938	57186
1985	622500	2.58	2612	215709	12109	1525	26771	56981
1986	632800	2.56	2698	222804	12109	1563	27518	56788
1987	643000	2.54	2775	229372	12100	1593	28114	56661
1988	653100	2.51	2851	235686	12095	1628	28729	56676
1989	662800	2.49	2924	241853	12089	1666	29404	56665
1990	672200	2.47	2996	247952	12081	1703	30061	56659
1991	681300	2.45	3065	253832	12073	1739	30693	56660
1992	690100	2.44	3133	259651	12065	1771	31319	56560
1993	698700	2.42	3200	265479	12055	1808	31957	56573

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

UTILITY GULF POWER COMPANY

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
1974	1325	159	8333692	12.933	0	4142
1975	1340	160	8372019	12.950	0	4283
1976	1435	154	9321214	12.955	0	4622
1977	1494	156	9577808	13.537	0	4871
1978	1530	160	9560894	13.877	0	5041
1979	1552	164	9465628	14.037	0	5060
1980	1494	166	9002560	14.357	0	5136
1981	1482	165	8983484	14.038	0	5209
1982	1432	170	8421987	14.100	0	5242
1983	1612	176	9161323	14.107	0	5597
1984	1546	182	8492181	13.991	0	5572
1985	1552	183	8479169	13.885	0	5703
1986	1569	186	8437914	13.811	0	5844
1987	1582	189	8368968	13.776	0	5964
1988	1593	192	8297062	13.778	0	6086
1989	1589	195	8149159	13.739	0	6193
1990	1585	198	8002934	13.679	0	6297
1991	1583	201	7877308	13.639	0	6401
1992	1580	205	7707244	13.589	0	6498
1993	1577	208	7580058	13.556	0	6599

UTILITY GULF POWER COMPANY

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

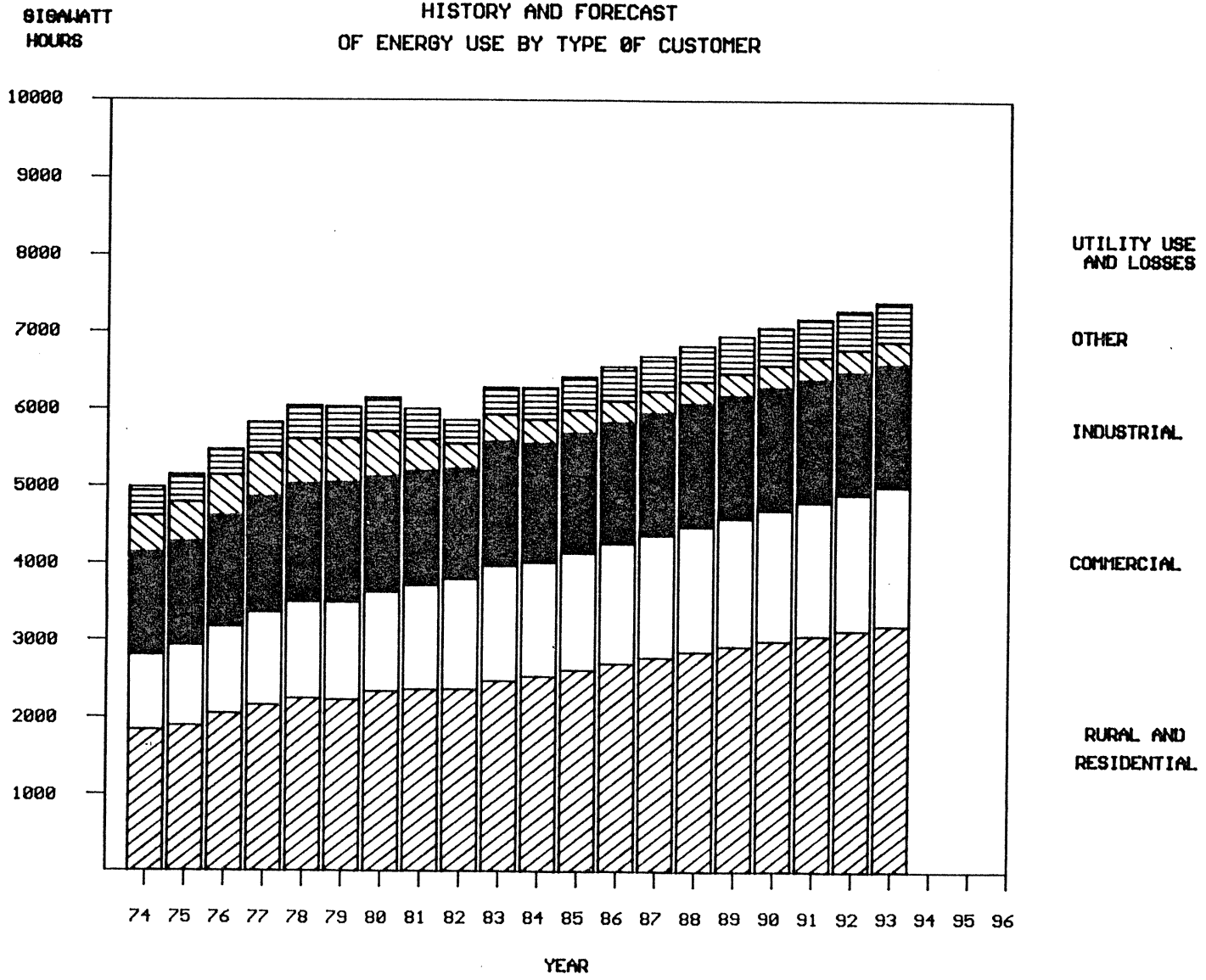
(17)	(18)	(19)	(20)	(21)	(22)
YEAR	SALES FOR RESALE GWH	UTILITY USE AND LOSSES GWH	NET ENERGY FOR LOAD GWH	OTHER CUSTOMERS (AVERAGE NO.)	TOTAL NO. OF CUSTOMERS
1974	470	371	4983	60	170065
1975	505	360	5148	59	174158
1976	519	334	5475	60	179070
1977	552	401	5823	60	184301
1978	569	434	6044	59	189942
1979	558	412	6030	59	195078
1980	574	437	6148	60	202851
1981	400	395	6004	57	210954
1982	313	305	5859	59	218419
1983	336	351	6284	62	227439
1984	338	414	6324	63	234978
1985	285	432	6420	61	242724
1986	265	447	6556	60	250568
1987	268	456	6688	60	257735
1988	272	465	6823	60	264667
1989	275	481	6949	60	271512
1990	279	489	7065	60	278271
1991	282	497	7180	60	284786
1992	286	505	7288	60	291235
1993	289	513	7401	60	297704

NOTE: COLUMNS (18) AND (20) INCLUDE CONTRACTED ENERGY ALLOCATED TO CERTAIN CUSTOMERS BY SOUTHEASTERN POWER ADMINISTRATION (SEPA).

GRAPH 1

HISTORY AND FORECAST

OF ENERGY USE BY TYPE OF CUSTOMER



UTILITY GULF POWER COMPANY

ENERGY SOURCES (a) (b)

	ENERGY SOURCES		Actual 1982	Actual 1983	1984	1985	1986	1987
(1)	ANNUAL ENERGY INTERCHANGE	GWH	(1489)	(1427)	(1581)	(2396)	(2254)	(3008)
(2)	NUCLEAR	GWH	None	None	None	None	None	None
(3)	COAL	GWH	7329	7660	7882	8767	8755	9679
(4)	RESIDUAL - TOTAL	GWH	None	None	None	None	None	None
(5)	Steam	GWH	None	None	None	None	None	None
(6)	CC	GWH	None	None	None	None	None	None
(7)	CT	GWH	None	None	None	None	None	None
(8)	Diesel	GWH	None	None	None	None	None	None
(9)	DISTILLATE - TOTAL	GWH	0	0	1	3	5	1
(10)	Steam	GWH	None	None	None	None	None	None
(11)	CC	GWH	None	None	None	None	None	None
(12)	CT	GWH	0	0	1	3	5	1
(13)	Diesel	GWH	None	None	None	None	None	None
(14)	NATURAL GAS - TOTAL	GWH	19	51	22	46	50	16
(15)	Steam	GWH	19	51	22	46	50	16
(16)	CC	GWH	None	None	None	None	None	None
(17)	CT	GWH	None	None	None	None	None	None
(18)	Diesel	GWH	None	None	None	None	None	None
(19)	OTHER	GWH	None	None	None	None	None	None
(20)	NET ENERGY FOR LOAD	GWH	5859	6284	6324	6420	6556	6688

(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		1988	1989	1990	1991	1992	1993
(1)	ANNUAL ENERGY INTERCHANGE[1]	GWH	(2362)	(880)	(988)	(1171)	(594)	253
(2)	NUCLEAR	GWH	None	None	None	None	None	None
(3)	COAL	GWH	9170	7827	8052	8351	7882	7148
(4)	RESIDUAL - TOTAL	GWH	None	None	None	None	None	None
(5)	Steam	GWH	None	None	None	None	None	None
(6)	CC	GWH	None	None	None	None	None	None
(7)	CT	GWH	None	None	None	None	None	None
(8)	Diesel	GWH	None	None	None	None	None	None
(9)	DISTILLATE - TOTAL	GWH	1	0	1	0	0	0
(10)	Steam	GWH	None	None	None	None	None	None
(11)	CC	GWH	None	None	None	None	None	None
(12)	CT	GWH	1	0	1	0	0	0
(13)	Diesel	GWH	None	None	None	None	None	None
(14)	NATURAL GAS - TOTAL	GWH	14	2	0	0	0	0
(15)	Steam	GWH	14	2	0	0	0	0
(16)	CC	GWH	None	None	None	None	None	None
(17)	CT	GWH	None	None	None	None	None	None
(18)	Diesel	GWH	None	None	None	None	None	None
(19)	OTHER	GWH	None	None	None	None	None	None
(20)	NET ENERGY FOR LOAD	GWH	6823	6949	7065	7180	7288	7401

(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 1982	Actual 1983	1984	1985	1986	1987
(1)	NUCLEAR	BTUx10^{12}	None	None	None	None	None	None
(2)	COAL	1000 TON	3,300	3,394	3,606	3,985	3,976	4,366
(3)	RESIDUAL - TOTAL	1000 BBL	None	None	None	None	None	None
(4)	Steam	1000 BBL	None	None	None	None	None	None
(5)	CC	1000 BBL	None	None	None	None	None	None
(6)	CT	1000 BBL	None	None	None	None	None	None
(7)	Diesel	1000 BBL	None	None	None	None	None	None
(8)	DISTILLATE - TOTAL	1000 BBL	30	30	32	37	42	41
(9)	Steam	1000 BBL	29	28	31	31	31	38
(10)	CC	1000 BBL	None	None	None	None	None	None
(11)	CT	1000 BBL	1	2	1	6	11	3
(12)	Diesel	1000 BBL	None	None	None	None	None	None
(13)	NATURAL GAS - TOTAL	1000 MCF	412	853	647	941	927	424
(14)	Steam	1000 MCF	412	853	647	941	927	424
(15)	CC	1000 MCF	None	None	None	None	None	None
(16)	CT	1000 MCF	None	None	None	None	None	None
(17)	Diesel	1000 MCF	None	None	None	None	None	None
(18)	OTHER	BTUx10^{6}	None	None	None	None	None	None
(19)	ANNUAL AVG. FOSSIL NET H.R.	BTU/KWH	10,905	10,721	11,034	10,945	10,896	10,829

UTILITY GULF POWER COMPANY

FUEL REQUIREMENTS

	FUEL REQUIREMENTS		1988	1989	1990	1991	1992	1993
(1)	NUCLEAR	BTUx10^{12}	None	None	None	None	None	None
(2)	COAL	1000 TON	4141	3564	3660	3789	3587	3271
(3)	RESIDUAL - TOTAL	1000 BBL	None	None	None	None	None	None
(4)	Steam	1000 BBL	None	None	None	None	None	None
(5)	CC	1000 BBL	None	None	None	None	None	None
(6)	CT	1000 BBL	None	None	None	None	None	None
(7)	Diesel	1000 BBL	None	None	None	None	None	None
(8)	DISTILLATE - TOTAL	1000 BBL	41	30	31	31	30	28
(9)	Steam	1000 BBL	38	29	30	31	30	28
(10)	CC	1000 BBL	None	None	None	None	None	None
(11)	CT	1000 BBL	3	1	1	0	0	0
(12)	Diesel	1000 BBL	None	None	None	None	None	None
(13)	NATURAL GAS - TOTAL	1000 MCF	379	24	3	0	0	0
(14)	Steam	1000 MCF	379	24	3	0	0	0
(15)	CC	1000 MCF	None	None	None	None	None	None
(16)	CT	1000 MCF	None	None	None	None	None	None
(17)	Diesel	1000 MCF	None	None	None	None	None	None
(18)	OTHER	BTUx10^{6}	None	None	None	None	None	None
(19)	ANNUAL AVG. FOSSIL NET H.R.	BTU/KWH	10,844	10,873	10,857	10,845	10,873	10,937

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
Year	Retail	Wholesale	Total	Interrupt	Total	Retail	Wholesale	Total	Factor %
1974			1,081		1,081			4,983	52.60
1975			1,078		1,078			5,148	54.52
1976			1,140		1,140			5,475	54.65
1977			1,180		1,180			5,823	56.33
1978			1,257		1,257			6,044	54.89
1979			1,232		1,232			6,030	55.87
1980			1,392		1,392			6,148	50.28
1981			1,309		1,309			6,004	52.36
1982			1,232		1,232			5,859	54.28
1983	N/A	N/A	1,355	N/A	1,355			6,284	52.94
1984			1,384		1,384			6,324	52.02
1985			1,412		1,412			6,420	51.90
1986			1,458		1,458			6,556	51.33
1987			1,496		1,496			6,688	51.03
1988			1,533		1,533			6,823	50.67
1989			1,568		1,568			6,949	50.59
1990			1,600		1,600			7,065	50.41
1991			1,630		1,630			7,180	50.28
1992			1,656		1,656			7,288	50.10
1993			1,683		1,683			7,401	50.20

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

UTILITY GULF POWER COMPANY

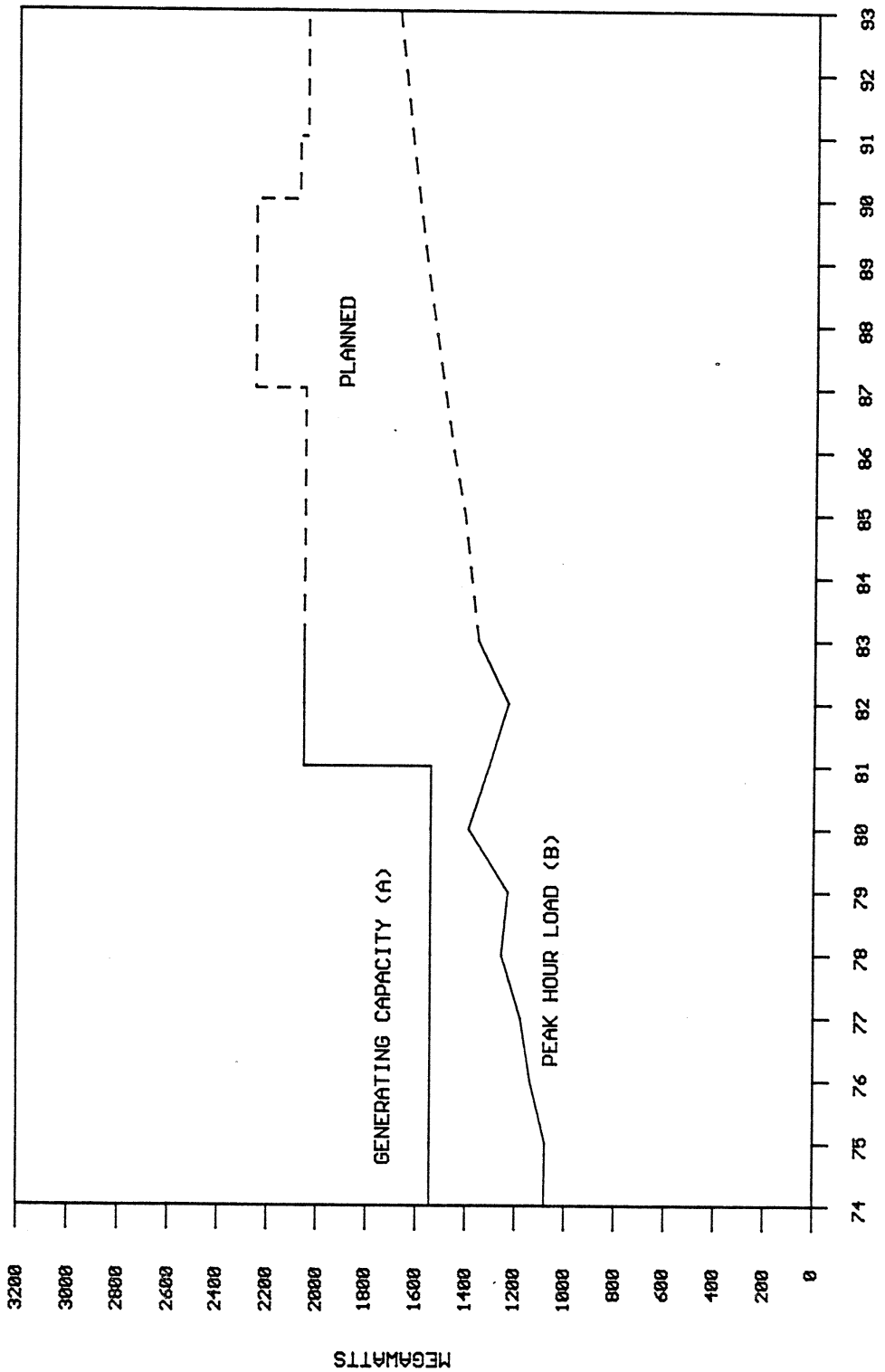
HISTORY AND FORECAST OF SEASONAL PEAK DEMAND AND ANNUAL NET ENERGY FOR LOAD

(11)	(12)	(13)	(14)	(15)	(16)
	Winter Peak Demand - MW				
	Firm				
Year	Retail	Wholesale	Total	Interrrupt	Total
1974-75	N/A	N/A	826	N/A	826
1975-76			976		976
1976-77			1,121		1,121
1977-78			1,072		1,072
1978-79			1,154		1,154
1979-80			1,132		1,132
1980-81			1,189		1,189
1981-82			1,217		1,217
1982-83			1,037		1,037
1983-84			1,306		1,306
1984-85			1,234		1,234
1985-86			1,227		1,227
1986-87			1,259		1,259
1987-88			1,290		1,290
1988-89			1,324		1,324
1989-90			1,350		1,350
1990-91			1,377		1,377
1991-92			1,402		1,402
1992-93			1,430		1,430
1993-94			1,457		1,457

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

GRAPH 2

HISTORY AND FORECAST OF LOAD AND CAPACITY ADDITIONS
SUMMER



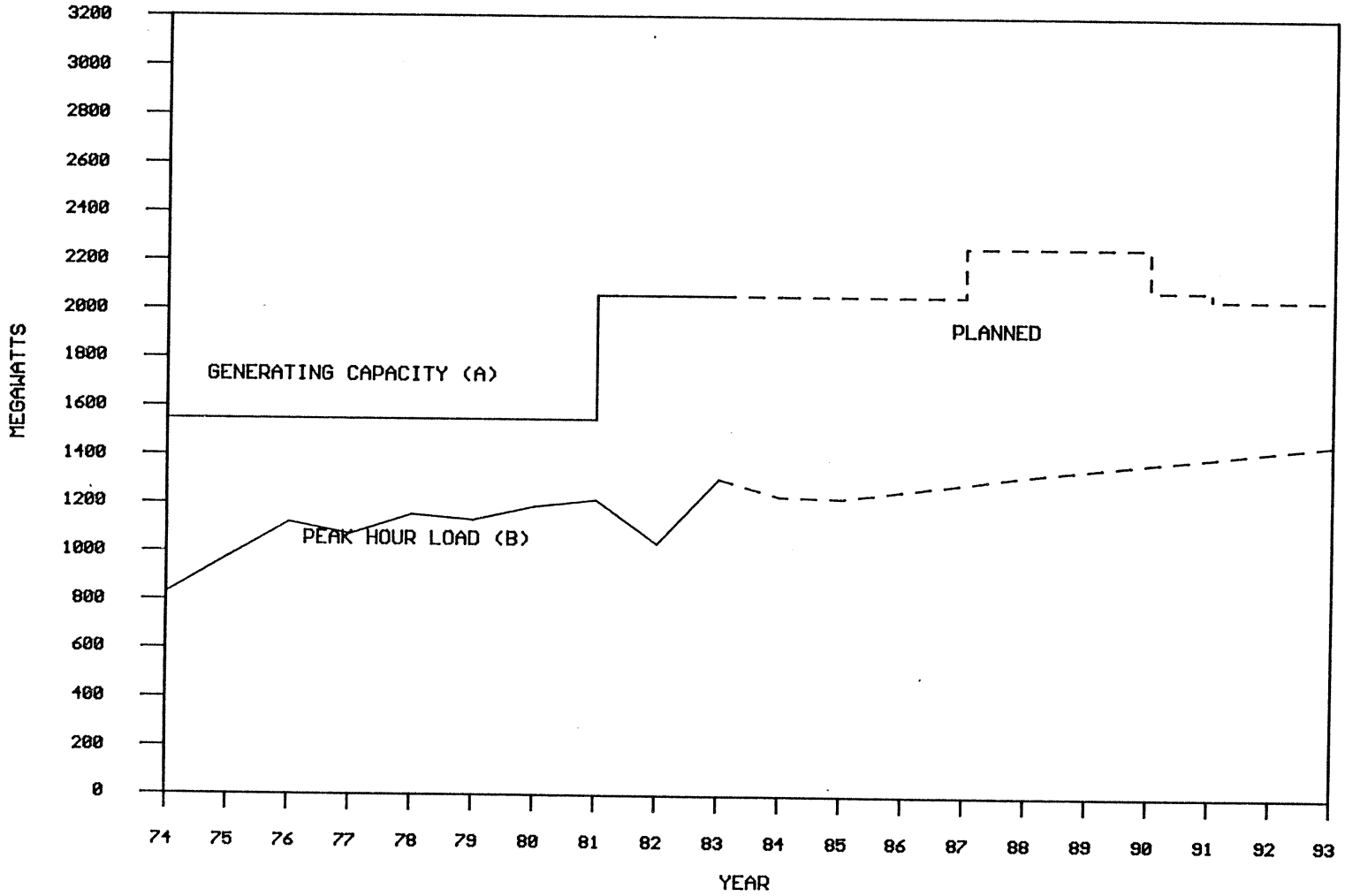
NOTE: (A) SHOWS INSTALLED GENERATING CAPACITY ONLY; REFER TO FORM 7A FOR NET AVAILABLE CAPACITY.
(B) INCLUDES CAPACITY ALLOCATED TO CERTAIN RESALE CUSTOMERS BY SEPA.

GRAPH 2

HISTORY AND FORECAST OF LOAD AND

CAPACITY ADDITIONS

WINTER



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			
	1983		1984		1985	
MONTH	PEAK DEMAND MW	NEL GWH	PEAK DEMAND MW	NEL GWH	PEAK DEMAND MW	NEL GWH
JAN	1,037	516	1,188	565	1,234	573
FEB	1,020	433	1,057	464	1,112	468
MAR	993	461	961	454	1,003	474
APR	743	403	818	424	814	424
MAY	950	493	1,046	498	1,066	508
JUN	1,126	562	1,286	635	1,324	654
JUL	1,317	702	1,384	673	1,412	669
AUG	1,355	703	1,238	632	1,241	633
SEP	1,243	540	1,186	555	1,205	564
OCT	1,015	474	915	432	938	443
NOV	883	440	889	441	894	444
DEC	1,306	557	1,141	550	1,176	566
TOTAL		6,284		6,324		6,420

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

FORECASTING

A. CUSTOMER AND ENERGY SALES FORECAST METHODOLOGY

OVERVIEW

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. Customer and energy sales projections by month are produced for both the short-term (1-5 years) and long-term (6-25 years). Base rate revenue projections are prepared only for the short-term horizon.

Gulf Power Company views the forecasting effort as a dynamic process requiring continuous effort to ensure that the data and statistical techniques being used result in a product which allows proper planning at the corporate level. A number of techniques, each tailored to the specific market or customer classification being forecasted, are utilized. These techniques take advantage of the extensive data made available through the Company's marketing effort, which is predicated on the philosophy of knowing in detail the characteristics of the customers being served and actively promoting wise decisions relative to their energy needs. This philosophy entails direct contact with the customers and provides the opportunity to gain firsthand knowledge of even subtle changes occurring in the market through use of automated reporting systems.

Various models and techniques are used in the preparation of the individual customer class forecasts. The residential class customer forecast consists primarily of an econometric projection driven by expected real per capita disposable income and population over age 21. Commercial customers are forecast as a function of residential customers and, implicitly, as a function of total real personal income. Short-term adjustments are made as necessary to reflect business cycle trends or fluctuations in tourism and military employment.

The various energy models utilized all exhibit detail in their structure due, as mentioned earlier, to the data available through administration of the Company's marketing programs. The residential disaggregate end-use energy model requires an assortment of inputs, including customers by dwelling type, appliance saturation levels, average dwelling size and thermal efficiency, appliance efficiency improvements and expected weather. The commercial class energy forecast is the summation of projections for individual business category (SIC) forecasts. Similarly, the energy sales forecast for the small industrial customer base is developed through individual projections for specific types of industries. The larger industrial customers, which represent approximately 90 percent of total industrial energy sales, are interviewed on an individual basis and projections of energy sales to each of these customers are prepared. Wholesale customers are also interviewed and projections are made separately based on the prospects for future growth in the areas served by the individual delivery points. Street lighting energy sales are based solely on fixture projections, with attention given to replacement of mercury lamps with sodium lamps.

The level of detail evident in each of the class forecasts facilitates the examination of various long-range scenarios. The structural framework of the models is such that certain basic assumptions regarding the effects of appliance stock and efficiency changes, for example, may be tested and examined with respect to their overall impact.

RESIDENTIAL CLASS CUSTOMER AND ENERGY SALES METHODOLOGY

Gulf's residential customer class is comprised of accounts from three rate schedules. The RS (residential service) rate schedule represents the majority of the class, both in terms of customers and energy sales. RST (residential service, time-of-use) is an optional rate offered to all residential customers but currently only opted for by a small number. Also included in the residential customer class are OS (outdoor service) residential lighting accounts.

The residential customer forecast is based on projections of real per capita disposable income and population over age 21. Personal income data series are provided by Data Resources, Inc., while population projections are based on an age cohort component technique. Results of the population model are compared with projections made by the University of Florida Bureau of Economics and Business Research. Some adjustments are made to the population data by incorporating revised estimates of net migration over time which are correlated with the perceived growth potential of various portions of Gulf's service territory. Also, short-term (1 to 2 years) construction estimates provided by division personnel are utilized to adjust the monthly customer projections for this time frame.

Quarterly average customer projections produced by the model are converted to monthly figures using historical monthly allocations. Current growth and construction characteristic patterns in Gulf's three geographic divisons are utilized to estimate single-family, multi-family and mobile home customer stocks in each division.

The disaggregate end-use energy forecast is produced using the projections of customers by dwelling type, as well as inputs such as appliance saturations, dwelling size and thermal efficiency, appliance efficiency improvements, consumption habit/lifestyle changes due to price and other factors, and expected weather. The initial step in the modeling process is the formulation of a data base containing appliance stock and dwelling characteristic data for a sample of residential customers, combined with corresponding monthly weather and billed energy observations. From this point multiple regression analysis is used to develop relationships between ownership of specific appliances and corresponding end-use energy consumption.

COMMERCIAL CLASS CUSTOMER AND ENERGY SALES METHODOLOGY

The commercial class represents the most heterogeneous market served by Gulf. Included in this class are customers from the following eight rate schedules: GS (general service), GST (general service, time-of-use), GSD (general service demand), GSDT (general service demand, time-of-use), GSI (poultry farm service), LP (large power service), LPT (large power service, time-of-use) and OS (outdoor service). Businesses served under these rate schedules range from large retail department stores to athletic fields.

The number of commercial customers are represented as a function of the number of residential customers. This implies the obvious relationship between commercial sector growth and total real disposable income in the Gulf service area. It is worth noting that, to some extent, both residential and commercial customers are assumed to be dependent upon the same "independent variables." These variables are actually jointly dependent, as many people obviously both work for commercial firms and purchase goods from commercial firms. The seasonal cyclic effect created by those customers in business only during the heavy tourism period (April - September) is also captured in the equation through the use of a shift binary variable. As in the residential sector, adjustments are made to the short-term (1 to 2 years) estimates utilizing information provided by division personnel relative to construction activity.

Disaggregation of the commercial customer projections into business categories (SIC codes) for rate codes GSD/GSDT and LP/LPT was accomplished through examination of the existing distribution, as well as estimates of the future demands for various types of commercial services based on the expected residential customer composition and general service area economic outlook.

Projection of energy sales in the commercial sector is also performed at the disaggregate level. Monthly net energy per customer for each SIC category, extracted from the most current 12 month billing master data base is examined and adjustments are made in an attempt to estimate the effects of conservation programs, emerging technologies and real price of electricity on the various sectors of the market.

INDUSTRIAL CLASS CUSTOMER AND ENERGY SALES METHODOLOGY

Gulf's industrial customer class consists of customers billed under the GSD (general service-demand), LP (large power service), LPT (large power service, time-of-use) and PXT (large, high load factor service, time-of-use) rate schedules.

Due to the fact that approximately 30 customers account for over 90 percent of the Company's industrial energy sales, particular emphasis is placed on forecasting the loads of these larger customers. Field interviews are performed by division personnel in order to obtain data relative to short-term operating characteristics and anticipated load additions or reductions. The remainder of the industrial class is disaggregrated at the 2 digit SIC level. As in the commercial class forecast, current billing data is extracted for the purpose of creating monthly energy per customer profiles for each of the SIC categories. This technique allows detailed monitoring of the forecast on virtually a customer by customer basis to ensure short-term accuracy. The long-term projections are based on the assumption that all new industrial customers will be small to moderate sized in terms of their energy consumption. The last major industrial customer to locate in Gulf's service territory came on line in 1968.

The fact that Gulf's service area can be considered essentially an economic region (i.e., an area which includes both the place of work and place of residence of the population) naturally leads to the examination of various methods of measuring industrial activity.

Number of employees, physical output, value of shipment or value added are all examples of variables upon which relationship to kWh consumption can be derived for forecasting purposes. Unfortunately, because of the small size of Gulf's geographic service area, much of this data is unavailable at the disaggregate level desired, due to the fact that disclosure of the information brings about potential problems from a competitive industry's point of view. It is in some part due to this data acquisition difficulty that Gulf has chosen its current techniques for forecasting in the industrial sector. Another equally important consideration is the fact that small regions have unique problems related to the instability of the region's growth. For example, the location of one major new firm can substantially increase employment growth rates for not only a particular employment category, but also for total employment. Likewise, industrial growth often does not occur evenly over time.

B. PEAK DEMAND

SUMMER PEAK DEMAND - ECONOMETRIC MODEL AND METHODOLOGY

In 1976, Southern Company Services developed an econometric model for Gulf and has produced forecasts each year of customers, energy and peak demand. In the years prior to the preparation of the 1982 budget, Gulf utilized these econometric results for comparison with the results of inhouse models. The econometric model produced results which were consistently higher than those derived from disaggregate end-use models, consequently Gulf adopted the disaggregate end-use results as the official forecast each year.

Beginning with the 1982 budget, in order to improve the accuracy of the long-range forecast and to reduce the dependency on the energy forecast, the demand portion of the econometric model has been employed to develop the Company's official peak-hour demand forecast using the customer levels and disaggregate energy sales projections from Gulf's approved energy and customer forecasts.

In order to remove the dependency on residential energy from the demand econometric model, the model was restructured for the 1983 budget, and this new format was used again in the 1984 budget. The residential term is now dependent not on energy, but instead 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 factor, which incorporates the effect of improving appliance efficiencies. The commercial term of the demand model relies on energy as an input but also incorprates the effect of the price of electricity.

The wholesale term of the model is separated between REA and 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 REA terminations.

The industrial term was not changed in format but has been updated with the latest available actual energies and demands to more accurately depict recent trends.

The customer levels and class energy projections from Gulf's disaggregate 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:

Residential and Commercial Demand

$$\text{RES/COM MW} = CF \times e^{[-2.34 + 1.45 \text{ Ln } (RD \times RC + \frac{CE}{(2208)\ (0.756)} - PT]}$$

Where CF = Conservation Factor

RD = Residential Demand per Customer (MW's)

RC = Number of Residential Customers - 3rd Quarter Average

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

PT = Price Term

The conservation factor decreases gradually from 100 percent in 1983 to 98.89 percent in 1994 and then remains constant through the remainder of the forecast. This factor takes into account the improvements in residential appliance efficiencies beyond the improvements due to price reaction, which are expected to occur due to improved standards, and also the effects of promotional conservation activities by Gulf beyond the price reaction which is modeled in the price term.

The residential demand per customer is derived by multiplying the projected residential appliance saturation for each of thirteen appliance categories by the expected demand contribution for the appliance and then by summing these together.

The number of residential customers is taken from Gulf's approved 1984 customer forecast. The commercial energy, from Gulf's approved 1984 energy forecast, is divided by 2208 (hours in 3rd quarter) and 0.756 (typical 3rd quarter commercial load factor) to convert to megawatts of demand.

The price term is comprised of three price variable components. Each of these consists of the weighted average price of residential and commercial energy with the basic variable lagged both one year and two years in a polynomial distribution. The negative coefficient of the price term reflects the inverse correlation of price and demand.

Industrial Demand

$$IND\ MW = e^{[-5.34 + 0.83 \times Ln\ (IE)]}$$

Where IE = Industrial 3rd Quarter Energy

The industrial demand is calculated directly from the third quarter (summer) industrial billed energy from Gulf's approved 1984 energy projections.

Wholesale Demand

WHSL MW = REA MW + FPU MW (REA Demand Plus FPU Demand)

$$REA\ MW = e^{[-8.19 + 1.08 \times Ln\ (RE)]}$$

Where RE = REA 3rd Quarter Energy (with SEPA)

$$FPU\ MW = e^{[-5.50 + 0.83 \times Ln\ (FE)]}$$

Where FE = FPU 3rd Quarter Energy

The REA and FPU demands are calculated directly from the REA and FPU third quarter (summer) billed energies from Gulf's approved 1984 energy budget. The wholesale demand is the sum of the REA and FPU demands.

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

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.

Total MW (with Losses) = [Total MW (W/O Losses) - SEPA]/0.9 + SEPA

Losses are estimated to be ten percent of the total territorial supply at the time of the system peak. This loss adjustment also accounts for the company and interdepartmental demand components, which are relatively small.

WINTER PEAK DEMAND ECONOMETRIC 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 sales and customers are from Gulf's approved 1984 customer and energy sales forecasts.

The basic form of the winter demand model is:

Winter Peak Demand (MW) =

$$CF \times e^{[0.58 \times Ln(RC \times RD + \frac{CE}{(2160)\ (.668)}) + 0.16 \times Ln(WE) + 0.09 \times Ln(IE)]}$$

Where CF = Conservation Factor

RC = Number of Residential Customers - 1st Quarter Average

RD = Residential Demand per customer (MW's)

CE = Commercial Energy - 1st Quarter

WE = Wholesale Energy - 1st Quarter

IE = Industrial Energy - 1st Quarter

The Conservation Factor and the Residential Demand per customer are derived using the same methodology as in the Summer model.

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. If a definite trend is not discernable, then a simple ten-year average is used.

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 accured 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)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Fuel		Const	Com'l In-	Gen Max	Net Capability		Fuel Transp		
Plant Name	Unit No.	Location	Type	Pri	Alt	Start Mo/Yr	Service Mo/Yrl	Nameplate KW	Summer MW	Winter MW	Pri	Alt	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
1984	2053	(239)	1814	1384	430	31.1	NONE	430	31.1
1985	2052	(324)	1728	1412	316	22.4		316	22.4
1986	2052	(424)	1628	1458	170	11.7		170	11.7
1987	2254	(585)	1669	1496	173	11.6		173	11.6
1988	2254	(648)	1606	1533	73	4.8		73	4.8
1989	2254	(184)	2070	1568	502	32.0		502	32.0
1990	2079	(184)	1895	1600	295	18.4		295	18.4
1991	2048	(184)	1864	1630	234	14.4		234	14.4
1992	2048	(191)	1857	1656	201	12.1		201	12.1
1993	2048	(135)	1913	1683	230	13.7		230	13.7

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.

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
1984-85	2057	(415)	1642	1234	408	33.1	NOT AVAILABLE	408	33.1
1985-86	2056	(424)	1632	1227	405	33.0		405	33.0
1986-87	2056	(629)	1427	1259	168	13.3		168	13.3
1987-88	2258	(602)	1656	1290	366	28.4		366	28.4
1988-89	2258	(648)	1610	1324	286	21.6		286	21.6
1989-90	2258	(184)	2074	1350	724	53.6		724	53.6
1990-91	2083	(184)	1899	1377	522	37.9		522	37.9
1991-92	2048	(184)	1864	1402	462	33.0		462	33.0
1992-93	2048	(167)	1881	1430	451	31.5		451	31.5
1993-94	2048	(135)	1913	1457	456	31.3		456	31.3

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.

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, has negotiated the sales of unit capacity and energy to several utilities outside the Southern system. The length of the contracts involves the year 1984 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) 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