TEN YEAR SITE PLAN
1989 - 1998

FOR ELECTRIC GENERATING FACILITIES

AND

ASSOCIATED TRANSMISSION LINES

APRIL, 1989

Gulf Power

GULF POWER COMPANY
TEN YEAR SITE PLAN

FOR ELECTRIC 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, 1989

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CHAPTER I

DESCRIPTION OF EXISTING FACILITIES

UTILITY: GULF POWER COMPANY
EXISTING GENERATING FACILITIES

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
				Fuel					Net Capability		Fuel	Transp
Plant Name	Unit No.	Location	Type	Pri	Alt	Com'l In-Service Mo/Yr	Exptd Retrmnt Mo/Yr	Gen Max Nameplate KW	Summer MW	Winter MW	Pri	Alt
								1,229,000	1106.6	1106.6		
Crist	1	Pensacola	FS	NG	HO	1/45	12/04	28,125	23.0	23.0	PL	TK
	2	25/1N/30W	FS	NG	HO	6/49	12/04	28,125	22.0	22.0	PL	TK
	3		FS	NG	HO	9/52	12/04	37,500	39.4	39.4	PL	TK
	4		FS	C	NG	7/59	12/14	93,750	87.5	87.5	WA	PL
	5		FS	C	NG	6/61	12/16	93,750	89.1	89.1	WA	PL
	6		FS	C	NG	5/70	12/15	369,750	326.6	326.6	WA	PL
	7		FS	C	--	8/73	12/18	578,000	519.0	519.0	WA	--
								381,850	388.1	388.1		
Lansing Smith	1	Panama City	FS	C	--	6/65	12/15	149,600	165.4	165.4	WA	--
	2	36/2S/15W	FS	C	--	6/67	12/17	190,400	187.9	187.9	WA	--
	A		CT	LO	--	5/71	12/01	41,850	34.8	34.8	TK	--
								98,000	94.4	94.4		
Scholz	1	Sneads	FS	C	--	3/53	12/08	49,000	46.7	46.7	RR	WA
	2	12/3N/7W	FS	C	--	10/53	12/08	49,000	47.7	47.7	RR	WA
								548,250	514.3	514.3		
(A)												
Daniel	1	Jackson County, MS	FS	C	HO	9/77	12/12	274,125	257.5	257.5	RR	TK
	2	42/5S/6W	FS	C	HO	6/81	12/16	274,125	256.8	256.8	RR	TK
(A)												
Scherer	3	Monroe County, GA	FS	C	--	1/87	12/27	222,750	212.0	212.0	RR	--
						Total System as of December 31, 1988			2315.4	2315.4		

Abbreviations:

Fuel

FS - Fossil Steam
CT - Combustion Turbine
NG - Natural Gas
C - Coal
LO - Light Oil
HO - Heavy Oil

Fuel Transportation

PL - Pipeline
WA - Water
TK - Truck
RR - Railroad

NOTE: (A) Unit capabilities shown represent Gulf's portion of Daniel Units 1 & 2 (50%) and Scherer Unit 3 (25%).

Utility: Gulf Power Company TYP FORM 1B

Existing Generating Facilities
(A)
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 (B)	Buildings & Equipment (C)	Total
Steam Total			6,517	148,306	645,757	800,580
Crist	680	350	1,795	56,542	241,905	300,242
Lansing Smith	865	400	195	17,681	66,244	84,120
Scholz	293 (D)	168 (D)	45 (E)	5,275 (E)	22,385 (E)	27,705 (E)
Daniel	2,657 (F)	500 (F)	3,668 (G)	36,820 (G)	159,725 (G)	200,213 (G)
Scherer	12,000	9,500	814	31,978	155,305	188,097
Caryville (Weather Station)				10	193	203
Combustion Turbine Total				668	3,484	4,152
Lansing Smith CT				668	3,484	4,152

(A) As of 12/31/88.
(B) Includes buildings.
(C) Buildings excluded due to inclusion in Col. 5
(D) Daniel Plant information refers to total area owned jointly by Gulf and Mississippi Power.
(E) Gulf Power's portion of Plant Daniel only.
(F) Scherer Plant information refers to total area owned by Georgia Power and area owned jointly by Gulf and Georgia Power. "In Use Acres" includes cooling water lake.
(G) Gulf Power's portion of Plant Scherer only.

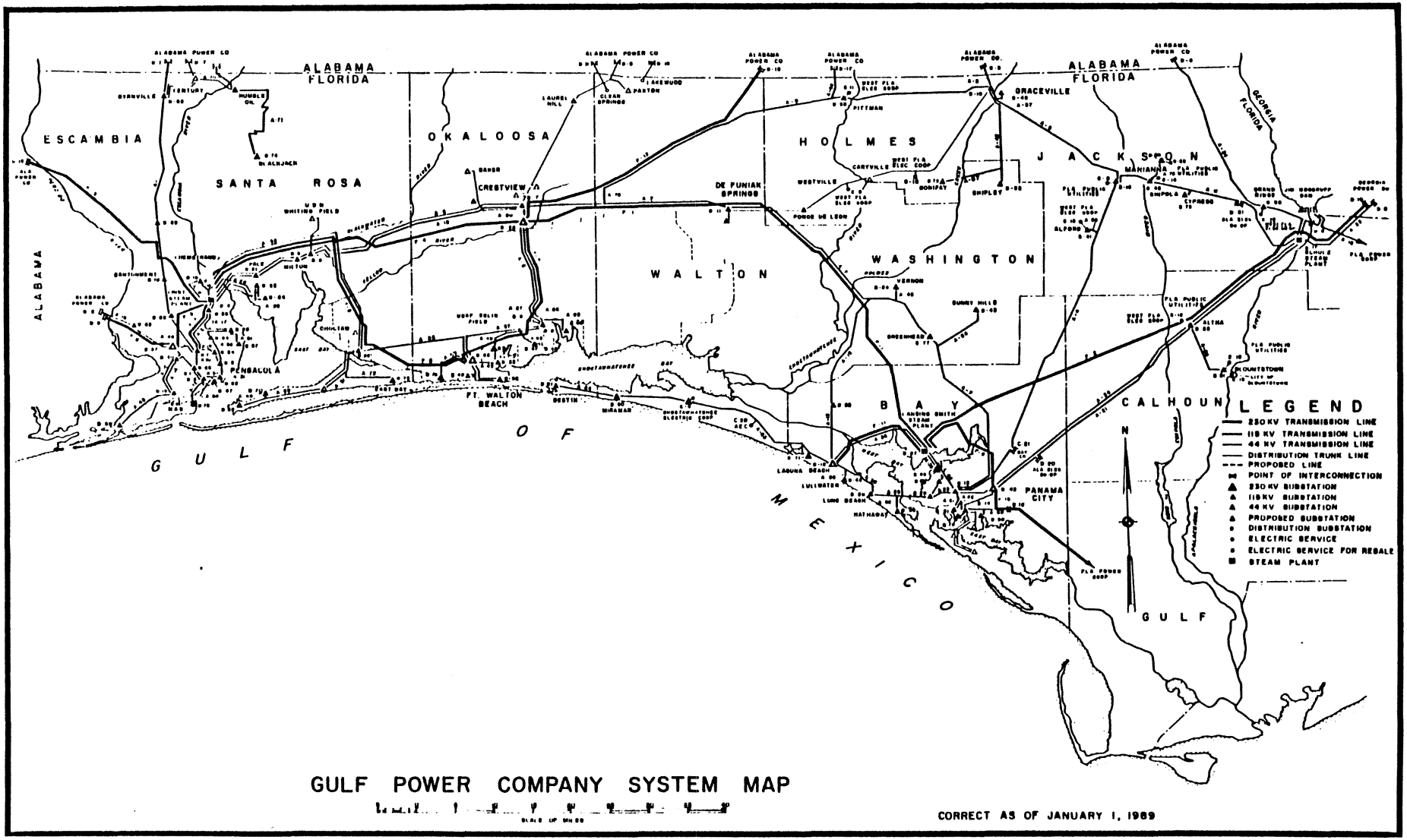
Utility: Gulf Power Company

Existing Generating Facilities
Environmental Considerations for Steam Generating Units

(1)	(2)	(3)	(4)	(5)	(6)
		Flue Gas Cleaning			
Plant Name	Unit	Particulate	SOx	NOx	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
Scherer	3	EP	no	no	NDCT

Abbreviations:

EP - Electrostatic Precipitator
WCTM - Wet cooling tower, mechanical draft
OTS - Once-through, saline
OTF - Once-through, fresh
CP - Cooling pond
NDCT - Natural Draft Cooling Tower



GULF POWER COMPANY SYSTEM MAP

CORRECT AS OF JANUARY 1, 1989

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
1979	481,963	2.79	2,225	172,906	12,868	1,269	21,949	57,832
1980	481,996	2.68	2,335	180,166	12,959	1,293	22,459	57,564
1981	499,711	2.67	2,361	187,489	12,591	1,352	23,243	58,190
1982	514,362	2.65	2,364	194,228	12,169	1,432	23,962	59,748
1983	524,509	2.60	2,472	201,714	12,254	1,499	25,487	58,805
1984	536,990	2.53	2,561	212,379	12,057	1,559	27,336	57,044
1985	561,608	2.51	2,736	223,908	12,221	1,777	28,983	61,326
1986	576,484	2.48	2,964	232,816	12,729	1,913	30,575	62,572
1987	591,854	2.47	3,055	239,362	12,763	1,986	31,821	62,422
1988	605,259	2.47	3,155	244,859	12,883	2,089	32,757	63,760
1989	615,481	2.45	3,312	250,768	13,208	2,167	33,663	64,372
1990	624,873	2.43	3,396	256,628	13,235	2,219	34,640	64,050
1991	637,689	2.41	3,490	264,400	13,199	2,276	35,929	63,353
1992	647,608	2.39	3,549	271,064	13,095	2,357	37,034	63,656
1993	657,188	2.37	3,634	277,069	13,118	2,419	38,029	63,606
1994	666,504	2.36	3,692	282,626	13,064	2,468	38,950	63,368
1995	674,364	2.34	3,731	288,277	12,941	2,515	39,887	63,065
1996	681,964	2.32	3,810	293,808	12,969	2,562	40,804	62,778
1997	689,460	2.30	3,873	299,135	12,946	2,612	41,687	62,653
1998	696,890	2.29	3,943	304,402	12,952	2,652	42,560	62,300

* HISTORICAL AND PROJECTED FIGURES INCLUDE PORTIONS OF ESCAMBIA, SANTA ROSA, OKALOOSA, WALTON, BAY, WASHINGTON, HOLMES, AND JACKSON COUNTIES SERVED BY GULF POWER COMPANY.

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

(10)	(11)	(12)	(13)	(14)	(15)	(16)
	INDUSTRIAL					
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
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	1,771	181	9,782,249	14	0	6,299
1986	1,745	194	8,995,227	14	0	6,636
1987	1,840	204	9,019,271	14	0	6,896
1988	1,968	206	9,553,842	15	0	7,226
1989	2,072	215	9,637,577	15	0	7,566
1990	2,121	217	9,775,074	15	0	7,752
1991	2,150	220	9,772,627	15	0	7,931
1992	2,080	223	9,327,973	16	0	8,003
1993	1,825	226	8,073,469	16	0	7,894
1994	1,473	229	6,430,686	16	0	7,649
1995	1,508	232	6,500,853	16	0	7,770
1996	1,539	235	6,550,315	16	0	7,928
1997	1,572	238	6,606,668	17	0	8,074
1998	1,556	241	6,457,631	17	0	8,167

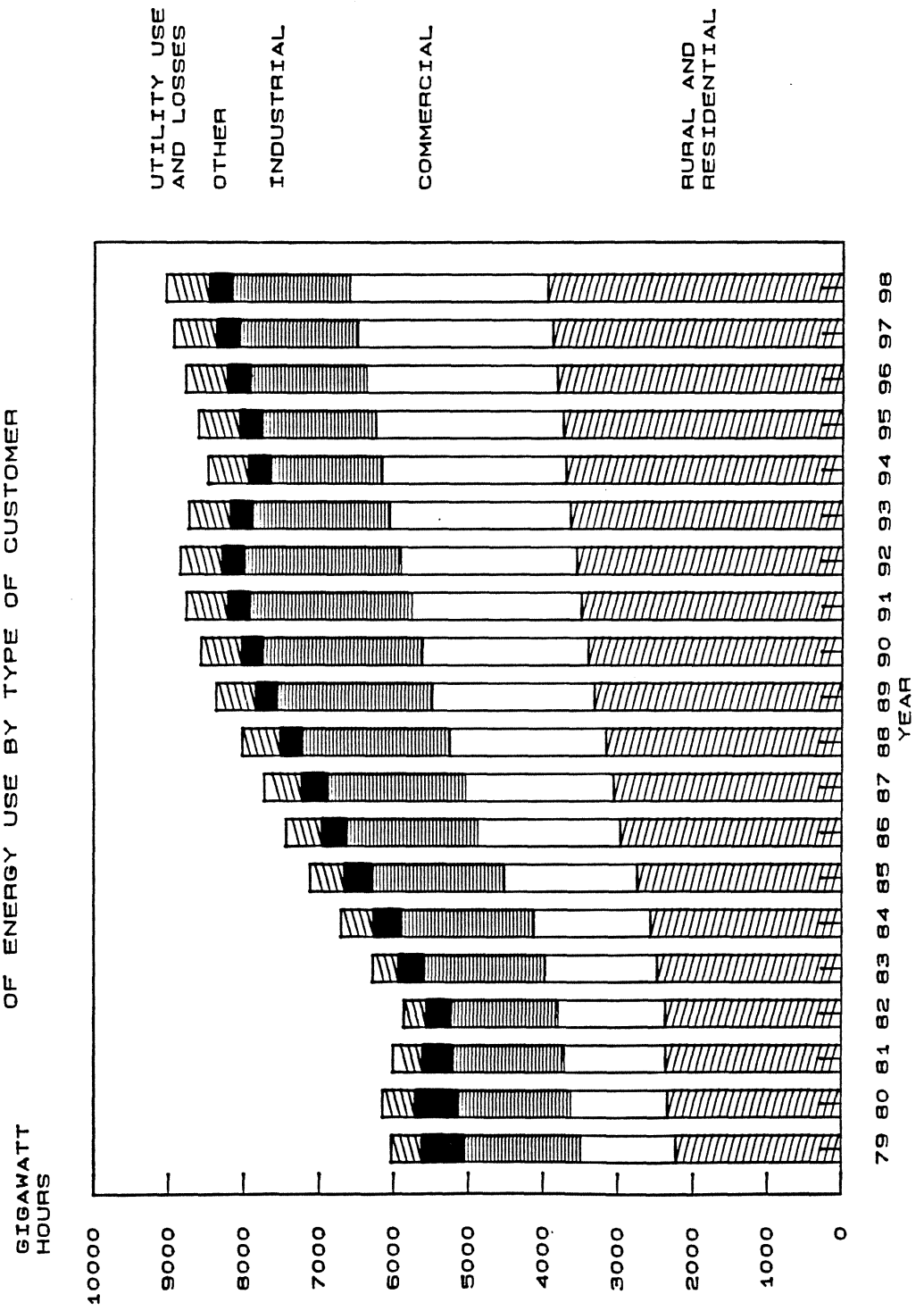
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND NUMBER OF CUSTOMERS BY CUSTOMER CLASS

(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
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	306	5,859	59	218,419
1983	336	351	6,284	62	227,439
1984	364	433	6,703	63	239,960
1985	359	458	7,115	63	253,135
1986	324	475	7,435	61	263,646
1987	328	499	7,723	62	271,449
1988	283	507	8,016	59	277,881
1989	267	528	8,362	58	284,704
1990	271	541	8,564	58	291,542
1991	275	554	8,761	58	300,606
1992	279	560	8,841	58	308,378
1993	282	554	8,729	58	315,382
1994	284	539	8,472	58	321,863
1995	286	548	8,605	58	328,453
1996	288	559	8,775	58	334,905
1997	290	569	8,933	58	341,118
1998	292	575	9,035	58	347,260

NOTE: SALES FOR RESALE AND NET ENERGY FOR LOAD 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
(a) (b)
Energy Sources

Energy Sources		Actual 1987	Actual 1988	1989	1990	1991	1992
Annual Energy Interchange	GWH	(3,747)	(3,193)	(161)	584	1,438	1,472
Nuclear	GWH	None	None	None	None	None	None
Coal	GWH	11,426	11,163	8,519	7,973	7,323	7,361
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	3	0	0	0	0
Steam	GWH	None	None	None	None	None	None
CC	GWH	None	None	None	None	None	None
CT	GWH	0	3	0	0	0	0
Diesel	GWH	None	None	None	None	None	None
Natural Gas -Total	GWH	44	43	4	7	0	8
Steam	GWH	44	43	4	7	0	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	7,723	8,016	8,362	8,564	8,761	8,841

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

(b) Includes energy generated and sold under existing power sales contracts.

Utility: Gulf Power Company
(a) (b)
Energy Sources

Energy Sources			1993	1994	1995	1996	1997	1998
Annual Energy Interchange		GWH	1,696	1,350	2,120	1,342	199	(3,621)
Nuclear		GWH	None	None	None	None	None	None
Coal		GWH	7,023	7,110	6,470	7,414	8,698	12,599
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	0	0	0	0	0
	Steam	GWH	None	None	None	None	None	None
	CC	GWH	None	None	None	None	None	None
	CT	GWH	1	0	0	0	0	0
	Diesel	GWH	None	None	None	None	None	None
Natural Gas	-Total	GWH	9	12	15	19	36	57
	Steam	GWH	9	2	2	3	3	3
	CC	GWH	None	None	None	None	None	None
	CT	GWH	None	10	13	16	33	54
	Diesel	GWH	None	None	None	None	None	None
Other		GWH	None	None	None	None	None	None
Net Energy for Load		GWH	8,729	8,472	8,605	8,775	8,933	9,035

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

(b) Includes energy generated and sold under existing power sales contracts.

Utility: Gulf Power Company

Fuel Requirements

Fuel Requirements			Actual 1987	Actual 1988	1989	1990	1991	1992
Nuclear		12 BTUx10	None	None	None	None	None	None
Coal		1000 TON	4,888	4,704	3,697	3,451	3,170	3,173
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	26	32	22	19	19	22
	Steam	1000 BBL	26	24	22	18	19	21
	CC	1000 BBL	None	None	None	None	None	None
	CT	1000 BBL	0	8	0	1	0	1
	Diesel	1000 BBL	None	None	None	None	None	None
Natural Gas	-Total	1000 MCF	826	693	64	107	6	133
	Steam	1000 MCF	826	693	64	107	6	133
	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		6 BTUx10	None	None	None	None	None	None
Annual Avg. Fossil Net H.R.		BTU/KWH	10,512	10,461	10,618	10,590	10,597	10,569

Fuel Requirements

Fuel Requirements			1993	1994	1995	1996	1997	1998
Nuclear		12 BTUx10	None	None	None	None	None	None
Coal		1000 TON	3,037	3,082	2,801	3,157	3,692	5,295
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	21	23	21	17	20	19
	Steam	1000 BBL	20	23	21	17	20	19
	CC	1000 BBL	None	None	None	None	None	None
	CT	1000 BBL	1	0	0	0	0	0
	Diesel	1000 BBL	None	None	None	None	None	None
Natural Gas	-Total	1000 MCF	147	143	191	233	445	699
	Steam	1000 MCF	147	27	38	41	44	46
	CC	1000 MCF	None	None	None	None	None	None
	CT	1000 MCF	None	116	153	192	401	653
	Diesel	1000 MCF	None	None	None	None	None	None
Other		6 BTUx10	None	None	None	None	None	None
Annual Avg. Fossil Net H.R.		BTU/KWH	10,601	10,622	10,614	10,453	10,373	10,189

UTILITY: GULF POWER COMPANY

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

	SUMMER PEAK DEMAND - MW					ANNUAL NET ENERGY FOR LOAD			
	FIRM					GWH			ANNUAL LOAD FACTOR
YEAR	RETAIL	WHOLESALE	TOTAL	INTERRUPT	TOTAL	RETAIL	WHOLESALE	TOTAL	%
1979	1,115	117	1,232	0	1,232	5,472	558	6,030	55.9%
1980	1,259	133	1,392	0	1,392	5,574	574	6,148	50.3%
1981	1,231	78	1,309	0	1,309	5,605	400	6,004	52.4%
1982	1,166	66	1,232	0	1,232	5,547	313	5,859	54.3%
1983	1,279	76	1,355	0	1,355	5,948	336	6,284	52.9%
1984	1,315	80	1,395	0	1,395	6,338	364	6,703	54.7%
1985	1,367	87	1,454	0	1,454	6,757	359	7,115	55.9%
1986	1,611	73	1,684	0	1,684	7,111	324	7,435	50.4%
1987	1,551	73	1,624	0	1,624	7,396	328	7,723	54.3%
1988	1,572	48	1,620	0	1,620	7,733	283	8,016	56.3%
1989	1,707	63	1,770	0	1,770	8,095	267	8,362	53.9%
1990	1,756	64	1,820	0	1,820	8,293	271	8,564	53.7%
1991	1,794	56	1,850	0	1,850	8,486	275	8,761	54.1%
1992	1,813	66	1,879	0	1,879	8,562	279	8,841	53.6%
1993	1,790	67	1,857	0	1,857	8,447	282	8,729	53.7%
1994	1,777	67	1,844	0	1,844	8,188	284	8,472	52.4%
1995	1,806	68	1,874	0	1,874	8,318	286	8,605	52.4%
1996	1,833	69	1,902	0	1,902	8,486	288	8,775	52.5%
1997	1,872	69	1,941	0	1,941	8,642	290	8,933	52.5%
1998	1,894	70	1,964	0	1,964	8,743	292	9,035	52.5%

NOTE: Wholesale and total columns include contracted capacity and energy allocated to certain resale customers by Southeastern Power Administration (SEPA)

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

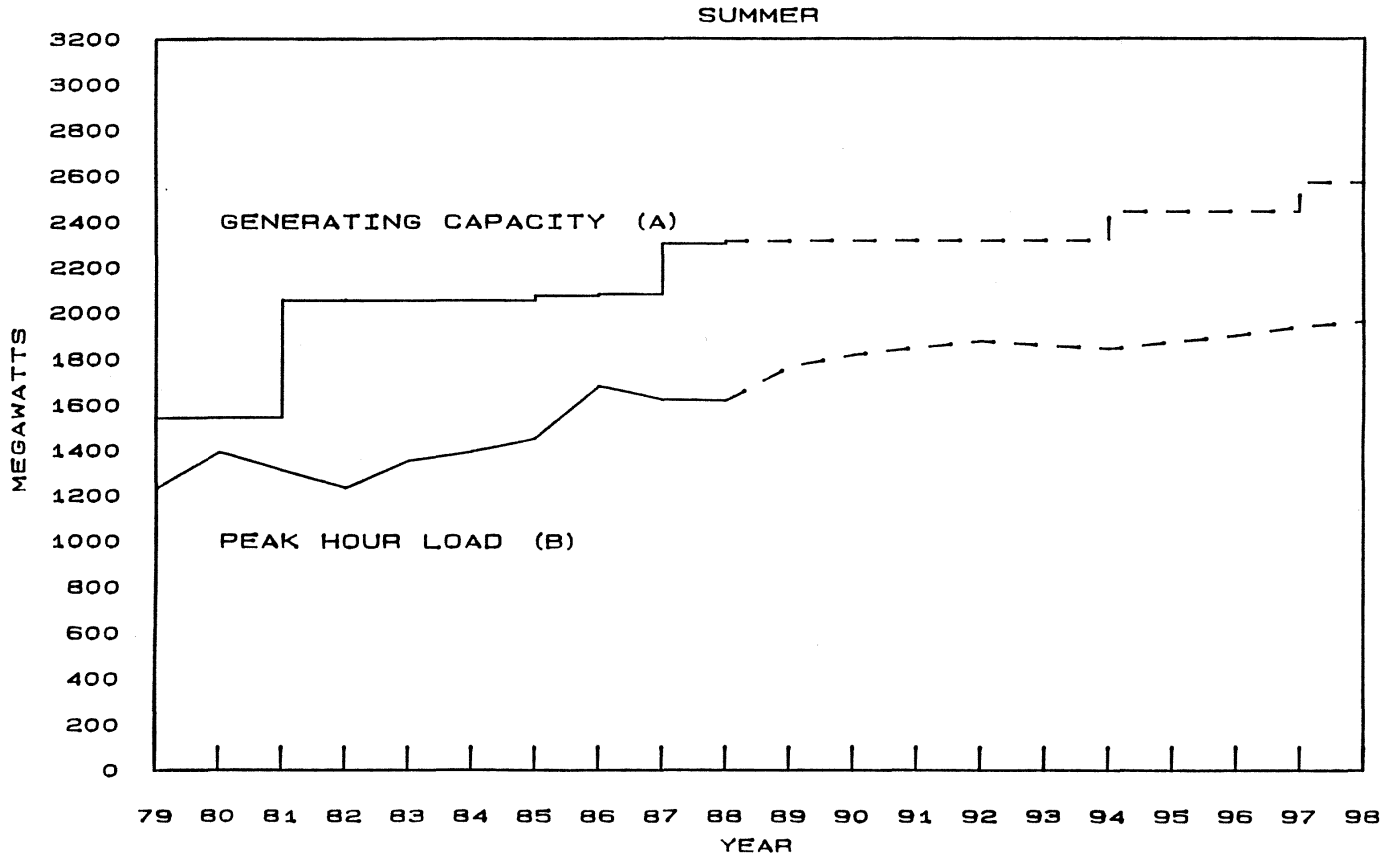
WINTER PEAK DEMAND - MW

	FIRM				
YEAR	RETAIL	WHOLESALE	TOTAL	INTERRUPT	TOTAL
1979-80	1,022	110	1,132	0	1,132
1980-81	1,083	106	1,189	0	1,189
1981-82	1,149	68	1,217	0	1,217
1982-83	978	59	1,037	0	1,037
1983-84	1,234	72	1,306	0	1,306
1984-85	1,450	81	1,531	0	1,531
1985-86	1,363	49	1,412	0	1,412
1986-87	1,303	57	1,360	0	1,360
1987-88	1,342	60	1,402	0	1,402
1988-89	1,477	54	1,531	0	1,531
1989-90	1,522	55	1,577	0	1,577
1990-91	1,546	56	1,602	0	1,602
1991-92	1,566	57	1,623	0	1,623
1992-93	1,557	58	1,615	0	1,615
1993-94	1,520	59	1,579	0	1,579
1994-95	1,546	59	1,605	0	1,605
1995-96	1,574	60	1,634	0	1,634
1996-97	1,610	60	1,670	0	1,670
1997-98	1,642	60	1,702	0	1,702
1998-99	1,661	61	1,722	0	1,722

NOTE: Wholesale and total columns include contracted capacity and energy allocated to certain resale customers by Southeastern Power Administration (SEPA)

GRAPH 2

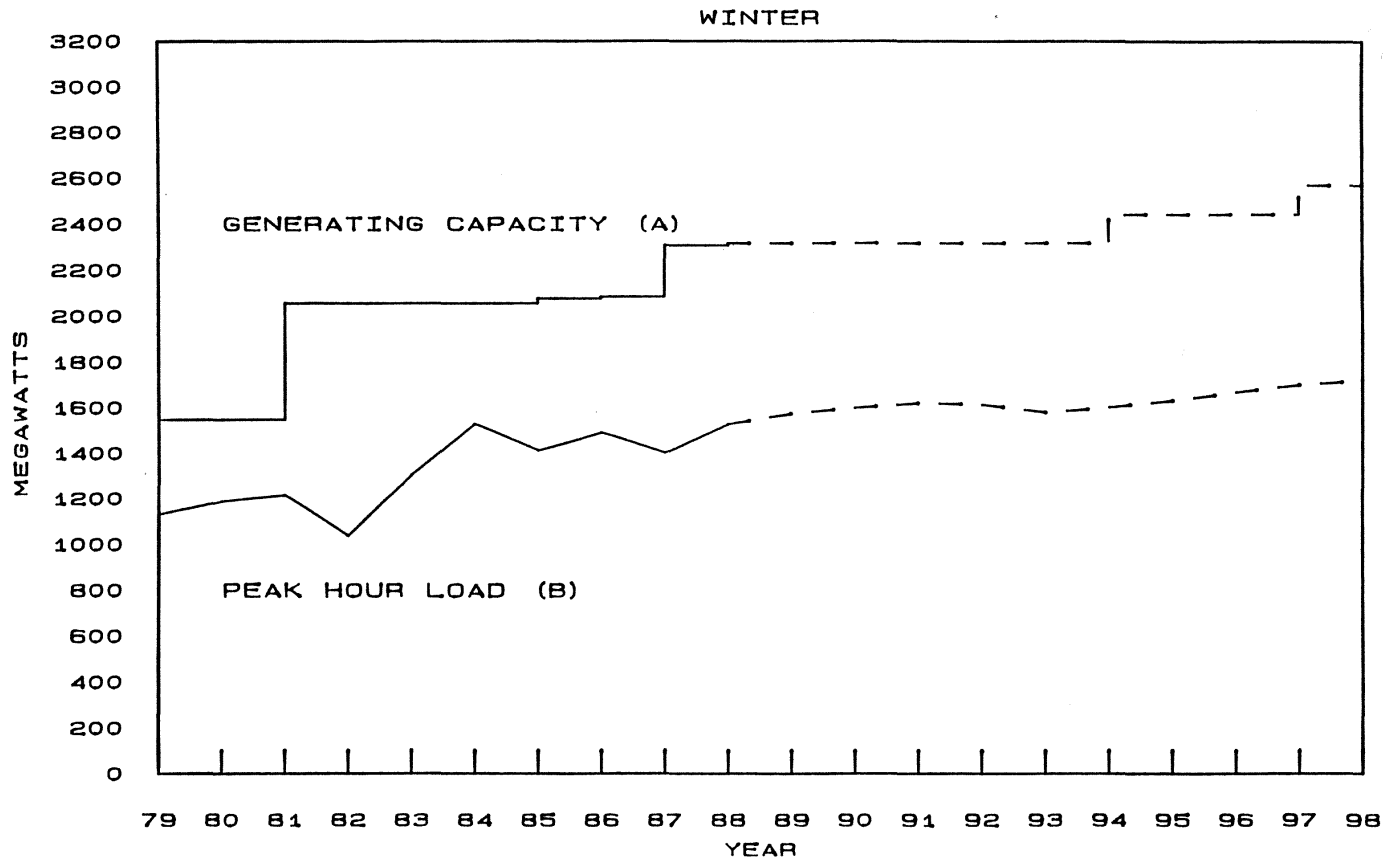
HISTORY AND FORECAST OF LOAD AND CAPACITY ADDITIONS



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.

UTILITY: GULF POWER COMPANY TYP FORM 5

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

	ACTUAL		FORECAST			
	1988		1989		1990	
MONTH	PEAK DEMAND MW	NEL GWH	PEAK DEMAND MW	NEL GWH	PEAK DEMAND MW	NEL GWH
JAN	1,389	684	1,531	715	1,577	733
FEB	1,402	614	1,220	557	1,257	570
MAR	1,240	573	1,215	585	1,252	597
APR	1,149	545	1,050	564	1,069	575
MAY	1,300	651	1,362	695	1,402	715
JUN	1,620	762	1,754	857	1,783	869
JUL	1,614	848	1,770	899	1,820	925
AUG	1,588	858	1,680	901	1,721	922
SEP	1,529	739	1,580	762	1,626	785
OCT	1,149	571	1,169	596	1,186	602
NOV	1,099	551	1,060	555	1,099	570
DEC	1,357	619	1,321	676	1,368	701
TOTAL		8,016		8,362		8,564

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

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FORECASTING DOCUMENTATION

GULF POWER COMPANY

LOAD FORECASTING METHODOLOGY

OVERVIEW

Gulf Power Company views the forecasting effort as a dynamic process requiring ongoing efforts to yield results which allow informed planning and decision-making. 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 and understanding the needs, perceptions and motivations of our customers and actively promoting wise and efficient uses of energy which satisfy customer needs. Gulf is recognized as an industry leader in the successful implementation of cost-effective conservation programs, beginning with the introduction of the highly successful Good ¢ents Home concept in 1976, and continuing with concerted efforts to meet the mandates of the 1980 Florida Energy Efficiency and Conservation Act (FEECA). This philosophy entails focused market research efforts, coupled with field marketing efforts that maintain an open line of communication with our customers, and yields increased knowledge and understanding of changes in the marketplace. Also included in these efforts is continued research support for promising new energy technologies, including solar photovoltaics, electric vehicles, fuel cells and high efficiency equipment.

The Forecasting and Marketing Planning section of the Marketing and Load Management Department is responsible for preparing forecasts of customers, energy and peak demand. A description of the methods used in the development of these forecasts follows.

I. CUSTOMER FORECAST

A. Residential Customer Forecast

The immediate short-term forecast (0-2 years) of customers is based primarily on projections prepared by division personnel. The divisions remain abreast of local market and economic conditions within their service territories through direct contact with economic development agencies, 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 Regional Economic Growth Impact Study (REGIS), a mathematically intensive forecasting model, is utilized in the development of residential customers. At the center of this system is a cohort survival routine approach in which population by age group is aged from one time period to the next. The model's migration/demographic component, given an initial population age distribution, together with forecasts of migration, births and deaths, projects population by age group into the future.

The forecast of residential customers is an outcome of the final section of the migration/demographic element of the model. The number of residential customers Gulf expects to serve is

calculated by multiplying the total number of households located in the eight counties in which Gulf provides service by the percentage of customers in these eight counties for which Gulf currently provides service.

The number of households referred to above is computed by applying a household formation trend to the previously mentioned population by age group, and then by summing the number of households in each of five adult age categories. As indicated, there is a relationship between households, or residential customers, and the age structure of the population of the area, as well as household formation trends. The household formation trend is the product of initial year household formation rates in the Gulf service area and projected U.S. trends in household formation.

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 major commercial development projects.

Beyond the immediate short-term period, commercial customers are forecast as a function of residential customers, reflecting the growth of commercial services 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.

II. ENERGY SALES FORECAST

A. Residential Sales Forecast

The residential energy sales forecast is prepared using the Residential End-Use Energy Planning System (REEPS), a model developed for the Electric Power Research Institute (EPRI) by Cambridge Systematics, Incorporated, under Project RP1211-2. The REEPS model integrates elements of both econometric and engineering end-use approaches to energy forecasting. Market penetrations and energy consumption rates for major appliance end-uses are treated explicitly. REEPS produces forecasts of appliance installations, operating efficiencies and utilization patterns for space heating, water heating, air conditioning and cooking, as well as other major end-uses. Each of these decisions is responsive to energy prices and demand-side initiatives, as well as household/dwelling characteristics and geographical variables.

The major behavioral responses in the simulation model have been estimated statistically from an analysis of household survey data. Surveys provide the data source required to identify the responsiveness of household energy decisions to prices and other variables.

The REEPS model forecasts energy decisions for a large number of different population segments. These segments represent households with different demographic and dwelling characteristics. Together, the population segments reflect the full distribution of characteristics in the customer population.

The total service area forecast of residential energy decisions is represented as the sum of the choices of various segments. This approach enhances evaluation of the distributional impacts of various demand-side initiatives.

For each of the major end-uses, REEPS forecasts equipment purchases, efficiency and utilization choices. The model distinguishes among appliance installations in new housing, retrofit installations and purchases of portable units. Within the simulation, the probability of installing a given appliance in a new dwelling depends on the operating and performance characteristics of the competing alternatives, as well as household and dwelling features. The installation probabilities for certain end-use categories are highly interdependent.

The functional form of the appliance installation models is the multinomial logit or its generalization, the nested logit. The parameters of these models quantify the sensitivity of appliance installation choices to costs and other characteristics. The magnitudes of these parameters have been estimated statistically from household survey data.

Appliance operating efficiency and utilization rates are simulated in the REEPS model as interdependent decisions. Efficiency choice is dependent on operating cost at the planned utilization rate, while actual utilization depends on operating cost given the appliance efficiency. Appliance and building standards affect efficiency directly by mandating higher levels than those otherwise expected.

The sensitivity of efficiency and utilization decisions to costs, climate, household and dwelling size, and income has been

estimated from historical survey data. Energy prices, income, and household and dwelling size significantly affect space conditioning and residual energy use. Household and dwelling size also influence water heating usage. Climate significantly impacts space heating and air conditioning.

Major appliance base year unit energy consumption (UEC) estimates are based on either metered appliance data or conditioned energy demand regression analysis. The latter is a technique employed in the absence of metered observations of individual appliance usage, and involves the disaggregation of total household demand for electricity into appliance specific demand functions.

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 premise that consumption through a particular end-use must be zero if the end-use is not present, and if the end-use is present, energy consumption levels are represented 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 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 squares regression estimates of the appliance coefficients. The regressions were performed using input data from the Gulf Power Company 1986 Residential Market Survey, billing cycle monthly energy data, and billing cycle monthly weather data.

B. Commercial Sales Forecast

COMMEND, a commercial end-use model developed by the Georgia Institute of Technology through EPRI Project RP1216-06, serves as the basis for the major portion of Gulf's commercial energy sales forecast.

The COMMEND 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.

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).

Three characteristics of COMMEND distinguish it from traditional modeling approaches. First, the reliance on engineering relationships to determine future heating and cooling efficiency provides a sounder basis for forecasting long-run changes in space heating and cooling energy requirements than a pure econometric approach can supply. Second, the simulation model uses a variety of engineering data on the energy-using characteristics of commercial buildings. Third, COMMEND provides estimates of energy use detailed by end-use, fuel type and building type.

Gulf's most recent Commercial Market Survey, conducted in 1984, 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

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 techniques, and multiple regression analysis. Forty-two of Gulf's largest industrial customers are interviewed to identify load changes due to equipment addition, 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 chemical, pulp and paper, other manufacturing, and non-manufacturing sectors. The industrial forecast is further refined by accounting for expected cogeneration installations, and a supplemental energy rate.

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

In the short-term, 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. In the long-term, kilowatt-hour consumption grows at the same rate as projected fixture growth which, in itself, is modeled as a function of projected residential customer growth.

E. Wholesale Energy 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 future growth potential.

III. PEAK DEMAND FORECAST

The peak demand forecast is prepared using the Hourly Electric Load Model (HELM), developed by ICF, Incorporated, for EPRI under Project RP1955-1. The model forecasts hourly electrical loads over the long-term.

Load shape forecasts have always provided an important input to traditional system planning functions. Forecasts of the pattern of demand have acquired an added importance due to structural changes in the demand for electricity and increased utility involvement in influencing load patterns for the mutual benefit of the utility and its customers.

HELM represents an approach designed to better capture changes in the underlying structure of electricity consumption. Rapid increases in energy prices during the 1970's and early 1980's brought about changes in the efficiency of energy-using equipment. Additionally, sociodemographic and microeconomic developments have changed the composition of electricity consumption, including changes in fuel shares, housing mix, household age and size, construction features, mix of commercial services, and mix of industrial products.

In addition to these naturally occurring structural changes, utilities have become increasingly active in offering customers options which result in modified consumption patterns. An important input to the design of such demand-side programs is an assessment of their likely impact on utility system loads.

HELM has been designed to forecast electric utility load shapes and to analyze the impacts of factors such as alternative weather

conditions, customer mix changes, fuel share changes, and demand-side programs. The structural detail of HELM provides forecasts of hourly class and system load curves by weighting and aggregating load shapes for individual end-use components.

Model inputs include energy forecasts and load shape data for the user-specified end-uses. Inputs are also required to reflect new technologies, rate structures and other demand-side programs. Model outputs include hourly system and class load curves, load duration curves, monthly system and class peaks, load factors and energy requirements by season and rating period.

The methodology embedded in HELM may be referred to as a "bottom-up" approach. Class and system load shapes are calculated by aggregating the load shapes of component end-uses. The system demand for electricity in hour i is modeled as the sum of demands by each end-use in hour i:

$$L_i = \sum_{R=1}^{N_R} L_{R,i} + \sum_{C=1}^{N_C} L_{C,i} + \sum_{I=1}^{N_I} L_{I,i} + Misc_i$$

Where: L_i = system demand for electricity in hour i;

N_R = number of residential end-use loads;

N_C = number of commercial end-use loads;

N_I = number of industrial end-use loads;

$L_{R,i}$ = demand for electricity by residential end-use R in hour i;

$L_{C,i}$ = demand for electricity by commercial end-use R in hour i:

$L_{I,i}$ = demand for electricity by industrial end-use R in hour i;

$Misc_i$ = other demands (wholesale, street lighting, losses, Company use) in hour i.

COMPANY USE & INTERDEPARTMENTAL ENERGY

The 1989 Annual Forecast for Company and Interdepartmental energy usage was based on recent historical values, with appropriate adjustments to reflect increases in energy requirements through 1988, for new Company facilities. The 1989 forecasted Company usage was then projected through the year 2013, at the same growth rate each year as the growth in residential customers. The monthly spreads were derived using historical relationships between monthly and annual energy usage.

Small Power Production

The current forecasts also consider Gulf's active position in the promotion of renewable energy resources, the most recent examples being our involvement in two waste-to-energy facilities located within our service area. In addition to aiding in the initial stages of planning, installation and operation of these facilities, the Company has initiated preliminary studies to assess the feasibility of construction of other waste disposal units at various sites in Northwest Florida. Following is a list of the cumulative small power producer capability anticipated in the base case forecast. This includes both waste-to-energy projects and other renewable fuel projects.

Year	Small Power Producers Net Capability (MW)	Year	Small Power Producers Net Capability (MW)
1989	11	2001	45
1990	11	2002	45
1991	11	2003	45
1992	11	2004	45
1993	40	2005	45
1994	40	2006	45
1995	45	2007	45
1996	45	2008	45
1997	45	2009	45
1998	45	2010	45
1999	45	2011	45
2000	45	2012	45
		2013	45

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CHAPTER III

FORECAST
OF
FACILITIES REQUIREMENTS

TYP FORM 6

UTILITY: GULF POWER COMPANY

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/Yr	Nameplate KW	Summer MW	Winter MW	Pri	Alt	Status
Caryville	A	Caryville, FL	CT	NG	LO	06/91	05/94	126,000	126.0	126.0	PL	TK	P
	B	Caryville, FL	CT	NG	LO	06/94	05/97	126,000	126.0	126.0	PL	TK	P
							TOTAL		252.0	252.0			

Abbreviations: CT - Combustion Turbine
NG - Natural Gas
LO - Light Oil
PL - Pipeline
TK - Truck
P - Planned, but not authorized by utility

TYP FORM 7A

UTILITY: GULF POWER COMPANY

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

					MARGIN BEFORE MAINTENANCE			MARGIN AFTER MAINTENANCE	
YEAR	TOTAL INSTALLED CAPACITY MW	FIRM CAPACITY IMPORT MW (B)	TOTAL AVAILABLE CAPACITY MW	FIRM PEAK DEMAND MW	MW	PER CENT OF PEAK	SCHEDULED MAINTENANCE MW	MW	PER CENT OF PEAK
1989	2317	(124)	2193	1770	423	23.9%	NONE	423	23.9%
1990	2317	(123)	2194	1820	374	20.5%		374	20.5%
1991	2317	(138)	2179	1850	329	17.8%		329	17.8%
1992	2317	(190)	2127	1879	248	13.2%		248	13.2%
1993	2317	(184)	2133	1857	276	14.9%		276	14.9%
1994	2443	(166)	2277	1844	433	23.5%		433	23.5%
1995	2443	(201)	2242	1874	368	19.6%		368	19.6%
1996	2443	(201)	2242	1902	340	17.9%		340	17.9%
1997	2569	(201)	2368	1941	427	22.0%		427	22.0%
1998	2569	(201)	2368	1964	404	20.6%		404	20.6%

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

TYP FORM 7B

UTILITY: GULF POWER COMPANY

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
1989-90	2317	(124)	2193	1577	616	39.1%	NOT	616	39.1%
1990-91	2317	(123)	2194	1602	592	37.0%	AVAILABLE	592	37.0%
1991-92	2317	(138)	2179	1623	556	34.3%		556	34.3%
1992-93	2317	(164)	2153	1615	538	33.3%		538	33.3%
1993-94	2317	(184)	2133	1579	554	35.1%		554	35.1%
1994-95	2443	(166)	2277	1605	672	41.9%		672	41.9%
1995-96	2443	(201)	2242	1634	608	37.2%		608	37.2%
1996-97	2443	(201)	2242	1670	572	34.3%		572	34.3%
1997-98	2569	(201)	2368	1702	666	39.1%		666	39.1%
1998-99	2569	(201)	2368	1722	646	37.5%		646	37.5%

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 CAPACITY SOLD IN ALL 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, Mississippi Power Company, and Savannah Electric and 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 capacity and energy to several utilities outside the Southern system. The term of the contracts started prior to 1989 and extends into 2010. 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 2000. Reserves shown in this filing have not been reduced for this capacity; however, the energy sales have been reflected on Forms 3A and 3B.

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CHAPTER IV

SITE DESCRIPTION
AND
IMPACT ANALYSIS

Utility: Gulf Power Company

Status Report
Specifications of Proposed Generating Facilities

(1)	Plant Name & Unit	Caryville A
(2)	Status	This facility is planned but not authorized
(3)	Anticipated Construction Timing	In-Service May, 1994
(4)	Capacity	Summer 126.0 MW Winter 126.0 MW
(5)	Type	Combustion Turbine
(6)	Primary and Alternate Fuel	Primary - Natural Gas; Alternate - Light Oil (distillate)
(7)	Air Pollution Control Strategy	Steam Injection for NOx control
(8)	Cooling Method	NA
(9)	Total Site Area	Unknown
(10)	Anticipated Capital Investment	$ 48,500,000
(11)	Certification Status	Not applied
(12)	Status with Federal Agencies	Not applied

Utility: Gulf Power Company

Status Report
Specifications of Proposed Generating Facilities

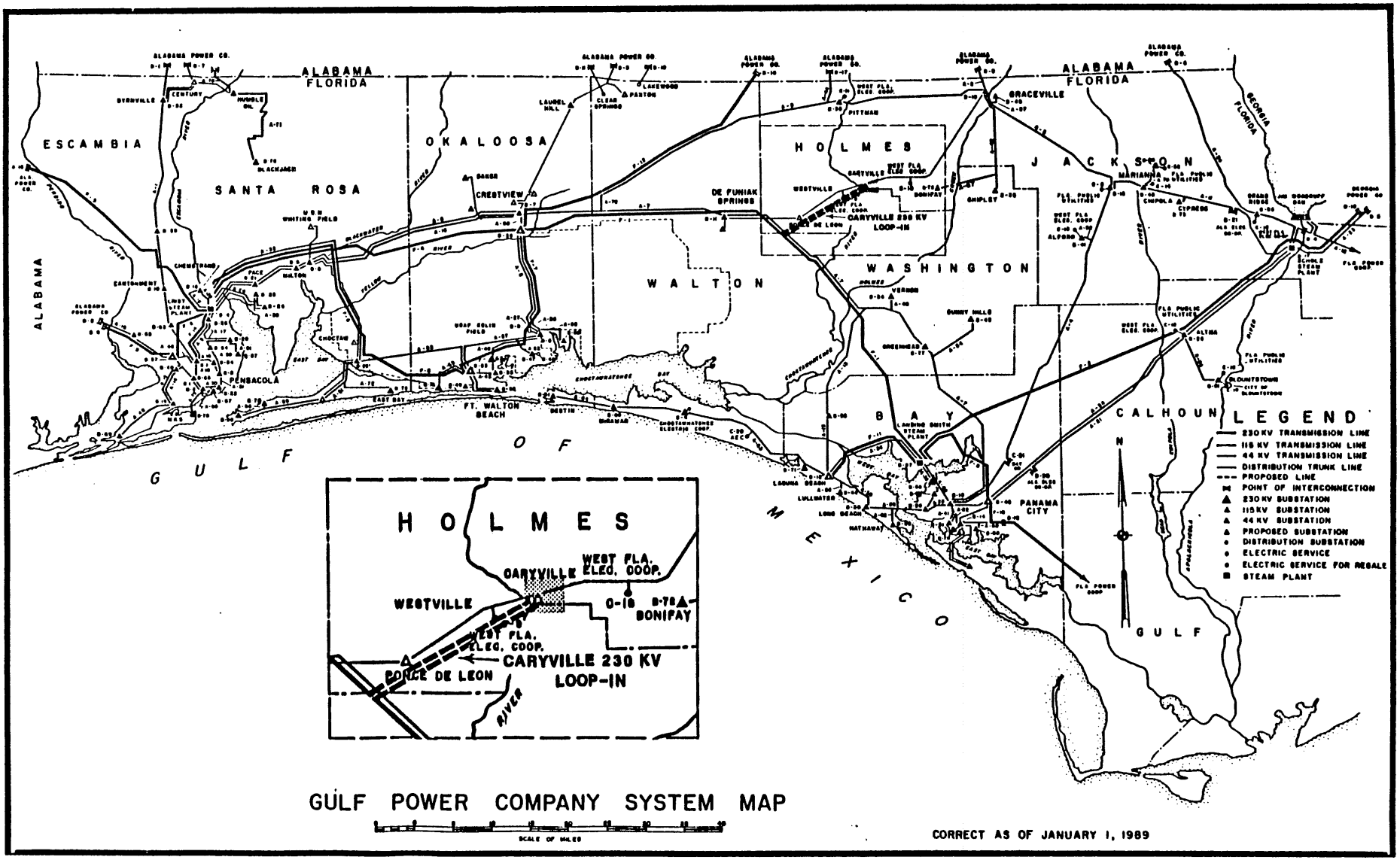
(1)	Plant Name & Unit	Caryville B
(2)	Status	This facility is planned but not authorized
(3)	Anticipated Construction Timing	In-Service May, 1997
(4)	Capacity	Summer 126.0 MW Winter 126.0 MW
(5)	Type	Combustion Turbine
(6)	Primary and Alternate Fuel	Primary - Natural Gas; Alternate - Light Oil (distillate)
(7)	Air Pollution Control Strategy	Steam Injection for NOx control
(8)	Cooling Method	NA
(9)	Total Site Area	Unknown
(10)	Anticipated Capital Investment	$ 55,200,000
(11)	Certification Status	Not applied
(12)	Status with Federal Agencies	Not applied

TYP FORM 8B

Utility: Gulf Power Company

Status Report and Specifications of Proposed
Directly-Associated Transmission Lines

(1)	Point of Origin and Termination	From Caryville site to the existing Smith - Shoal River 230 KV line
(2)	Number of Lines	Two (2)
(3)	Right-of-Way	Length: 14.0 miles Width: 225.0 feet (average)
(4)	Line Length	14.0 miles each
(5)	Voltage	230 KV
(6)	Anticipated Construction Timing	In-Service January, 1994
(7)	Anticipated Capital Investment	$17,100,000
(8)	Substations	None
(9)	Participation	None



GULF POWER COMPANY SYSTEM MAP

CORRECT AS OF JANUARY 1, 1989