TEN YEAR SITE PLAN 1990 - 1999

FOR ELECTRIC GENERATING FACILITIES

AND

ASSOCIATED TRANSMISSION LINES

APRIL, 1990



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, 1990

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CHAPTER I DESCRIPTION OF EXISTING FACILITIES

				UTI	LITY: GL TING GENE	UTILITY: GULF POWER COMPANY EXISTING GENERATING FACILITIES	ANY TIES			TYP FC Page 1	TYP FORM 1A Page 1 of 2	
()	(2)	(3)	(4)	(5) (6)	(9)	(2)	(8)	6)	(10) (11) Net Capability	(12)	(12) (13)	_
	4			Fuel	eſ	Com'l In-	Exptd	Gen Max	1	Fuel	Fuel Transp	ds
Plant Name	No.	Location	Туре	P.:	Alt	Mo/Yr	Mo/Yr	Nameptate KW	MU MU	Pri	Alt	٠.
Crist		Pensacola						1,229,000	1106.4 1106.4			1
		25/1N/30W										
	-		FS.	NG	웊	1/45	12/04	28,125	23.0 23.0	Я	¥	
	2		FS	NG	오	67/9	12/04	28, 125	22.0 22.0	Я.	¥	
	m		FS	SN N	오	9/52	12/04	37,500		占		
	7		FS	ပ	NG	65/2	12/14	93,750		¥		
	10		FS	ပ	NG	6/61	12/16	93,750	86.9 86.9	¥		
	9		FS	ပ	NG	2/20	12/15	369,750	۲,	¥	7	
	7		FS	ပ	:	8/73	12/18	578,000		M		
Lansing Smith		Panama City						381,850	392.3 392.3			
	-	MCI /87/00	FS.	ပ	:	9/92	12/15	149,600	165.9 165.9	S	:	
	~		FS	ပ	:	29/9	12/17	190,400		H	:	
	∢		5	2	:	5/71	12/01	41,850		¥	:	
Scholz		Sneads						98,000				
	-	W / NC / Z	£	ပ	:	3/53	12/08	49,000	47.2 47.2	æ	ž	
	2		FS	ပ	:	10/53	12/08	49,000		R		
8												
Daniel		Jackson County, MS						548,250	514.8 514.8			
		42/5S/6W										
	-		FS	ပ	웊	2//6	12/12	274,125	257.6 257.6	S.	¥	
	2		FS	ပ	웊	6/81	12/16	274,125	257.2 257.2	R	¥	
€												
Scherer	m	Monroe County, GA	FS	ပ	:	1/87	12/27	222,750	212.2 212.2	8	:	
						Total System	Total System as of December 31, 1989	er 31, 1989	2320.5 2320.5			

1

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%).

Company
Power
eul f
Utility:

TYP FORM 18

Existing Generating Facilities

Land Use and Investment

€	(2) Land Area	(3) Area	(,)	(5) ant Capital Inves	(5) (6) Plant Capital Investment in (\$1,000)	8
Plant Name	Total	In Use Acres	Land	Site (B) Improvements	Buildings & Equipment (C)	Total
Steam Total			0,814	006,151	656,636	815,350
Crist	989	350	1,792	56,528	252,889	311,209
Lansing Smith	1,185	007	197	17,987	66,799	87,983
Scholz	293 (0)	168 (D)	45 (E)	5,555 (E)	22,951 (E)	28,551 (E)
Daniel	2,657 (F)	500 (F)	3,666	38,595 (6)	158,410 (G)	200,671
Scherer	12,158	6,500	1,114	33,225	152,370	186,709
Caryville (Weather Station)	ation)			10	217	227
Combustion Turbine Total	E			768	3,429	4,197
Lansing Smith CT				768	3,429	4,197

As of 12/31/89.

9

Includes buildings.

Buildings excluded due to inclusion in Col. 5

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

Gulf Power's portion of Plant Daniel only.

Scherer Plant information refers to total area owned by Georgia Power and area owned jointly £ 6 6 6 6 £

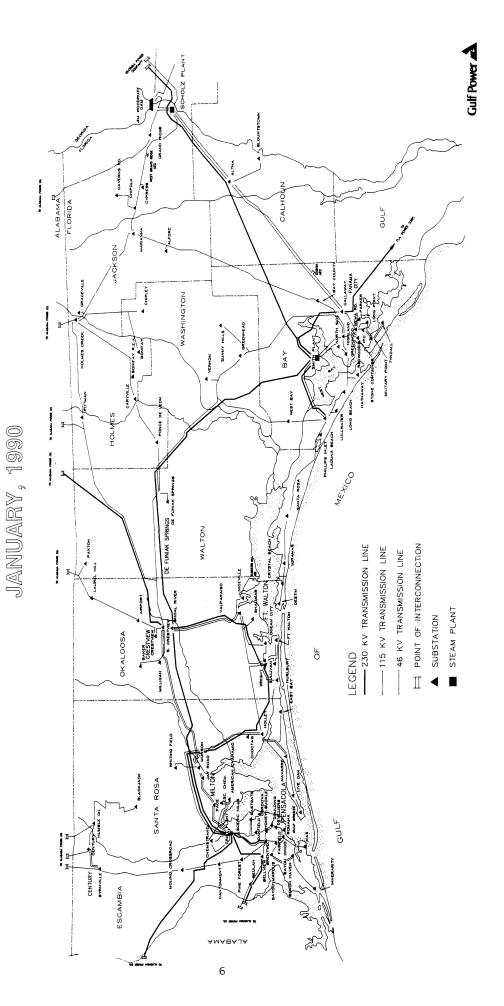
by Gulf and Georgia Power. "In Use Acres" includes cooling water lake. Gulf Power's portion of Plant Scherer only. Includes acquisition adjustment in the amount of \$8,154,924.

	Utility: Gul	Utility: Gulf Power Company			TYP FORM 1C
	Existing Generating Facilities Environmental Considerations for Steam Generating Units	Existing Generating Facilities al Considerations for Steam Genera	ting Units		Page 1 01 2
3	(2)	(3)	(4)	(5)	(9)
		Flue	Flue Gas Cleaning		100
Plant Name	Unit	Particulate	SOX	NOX	Type
Crist	-	OL OL	o C	ОЦ	WCTM
	2	0	2	9	WCTM
	٤	õ	2	9	WCTM
	4	EP	2	2	WCTM
	5	ЕБ	2	9	WCTM
	9	EP	2	2	WCTM
	7	ЕÐ	2	92	WCTM
Lansing Smith	-	EP	6	2	015
	2	В	2	2	015
Scholz	-	EP	2	2	OTF
	2	EP	2	2	OTF
Daniel	-	EP	9	2	8
	2	Б	6	٤	5
Scherer	m	Eb	Ĉ.	on O	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



CHAPTER II FORECAST OF ELECTRIC POWER DEMAND

TYP FORM 2	PAGE 1 OF 3
UTILITY: GULF POWER COMPANY	

R CLASS
MERS BY CUSTOMER
Β¥
CUSTOMERS
P
NUMBER
AND
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND NUMBER OF CUSTOMERS BY CUSTOMER
F ENERGY
Ą
FORECAST
AND
HISTORY

(6)		AVERAGE KUH CONSUMPTION	PER CUSTOMER	57,564	58, 190	29,748	58,805	57,044	61,326	62,570	62,422	63,760	64,761	64,270	64,241	64,328	269,499	64,754	64,563	65,280	65,539	65,438	66,199
(8)	COMMERCIAL	AVERAGE NO. OF	CUSTOMERS	22,459	23,243	23,962	25,487	27,336	28,983	30,576	31,821	32,757	33,500	34,451	35,442	36,567	37,609	38,593	39,543	40,472	41,396	42,320	43,212
6			₹ .	1,293	1,352	1,432	1,499	1,559	1,777	1,913	1,986	2,089	2,169	2,214	2,277	2,352	2,433	5,499	2,553	2,642	2,713	2,769	2,861
(9)		AVERAGE KWH CONSUMPTION	PER CUSTOMER	12,959	12,591	12,169	12,254	12,057	12,221	12,729	12,763	12,883	13,173	13,093	12,961	12,921	12,953	12,972	12,955	12,998	12,970	12,976	12,987
(5)	IDENTIAL	AVERAGE NO. OF	CUSTOMERS	180, 166	187,489	194,228	201,714	212,379	223,908	232,816	239,362	244,859	250,038	255,473	262,224	270,128	277,194	283,874	290,269	596,469	302,805	309,120	315,006
(4)	RURAL AND RESIDENTIAL		GVH	2,335	2,361	2,364	2,472	2,561	2,736	2,964	3,055	3,155	3,294	3,345	3,399	3,490	3,590	3,682	3,761	3,853	3,927	4,011	4,091
(3)		MEMBERS	PER HOUSEHOLD	2.68	2.67	2.65	2.60	2.53	2.51	2.48	2.47	2,42	2,42	2.42	2.42	2.40	2.39	2.37	2.36	2.35	2.33	2.32	2.31
(2)			POPULATION	481,996	499,711	514,362	524,509	536,990	561,608	576,484	591,854	593,520	603,858	618,018	633,769	648,194	661,338	673,635	685,079	695,525	706,842	717,167	726,698
9			YEAR	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999

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

(15) (16)	OTHER TOTAL	SALES TO SALES TO	ULTIMATE ULTIMATE	CONSUMERS CONSUMERS	GWH		0 5,136	0 5,209	0 5,241	0 5,597	0 5,905	0 6,299	96,636	968'9 0	0 7,226	0 7,574	0 7,699	0 7,910	0 8,104	0 8,310	667'8 0	8,678	0 8,911	960'6 0	0 9,273	0 9,473
(14)		STREET AND S	HIGHWAY	LIGHTING	GWH		14	14	14	14	14	14	14	14	15	16	16	17	17	17	18	18	19	19	20	20
(13)			AVERAGE KWH	CONSUMPTION	PER CUSTOMER		9,002,560	8,983,485	8,421,988	9,161,324	9,894,417	9,782,246	8,949,099	9,019,271	9,553,842	9,147,029	9,116,555	9,358,640	9,350,331	6,337,709	9,349,365	9,422,653	9,511,043	9,553,332	9,581,889	9,581,468
(12)	INDUSTRIAL		AVERAGE	NO. OF	CUSTOMERS		166	165	170	176	179	181	195	504	506	529	233	237	240	243	546	546	252	255	258	261
C13					EVH	:	1,494	1,482	1,432	1,612	1,771	1,771	1,745	1,840	1,968	2,095	2,124	2,218	2,244	2,269	2,300	2,346	2,397	2,436	2,472	2,501
(10)					YEAR	<u>:</u>	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999

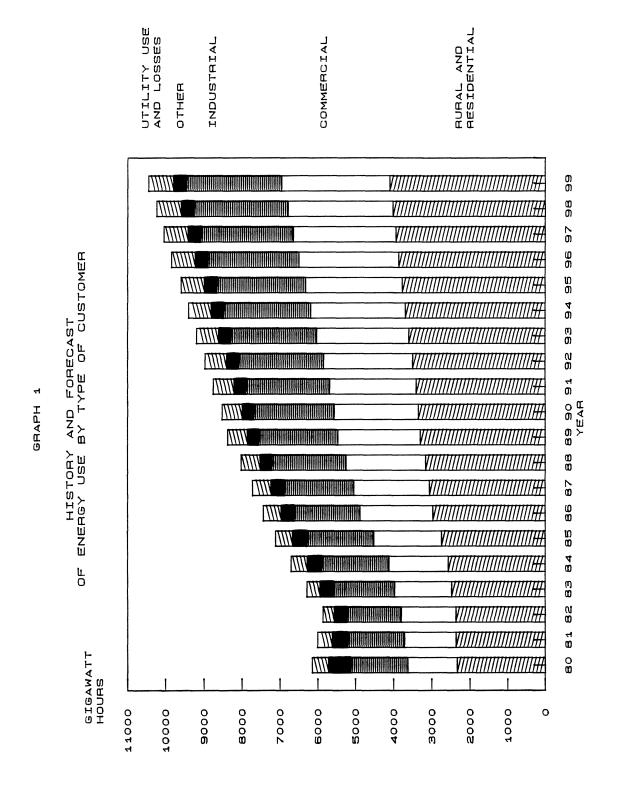
GULF POWER COMPANY

TYP FORM 2 PAGE 3 OF 3

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

(22)	TOTAL	NO. OF	CUSTOMERS		202,851	210,954	218,419	227,439	239,956	253, 135	563,646	271,449	277,881	283,830	290,219	297,965	306,997	315,108	322,774	330,123	337,255	344,518	351,760	358,540
(21)	ОТНЕК	CUSTOMERS	(AVERAGE NO.)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	09	22	59	62	63	63	79	79	29	63	95	95	79	95	79	29	95	95	79	62
(20)	NET ENERGY	FOR LOAD	GWH		6,148	6,004	5,859	6,284	6,703	7,115	7,435	7,723	8,016	8,378	8,522	8,752	8,964	9,188	6,394	9,588	9,839	10,039	10,231	10,447
(19)	UTILITY USE AND	LOSSES	GWH		438	395	306	351	433	458	475	667	202	528	240	555	298	583	265	609	929	638	920	999
(18)	SALES FOR	RESALE	HMD		574	400	313	336	364	359	324	328	283	276	282	288	262	295	298	300	303	306	308	311
(17)			YEAR	:	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999

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



			Utility: Gulf Power Company (a) (b) Energy Sources	Power Company (a) (b) ources			<u>i- ă</u>	TYP FORM 3A Page 1 of 2
Energy Sources	ources		Actual 1988	Actual 1989	1990	1991	1992	1993
Annual Energy Interchange	Interchange	ВМН	(3, 193)	(416)	(220)	(1,817)	(2,572)	(2,116)
Nuclear		GWH	None	None	None	None	None	None
Coal		GWH	11,163	8,773	8,741	10,568	11,528	11,294
Residual	-Total	E GUH	0 0	- -	0 0	00	0 0	0 0
	20	er.	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	m	2	0	0	-	-
	Steam	GWH	None	None	None	None	None	None
	ខ	GWH	None	None	None	None	None	None
	ct	GWH	23	2	0	0	-	-
	Diesel	HMS	None	None	None	None	None	None

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

None None

None None None

None None None

None None None

None None None

None

None

Diesel

None

EVEL GUE

Steam -Total

Natural Gas

ខេដ

None

None

None

None

None

None

SVH.

9,188

8,964

8,752

8,522

8,378

8,016

GVH GVH

Net Energy for Load

Other

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

		Energy Sources	ources				
Energy Sources		1994	1995	1996	1997	1998	1999
Annual Energy Interchange	ВМН	(2,147)	(2,562)	(2,292)	(3,071)	(2,771)	(2,676)
Nuclear	ВМ	None	None	None	None	None	None
Coal	СМН	11,529	12,107	12,095	13,054	12,886	12,972
Residual -Total	GWH	0	0		0	0	0
Steam	HM5	0	0	0	0	0	0
ວວ	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	HMS	0	-	0	0	0	0
Steam	GWH	None	None	None	None	None	None
ວ	GWH	None	None	None	None	None	None
CT	GWH	0	-	0	0	0	0
Diesel	GWH	None	None	None	None	None	None
Natural Gas •Total	HAS	12	77	36	28	116	151
Steam	GWH	12	7	10	20	19	57
55	GWH	None	None	None	None	None	None
CT	GWH	None	35	92	36	26	127
Diesel	BWH	None	None	None	None	None	None
Other	GWH	None	None	None	None	None	None
Net Energy for Load	GVH	9,394	9,588	9,839	10,039	10,231	10,447

⁽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.

		Ut	Utility: Gulf Power Company	ower Company				TYP FORM 3B Page 1 of 2
			Fuel Requ	Fuel Requirements				
Fuel Requirements	ments		Actual 1988	Actual 1989	1990	1991	1992	1993
Nuclear		12 BTUx10	None	None	None	None	None	None
Coal		1000 TON	4,704	3,803	3,755	4,450	4,847	4,749
Residual	-Total	1000 BBL	00		00	00	0 0	0 0
	Steam	1000 BBL	None	None	None	None	None	None
	ב	1000 BBL	None	None	None	None	None	None
	Diesel	1000 BBL	None	None	None	None	None	None
Distillate	-Total	1000 BBL	32	33	31	17	21	20
	Steam	1000 BBL	None	None	None	None	None	None
	ct	1000 BBL	80	9	-	0	2	-
	Diesel	1000 BBL	None	None	None	None	None	None
Natural Gas	-Total	1000 MCF	693	707	ھ	14	111	138
	Steam	1000 MCF	693	707	80	14	111	138
	ខ	1000 MCF	None	None	None	None	None	None
	C 1	1000 MCF	None	None	None	None	None	None
	Diesel	1000 MCF	None	None	None	None	None	None
		9						
0ther		BTUx10	None	None	None	None	None	None
Annual Avg. Fossil Net H.R.	Fossil	вти/кин	10,461	10,621	10,496	10,262	10,257	10,258

			Utility: Gul	Utility: Gulf Power Company			TYP	TYP FORM 38
			Fuel Requirements	irements			ño L	7 - 0 - 7 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9
Fuel Requirements	ments		1994	1995	1996	1997	1998	1999
		12						
Nuclear		BTUx10	None	None	None	None	None	None
Coal		1000 TON	4,837	5,058	5,049	5,444	5,365	5,397
Residual	-Total	1000 BBL	0	0	0	0	0	0
	Steam	1000 BBL	0	0	0	0	0	0
	ខ	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	18	17	18	18	18
	Steam	1000 BBL	20	17	16	17	17	17
	ខ	1000 BBL	None	None	None	None	None	None
	c1	1000 BBL	-	-	-	-	-	-
	Diesel	1000 BBL	None	None	None	None	None	None
Natural Gas	-Total	1000 MCF	193	525	785	754	1,477	1,920
	Steam	1000 MCF	193	103	170	324	310	397
	ខ	1000 MCF	None	None	None	None	None	None
	C1	1000 MCF	None	725	312	430	1,167	1,523
	Diesel	1000 MCF	None	None	None	None	None	None
		9						
Other		BTUx10	None	None	None	None	None	None
Annual Avg. Fossil Net H.R.	ossil	вти/кин	10,239	10,211	10,205	10,202	10,195	10,199

UTILITY: GULF POWER COMPANY

TYP FORM 4 PAGE 1 OF 2

LOAD
졄
ENERGY
NET
ANNUAL
AND
. PEAK DEMAND
PEAK
FORECAST OF SEASONAL
P
FORECAST
AND
HISTORY AND

SUMMER PEAK DEMAND - MW ANNUAL NEI ENEKGT FOK LOAD FIRM GWH
WHOLESALE TOTAL INTERRUPT TOTAL RETAIL
0 1,392
0 1,309
0
, 1,355 0 1,355 5,5
0 1,395
0 1,454
0 1,684
0 1,624
0 1,620
0 1,698
1,750 0 1,750
0 1,775
69 1,819 0 1,819
1,853 0
72 1,931 0 1,931
0
0
2,051 0 2,051
0 2,092

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

UTILITY: GULF POWER COMPANY

TYP FORM 4 PAGE 2 OF 2

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

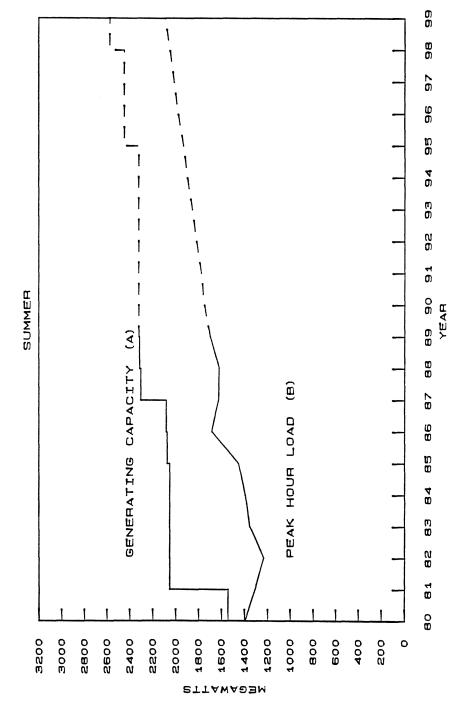
WINTER PEAK DEMAND - MW

(a) WHOLESALE 106 68 68 72 72 72 60 60 56 57 57 57 57 57 57 57 58	a) (a) : TOTAL	INTERRUPT	
106 68 68 77 77 56 57 57 57 57 58			TOTAL
106 68 77 47 57 57 57 57 57 58			
68 87 77 57 57 57 57 58	1,189	0	1,189
59 81 47 57 57 55 55 57 57 58	1,217	0	1,217
72 81 47 56 57 57 55 57 57 58	1,037	0	1,037
81 57 58 57 53 55 57 57	1,306	0	1,306
47 50 54 55 55 57 58	1,531	0	1,531
57 60 55 54 55 55 57 88	1,412	0	1,412
60 55 57 55 55 57 58	1,360	0	1,360
56 57 55 55 57 58	1,402	0	1,402
57 55 55 57 57	1,554	0	1,554
55 55 56 57 57	1,821	0	1,821
55 56 57 57 58	1,545	0	1,545
55 56 57 58	1,588	0	1,588
56 57 57 58	1,615	0	1,615
57 57 58	1,654	0	1,654
57 58	1,689	0	1,689
58	1,736	0	1,736
	1,777	0	1,777
58	1,814	0	1,814
59	1,854	0	1,854
59		0	1,891

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

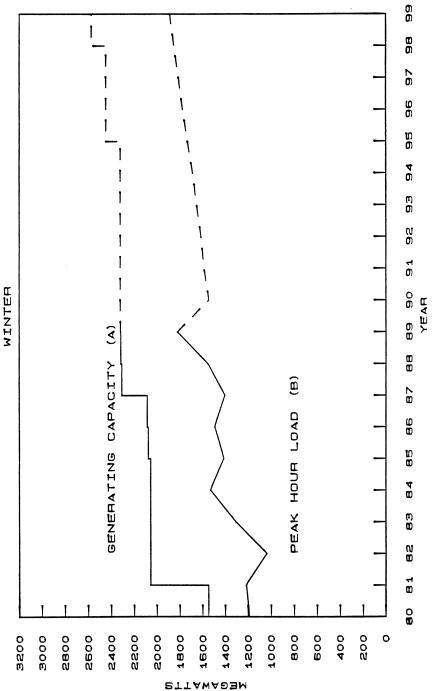
(b) The demand shown for the 1989-90 winter represents the actual peak demand experienced during the extreme arctic weather of December, 1989. Since this value greatly exceeds the projected 1989-90 winter peak demand, it is being reported in lieu of the projected value.

GRAPH 2 HISTORY AND FORECAST OF LOAD AND CAPACITY ADDITIONS



SHOWS INSTALLED GENERATING CAPACITY ONLY: REFER TO FORM 74 FOR NET AVAILABLE CAPACITY. INCLUDES CAPACITY ALLOCATED TO CERTAIN RESALE CUSTOMERS BY SEPA. ₹0 NOTE:

GRAPH 2 HISTORY AND FORECAST OF LOAD AND CAPACITY ADDITIONS



SHOWS INSTALLED GENERATING CAPACITY ONLY; REFER TO FORM 7B FOR NET AVAILABLE CAPACITY. INCLUDES CAPACITY ALLOCATED TO CERTAIN RESALE CUSTOMERS BY SEPA. **3 9** NOTE:

UTILITY: GULF POWER COMPANY

TYP FORM 5

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

FORECAST

ACTUAL

	1989		1990		1991	
	PEAK DEMAND	NEL	PEAK DEMAND	NEL	PEAK DEMAND	NEL
MONTH	¥	BWH	2	HMS	₹	3
:		:		:		:
JAN	1,123	581	1,519	751	1,545	761
FEB	1,554	574	1,151	574	1,187	591
MAR	1,339	809	1,083	709	1,143	641
APR	1,193	579	986	299	1,002	574
MAY	1,528	969	1,391	705	1,427	726
NOP	1,576	812	1,680	864	1,728	868
JUL	1,690	872	1,750	006	1,773	606
AUG	1,698	903	1,688	206	1,714	917
SEP	1,644	792	1,622	962	1,657	816
00.1	1,298	637	1,294	599	1,332	622
NOV	1,226	583	605	570	1,014	583
DEC	1,821	292	1,231	169	1,278	717
		:		:		:
TOTAL		8,378		8,522		8,752

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 $\pmb{\xi}$ 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 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 dwelling depends the operating and performance new on 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:

$$E = E_0 + \sum_{i=1}^{N} E_i$$

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 and 1988 Residential Market Surveys, billing cycle monthly energy data, and billing cycle monthly weather data.

The residential sales forecast reflects the continued impacts of Gulf Power's Good Cents Home program and efficiency improvements undertaken by customers as a result of Centsable Energy Check audits, as well as conversions to higher efficient outdoor lighting. Additional information on the Residential Conservation programs and program features are provided in the Conservation section.

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 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

7. Elementary/Secondary Schools

2. Offices

8. Colleges/Trade Schools

3. Retail and Personal Services 9. Hospitals/Health Services

4. Public Utilities

10. Hotels/Motels

Automotive Services

11. Religious Organizations

6. Restaurants

12. Miscellaneous

The Commercial Sales forecast reflects the continued impacts of Gulf Power's Commercial Good Cents building program and efficiency improvements undertaken by customers as a result of Commercial Energy Audits and Technical Assistance Audits, as well as conversions to higher efficient outdoor lighting. Additional information on the Commercial Conservation programs and program features are provided in the Conservation section.

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-three 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.

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

F. COMPANY USE & INTERDEPARTMENTAL ENERGY

The 1990 Annual Forecast for Company and Interdepartmental energy usage was based on recent historical values, with appropriate adjustments to reflect increases in energy requirements through 1989, for new Company facilities. The 1990 forecasted Company usage was then projected through the year 2014, 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.

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:

 $L_{i} = \sum_{R=1}^{N_{R}} L_{R,i} + \sum_{C=1}^{N_{C}} L_{C,i} + \sum_{L_{I,i}} L_{I,i} + \text{Misc}_{i}$ 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; $L_{I,i}$ = other demands (wholesale, street lighting, losses, Company use) in hour i.

IV. CONSERVATION PROGRAMS

As mentioned earlier, Gulf's forecast of energy sales and peak demand reflect the continued impacts of our conservation programs. The following provides a listing of the conservation programs and program features in effect and estimates of reductions in peak demand and net energy for load reflected in the forecast as a result of these programs.

A. RESIDENTIAL CONSERVATION

In the residential sector, Gulf's Good Cents New Home program is designed to make cost effective increases in the efficiencies of the new home construction market above that currently being provided by placing additional requirements on cooling equipment efficiencies and sizing, increased water heating efficiencies, increased insulation levels in walls, ceilings, and floors, and tighter restrictions on glass area.

Gulf's Good Cents Improved Home program is designed to make cost effective increases in efficiencies in the existing home market by requiring improvements in the insulation levels in walls, ceilings, and floors, and increased efficiency requirements on the heating and cooling systems and water heating systems.

Further conservation benefits are achieved in the existing home market with Gulf's Residential Energy Audit program which is designed to provide existing residential customers with cost-effective energy conserving options that increase comfort and

reduce operating costs. The goal of this program is to upgrade the customer's home to the Good Cents Improved Home standard by providing specific whole house recommendations, a list of qualified companies who provide installation services, and information on "low-interest" financing.

Additional conservation benefits are realized in the residential sector through Gulf's Outdoor Lighting program by conversion of existing less efficient mercury vapor lighting to higher efficient high pressure sodium lighting.

B. COMMERCIAL CONSERVATION

In the commercial sector, Gulf's Good Cents Building program is designed to make cost effective increases in efficiencies in both new and existing commercial buildings with requirements resulting in energy conserving investments that address the thermal efficiency of the building envelope, interior lighting, heating and cooling equipment efficiency, and solar glass area. Additional recommendations are made, where applicable, on energy conserving options that include thermal storage, heat recovery systems, water heating heat pumps, solar applications, energy management systems, and high efficiency outdoor lighting.

The Commercial Energy Audit (EA) and Technical Assistance Audit (TAA) programs are designed to provide commercial customers with assistance in identifying cost effective energy conservation opportunities and introduce them to various technologies which will lead to improvements in the energy efficiency level of their

business. The program is designed with enough flexibility to allow for a simple walk through analysis (EA) or a detailed economic evaluation of potential energy improvements through a more in-depth audit process (TAA) which includes equipment energy usage monitoring, computer energy modeling, life cycle equipment cost analysis, and feasibility studies.

C. STREET LIGHTING CONVERSION

Gulf's Street Lighting program is designed to achieve additional conservation benefits by conversion of existing less efficient mercury vapor lighting to higher efficient high pressure sodium lighting.

D. CONSERVATION RESULTS SUMMARY

The following table provides direct estimates of the energy savings (reductions in peak demand and net energy for load) realized by Gulf's conservation programs. These numbers relfect estimates of conservation undertaken by customers as a result of Gulf Power Company's involvement. The conservation without Gulf's involvement has contributed to further unquantifiable reductions to demand and net energy for load. These unquantifiable additional reductions are captured in the time series regressions in our demand and energy forecasts.

HISTORICAL TOTAL CONSERVATION PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER	WINTER	NET ENERGY
	PEAK	PEAK	FOR LOAD
	(KW)	(KW)	(KWH)
1989	160,245	207,891	384,995,884

1990 BUDGET FORECAST TOTAL CONSERVATION PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1990	11,510	14,165	28,453,803
1991	12,341	16,946	30,284,396
1992	13,283	17,614	32,469,259
1993	13,140	17,466	32,263,974
1994	13,188	17,896	32,455,011
1995	13,267	18,120	32,756,312
1996	13,461	18,655	33,305,931
1997	13,964	19,816	34,534,145
1998	14,322	20,320	35,449,998
1999	14,216	20,086	35,348,013

1990 BUDGET FORECAST TOTAL CONSERVATION PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER	WINTER	NET ENERGY
	PEAK	PEAK	FOR LOAD
	(KW)	(KW)	(KWH)
1990	171,755	222,055	413,449,688
1991	184,096	239,001	443,734,084
1992	197,379	256,615	476,203,342
1993	210,519	274,081	508,467,316
1994	223,706	291,977	540,922,327
1995	236,974	310,096	573,678,638
1996	250,434	328,751	606,984,569
1997	264,398	348,567	641,518,714
1998	278,721	368,887	676,968,712
1999	292,937	388,973	712,316,726

V. 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.

	Small Power Producers		Small Power Producers
Year	Net Capability (MW)	Year	Net Capability (MW)
1989	11	2002	45
1990	11	2003	45
1991	11	2004	45
1992	11	2005	45
1993	11	2006	45
1994	11	2007	45
1995	40	2008	45
1996	40	2009	45
1997	45	2010	45
1998	45	2011	45
1999	45	2012	45
2000	45	2013	45
2001	45	2014	45

CHAPTER III

FORECAST OF

FACILITIES REQUIREMENTS

UTILITY: GULF POWER COMPANY

PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

		€	(2)	(5) (6)	9	(8)	6	(10)	(10) (11)	(12)	(12) (13)	(14)	
Unit			2	Fuel	Const	Com'l In- Service	Gen Max Nameplate	Net Cap Summer	Net Capability Summer Winter	Fuel	Fuel Transp		
. No.	Location	Туре	P.	Pri Alt	Mo/Yr	Mo/Yr	3	£	₹	Pri	Alt	Status	•
	Unknown	CT	NG	9	26/90	05/95	126,000	126.0	126.0 126.0	귙	¥	۵	
	Unknown	CT	Š	2	96/90	05/98	126,000	126.0	126.0 126.0	굽	¥,	۵	
						TOTAL		252.0	252.0 252.0				
Abbreviations: CT - Combustion Turbine NG - Natural Gas LO - Light Oil PL - Pipeline TK - Truck P - Planned, but not au	 :T - Combustion Turbine IG - Natural Gas :O - Light Oil !L - Pipeline :K - Truck Planned, but not authorized by utility 	ed by utility											

UTILITY: GULF POWER COMPANY

FORECAST OF CAPACITY, DEMAND, AND SCHEDULED MAINTENANCE

2	
J	
PEAK	
SUMMER	
Ы	
TIME	
AT	

ARGIN AFTER	MAINTENANCE				PER CENT	OF PEAK	:	25.5%	23.0%	17.2%	15.3%	13.7%	16.4%	13.6%	11.6%	15.8%	13.7%
MARGIN	MAINI					₹	:	277	7 08	313	584	529	316	569	534	325	586
		•		SCHEDULED	MAINTENANCE	æ		NONE									
ARGIN BEFORE	NANCE	· · · · · · · · · · · · · · · · · · ·			PER CENT	OF PEAK		25.5%	23.0%	17.2%	15.3%	13.7%	16.4%	13.6%	11.6%	15.8%	13.7%
MARGIN	MARGIN BEFOR					¥	i	255	408	313	284	259	316	569	234	325	286
			FIRM	PEAK	DEMAND	¥	i	1750	1775	1819	1853	1897	1931	1978	2015	2051	2002
			TOTAL	AVAILABLE	CAPACITY	M		2197	2183	2132	2137	2156	2547	2247	5549	2376	2378
			FIRM	CAPACITY	IMPORT	MW (B)		(124)	(138)	(189)	(184)	(165)	(200)	(200)	(198)	(197)	(195)
			TOTAL	INSTALLED	CAPACITY	₹		2321	2321	2321	2321	2321	2447	2447	2447	2573	2573
						YEAR	:	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999

(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. NOTE:

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

UTILITY: GULF POWER COMPANY

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

					MARGI	MARGIN BEFORE MAINTENANCE		MARGI	MARGIN AFTER MAINTENANCE
	TOTAL	FIRM	TOTAL	FIRM					
	INSTALLED	CAPACITY	AVAILABLE	PEAK			SCHEDULED		
	CAPACITY	IMPORT	CAPACITY	DEMAND		PER CENT	MAINTENANCE		PER CENT
AR.	æ	MW (B)	£	æ	Ŧ	OF PEAK	æ	¥	OF PEAK
:					:			:	
1990-91	2321	(124)	2197	1545	652	42.2%	NOT	652	42.2%
1-92	2321	(138)	2183	1588	295	37.5%	AVAILABLE	295	37.5%
:-93	2321	(163)	2158	1615	543	33.6%		543	33.6%
3-94	2321	(183)	2138	1654	787	29.3%		787	29.3%
-95	2321	(165)	2156	1689	195	27.6%		197	27.6%
96-	2447	(200)	2547	1736	511	29.4%		511	29.4%
26-9	2447	(198)	5549	1777	7.2	26.6%		725	26.6%
98	2447	(197)	2250	1814	436	24.0%		436	24.0%
% -	2573	(195)	2378	1854	524	28.3%		524	28.3%
-00	2573	(192)	2381	1891	7490	25.9%		067	25.9%

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, CONTRACTED CAPACITY ALLOCATED TO CERTAIN RESALE CUSTOMERS BY THE SOUTHEASTERN POWER ADMINISTRATION (SEPA), AND ESTIMATED CONTRACTED DEMAND SIDE OPTIONS.

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 1990 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 May of the year 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

TYP FORM 8A Page 1 of 2

Utility: Gulf Power Company

Status Report Specifications of Proposed Generating Facilities	Peaking Unit	This facility is planned but not authorized	ion Timing In-Service May, 1995	Summer 126.0 MW Winter 126.0 MW	Combustion Turbine	Fuel Primary - Natural Gas; Alternate - Light Oil (distillate)	Strategy Steam Injection for NOx control	NA NA	Uhknown	westment \$ 53,697,420	Not applied	encies Not applied
Specificatio	Plant Name & Unit	Status	Anticipated Construction Timing	Capacity	Туре	Primary and Alternate Fuel	Air Pollution Control Strategy	Cooling Method	Total Site Area	Anticipated Capital Investment	(11) Certification Status	Status with Federal Agencies
	9	(2)	(3)	(4)	(5)	9)	3	(8)	6	(10)	(11)	(12)

TYP FORM 8A Page 2 of 2

Specifications of Proposed Generating Facilities Status Report

	specifications of Proposed Generaling Factifies	refating racitities
€	Plant Name & Unit	Peaking Unit
(2)	Status	This facility is planned but not authorized
(3)	Anticipated Construction Timing	In-Service May, 1998
(4)	Capacity	Summer 126.0 MW Winter 126.0 MW
(2)	Туре	Combustion Turbine
9	Primary and Alternate Fuel	Primary - Natural Gas; Alternate - Light Oil (distillate)
9	Air Pollution Control Strategy	Steam Injection for NOx control
(8)	Cooling Method	NA
6	Total Site Area	Unknown
(10)	Anticipated Capital Investment	\$ 61,195,680
C11)	Certification Status	Not applied
(12)	(12) Status with Federal Agencies	Not applied

Status Report and Specifications of Proposed Directly-Associated Transmission Lines

Unknown	Unknown	Length: unknown Width: unknown	Unknown	230 KV	In-Service January,	Unknown	None	None
(1) Point of Origin and Termination	(2) Number of Lines	Right-of-Way	(4) Line Length	(5) Voltage	(6) Anticipated Construction Timing	(7) Anticipated Capital Investment	Substations	(9) Participation
€	(2)	(3)	(4)	(5)	(9)	3	(8)	6)

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