TEN YEAR SITE PLAN
1995 - 2004

FOR ELECTRIC GENERATING FACILITIES
AND
ASSOCIATED TRANSMISSION LINES

APRIL, 1995

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 Resource Planning and Management
Bureau of State Planning
Power Plant Siting Program

APRIL 1, 1995

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Chapter IV

SITE DESCRIPTION AND IMPACT

CHAPTER I

DESCRIPTION OF EXISTING FACILITIES

UTILITY: GULF POWER COMPANY
EXISTING GENERATING FACILITIES

(1) Plant Name	(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
Crist		Escambia County 25/1N/30W						1,229,000	1105.2	1105.2		
	1		FS	NG	HO	1/45	12/04	28,125	24.0	24.0	PL	TK
	2		FS	NG	HO	6/49	12/04	28,125	25.1	25.1	PL	TK
	3		FS	NG	HO	9/52	12/04	37,500	37.0	37.0	PL	TK
	4		FS	C	NG	7/59	12/14	93,750	88.0	88.0	WA	PL
	5		FS	C	NG	6/61	12/16	93,750	87.0	87.0	WA	PL
	6		FS	C	NG	5/70	12/15	369,750	327.0	327.0	WA	PL
	7		FS	C	NG	8/73	12/18	578,000	517.1	517.1	WA	PL
Lansing Smith		Bay County 36/2S/15W						381,850	386.9	395.1		
	1		FS	C	--	6/65	12/15	149,600	162.0	162.0	WA	--
	2		FS	C	--	6/67	12/17	190,400	193.6	193.6	WA	--
	A		CT	LO	--	5/71	12/01	41,850	31.3	39.5	TK	--
Scholz		Jackson County 12/3N/7W						98,000	98.1	98.1		
	1		FS	C	--	3/53	12/08	49,000	49.6	49.6	RR	WA
	2		FS	C	--	10/53	12/08	49,000	48.5	48.5	RR	WA
(A) Daniel		Jackson County, MS 42/5S/6W						548,250	540.7	540.7		
	1		FS	C	HO	9/77	12/22	274,125	268.0	268.0	RR	TK
	2		FS	C	HO	6/81	12/26	274,125	272.7	272.7	RR	TK
(A) Scherer	3	Monroe County, GA	FS	C	--	1/87	12/27	222,750	210.2	210.2	RR	--
						Total System as of January 1, 1995			2341.1	2349.3		

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) Land Area Owned		(4)	(5) Plant Capital Investment in ($1,000)	(6)	(7)
Plant Name	Total Acres	In Use Acres	Land & Land Rights	Site Improvements (B)	Buildings & Equipment	Total
Steam Total			6,908		885,078	891,986
Crist	680	350	1,792		369,529	371,321
Lansing Smith	1,340	400	612		99,837	100,449
Scholz	293 (C)	168 (C)	45 (D)		29,447 (D)	29,492 (D)
Daniel	2,657 (E)	500 (E)	3,666 (F)		212,625 (F)	216,291 (F)
Scherer	12,158	9,500	793		173,640	174,433
Caryville (Weather Station)					0	0
Combustion Turbine Total					4,252	4,252
Lansing Smith CT					4,252	4,252

(A) As of 12/31/94.
(B) Included in column 6.
(C) Daniel Plant information refers to total area owned jointly by Gulf and Mississippi Power.
(D) Gulf Power's portion of Plant Daniel only.
(E) 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.
(F) Gulf Power's portion of Plant Scherer only. Excludes acquisition adjustment in the amount of $6,881,836.

Utility: Gulf Power Company

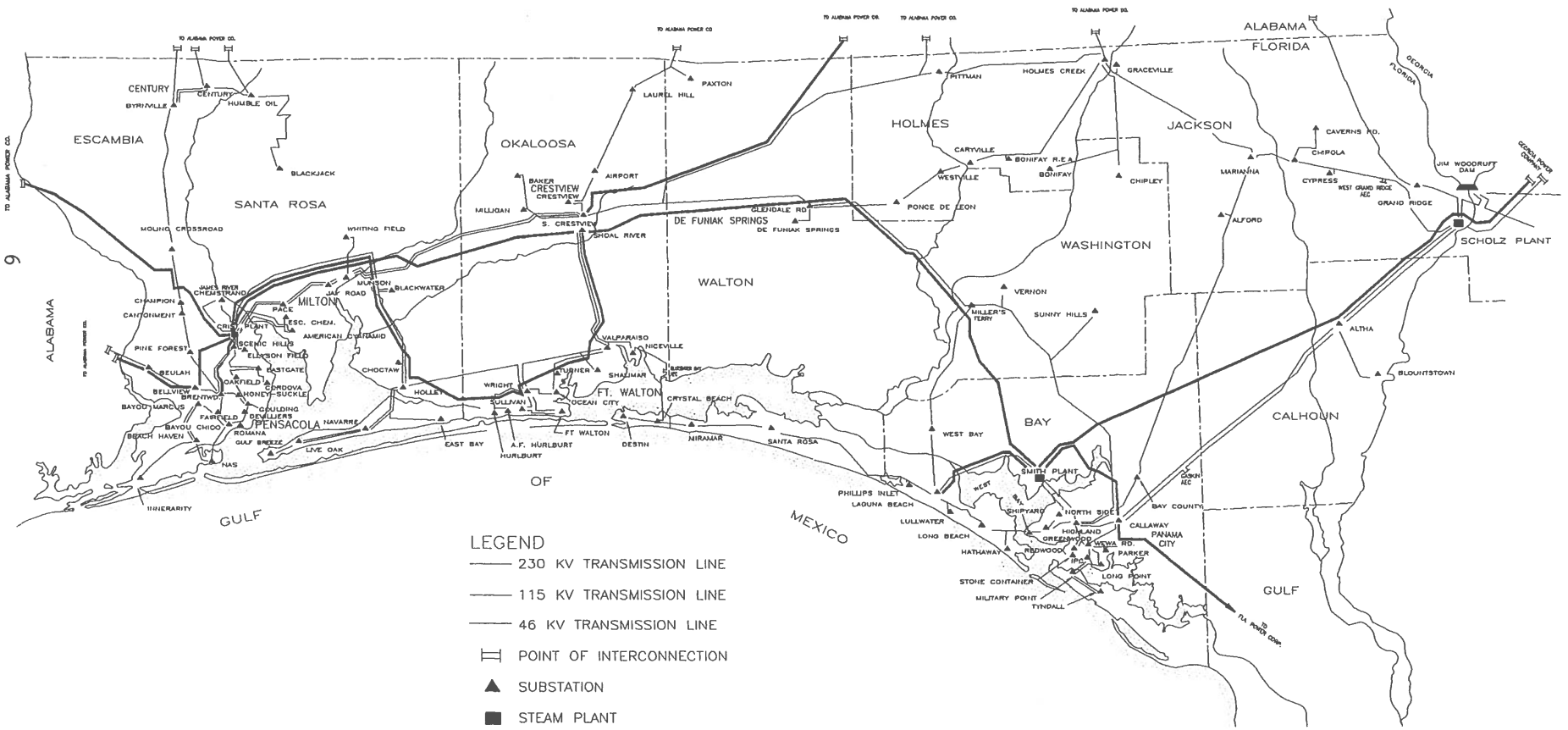
Existing Generating Facilities
Environmental Considerations for Steam Generating Units

(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	LNB	WCTM
	7	EP	no	LNB	WCTM
Lansing Smith	1	EP	no	no	OTS
	2	EP	no	LNB	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
LNB - Low NOx Burners

GULF POWER COMPANY
SYSTEM MAP
JANUARY, 1995



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
1985	531,204	2.37	2,736	223,908	12,221	1,777	28,983	61,326
1986	543,337	2.33	2,964	232,816	12,729	1,913	30,576	62,570
1987	552,797	2.31	3,055	239,362	12,763	1,986	31,821	62,422
1988	559,857	2.29	3,155	244,859	12,883	2,089	32,757	63,760
1989	567,022	2.27	3,294	250,038	13,173	2,169	33,500	64,761
1990	573,606	2.25	3,361	255,129	13,173	2,218	33,957	65,305
1991	582,196	2.24	3,455	259,395	13,320	2,273	34,372	66,120
1992	594,419	2.24	3,597	265,374	13,553	2,369	36,009	65,796
1993	607,802	2.24	3,713	271,594	13,671	2,433	38,477	63,242
1994	613,600	2.21	3,752	278,215	13,486	2,549	39,989	63,739
1995	620,800	2.19	3,828	283,551	13,501	2,537	40,500	62,633
1996	627,200	2.18	3,885	287,108	13,532	2,566	41,280	62,150
1997	635,200	2.18	3,923	290,784	13,491	2,619	42,048	62,285
1998	644,000	2.18	3,989	295,268	13,510	2,684	42,825	62,662
1999	653,600	2.18	4,062	300,148	13,534	2,750	43,618	63,047
2000	663,200	2.17	4,136	305,343	13,544	2,816	44,413	63,409
2001	673,600	2.17	4,212	310,861	13,548	2,883	45,227	63,736
2002	684,800	2.16	4,296	316,686	13,566	2,951	46,068	64,048
2003	696,000	2.16	4,385	322,681	13,590	3,019	46,892	64,388
2004	707,200	2.15	4,480	328,833	13,622	3,090	47,699	64,771

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

UTILITY: 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
1985	1,771	181	9,782,246	14	0	6,299
1986	1,745	195	8,949,099	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	2,095	229	9,147,029	16	0	7,574
1990	2,178	247	8,817,297	17	0	7,774
1991	2,117	260	8,143,878	16	0	7,861
1992	2,179	262	8,318,456	16	0	8,161
1993	2,030	268	7,574,388	16	0	8,192
1994	1,847	280	6,596,837	16	0	8,164
1995	2,003	282	7,103,871	17	0	8,385
1996	1,990	285	6,983,366	17	0	8,458
1997	1,995	288	6,927,011	17	0	8,554
1998	2,009	291	6,904,272	18	0	8,699
1999	2,021	294	6,875,588	18	0	8,852
2000	2,027	297	6,825,333	18	0	8,997
2001	2,034	300	6,779,845	19	0	9,147
2002	2,041	303	6,735,872	19	0	9,307
2003	2,045	306	6,684,440	19	0	9,469
2004	2,054	309	6,646,957	20	0	9,643

UTILITY: GULF POWER COMPANY

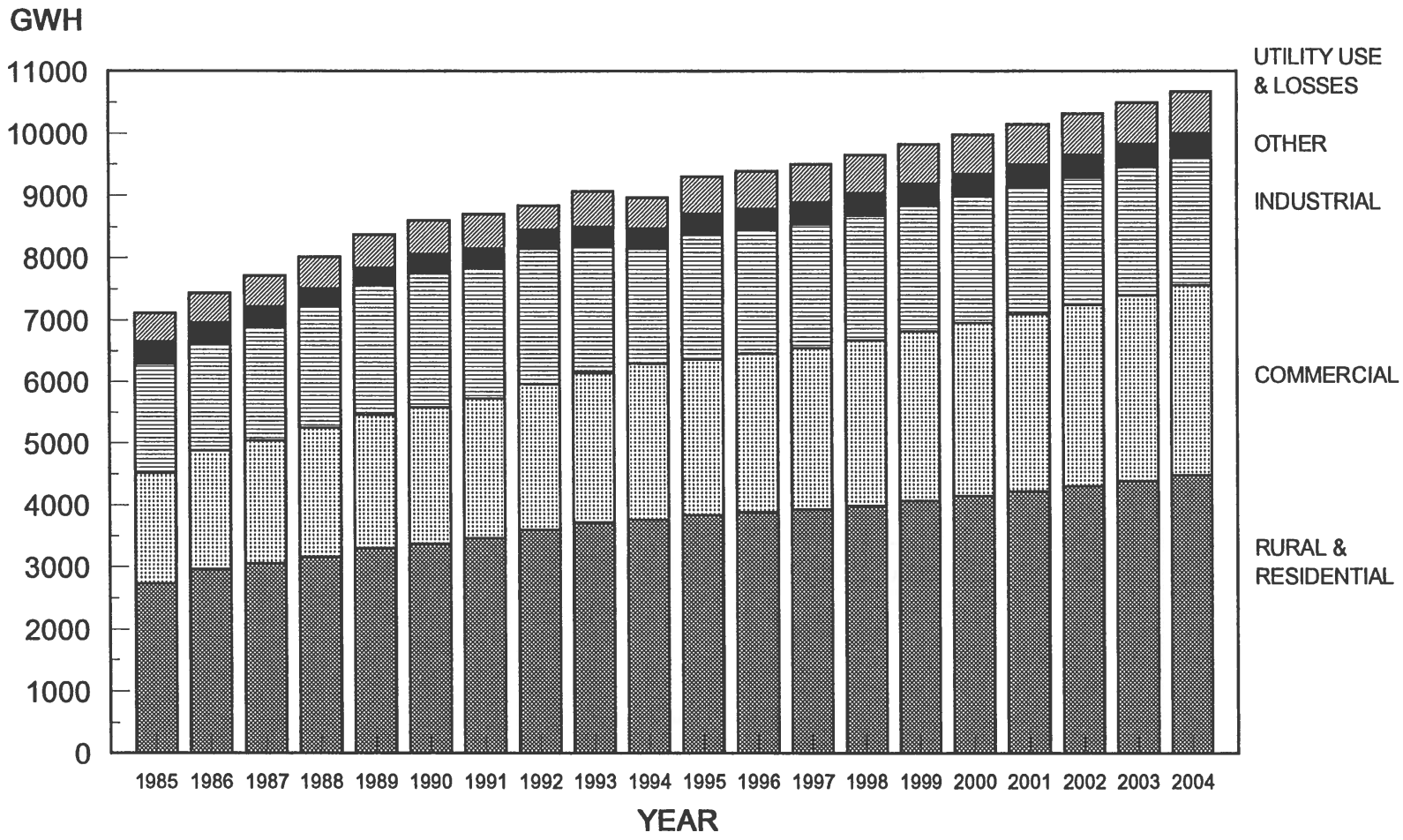
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND NUMBER OF CUSTOMERS BY CUSTOMER CLASS

(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
1985	359	458	7,115	63	253,135
1986	324	475	7,435	62	263,646
1987	328	499	7,723	62	271,449
1988	283	507	8,016	59	277,881
1989	276	528	8,378	63	283,830
1990	294	545	8,612	68	289,400
1991	296	547	8,704	68	294,095
1992	299	389	8,849	74	301,719
1993	317	565	9,074	79	310,419
1994	316	487	8,967	93	318,578
1995	332	594	9,311	79	324,412
1996	336	599	9,393	79	328,751
1997	339	606	9,500	79	333,199
1998	343	616	9,658	79	338,462
1999	346	627	9,824	79	344,139
2000	349	637	9,983	79	350,131
2001	352	647	10,146	79	356,466
2002	354	658	10,320	79	363,136
2003	357	669	10,496	79	369,957
2004	359	681	10,683	79	376,920

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 1993	Actual 1994	1995	1996	1997	1998
Annual Energy Interchange	GWH	(484)	(592)	(558)	(721)	(978)	(1,447)
Nuclear	GWH	None	None	None	None	None	None
Coal	GWH	9,497	9,544	9,821	10,051	10,402	10,924
Residual -Total	GWH	0	0	0	0	0	0
Steam	GWH	0	0	0	0	0	0
CC	GWH	None	None	None	None	None	None
CT	GWH	None	None	None	None	None	None
Diesel	GWH	None	None	None	None	None	None
Distillate -Total	GWH	3	1	3	5	6	5
Steam	GWH	None	None	None	None	None	None
CC	GWH	None	None	None	None	None	None
CT	GWH	3	1	3	5	6	5
Diesel	GWH	None	None	None	None	None	None
Natural Gas -Total	GWH	58	14	45	58	70	176
Steam	GWH	58	14	45	58	70	72
CC	GWH	None	None	None	None	None	None
CT	GWH	None	None	None	None	None	104
Diesel	GWH	None	None	None	None	None	None
Other	GWH	None	None	None	None	None	None
Net Energy for Load	GWH	9,074	8,967	9,311	9,393	9,500	9,658

(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		1999	2000	2001	2002	2003	2004
Annual Energy Interchange	GWH	(1,886)	(1,383)	(1,148)	(1,803)	(1,881)	(2,113)
Nuclear	GWH	None	None	None	None	None	None
Coal	GWH	11,382	10,989	10,878	11,602	11,918	12,163
Residual -Total	GWH	0	0	0	0	0	0
Steam	GWH	0	0	0	0	0	0
CC	GWH	None	None	None	None	None	None
CT	GWH	None	None	None	None	None	None
Diesel	GWH	None	None	None	None	None	None
Distillate -Total	GWH	5	4	4	0	0	0
Steam	GWH	None	None	None	None	None	None
CC	GWH	None	None	None	None	None	None
CT	GWH	5	4	4	0	0	0
Diesel	GWH	None	None	None	None	None	None
Natural Gas -Total	GWH	323	373	412	521	459	633
Steam	GWH	68	73	88	85	71	77
CC	GWH	None	None	None	None	None	109
CT	GWH	255	300	324	436	388	447
Diesel	GWH	None	None	None	None	None	None
Other	GWH	None	None	None	None	None	None
Net Energy for Load	GWH	9,824	9,983	10,146	10,320	10,496	10,683

(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 1993	Actual 1994	1995	1996	1997	1998
Nuclear		12 BTUx10	None	None	None	None	None	None
Coal		1000 TON	4,135	4,392	4,572	4,696	4,759	5,041
Residual	-Total	1000 BBL	0	0	0	0	0	0
	Steam	1000 BBL	0	0	0	0	0	0
	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	31	24	47	46	53	51
	Steam	1000 BBL	22	22	39	35	39	40
	CC	1000 BBL	None	None	None	None	None	None
	CT	1000 BBL	9	2	8	11	14	11
	Diesel	1000 BBL	None	None	None	None	None	None
Natural Gas	-Total	1000 MCF	1,125	461	774	980	1,162	2,500
	Steam	1000 MCF	1,125	461	774	980	1,162	1,206
	CC	1000 MCF	None	None	None	None	None	None
	CT	1000 MCF	None	None	None	None	None	1,294
	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	10,390	10,614	10,353	10,347	10,334	10,352

Utility: Gulf Power Company

TYP FORM 3B

Fuel Requirements

Fuel Requirements			1999	2000	2001	2002	2003	2004
Nuclear		12 BTUx10	None	None	None	None	None	None
Coal		1000 TON	5,239	5,063	4,983	5,307	5,451	5,533
Residual	-Total	1000 BBL	0	0	0	0	0	0
	Steam	1000 BBL	0	0	0	0	0	0
	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	48	40	38	31	29	29
	Steam	1000 BBL	36	32	30	31	29	29
	CC	1000 BBL	None	None	None	None	None	None
	CT	1000 BBL	12	8	8	0	0	0
	Diesel	1000 BBL	None	None	None	None	None	None
Natural Gas	-Total	1000 MCF	4,310	5,008	5,537	6,894	6,099	7,731
	Steam	1000 MCF	1,138	1,273	1,501	1,467	1,268	1,369
	CC	1000 MCF	None	None	None	None	None	806
	CT	1000 MCF	3,172	3,735	4,036	5,427	4,831	5,556
	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	10,367	10,388	10,407	10,422	10,400	10,384

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	%
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	7,110	324	7,435	50.4%
1987	1,551	73	1,624	0	1,624	7,395	328	7,723	54.3%
1988	1,565	55	1,620	0	1,620	7,733	283	8,016	56.3%
1989	1,638	60	1,698	0	1,698	8,102	276	8,378	56.3%
1990	1,716	69	1,785	0	1,785	8,319	294	8,612	55.1%
1991	1,684	64	1,748	0	1,748	8,409	296	8,704	56.8%
1992	1,765	71	1,836	0	1,836	8,550	299	8,849	54.9%
1993	1,830	76	1,906	0	1,906	8,758	317	9,074	54.3%
1994	1,731	72	1,803	0	1,803	8,651	316	8,967	56.8%
1995	1,869	75	1,944	0	1,944	8,979	332	9,311	54.7%
1996	1,893	76	1,969	0	1,969	9,057	336	9,393	54.3%
1997	1,909	76	1,985	0	1,985	9,160	339	9,500	54.6%
1998	1,936	77	2,013	0	2,013	9,315	343	9,658	54.8%
1999	1,964	78	2,042	0	2,042	9,478	346	9,824	54.9%
2000	1,989	78	2,067	0	2,067	9,634	349	9,983	55.0%
2001	2,014	79	2,093	0	2,093	9,794	352	10,146	55.3%
2002	2,040	79	2,119	0	2,119	9,965	354	10,320	55.6%
2003	2,068	80	2,148	0	2,148	10,139	357	10,496	55.8%
2004	2,098	80	2,178	0	2,178	10,324	359	10,683	56.0%

NOTE: Wholesale and total columns include 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

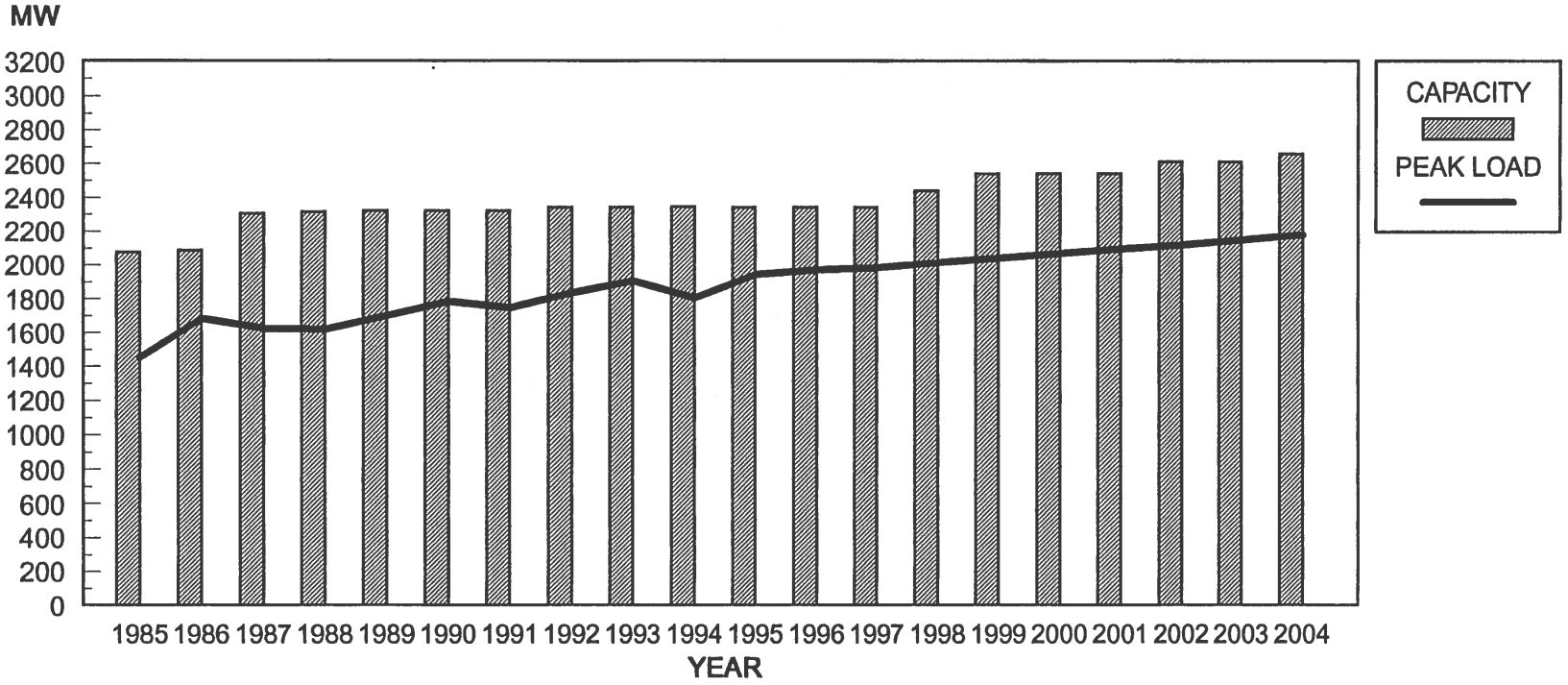
WINTER PEAK DEMAND - MW

YEAR	FIRM RETAIL	FIRM WHOLESALE	FIRM TOTAL	INTERRUPT	TOTAL
1984-85	1,450	81	1,531	0	1,531
1985-86	1,365	47	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	1,498	56	1,554	0	1,554
1989-90	1,764	57	1,821	0	1,821
1990-91	1,375	50	1,425	0	1,425
1991-92	1,481	60	1,541	0	1,541
1992-93	1,518	61	1,579	0	1,579
1993-94	1,737	72	1,809	0	1,809
1994-95	1,653	63	1,716	0	1,716
1995-96	1,711	64	1,775	0	1,775
1996-97	1,729	65	1,794	0	1,794
1997-98	1,758	65	1,823	0	1,823
1998-99	1,789	66	1,855	0	1,855
1999-00	1,817	67	1,884	0	1,884
2000-01	1,846	67	1,913	0	1,913
2001-02	1,879	68	1,947	0	1,947
2002-03	1,912	68	1,980	0	1,980
2003-04	1,946	68	2,014	0	2,014

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

GRAPH 2

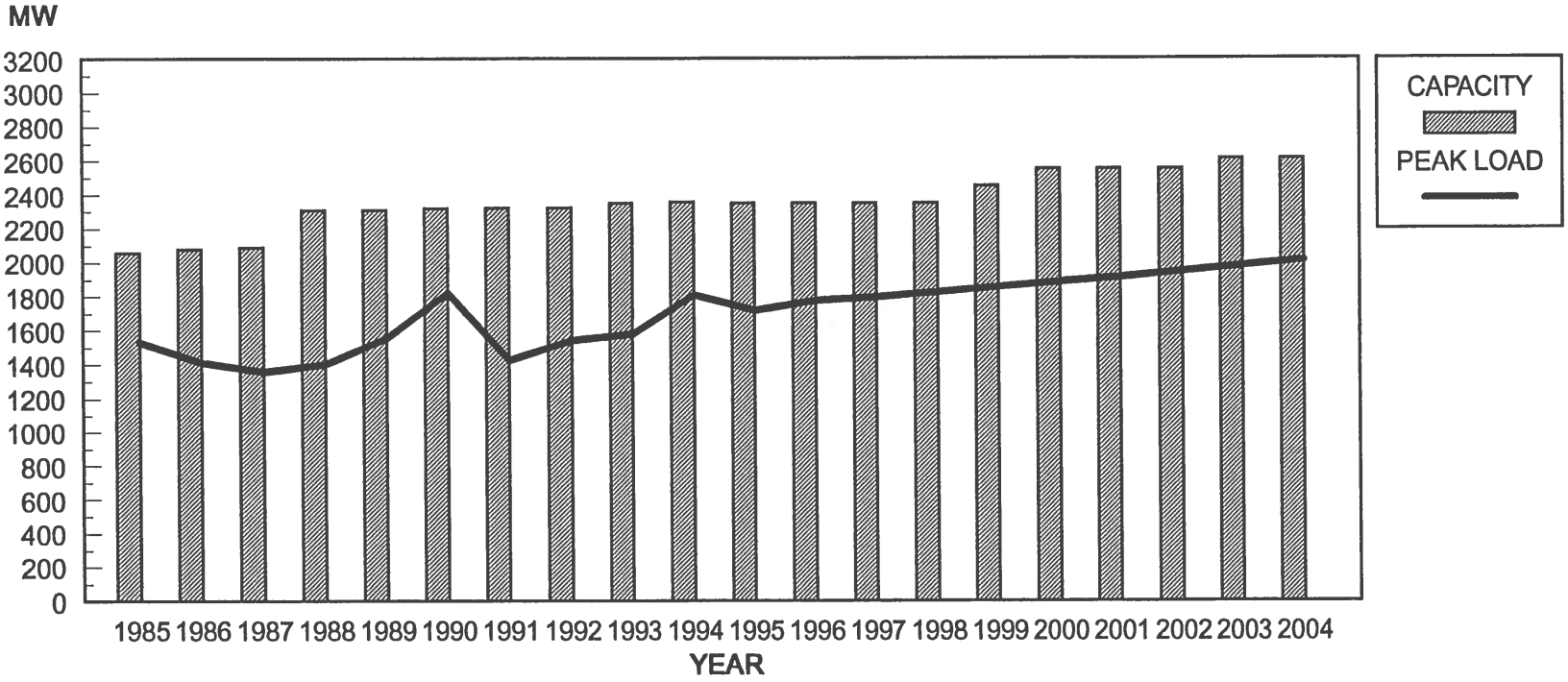
HISTORY AND FORECAST OF LOAD AND CAPACITY ADDITIONS SUMMER



NOTE: SHOWS INSTALLED GENERATING CAPACITY ONLY.
PEAK DEMAND INCLUDES SEPA RESALE CUSTOMER ALLOCATIONS.

GRAPH 2

HISTORY AND FORECAST OF LOAD AND CAPACITY ADDITIONS WINTER



NOTE: SHOWS INSTALLED GENERATING CAPACITY ONLY.
PEAK DEMAND INCLUDES SEPA RESALE CUSTOMER ALLOCATIONS.

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			
	1994		1995		1996	
MONTH	PEAK DEMAND MW	NEL GWH	PEAK DEMAND MW	NEL GWH	PEAK DEMAND MW	NEL GWH
JAN	1,809	784	1,716	787	1,775	791
FEB	1,612	606	1,574	635	1,502	642
MAR	1,274	643	1,432	674	1,442	680
APR	1,398	642	1,234	616	1,222	619
MAY	1,526	761	1,600	777	1,709	780
JUN	1,752	872	1,909	947	1,881	952
JUL	1,803	908	1,944	989	1,969	1,000
AUG	1,772	936	1,933	990	1,890	990
SEP	1,744	828	1,769	826	1,813	854
OCT	1,352	699	1,394	685	1,463	686
NOV	1,188	618	1,297	631	1,205	633
DEC	1,356	670	1,653	753	1,661	766
TOTAL		8,967		9,311		9,393

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 Power Company has been a pacesetter in the energy efficiency market since the development and implementation of the Good ¢ents Home program in the mid-70's. This program brought customer awareness, understanding and expectations regarding energy eficient construction standards in Northwest Florida to levels unmatched elsewhere. Since that time, the Good ¢ents Home program has seen many enhancements, and has been widely accepted not only by our customers, but by builders, contractors, consumers, and other electric utilities throughout the nation, providing clear evidence that selling efficiency to customers can be done successfully.

The Marketing Services 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 district personnel. The districts 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 districts, 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 Gulf Economic Model, a competition-based econometric model, is used in the development of residential customer projections. Projections of births, deaths, and population by age groups are determined by past and projected trends. Migration is determined by economic growth relative to surrounding areas.

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 districts. A review of the assumptions, techniques and results for each district 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:

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

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

The residential sales forecast reflects the continued impacts of Gulf Power's Good ¢ents Home program and efficiency improvements undertaken by customers as a result of ¢entsable 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 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.

DRI McGraw Hill's annual building data and Gulf's most recent Commercial Market Survey provided much of the input data required for the COMMEND model. The model produces forecasts of energy use for the end-uses mentioned above, within each of the following business categories:

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

The Commercial Sales forecast reflects the continued impacts of Gulf Power's Commercial Good ¢ents 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. Fifty-one 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 self generation 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	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 vapor 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 1995 Annual Forecast for Company and Interdepartmental energy usage was based on recent historical values, with appropriate adjustments to reflect increases in energy requirements through 1993, for new Company facilities. The 1994 forecasted Company usage was then projected through the year 2004, 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:

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

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 C in hour i;

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

$Misc_i$ = 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. These reductions do not yet reflect the impacts of the new programs submitted in Gulf's Demand Side Management plan filed February 22, 1995 (Docket No. 941172-EI) for approval by the FPSC. The anticipated impacts of these programs, as approved, will be included in future projections where appropriate.

A. RESIDENTIAL CONSERVATION

In the residential sector, Gulf's Good ¢ents New Home program is designed to make cost effective increases in the efficiencies of the new home construction market. This is being achieved by placing greater requirements on cooling and water heating equipment efficiencies, proper HVAC sizing, increased insulation levels in walls, ceilings, and floors, and tighter restrictions on glass area and infiltration reduction practices. In addition, Gulf monitors proper quality installation of all the above energy features.

Gulf's Good ¢ents 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 heating and cooling systems, air distribution system leakage, 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 recommendations and options that increase comfort and reduce energy operating costs. The goal of this program is to upgrade the customer's home to the Good ¢ents 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 ¢ents 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 tables provide direct estimates of the energy savings (reductions in peak demand and net energy for load) realized by Gulf's conservation programs. These numbers reflect 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
RESIDENTIAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1993	86,932	136,843	233,543,174

1995 BUDGET FORECAST
RESIDENTIAL CONSERVATION PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1994	3,239	10,028	7,730,722
1995	3,683	11,100	8,992,587
1996	3,974	11,441	9,924,147
1997	3,975	11,322	9,909,388
1998	4,106	11,825	10,175,445
1999	4,261	12,443	10,493,293
2000	4,321	12,725	10,621,041
2001	4,368	12,950	10,722,320
2002	4,415	13,172	10,822,447
2003	4,356	12,894	10,697,000
2004	4,357	12,899	10,699,302

1995 BUDGET FORECAST
RESIDENTIAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1994	90,170	146,871	241,273,897
1995	93,854	157,971	250,266,484
1996	97,828	169,412	260,190,630
1997	101,803	180,734	270,100,018
1998	105,909	192,559	280,275,463
1999	110,170	205,002	290,768,756
2000	114,491	217,727	301,389,797
2001	118,859	230,677	312,112,117
2002	123,273	243,848	322,934,564
2003	127,630	256,742	333,631,564
2004	131,987	269,641	344,330,866

HISTORICAL
COMMERCIAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1993	101,821	100,428	215,715,187

1995 BUDGET FORECAST
COMMERCIAL CONSERVATION PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1994	5,467	1,503	13,443,728
1995	5,896	1,653	14,433,880
1996	6,324	1,803	15,424,033
1997	6,324	1,803	15,424,033
1998	6,324	1,803	15,424,033
1999	6,324	1,803	15,424,033
2000	6,324	1,803	15,424,033
2001	6,324	1,803	15,424,033
2002	6,324	1,803	15,424,033
2003	6,324	1,803	15,424,033
2004	6,324	1,803	15,424,033

1995 BUDGET FORECAST
COMMERCIAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1994	107,288	101,931	229,158,915
1995	113,184	103,583	243,592,796
1996	119,508	105,387	259,016,828
1997	125,832	107,190	274,440,861
1998	132,157	108,993	289,864,893
1999	138,481	110,796	305,288,926
2000	144,805	112,599	320,712,958
2001	151,130	114,402	336,136,991
2002	157,454	116,205	351,561,023
2003	163,778	118,008	366,985,056
2004	170,103	119,811	382,409,088

HISTORICAL
TOTAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1993	188,753	237,271	457,491,167

1995 BUDGET FORECAST
TOTAL CONSERVATION PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1994	9,706	11,531	21,538,923
1995	10,579	12,753	23,796,375
1996	11,299	13,244	25,716,249
1997	13,299	13,125	25,665,795
1998	12,430	13,628	25,915,403
1999	14,586	14,246	26,233,251
2000	15,645	14,529	26,356,851
2001	16,692	14,753	26,408,006
2002	16,739	14,975	26,494,126
2003	16,681	14,697	26,368,679
2004	16,682	14,702	26,295,836

1995 BUDGET FORECAST
TOTAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1994	198,458	248,802	479,030,090
1995	209,038	261,555	502,826,465
1996	220,336	274,799	528,542,714
1997	233,635	287,924	554,208,508
1998	246,065	301,552	580,123,912
1999	260,651	315,797	606,357,162
2000	276,296	330,326	632,714,013
2001	292,988	345,079	659,122,019
2002	309,727	360,054	685,616,145
2003	326,408	374,750	711,984,825
2004	343,089	389,452	738,280,661

V. SMALL POWER PRODUCTION / RENEWABLE ENERGY

The current forecasts also consider Gulf's active position in the promotion of renewable energy resources. 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. Future projections will include additional impacts of Gulf's "Green Pricing" proposal currently before the Commission for approval.

Small Power Producers

Net Capability

Year	MW
1994	11
1995	11
1996	32
1997	32
1998	32
1999	37
2000	37
2001	37
2002	37
2003	37
2004	37

District heating and cooling plants are an older fundamental application of large central station heating and cooling equipment for service to multiple premises in close proximity. These systems are typically located in college or school settings as well as some military bases and industrial plants.

Within Gulf's service area there exists a number of these systems which were appropriate or seemed appropriate at the time of their installation. Current day considerations for energy pricing, operating and maintenance expenses have resulted in many of these systems becoming uneconomical and decommissioned. Future installations of district heating and

cooling plants of any consequence hinge primarily upon the opportunity for optimum application of this technology. The very dispersed construction of low rise buildings which are characteristic of the building demographics in Gulf Power's service area yield no significant opportunities for district heating and cooling that are economically viable on the planning horizon.

CHAPTER III

FORECAST
OF
FACILITIES REQUIREMENTS

THE INTEGRATED RESOURCE PLANNING PROCESS

Gulf Power Company's Integrated Resource Planning (IRP) process begins with a team of experts from within and outside the Southern electric system that meet to discuss current and historical economic trends and conditions as well as future expected economic conditions and most probable occurrences which would impact the Southern electric system's business over the next twenty to twenty-five years. This economic panel will then decide what the various escalation and inflation rates will be for the various components that impact the financial condition of the Company. This group is the source for the assumptions surrounding general inflation and escalation regarding fuel, construction costs, labor rates and variable O&M.

In addition to this activity, there are a number of activities which are conducted in parallel with one another in the IRP process. These activities include the energy and demand forecasting, fuel price forecasting, technology screening analysis and evaluation, technology engineering cost estimation modeling, and miscellaneous issues and assumptions determinations. In addition to the changes of these assumptions, 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.

As mentioned earlier, Gulf's forecast of energy sales and peak demand reflect the continued impacts of our conservation programs. Furthermore, an update of demand-side measure cost and benefits is conducted in order to perform cost-effectiveness evaluations against the selected supply-side technologies in the integration process.

A number of existing generating units on the Southern electric system are also evaluated with respect to their currently planned retirement dates as well as the economics and appropriateness of possible repowering over the planning horizon. The repowering evaluation is particularly important as a possible competing technology with the other unit addition technologies. The evaluations are extremely important in order to maximize the benefit of existing investment from both a capital and an operating and maintenance expense basis.

Additionally, an analysis of the market for power purchases is performed in order to determine the cost-effectiveness in comparison to the available supply-side and demand-side options. Power purchases are looked at from both a near-term and long-term basis as a possible means of meeting the system's demand requirements. It is important to remember that power purchases can be procured from utility sources as well as non-utility generators.

It is important to note, once again, that up to this point the supply side of the integrated resource planning process is focusing on the Southern electric system as a whole which has as its planning criterion a 15% target reserve margin. This reserve margin is the optimum economic point where the system can meet its energy and demand requirements taking into account load forecast error, abnormal weather conditions, and unit-forced outage conditions. It also takes into account the cost of adding additional generation balanced with the societal cost of not serving all the energy requirements of the customer.

Once the necessary assumptions are determined, the technologies are screened to the most acceptable candidates, and the necessary planning inputs are defined, the generation mix analysis is initiated. The supply-side technology candidates are input into PROVIEW, the generation mix model, in specific MW block sizes for selection over the planning horizon for the entire Southern electric system. The main optimization tool used in the mix analysis is the PROVIEW model. Although this model uses many data inputs and assumptions in the process of optimizing system generation additions, the key assumptions are: load forecast, DSOs, candidate units, reserve margin, cost of capital, and escalation rates.

PROVIEW uses a dynamic programming technique to develop the optimum resource mix. This technique allows PROVIEW to evaluate in every year each combination of generation additions that satisfy the reserve margin constraint. For each combination, annual system operating costs are simulated and are added to the construction costs required to build that particular combination of resource additions. A least cost resource addition schedule is developed by evaluating each year sequentially. In summary, a least cost resource plan is developed only after reviewing many construction options.

PROVIEW produces a number of different combinations over the planning horizon which evaluates both the capital cost components for unit additions as well as the operating and maintenance cost of existing and future supply option additions. The program produces a report which ranks all of the different combinations with respect to the total net present value cost (objective function) over the entire twenty year planning horizon. The leading combinations from the program are then evaluated for reasonableness and validity. Once again, it is important to note that supply option additions out of the PROVIEW program are for the entire Southern electric system and are reflective of the various technology candidates selected.

After the Southern electric system results are verified, each individual operating company's specific needs over the planning horizon are evaluated. Each company is involved in recommending the type and timing of its unit additions. When all companies are satisfied with their capacity additions, and the sum matches the system need, the system base supply-side plan is complete. The results of this allocation is an individual operating company supply plan as it would fit within the Southern electric system planning criteria.

Once the individual operating company supply plan is determined, it is necessary to evaluate demand-side options as a cost-effective alternative to the supply plan. After the incorporation of the cost effective demand-side impacts, a final integrated resource plan for the individual operating companies is produced.

Finally, a sanity check of the plan as well as a financial analysis of the impact of the plan is performed. The plan is analyzed for changes in load forecast as well as fuel price variations, as sensitivities, in order to asses the impact on the system's cost. Once the plan has proven to be robust and financially feasible, it is presented for approval to the Southern electric system Operating Committee.

In summary, the Southern electric system's integrated resource planning process involves a significant amount of manpower and computer resources in order to produce truly least-cost, integrated demand-side and supply-side resource plan. During the entire process, we are continually looking at a broad range of alternatives in order to meet the system's projected demand and energy requirements. The result of the Southern electric system's integrated

resource planning process is an integrated plan which can meet the needs of our customers in a cost-effective and reliable manner.

UTILITY: GULF POWER COMPANY

TYP FORM 6

PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES (a)

(1)	(2)	(3)	(4)	(5)	(6)	(7) (b)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Fuel					Net Capability		Fuel Transp		
Plant Name	Unit No.	Location	Type	Pri	Alt	Const Start Mo/Yr	Com'l In-Service Mo/Yr	Gen Max Nameplate KW	Summer MW	Winter MW	Pri	Alt	Status
Scholz	A	Jackson County 12/3N/7W	CT	NG	LO	02/96	05/98		100.0	100.0	PL	TK	P
Scholz	B	Jackson County 12/3N/7W	CT	NG	LO	02/96	12/98		100.0	100.0	PL	TK	P
Lansing Smith	A	Bay County 36/2S/15W	CT	LO	--	--	(12/01)		(31.3)	(39.5)	TK	--	R
Peaking Unit		Unknown	CT	NG	LO	06/99	05/02		100.0	100.0	PL	TK	P
Intermediate Unit (10%)		Unknown	CC	NG	LO	06/01	05/04		48.0	48.0	PL	TK	P
							TOTAL		216.7	208.5			

NOTE: (a) This table displays the current schedule of anticipated unit additions in the form of traditional utility construction to meet forecasted capacity requirements. As indicated by the reference for each unit under the column heading "Status", Gulf has not reached the construction commitment stage for any of the planned unit additions. Gulf continues to evaluate alternatives to traditional utility construction to meet the "capacity need" represented by this stream of unit additions. In Gulf's view, this "capacity need" may also be met by conservation, cogeneration, power purchases, or a combination of one or more of these alternatives to traditional utility construction.

(b) The construction start date represents the estimated start of related expenditures. The actual construction of the Scholz CT's is anticipated to take only 11 months.

Abbreviations: CT - Combustion Turbine; CC - Combined Cycle; NG - Natural Gas; LO - Light Oil; PL - Pipeline; TK - Truck; P - Planned, but not authorized by utility; R - To be retired

TYP FORM 7A

UTILITY: GULF POWER COMPANY

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
1995	2341	(201)	2140	1944	196	10.1%	NONE	196	10.1%
1996	2341	(179)	2162	1969	193	9.8%		193	9.8%
1997	2341	(179)	2162	1985	177	8.9%		177	8.9%
1998	2441	(179)	2262	2013	249	12.4%		249	12.4%
1999	2541	(179)	2362	2042	320	15.7%		320	15.7%
2000	2541	(179)	2362	2067	295	14.3%		295	14.3%
2001	2541	(179)	2362	2093	269	12.9%		269	12.9%
2002	2610	(179)	2431	2119	312	14.7%		312	14.7%
2003	2610	(179)	2431	2148	283	13.2%		283	13.2%
2004	2658	(179)	2479	2178	301	13.8%		301	13.8%

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

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
1994-95	2349	(201)	2148	1716	432	25.2%	NONE	432	25.2%
1995-96	2349	(201)	2148	1775	373	21.0%		373	21.0%
1996-97	2349	(179)	2170	1794	376	21.0%		376	21.0%
1997-98	2349	(179)	2170	1823	347	19.0%		347	19.0%
1998-99	2449	(179)	2270	1855	415	22.4%		415	22.4%
1999-00	2549	(179)	2370	1884	486	25.8%		486	25.8%
2000-01	2549	(179)	2370	1913	457	23.9%		457	23.9%
2001-02	2549	(179)	2370	1947	423	21.7%		423	21.7%
2002-03	2610	(179)	2431	1980	451	22.8%		451	22.8%
2003-04	2610	(179)	2431	2014	417	20.7%		417	20.7%
2004-05	2658	(179)	2479	2049	430	21.0%		430	21.0%

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), FIRM PURCHASES, 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 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

Gulf Power Company, along with the other Southern electric 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 1995 and extends into 2010. Gulf's share of the capacity and energy sales is reflected in the reserves on Forms 7A and 7B and the energy and fuel use on Forms 3A and 3B.

CHAPTER IV

SITE DESCRIPTION
AND
IMPACT ANALYSIS

SCHOLZ SITE

The Scholz Site consist of 293 acres (total plant site) and is the location of the existing Scholz Electric Generating Facility. It is located south of the town of Sneads along the west side of the Apalachicola river. The site is accessible by railroad and river barge service.

Scholz has been chosen as the site for the installation of two 100 MW combustion turbines. It is currently anticipated that the first will be in service in May of 1998 and the second in December of 1998. These two combustion turbines and associated transmission facilities are to be installed on existing cleared company property immediately adjacent to the existing Scholz plant. These units will be used during peak periods, and the impact of their operation on the surrounding area should be minimal.

Utility: Gulf Power Company

Status Report
Specifications of Proposed Generating Facilities

(1)	Plant Name & Unit	Scholz A
(2)	Status	This facility is planned but not authorized
(3)	Anticipated Construction Timing	In-Service May, 1998
(4)	Capacity	Summer 100.0 MW Winter 100.0 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	293 acres (total plant site)
(10)	Anticipated Capital Investment	$ 27,452,576
(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	Scholz B
(2)	Status	This facility is planned but not authorized
(3)	Anticipated Construction Timing	In-Service December, 1998
(4)	Capacity	Summer 100.0 MW Winter 100.0 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	293 acres (total plant site)
(10)	Anticipated Capital Investment	$ 27,452,576
(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	Peaking Unit
(2)	Status	This facility is planned but not authorized
(3)	Anticipated Construction Timing	In-Service May, 2002
(4)	Capacity	Summer 100.0 MW Winter 100.0 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	$ 32,000,000
(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	Intermediate Unit (10%)
(2)	Status	This facility is planned but not authorized
(3)	Anticipated Construction Timing	In-Service May, 2004
(4)	Capacity	Summer 48.0 MW Winter 48.0 MW
(5)	Type	Combined Cycle
(6)	Primary and Alternate Fuel	Primary - Natural Gas; Alternate - Light Oil (distillate)
(7)	Air Pollution Control Strategy	Steam Injection for NOx control for combustion turbine Selective Catalytic Reduction for heat recovery steam generator
(8)	Cooling Method	mechanical draft cooling tower
(9)	Total Site Area	Unknown
(10)	Anticipated Capital Investment	$ 28,176,000
(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	Scholz to Smith - Thomasville 230 KV loop
(2)	Number of Lines	2
(3)	Right-of-Way	Length: on company property Width:
(4)	Line Length	0.3 miles each
(5)	Voltage	230 KV
(6)	Anticipated Construction Timing	In-Service January, 1998
(7)	Anticipated Capital Investment	$ 2,424,730
(8)	Substations	None
(9)	Participation	None