SCANNED

GULF POWER
A **SOUTHERN COMPANY**

March 31, 2003

Ms. Blanca S. Bayo, Director
Division of the Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0870

Dear Ms. Bayo:

Enclosed are an original and twenty-five copies of Gulf Power Company's 2003 Ten Year Site Plan, and it is filed pursuant to Rule No. 25-22.071. Included in the Ten Year Site Plan is the Company's Clean Air Act Compliance update, and it is filed pursuant to Order No. PSC-93-1376-FOF-EI.
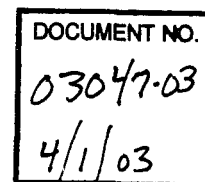
Sincerely,

Susan D. Ritenour

Susan D. Ritenour
Assistant Secretary and Assistant Treasurer

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Enclosures

cc: Beggs and Lane
       Jeffrey A. Stone, Esquire

DOCUMENT NO.
03047-03
4/1/03

TEN YEAR SITE PLAN
2003-2012

FOR ELECTRIC GENERATING FACILITIES
AND
ASSOCIATED TRANSMISSION LINES

APRIL 2003
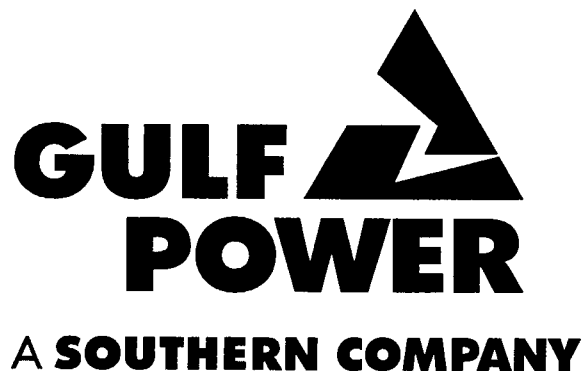
GULF POWER

A **SOUTHERN COMPANY**

GULF POWER COMPANY
TEN YEAR SITE PLAN

FOR ELECTRIC GENERATING FACILITIES
AND
ASSOCIATED TRANSMISSION LINES

Submitted To The
State of Florida
Public Service Commission

APRIL 1, 2003

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CHAPTER III   PLANNING ASSUMPTIONS AND PROCESSES

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GULF POWER COMPANY

TEN-YEAR SITE PLAN

Executive Summary

The Gulf Power Company 2003 Ten-Year Site Plan is filed with the Florida Public Service Commission (FPSC) in accordance with the requirements of Chapter 186.801, Florida Statues as revised by the Legislature in 1995. That revision replaced the Florida Department of Community Affairs with the FPSC as the responsible agency for the Ten-Year Site Plan (TYSP). This 2003 TYSP for Gulf Power Company (Gulf) is being filed in compliance with the Commission's rules.

The 2003 TYSP contains documentation of assumptions, load forecast, fuel forecasts, the planning processes, existing resources, and future capacity needs and resources. The planning process for Gulf is tightly coordinated within the Southern electric system Integrated Resource Planning (IRP) process. Gulf participates in the IRP process along with the other Southern electric system operating companies, Alabama Power Company, Georgia Power Company, Mississippi Power Company, Savannah Electric & Power Company, and Southern Power Company, (collectively, the "Southern electric system" or "SES"). Gulf shares in the benefits gained from planning a large system such the SES, without the costs of a large planning staff of its own.

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The capacity resource needs set forth within the SES IRP are driven by the demand forecast which already includes the projected demand-side measures embedded into the forecast prior to entering the generation mix process. The generation mix process uses PROVIEW® to screen the available technologies in order to produce a listing of preferred capacity resource plans from which to select the best, most cost-effective plan for the system. The resulting SES resource needs are appropriately allocated among the operating companies based on reserve requirements, whereby each company chooses the best way in order to meet its capacity and reliability needs.

In April 2002, a new natural gas-fired combined cycle generating unit at Gulf's existing Lansing Smith Generating Plant began commercial operation. This unit is designated as Smith Unit 3. Gulf will use market power purchases and/or SES resources, exclusively, prior to and possibly beyond the summer of 2007. Gulf currently plans to meet its next capacity need in the 2007 timeframe by installing two 157 MW combustion turbines (CT) at a site to be determined or otherwise acquiring an equivalent peaking capacity resource. This addition is tabulated in further detail on Schedules 8 and 9 of this document.

CHAPTER I

DESCRIPTION OF EXISTING FACILITIES

DESCRIPTION OF EXISTING FACILITIES

Gulf owns and operates three fossil - fueled generating facilities in Northwest Florida (Plants Crist, Smith, and Scholz). Gulf also owns a 50% undivided ownership interest in Unit 1 and Unit 2 at Mississippi Power Company's Daniel Electric Generating Facility. Gulf has a 25% ownership in Unit 3 at Georgia Power Company's Scherer Electric Generating Facility which is completely dedicated to wholesale unit power sale contracts. This fleet of generating units consists of fourteen fossil steam units, one combined cycle unit, and one combustion turbine. Schedule 1 shows 1,020 MW of steam generation is located at the Crist Electric Generating Facility near Pensacola, Florida. The Lansing Smith Electric Generating Facility near Panama City, Florida includes 351 MW of steam generation, 566 MW (summer rating) of combined cycle generation, and 32 MW (summer rating) of combustion turbine facilities. The Scholz Electric Generating Facility, near Sneeds, Florida consists of 92 MW of steam generation. In May of 1998, Gulf took ownership of three new combustion turbines associated with an existing customer's cogeneration facility, adding another 12 MW (summer rating) to Gulf's existing capacity.

Including Gulf's ownership interest in Daniel fossil steam units 1 and 2 and Scherer fossil steam unit 3, Gulf has a total net summer generating capability of 2,815 MW and a total net winter generating capability of 2,844 MW. In addition to Gulf's installed generating resources, Gulf has a contract with Solutia Corporation (successor to Monsanto) for 19 MW of firm capacity that will be in effect until May 31, 2005.

The existing Gulf system in Northwest Florida including generating plants, substations, transmission lines and service area is shown on the system map on page 7. Data regarding Gulf's existing generating facilities is presented on Schedule 1.

UTILITY: GULF POWER COMPANY

SCHEDULE 1
EXISTING GENERATING FACILITIES
AS OF DECEMBER 31, 2002

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
								Alt. Fuel	Com'l In-	Exptd	Gen Max	Net Capability	
	Unit		Unit	Fuel		Fuel Transp		Days	Service	Retrmnt	Nameplate	Summer	Winter
Plant Name	No.	Location	Type	Pri	Alt	Pri	Alt	Use	Mo/Yr	Mo/Yr	KW	MW	MW
Crist		Escambia County 25/1N/30W									1,229,000	1,020.0	1,020.0
	1		FS	NG	HO	PL	TK	--	1/45	4/03	28,125	24.0	24.0
	2		FS	NG	HO	PL	TK	--	6/49	5/06	28,125	24.0	24.0
	3		FS	NG	HO	PL	TK	--	9/52	5/06	37,500	35.0	35.0
	4		FS	C	NG	WA	PL	1	7/59	12/14	93,750	78.0	78.0
	5		FS	C	NG	WA	PL	1	6/61	12/16	93,750	80.0	80.0
	6		FS	C	NG	WA	PL	1	5/70	12/15	369,750	302.0	302.0
	7		FS	C	NG	WA	PL	1	8/73	12/18	578,000	477.0	477.0
Lansing Smith		Bay County 36/2S/15W									1,001,500	949.0	975.0
	1		FS	C	--	WA	--	--	6/65	12/15	149,600	162.0	162.0
	2		FS	C	--	WA	--	--	6/67	12/17	190,400	189.0	189.0
	3		CC	NG	--	PL	--	--	4/02	12/27	619,650	566.0	584.0
	A		CT	LO	--	TK	--	--	5/71	12/17	41,850	32.0	40.0
Scholz		Jackson County 12/3N/7W									98,000	92.0	92.0
	1		FS	C	--	RR	WA	--	3/53	12/11	49,000	46.0	46.0
	2		FS	C	--	RR	WA	--	10/53	12/11	49,000	46.0	46.0
(A) Daniel		Jackson County, MS 42/5S/6W									548,250	523.0	523.0
	1		FS	C	HO	RR	TK	--	9/77	12/22	274,125	261.0	261.0
	2		FS	C	HO	RR	TK	--	6/81	12/26	274,125	262.0	262.0
(A) Scherer	3	Monroe County, GA	FS	C	--	RR	--	--	1/87	12/42	222,750	219.0	219.0
Pea Ridge		Santa Rosa County 15/1N/29W									14,250	12.0	15.0
	1		CT	NG	--	PL	--	--	5/98	12/18	4,750	4.0	5.0
	2		CT	NG	--	PL	--	--	5/98	12/18	4,750	4.0	5.0
	3		CT	NG	--	PL	--	--	5/98	12/18	4,750	4.0	5.0
										Total System		2,815.0	2,844.0

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Abbreviations:

Fuel
_____

FS - Fossil Steam
CT - Combustion Turbine
CC - Combined Cycle
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%).

GULF POWER COMPANY
TRANSMISSION SYSTEM MAP

ESCAMBIA CO.

SANTA ROSA CO.

OKALOOSA CO.

HOLMES CO.

WALTON CO.

WASHINGTON CO.

JACKSON CO.

GADSDEN CO.

CALHOUN CO.

BAY CO.

LIBERTY CO.

GULF CO.

FRANKLIN CO.

GULF

OF

MEXICO
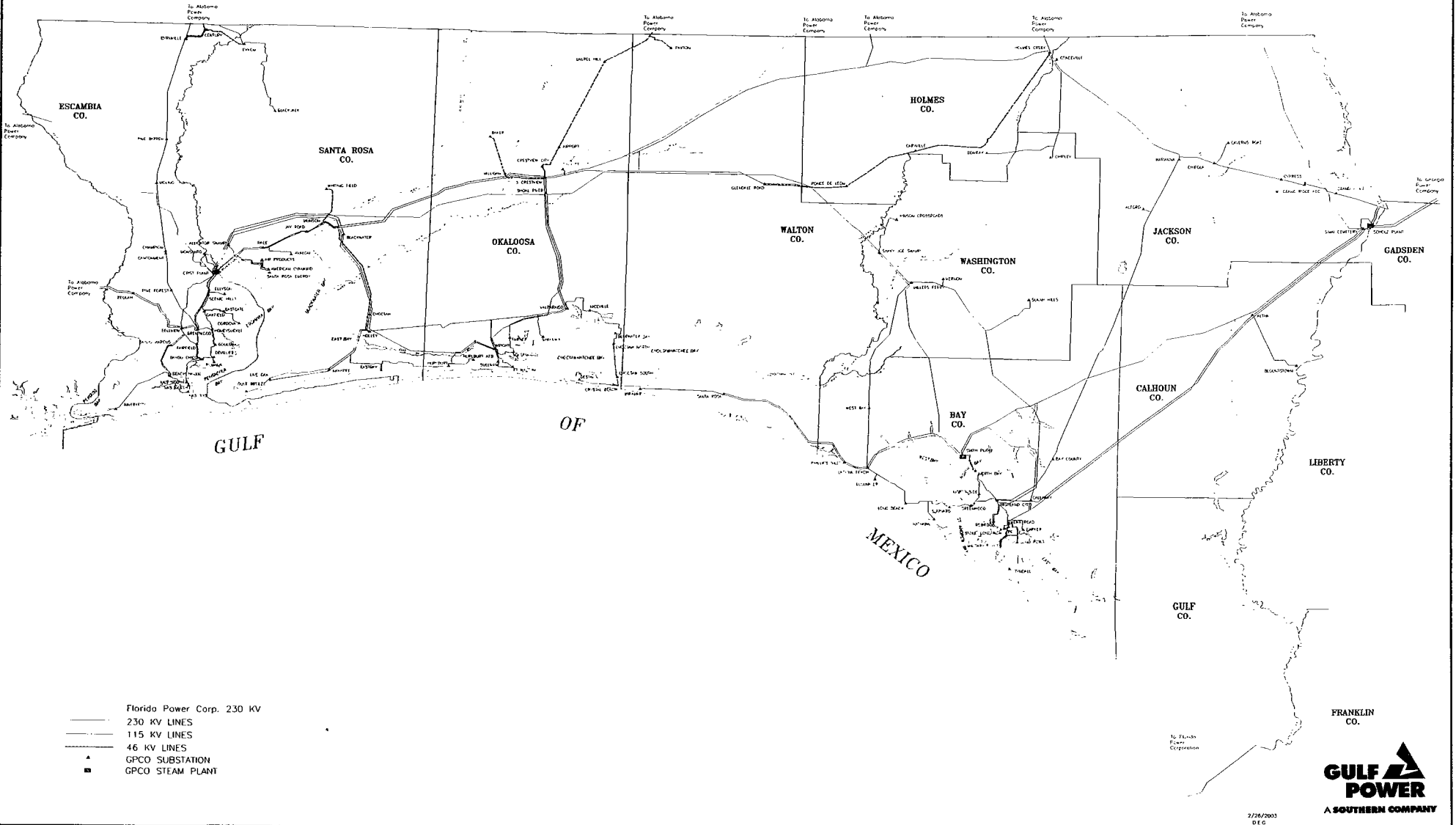
Florida Power Corp. 230 KV
230 KV LINES
115 KV LINES
46 KV LINES
▲ GPCO SUBSTATION
■ GPCO STEAM PLANT

GULF POWER
A SOUTHERN COMPANY

2/26/2003
DEG

CHAPTER II

FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

FORECASTING DOCUMENTATION

GULF POWER COMPANY
LOAD FORECASTING METHODOLOGY
<u>OVERVIEW</u>

Gulf 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 has been a pacesetter in the energy efficiency market since the development and implementation of the GoodCents Home program in the mid-70's. This program brought customer awareness, understanding and expectations regarding energy efficient construction standards in Northwest Florida to levels unmatched elsewhere. Since that time, the GoodCents 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 assumptions and methods used in the development of these forecasts follows.

I. ASSUMPTIONS

A. ECONOMIC OUTLOOK

Gulf's projections assume the growth in the U. S. economy (Real Gross Domestic Product, GDP) will rise from a dismal 1.8% in 2002 to 4.0% in 2003 and then settle to its long-term trend growth of 3.2% in 2004 and remain in that range. The Federal Reserve is expected to maintain its policy of encouraging economic growth while maintaining control of inflation. This environment of moderate growth (2002-1.8%, 2003-4.0%, 2004-3.2%) will result in inflation of about 1.6% for 2002, rising to about 2.3% by 2007.

B. TERRITORIAL ECONOMIC OUTLOOK

Gulf's projections reflect the economic outlook for our service area as provided by Economy.com, a renowned economic service provider. Gulf's forecast assumes that service area population growth will continue to exceed the nation's growth and slightly lag the rate of growth for the state of Florida. Gulf's projections incorporate electric price assumptions derived from the 2002 Gulf Power Official Long-Range Forecast and include estimated capital costs associated with the May 2002 Lansing Smith Unit 3 capacity addition. Fuel price projections were provided by Southern Company Fuel Services. The following tables provide a summary of the assumptions associated with Gulf's forecast:

TABLE 1

**ECONOMIC SUMMARY
(2002-2007)**

	Base Case Forecast
GDP Growth	1.8% - 3.0%
Real Interest Rate	7.1% - 7.4%
Inflation	1.6% - 2.3%

TABLE 2

**AREA DEMOGRAPHIC SUMMARY
(2002-2007)**

	Base Case Forecast
Population Gain	68,050
Net Migration	14,710
Average Annual Population Growth	1.5%
Average Annual Labor Force Growth	1.8%

II. 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. Gulf district personnel 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 projections prepared by the districts are based upon recent historical trends in customer gains and their knowledge of locally planned construction projects from which they are able to estimate the near-term anticipated customer gains. These projections are then analyzed for consistency and the incorporation of major construction projects and business developments is reviewed for completeness and accuracy. The end result is a near-term forecast of residential customers.

For the remaining forecast horizon (3-25 years), the Gulf Economic Model, a competition-based econometric model developed by Economy.com, 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

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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 district personnel in similar fashion utilizing recent historical customer gains information and their knowledge of the local area economies and upcoming construction projects. 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.

III. ENERGY SALES FORECAST

A. RESIDENTIAL SALES FORECAST

The short-term (0-2 year) residential energy sales forecast is developed utilizing multiple regression analyses. Monthly class energy use per customer per billing day is estimated based upon recent historical data, expected normal weather and projected price. The model output is then multiplied by the projected number of customers and billing days by month to expand to the total residential class.

The long-term 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 data developed by Regional Economic Research, Inc. (RER), the current EPRI contractor, from 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. All of the weather sensitive UEC estimates were adjusted for Gulf's weather conditions.

The residential sales forecast reflects the continued impacts of Gulf's GoodCents Home program and efficiency improvements undertaken by customers as a result of the GoodCents Energy Survey program, as well as conversions to higher efficient outdoor lighting. The residential sales forecast also reflects the anticipated incremental impacts of Gulf's DSM plan, approved in April 2000, designed to meet the Commission-approved demand and energy reduction goals established in October 1999. Additional information on the residential conservation programs and program features are provided in the Conservation section.

B. COMMERCIAL SALES FORECAST

The short-term (0-2 year) commercial energy sales forecast is also developed utilizing multiple regression analyses. Monthly class energy use per customer per billing day is estimated based upon recent historical data, expected normal weather and projected price. The model output is then multiplied by the projected number of customers and billing days by month to expand to the total commercial class.

COMMEND, a commercial end-use model developed by the Georgia Institute of Technology through EPRI Project RP1216-06, serves as the basis for Gulf's long-term 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	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
5. Automotive Services	11. Religious Organizations
6. Restaurants	12. Miscellaneous

The commercial sales forecast reflects the continued impacts of Gulf's Commercial GoodCents 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. The commercial sales forecast also reflects the anticipated incremental impacts of Gulf's DSM plan, approved in April 2000, designed to meet the Commission-approved demand and energy reduction goals established in October 1999. 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 a combination of trending techniques and 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. The industrial sales forecast also reflects the anticipated incremental impacts of Gulf's DSM plan, approved in April 2000, designed to meet the Commission-approved demand and energy reduction goals established in October 1999. Additional information on the conservation programs and program features are provided in the Conservation section.

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:

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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

The projected number of fixtures by fixture type is developed from analyses of recent historical fixture data to discern the patterns of fixture additions and deletions. 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.

E. WHOLESALE ENERGY FORECAST

The forecast of energy sales to wholesale customers is developed utilizing multiple regression analyses. Monthly energy purchases per day for each of Gulf's wholesale customers are estimated based upon recent historical data and expected normal weather. The model output is then multiplied by the projected number of days by month to expand to the customer totals, which are then summed to develop the class totals.

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 annual forecast for Company and Interdepartmental energy usage was based on recent historical values, with appropriate adjustments to reflect short-term increases in energy requirements for anticipated new

Company facilities. The monthly spreads were derived using historical relationships between monthly and annual energy usage.

IV. PEAK DEMAND FORECAST

The short-term (0-2 years) peak demand forecast is prepared using average historical monthly territorial load factors and projected monthly territorial supply.

The summer peak month demand projections are based upon the average of the historical summer peak month territorial load factors for the period from 1980 through the summer peak of 2000, excluding the extreme high load factor and extreme low load factor experienced during that period. Gulf's summer peak demand typically occurs in the month of July.

Similarly, the winter peak month demand projections are based upon the average of the historical winter peak month territorial load factors for the period from 1980 through the winter peak of 2000/2001, excluding the extreme high load factor and extreme low load factor experienced during that period. Gulf's winter peak demand typically occurs in the month of January.

The remaining monthly demand projections are developed in similar fashion utilizing the respective historical average monthly load factors, excluding the monthly extreme high and extreme low load factors.

The long-term 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:

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

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 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.

V. __DATA SOURCES__

Gulf utilizes Company historical customer, energy and revenue data by rate and class, and historical hourly load data coupled with weather information from WDAS and NOAA to drive the energy and demand models. Individual customer historical data is utilized in developing the projections for Gulf's largest commercial and industrial customers.

Gulf's models also utilize economic projections provided by Economy.com, a renowned economic services provider. Economy.com utilizes the Bureau of Labor Statistics for data on employment, unemployment rate and labor force. Personal Income data is obtained from the Bureau of Economic Analysis. Population and Population by Age Cohort, Households and Housing Permit information is obtained from the U.S. Bureau of Census.

VI. CONSERVATION PROGRAMS

As previously mentioned, 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 also reflect the anticipated impacts of the new programs submitted in Gulf's Demand Side Management plan filed December 29, 1999 (Docket No. 991790-EG) as approved by the FPSC on April 17, 2000. These programs were designed to meet the incremental impacts of the Commission-approved demand and energy reduction DSM goals established in Order No. PSC-99-1942-FOF-EG on October 1,1999.

A. RESIDENTIAL CONSERVATION

In the residential sector, Gulf's GoodCents Home/Energy Star 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. This program also provides the opportunity to offer the Energy Star Home Program to Gulf's builders and customers and correlates the performance of GoodCents Homes to the nationally recognized Energy Star efficiency label. In many cases, a standard GoodCents Home will also qualify as an Energy Star home. Approximately 53,000 new homes have been constructed to Good Cents standards under this program resulting in an annual reduction of nearly 72 mW of summer peak demand and annual energy savings of nearly 190 gWh.

Further conservation benefits are achieved in the existing home market with Gulf's GoodCents Energy Survey 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 by providing specific whole house recommendations and a list of qualified companies who provide installation services. The benefits of this program are also made available to our customers through the GoodCents Mail-In Energy Survey program as well as a recently added on-line version. Approximately 13,000 existing homes have been upgraded to Good Cents standards in addition to other system upgrades resulting in an annual reduction of approximately 32 mW of summer peak demand and over 70 gWh in annual energy savings.

In Concert With The Environment® is an environmental and energy awareness program that was being implemented in the 8th and 9th grade science classes in Gulf's service area. The program shows students how everyday energy use impacts the environment and how using energy wisely increases environmental quality. *In Concert With The Environment®* is brought to students who are already making decisions which impact our country's energy supply and the environment. Wise energy use today can best be achieved by linking environmental benefits to wise energy-use activities and by educating both present and future consumers on how to live "in concert with the environment". The program encourages participation by all household members through a take-home Energy Survey, Energy Survey Results, and student educational handbook and is considered an extension of Gulf's Residential Audit Program. Although Gulf ceased actively pursuing implementation of this program in 1998, it is still available upon request for presentation in the schools within Gulf's service area.

The Duct Leakage Repair Program provides Gulf's residential customers a means to identify house air duct leakage and recommend repairs that can reduce customer energy usage and kW demand. Potential program participants are identified through the Residential Energy Audit Program as well as through educational and promotional activities. After identification of the leakage sites and quantities, the customer is given a

written summary of the test findings and the potential for savings, along with a list of approved repair contractors. The program also provides duct leakage testing on new construction duct systems to ensure maximum efficiency and comfort in these new homes. This testing is available to the Builder, HVAC contractor, or homeowner. This program builds upon the Residential Energy Audit process by revealing additional energy efficiency and comfort measures available to the customer. Although Gulf discontinued actively promoting this program in 1998, it is still available upon request.

The GoodCents Environmental Home Program provides Gulf's residential customers with guidance concerning energy and environmental efficiency in new construction. The program promotes energy-efficient and environmentally sensitive home construction techniques by evaluating over 500 components in six categories of design and construction practices. The GoodCents Environmental Home consists of energy and environmental components. The energy components evaluate the building envelope and mechanical systems of the home with respect to energy efficiency. The environmental components of the program include measures which also evaluate thermal energy loss, alternative energy sources, embodied energy and design strategies that affect energy usage in the home.

The Residential Geothermal Heat Pump Program reduces the demand and energy requirements of new and existing residential customers through the promotion and installation of advanced and emerging geothermal systems. Geothermal heat pumps also provide significant benefits to participating customers in the form of reduced operating costs and increased comfort levels, and are superior to other available heating and cooling technologies with respect to source efficiency and environmental impacts. Gulf's Geothermal Heat Pump program is designed to overcome existing market barriers, specifically, lack of consumer awareness, knowledge and acceptance of this technology. The program additionally promotes efficiency levels well above current market conditions. Approximately 1,500 geothermal heat pumps have been installed in Gulf's

service area resulting in an annual reduction in summer peak demand in excess of 3.5 mW and annual energy savings of over 4 gWh.

The GoodCents Select Program, an advanced energy management (AEM) program, provides Gulf's customers with a means of conveniently and automatically controlling and monitoring their energy purchases in response to prices that vary during the day and by season in relation to Gulf's cost of producing or purchasing energy. The GoodCents Select System allows the customer to control more precisely the amount of electricity purchased for heating, cooling, water heating, and other selected loads; to purchase electric energy on a variable spot price rate; and to monitor at any time, and as often as desired, the use of electricity and its cost in dollars, both for the billing period to date and on a forecast basis to the end of the period. The various components of the GoodCents Select system installed in the customer's home, as well as the components installed at Gulf, provide constant communication between customer and utility. The combination of the GoodCents Select system and Gulf's innovative variable rate concept will provide consumers with the opportunity to modify their usage of electricity in order to purchase energy at prices that are somewhat lower to significantly lower than standard rates a majority of the time. Further, the communication capabilities of the GoodCents Select system allow Gulf to send a critical price signal to the customer's premises during extreme peak load conditions. The signal results in a reduction attributable to predetermined thermostat and relay settings chosen by the individual participating customer. The customer's pre-programmed instructions regarding their desired comfort levels adjust electricity use for heating, cooling, water heating and other appliances automatically. Therefore, the customer's control of their electric bill is accomplished by allowing them to choose different comfort levels at different price levels in accordance with their individual lifestyles. Currently approximately 3,200 customers are participating in this program resulting in an annual reduction of over 10 mW in summer peak demand and annual energy savings in excess of 7 gWh.

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

B. COMMERCIAL/INDUSTRIAL CONSERVATION

In the commercial sector, Gulf's GoodCents 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. More than 8,000 customers under this program have achieved an annual reduction of over 100 mW in summer peak demand and annual energy savings of nearly 200 gWh.

The Tier I and Tier II Commercial Energy Analysis Programs and the 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. More than 17,000 customers participating in these programs have achieved an annual reduction of 22 mW in summer peak demand and annual energy savings of nearly 70 gWh.

The Tier I program is a direct mail energy audit program that provides customers with recommendations that, if implemented, would move the customer beyond the efficiency level typically found in the marketplace. The Tier II program is an interactive program that consists of an on-site review by a Gulf Power Company Commercial Energy Consultant of the customer's facility operation, equipment and energy usage pattern. The customer is provided with energy management strategies that enhance their overall

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business operation, and customer specific recommendations, including introduction to new technologies, for improving profitability by lowering energy cost.

The Technical Assistance Audit Program is designed with enough flexibility to allow a detailed economic evaluation of potential energy improvements through a more in-depth process which includes equipment energy usage monitoring, computer energy modeling, life cycle equipment cost analysis, and feasibility studies.

Gulf's Real Time Pricing (RTP) program is designed to take advantage of customer price response to achieve peak demand reductions. Customer participation is voluntary. Due to the nature of the pricing arrangement included in this program, there are some practical limitations to customers' ability to participate. These limitations include the ability to purchase energy under a pricing plan which includes price variation and unknown future prices; the transaction costs associated with receiving, evaluating, and acting on prices received on a daily basis; customer risk management policy; and other technical/economic factors. Customers participating in this program typically exhibit approximately 20 mW of reduction in summer peak demand.

Gulf also has an Interruptible Service program which provides the Company with a contracted and callable resource. Participating customers are notified in advance for the need to curtail consumption. Under preset terms and conditions, the customer must reduce demand and energy for the designated period or risk assessment of monetary penalties for noncompliance.

Gulf's Energy Services Program is designed to offer advanced energy services and energy efficient end-use equipment to meet the individual needs of large customers. These energy services include comprehensive audits, design, construction and financing of demand reduction or efficiency improvement energy conservation projects. This program has resulted in a reduction of over 5 mW of summer peak demand and 29 gWh in annual energy savings.

C. **STREET LIGHTING CONVERSION**

Gulf's Street Lighting program is designed to achieve additional conservation benefits by conversion of existing less efficient mercury vapor street and roadway lighting to higher efficient high pressure sodium lighting. Customers participating in Gulf's outdoor lighting conversion programs have achieved annual energy savings of nearly 12 gWh.

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 reductions are verified through on-going monitoring in place on Gulf's major conservation programs and reflect estimates of conservation undertaken by customers as a result of Gulf's involvement. The conservation without Gulf's involvement has contributed to further unquantifiable reductions in 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 PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	279,991	326,297	598,091,328

2003 BUDGET FORECAST
TOTAL CONSERVATION PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	13,681	15,692	25,080,950
2003	16,690	19,063	27,130,270
2004	17,363	19,860	27,365,012
2005	17,531	20,110	27,599,115
2006	17,687	20,339	27,770,215
2007	17,940	20,664	28,316,145
2008	18,096	20,889	28,561,233
2009	18,272	21,160	28,847,013
2010	18,294	21,196	28,876,544
2011	18,216	21,054	28,753,478
2012	18,192	21,013	28,720,110

2003 BUDGET FORECAST
TOTAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	293,672	341,989	623,172,278
2003	310,362	361,052	650,302,548
2004	327,725	380,912	677,667,560
2005	345,256	401,022	705,266,675
2006	362,943	421,361	733,036,890
2007	380,883	442,025	761,353,035
2008	398,979	462,914	789,914,268
2009	417,251	484,074	818,761,281
2010	435,545	505,270	847,637,825
2011	453,761	526,324	876,391,303
2012	471,953	547,337	905,111,413

HISTORICAL
TOTAL RESIDENTIAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	136,607	200,039	302,786,939

2003 BUDGET FORECAST
TOTAL RESIDENTIAL CONSERVATION PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	11,071	14,210	9,845,408
2003	14,080	17,583	11,833,595
2004	14,908	18,534	12,446,807
2005	15,128	18,836	12,711,521
2006	15,336	19,116	12,959,229
2007	15,537	19,390	13,197,931
2008	15,744	19,667	13,441,634
2009	15,974	19,990	13,724,360
2010	15,994	20,026	13,755,376
2011	15,916	19,883	13,632,311
2012	15,893	19,843	13,599,292

2003 BUDGET FORECAST
TOTAL RESIDENTIAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	147,678	214,249	312,632,347
2003	161,758	231,832	324,465,942
2004	176,666	250,366	336,912,749
2005	191,794	269,202	349,624,270
2006	207,130	288,318	362,583,499
2007	222,667	307,708	375,781,430
2008	238,411	327,375	389,223,064
2009	254,385	347,365	402,947,424
2010	270,379	367,391	416,702,800
2011	286,295	387,274	430,335,111
2012	302,188	407,117	443,934,403

HISTORICAL
TOTAL COMMERCIAL/INDUSTRIAL DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	143,384	126,258	283,604,629

2003 BUDGET FORECAST
TOTAL COMMERCIAL/INDUSTRIAL DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	2,610	1,482	15,017,954
2003	2,610	1,480	15,155,066
2004	2,455	1,326	14,820,849
2005	2,403	1,274	14,807,827
2006	2,351	1,223	14,799,173
2007	2,403	1,274	15,111,972
2008	2,352	1,222	15,112,439
2009	2,298	1,170	15,117,678
2010	2,300	1,170	15,117,678
2011	2,300	1,171	15,117,678
2012	2,299	1,170	15,117,677

2003 BUDGET FORECAST
TOTAL COMMERCIAL/INDUSTRIAL DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	145,994	127,740	298,622,583
2003	148,604	129,220	313,777,649
2004	151,059	130,546	328,598,498
2005	153,462	131,820	343,406,325
2006	155,813	133,043	358,205,498
2007	158,216	134,317	373,317,470
2008	160,568	135,539	388,429,909
2009	162,866	136,709	403,547,587
2010	165,166	137,879	418,665,265
2011	167,466	139,050	433,782,943
2012	169,765	140,220	448,900,620

HISTORICAL
TOTAL OTHER DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	0	0	11,699,760

2003 BUDGET FORECAST
TOTAL OTHER DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	0	0	217,588
2003	0	0	141,608
2004	0	0	97,356
2005	0	0	79,767
2006	0	0	11,813
2007	0	0	6,242
2008	0	0	7,160
2009	0	0	4,976
2010	0	0	3,489
2011	0	0	3,489
2012	0	0	3,141

2003 BUDGET FORECAST
TOTAL OTHER DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	0	0	11,917,348
2003	0	0	12,058,957
2004	0	0	12,156,313
2005	0	0	12,236,080
2006	0	0	12,247,893
2007	0	0	12,254,135
2008	0	0	12,261,295
2009	0	0	12,266,270
2010	0	0	12,269,760
2011	0	0	12,273,249
2012	0	0	12,276,390

HISTORICAL
TOTAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	222,644	267,533	533,155,995

2003 BUDGET FORECAST
TOTAL EXISTING DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	1,715	2,651	3,270,934
2003	1,459	2,191	2,799,744
2004	1,393	2,073	2,654,438
2005	1,425	2,129	2,684,874
2006	1,445	2,165	2,647,937
2007	1,459	2,191	2,664,378
2008	1,476	2,222	2,692,310
2009	1,519	2,299	2,756,161
2010	1,539	2,335	2,785,691
2011	1,460	2,192	2,662,625
2012	1,438	2,153	2,629,260

2003 BUDGET FORECAST
TOTAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	224,359	270,183	536,426,929
2003	225,817	272,373	539,226,674
2004	227,210	274,446	541,881,112
2005	228,635	276,575	544,565,986
2006	230,080	278,739	547,213,924
2007	231,538	280,930	549,878,302
2008	233,015	283,152	552,570,612
2009	234,533	285,450	555,326,772
2010	236,072	287,785	558,112,465
2011	237,532	289,977	560,775,090
2012	238,970	292,130	563,404,349

HISTORICAL
RESIDENTIAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	112,468	164,708	282,890,492

2003 BUDGET FORECAST
RESIDENTIAL EXISTING DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	1,460	2,396	2,273,622
2003	1,204	1,936	1,878,412
2004	1,138	1,818	1,777,358
2005	1,170	1,874	1,825,383
2006	1,190	1,910	1,856,400
2007	1,204	1,936	1,878,412
2008	1,221	1,967	1,905,426
2009	1,264	2,044	1,971,461
2010	1,284	2,080	2,002,478
2011	1,205	1,937	1,879,412
2012	1,183	1,898	1,846,395

2003 BUDGET FORECAST
RESIDENTIAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	113,928	167,103	285,164,114
2003	115,132	169,039	287,042,525
2004	116,270	170,857	288,819,883
2005	117,440	172,731	290,645,266
2006	118,630	174,640	292,501,666
2007	119,833	176,576	294,380,078
2008	121,055	178,543	296,285,504
2009	122,319	180,587	298,256,965
2010	123,603	182,667	300,259,443
2011	124,808	184,604	302,138,855
2012	125,991	186,502	303,985,249

HISTORICAL
COMMERCIAL/INDUSTRIAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	110,176	102,825	238,565,743

2003 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL EXISTING DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	255	255	779,724
2003	255	255	779,724
2004	255	255	779,724
2005	255	255	779,724
2006	255	255	779,724
2007	255	255	779,724
2008	255	255	779,724
2009	255	255	779,724
2010	255	255	779,724
2011	255	255	779,724
2012	255	255	779,724

2003 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	110,431	103,080	239,345,467
2003	110,685	103,334	240,125,192
2004	110,940	103,589	240,904,916
2005	111,195	103,844	241,684,640
2006	111,450	104,099	242,464,365
2007	111,705	104,354	243,244,089
2008	111,960	104,609	244,023,813
2009	112,214	104,863	244,803,537
2010	112,469	105,118	245,583,262
2011	112,724	105,373	246,362,986
2012	112,979	105,628	247,142,710

HISTORICAL
OTHER EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	0	0	11,699,760

2003 BUDGET FORECAST
OTHER EXISTING DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	0	0	217,588
2003	0	0	141,608
2004	0	0	97,356
2005	0	0	79,767
2006	0	0	11,813
2007	0	0	6,242
2008	0	0	7,160
2009	0	0	4,976
2010	0	0	3,489
2011	0	0	3,489
2012	0	0	3,141

2003 BUDGET FORECAST
OTHER EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	0	0	11,917,348
2003	0	0	12,058,957
2004	0	0	12,156,313
2005	0	0	12,236,080
2006	0	0	12,247,893
2007	0	0	12,254,135
2008	0	0	12,261,295
2009	0	0	12,266,270
2010	0	0	12,269,760
2011	0	0	12,273,249
2012	0	0	12,276,390

HISTORICAL
TOTAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	57,347	58,764	64,935,333

2003 BUDGET FORECAST
TOTAL NEW DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	11,966	13,042	21,810,016
2003	15,232	16,873	24,330,525
2004	15,970	17,787	24,710,574
2005	16,106	17,981	24,914,241
2006	16,242	18,175	25,122,277
2007	16,482	18,473	25,651,767
2008	16,619	18,667	25,868,923
2009	16,754	18,862	26,090,853
2010	16,755	18,861	26,090,851
2011	16,756	18,862	26,090,853
2012	16,754	18,860	26,090,851

2003 BUDGET FORECAST
TOTAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	69,313	71,806	86,745,349
2003	84,545	88,679	111,075,874
2004	100,515	106,466	135,786,448
2005	116,621	124,447	160,700,689
2006	132,863	142,622	185,822,966
2007	149,345	161,095	211,474,733
2008	165,964	179,762	237,343,656
2009	182,718	198,624	263,434,509
2010	199,473	217,485	289,525,360
2011	216,229	236,347	315,616,213
2012	232,983	255,207	341,707,064

HISTORICAL
RESIDENTIAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	24,139	35,331	19,896,447

2003 BUDGET FORECAST
RESIDENTIAL NEW DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	9,611	11,815	7,571,786
2003	12,876	15,647	9,955,184
2004	13,770	16,716	10,669,449
2005	13,958	16,962	10,886,138
2006	14,146	17,207	11,102,829
2007	14,334	17,454	11,319,519
2008	14,522	17,700	11,536,208
2009	14,710	17,946	11,752,899
2010	14,710	17,946	11,752,898
2011	14,711	17,946	11,752,899
2012	14,710	17,945	11,752,898

2003 BUDGET FORECAST
RESIDENTIAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	33,750	47,146	27,468,233
2003	46,626	62,793	37,423,417
2004	60,396	79,509	48,092,866
2005	74,354	96,471	58,979,004
2006	88,500	113,678	70,081,833
2007	102,834	131,132	81,401,352
2008	117,356	148,832	92,937,560
2009	132,066	166,778	104,690,459
2010	146,776	184,724	116,443,357
2011	161,487	202,670	128,196,256
2012	176,197	220,615	139,949,154

HISTORICAL
COMMERCIAL/INDUSTRIAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	33,208	23,433	45,038,886

2003 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL NEW DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	2,355	1,227	14,238,230
2003	2,356	1,226	14,375,341
2004	2,200	1,071	14,041,125
2005	2,148	1,019	14,028,103
2006	2,096	968	14,019,448
2007	2,148	1,019	14,332,248
2008	2,097	967	14,332,715
2009	2,044	916	14,337,954
2010	2,045	915	14,337,953
2011	2,045	916	14,337,954
2012	2,044	915	14,337,953

2003 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	35,563	24,660	59,277,116
2003	37,919	25,886	73,652,457
2004	40,119	26,957	87,693,582
2005	42,267	27,976	101,721,685
2006	44,363	28,944	115,741,133
2007	46,511	29,963	130,073,381
2008	48,608	30,930	144,406,096
2009	50,652	31,846	158,744,050
2010	52,697	32,761	173,082,003
2011	54,742	33,677	187,419,957
2012	56,786	34,592	201,757,910

HISTORICAL
OTHER NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2001	0	0	0

2003 BUDGET FORECAST
OTHER NEW DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0

2003 BUDGET FORECAST
OTHER NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	0	0	0
2003	0	0	0
2004	0	0	0
2005	0	0	0
2006	0	0	0
2007	0	0	0
2008	0	0	0
2009	0	0	0
2010	0	0	0
2011	0	0	0
2012	0	0	0

VII. 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.

Small Power Producers
Net Capability

Year	MW
2002	30
2003	30
2004	30
2005	11
2006	11
2007	11
2008	11
2009	11
2010	11
2011	11
2012	11

Additionally, Gulf initiated implementation of a "Green Pricing" pilot program, *Solar for Schools,* to obtain funding for the installation of solar technologies in participating school facilities combined with energy conservation education of students. Initial solicitation began in September 1996 and has resulted in participation of approximately 219 customers contributing $41,386 through December 2002. A prototype installation at a local middle school has been completed and the experience gained at this site will be used to design future Solar for Schools installations.

Gulf customers also now have the opportunity to participate in a recent Florida Public Service Commission approved solar energy project. EarthCents

was developed as a renewable energy program that will include a portfolio of renewable energy choices. The EarthCents Solar Program gives customers an opportunity to help pay for the construction of a photovoltaic generating facility. This project is a Southern Company-wide effort; with Gulf and her sister company Alabama Power Company the first to roll out their programs. The facility will be built within Southern Company's territory or the power will be purchased from other photovoltaic generating facilities. Approximately 10,000 customers are initially needed to sign up in order to begin construction of a 1 MW generating facility. As of March, 2003 customers have pledged to purchase a total of 98 hundred-watt blocks of generation at a monthly rate of $6 per block. The time frame for potential construction will be determined as participation levels increase.

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's service area yield no significant opportunities for district heating and cooling that are economically viable on the planning horizon.

GULF POWER COMPANY

Schedule 2.1
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	
		Members per		Average No. of	Average KWH Consumption		Average No. of	Average KWH Consumption
Year	Population *	Household	GWH	Customers	Per Customer	GWH	Customers	Per Customer
1993	707,535	2.61	3,713	271,594	13,671	2,433	38,477	63,242
1994	719,958	2.59	3,752	278,215	13,486	2,549	39,989	63,739
1995	728,261	2.57	4,014	283,717	14,148	2,708	41,007	66,043
1996	734,578	2.55	4,160	287,752	14,457	2,809	42,381	66,271
1997	762,179	2.57	4,119	296,497	13,894	2,898	43,955	65,928
1998	789,816	2.59	4,438	304,413	14,577	3,112	45,510	68,379
1999	804,887	2.58	4,471	312,283	14,318	3,223	47,292	68,141
2000	818,664	2.56	4,790	319,506	14,992	3,379	47,584	71,021
2001	834,374	2.56	4,716	325,343	14,497	3,417	48,482	70,489
2002	848,129	2.56	5,144	331,637	15,510	3,553	49,139	72,304
2003	859,458	2.54	4,828	338,235	14,273	3,395	49,708	68,301
2004	876,891	2.54	4,926	345,604	14,252	3,481	51,137	68,080
2005	892,228	2.53	5,057	352,101	14,363	3,579	52,300	68,436
2006	904,805	2.53	5,172	358,315	14,433	3,646	53,414	68,265
2007	918,057	2.51	5,307	365,408	14,522	3,678	54,671	67,278
2008	932,781	2.50	5,424	373,568	14,518	3,720	56,105	66,296
2009	951,216	2.49	5,530	382,111	14,473	3,745	57,605	65,008
2010	970,185	2.48	5,674	390,420	14,533	3,791	59,066	64,179
2011	988,208	2.48	5,781	398,654	14,502	3,846	60,513	63,550
2012	1,002,401	2.45	5,919	408,338	14,495	3,891	62,196	62,560
CAAG								
93-02	2.0%	-0.2%	3.7%	2.2%	1.4%	4.3%	2.8%	1.5%
02-07	1.6%	-0.4%	0.6%	2.0%	-1.3%	0.7%	2.2%	-1.4%
02-12	1.7%	-0.4%	1.4%	2.1%	-0.7%	0.9%	2.4%	-1.4%

* Historical and projected figures include portions of Escambia, Santa Rosa, Okaloosa, Bay,
Walton, Washington, Holmes, and Jackson counties served by Gulf Power Company.

GULF POWER COMPANY

Schedule 2.2
History and Forecast of Energy Consumption and Number of Customers by Customer Class

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Industrial		Railroads	Street & Highway	Other Sales to Public	Total Sales to Ultimate
		Average No. of	Average KWH Consumption	and Railways	Lighting	Authorities	Consumers
Year	GWH	Customers	Per Customer	GWH	GWH	GWH	GWH
1993	2,030	268	7,574,388	0	16	0	8,192
1994	1,847	280	6,596,837	0	16	0	8,164
1995	1,795	276	6,502,731	0	16	0	8,534
1996	1,808	281	6,434,470	0	17	0	8,794
1997	1,903	277	6,870,216	0	17	0	8,938
1998	1,834	263	6,971,767	0	18	0	9,401
1999	1,846	251	7,357,969	0	18	0	9,558
2000	1,925	270	7,128,700	0	18	0	10,112
2001	2,018	277	7,285,943	0	21	0	10,173
2002	2,054	272	7,550,249	0	21	0	10,772
2003	2,152	310	6,942,678	0	22	0	10,398
2004	2,175	323	6,734,657	0	23	0	10,605
2005	2,195	326	6,733,070	0	24	0	10,855
2006	2,213	329	6,725,469	0	25	0	11,055
2007	2,228	332	6,711,782	0	25	0	11,238
2008	2,217	335	6,617,482	0	26	0	11,386
2009	2,205	338	6,523,675	0	27	0	11,507
2010	2,194	341	6,434,139	0	27	0	11,686
2011	2,181	344	6,341,027	0	28	0	11,836
2012	2,170	347	6,253,942	0	29	0	12,009
CAAG							
93-02	0.1%	0.2%	0.0%	0.0%	3.2%	0.0%	3.1%
02-07	1.6%	4.1%	-2.3%	0.0%	3.3%	0.0%	0.9%
02-12	0.6%	2.5%	-1.9%	0.0%	2.9%	0.0%	1.1%

GULF POWER COMPANY

Schedule 2.3
History and Forecast of Energy Consumption and Number of Customers by Customer Class

(1)	(2)	(3)	(4)	(5)	(6)
Year	Sales for Resale GWH	Utility Use & Losses GWH	Net Energy for Load GWH	Other Customers (Average No.)	Total No. of Customers
1993	317	565	9,074	79	310,419
1994	316	487	8,967	93	318,578
1995	336	582	9,452	119	325,119
1996	347	521	9,662	157	330,571
1997	342	607	9,887	215	340,944
1998	356	645	10,402	262	350,447
1999	348	558	10,464	286	360,113
2000	363	629	11,105	380	367,740
2001	360	671	11,204	460	374,561
2002	384	754	11,910	474	381,522
2003	366	696	11,460	485	388,737
2004	374	712	11,691	495	397,558
2005	380	730	11,966	505	405,231
2006	387	745	12,188	515	412,571
2007	394	759	12,392	525	420,936
2008	402	771	12,558	534	430,542
2009	409	781	12,697	540	440,593
2010	416	795	12,897	546	450,373
2011	424	807	13,067	551	460,062
2012	432	820	13,261	556	471,436
CAAG					
93-02	2.2%	3.3%	3.1%	22.0%	2.3%
02-07	0.5%	0.1%	0.8%	2.1%	2.0%
02-12	1.2%	0.8%	1.1%	1.6%	2.1%

Note: Sales for Resale and Net Energy for Load include contracted energy allocated to certain customers by Southeastern Power Administration (SEPA).

GULF POWER COMPANY

Schedule 3.1
History and Forecast of Summer Peak Demand - MW
Base Case

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
					Residential Load	Residential	Comm/Ind Load	Comm/Ind	Net Firm
Year	Total	Wholesale	Retail	Interruptible	Management	Conservation	Management	Conservation	Demand
1993	2,096	76	2,021	0	0	88	0	102	1,906
1994	1,999	72	1,927	0	0	92	0	104	1,803
1995	2,265	82	2,183	0	0	96	0	122	2,048
1996	2,196	79	2,118	0	0	100	0	127	1,969
1997	2,283	75	2,208	0	0	107	0	136	2,040
1998	2,422	82	2,340	16	0	115	0	138	2,154
1999	2,432	84	2,347	0	0	120	0	143	2,169
2000	2,576	86	2,490	17	0	128	0	142	2,289
2001	2,511	78	2,433	0	0	137	0	143	2,231
2002	2,756	86	2,670	0	0	148	0	146	2,462
2003	2,574	78	2,496	26	0	162	0	149	2,264
2004	2,624	80	2,544	26	0	177	0	151	2,296
2005	2,691	81	2,610	27	0	192	0	153	2,346
2006	2,749	83	2,666	27	0	207	0	156	2,386
2007	2,805	84	2,721	27	0	223	0	158	2,424
2008	2,855	86	2,769	22	0	238	0	161	2,456
2009	2,900	87	2,813	19	0	254	0	163	2,483
2010	2,959	89	2,870	15	0	270	0	165	2,523
2011	3,010	91	2,919	11	0	286	0	167	2,556
2012	3,062	92	2,970	6	0	302	0	170	2,590
CAAG									
93-02	3.1%	1.5%	3.1%	100.0%	0.0%	5.9%	0.0%	4.1%	2.9%
02-07	0.4%	-0.4%	0.4%	100.0%	0.0%	8.6%	0.0%	1.6%	-0.3%
02-12	1.1%	0.7%	1.1%	100.0%	0.0%	7.4%	0.0%	1.5%	0.5%

NOTE 1: Includes contracted capacity and energy allocated to certain Resale customers by Southeastern Power Administration (SEPA)

NOTE 2: The forecasted interruptible amounts shown in col (5) are included here for information purposes only. The projected demands shown in column (2), column (4) and column (10) do not reflect the impacts of interruptible. Gulf treats interruptible as a supply side resource.

GULF POWER COMPANY

Schedule 3.2
History and Forecast of Winter Peak Demand - MW
Base Case

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Residential Load Management	Residential Conservation	Comm/Ind Load Management	Comm/Ind Conservation	Net Firm Demand
92-93	1,820	61	1,759	0	0	140	0	100	1,579
93-94	2,055	72	1,983	0	0	145	0	101	1,809
94-95	1,993	71	1,922	0	0	150	0	102	1,740
95-96	2,404	82	2,322	0	0	157	0	103	2,144
96-97	2,208	80	2,127	0	0	163	0	105	1,939
97-98	1,981	61	1,919	0	0	171	0	118	1,692
98-99	2,392	79	2,313	0	0	177	0	122	2,093
99-00	2,225	75	2,150	0	0	188	0	126	1,911
00-01	2,486	86	2,401	0	0	200	0	126	2,160
01-02	2,532	85	2,447	0	0	214	0	128	2,190
02-03	2,474	68	2,406	27	0	232	0	129	2,113
03-04	2,521	69	2,452	27	0	250	0	131	2,140
04-05	2,576	70	2,506	28	0	269	0	132	2,175
05-06	2,623	72	2,552	28	0	288	0	133	2,202
06-07	2,670	73	2,597	28	0	308	0	134	2,228
07-08	2,711	74	2,637	23	0	327	0	136	2,248
08-09	2,745	76	2,669	20	0	347	0	137	2,261
09-10	2,792	77	2,715	15	0	367	0	138	2,287
10-11	2,832	78	2,754	11	0	387	0	139	2,306
11-12	2,876	80	2,796	7	0	407	0	140	2,329
CAAG									
93-02	3.7%	3.7%	3.7%	0.0%	0.0%	4.8%	0.0%	2.7%	3.7%
02-07	1.1%	-3.0%	1.2%	0.0%	0.0%	7.5%	0.0%	1.0%	0.3%
02-12	1.3%	-0.6%	1.3%	0.0%	0.0%	6.6%	0.0%	0.9%	0.6%

NOTE 1: Includes contracted capacity and energy allocated to certain Resale customers by Southeastern Power Administration (SEPA)

NOTE 2: The forecasted interruptible amounts shown in col (5) are included here for information purposes only. The projected demands shown in column (2), column (4) and column (10) do not reflect the impacts of interruptible. Gulf treats interruptible as a supply side resource.

GULF POWER COMPANY

Schedule 3.3
History and Forecast of Annual Net Energy for Load - GWH
Base Case

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year	Total	Residential Conservation	Comm/Ind Conservation	Retail	Wholesale	Utility Use & Losses	Net Energy for Load	Load Factor %
1993	9,537	247	216	8,192	317	565	9,074	54.3%
1994	9,443	254	222	8,164	316	487	8,967	56.8%
1995	9,942	263	227	8,534	336	582	9,452	52.7%
1996	10,167	273	232	8,794	347	521	9,662	55.9%
1997	10,408	282	239	8,938	342	607	9,887	55.3%
1998	10,950	292	257	9,401	356	645	10,402	55.1%
1999	11,036	298	274	9,558	348	558	10,464	55.1%
2000	11,691	306	280	10,112	363	629	11,105	55.2%
2001	11,802	314	284	10,173	360	671	11,204	57.3%
2002	12,533	325	299	10,772	384	754	11,910	55.2%
2003	12,110	337	314	10,398	366	696	11,460	57.8%
2004	12,368	349	329	10,605	374	712	11,691	58.1%
2005	12,671	362	343	10,855	380	730	11,966	58.2%
2006	12,921	375	358	11,055	387	745	12,188	58.3%
2007	13,153	388	373	11,238	394	759	12,392	58.4%
2008	13,348	401	388	11,386	402	771	12,558	58.4%
2009	13,516	415	404	11,507	409	781	12,697	58.4%
2010	13,745	429	419	11,686	416	795	12,897	58.4%
2011	13,943	443	434	11,836	424	807	13,067	58.4%
2012	14,166	456	449	12,009	432	820	13,261	58.4%
CAAG								
93-02	3.1%	3.1%	3.7%	3.1%	2.2%	3.3%	3.1%	0.2%
02-07	1.0%	3.6%	4.6%	0.9%	0.5%	0.1%	0.8%	1.1%
02-12	1.2%	3.5%	4.2%	1.1%	1.2%	0.8%	1.1%	0.6%

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

GULF POWER COMPANY

Schedule 4
Previous Year Actual and Two Year Forecast of Peak Demand and Net Energy for Load by Month

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	2002 Actual		2003 Forecast		2004 Forecast	
	Peak Demand	NEL	Peak Demand	NEL	Peak Demand	NEL
Month	MW	GWH	MW	GWH	MW	GWH
January	2,182	917	2,113	932	2,140	948
February	2,108	810	1,892	790	1,844	803
March	2,127	853	1,736	840	1,779	861
April	1,849	877	1,610	811	1,627	819
May	2,063	1,046	2,084	1,037	2,066	1,031
June	2,252	1,131	2,172	1,139	2,213	1,166
July	2,454	1,244	2,264	1,201	2,296	1,222
August	2,255	1,202	2,242	1,236	2,279	1,261
September	2,190	1,120	2,093	1,016	2,133	1,037
October	2,059	988	1,679	825	1,741	855
November	1,556	805	1,480	741	1,506	757
December	1,701	917	1,842	892	1,911	931

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

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Utility: Gulf Power Company

Schedule 5
Fuel Requirements

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Fuel Requirements		Units	Actual 2001	Actual 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
(1)	Nuclear		Trillion BTU	None	None	None	None	None	None	None	None	None	None	None	None
(2)	Coal		1000 TON	5,077	4,980	5,888	5,518	6,020	5,940	5,715	5,970	6,117	5,633	5,494	5,340
(3)	Residual	Total	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(4)		Steam	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(5)		CC	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(6)		CT	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(7)		Diesel	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(8)	Distillate	Total	1000 BBL	28	21	9	11	9	10	12	10	10	10	11	10
(9)		Steam	1000 BBL	14	20	9	10	9	9	10	9	9	9	10	9
(10)		CC	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(11)		CT	1000 BBL	14	1	0	1	0	1	2	1	1	1	1	1
(12)		Diesel	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(13)	Natural Gas	Total	1000 MCF	1,135	14,366	16,509	19,132	21,311	21,944	22,925	23,445	23,791	25,250	25,313	22,817
(14)		Steam	1000 MCF	1,135	686	10	17	5	5	0	0	0	0	0	0
(15)		CC	1000 MCF	None	13,680	16,499	19,115	21,306	21,939	22,843	23,385	23,780	25,224	25,293	22,816
(16)		CT	1000 MCF	None	None	None	None	None	None	82	60	11	26	20	1
(17)	Other		Trillion BTU	None	None	None	None	None	None	None	None	None	None	None	None

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Utility: Gulf Power Company

Schedule 6.1
Energy Sources

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Energy Sources		Units	Actual 2001	Actual 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
(1)	Annual Firm Interchange		GWH	(333)	(1,029)	(4,700)	(3,977)	(5,175)	(4,786)	(4,213)	(4,735)	(4,996)	(3,864)	(3,380)	(2,502)
(2)	Nuclear		GWH	None	None	None	None	None	None	None	None	None	None	None	None
(3)	Coal		GWH	11,290	10,752	13,682	12,789	13,990	13,779	13,262	13,874	14,210	13,055	12,718	12,404
(4)	Residual	Total	GWH	0	0	0	0	0	0	0	0	0	0	0	0
(5)		Steam	GWH	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CC	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(7)		CT	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(8)		Diesel	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(9)	Distillate	Total	GWH	6	1	0	1	0	1	1	1	1	1	1	1
(10)		Steam	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(11)		CC	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(12)		CT	GWH	6	1	0	1	0	1	1	1	1	1	1	1
(13)		Diesel	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(14)	Natural Gas	Total	GWH	127	2,086	2,377	2,777	3,109	3,194	3,342	3,418	3,482	3,705	3,728	3,358
(15)		Steam	GWH	63	27	1	1	1	1	0	0	0	0	0	0
(16)		CC	GWH	None	1,953	2,376	2,775	3,107	3,192	3,333	3,410	3,477	3,699	3,722	3,354
(17)		CT	GWH	64	106	0	1	1	1	9	8	5	6	6	4
(18)	NUGs		GWH	114	100	101	101	42	0	0	0	0	0	0	0
(19)	Net Energy for Load		GWH	11,204	11,910	11,460	11,691	11,966	12,188	12,392	12,558	12,697	12,897	13,067	13,261

NOTE: Incudes energy generated and sold under existing power sales contracts, and energy from projected short term firm purchases.

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Utility: Gulf Power Company

Schedule 6.2
Energy Sources

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Energy Sources		Units	Actual 2001	Actual 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
(1)	Annual Firm Interchange		%	(2.97)	(8.64)	(41.01)	(34.02)	(43.25)	(39.27)	(34.00)	(37.71)	(39.35)	(29.96)	(25.87)	(18.87)
(2)	Nuclear		%	None	None	None	None	None	None	None	None	None	None	None	None
(3)	Coal		%	100.77	90.28	119.39	109.39	116.91	113.05	107.02	110.48	111.92	101.23	97.33	93.54
(4)	Residual	Total	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(5)		Steam	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(6)		CC	%	None	None	None	None	None	None	None	None	None	None	None	None
(7)		CT	%	None	None	None	None	None	None	None	None	None	None	None	None
(8)		Diesel	%	None	None	None	None	None	None	None	None	None	None	None	None
(9)	Distillate	Total	%	0.05	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
(10)		Steam	%	None	None	None	None	None	None	None	None	None	None	None	None
(11)		CC	%	None	None	None	None	None	None	None	None	None	None	None	None
(12)		CT	%	0.05	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
(13)		Diesel	%	None	None	None	None	None	None	None	None	None	None	None	None
(14)	Natural Gas	Total	%	1.13	17.51	20.74	23.75	25.98	26.21	26.97	27.22	27.42	28.73	28.53	25.32
(15)		Steam	%	0.56	0.23	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
(16)		CC	%	None	16.40	20.73	23.74	25.97	26.19	26.90	27.15	27.38	28.68	28.48	25.29
(17)		CT	%	0.57	0.89	0.00	0.01	0.01	0.01	0.07	0.06	0.04	0.05	0.05	0.03
(18)	NUGs		%	1.02	0.84	0.88	0.86	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(19)	Net Energy for Load		%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

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CHAPTER III

PLANNING ASSUMPTIONS AND PROCESSES

THE INTEGRATED RESOURCE PLANNING PROCESS

Gulf participates in the SES IRP process. This process begins with a team of experts from within and outside the SES that meets to discuss current and historical economic trends and conditions as well as future expected economic conditions and most probable occurrences which would impact the SES's business over the next twenty to twenty-five years. This economic panel decides what the various escalation and inflation rates will be for the various components that impact the financial condition of the SES. 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 SES 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 potential 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 evaluated 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.

The supply side of the IRP process focuses on the SES as a whole which has as its planning criterion a 15.0% reserve margin target for the year 2006 and beyond. 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, the necessary planning inputs are defined and 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 SES. 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 forecasts, 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 for every year all the many combinations of generation additions that satisfy the reserve margin constraint. Annual system operating costs are simulated and are added to the construction costs required to build each combination of resource additions. A least cost resource addition schedule is developed by evaluating each year sequentially and comparing the results with each other. 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 SES and are reflective of the various technology candidates selected.

After the SES 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 result of this allocation is an individual operating company supply plan as it would fit within the SES planning criteria.

Once the individual operating company supply plans are 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 are performed. The plan is analyzed for changes in load forecast as well as fuel price variations, as sensitivities, in order to assess the impact on the system's cost. Once the plan has proven to be robust and financially feasible, it is reviewed with and presented for approval to executive personnel.

In summary, the SES IRP process involves a significant amount of manpower and computer resources in order to produce a truly least-cost, integrated demand-side and supply-side resource plan. During the entire process, the SES is continually looking at a broad range of alternatives in order to meet the SES's projected demand and energy requirements. The result of the SES IRP process is an integrated plan which can meet the needs of the SES's customers in a cost-effective and reliable manner.

The IRP process is a very manpower-intensive activity. The SES has decided to only perform a "full-blown" IRP on every third year, with "updates" performed for the interim years. These updated plans take the changes in the demand and energy forecast, and any major changes to other assumptions, and remixes to assure the companies that the IRP is still valid. Likewise, most sensitivities are suspended for the updated plans in an effort to conserve manpower and costs. The SES has chosen to perform updates rather than expend resources to do a full-blown IRP because no observed changes in recent years would make a significant difference from year to year. The costs of performing full-blown IRPs on an annual basis with such little change is not justifiable.

TRANSMISSION PLANNING PROCESS

The transmission system is not studied as a part of the IRP process, but it is studied, nonetheless, for reliability purposes. Commonly, a transmission

system is viewed as a medium used to transport electric power from its generation source to the point of its consumption under a number of system conditions, known as contingencies. The results of the IRP, particularly with regard to location of future generating units, is factored into transmission studies in order to determine what the impacts of various generation site options have on the transmission system. The transmission system is studied under different contingencies for various load levels to insure that the system can operate adequately without exceeding conductor thermal and system voltage limits.

When the study reveals a potential problem with the transmission system that warrants the consideration of correction in order to maintain or restore reliability, a number of possible solutions are identified. These solutions and their costs are evaluated to determine which is the most cost-effective. Once a solution is chosen to correct the problem, a capital budget expenditure request is prepared for executive approval. It should be noted that not all thermal overloads or voltage limit violations warrant correction. This may be due to the small magnitude of the problem or because the probability of occurrence is insufficient to justify the capital investment of the solution.

Gulf has made a series of purchased power arrangements to meet its needs in prior years, and it will continue this practice in the future when economical opportunities are available. The planned transmission has proven adequate to handle these purchased power transactions during the time of Gulf's needs. It has been and will continue to be Gulf's practice to perform a transmission analysis of all viable purchased power proposals to determine any

transmission constraints. Gulf will formulate a plan, if needed, to most cost-effectively solve any problems prior to proceeding with negotiations for purchased power agreements.

FUEL PRICE FORECAST PROCESS

FUEL PRICE FORECASTS

Fuel price forecasts are used for a variety of purposes within the SES, including such diverse uses as long-term generation planning and short-term fuel budgeting. The SES's fuel price forecasting process is designed to support these various uses.

The delivered price of any fuel consists of two components, the commodity price and the transportation cost. Commodity prices are forecast as mine-mouth prices for coal or well-head prices for natural gas. Because mine-mouth coal prices vary by source, sulfur content and Btu level, the SES prepares commodity price forecasts for 17 different coal classifications used on the SES. Because natural gas does not experience the same quality variations as coal, the SES prepares a single commodity price forecast for gas. In the case of natural gas, a price basis is applied to the single commodity price forecast for the Henry Hub, a delivery pricing point in Louisiana, and the various pipelines serving the SES's plants. This price basis is based on historical averages between the various pipelines. Four price forecasts are developed for oil, based on grade of oil, sulfur and heat content.

The level of detail with which transportation costs are projected depends on the purpose for which the forecast will be used. Generic transportation costs reflecting an average cost for delivery within the SES territory are used in the delivered price forecast when modeling generic unit additions in the IRP process.

Site-specific transportation costs are developed for existing units to produce delivered price forecasts for both the IRP process and the fuel budget process. Similarly, when site-specific unit additions are under consideration, site-specific transportation costs are developed for each option.

Given the proposed resource additions in this site plan, the following discussion will focus on the commodity price forecasts for coal and natural gas.

SES GENERIC FUEL FORECAST

Each year, the SES develops a fuel price forecast for coal, oil, and natural gas, which extends through the Company's 10-year planning horizon. This forecast is developed by Southern Company Services (SCS) Fuel Procurement staff with input from outside consultants. The forecast is approved by a fuel panel consisting of fuel procurement managers responsible for the fuel programs of each of the SES operating companies.

The fuel price forecasting process begins with an annual Fossil Fuel Price Workshop that is held with representatives from recognized leaders in energy-related economic forecasting and transportation-related industries. Presenters at the last fuel price workshop included representatives from Energy Ventures Analysis, McClosky Coal, JD Energy, Resource Data International, PIRA Energy Group, Canadian Imperial Bank of Commerce, and Criton Company.

During the Fossil Fuel Price Workshop, each fuel procurement representative presents their "base case" forecast and assumptions, and high and low fuel price scenarios are discussed.

After the workshop, presentations by the SCS Fuel Services group reference the outside consultant forecasts and identify any major assumption differences. The Fuel Panel then consolidates both internal and external forecasts and assumptions to derive a commodity forecast for each type of fuel. The Fuel Panel's 2002 commodity price forecasts for 1.0% sulfur coal, low sulfur #2 oil, and natural gas are included in the table below.

SES GENERIC FUEL PRICE FORECAST
($/MMBtu)

	COAL*	NAT. GAS	OIL**
2003	1.188	3.750	4.610
2004	1.188	3.750	4.420
2005	1.208	3.750	4.507
2006	1.229	4.000	4.501
2007	1.250	4.000	4.481
2008	1.248	4.000	4.525
2009	1.269	4.000	4.566
2010	1.291	4.000	4.669
2011	1.302	3.918	4.781
2012	1.318	4.092	4.894

*Central Appalachia, 12000 BTU/lb., 1% Sulfur
** SES No.2 Oil, 0.05% Sulfur

COAL PRICE FORECAST

The information provided during the Fuel Price Workshop is used to develop the SES forecast of generic coal prices. In general, coal has experienced real price declines over the last several decades. There are ample reserves of coal and the industry has experienced downward price pressures from environmental regulations, readily available coal supplies, and competition from import coals and efficient gas turbine technology. In the latter part of 2000 and during 2001, real price increases in coal resulted from strong demand (weather driven), short term supply constraints, and transportation delivery issues. The market returned to more normal prices by 2002 as weather effects were milder, a weak economy continued to affect demand, production issues were resolved, and gas prices were stable. In early 2003, a price spike has been experienced in the Central Appalachia market due to supply/demand imbalance, transportation delivery issues, and high natural gas prices. Many producers in this region are in poor financial condition and continue to shut down high cost mining operations. Thus, this is shrinking the supply and increasing the market prices.

The generic coal price used in the IRP process is based on an average expectation of coal commodity cost combined with average transportation fees. This serves as a basis for the fuel costs associated with the pulverized coal candidate technology in the mix analyses. This generic fuel commodity price is also used with plant specific transportation fees in combination with a plant's

contract coal prices to develop the existing fuel price projection for the SES's budget process.

NATURAL GAS PRICE FORECAST

The consensus is that gas resources are sufficient to meet the growing demand with moderate nominal dollar increases in price during the planning period. Dramatic improvements in producers' ability to find and develop natural gas reserves have prompted suppliers to have a bullish outlook on future markets. In the past few years, success rates in drilling offshore exploration wells have improved dramatically. In addition, new completion techniques such as horizontal drilling have increased production per well substantially. Lastly, new production methods are allowing producers to drill in very deep water at a lower cost. The result is expected to be a sufficient supply of volumes of gas in the near future. Improving technology has, however, led to wells declining at quicker than historical rates. As a result, Exploration and Production (E&P) companies are forced to maintain consistent drilling rates in order to maintain current production levels. This treadmill effect can lead to price volatility if E&P companies reduce their domestic drilling efforts. Declines in production have been credited with recent price volatility that occurred this past winter, when colder weather led to increased demand for natural gas.

NATURAL GAS AVAILABILITY

Gas supplies in the SES region should improve during the next five years. Producers have announced major discoveries in the deepwater Gulf of Mexico. Current well depletion rates are expected, however, to keep production levels flat for the foreseeable future. As a result, liquefied natural gas (LNG) and Canadian imports will be expected to bridge the gap between increasing demand and flat supply growth. LNG imports at Elba Island, GA and Lake Charles, LA increased potential gas supplies approximately 1.5 Bcf per day during 2002. Several plans have been announced for increasing LNG imports into the United States. These plans include an expansion of the Elba Island, GA facility to increase daily deliveries by 0.4 Bcf/day (2006), reactivation of the Cove Point, MD facility to increase daily deliveries by 0.8 Bcf/day (2003), and plans for additional deliveries into Louisiana by both Sempra Energy (1.5 Bcf/day – 2007) and ChevronTexaco (0.8 Bcf/day – 2006).

Near-term (2003-2005), demand in advance of new offshore pipeline construction, deepwater Gulf of Mexico development, increased LNG imports, Alaskan and/or Far North Canadian and Eastern Canadian development will impose upward pressure on the price of natural gas. After the new pipelines and developments are in place, natural gas supplies are expected to stabilize.

Assuming the construction of additional LNG and pipeline facilities and continuing development of new production, sufficient natural gas supplies are available in the Southeastern United States to support full load operation of the SES's gas-based power plants.

STRATEGIC ISSUES

Prior to the commercial operation of Smith Unit 3 beginning in April 2002, Gulf executed purchased power agreements that provided flexibility and allowed the Gulf to react quickly to changing market conditions without negative financial impacts. Although Gulf fully expects to build or contract for new generating capacity in the future to maintain reliability, Gulf will continue to supplement its acquisition of long-term capacity resources with shorter term power purchases when appropriate and cost-effective to do so in the future.

Another important strategic advantage for Gulf is its association with the SES as it relates to integrated planning and operations. Drawing on the planning resources of SCS to perform coordinated planning and having the capacity resources of the SES available in times when Gulf is temporarily short of reserves are some of the key benefits that Gulf and its customers realize through its association with the SES. In addition, SES's Generation and Energy Marketing organization actively pursues firm energy market products at prices that can lead to significant savings to the SES and its customers.

ENVIRONMENTAL CONCERNS

In 2002, Gulf began operation of a new combined cycle generating unit, Smith Unit 3, located at the Lansing Smith Generating Plant located in Panama City, Florida. Gulf successfully completed the initial air emissions compliance tests on schedule and met all permit requirements. The Title V application for Smith Unit 3 was submitted and a draft permit is currently under review for final issuance. With the successful startup of Smith Unit 3, Gulf's existing generation resources, along with existing and planned power purchases, Gulf has satisfied its capacity resource needs until 2007.

The next planned resource addition is 314 MW of peaking capacity in 2007. It has been and will continue to be Gulf's intent to always comply with all environmental laws and regulations as they apply to the Gulf's operation.

Gulf's clean air compliance strategy serves as a road map for a least-cost compliance plan. This road map establishes general direction, but allows for individual decisions to be made based on specific information available at the time. This approach is an absolute necessity in maintaining the flexibility to match a dynamic environment with the variety of available compliance options.

Gulf completed its initial Clean Air Act Amendments (CAAA) strategy in December 1990 and has produced updates or reviews in subsequent years following this initial strategy. Due to the relatively minor changes in assumptions since the last review and the lack of new information or developments on the

regulatory front, this status review serves as a confirmation of the general direction of Gulf's compliance strategy.

The focus of the strategy updates has, to date, centered on compliance with the acid rain requirements while considering other significant clean air requirements and potential new requirements of the CAAA. There is an increasing uncertainty associated with future regulatory requirements that could significantly impact both the scope and cost of compliance over the next decade. However, there is insufficient information at this time to warrant incorporating these scenarios into a revised strategy. Gulf will continue its involvement in future clean air requirements. These requirements will be incorporated into future strategy updates as appropriate.

Phase I of Title IV of the CAAA became effective for SO_2 on January 1, 1995. Fuel procurement and equipment installation efforts to support Gulf's Phase I fuel switching strategy are complete. Gulf has also completed installation of low-NOx burners on two large coal-fired units to support compliance with Title IV NOx requirements. In addition, Gulf brought four Phase II units into Phase I as 1995 substitution units. All of these units were affected for SO2 and NOx starting in 1995 and are grandfathered at the Phase I NOx limits during Phase II.

With respect to Phase II sulfur dioxide compliance, Gulf is using additional fuel switching coupled with the use of emission allowances banked during Phase I and the acquisition of additional allowances to meet compliance. Only minor differences in the fuel selection at several plants are needed during Phase II.

The updated strategy recommends that Plant Lansing Smith and Plant Scholz switch to less than 1.0% sulfur coal during Phase II. The previous strategy showed a Phase II switch to a 1.2% or higher sulfur coals.

In 2002, Gulf entered into an agreement with the Florida Department of Environmental Protection (FDEP) to ensure that its electrical generating facility located within the Pensacola, Florida Metropolitan Planning Area supports the Area's compliance with the eight hour ozone ambient air quality standard. The agreement authorized related cost recovery pursuant to Section 366.8255 (1)(d) of the Florida Statutes as amended by the Florida Legislature in its 2002 session and signed into law by the Governor of the State of Florida. This agreement requires Gulf to install pollution control equipment (selective catalytic reduction system & electrostatic precipitator) on Plant Crist Unit 7 to reduce nitrogen oxides and particulates before May, 2005. A study to determine additional controls to reduce nitrogen oxides on the remaining coal fired units (4-6) at Plant Crist with future implementation of a control strategy is required in addition to the Selection Catalytic Reduction system (SCR) on Crist Unit 7 by 2007. The agreement also requires the retirement of Crist Units 1-3 before May, 2006.

Potential future regulatory requirements, especially under new proposed multi-pollutant reduction scenarios similar to President Bush's Clear Skies Initiative, are aimed at further NOx and SO2 reductions. All of this uncertainty reinforces the need for a flexible, robust compliance plan. Accordingly, as decision dates for fuel and equipment purchases approach or as better information becomes available relative to regulatory and economic drivers, the

analysis will be updated to determine the most cost-effective decisions while maintaining future flexibility.

AVAILABILITY OF SYSTEM INTERCHANGE

Gulf coordinates its planning and operation with the other operating companies of the SES: Alabama Power Company, Georgia Power Company, Mississippi Power Company, Savannah Electric and Power Company, and Southern 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 accomplished through the reserve sharing mechanism of the SES Intercompany Interchange Contract that is reviewed and updated annually.

OFF-SYSTEM SALES

Gulf and the other SES operating companies have negotiated the sale of capacity and energy to several utilities outside the SES. The term of the contracts started prior to 2003 and extends into 2010. Gulf's share of the capacity and energy sales is reflected in the reserves on Schedules 7.1 and 7.2 and the energy and fuel use on Schedules 5 and 6.1.

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CHAPTER IV

FORECAST OF FACILITIES REQUIREMENTS

CAPACITY RESOURCE ALTERNATIVES

POWER PURCHASES

Gulf has entered into short-term purchased power arrangements in previous years in order meet its reliability needs. As its needs grow prior to the summer of 2007 and beyond, both short-term and longer-term purchased power will be economically evaluated against internal construction and other capacity resource opportunities in order to meet Gulf customer needs in the least cost manner.

CAPACITY ADDITIONS

Gulf plans to perform a number of economic evaluations of various potential supply options in order to determine the most cost-effective means of meeting its future capacity obligations. Gulf will continue to evaluate its options in order to determine how to best meet its capacity obligations beyond 2003.

As previously mentioned, Gulf's current capacity resource expansion plan reflects the installation of two 157 MW combustion turbines (CT) in 2007 at an undetermined site. This proposed addition is currently planned as outlined in Schedules 8 and 9 of this document. If more economical purchased power options are subsequently identified, Gulf will modify its plan to reflect proposed procurement of these resources. Gulf will continue to review all available capacity resources in order to ensure that its customer's electricity needs are met in the most economical manner as possible.

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SCHEDULE 7.1
FORECAST OF CAPACITY, DEMAND, AND SCHEDULED MAINTENANCE AT TIME OF SUMMER PEAK (A)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
							RESERVE MARGIN BEFORE MAINTENANCE			RESERVE MARGIN AFTER MAINTENANCE	
YEAR	TOTAL INSTALLED CAPACITY MW	FIRM CAPACITY IMPORT MW (B)	FIRM CAPACITY EXPORT MW	NUG MW	TOTAL CAPACITY AVAILABLE MW	FIRM PEAK DEMAND MW	MW	% OF PEAK	SCHEDULED MAINTENANCE MW	MW	% OF PEAK
2003	2791	26	(211)	19	2625	2264	361	15.9%	NONE	361	15.9%
2004	2783	26	(211)	19	2617	2296	321	14.0%		321	14.0%
2005	2769	27	(211)	0	2585	2346	239	10.2%		239	10.2%
2006	2704	177	(211)	0	2670	2386	284	11.9%		284	11.9%
2007	3018	27	(211)	0	2834	2424	410	16.9%		410	16.9%
2008	3018	22	(211)	0	2829	2456	373	15.2%		373	15.2%
2009	3018	19	(211)	0	2826	2483	343	13.8%		343	13.8%
2010	3018	226	(211)	0	3033	2523	510	20.2%		510	20.2%
2011	3018	222	(211)	0	3029	2556	473	18.5%		473	18.5%
2012	2926	217	(211)	0	2932	2590	342	13.2%		342	13.2%

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 FIRM PURCHASES AND ESTIMATED DEMAND SIDE OPTIONS.

UTILITY: GULF POWER COMPANY

SCHEDULE 7.2
FORECAST OF CAPACITY, DEMAND, AND SCHEDULED MAINTENANCE AT TIME OF WINTER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
							RESERVE MARGIN BEFORE MAINTENANCE			RESERVE MARGIN AFTER MAINTENANCE	
YEAR	TOTAL INSTALLED CAPACITY MW	FIRM CAPACITY IMPORT MW (A)	FIRM CAPACITY EXPORT MW	NUG MW	TOTAL CAPACITY AVAILABLE MW	FIRM PEAK DEMAND MW	MW	% OF PEAK	SCHEDULED MAINTENANCE MW	MW	% OF PEAK
2002-03	2820	27	(211)	19	2655	2113	542	25.7%	NONE	542	25.7%
2003-04	2812	27	(211)	19	2647	2140	507	23.7%		507	23.7%
2004-05	2798	28	(211)	19	2634	2175	459	21.1%		459	21.1%
2005-06	2733	28	(211)	0	2550	2202	348	15.8%		348	15.8%
2006-07	2733	28	(211)	0	2550	2228	322	14.5%		322	14.5%
2007-08	3065	23	(211)	0	2877	2248	629	28.0%		629	28.0%
2008-09	3065	20	(211)	0	2874	2261	613	27.1%		613	27.1%
2009-10	3065	15	(211)	0	2869	2287	582	25.4%		582	25.4%
2010-11	3065	11	(211)	0	2865	2306	559	24.2%		559	24.2%
2011-12	2973	7	(211)	0	2769	2329	440	18.9%		440	18.9%

NOTE: (A) INCLUDES FIRM PURCHASES AND ESTIMATED DEMAND SIDE OPTIONS.

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UTILITY: GULF POWER COMPANY

SCHEDULE 8
PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
				Fuel		Fuel Transport		Const Start	Com'l In-Service	Expected Retirement	Gen Max Nameplate	Net Capability		
Plant Name	Unit No.	Location	Unit Type	Pri	Alt	Pri	Alt	Mo/Yr	Mo/Yr	Mo/Yr	KW	Summer MW	Winter MW	Status
Unlocated	A	Unknown	CT	NG	LO	PL	TK	7/06	06/07			157.0	166.0	P
Unlocated	B	Unknown	CT	NG	LO	PL	TK	7/06	06/07			157.0	166.0	P

Abbreviations: CT - Combustion Turbine P - Planned, but not authorized by utility
CC - Combined Cycle R - To be retired
V - Under construction, more than 50% complete
NG - Natural Gas
LO - Light Oil

PL - Pipeline
TK - Truck

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Schedule 9
Status Report and Specifications of Proposed Generating Facilities

(1)	Plant Name and Unit Number:	Unlocated Units A and B
(2)	Capacity	
	a. Summer:	314 MW
	b. Winter:	332 MW
(3)	Technology Type:	Combustion Turbine
(4)	Anticipated Construction Timing	
	a. Field construction start - date:	07/06
	b. Commercial in-service date:	06/07
(5)	Fuel	
	a. Primary fuel:	Natural Gas
	b. Alternate fuel:	Distillate
(6)	Air Pollution Control Strategy:	Dry low NOx combustor for natural gas
		Water injection for NOx control for distillate
(7)	Cooling Method:	Evaporative cooling
(8)	Total Site Area:	Unknown
(9)	Construction Status:	This facility is planned but not authorized by Utility
(10)	Certification Status:	Not applied
(11)	Status with Federal Agencies:	Not applied

(12) Projected Unit Performance Data

Planned Outage Factor (POF):	3.8%
Forced Outage Factor (FOF):	2.5%
Equivalent Availability Factor (EAF):	95.8%
Resulting Capacity Factor (%):	15.0%
Average Net Operating Heat Rate (ANOHR):	11,170

(13) Projected Unit Financial Data

Book Life (Years):	20
Total Installed Cost (In-Service Year $/kW):	459
Direct Construction Cost ('03 $/kW):	399
AFUDC Amount ($/kW):	0
Escalation ($/kW):	60
Fixed O&M ($/kW - Yr):	3.10
Variable O&M ($/MWH):	12.09
K Factor:	1.4862

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Utility: Gulf Power Company

Schedule 10
Status Report and Specifications of Proposed Directly Associated Transmission Lines

(1) Point of Origin and Termination: Unknown

(2) Number of Lines: Unknown

(3) Right-of-Way: Unknown

(4) Line Length: Unknown

(5) Voltage: Unknown

(6) Anticipated Construction Timing: Unknown

(7) Anticipated Capital Investment: Unknown

(8) Substations: Unknown

(9) Participation with Other Utilities: N/A