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ORIGINAL

GULF POWER
A SOUTHERN COMPANY

March 31, 2004

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COMMISSION
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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 2004 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

lw

Enclosures

cc: Beggs and Lane
Jeffrey A. Stone, Esquire

AUS
CAF
CMP
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ORIGINAL

TEN YEAR SITE PLAN
2004-2013

FOR ELECTRIC GENERATING FACILITIES
AND
ASSOCIATED TRANSMISSION LINES

APRIL 2004

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, 2004

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GULF POWER COMPANY

TEN-YEAR SITE PLAN

Executive Summary

The Gulf Power Company 2004 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). The 2004 TYSP for Gulf Power Company (Gulf) is being filed in compliance with the FPSC's rules.

Gulf's 2004 TYSP contains the documentation of assumptions, load forecast, fuel forecasts, the planning processes, existing resources, and future capacity needs and resources. The planning process utilized by Gulf is closely 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.

The capacity resource needs set forth within the SES IRP are driven by the demand forecast that 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 most cost-effective plan for the system. The resulting SES resource needs are appropriately allocated among the operating companies based on reserve requirements, and each company then determines what resources will best meet its capacity and reliability needs.

For the 2004 TYSP cycle, Gulf's allocated resource needs have been determined, showing a 177 megawatt need for peaking capacity in 2008, followed by a 312 megawatt peaking capacity need by 2009. The magnitude of capacity need has not changed significantly from the previous TYSP, but the timing of the need has moved from the previously anticipated 2006-2007 timeframe to the current 2008-2009 timeframe due to a revised projection that indicates adequate SES reserve margins through 2007.

Gulf will utilize market power purchases and/or SES resources, exclusively, prior to and possibly beyond the summer of 2009. If Gulf were to commit to the construction of generating capacity, the currently projected 2009 need would be meet by installing two 157 MW combustion turbines (CT) at a site to be determined, or otherwise would acquire an equivalent peaking capacity resource. This CT 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 996 MW of steam generation 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 the Daniel fossil steam Units 1 and 2 and the Scherer fossil steam Unit 3, Gulf has a total net summer generating capability of 2,800 MW and a total net winter generating capability of 2,828 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.

GULF POWER COMPANY

SCHEDULE 1
EXISTING GENERATING FACILITIES
AS OF DECEMBER 31, 2003

(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									1,200,875	996.0	996.0
	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
Daniel (A)		Jackson County, MS 42/5S/6W									548,250	532 0	532 0
	1		FS	C	HO	RR	TK	--	9/77	12/22	274,125	268.0	268 0
	2		FS	C	HO	RR	TK	--	6/81	12/26	274,125	264 0	264 0
Scherer (A)	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	13 8
	1		CT	NG	--	PL	--	--	5/98	12/18	4,750	4 0	4.6
	2		CT	NG	--	PL	--	--	5/98	12/18	4,750	4 0	4 6
	3		CT	NG	--	PL	--	--	5/98	12/18	4,750	4.0	4.6
											Total System	2,800.0	2,827.8

Abbreviations

Fuel

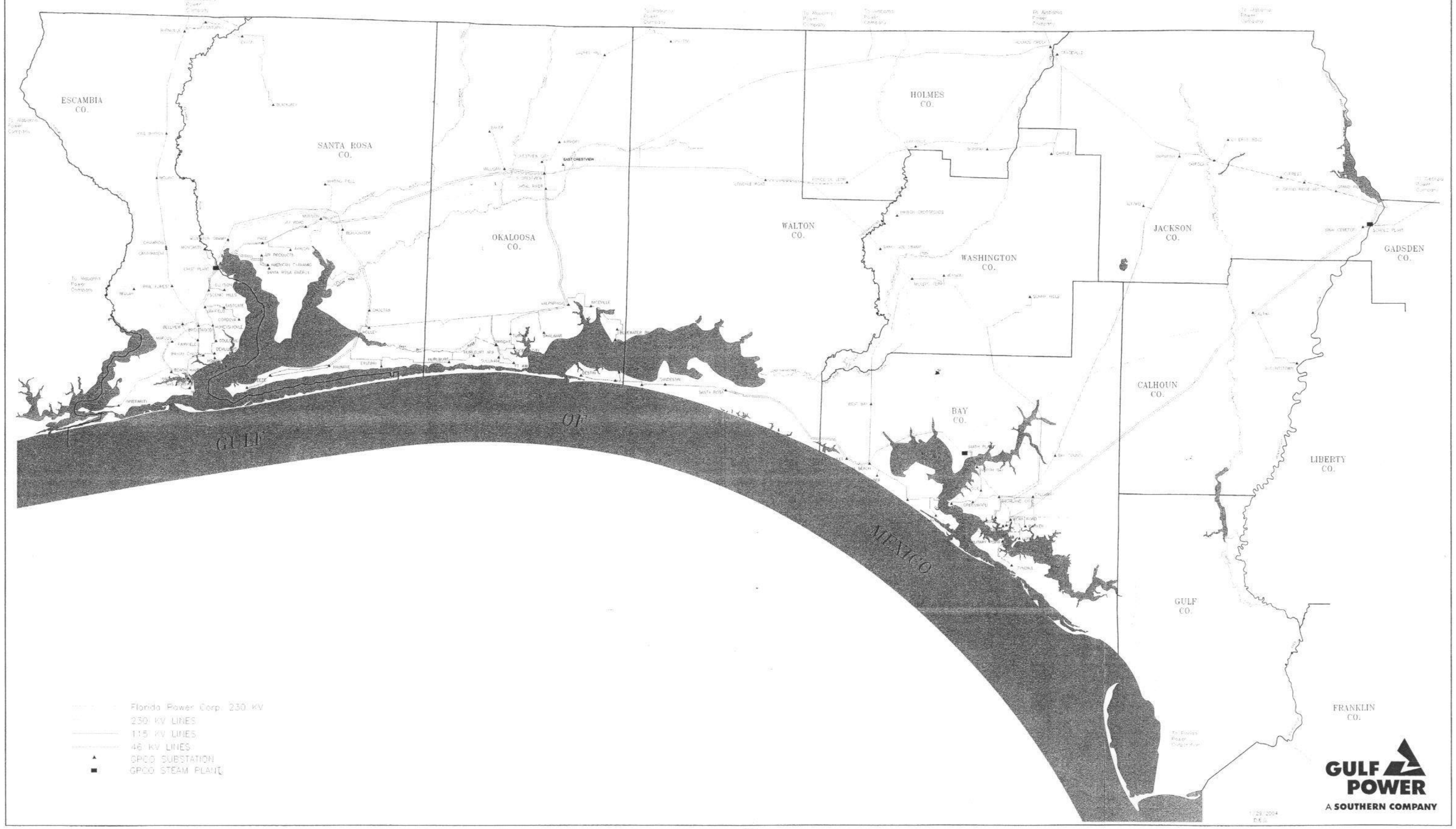
FS - Fossil Steam
CT - Combustion Turbine
CC - Combined Cycle
NG - Natural Gas
C - Coal
LO - Light Oil
HO - Heavy Oil

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



CHAPTER II

FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

FORECASTING DOCUMENTATION

GULF POWER COMPANY
LOAD FORECASTING METHODOLOGY
OVERVIEW

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 climb to only 2.5% in 2003 and to 3.4% in 2004 and then settle to its long-term trend growth of between 2.5% and 3.0% and remain in that range.

The looming Iraqi conflict is the major threat to the economic rebound. Consumer spending has been the sole source for recent post-recession economic growth, but booming automobile and housing demand are quickly saturating. With productivity growing at high rates, new jobs are not being created even though the economy continues to expand. To compensate for the mounting travails of job seekers, Federal policy makers have recently proposed a new round of tax cuts and spending increases which are incorporated into the 2004 Budget economic outlook. Monetary policy will also accommodate as the Federal Reserve seems committed to keeping interest rates low until a sustained, job-creating economic growth rate is achieved. The 2004 Budget outlook expects such growth by the year 2004. That prediction hinges on how quickly and successfully the Iraqi conflict is resolved.

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 2003 Gulf Power Official Long-Range Forecast. Fuel price projections for gas and oil were obtained fron the Department of Energy. The following tables provide a summary of the assumptions associated with Gulf's forecast:

TABLE 1

ECONOMIC SUMMARY
(2003-2008)

	Base Case Forecast
GDP Growth	2.5% - 2.8%
Real Interest Rate	6.5% - 7.4%
Inflation	1.6% - 1.9%

TABLE 2

AREA DEMOGRAPHIC SUMMARY
(2003-2008)

	Base Case Forecast
Population Gain	69,740
Net Migration	25,320
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 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 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 validated 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 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 validating 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
2. Offices
3. Retail and Personal Services
4. Public Utilities
5. Automotive Services
6. Restaurants
7. Elementary/Secondary Schools
8. Colleges/Trade Schools
9. Hospitals/Health Services
10. Hotels/Motels
11. Religious Organizations
12. Miscellaneous

The commercial sales forecast reflects the continued impacts of Gulf'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:

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 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 2003, 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 2002/2003, 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 validated using the Hourly Electric Load Model (HELM), developed by ICF, Incorporated, for EPRI under Project RP1955-1. The model forecasts hourly electrical loads over the long-term.

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

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

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

HELM has been designed to forecast electric utility load shapes and to analyze the impacts of factors such as alternative weather conditions, customer mix changes, fuel share changes, and demand-side programs. The structural detail of HELM provides forecasts of hourly class and system load curves by weighting and aggregating load shapes for individual end-use components.

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

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

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

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

N_R = number of residential end-use loads;

N_C = number of commercial end-use loads;

N_I = number of industrial end-use loads;

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

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

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

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

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 54,000 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 191 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 21 mW of summer peak demand and over 40 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 1,647 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 9,500 customers under this program have achieved an annual reduction of nearly 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. Nearly 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 69 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 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 20 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 11 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)
2002	293,360	340,091	610,563,638

2004 BUDGET FORECAST
TOTAL CONSERVATION PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	7,345	9,888	22,554,110
2004	8,114	10,728	22,751,128
2005	8,065	10,674	22,738,111
2006	8,010	10,626	22,729,454
2007	8,062	10,675	23,042,254
2008	8,012	10,625	23,042,721
2009	7,959	10,572	23,099,655
2010	7,961	10,571	23,048,233
2011	7,960	10,572	23,047,210
2012	7,958	10,572	23,047,208
2013	5,017	7,143	20,974,944

2004 BUDGET FORECAST
TOTAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	300,705	349,979	633,117,748
2004	308,819	360,707	655,868,876
2005	316,884	371,381	678,606,987
2006	324,894	382,007	701,336,441
2007	332,956	392,682	724,378,695
2008	340,968	403,307	747,421,416
2009	348,927	413,879	770,521,071
2010	356,888	424,450	793,569,304
2011	364,848	435,022	816,616,514
2012	372,806	445,594	839,663,722
2013	377,823	452,737	860,638,666

HISTORICAL
TOTAL RESIDENTIAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	145,495	211,402	311,732,844

2004 BUDGET FORECAST
TOTAL RESIDENTIAL CONSERVATION PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	4,992	8,375	7,654,859
2004	5,917	9,370	8,197,664
2005	5,918	9,369	8,197,664
2006	5,916	9,371	8,197,664
2007	5,917	9,370	8,197,665
2008	5,918	9,371	8,197,664
2009	5,916	9,370	8,197,664
2010	5,918	9,369	8,197,665
2011	5,917	9,371	8,197,664
2012	5,917	9,370	8,197,664
2013	2,974	5,941	6,125,397

2004 BUDGET FORECAST
TOTAL RESIDENTIAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	150,487	219,777	319,387,703
2004	156,404	229,147	327,585,367
2005	162,322	238,516	335,783,031
2006	168,238	247,887	343,980,695
2007	174,155	257,257	352,178,360
2008	180,073	266,628	360,376,024
2009	185,989	275,998	368,573,688
2010	191,907	285,367	376,771,353
2011	197,824	294,738	384,969,017
2012	203,741	304,108	393,166,681
2013	206,715	310,049	399,292,078

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

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	147,865	128,689	287,978,939

2004 BUDGET FORECAST
TOTAL COMMERCIAL/INDUSTRIAL DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	2,353	1,513	14,840,615
2004	2,197	1,358	14,506,395
2005	2,147	1,305	14,493,377
2006	2,094	1,255	14,484,721
2007	2,145	1,305	14,797,520
2008	2,094	1,254	14,797,988
2009	2,043	1,202	14,803,226
2010	2,043	1,202	14,803,227
2011	2,043	1,201	14,803,226
2012	2,041	1,202	14,803,225
2013	2,043	1,202	14,803,227

2004 BUDGET FORECAST
TOTAL COMMERCIAL/INDUSTRIAL DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	150,218	130,202	302,819,554
2004	152,415	131,560	317,325,949
2005	154,562	132,865	331,819,326
2006	156,656	134,120	346,304,047
2007	158,801	135,425	361,101,567
2008	160,895	136,679	375,899,555
2009	162,938	137,881	390,702,781
2010	164,981	139,083	405,506,008
2011	167,024	140,284	420,309,234
2012	169,065	141,486	435,112,459
2013	171,108	142,688	449,915,686

HISTORICAL
TOTAL OTHER DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	0	0	10,851,855

2004 BUDGET FORECAST
TOTAL OTHER DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	0	0	58,636
2004	0	0	47,069
2005	0	0	47,069
2006	0	0	47,069
2007	0	0	47,069
2008	0	0	47,069
2009	0	0	98,765
2010	0	0	47,341
2011	0	0	46,320
2012	0	0	46,320
2013	0	0	46,320

2004 BUDGET FORECAST
TOTAL OTHER DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	0	0	10,910,491
2004	0	0	10,957,560
2005	0	0	11,004,630
2006	0	0	11,051,699
2007	0	0	11,098,768
2008	0	0	11,145,837
2009	0	0	11,244,602
2010	0	0	11,291,943
2011	0	0	11,338,263
2012	0	0	11,384,582
2013	0	0	11,430,902

HISTORICAL
TOTAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	225,006	271,350	536,441,439

2004 BUDGET FORECAST
TOTAL EXISTING DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	2,143	3,419	3,854,576
2004	2,014	3,187	3,643,903
2005	2,014	3,187	3,643,903
2006	2,014	3,187	3,643,903
2007	2,014	3,187	3,643,903
2008	2,014	3,187	3,643,903
2009	2,014	3,187	3,695,599
2010	2,014	3,187	3,644,175
2011	2,014	3,187	3,643,154
2012	2,014	3,187	3,643,154
2013	2,014	3,187	3,643,154

2004 BUDGET FORECAST
TOTAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	227,147	274,770	540,296,017
2004	229,161	277,957	543,939,920
2005	231,175	281,144	547,583,824
2006	233,188	284,332	551,227,728
2007	235,201	287,518	554,871,632
2008	237,215	290,706	558,515,535
2009	239,228	293,893	562,211,134
2010	241,242	297,080	565,855,311
2011	243,256	300,267	569,498,465
2012	245,269	303,454	573,141,618
2013	247,282	306,641	576,784,774

HISTORICAL
RESIDENTIAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	114,519	168,215	286,072,958

2004 BUDGET FORECAST
RESIDENTIAL EXISTING DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	1,832	3,108	2,845,057
2004	1,703	2,876	2,645,951
2005	1,703	2,876	2,645,951
2006	1,703	2,876	2,645,951
2007	1,703	2,876	2,645,951
2008	1,703	2,876	2,645,951
2009	1,703	2,876	2,645,951
2010	1,703	2,876	2,645,951
2011	1,703	2,876	2,645,951
2012	1,703	2,876	2,645,951
2013	1,703	2,876	2,645,951

2004 BUDGET FORECAST
RESIDENTIAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	116,350	171,324	288,918,016
2004	118,053	174,200	291,563,967
2005	119,756	177,076	294,209,918
2006	121,458	179,953	296,855,869
2007	123,161	182,829	299,501,821
2008	124,864	185,706	302,147,772
2009	126,566	188,582	304,793,723
2010	128,269	191,458	307,439,675
2011	129,972	194,335	310,085,626
2012	131,675	197,211	312,731,577
2013	133,377	200,087	315,377,529

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

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	110,487	103,135	239,516,626

2004 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL EXISTING DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	311	311	950,883
2004	311	311	950,883
2005	311	311	950,883
2006	311	311	950,883
2007	311	311	950,883
2008	311	311	950,883
2009	311	311	950,883
2010	311	311	950,883
2011	311	311	950,883
2012	311	311	950,883
2013	311	311	950,883

2004 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	110,797	103,446	240,467,510
2004	111,108	103,757	241,418,393
2005	111,419	104,068	242,369,276
2006	111,730	104,379	243,320,160
2007	112,040	104,689	244,271,043
2008	112,351	105,000	245,221,926
2009	112,662	105,311	246,172,809
2010	112,973	105,622	247,123,693
2011	113,284	105,932	248,074,576
2012	113,594	106,243	249,025,459
2013	113,905	106,554	249,976,343

HISTORICAL
OTHER EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	0	0	10,851,855

2004 BUDGET FORECAST
OTHER EXISTING DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	0	0	58,636
2004	0	0	47,069
2005	0	0	47,069
2006	0	0	47,069
2007	0	0	47,069
2008	0	0	47,069
2009	0	0	98,765
2010	0	0	47,341
2011	0	0	46,320
2012	0	0	46,320
2013	0	0	46,320

2004 BUDGET FORECAST
OTHER EXISTING DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	0	0	10,910,491
2004	0	0	10,957,560
2005	0	0	11,004,630
2006	0	0	11,051,699
2007	0	0	11,098,768
2008	0	0	11,145,837
2009	0	0	11,244,602
2010	0	0	11,291,943
2011	0	0	11,338,263
2012	0	0	11,384,582
2013	0	0	11,430,902

HISTORICAL
TOTAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	68,354	68,741	74,122,199

2004 BUDGET FORECAST
TOTAL NEW DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	5,204	6,468	18,699,532
2004	6,100	7,541	19,107,225
2005	6,051	7,487	19,094,207
2006	5,997	7,438	19,085,550
2007	6,049	7,489	19,398,350
2008	5,998	7,437	19,398,818
2009	5,946	7,385	19,404,056
2010	5,947	7,384	19,404,056
2011	5,946	7,385	19,404,056
2012	5,945	7,385	19,404,055
2013	3,004	3,956	17,331,788

2004 BUDGET FORECAST
TOTAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	73,558	75,209	92,821,731
2004	79,658	82,750	111,928,956
2005	85,709	90,237	131,023,163
2006	91,706	97,675	150,108,713
2007	97,755	105,164	169,507,063
2008	103,753	112,601	188,905,881
2009	109,699	119,986	208,309,937
2010	115,646	127,370	227,713,993
2011	121,592	134,755	247,118,049
2012	127,537	142,140	266,522,104
2013	130,541	146,096	283,853,892

HISTORICAL
RESIDENTIAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	30,976	43,187	25,659,886

2004 BUDGET FORECAST
RESIDENTIAL NEW DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	3,161	5,266	4,809,801
2004	4,214	6,494	5,551,713
2005	4,215	6,493	5,551,713
2006	4,214	6,494	5,551,713
2007	4,214	6,494	5,551,713
2008	4,215	6,494	5,551,713
2009	4,214	6,494	5,551,713
2010	4,215	6,493	5,551,713
2011	4,214	6,494	5,551,713
2012	4,214	6,494	5,551,713
2013	1,272	3,065	3,479,445

2004 BUDGET FORECAST
RESIDENTIAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	34,137	48,453	30,469,687
2004	38,351	54,947	36,021,400
2005	42,566	61,440	41,573,113
2006	46,780	67,934	47,124,826
2007	50,994	74,428	52,676,539
2008	55,209	80,922	58,228,252
2009	59,423	87,416	63,779,965
2010	63,638	93,909	69,331,678
2011	67,852	100,403	74,883,391
2012	72,066	106,897	80,435,104
2013	73,338	109,962	83,914,549

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

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	37,378	25,554	48,462,313

2004 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL NEW DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	4,170	2,121	3,423,427
2003	2,043	1,202	13,889,731
2004	1,886	1,047	13,555,512
2005	1,836	994	13,542,494
2006	1,783	944	13,533,837
2007	1,835	995	13,846,637
2008	1,783	943	13,847,105
2009	1,732	891	13,852,343
2010	1,732	891	13,852,343
2011	1,732	891	13,852,343
2012	1,731	891	13,852,342

2004 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2003	39,421	26,756	62,352,044
2004	41,307	27,803	75,907,556
2005	43,143	28,797	89,450,050
2006	44,926	29,741	102,983,887
2007	46,761	30,736	116,830,524
2008	48,544	31,679	130,677,629
2009	50,276	32,570	144,529,972
2010	52,008	33,461	158,382,315
2011	53,740	34,352	172,234,658
2012	55,471	35,243	186,087,000
2013	57,203	36,134	199,939,343

HISTORICAL
OTHER NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2002	0	0	0

2004 BUDGET FORECAST
OTHER NEW DSM PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
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
2013	0	0	0

2004 BUDGET FORECAST
OTHER NEW DSM PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
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
2013	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
2003	30
2004	30
2005	11
2006	11
2007	11
2008	11
2009	11
2010	11
2011	11
2012	11
2013	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 191 customers contributing $45,588 through December, 2003. 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 December, 2003, 77 customers have pledged to purchase a total of 99 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		
Year	Population *	Members per Household	GWH	Average No of Customers	Average KWH Consumption Per Customer	GWH	Average No. of Customers	Average KWH Consumption Per Customer
1994	**751,155**	2 77	3,752	271,594	13,814	2,549	38,477	66,243
1995	**763,892**	2 75	4,014	278,215	14,428	2,708	39,989	67,725
1996	**772,113**	2 72	4,160	283,717	14,662	2,809	41,007	68,492
1997	**796,084**	2.77	4,119	287,752	14,316	2,898	42,381	68,377
1998	**818,974**	2.76	4,438	296,497	14,967	3,112	43,955	70,798
1999	**842,216**	2 77	4,471	304,413	14,688	3,223	45,510	70,809
2000	**857,593**	2 75	4,790	312,283	15,339	3,379	47,292	71,459
2001	**874,003**	2.74	4,716	319,506	14,762	3,417	47,584	71,819
2002	**893,449**	2 75	5,144	325,343	15,810	3,553	48,482	73,284
2003	**912,645**	2.70	5,101	338,631	15,064	3,614	50,420	71,683
2004	**926,591**	2 69	4,991	345,052	14,465	3,521	51,835	67,926
2005	**942,242**	2 68	5,095	351,803	14,482	3,605	53,201	67,767
2006	**956,451**	2.67	5,144	357,806	14,377	3,652	54,246	67,327
2007	**970,608**	2 67	5,162	364,154	14,175	3,689	55,343	66,656
2008	**986,159**	2.66	5,236	371,344	14,099	3,754	56,575	66,350
2009	**1,004,263**	2 65	5,324	379,588	14,026	3,814	57,977	65,779
2010	**1,023,752**	2.64	5,417	388,245	13,951	3,876	59,448	65,203
2011	**1,043,094**	2.63	5,526	396,743	13,928	3,947	60,894	64,819
2012	**1,062,212**	2 62	5,641	405,204	13,920	4,026	62,331	64,590
2013	**1,086,118**	2 62	5,747	414,998	13,849	4,101	63,983	64,096
CAAG								
94-03	2 2%	-0 3%	3 5%	2.5%	1 0%	4.0%	3.0%	0.9%
03-08	1 6%	-0 3%	0 5%	1 9%	-1.3%	0.8%	2.3%	-1.5%
03-13	1 8%	-0.3%	1 2%	2.1%	-0 8%	1.3%	2 4%	-1.1%

* 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				Street &	Other Sales	Total Sales
		Average No. of	Average KWH Consumption	Railroads and Railways	Highway Lighting	to Public Authorities	to Ultimate Consumers
Year	GWH	Customers	Per Customer	GWH	GWH	GWH	GWH
1994	1,847	268	6,892,218	0	16	0	8,164
1995	1,795	280	6,409,835	0	16	0	8,534
1996	1,808	276	6,551,036	0	17	0	8,794
1997	1,903	281	6,772,419	0	17	0	8,938
1998	1,834	277	6,619,403	0	18	0	9,401
1999	1,846	263	7,019,913	0	18	0	9,558
2000	1,925	251	7,670,869	0	18	0	10,112
2001	2,018	270	7,474,838	0	21	0	10,173
2002	2,054	277	7,413,963	0	21	0	10,772
2003	2,147	285	7,533,179	0	22	0	10,885
2004	2,106	311	6,772,874	0	23	0	10,641
2005	2,128	321	6,629,155	0	23	0	10,851
2006	2,138	324	6,599,732	0	23	0	10,958
2007	2,148	327	6,568,944	0	24	0	11,023
2008	2,157	330	6,535,901	0	24	0	11,170
2009	2,138	333	6,421,046	0	24	0	11,300
2010	2,120	336	6,309,677	0	25	0	11,438
2011	2,101	339	6,198,178	0	25	0	11,599
2012	2,083	342	6,089,330	0	25	0	11,774
2013	2,063	345	5,978,876	0	26	0	11,937
CAAG							
94-03	1.7%	0.7%	1.0%	0.0%	3.5%	0.0%	3.2%
03-08	0.1%	3.0%	-2.8%	0.0%	1.3%	0.0%	0.5%
03-13	-0.4%	1.9%	-2.3%	0.0%	1.4%	0.0%	0.9%

GULF POWER COMPANY

Schedule 2.3

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

(1) Year	(2) Sales for Resale GWH	(3) Utility Use & Losses GWH	(4) Net Energy for Load GWH	(5) Other Customers (Average No.)	(6) Total No. of Customers
1994	316	487	8,967	79	310,419
1995	336	582	9,452	93	318,578
1996	347	521	9,662	119	325,119
1997	342	607	9,887	157	330,571
1998	356	645	10,402	215	340,944
1999	348	558	10,464	262	350,447
2000	363	629	11,105	286	360,113
2001	360	671	11,204	380	367,740
2002	384	754	11,910	460	374,561
2003	383	685	11,952	473	389,809
2004	375	706	11,722	475	397,673
2005	380	721	11,952	479	405,804
2006	387	730	12,075	483	412,859
2007	393	736	12,152	487	420,311
2008	401	747	12,318	491	428,740
2009	407	757	12,464	494	438,392
2010	413	768	12,618	497	448,526
2011	420	780	12,799	500	458,476
2012	427	793	12,995	503	468,380
2013	433	805	13,175	506	479,831
CAAG					
94-03	2.2%	3.9%	3.2%	22.0%	2.6%
03-08	0.9%	1.8%	0.6%	0.7%	1.9%
03-13	1.2%	1.6%	1.0%	0.7%	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)
Year	Total	Wholesale	Retail	Interruptible	Residential Load Management	Residential Conservation	Comm/Ind Load Management	Comm/Ind Conservation	Net Firm Demand
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	2,755	86	2,669	0	0	145	0	148	2,462
2003	2,576	79	2,496	0	0	150	0	150	2,275
2004	2,700	79	2,621	26	0	156	0	152	2,391
2005	2,757	80	2,677	26	0	162	0	155	2,440
2006	2,784	81	2,703	26	0	168	0	157	2,459
2007	2,835	82	2,753	26	0	174	0	159	2,502
2008	2,817	83	2,734	26	0	180	0	161	2,476
2009	2,862	85	2,777	21	0	186	0	163	2,513
2010	2,907	86	2,821	17	0	192	0	165	2,550
2011	2,948	87	2,861	13	0	198	0	167	2,583
2012	2,984	88	2,896	8	0	204	0	169	2,611
2013	3,039	89	2,950	4	0	207	0	171	2,661
CAAG									
94-03	2.9%	1 1%	2.9%	100 0%	0 0%	5.7%	0.0%	4.1%	2.6%
03-08	1.8%	1.0%	1.8%	100.0%	0.0%	3.7%	0.0%	1.4%	1 7%
03-13	1.7%	1 2%	1 7%	100.0%	0 0%	3.2%	0 0%	1 3%	1.6%

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

(1) Year	(2) Total	(3) Wholesale	(4) Retail	(5) Interruptible	(6) Residential Load Management	(7) Residential Conservation	(8) Comm/Ind Load Management	(9) Comm/Ind Conservation	(10) Net Firm Demand
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	2,530	85	2,445	0	0	211	0	129	2,190
02-03	2,850	92	2,758	0	0	220	0	130	2,500
03-04	2,523	67	2,456	27	0	229	0	132	2,162
04-05	2,567	68	2,499	27	0	239	0	133	2,196
05-06	2,607	70	2,537	27	0	248	0	134	2,225
06-07	2,643	71	2,572	27	0	257	0	135	2,250
07-08	2,687	72	2,615	27	0	267	0	137	2,284
08-09	2,716	73	2,643	22	0	276	0	138	2,302
09-10	2,755	74	2,681	18	0	285	0	139	2,331
10-11	2,794	75	2,719	13	0	295	0	140	2,359
11-12	2,856	77	2,779	9	0	304	0	141	2,410
12-13	2,877	78	2,799	4	0	310	0	143	2,424
CAAG									
94-03	3 7%	2 8%	3.7%	0 0%	0 0%	4 8%	0.0%	2.8%	3.7%
03-08	-1.2%	-4 7%	-1 1%	0 0%	0 0%	3.9%	0.0%	1.0%	-1.8%
03-13	0 1%	-1 6%	0 1%	0 0%	0.0%	3.5%	0.0%	0.9%	-0 3%

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 %
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	11,035	297	274	9,558	348	558	10,464	55.1%
2000	11,690	305	280	10,112	363	629	11,105	55.2%
2001	11,801	314	284	10,173	360	671	11,204	57.3%
2002	12,520	323	288	10,772	384	754	11,910	55.2%
2003	12,585	330	303	10,885	383	685	11,952	60.0%
2004	12,378	339	317	10,641	375	706	11,722	55.8%
2005	12,631	347	332	10,851	380	721	11,952	55.9%
2006	12,776	355	346	10,958	387	730	12,075	56.1%
2007	12,876	363	361	11,023	393	736	12,152	55 4%
2008	13,066	372	376	11,170	401	747	12,318	56.6%
2009	13,235	380	391	11,300	407	757	12,464	56.6%
2010	13,412	388	406	11,438	413	768	12,618	56.5%
2011	13,615	396	420	11,599	420	780	12,799	56.6%
2012	13,834	405	435	11,774	427	793	12,995	56.7%
2013	14,035	411	450	11,937	433	805	13,175	56.5%
CAAG								
94-03	3.2%	3 0%	3.5%	3.2%	2.2%	3.9%	3.2%	0.6%
03-08	0.8%	2.4%	4.4%	0.5%	0.9%	1.8%	0.6%	-1.1%
03-13	1.1%	2 2%	4.0%	0.9%	1.2%	1.6%	1.0%	-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)
	2003 Actual		2004 Forecast		2005 Forecast	
	Peak Demand	NEL	Peak Demand	NEL	Peak Demand	NEL
Month	MW	GWH	MW	GWH	MW	GWH
January	2,492	1,018	2,162	918	2,196	934
February	1,681	785	1,822	781	1,927	798
March	1,518	827	1,749	841	1,807	870
April	1,723	866	1,649	829	1,689	848
May	2,071	1,095	2,155	1,068	2,193	1,086
June	2,216	1,152	2,295	1,189	2,339	1,210
July	2,267	1,216	2,391	1,252	2,440	1,278
August	2,263	1,228	2,337	1,252	2,387	1,279
September	2,163	1,075	2,125	1,024	2,154	1,039
October	1,705	890	1,838	898	1,866	912
November	1,705	835	1,564	775	1,594	791
December	1,897	963	1,869	893	1,897	908

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

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 2002	Actual 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
(1)	Nuclear		Trillion BTU	None	None	None	None	None	None	None	None	None	None	None	None
(2)	Coal		1000 TON	4,980	5,878	6,108	6,164	6,370	6,611	6,613	6,385	6,229	6,484	6,081	6,386
(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	21	19	10	10	9	9	11	11	14	13	12	13
(9)		Steam	1000 BBL	20	16	10	9	9	9	10	11	11	11	10	10
(10)		CC	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(11)		CT	1000 BBL	1	3	0	1	0	0	1	0	3	2	2	3
(12)		Diesel	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(13)	Natural Gas	Total	1000 MCF	14,366	13,288	15,809	17,866	19,063	21,110	20,768	22,960	24,459	22,820	22,371	23,445
(14)		Steam	1000 MCF	686	155	10	62	5	0	0	0	0	0	0	0
(15)		CC	1000 MCF	13,680	13,133	15,799	17,804	19,058	21,110	20,768	22,934	24,449	22,810	22,359	23,438
(16)		CT	1000 MCF	0	0	0	0	0	0	0	26	10	10	12	7
(17)	Other		Trillion BTU	None	None	None	None	None	None	None	None	None	None	None	None

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 2002	Actual 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
(1)	Annual Firm Interchange		GWH	(1,029)	(3,080)	(5,021)	(5,244)	(5,735)	(6,593)	(6,440)	(6,074)	(5,776)	(5,964)	(4,767)	(5,479)
(2)	Nuclear		GWH	None	None	None	None	None	None	None	None	None	None	None	None
(3)	Coal		GWH	10,752	13,025	14,306	14,479	14,951	15,555	15,584	15,028	14,660	15,280	14,348	15,079
(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	1	1	0	1	0	0	1	0	2	1	1	2
(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	1	1	0	1	0	0	1	0	2	1	1	2
(13)		Diesel	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(14)	Natural Gas	Total	GWH	2,086	1,963	2,356	2,675	2,859	3,190	3,173	3,510	3,732	3,482	3,413	3,573
(15)		Steam	GWH	27	5	1	4	1	0	0	0	0	0	0	0
(16)		CC	GWH	1,953	1,860	2,254	2,570	2,757	3,089	3,072	3,407	3,630	3,380	3,311	3,471
(17)		CT	GWH	106	98	101	101	101	101	101	103	102	102	102	102
(18)	NUGs		GWH	100	43	81	41	0	0	0	0	0	0	0	0
(19)	Net Energy for Load		GWH	11,910	11,952	11,722	11,952	12,075	12,152	12,318	12,464	12,618	12,799	12,995	13,175

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

Gulf Power Company

Schedule 6.2
Energy Sources

(1)	(2) Energy Sources	(3)	(4) Units	(5) Actual 2002	(6) Actual 2003	(7) 2004	(8) 2005	(9) 2006	(10) 2007	(11) 2008	(12) 2009	(13) 2010	(14) 2011	(15) 2012	(16) 2013
(1)	Annual Firm Interchange		%	(8.64)	(25.77)	(42.83)	(43.88)	(47.49)	(54.25)	(52.28)	(48.73)	(45.78)	(46.60)	(36.68)	(41.59)
(2)	Nuclear		%	None	None	None	None	None	None	None	None	None	None	None	None
(3)	Coal		%	90.28	108.98	122.04	121.14	123.82	128.00	126.51	120.57	116.18	119.38	110.41	114.45
(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 01	0 01	0 00	0.01	0.00	0.00	0.01	0.00	0.02	0.01	0.01	0.02
(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	%	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.02	0.01	0.01	0.02
(13)		Diesel	%	None	None	None	None	None	None	None	None	None	None	None	None
(14)	Natural Gas	Total	%	17 51	16.42	20.10	22.38	23.68	26.25	25.76	28.16	29.58	27.21	26.26	27.12
(15)		Steam	%	0.23	0.04	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(16)		CC	%	None	15.56	19.23	21.50	22.83	25.42	24.94	27.33	28.77	26.41	25.48	26.35
(17)		CT	%	0.89	0.82	0.86	0.85	0.84	0.83	0.82	0.83	0.81	0.80	0.78	0.77
(18)	NUGs		%	0.84	0.36	0.69	0.34	0.00	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

CHAPTER III

PLANNING ASSUMPTIONS AND PROCESSES

THE INTEGRATED RESOURCE PLANNING PROCESS

As previously mentioned, 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 determines the various escalation and inflation rates that will impact the financial condition of the SES. This determination acts as a basis for the assumptions surrounding general inflation and escalation that will affect fuel costs, 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 energy and demand forecasting, fuel price forecasting, technology screening analysis and evaluation, engineering cost estimation modeling, evaluation of active and passive demand-side options, and other miscellaneous issues. Utilities have also become increasingly active in offering customers options which result in modified consumption patterns. An important input into 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 reflects 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. These evaluations are extremely important in order to maximize the benefit of existing investment from both a capital and an operating and maintenance expense perspective.

Additionally, the market for potential power purchases is analyzed in order to determine the cost-effectiveness in comparison to the available supply-side and demand-side options. Power purchases will be evaluated on 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 2007 and beyond. This reserve margin is the optimum economic point where the system can meet its energy and demand requirements after accounting for load forecast error, abnormal weather conditions, and unit-forced outage conditions. It also balances the cost of adding additional generation 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 determine the most acceptable candidates, the necessary planning inputs are defined and the generation mix analysis is initiated. The main optimization tool used in the generation mix analysis is the PROVIEW® model. The supply-side technology candidates are input into PROVIEW® in specific MW block sizes for selection over the planning horizon for the entire SES. 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 from the PROVIEW® program output 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 that fits 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 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 and fuel price variations 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 SES will only perform a "full-blown" IRP on every third year, with "updates" performed for the interim years. These updated plans account for the changes in the demand and energy forecast, and any other major assumption changes, and a remix is performed to assure the Companies' IRP is the most economical and cost effective plan. Most sensitivities are suspended for the updated plans in an effort to conserve manpower and costs. 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.

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 are factored into transmission studies in order to determine the impacts of various generation site options upon 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.

In prior years, Gulf has made a series of purchased power arrangements to meet its needs, 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 fuel price forecasting process is designed to support these various uses.

The delivered price of any fuel consists of a variety of components. The main components are commodity price and transportation cost. Coal commodity domestic prices are forecast on either a mine-mouth basis or FOB barge basis, while import coals are forecast on a FOB ship basis at the port of export. Natural gas is forecast on well-head prices. 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 the 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, PLATTS, PIRA Energy Group, Bank of America, and Criton Company.

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

After the workshop, the SCS Fuel Services Procurement staff references the outside consultant forecasts and identifies any major assumption differences. The Fuel Procurement staff then consolidates both internal and external forecasts and assumptions to develop a commodity forecast for each type of fuel. Fuel Procurement's 2003 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***
2004	1.333	5.250	4.875
2005	1.344	4.750	4.739
2006	1.344	4.500	4.690
2007	1.323	4.250	4.671
2008	1.323	4.000	4.647
2009	1.314	4.000	4.625
2010	1.344	4.026	4.656
2011	1.367	4.192	4.685
2012	1.397	4.385	4.771
2013	1.392	4.590	4.857

*Central Appalachia CSX, 12000 Btu/lb., 1% Sulfur
**Henry Hub
***SES LS 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, though this pricing decline on a real basis is diminishing as lower production cost reserves are depleted. In most regions, there are ample reserves of coal, though all are not economical reserves. The domestic U.S. industry continues to experience price pressures from environmental regulations, competition from import coals, and efficient gas turbine technology. In 2003, real price increases were experienced in the Central Appalachia market due to supply/demand imbalances, 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, these factors are shrinking Central Appalachia coal supply and increasing market prices.

The generic coal prices used in the IRP process are based on an average expectation of coal commodity costs combined with average transportation fees. These generic coal prices are used in conjunction with plant specific transportation fees and plant specific contract coal prices to develop the existing fuel price projection for the SES's budget process.

NATURAL GAS PRICE FORECAST

Gas markets remained tight during the 2003 budget preparation. Flat U.S. gas production, declining imports from Canada, and a need to refill storage from historically low inventory levels contributed to relatively high U.S. gas prices during 2003.

In late 2003, the gas market showed signs of improving supply fundamentals. U.S. production began to rebound slightly as a result of increased drilling. Storage inventories were successfully restored heading into the winter withdrawal season. Canadian imports flattened after declining sharply in early 2003, and LNG imports grew with the re-opening of all four existing U.S. terminals and a supply expansion in Trinidad.

Analysts' forecasts during mid-2003 reflected this combination of high current prices and an expectation of improving supply fundamentals leading to lower prices over the near term. Consequently, Southern Company's budget forecast was a mid-range of consultants' forecasts compared to higher prices that were evident in the futures market at the time.

Despite the short term improvements in gas supply, prices remained high in the 2003-04 winter due to normal or slightly colder-than-normal weather (and particularly colder weather in the northeastern U.S.) and the market's apparent desire to keep storage inventory from dwindling to the historically low level of a year ago.

NATURAL GAS AVAILABILITY

Gas production for southeastern U.S. markets will remain flat over the next few years. Traditional supply areas in the shallow-water Gulf of Mexico are declining; deepwater discoveries have helped to offset that decline, but they too will peak in the near future.

LNG imports will be critical to balance supply and demand. Short term growth in LNG imports has occurred with the re-opening of the Elba Island, Lake Charles and Cove Point terminals. Total LNG imports are estimated to have increased from 0.6 Bcfd in 2002 to approximately 1.4 Bcfd in 2003. Substantial LNG growth, however, will not occur until the expansion of these existing terminals in 2006-07, and the commencement of service from new terminals proposed for 2008-10.

Despite the lack of growth in near-term gas supply, sufficient supply remains available to meet operating needs, though pricing will be volatile during periods of peak demand.

STRATEGIC ISSUES

Prior to Gulf's last generating unit addition, Plant Smith Unit 3 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 to Gulf through the Intercompany Interchange Contract's reserve sharing mechanism in times when it 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 construction permit requirements. In 2003, these requirements were successfully incorporated into the Smith Title V air permit. 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 2009.

The Company's next potential capacity resource addition is 314 MW of CT peaking capacity in 2009. 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 Clean Air Act. 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. For example, in December 2003 the U. S. Environmental Protection Agency (EPA) proposed new rules that would lead to reductions in mercury and further reductions in nitrogen oxides (NOx) and sulfur dioxide (SO_2). The EPA plans to finalize the rules in 2004, and the SES should have a clearer picture of the actions required to address the rule requirements. 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 SO_2 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 future 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. Crist 1 was retired in 2003, and Units 2 and 3 will be retired in 2006.

As previously mentioned, the EPA has unveiled two new initiatives; the Interstate Air Quality Rule and the Mercury Rule, to reduce emissions of sulfur dioxide, nitrogen oxides and mercury in a manner similar to President Bush's 2003 Clear Skies Initiative. The uncertainty as to the outcome of these initiatives 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.

Gulf would support any proposal that would help the Company meet environmental goals in a logical and cost effective way. This would include having standards that are based on sound science and economics which allow for adequate time to comply without threatening a safe, reliable and affordable supply of energy.

AVAILABILITY OF SYSTEM INTERCHANGE

Gulf coordinates its planning and operations 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 provisions of the SES IIC 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 began prior to 2004 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.

CHAPTER IV

FORECAST OF FACILITIES REQUIREMENTS

CAPACITY RESOURCE ALTERNATIVES

POWER PURCHASES

Gulf has entered into short-term purchased power arrangements with non-affiliates in previous years in order meet its reliability needs. As its capacity needs increase prior to the summer of 2009 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 2004.

As previously mentioned, Gulf's current capacity resource expansion plan reflects the installation of two 157 MW combustion turbines (CT) in 2009 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.

PREFERRED AND POTENTIAL SITES FOR CAPACITY ADDITIONS

At this stage in Gulf's planning process, a commitment to construct the future combustion turbine (CT) capacity addition identified on Schedules 8 and 9 of this Ten Year Site Plan has not been made. Therefore, no preferred sites have been identified at this time. However, Gulf has identified four potential sites within Gulf's service area that could be used to locate the future CT capacity addition identified in this Ten Year Site Plan. These sites have been identified as potential sites for CT construction due to the existence of infrastructure, acreage, and/or transmission and fuel facilities. Future studies will determine which of these potential sites are more preferable. Other sites not yet identified, both inside and outside of Gulf's service area, could be considered for possible location of the project as part of Gulf's ongoing planning process.

Three of the potential sites are contained within each of Gulf's existing generation sites in Northwest Florida. These existing generation sites include Plant Crist in Escambia County, Florida, Plant Smith in Bay County, Florida, and Plant Scholz in Jackson, County, Florida. The fourth potential site, Gulf's Shoal River property located in Walton County, Florida, is an undeveloped greenfield site.

Each of these potential sites have differing characteristics that could offer construction and/or operational advantages related to the currently planned natural gas-fired CTs, but detailed studies will be required to further define and evaluate those characteristics. All necessary permits needed for CT construction at each of the above mentioned sites should be obtainable, assuming no major changes in environmental requirements.

The required environmental and land use information for each potential site is set forth below. Please note that the estimated peak water usage for the proposed CTs should be identical for each site mentioned below. Gulf projects that up to 400 gallons per minute (gpm) would be required for industrial processing water used to control NOx emissions during oil-fired operation. It is expected that 80 gpm would be required for industrial cooling water needs, while 1 gpm would be required for domestic, irrigation, and other potable and non-potable water uses.

Potential Site #1: Plant Crist, Escambia County

The project site would be located on Gulf's existing Plant Crist property in Escambia County, Florida. If the project is ultimately located on this property, detailed studies will first be required to determine the exact size and location of the project site within the plant property's boundaries in order to meet Gulf's needs while insuring full compliance with local, state, and federal requirements. The plant property, approximately 10 miles north of Pensacola, Florida, is located on the Escambia River and can be accessed via county roads from nearby U. S. Highway 29. The existing Plant Crist facility consists of 996 MW of steam generation.

U. S. Geological Survey (USGS) Map

A USGS map showing the general location of the Plant Crist property is found on page 80 of this chapter.

Land Uses and Environmental Features

The Plant Crist property is dedicated to industrial use. The land adjacent to the property is currently being used for residential, commercial, and industrial purposes. General environmental features of the undeveloped portion of the property include mixed scrub, mixed hardwood/pine forest, and some open grassy areas. This property is located on the Escambia River. There are no unique or significant environmental features on the property would substantially affect project development.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf would likely use groundwater from on-site wells or municipal water facilities.

Potential Site #2: Plant Smith, Bay County

The project site would be located on Gulf's existing Plant Smith property in Bay County, Florida. If the project is ultimately located on this property, detailed studies will first be required to determine the exact size and location of the project site within the plant property's boundaries in order to meet Gulf's needs while insuring full compliance with local, state, and federal requirements. The plant property, approximately 10 miles northwest of Panama City, Florida, is located on North Bay and can be accessed via a county road from nearby State Road 77. The existing Plant Smith facility consists of 351 MW of steam generation, 566 MW of combined cycle generation, and 32 MW of CT generation.

U. S. Geological Survey (USGS) Map

A USGS map showing the general location of the Plant Smith property is found on page 81 of this chapter.

Land Uses and Environmental Features

The Plant Smith property is dedicated to industrial use. The land adjacent to the property is rural and consists of planted pine plantations. General environmental features of the property include a mixture of upland and wetland areas. This property is located on North Bay, which connects to St. Andrews Bay. The property has no unique or significant environmental features that would substantially affect project development.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf would likely use groundwater from on-site wells.

Potential Site #3: Plant Scholz, Jackson County

The project site would be located on Gulf's existing Plant Scholz property in Jackson County, Florida. If the project is ultimately located on this property, detailed studies will first be required to determine the exact size and location of the project site within the plant property's boundaries in order to meet Gulf's needs while insuring full compliance with local, state, and federal requirements. The plant property, approximately 3 miles southeast of Sneeds, Florida, is located on the Apalachicola River and can be accessed via a private road from nearby U. S. Highway 90. The existing Plant Scholz facility consists of 92 MW of steam generation.

U. S. Geological Survey (USGS) Map

A USGS map showing the general location of the Plant Scholz property is found on page 82 of this chapter.

Land Uses and Environmental Features

The Plant Scholz property is dedicated to industrial use. The land adjacent to the property is primarily rural and in a natural state, but some agricultural development exists. General environmental features of the property include a mixture of hardwood and pine forest areas. This property is located on the Apalachicola River and has no unique or significant environmental features that would substantially affect project development.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf would likely use groundwater from on-site wells.

Potential Site #4: Shoal River Property, Walton County

The project site would be located on undeveloped Gulf property in Walton County, Florida. If the project is ultimately located on this property, detailed studies will first be required to determine the exact size and location of the project site within the property's boundaries in order to meet Gulf's needs while insuring full compliance with local, state, and federal requirements. This property, approximately 3 miles northwest of Mossy Head, Florida, is located on the Shoal River and can be accessed via a county road from nearby U. S. Highway 90.

U. S. Geological Survey (USGS) Map

A USGS map showing the general location of the Shoal River property is found on page 83 of this chapter.

Land Uses and Environmental Features

The Shoal River property is currently dedicated to agricultural and rural residential use. The northern part of the site, some 150 acres, is designated General Agricultural in Walton County's Comprehensive Future Land Use Plan. The land adjacent to the property is rural and in a natural state. General environmental features of the property mainly include wooded upland areas. This property is located on the Shoal River. Because the river is designated as Outstanding Florida Waters, certain criteria must be satisfied to ensure that the river is not significantly degraded. There are no other unique or significant environmental features on the property that would substantially affect project development.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf would likely use groundwater from on-site wells.

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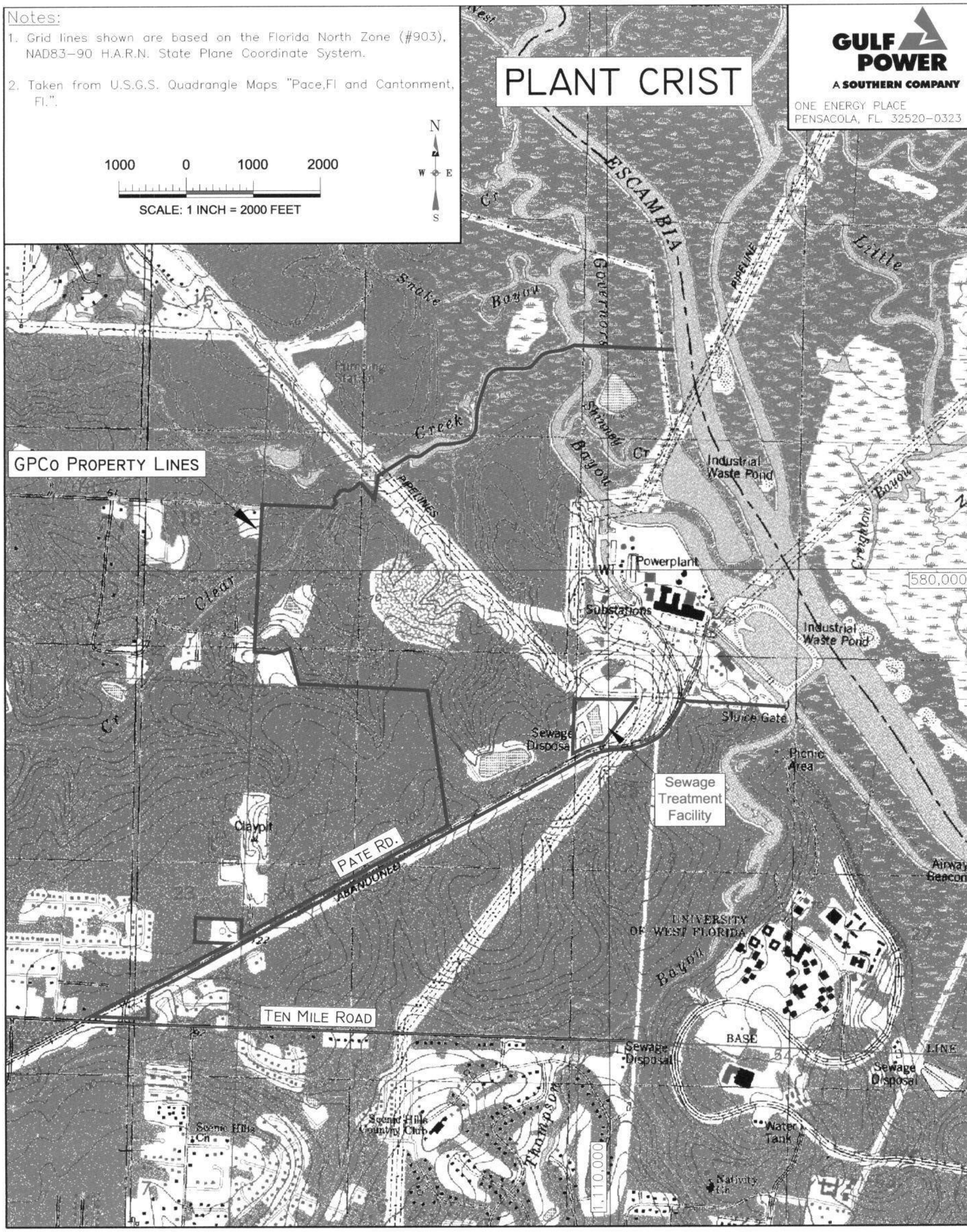

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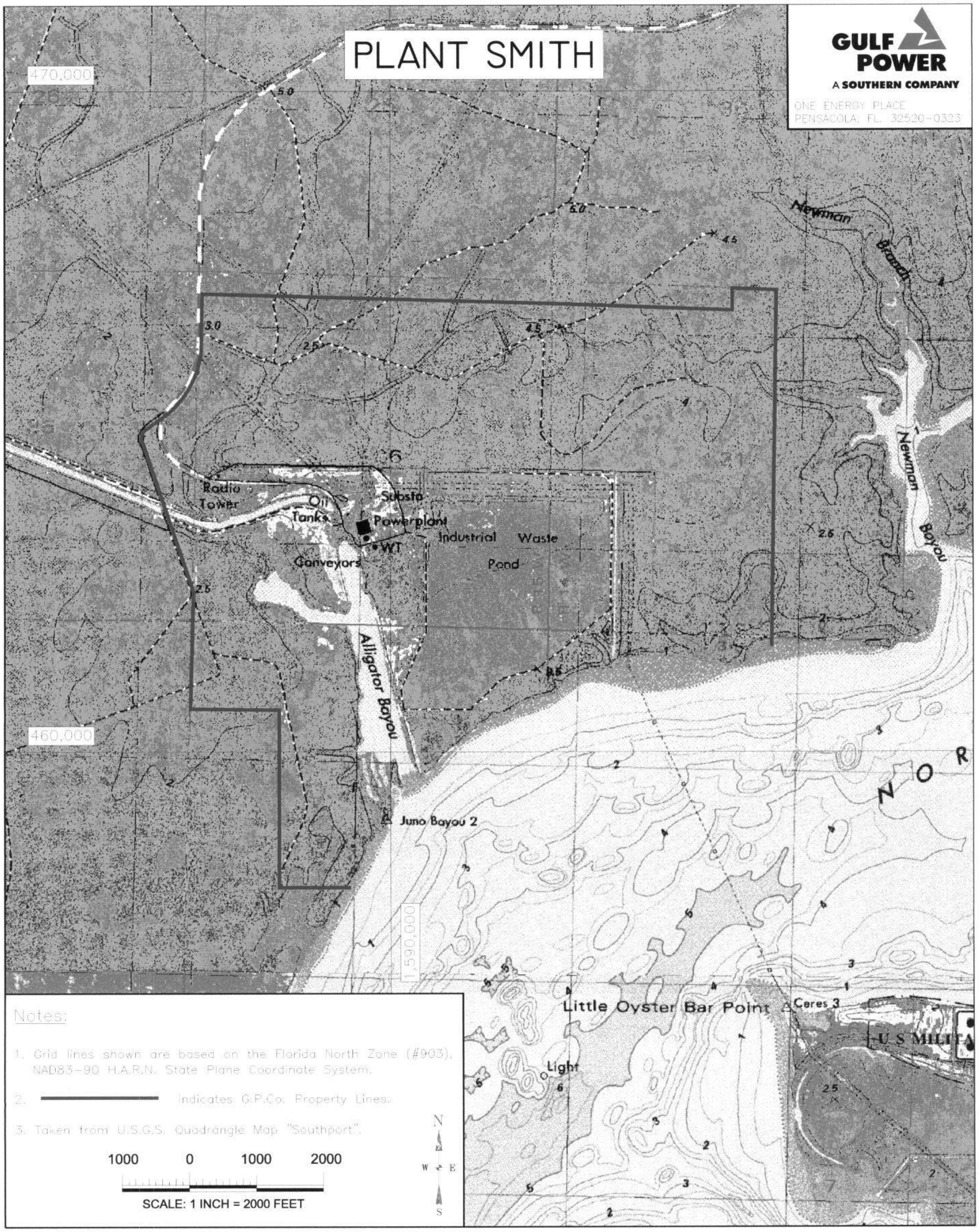
PLANT SMITH
GULF POWER
A SOUTHERN COMPANY
ONE ENERGY PLACE
PENSACOLA, FL. 32520-0323
470,000
460,000
1,590,000
Newman Branch
Newman Bayou
Radio Tower
Oil Tanks
Substa
Powerplant
WT
Industrial Waste Pond
Conveyors
Alligator Bayou
Juno Bayou 2
Little Oyster Bar Point
Ceres 3
Light
U S MILITA
NOR
Notes:
1. Grid lines shown are based on the Florida North Zone (#903), NAD83-90 H.A.R.N. State Plane Coordinate System.
2. indicates G.P.Co. Property Lines.
3. Taken from U.S.G.S. Quadrangle Map "Southport".
1000 0 1000 2000
SCALE: 1 INCH = 2000 FEET
N
W E
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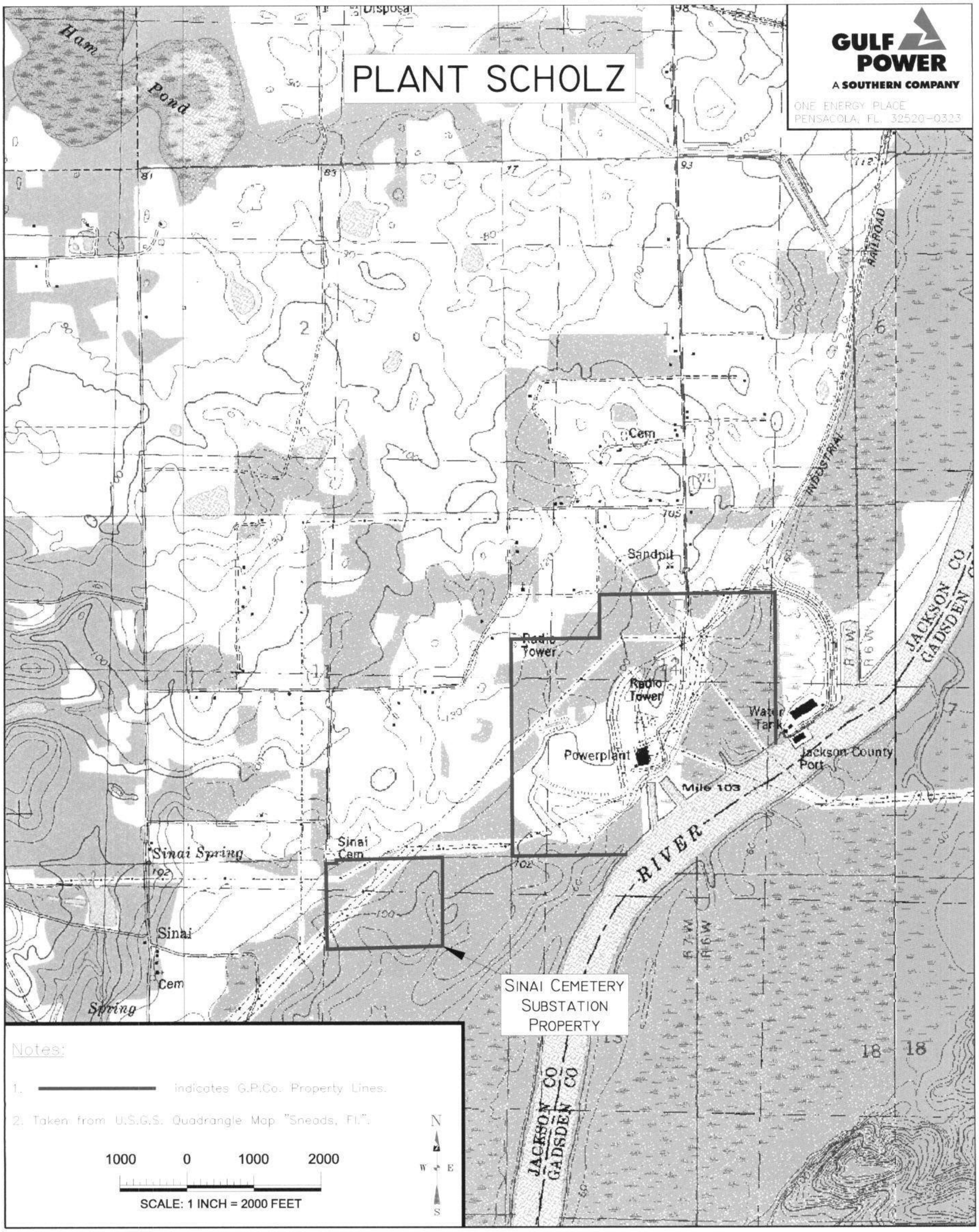
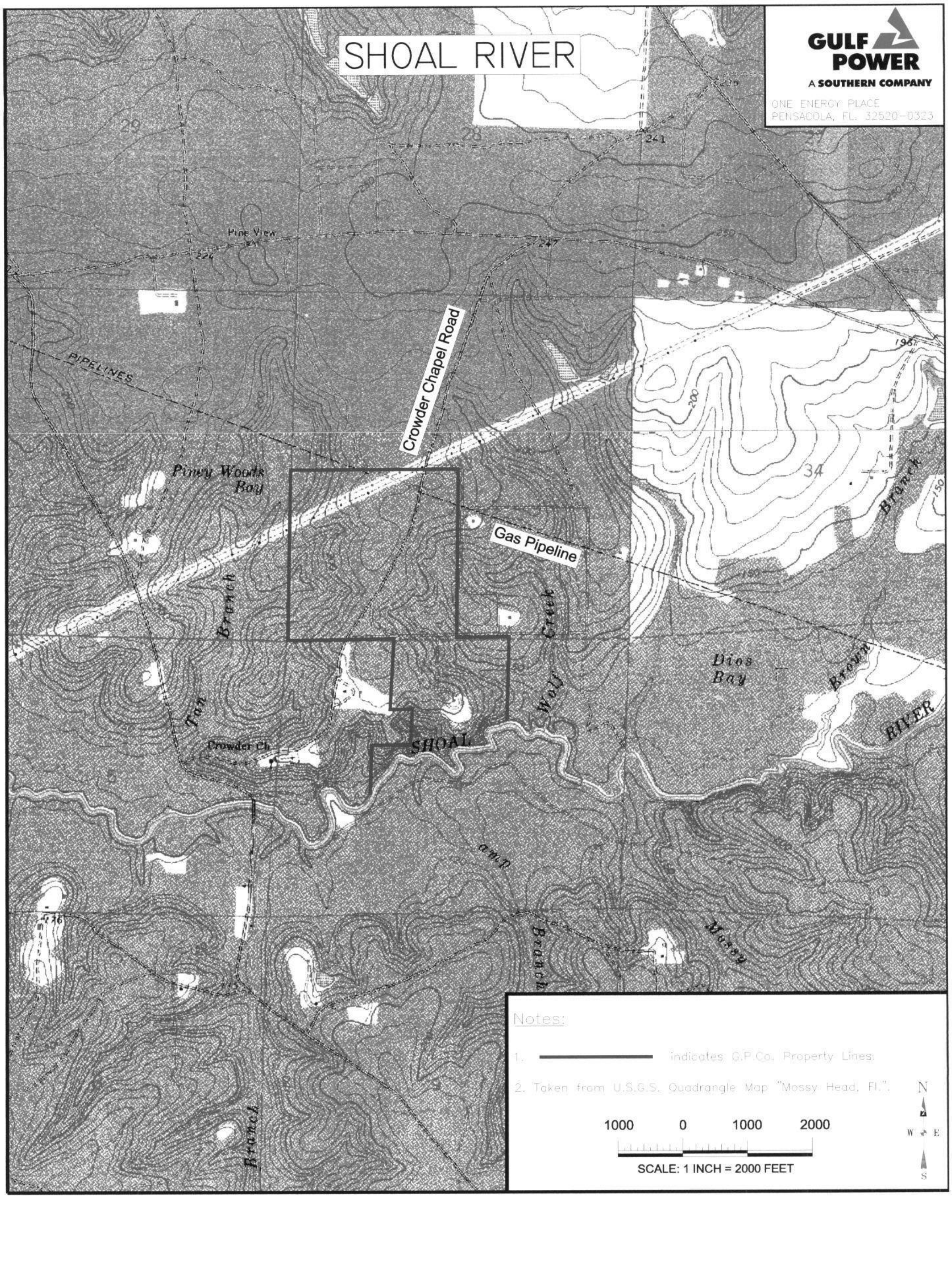

PLANT SCHOLZ
GULF POWER
A SOUTHERN COMPANY
ONE ENERGY PLACE
PENSACOLA, FL. 32520-0323
Ham Pond
Disposal
INDUSTRIAL RAILROAD
Cem
Sandpit
Radio Tower
Radio Tower
Water Tank
Powerplant
Jackson County Port
Mile 103
RIVER
JACKSON CO
GADSDEN CO
R7W
R6W
Sinai Spring
Sinai Cem
Sinai
Cem
Spring
SINAI CEMETERY
SUBSTATION
PROPERTY
Notes:
1. indicates G.P.Co. Property Lines.
2. Taken from U.S.G.S. Quadrangle Map "Sneads, Fl.".
1000 0 1000 2000
SCALE: 1 INCH = 2000 FEET
N
W E
S


SHOAL RIVER
GULF POWER
A SOUTHERN COMPANY
ONE ENERGY PLACE
PENSACOLA, FL. 32520-0323
Crowder Chapel Road
Gas Pipeline
PIPELINES
Piney Woods Bay
Pine View
Tan Branch
Crowder Ch
Wolf Creek
Dias Bay
Brown Branch
SHOAL RIVER
Mossy Branch
Notes:
1. Indicates G.P.Co. Property Lines.
2. Taken from U.S.G.S. Quadrangle Map "Mossy Head, Fl.".
1000 0 1000 2000
SCALE: 1 INCH = 2000 FEET
N
W E
S

GULF POWER COMPANY

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
2004	2,800	26	(211)	19	2,634	2,391	243	10.2%	NONE	243	10.2%
2005	2,789	26	(211)	0	2,604	2,440	164	6.7%		164	6.7%
2006	2,724	26	(211)	0	2,539	2,459	80	3.3%		80	3.3%
2007	2,724	26	(211)	0	2,539	2,502	37	1.5%		37	1.5%
2008	2,724	206	(211)	0	2,719	2,476	243	9.8%		243	9.8%
2009	3,038	21	(211)	0	2,848	2,513	335	13.3%		335	13.3%
2010	3,038	77	(211)	0	2,904	2,550	354	13.9%		354	13.9%
2011	3,038	133	(211)	0	2,960	2,583	377	14.6%		377	14 6%
2012	2,946	248	(211)	0	2,983	2,611	372	14.2%		372	14.2%
2013	2,946	304	(211)	0	3,039	2,661	378	14.2%		378	14.2%

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

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
2003-04	2,828	27	(211)	19	2,663	2,162	501	23.2%	NONE	501	23.2%
2004-05	2,828	27	(211)	19	2,663	2,196	467	21.3%		467	21 3%
2005-06	2,817	27	(211)	0	2,633	2,225	408	18.3%		408	18.3%
2006-07	2,752	27	(211)	0	2,568	2,250	318	14.1%		318	14.1%
2007-08	2,752	27	(211)	0	2,568	2,284	284	12.4%		284	12.4%
2008-09	2,752	22	(211)	0	2,563	2,302	261	11.3%		261	11.3%
2009-10	3,084	18	(211)	0	2,891	2,331	560	24.0%		560	24.0%
2010-11	3,084	73	(211)	0	2,946	2,359	587	24.9%		587	24.9%
2011-12	2,992	129	(211)	0	2,910	2,410	500	20.7%		500	20.7%
2012-13	2,992	244	(211)	0	3,025	2,424	601	24.8%		601	24.8%

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

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 Transport		Const	Com'l In-	Expected	Gen Max	Net Capability		
	Unit		Unit	Fuel				Start	Service	Retirement	Nameplate	Summer	Winter	
Plant Name	No.	Location	Type	Pri	Alt	Pri	Alt	Mo/Yr	Mo/Yr	Mo/Yr	KW	MW	MW	Status
Lansing Smith	3	Bay County 36/2S/15W	CC	NG	--	PL	--	--	04/02	06/05	619,650	(11.0)	(11.0)	D
Crist	2	Escambia County 25/1N/30W	FS	NG	HO	PL	TK	--	06/49	05/06	28,125	(24.0)	(24.0)	R
Crist	3	Escambia County 25/1N/30W	FS	NG	HO	PL	TK	--	09/52	05/06	37,500	(35.0)	(35.0)	R
Lansing Smith	3	Bay County 36/2S/15W	CC	NG	--	PL	--	--	04/02	06/06	619,650	(6.0)	(6.0)	D
Scholz	1	Jackson County 12/3N/7W	FS	C	--	RR	WA	--	03/53	12/11	49,000	(46.0)	(46.0)	R
Scholz	2	Jackson County 12/3N/7W	FS	C	--	RR	WA	--	10/53	12/11	49,000	(46.0)	(46.0)	R
Unlocated	A	Unknown	CT	NG	LO	PL	TK	07/06	06/09	12/29	170,000	157.0	166.0	P
Unlocated	B	Unknown	CT	NG	LO	PL	TK	07/06	06/09	12/29	170,000	157.0	166.0	P

SCHEDULE 8

Abbreviations:

C - Coal
CT - Combustion Turbine
CC - Combined Cycle

NG - Natural Gas
LO - Light Oil
HO - Heavy Oil

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

D - Unit degradation, not retirement
P - Planned, but not authorized by utility
R - To be retired
V - Under construction, more than 50% complete

Gulf Power Company

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:	07/08
	b. Commercial in-service date:	06/09
(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):	2.0%
	Equivalent Availability Factor (EAF):	95.9%
	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):	433
	Direct Construction Cost ('03 $/kW):	369
	AFUDC Amount ($/kW):	0
	Escalation ($/kW):	64
	Fixed O&M ($/kW - Yr):	3.25
	Variable O&M ($/MWH):	12.70
	K Factor:	1.4794

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