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ECENTED SC MAR 30 AM IO: 0 COMMISSION

March 30, 2007

Ms. Ann Cole Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee FL 32399-0870

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Dear Ms. Bayo:

Enclosed are an original and twenty-five copies of Gulf Power Company's 2007 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. Ritenau (lw)

lw

CMP Enclosures COM Beggs & Lane CC: CTR Jeffrey A. Stone, Esq. ECR GCL OPC ____ RCA _____ SCR SGA SEC OTH

DOCUMENT NUMBER-DATE 02745 MAR 30 5 FPSC-COMMISSION CLERK

TEN YEAR SITE PLAN 2007-2016

FOR ELECTRIC GENERATING FACILITIES AND ASSOCIATED TRANSMISSION LINES

APRIL 2007



160186-OPC-POD-128-749

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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 2, 2007

160186-OPC-POD-128-750

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GULF POWER COMPANY

TEN-YEAR SITE PLAN

Executive Summary

The Gulf Power Company 2007 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 state agency responsible for the oversight of the Ten-Year Site Plan (TYSP). The 2007 TYSP for Gulf Power Company (Gulf) is being filed in compliance with the applicable FPSC rules.

Gulf's 2007 TYSP contains the documentation of assumptions, load forecast, fuel forecasts, the planning processes, existing resources, and future capacity needs and resources. The resource planning process utilized by Gulf to determine its future capacity needs is 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 (merged with Savannah Electric & Power), and Mississippi 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 in the SES IRP are driven by the demand forecast that includes 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 resources from which to select the most cost-effective plan for the system. The resulting SES resource needs are then allocated among the operating companies based on reserve requirements, and each company then determines the resources that will best meet its capacity and reliability needs. The generation technologies screened in the latest SES IRP include gas-fired combustion turbine, gas-fired combined cycle, pulverized coal, and nuclear.

For the 2007 TYSP cycle, the timing of Gulf's next capacity need has changed from 2009, as shown in the previous TYSP, to 2014 due to Gulf's successful negotiation and subsequent execution of purchased power agreements (PPAs) for a total of 487 MW that will serve Gulf customers' electrical needs from June 1, 2009 until May 31, 2014. The PPAs contain the terms and conditions for the supply of peaking power from two existing regional market facilities located outside Gulf's service territory. These PPAs were filed with the FPSC in December 2006, and approvals are currently pending.

With the inclusion of this PPA capacity as committed capacity, Gulf's allocated resource needs for this planning cycle are shown to begin in 2010, and increase annually to 1006 megawatts by the summer of 2016. The magnitude of the need has decreased slightly frompreviously anticipated levels due primarily to

a decrease in expected summer peak demand projections for the 2007 TYSP cycle.

In order to determine its next proposed capacity resource, Gulf has continued to evaluate the construction of generating capacity, or the acquisition of equivalent capacity resources in coordination with other SES operating companies. Gulf's current generation expansion plan calls for the addition of a 600 megawatt gasfired combined cycle unit in Gulf's service territory in 2014. In addition, shortterm reliability purchases from the market are proposed for the summer of 2016. When combined with the proposed capacity additions of the other Southern electric system operating companies, Gulf's proposed additions will result in the SES having a planning reserve margin of 15% through 2016.

If Gulf ultimately commits to the construction of this new combined cycle generating capacity, the installation is anticipated to coincide with the expiration of its firm market capacity purchases in May 2014. Locations for this potential combined cycle generating facility are currently being studied, with the primary focus being on Gulf's existing generating facility sites. Schedules 8 and 9 of this TYSP document contain more detailed information on this potential combined cycle addition.

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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 eleven fossil steam units, one combined cycle unit, and four combustion turbines. Schedule 1 shows 937 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 357 MW of steam generation, 556 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. Gulf's Pea Ridge Facility, in Pace, Florida, consists of three combustion turbines associated with an existing customer's cogeneration facility, which adds 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 2,733 MW and a total net winter generating capability of 2,771 MW.

The existing Gulf system in Northwest Florida, including generating plants, substations, transmission lines and service area, is shown on the system map on

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page 8. Data regarding Gulf's existing generating facilities is presented on Schedule 1.

SCHEDULE 1 EXISTING GENERATING FACILITIES AS OF DECEMBER 31, 2006							Page 1 of 2						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Unit		Unit	F	uel	Fuel T	ransp	Alt. Fuel Days	Com'l In- Service	Exptd Retrmnt	Gen Max Nameplate	Net Ca Summer	pability Winter
Plant Name	No.	Location	Туре	Pri	Alt	Pri	Alt	<u>Use</u>	Mo/Yr	Mo/Yr	KW	<u>MW</u>	MW
Crist		Escambia County 25/1N/30W									<u>1,135,250</u>	<u>937.0</u>	<u>937.0</u>
	4		FS	С	NG	WA	PL	1	7/59	12/24	93,750	78.0	78.0
	5		FS	С	NG	WA	PL	1	6/61	12/26	93,750	80.0	80.0
	6		FS	С	NG	WA	ΡL	1	5/70	12/35	369,750	302.0	302.0
	7		FS	С	NG	WA	PL	1	8/73	12/38	578,000	477.0	477.0
Lansing Smith		Bay County 36/2S/15W									1,001,500	<u>945.0</u>	<u>981.0</u>
	1		FS	С		WA			6/65	12/30	149,600	162.0	162.0
	2		FS	С		WA			6/67	12/32	190,400	195.0	195.0
	3		CC	NG		PL			4/02	12/37	619,650	556.0	584.0
	Α		СТ	LO		тк			5/71	12/17	41,850	32.0	40.0
Scholz		Jackson County 12/3N/7W									<u>98,000</u>	<u>92.0</u>	<u>92.0</u>
	1		FS	С		RR	WA		3/53	12/11	49,000	46.0	46.0
	2		FS	С		RR	WA		10/53	12/11	49,000	46.0	46.0
(A) Daniel		Jackson County, MS 42/5S/6W									<u>548,250</u>	<u>528.0</u>	<u>528.0</u>
	1	42/55/044	FS	с	но	RR	тк		9/77	12/32	274,125	264.0	264.0
	2		FS	č	но	RR	тк		6/81	12/36	274,125	264.0	264.0
(A)											,		
Scherer	3	Monroe County, GA	FS	С		RR			1/87	12/42	222,750	219.0	219.0
Pea Ridge		Santa Rosa County 15/1N/29W									<u>14,250</u>	<u>12.0</u>	<u>13.8</u>
	1		СТ	NG		PL			5/98	12/18	4,750	4.0	4.6
	2		СТ	NG		PL			5/98	12/18	4,750	4.0	4.6
	3		СТ	NG		PL			5/98	12/18	4,750	4.0	4.6
											Total System	2,733.0	2,770.8

GULF POWER COMPANY

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SCHEDULE 1

Page 2 of 2

Abbreviations:

Fuel

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

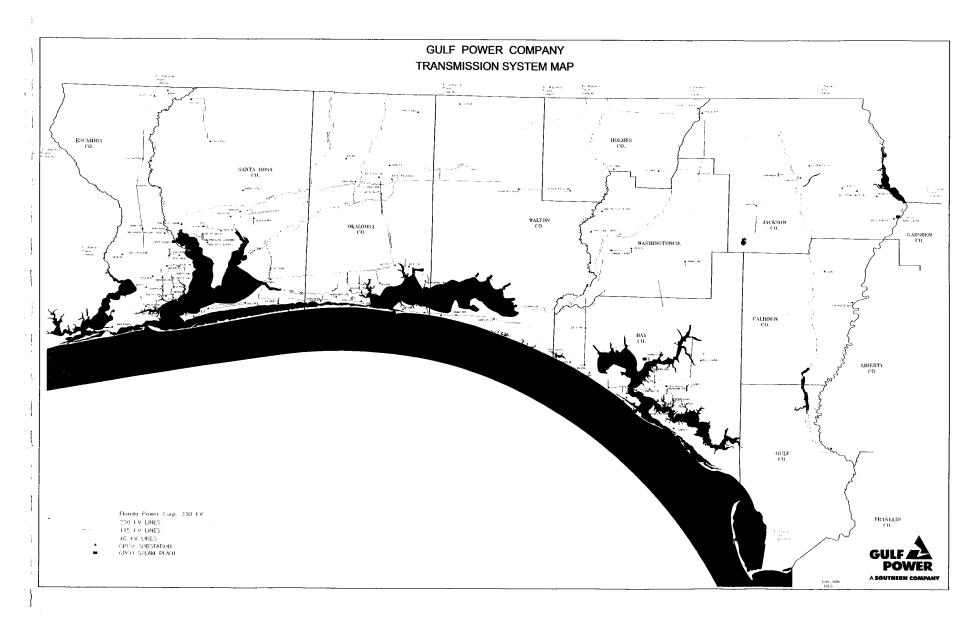
Fuel Transportation

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%).

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CHAPTER II

FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

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FORECASTING DOCUMENTATION

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

Gulf views the forecasting effort as a dynamic process requiring ongoing efforts to yield results which allow informed planning and decision-making. The total forecast is an integration of different techniques and methodologies, each applied to the task for which it is best suited. Many of the techniques take advantage of the extensive data made available through the Company's marketing efforts, which are predicated on the philosophy of knowing and understanding the needs, perceptions and motivations of our customers and actively promoting wise and efficient uses of energy which satisfy customer needs. Gulf has been a pacesetter in the energy efficiency market since the development and implementation of the GoodCents Home program in the mid-70's. This program brought customer awareness, understanding and expectations regarding energy efficient construction standards in Northwest Florida to levels unmatched elsewhere. Since that time, the GoodCents Home program has seen many enhancements, and has been widely accepted not only by our customers, but by builders, contractors, consumers, and other electric utilities throughout the nation, providing clear evidence that selling efficiency to customers can be done successfully.

The Marketing Services section of the Marketing 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

The 2007 Budget Forecast assumes that during 2006 real GDP growth will stay at 3.5% but will slow to 3.0% during both 2007 and 2008.

Real GDP is on track to register a 5% gain in the first half of 2006. Seasonally adjusted, real GDP growth is running at an annualized pace of between 3.5% and 4%, which is above the economy's estimated potential growth rate of between 3% and 3.5%.

Comparing to Budget 2006, the real GDP and total employment forecast growth slowed slightly over Budget 2007 forecast horizon. The real GDP is predicted to grow at a 2.45% compound annual rate over the 25 years period in Budget 2006 but 2.31% in Budget 2007. Total employment was forecast to grow by 1.11% annually in Budget 2006 but 1.04% in Budget 2007. Real personal income follows the same trend – increase by 2.34% in Budget 2006 but 2.19% in Budget 2007.

Overall, the economy will continue to remain strong in 2006 but grow at a slower pace. It will experience above trend growth through this summer. Annualized real GDP growth will be over 4% and job growth will remain near 200,000 per month. Inflation pressures will develop more fully during this period. Interest rates will thus rise further. The higher rates will weigh heavily on housing; highly leveraged lower-income households and their spending will also suffer. Spiking energy prices and sharply declining house prices do remain serious threats to the expansion.

B. TERRITORIAL ECONOMIC OUTLOOK

Gulf's projections reflect the economic outlook for our service area as provided by Moody's 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 exceed the rate of growth for the state of Florida. Gulf's projections incorporate electric price assumptions derived from the 2006 Gulf Power Official Long-Range Forecast. Fuel price projections for gas and oil are developed by Southern Company Services (SCS) Fuel Procurement staff with input from outside consultants. The following tables provide a summary of the assumptions associated with Gulf's forecast:

TABLE 1

ECONOMIC SUMMARY (2005-2011)

Base Case Forecast

GDP Growth	3.5% - 2.8%
Interest Rate (AAA Corporate Bonds)	5.9% - 7.0%
Inflation	3.3% - 2.3%

TABLE 2

AREA DEMOGRAPHIC SUMMARY (2005-2011)

	Base Case Forecast
Population Gain	117,094
Net Migration	90,315
Average Annual Population Growth	2.0%
Average Annual Labor Force Growth	2.5%

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 Moody's 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. <u>COMMERCIAL CUSTOMER FORECAST</u>

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. <u>RESIDENTIAL SALES FORECAST</u>

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 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 March 2005, designed to meet the Commission-approved demand and energy reduction goals established in September 2004. Additional information on the residential conservation programs and program features are provided in the <u>Conservation</u> section.

B. <u>COMMERCIAL SALES FORECAST</u>

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.

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 March 2005, designed to meet the Commission-approved demand and energy reduction goals established in September 2004. Additional information on the Commercial Conservation programs and program features are provided in the <u>Conservation</u> 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-four 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 sales forecast also reflects the anticipated incremental impacts of Gulf's DSM plan, approved in March 2005, designed to meet the Commission-approved demand and energy reduction goals established in September 2004. 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 available fixture types. 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.

F. <u>COMPANY USE & INTERDEPARTMENTAL ENERGY</u>

The annual forecast for Company 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 the Hourly Electric Load Model (HELM), developed by ICF, Incorporated, for EPRI under Project RP1955-1. The resulting output from the model is hourly electrical loads over the forecast horizon.

The summer and winter peak demands are the maximum of the hourly forecasted loads in July and January, respectively. Gulf's summer peak demand typically occurs in the month of July, while Gulf's winter peak demand typically occurs in the month of January.

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 rate level components.

Model inputs include rate level energy forecasts consistent with the cost of service load shape data collected from COS load research samples as well as individual customer load data for many of the larger customers. 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 rates and individual large customer load shapes. The system demand for electricity in hour i is modeled as the sum of demands by each end-use in hour i:

NR NC NI $L_{i} = \Sigma LR_{,i} + \Sigma LC_{,i} + \Sigma L_{i,i} + Misc_{i}$ R=1 C=1 I=1

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

NR = number of residential rate class loads;

NC = number of commercial rate class loads;

NI = number of industrial rate class loads;

LR.i = demand for electricity by residential rate R in hour i;

LC, i = demand for electricity by commercial rate C in hour i;

LLi = demand for electricity by industrial rate/customer I in hour i;

Misci = 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 Moody's Economy.com, a renowned economic services provider. Moody's 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 01, 2004, modified on January 26, 2005 (Docket No. 040032-EG) and approved by the FPSC on March 14, 2005. These programs were designed to meet the incremental impacts of the Commission-approved demand and energy reduction DSM goals established in Order No. PSC-04-0764-PAA-EG on September 1, 2004.

A. <u>RESIDENTIAL CONSERVATION</u>

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 67,000 new homes have been constructed to Good Cents standards under this program resulting in an annual reduction of 79 MW of summer peak demand and annual energy savings of 202 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 21 MW of summer peak demand and 41 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 1,900 geothermal heat pumps have been installed in Gulf's service area resulting in an annual reduction in summer peak demand of 4 MW and annual energy savings of 5 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 6,900 customers are participating in this program resulting in an annual reduction of 20 MW in summer peak demand and annual energy savings of 12 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. Approximately 10,000 customers under this program have achieved an annual reduction of 102 MW in summer peak demand and annual energy savings of 204 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. Approximately 18,000 customers participating in these programs have achieved an annual reduction of 24 MW in summer peak demand and annual energy savings of 74 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.

The objective of the Commercial Geothermal Heat Pump Program is to reduce the demand and energy requirements of new and existing Commercial/Industrial customers through the promotion and installation of

advanced and emerging geothermal systems. Due to the long life of space conditioning equipment, the choices that are made over the next decade regarding space conditioning equipment will have important economic and environmental ramifications lasting well into the future. Geothermal heat pumps 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. This program will promote efficiency levels well above current market conditions, specifically those units with an Energy Efficiency Ratio (EER) of 13.0 or higher.

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 28 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 10 MW of summer peak demand and 41 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	WINTER	NET ENERGY
PEAK	PEAK	FOR LOAD
(KW)	(KW)	(KWH)

2005 331,506 387,531 675,862,770

2007 BUDGET FORECAST TOTAL CONSERVATION PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
9,439	15,448	15,119,245
12,273	20,688	16,901,099
11,061	20,768	17,302,344
11,179	21,942	18,035,554
10,777	22,011	17,874,722
10,748	21,806	17,728,070
10,759	21,792	17,738,475
10,972	23,458	18,842,099
11,025	24,668	19,490,524
9,568	22,457	18,153,857
8,456	21,071	17,781,772
	PEAK (KW) 9,439 12,273 11,061 11,179 10,777 10,748 10,759 10,972 11,025 9,568	PEAK (KW)PEAK (KW)9,43915,44812,27320,68811,06120,76811,17921,94210,77722,01110,74821,80610,75921,79210,97223,45811,02524,6689,56822,457

2007 BUDGET FORECAST TOTAL CONSERVATION PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	340,945	402,979	690.982.015
2007	353,218	423,667	707,883,114
2008	364,279	444,435	725,185,458
2009	375,458	466,377	743,221,012
2010	386,235	488,388	761,095,734
2011	396,983	510,194	778,823,804
2012	407,742	531,986	796,562,279
2013	418,714	555,444	815,404,378
2014	429,739	580,112	834,894,902
2015	439,307	602,569	853,048,759
2016	447,763	623,640	870,830,531

HISTORICAL TOTAL RESIDENTIAL CONSERVATION PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

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

2005	167,166	250,214	345,721,290
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2007 BUDGET FORECAST TOTAL RESIDENTIAL CONSERVATION PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	6,186	13,115	9,584,842
2007	8,833	18,259	10,951,089
2008	8,873	18,969	11,283,837
2009	8,991	20,143	12,020,680
2010	8,589	20,213	11,864,952
2011	8,560	20,007	11,722,293
2012	8,571	19,993	11,736,189
2013	8,784	21,660	12,844,374
2014	8,837	22,869	13,496,288
2015	7,551	20,879	12,467,585
2016	6,439	19,493	12,098,652

2007 BUDGET FORECAST TOTAL RESIDENTIAL CONSERVATION PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	173,352	263,329	355,306,132
2007	182,185	281,588	366,257,221
2008	191,058	300,557	377,541,058
2009	200,049	320,700	389,561,738
2010	208,638	340,913	401,426,690
2011	217,198	360,920	413,148,983
2012	225,769	380,913	424,885,172
2013	234,553	402,573	437,729,546
2014	243,390	425,442	451,225,834
2015	250,941	446,321	463,693,419
2016	257,380	465,814	475,792,071

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

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

2005	164,340	137,317	319,056,114
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2007 BUDGET FORECAST TOTAL COMMERCIAL/INDUSTRIAL DSM PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	3,253	2,333	5,452,814
2007	3,440	2,429	5,872,531
2008	2,188	1,799	5,948,820
2009	2,188	1,799	5,948,820
2010	2,188	1,798	5,948,820
2011	2,188	1,799	5,948,821
2012	2,188	1,799	5,948,820
2013	2,188	1,798	5,948,820
2014	2,188	1,799	5,948,821
2015	2,017	1,578	5,643,662
2016	2,017	1,578	5,643,663

2007 BUDGET FORECAST TOTAL COMMERCIAL/INDUSTRIAL DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	167,593	139,650	324,508,928
2007	171,033	142,079	330,381,459
2008	173,221	143,878	336,330,279
2009	175,409	145,677	342,279,099
2010	177,597	147,475	348,227,919
2011	179,785	149,274	354,176,740
2012	181,973	151,073	360,125,560
2013	184,161	152,871	366,074,380
2014	186,349	154,670	372,023,201
2015	188,366	156,248	377,666,863
2016	190,383	157,826	383,310,526

HISTORICAL TOTAL OTHER DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

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

2005 0 0 11,085,366

2007 BUDGET FORECAST TOTAL OTHER DSM PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	0	0	81,589
2007	0	0	77,479
2008	0	0	69,686
2009	0	0	66,055
2010	0	0	60,950
2011	0	0	56,956
2012	0	0	53,467
2013	0	0	48,904
2014	0	0	45,415
2015	0	0	42,610
2016	0	0	39,457

2007 BUDGET FORECAST TOTAL OTHER DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	0	0	11,166,955
2007	0	0	11,244,434
2008	0	0	11,314,121
2009	0	0	11,380,175
2010	0	0	11,441,125
2011	0	0	11,498,081
2012	0	0	11,551,547
2013	0	0	11,600,452
2014	0	0	11,645,867
2015	0	0	11,688,477
2016	0	0	11,727,934

HISTORICAL TOTAL EXISTING DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

SUMMER	WINTER	NET ENERGY
PEAK	PEAK	FOR LOAD
(KW)	(KW)	(KWH)
		. ,

2005 233,297 286,570 552,341,804

2007 BUDGET FORECAST TOTAL EXISTING DSM PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	1,317	6,219	4,837,619
2007	1,088	7,676	5,418,410
2008	1,127	8,385	5,743,366
2009	1,246	9,560	6,476,579
2010	1,248	9,929	6,673,405
2011	1,220	9,724	6,526,751
2012	1,230	9,709	6,537,160
2013	1,443	11,377	7,640,779
2014	1,497	12,585	8,289,206
2015	1,329	12,020	7,668,048
2016	1,339	12,059	7,706,312

2007 BUDGET FORECAST TOTAL EXISTING DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	234,614	292,789	557,179,423
2007	235,702	300,465	562,597,834
2008	236,829	308,850	568,341,201
2009	238,075	318,410	574,817,778
2010	239,323	328,339	581,491,183
2011	240,543	338,063	588,017,935
2012	241,773	347,772	594,555,093
2013	243,216	359,149	602,195,874
2014	244,713	371,734	610,485,080
2015	246,043	383,754	618,153,128
2016	247,382	395,813	625,859,440

HISTORICAL RESIDENTIAL EXISTING DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

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

2005 122,234 182,859 299,977,508

2007 BUDGET FORECAST RESIDENTIAL EXISTING DSM PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
1,317	6,219	4,756,030
1,088	7,676	5,340,931
1,127	8,385	5,673,680
1,246	9,560	6,410,524
1,248	9,929	6,612,455
1,220	9,724	6,469,795
1,230	9,709	6,483,693
1,443	11,377	7,591,875
1,497	12,585	8,243,791
1,329	12,020	7,625,438
1,339	12,059	7,666,855
	PEAK (KW) 1,317 1,088 1,127 1,246 1,248 1,220 1,230 1,230 1,443 1,497 1,329	PEAK (KW) PEAK (KW) 1,317 6,219 1,088 7,676 1,127 8,385 1,246 9,560 1,248 9,929 1,220 9,724 1,230 9,709 1,443 11,377 1,497 12,585 1,329 12,020

2007 BUDGET FORECAST RESIDENTIAL EXISTING DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	123,551	189,078	304,733,538
2007	124,639	196,754	310,074,470
2008	125,766	205,139	315,748,150
2009	127,012	214,699	322,158,673
2010	128,260	224,628	328,771,128
2011	129,480	234,352	335,240,924
2012	130,710	244,061	341,724,616
2013	132,153	255,438	349,316,492
2014	133,650	268,023	357,560,283
2015	134,980	280,043	365,185,721
2016	136,319	292,102	372,852,576

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

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

2005 111,063 103,711 241,278,930

2007 BUDGET FORECAST COMMERCIAL/INDUSTRIAL EXISTING DSM PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
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
2014	0	0	0
2015	0	0	0
2016	0	0	0

2007 BUDGET FORECAST COMMERCIAL/INDUSTRIAL EXISTING DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	111,063	103,711	241,278,930
2007	111,063	103,711	241,278,930
2008	111,063	103,711	241,278,930
2009	111,063	103,711	241,278,930
2010	111,063	103,711	241,278,930
2011	111,063	103,711	241,278,930
2012	111,063	103,711	241,278,930
2013	111,063	103,711	241,278,930
2014	111,063	103,711	241,278,930
2015	111,063	103,711	241,278,930
2016	111,063	103,711	241,278,930

HISTORICAL OTHER EXISTING DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

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

2005 0 0 11,085,366

2007 BUDGET FORECAST OTHER EXISTING DSM PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
0	0	81,589
0	0	77,479
0	0	69,686
0	0	66,055
0	0	60,950
0	0	56,956
0	0	53,467
0	0	48,904
0	0	45,415
0	0	42,610
0	0	39,457
	PEAK (KW) 0 0 0 0 0 0 0 0 0 0 0 0 0	PEAK (KW) PEAK (KW) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

2007 BUDGET FORECAST OTHER EXISTING DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	0	0	11,166,955
2007	0	0	11,244,434
2008	0	0	11,314,121
2009	0	0	11,380,175
2010	0	0	11,441,125
2011	0	0	11,498,081
2012	0	0	11,551,547
2013	0	0	11,600,452
2014	0	0	11,645,867
2015	0	0	11,688,477
2016	0	0	11,727,934

HISTORICAL TOTAL NEW DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

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

2005 98,209 100,961 123,520,966

2007 BUDGET FORECAST TOTAL NEW DSM PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
8,122	9,229	10,281,626
11,185	13,012	11,482,688
9,934	12,383	11,558,977
9,933	12,382	11,558,977
9,529	12,082	11,201,317
9,528	12,082	11,201,318
9,529	12,083	11,201,317
9,529	12,081	11,201,318
9,528	12,083	11,201,318
8,238	10,437	10,485,809
7,117	9,012	10,075,460
	PEAK (KW) 8,122 11,185 9,934 9,933 9,529 9,529 9,529 9,529 9,529 9,528 8,238	PEAK (KW)PEAK (KW)8,1229,22911,18513,0129,93412,3839,93312,3829,52912,0829,52812,0829,52912,0839,52912,0839,52912,0839,52912,0839,52812,0839,52812,0839,52812,0839,52812,0839,52812,0839,52812,0839,52812,0838,23810,437

2007 BUDGET FORECAST TOTAL NEW DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	106,331	110,190	133,802,592
2007	117,516	123,202	145,285,280
2008	127,450	135,585	156,844,257
2009	137,383	147,967	168,403,234
2010	146,912	160,049	179,604,551
2011	156,440	172,131	190,805,869
2012	165,969	184,214	202,007,186
2013	175,498	196,295	213,208,504
2014	185,026	208,378	224,409,822
2015	193,264	218,815	234,895,631
2016	200,381	227,827	244,971,091

HISTORICAL RESIDENTIAL NEW DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

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

2005 44,932 67,355 45,743,782

2007 BUDGET FORECAST RESIDENTIAL NEW DSM PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
			, , ,
2006	4,869	6,896	4,828,812
2007	7,745	10,583	5,610,157
2008	7,746	10,584	5,610,157
2009	7,745	10,583	5,610,157
2010	7,341	10,284	5,252,497
2011	7,340	10,283	5,252,497
2012	7,341	10,284	5,252,497
2013	7,341	10,283	5,252,498
2014	7,340	10,284	5,252,497
2015	6,221	8,859	4,842,147
2016	5,100	7,434	4,431,797

2007 BUDGET FORECAST RESIDENTIAL NEW DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	49,801	74,251	50,572,594
2007	57,546	84,834	56,182,751
2008	65,292	95,418	61,792,908
2009	73,037	106,001	67,403,065
2010	80,378	116,285	72,655,562
2011	87,718	126,568	77,908,059
2012	95,059	136,852	83,160,556
2013	102,400	147,135	88,413,054
2014	109,740	157,419	93,665,551
2015	115,961	166,278	98,507,698
2016	121,061	173,712	102,939,495

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

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

2005 53,277 33,606 77,777,184

2007 BUDGET FORECAST COMMERCIAL/INDUSTRIAL NEW DSM PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	3,253	2,333	5,452,814
2007	3,440	2,429	5,872,531
2008	2,188	1,799	5,948,820
2009	2,188	1,799	5,948,820
2010	2,188	1,798	5,948,820
2011	2,188	1,799	5,948,821
2012	2,188	1,799	5,948,820
2013	2,188	1,798	5,948,820
2014	2,188	1,799	5,948,821
2015	2,017	1,578	5,643,662
2016	2,017	1,578	5,643,663

2007 BUDGET FORECAST COMMERCIAL/INDUSTRIAL NEW DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2006	56,530	35,939	83,229,998
2007	59,970	38,368	89,102,529
2008	62,158	40,167	95,051,349
2009	64,346	41,966	101,000,169
2010	66,534	43,764	106,948,989
2011	68,722	45,563	112,897,810
2012	70,910	47,362	118,846,630
2013	73,098	49,160	124,795,450
2014	75,286	50,959	130,744,271
2015	77,303	52,537	136,387,933
2016	79,320	54,115	142,031,596

HISTORICAL OTHER NEW DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

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

0

0

2005 0

2007 BUDGET FORECAST OTHER NEW DSM PROGRAMS INCREMENTAL ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
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
2014	0	0	0
2015	0	0	0
2016	0	0	0

2007 BUDGET FORECAST OTHER NEW DSM PROGRAMS CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
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
2014	0	0	0
2015	0	0	0
2016	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. 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 242 customers contributing \$61,713 through December, 2006. 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 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, 2006, 71 customers have pledged to purchase a total of 89 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.

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)
		R	ural and Resid	dential			Commercia	1
		Members		Average	Average KWH		Average	Average KWH
		per		No. of	Consumption		No. of	Consumption
<u>Year</u>	Population	Household	<u>GWH</u>	Customers	Per Customer	<u>GWH</u>	Customers	Per Customer
1997	773,866	2.61	4,119	296,497	13,894	2,898	43,955	65,928
1998	792,808	2.60	4,438	304,413	14,577	3,112	45,510	68,379
1999	811,525	2.60	4,471	312,283	14,318	3,223	47,294	68,138
2000	828,649	2.59	4,790	319,506	14,992	3,379	47,584	71,020
2001	843,919	2.59	4,716	325,343	14,497	3,417	48,482	70,490
2002	860,444	2.59	5,144	331,637	15,510	3,553	49,139	72,304
2003	878,856	2.60	5,101	338,631	15,064	3,614	50,419	71,684
2004	896,816	2.60	5,215	345,467	15,096	3,695	51,981	71,093
2005	909,723	2.60	5,320	350,404	15,181	3,736	52,916	70,599
2006	935,300	2.59	5,425	360,930	15,032	3,843	53,479	71,862
2007	961,267	2.58	5,558	371,949	14,942	3,821	55,016	69,454
2008	981,949	2.58	5,655	381,027	14,841	3,892	56,394	69,008
2009	998,474	2.57	5,741	388,665	14,772	3,952	57,649	68,553
2010	1,016,713	2.56	5,844	397,153	14,714	4,024	59,041	68,161
2011	1,035,823	2.55	6,010	406,093	14,798	4,134	60,506	68,330
2012	1,055,199	2.54	6,165	415,315	14,844	4,264	62,015	68,753
2013	1,075,751	2.53	6,329	425,078	14,890	4,396	63,612	69,108
2014	1,098,087	2.52	6,509	435,480	14,947	4,538	65,310	69,484
2015	1,121,282	2.51	6,661	446,146	14,930	4,672	67,051	69,679
2016	1,145,660	2.51	6,829	457,170	14,937	4,800	68,849	69,722
<u>CAAG</u>								
97-06	2.1%	-0.1%	3.1%	2.2%	0.9%	3.2%	2.2%	1.0%
06-11	2.1%	-0.3%	2.1%	2.4%	-0.3%	1.5%	2.5%	-1.0%
06-16	2.0%	-0.3%	2.3%	2.4%	-0.1%	2.2%	2.6%	-0.3%

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

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

(1)	(2)	(2) (3)		(5)	(6)	(7)	(8)	
		Industrial			Street &	Other Sales	Total Sales	
		Average	Average KWH	Railroads	Highway	to Public	to Ultimate	
		No. of	Consumption	and Railways	Lighting	Authorities	Consumers	
<u>Year</u>	<u>GWH</u>	Customers	Per Customer	<u>GWH</u>	<u>GWH</u>	<u>GWH</u>	GWH	
1997	1,903	277	6,874,352	0	17	0	8,938	
1998	1,834	263	6,971,767	0	18	0	9,401	
1999	1,846	249	7,409,647	0	18	0	9,558	
2000	1,925	269	7,141,925	0	18	0	10,112	
2001	2,018	277	7,290,329	0	21	0	10,173	
2002	2,054	272	7,552,563	0	21	0	10,772	
2003	2,147	285	7,526,577	0	22	0	10,885	
2004	2,113	279	7,569,053	0	23	0	11,046	
2005	2,161	295	7,332,898	0	23	0	11,239	
2006	2,136	294	7,260,626	0	24	0	11,429	
2007	2,083	319	6,536,200	0	23	0	11,485	
2008	2,122	332	6,392,602	0	24	0	11,693	
2009	2,139	339	6,315,803	0	24	0	11,857	
2010	2,156	346	6,226,799	0	25	0	12,048	
2011	2,145	352	6,092,157	0	25	0	12,315	
2012	2,137	359	5,943,881	0	26	0	12,592	
2013	2,129	368	5,790,134	0	27	0	12,881	
2014	2,119	375	5,656,452	0	27	0	13,193	
2015	2,110	382	5,528,773	0	28	0	13,471	
2016	2,102	391	5,379,175	0	28	0	13,759	
CAAG								
97-06	1.3%	0.7%	0.6%	0.0%	3.7%	0.0%	2.8%	
06-11	0.1%	3.7%	-3.4%	0.0%	1.3%	0.0%	1.5%	
06-16	-0.2%	2.9%	-3.0%	0.0%	1.7%	0.0%	1.9%	

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

(1)	(2)	(3)	(4)	(5)	(6)	
	Sales for	Utility Use	Net Energy	Other	Total	
	Resale	& Losses	for Load	Customers	No. of	
<u>Year</u>	<u>GWH</u>	<u>GWH</u>	<u>GWH</u>	(Average No.)	Customers	
1997	342	606	9,887	215	340,944	
1998	356	644	10,402	262	350,447	
1999	348	559	10,467	286	360,113	
2000	363	628	11,105	380	367,740	
2001	360	671	11,204	460	374,561	
2002	384	754	11,910	474	381,521	
2003	383	685	11,952	473	389,809	
2004	389	727	12,162	474	398,200	
2005	423	666	12,327	472	404,086	
2006	415	743	12,586	482	415,185	
2007	414	758	12,657	479	427,763	
2008	422	775	12,890	481	438,234	
2009	429	786	13,072	484	447,137	
2010	436	800	13,284	486	457,026	
2011	443	818	13,576	488	467,440	
2012	452	836	13,880	491	478,180	
2013	458	855	14,194	493	489,551	
2014	465	876	14,535	496	501,660	
2015	473	895	14,838	498	514,076	
2016	481	914	15,155	501	526,911	
CAAG						
97-06	2.2%	2.3%	2.7%	9.4%	2.2%	
06-11	1.4%	1.9%	1.5%	0.3%	2.4%	
06-16	1.5%	2.1%	1.9%	0.4%	2.4%	

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

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

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
					Residential		Comm/Ind		
					Load	Residential	Load	Comm/Ind	Net Firm
Year	<u>Total</u>	Wholesale	Retail	Interruptible	Management	Conservation	Management	Conservation	Demand
1997	2,283	75	2,208	0	0	107	0	136	2,040
1998	2,406	82	2,324	0	0	115	0	138	2,154
1999	2,448	84	2,363	16	0	120	0	143	2,169
2000	2,558	86	2,472	0	0	128	0	142	2,289
2001	2,528	78	2,450	17	0	137	0	143	2,231
2002	2,755	86	2,669	0	0	145	0	148	2,462
2003	2,583	7 9	2,504	0	0	153	0	155	2,275
2004	2,751	84	2,666	0	0	161	0	159	2,431
2005	2,767	82	2,685	0	0	167	0	164	2,435
2006	2,824	89	2,735	0	0	173	0	168	2,483
2007	2,888	92	2,796	0	0	182	0	171	2,535
2007	2,000	92 94	2,830	0	0	191	0	173	2,555
2009	2,970	95	2,875	0 0	0 0	200	0	175	2,595
2010	3,027	96	2,931	Ő	õ	209	õ	178	2,641
2011	3,099	98	3,001	0	0	217	0	180	2,702
2012	3,146	99	3,047	0	0	226	0	182	2,738
2013	3,218	100	3,118	0	0	235	0	184	2,800
2014	3,300	101	3,199	0	0	243	0	186	2,871
2015	3,376	103	3,273	0	0	251	0	188	2,937
2016	3,426	104	3,322	0	0	257	0	190	2,978
									
CAAG	0 49/	1 00/	0 40/	0.0%	0.0%	E E0/	0.0%	2.3%	2.2%
97-06	2.4%	1.8%	2.4%	0.0%		5.5%	0.0%		2.2% 1.7%
06-11	1.9%	1.9%	1.9%	0.0%	0.0% 0.0%	4.6% 4.0%	0.0% 0.0%	1.4% 1.3%	1.7%
06-16	2.0%	1.6%	2.0%	0.0%	0.0%	4.070	0.0%	1.3%	1.0 /0

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.

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

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
					Residential		Comm/Ind		
					Load	Residential	Load	Comm/Ind	Net Firm
<u>Year</u>	Total	<u>Wholesale</u>	<u>Retail</u>	Interruptible	<u>Management</u>	Conservation	Management	Conservation	Demand
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
98-9 9	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	2,857	92	2,766	0	0	225	0	133	2,500
03-04	2,445	76	2,369	0	0	240	0	134	2,070
04-05	2,518	89	2,428	0	0	250	0	137	2,130
05-06	2,475	89	2,386	0	0	263	0	140	2,072
06-07	2,785	74	2,711	0	0	282	0	142	2,362
07-08	2,851	76	2,775	0	0	301	0	144	2,407
08-09	2,904	77	2,827	0	0	321	0	146	2,438
09-10	2,942	78	2,864	0	0	341	0	147	2,454
10-11	3,013	79	2,934	0	0	361	0	149	2,503
11-12	3,091	80	3,010	0	0	381	0	151	2,559
12-13	3,178	82	3,096	0	0	403	0	153	2,622
13-14	3,248	83	3,165	0	0	425	0	155	2,668
14-15	3,325	84	3,241	0	0	446	0	156	2,723
15-16	3,409	85	3,323	0	0	466	0	158	2,785
16-17	2,865	86	2,779	0	0	0	0	0	2,865
<u>CAAG</u>									
97-06	1.3%	1.1%	1.3%	0.0%	0.0%	5.5%	0.0%	3.2%	0.7%
06-11	4.0%	-2.2%	4.2%	0.0%	0.0%	6.5%	0.0%	1.3%	3.9%
06-16	3.3%	-0.4%	3.4%	0.0%	0.0%	5.9%	0.0%	1.2%	3.0%

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.

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	<u>Wholesale</u>	Utility Use <u>& Losses</u>	Net Energy for Load	Load <u>Factor_%</u>
1997	10,408	282	239	8,939	342	<u>606</u>	9,887	<u>1 actor //</u> 55.3%
1998	10,950	292	257	9,402	356	644	10,402	55.1%
1999	11,038	297	274	9,559	348	559	10,467	55.1%
2000	11,690	305	280	10,113	363	628	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	12,584	335	297	10,885	383	685	11,952	60.0%
2004	12,813	348	303	11,046	389	727	12,162	57.0%
2005	13,003	357	319	11,239	423	666	12,327	57.8%
2006	13,277	366	325	11,429	415	743	12,586	57.9%
							,	
2007	13,365	378	330	11,485	414	758	12,657	57.0%
2008	13,615	389	336	11,693	422	775	12,890	57.3%
2009	13,815	401	342	11,857	429	786	13,072	57.5%
2010	14,045	413	348	12,048	436	800	13,284	57.4%
2011	14,355	425	354	12,315	443	818	13,576	57.4%
2012	14,676	436	360	12,592	452	836	13,880	57.7%
2013	15,010	449	366	12,881	458	855	14,194	57.9%
2014	15,370	463	372	13,193	465	876	14,535	57.8%
2015	15,691	475	378	13,471	473	895	14,838	57.7%
2016	16,025	488	383	13,759	481	914	15,155	57.9%
<u>CAAG</u>								
97-06	2.7%	3.0%	3.5%	2.8%	2.2%	2.3%	2.7%	0.5%
06-11	1.6%	3.0%	1.8%	1.5%	1.4%	1.9%	1.5%	-0.2%
06-16	1.9%	2.9%	1.7%	1.9%	1.5%	2.1%	1.9%	0.0%

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

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Schedule 4 Previous Year Actual and Two Year Forecast of Peak Demand and Net Energy for Load by Month											
Flevious real Actual and two real torecast of teak bemand and thet chergy for Eoad by Month											
(1)	(2)	(3)	(4)	(5)	(6)	(7)					
	2006	6	2007	,	2008	2008					
	Actua	al	Foreca	<u>ist</u>	Forecast						
	Peak Demand	NEL	Peak Demand	NEL	Peak Demand	NEL					
<u>Month</u>	<u>MW</u>	<u>GWH</u>	<u>MW</u>	<u>GWH</u>	MW	<u>GWH</u>					
January	1,860	888	2,362	1,011	2,407	1,035					
February	2,072	840	2,120	869	2,167	891					
March	1,566	864	1,725	881	1,752	899					
April	1,984	944	1,836	903	1,854	913					
May	2,280	1,105	2,211	1,118	2,255	1,142					
June	2,475	1,274	2,416	1,244	2,475	1,276					
July	2,483	1,377	2,535	1,333	2,559	1,350					
August	2,461	1,378	2,493	1,356	2,532	1,382					
September	2,253	1,135	2,437	1,125	2,474	1,146					
October	2,171	980	2,037	957	2,073	975					
November	1,798	863	1,770	875	1,774	879					
December	2,187	939	2,183	987	2,204	1,000					

Schedule 4

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

Gulf Power Company

Schedule 5 Fuel Requirements

(4) Steam 1000 BBL 0	
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	(11) (12) (13) (14) (15) (16)
(2) Coal 1000 TON $6,159$ $6,795$ $6,232$ $6,305$ $6,591$ $6,434$ (3) ResidualTotal 1000 BBL 0000000(4)Steam 1000 BBL 00000000(5)CC 1000 BBL NoneNoneNoneNoneNoneNoneNone(6)CT 1000 BBL NoneNoneNoneNoneNoneNoneNone(7)Diesel 1000 BBL 19149989(8) DistillateTotal 1000 BBL 1712887(10)CC 1000 BBL NoneNoneNoneNoneNone(11)CT 1000 BBL 22111(12)Diesel 1000 BBL 22111(12)Diesel 1000 BBL NoneNoneNoneNoneNone(13) Natural GasTotal 1000 MCF $14,716$ $14,830$ $17,435$ $16,008$ $20,070$ $21,617$ (14)Steam 1000 MCF $14,716$ $14,675$ $17,435$ $16,008$ $19,149$ $20,644$ (16)CT 1000 MCF 0 0 0 0 921 961	2011 2012 2013 2014 2015 2016
(3) Residual Total 1000 BBL 0 0 0 0 0 0 (4) Steam 1000 BBL 0 0 0 0 0 0 0 (5) CC 1000 BBL None None <t< td=""><td>e None None None None None</td></t<>	e None None None None None
(4) Steam 1000 BBL 0	4 6,459 6,059 6,367 6,310 6,193 5,758
(9) Steam 1000 BBL 17 12 8 8 7 (10) CC 1000 BBL None Liftightightightightightightigh	e None None None None None None
(14) Steam 1000 MCF 127 155 0 921 963 0 0 0 0 0 921 963 0 0 0 0 921 963 0 0 0 0 921 963 0 0 0 0 921 963 0 0 0 0 0 1 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 1 0 1 0 <th0< th=""></th0<>	2 1 0 1 1 2
(17) Other Trillion BTU None None None None None None	0 0 0 0 0 0 0 0 5 19,889 18,494 21,909 32,101 36,549 41,502
	e None None None None None None

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160186-OPC-POD-128-806

Utility: Gulf Power Company

Schedule 6.1 Energy Sources

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Energy Sources	<u>; </u>	Units	Actual 2005	Actual 2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
(1)	Annual Firm Interchan	ge	GWH	(2,712)	(3,772)	(4,301)	(4,103)	(5,124)	(4,619)	(4,198)	(2,842)	(3,764)	(4,691)	(4,737)	(4,169)
(2)	Nuclear		GWH	None											
(3)	Coal		GWH	12,907	14,216	14,404	14,641	15,312	14,779	14,782	13,930	14,636	14,496	14,206	13,195
(4) (5) (6) (7) (8)	Residual	Total Steam CC CT Diesel	GWH GWH GWH GWH GWH	0 0 None None None											
(9) (10) (11) (12) (13)	Distillate	Total Steam CC CT Diesel	GWH GWH GWH GWH GWH	1 None None 1 None	0 None None 0 None	1 None None 1 None	1 None None 1 None	1 None None 1 None	1 None None 1 None						
(14) (15) (16) (17)	Natural Gas	Total Steam CC CT	GWH GWH GWH GWH	2,117 1 2,056 60	2,132 20 2,072 40	2,543 0 2,468 75	2,341 0 2,266 75	2,873 0 2,721 152	3,113 0 2,958 155	2,981 0 2,844 137	2,782 0 2,636 146	3,311 0 3,138 173	4,719 0 4,644 75	5,358 0 5,283 75	6,118 0 6,043 75
(18)	NUGs		GWH	14	9	10	10	10	10	10	10	10	10	10	10
(19)	Net Energy for Load		GWH	12,327	12,586	12,657	12,890	13,072	13,284	13,576	13,880	14,194	14,535	14,838	15,155

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

100.00	100.00	100.00	00.001	00.001	100.00	100.00	100.00	00.00t	100.00	100.00	100.00	%		Net Energy for Load	(61)
20.0	20.0	۲0.0	20.0	20.0	20.0	80.0	80.0	80.0	80.0	۲0.0	11.0	%		NUGs	(81)
67.0	19.0	0.52	1.22	90°L	10.1	21.1	91.I	85.0	65.0	SE.0	64.0	%	CL		(ZL)
78.65	32.60	31.95	11.22	66.81	20.95	72.22	20.82	89 [.] 71	09.61	94. 81	anoN	%	00		(91)
00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	91.0	10.0	%	Steam		(31)
76.04	11.96	74.SE	23.33	\$0.05	96.12	23.43	86.12	81.81	20.09	46.91	71.71	%	listoT	Natural Gas	(41)
anoN	anoN	əuoN	anoN	anoN	anoN	enoN	anoN	anoN	əuoN	əuoN	anoN	%	Diesel		(13)
10.0	10.0	10.0	10.0	00.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	%	C T		(12)
anoN	anoN	anoN	anoN	anoN	əuoN	anoN	enoN	enoN	anoN	anoN	anoN	%	00		(11)
anoN	anoN	anoN	anoN	anoN	anoN	anoN	əuoN	anoN	anoN	anoN	anoN	%	Steam		(01)
10.0	10.0	10.0	10.0	00.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	%	Total	Distillate	(6)
enoN	anoN	anoN	anoN	enoN	anoN	anoN	anoN	enoN	əuoN	əuoN	ənoN	%	Diesel		(8)
anoN	anoN	anoN	anoN	anoN	anoN	anoN	anoN	anoN	anoN	anoN	anoV	%	CL		(2)
anoN	anoN	anoN	anoN	anoN	anoN	anoN	anoN	anoN	anoN	enoN	anoN	%	20		(9)
00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	%	Steam		(2)
00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	00.0	%	leto T	IsubiseA	(4)
70.78	47.86	66.73	11.601	96.001	88.80t	32.111	41.711	82.611	08.611	115.95	17.401	%		lsoO	(E)
ənoV	anoN	anoN	ənoN	anoN	əuoN	ənoN	ənoN	anoN	anoN	anoN	anoN	%		Nuclear	(८)
(18.75)	(26.16)	(72.25)	(26.52)	(84.02)	(26.0E)	(77.46)	(02.95)	(68.16)	(86.55)	(79.92)	(00.22)	%	ðe	narial Firm Interchan	(1)
5016	5015	5014	5013	5012	5011	5010	5009	2008	2002	Actual 2006	Actual 2005	Units	Energy Sources		
(91)	(31)	(41)	(51)	(21)	(11)	(01)	(6)	(8)	(∠)	(9)	(2)	(†)	(E)	(2)	(L)

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Utility: Gulf Power Company

Schedule 6.2 Energy Sources 50

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Utility: Gulf Power Company Schedule 6.3 Renewable Energy Sources

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
			Actuals										
	Renewable Energy Sources (A)		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
(1)	Renewable Generating Capacity												
		MW	0	0	0	0	0	0	0	0	0	0	0
		MWh	884	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
		% of Capacity Mix	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		% of NEL	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
		% of Fuel Mix	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
(2)	Self-Service Generation By												
	Renewable Generation	MW	0	0	0	0	0	0	0	0	0	0	0
		MWh	0	0	0	0	0	0	0	0	0	0	0

(A) Owned and/or Purchased by Gulf

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. The SES operating companies have also remained 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 its 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 its cost-effectiveness in comparison to the available supply-side and demand-side options. Power purchases will be evaluated on both a nearterm 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% reserve margin target for the year 2010 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.

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Once the necessary assumptions are determined, generating unit 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 requirements, 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 of these additions matches the system need, the system base supply-side plan is complete. The result 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 financial analysis of the impact of the plan is 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 updates its IRP each year to account for the changes in the demand and energy forecast, as well as the other major assumptions previously mentioned in this section. A remix is then performed to insure that the IRP is the most economical and cost effective plan. The resulting product of the SES IRP process is an integrated plan which meets 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 entered into a series of purchased power agreements to meet its needs, and it will continue this practice in the future when economically attractive opportunities are available. The planned transmission has proven adequate to handle these purchased power transactions during the periods when Gulf has needed additional capacity. 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 prices are forecast at the Henry Hub, Louisiana benchmark delivery point. Because mine-mouth coal prices vary by source, sulfur content, and Btu level, the SES prepares commodity price forecasts for fifteen 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 at Henry Hub, and applies a historical basis differential between Henry Hub and the various pipelines serving the SES's plants. 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 forecast for both 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 forecast process begins with an annual Fossil Fuel Price Workshop that is held with representatives from recognized leaders in energyrelated economic forecasting and transportation-related industries. Presenters at the 2006 Fuel Price Workshop included representatives from Energy Ventures Analysis, JD Energy, McClosky Coal, Cambridge Energy Research Associates, Criton Company, Deutsche Bank, Energy and Environmental Analysis, and PIRA Energy Group.

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

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 the internal and external forecasts and assumptions to develop a commodity forecast for each type of fuel. Fuel Procurement's 2006 commodity price forecasts for bituminous 1.0% sulfur coal, low sulfur #2 oil, and natural gas are included in the table below.

	<u>COAL*</u>	NAT. GAS**	<u>OIL***</u>
2007	2.1250	9.000	16.715
2008	2.0833	9.000	16.008
2009	2.0417	8.500	15.536
2010	2.0417	8.000	15.064
2011	2.0620	7.600	14.593
2012	2.1185	7.300	14.121
2013	2.1511	7.000	13.767
2014	2.2126	6.900	13.414
2015	2.2612	6.830	13.282
2016	2.3283	6.965	13.557

SES GENERIC FUEL PRICE FORECAST (\$/MMBtu)

*Central Appalachia CSX, 12000 Btu/lb., 1% Sulfur

**Henry Hub

***US Gulf Coast LS No.2 Oil, 0.05% Sulfur

COAL PRICE FORECAST

Coal production in the United States reached a record level in 2006, ending the year at 1,160 million short tons, a 2.5% increase over year 2005 production levels. Though the Appalachian region in the US experienced a 1.3% decrease in production, the Western US experienced a 5.4% increase while the Interior US recorded a 1.4% increase in production.

Total coal stocks increased during the year, as electric generators built their stockpiles in the second half of 2006 on milder weather and improved rail transportation from the prior year. Delivery issues experienced in 2005 were caused from flooding on the major waterways, low water levels on some major river systems during the summer, three major hurricanes (Dennis, Katrina, and Rita), and disruption of rail traffic from the Powder River Basin (PRB) due to track maintenance. At the same time, the expanding economy, the warmer than normal summer weather in 2005, and the milder winter weather in 2006 helped to drive up the demand for coal in the electric power sector during the year.

The coal industry continues to experience price pressures from environmental and legal challenges, labor and mining cost increases, and global competition from other coal producing regions as well as from the natural gas markets. Bituminous coal prices in the US increased in real terms through 1980 then declined in real terms through year 2000, after which real price increases have occurred. Sub-bituminous coal prices declined in real terms through 2001 and have increased since then. During 2006, spot market prices began to fall in nominal terms from the higher levels experienced in 2005. The Central

Appalachian, the Powder River Basin, and the Western Colorado-Utah markets saw price decreases in 2006. Overall, import coal to the US from Colombia remained relatively flat from 2005 price levels.

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 annual budget process.

NATURAL GAS PRICE FORECAST

Continuing the trend of the last few years, supply remained tight relative to demand in the 2006 gas market. Actual prices in 2006 tracked well below the forecast prepared in September 2005. Prices diverged from the forecast as the effects of Hurricanes Katrina and Rita were offset by the combination of historically warmer winter weather, the absence of additional hurricane-related supply disruptions in 2006, and the resulting record levels of natural gas in storage. While above normal temperatures in summer 2006 resulted in the first-ever summer storage withdrawals to meet increased gas-fired generation, the continuing storage overhang and the decline in oil prices kept natural gas prices well below the 2005 forecast for the remainder of 2006.

Although forward gas prices and analysts' long-term price forecasts available during the budget preparation in 2005 had shifted upward from the previous year primarily as a result of uncertainty associated with the effects of

the 2005 hurricanes, the forward prices and forecasts showed a downwardsloping trend in long-term gas prices with the expectation that increasing Liquefied Natural Gas (LNG) imports would ease future supply limitations. The SES budget forecast in 2005 anticipated stronger oil prices in the near term due to strong, although slowing, worldwide economic growth and continuing market tightness, while the long-term prices were expected to abate gradually as world oil prices retreated toward \$45 - \$50 per barrel over the future ten-year period.

NATURAL GAS AVAILABILITY

Overall, domestic production is expected to remain relatively flat in the short term. Declines in Gulf of Mexico production should be partially offset by rising unconventional production in eastern Texas and the Rocky Mountains. While pipeline transportation capacity from these regions is currently limited, pipeline additions are being developed and are expected to be operational by the 2008 - 2009 timeframe. Even with new unconventional supplies becoming available, however, LNG imports will remain critical to balance supply and demand. Total U.S. LNG imports were estimated to have increased from 0.6 Bcfd in 2002 to approximately 1.8 Bcfd in 2004, but were slightly reduced in 2005 and decreased even further to an estimated 1.6 Bcfd in 2006 as strong global competition pulled cargoes away from the US market. In the short run, LNG supply will continue to grow with new liquefaction projects in Trinidad, Qatar, West Africa and elsewhere, but substantial increases in LNG imports are not

expected until the 2009 - 2010 timeframe due to delays in several of the overseas facilities becoming fully operational.

Despite the lack of significant growth in near-term gas supply, sufficient supply remains available to meet operating needs; though pricing will remain volatile as a result of the tight balance between demand and supply availability, the higher cost of oil as an alternative fuel, and the uncertainty of the market's reaction to weather events. One market observer has noted that 2007 natural gas prices could range from \$5 to \$12 per MMBtu on the basis of weather alone.

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. Gulf has again employed this strategy, having successfully negotiated and executed two PPAs that will supply firm peaking capacity from June 2009 through May 2014. Gulf's latest generation expansion plan, developed in conjunction with other SES operating company planned capacity additions, indicates the need to build or contract for new internal combined cycle generating capacity with an in-service date of June 2014 in order to reliability meet Gulf's projected load growth. This strategy of supplementing Gulf's development of long-term capacity resources with shorter term power purchases has proven successful, and Gulf will continue to follow this strategy 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, the SES's Generation organization

actively pursues firm energy market products at prices that can lead to significant savings to the SES and its customers.

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ENVIRONMENTAL CONCERNS

In 2004 and 2005, Gulf completed renewal of Title V air permits for Plants Crist, Lansing Smith, Scholz, and Pea Ridge co-generation facility with only minor changes regarding the implementation of new Compliance Assurance Monitoring (CAM) plans required by the Clean Air Act Amendments (CAAA) of 1990. The Company's next potential generating unit addition is 600 MWs of CC capacity in 2014. It has been and will continue to be Gulf's intent to fully comply with all environmental laws and regulations as they apply to the installation and operation of Gulf's generation facilities.

Gulf's clean air compliance strategy serves as a road map for a reasonable, 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 CAAA strategy in December 1990 and has produced updates or reviews in subsequent years following this initial strategy. The focus of the strategy updates has, to date, centered on compliance with the acid rain requirements, while considering other significant clean air requirements and potential new requirements of the CAAA. There is an increasing uncertainty associated with future regulatory requirements that could significantly impact both the scope and cost of compliance over the next decade. In 2005, the U. S.

Environmental Protection Agency (EPA) finalized the Interstate Air Quality Rule and the Mercury Rule that require reductions in mercury and further reductions in nitrogen oxides (NOx) and sulfur dioxide (SO₂). Gulf is in the process of developing and implementing a comprehensive strategy required to address these new rule requirements. The strategy includes the addition of a Flue Gas Desulfurization (FGD) scrubber system at Plant Crist, Plant Daniel and Plant Scherer Unit 3 to reduce sulfur dioxide and mercury in 2009, 2011 and 2011, respectively. A baghouse is also planned for Scherer Unit 3 in 2008 for additional mercury control. In addition, Gulf will install a Selective Catalytic Reduction (SCR) system on Crist Unit 6 and Scherer Unit 3 in 2010, and Selective Non-Catalytic Reduction (SNCR) systems at Plant Smith and Plant Daniel in 2009 and 2010-2011, respectively. The CAIR/CAMR Compliance Program is also expected to require new mercury emission monitoring equipment for mercury compliance verification at all of Gulf's generating units (2008) as well as the Plant Daniel and Scherer ownership units (2007-2008). Gulf will continue its involvement in the development of strategies to address any future clean air requirements in order to minimize the uncertainty related to the scope and cost of compliance.

As new clean air initiatives emerge, Gulf will support any proposal that would help it meet environmental goals and objectives 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 the safe, reliable and affordable supply of energy.

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AVAILABILITY OF SYSTEM INTERCHANGE

Gulf coordinates its planning and operations with the other operating companies of the SES: Alabama Power Company, Georgia Power Company, and Mississippi 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 SES operating company either buys or sells its temporary deficit or surplus capacity from or to the pool in order to satisfy its reserve responsibility requirement. 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 terms of the existing contracts began prior to 2005 and extend into 2010. In addition, new contracts have been finalized, and are scheduled to be in affect from the summer of 2010 through the summer of 2015. 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's use of purchased power arrangements in previous years has proven to be a successful approach to meeting its reliability needs. In order to meet its future need for capacity in 2014 and beyond, longer-term purchased power from the market will be factored into expansion studies in order to evaluate its effect on supply flexibility and reduced commitment risk during periods in which environmental regulations (with considerable economic impacts) and legislative initiatives focusing on generation additions are in various stages of development. Gulf will continue to utilize both short-term and longer-term purchased power in the future to balance it's approach to supply side resource development.

CAPACITY ADDITIONS

In conjunction with the SES, Gulf will conduct economic evaluations of its potential supply options in order to determine the most cost-effective means of meeting its future capacity obligations. Gulf will evaluate its internal construction options versus external development of capacity resources in order to determine how to best meet its future capacity obligations. All commercially available generating technologies such as gas combustion turbine and combined cycle, conventional pulverized coal, and nuclear will be included in future SES IRP mix studies. In addition, emerging integrated gasification combined cycle (IGCC)

technologies, such as air blown IGCC, will be added to the future generation mix studies so that their potential economic and technical viabilities may be evaluated. While there is only limited operational experience that aids in approximating the economic and performance characteristics of full-scale air blown IGCC facilities, the potential benefits of the technology include greater efficiency and lower environmental emissions.

As previously mentioned, Gulf's current capacity resource expansion plan reflects the possible installation of a 600 MW combined cycle generating unit (CC) in 2014 at a yet to be determined site. This potential addition is currently outlined in Schedules 8 and 9 of this document. If subsequent mix studies identify alternative power supply technologies or purchased power options that are more economical or that deliver more desirable results, Gulf will modify its plan to reflect the proposed procurement of these resources. Gulf will continue to review all available capacity resource possibilities in order to ensure that its customer's electricity needs are met in the most dependable and economical manner.

PREFERRED AND POTENTIAL SITES FOR CAPACITY ADDITIONS

At this stage in Gulf's planning process, a commitment to construct the future CC 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 three potential sites within Gulf's service area that may prove to be viable locations for the future CC capacity addition identified in this Ten Year Site Plan. These sites have been identified as potential sites for possible CC 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, will also be considered for possible location of the project as part of Gulf's ongoing planning process.

The potential sites being considered 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.

Each of these potential sites has unique characteristics that could offer construction and/or operational advantages related to the potential installation of natural gas-fired CCs. More detailed studies must be completed to further define and evaluate those characteristics. All necessary permits needed for CC 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 CCs should be identical for each site mentioned below. Gulf projects that 4000 gallons per minute (gpm) would be required for industrial cooling water needs, while 250 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 a future project is ultimately located on this property, detailed studies must first be completed 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. As shown on Schedule 1, the existing Plant Crist facility consists of 937 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 77 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 a future project is ultimately located on this property, detailed studies must first be completed 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. As shown on Schedule 1, the existing Plant Smith facility consists of 357 MW of steam generation, 556 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 78 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 a future project is ultimately located on this property, detailed studies must first be completed 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. As shown on Schedule 1, the existing Plant Scholz facility consists of 92 MW of steam generation.

U. S. Geological Survey (USGS) Map

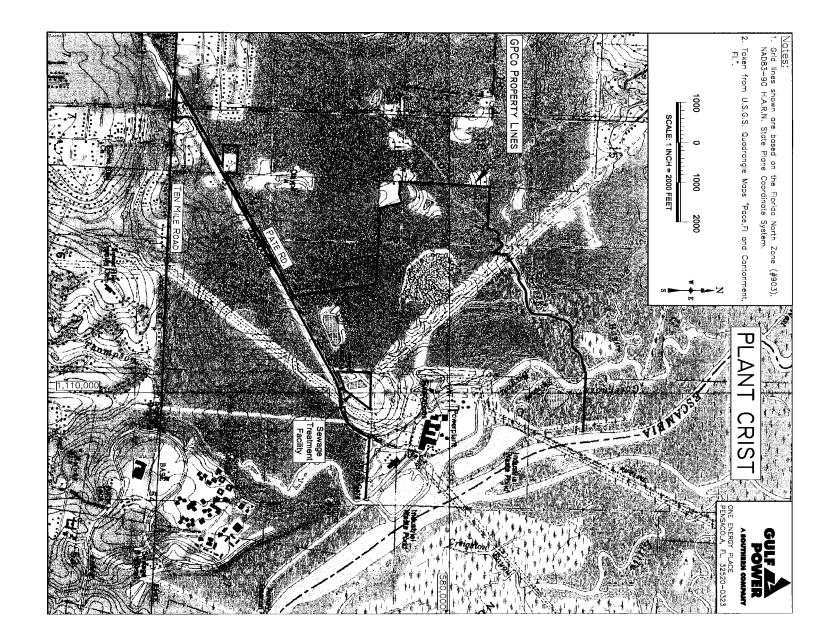
A USGS map showing the general location of the Plant Scholz property is found on page 79 of this chapter.

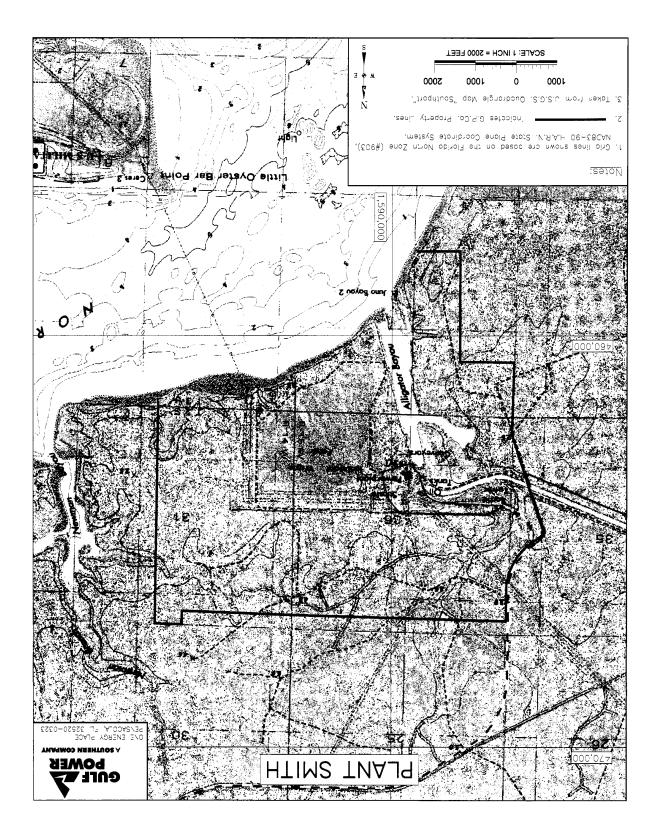
Land Uses and Environmental Features

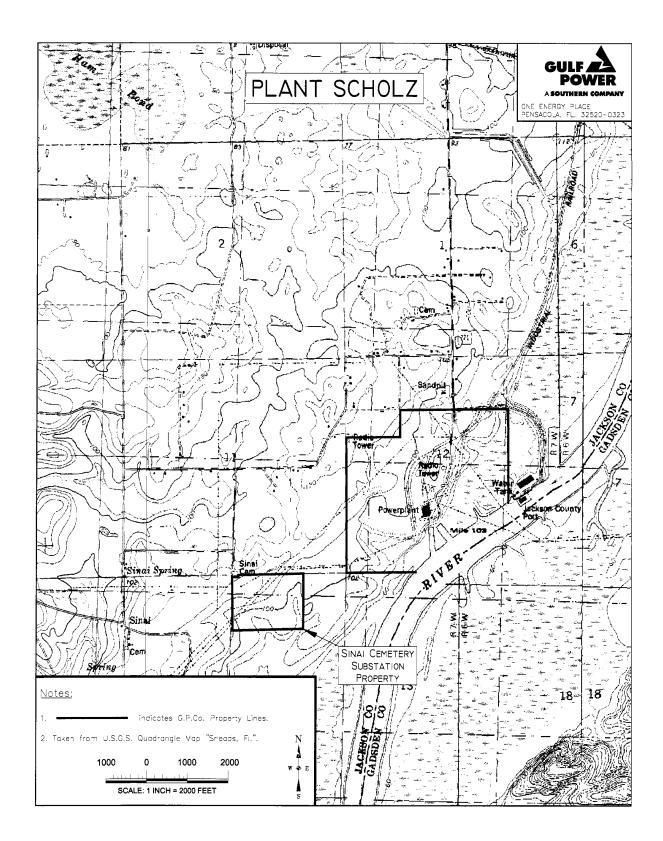
The Plant Scholz property is dedicated to industrial use. The land adjacent to the property is primarily rural and in a natural state, but some agricultural development exists. General environmental features of the property include a mixture of hardwood and pine forest areas. This property is located 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.







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)
	TOTAL	FIRM CAPACITY	FIRM CAPACITY		TOTAL CAPACITY	FIRM PEAK	MARG	SERVE IN BEFORE TENANCE	SCHEDULED	MAR	SERVE GIN AFTER TENANCE
	CAPACITY	IMPORT	EXPORT	NUG	AVAILABLE	DEMAND		%	MAINTENANCE		%
YEAR	MW	MW	MW	MW	MW	MW	MW	OF PEAK	MW	MW	OF PEAK
2007	2,714	0	(211)	0	2,503	2,535	(32)	-1.3%	NONE	(32)	-1.3%
2008	2,714	0	(211)	0	2,503	2,559	(56)	-2.2%		(56)	-2.2%
2009	2,714	487	(211)	0	2,990	2,595	395	15.2%		395	15.2%
2010	2,698	487	(211)	0	2,974	2,641	333	12.6%		333	12.6%
2011	2,681	487	(211)	0	2,957	2,702	255	9.4%		255	9.4%
2012	2,589	487	(211)	0	2,865	2,738	127	4.6%		127	4.6%
2013	2,589	487	(211)	0	2,865	2,800	65	2.3%		65	2.3%
2014	3,189	0	(211)	0	2,978	2,871	107	3.7%		107	3.7%
2015	3,189	0	(211)	0	2,978	2,937	41	1.4%		41	1.4%
2016	3,188	180	(211)	0	3,157	2,978	179	6.0%		179	6.0%

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.

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)
	TOTAL INSTALLED	FIRM CAPACITY	FIRM CAPACITY		TOTAL CAPACITY	FIRM PEAK	RESERVE MARGIN BEFORE MAINTENANCE		SCHEDULED	MARC	ESERVE GIN AFTER TENANCE
	CAPACITY	IMPORT	EXPORT	NUG	AVAILABLE	DEMAND		%	MAINTENANCE		%
YEAR	MW	MW	MW	MW	MW	MW	MW	OF PEAK	MW	MW	OF PEAK
2006-07	2,771	0	(211)	0	2,560	2,362	198	8.4%	NONE	198	8.4%
2007-08	2,752	0	(211)	0	2,541	2,407	134	5.6%		134	5.6%
2008-09	2,752	0	(211)	0	2,541	2,438	103	4.2%		103	4.2%
2009-10	2,752	487	(211)	0	3,028	2,454	574	23.4%		574	23.4%
2010-11	2,736	487	(211)	0	3,012	2,503	50 9	20.3%		509	20.3%
2011-12	2,627	487	(211)	0	2,903	2,559	344	13.4%		344	13.4%
2012-13	2,627	487	(211)	0	2,903	2,622	281	10.7%		281	10.7%
2013-14	2,627	487	(211)	0	2,903	2,688	215	8.0%		215	8.0%
2014-15	3,227	0	(211)	0	3,016	2,723	293	10.8%		293	10.8%
2015-16	3,227	0	(211)	0	3,016	2,785	231	8.3%		231	8.3%

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PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES														
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Plant Name	Unit	Location	Unit	<u> </u>		Tran		Const Start	Com'l In- Service	Expected Retirement	Gen Max Nameplate	Summer	bability Winter	
Crist	<u>No.</u> 5	Escambia County 25/1N/30W	Type FS	Pri C	<u>Alt</u> NG	<u>Pri</u> WA	<u>Alt</u> PL	<u>Mo/Yr</u>	<u>Mo/Yr</u> 6/61	<u>Mo/Yr</u> 06/07	<u>KW</u> 93,750	<u>MW</u> (2.0)	<u>MW</u> (2.0)	<u>Status</u> CR
Crist	7	Escambia County 25/1N/30W	FS	С	NG	WA	PL		08/73	06/07	578,000	(5.0)	(5.0)	CR
Daniel	1	Jackson Cnty, MS 42/5S/6W	FS	С	НО	RR	тк	-	09/77	06/07	274,125	(3.0)	(3.0)	CR
Daniel	2	Jackson Cnty, MS 42/5S/6W	FS	С	но	RR	тк		06/81	06/07	274,125	(9.0)	(9.0)	CR
Crist	6	Escambia County 25/1N/30W	FS	С	NG	WA	PL		05/70	06/10	369,750	(6.0)	(6.0)	D
Crist	7	Escambia County 25/1N/30W	FS	С	NG	WA	PL		08/73	06/10	578,000	(10.0)	(10.0)	D
Crist	4	Escambia County 25/1N/30W	FS	С	NG	WA	PL		7/59	06/11	93,750	(2.0)	(2.0)	D
Crist	5	Escambia County 25/1N/30W	FS	С	NG	WA	PL		6/61	06/11	93,750	(2.0)	(2.0)	D
Crist	6	Escambia County 25/1N/30W	FS	С	NG	WA	PL		05/70	06/11	369,750	(1.0)	(1.0)	D
Daniel	1	Jackson Cnty, MS 42/5S/6W	FS	С	НО	RR	тк		09/77	06/11	274,125	(5.0)	(5.0)	D
Daniel	2	Jackson Cnty, MS 42/5S/6W	FS	С	HO	RR	тк		06/81	06/11	274,125	(5.0)	(5.0)	D

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)
<u>Plant Name</u> Scherer	Unit <u>No.</u> 3	Location Monroe Cnty, GA	Unit Type FS	<u> </u>	<u>Alt</u> 	Fi <u>Trans</u> Pri RR	uel sport <u>Alt</u> 	Const Start Mo/Yr	Com'l In- Service Mo/Yr 1/87	Expected Retirement <u>Mo/Yr</u> 06/11	Gen Max Nameplate KW 222,750	<u>Net Cap</u> Summer <u>MW</u> (2.0)	oability Winter <u>MW</u> (2.0)	<u>Status</u> D
Scholz	1	Jackson Cnty, FL 12/3N/7W	FS	с		RR	WA		03/53	12/11	49,000	(46.0)	(46.0)	R
Scholz	2	Jackson Cnty, FL 12/3N/7W	FS	С		RR	WA		10/53	12/11	49,000	(46.0)	(46.0)	R
Unlocated	A	Unknown	СС	NG		PL		07/12	06/14	12/54	619,650	600.0	620.0	Ρ
Daniel	1	Jackson Cnty, MS 42/5S/6W	FS	С	но	RR	тк		09/77	06/16	274,125	(1.0)	(1.0)	D

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SCHEDULE 8	
PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHA	NGES

Abbreviations:	<u>Unit Type</u>	Status
	C - Coal	CR - Certified Rating change
	CT - Combustion Turbine	D - Environmental derate
	CC - Combined Cycle	P - Planned, but not authorized by utility
	NG - Natural Gas	R - To be retired
	LO - Light Oil	V - Under construction, more than 50% complete
	HO - Heavy Oil	
	Fuel Transportation	
	PL - Pipeline	
	TK - Truck	
	RR - Railroad	
	WA - Water	

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	Gulf Power Company		Page 1 of
	Schedule 9 Status Report and Specifications of Proposed (Generating Facilities	
(1)	Plant Name and Unit Number:	Unknown	
(2)	Capacity		
	a. Summer:	600 MW	
	b. Winter	620 MW	
(3)	Technology Type:	High Output "F" Combined Cycle	
(4)	Anticipated Construction Timing		
	 a. Field construction start - date: 	07/12	
	b. Commercial in-service date:	06/14	
(5)	Fuel		
	a. Primary fuel:	Natural Gas	
	b. Alternate fuel:	N/A	
(6)	Air Pollution Control Strategy:	Dry low NOx combustor for natural gas SCR	
(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):	5.8%	
	Unplanned Outage Factor (UOF):	5.5%	
	Equivalent Availability Factor (EAF):	88.7% 50.0%	
	Capacity Factor (%):	50.0% 7,590	
	Average Net Operating Heat Rate (ANOHR):	1,000	
(13)	Projected Unit Financial Data	40	
	Book Life (Years):	40	
	Total Installed Cost (In-Service Year \$/kW):	700 550	
	Direct Construction Cost ('07 \$/kW): AFUDC Amount ('14 \$/kW):	91	
	Escalation (\$/kW):	59	
	Fixed O&M ('14 \$/kW - Yr):	9.75	
	Variable O&M ('14 $\%$ /WW - 11):	3.58	
	K Factor:	1.5049	

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