

DECLASSIFIED *2.2.01*

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Gulf Power Company to
Determine Need for Proposed Electrical
Power Plant in Bay County, Florida

Docket No.: 990325-EI
Filed: June 10, 1999

REQUEST FOR CONFIDENTIAL CLASSIFICATION

EXHIBIT "A"

The information provided herein should be maintained as proprietary confidential business information pursuant to Section 366.093 and Rule 25-22.006, F.A.C.

EXHIBIT "A"

Provided to the Division of Records and Reporting
under separate cover as confidential information

*x-ref DNS 05938-99
06508-99, 06499-99
(Parts 1+2)*

DOCUMENT NUMBER-DATE

07146 JUN 11 8

FPSC-RECORDS/REPORTING

**LATE-FILED EXHIBIT 1
DEPOSITION OF WILLIAM F. POPE**

IRP FUEL ASSUMPTIONS

COAL SUPPLY SIDE ASSUMPTIONS

ITEM	1998-2001	2002-2005	2006 - 2022
COMPANY REALIGNMENT	Active consolidations with positive impact on Supply	Consolidations Continue with Positive Impact	Market dominated by Major Companies - Sufficient Competition
CAPACITY	Excess.	Excess.	Near Balance New Capacity Needed in Later Years
PRODUCTIVITY	Competitive Pressures Increases 2-5%.	Competitive Pressures Increases 2-5%.	Competitive Pressures Increases 2-5%. Some New Technology
LABOR	Weak union 1998 Contract Year Minimum Impact	Weak union -- Labor stability.	Weak union -- Labor stability.
ENVIRONMENTAL REGULATION	No Impact	Limited Impact NOx? CO2?	Increasing impact.
FOREIGN SUPPLY AVAILABILITY	Impact on NS and PRB Market New Production Still Lagging World Demand	Production Still Lagging Demand Minimum Impact on Domestic Markets	Increasing Production Approaching Balance
TRANSPORTATION - RAIL	Western Coal Continues to Move East Merged RR's become more effective Slight Sourcing Shift Due to Mergers	Western Coal Continues to Move East Eastern RR's become more productive Merger Cost	Universal Rail Implications
TRANSPORTATION - BARGE	Minimal Excess Capacity Slight Overage	Barge Capacity Cycle at Equilibrium - Infrastructure Improvements	Barge Capacity Cycle at Equilibrium - Infrastructure Improvements

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COAL DEMAND SIDE ASSUMPTIONS

ITEM	1998-2001	2002-2005	2006 - 2022
ENVIRONMENTAL REGULATION	No Effect Emission Market Responds to Phasell	Ozone Non-Attainment Impacts Specific Areas OTAG - Concerns Air Toxics Limited Impact	Struggle Between Environmental Costs & Competitive Energy Pricing
ALTERNATE FUELS GAS, OIL, RENEWABLES	Natural Gas is Majority of New Capacity Alternative Energy Sources Limited.	Natural Gas is Majority of New Capacity Alternative Energy Sources Growing.	15 - 20% of Requirements From Nat. Gas (Peaking & Intermediate) - Growing Alternative Energy Sources
LOAD GROWTH	2.63% Yearly	2.05% Yearly	1.84% Yearly
U.S. ECONOMY	2.61% Yearly	3.08% Yearly	3.30% Yearly
U.S. COAL EXPORTS	U.S. Increasing Growth as Swing Supplier	U.S. Increasing Growth as Swing Supplier	U.S. Increasing Growth as Swing Supplier
UTILITY DEREGULATION	No Impact	Market Based Electricity Has Limited Impact	Market Based Electricity Results in Increased Utilization

Southern Company

1998 Fuel Price Workshop

COAL REGION & TRANSPORTATION ANALYSIS

June 23, 1998



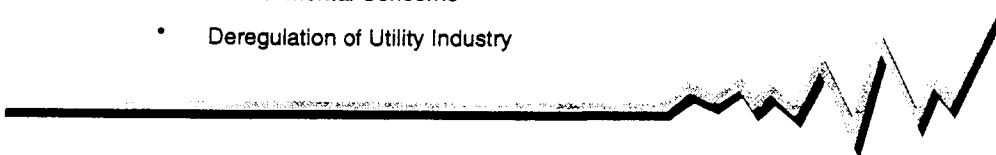
Energy to Serve Your World™



CENTRAL APPALACHIA

NSPS COAL - NS

- Limited Number of Players
- More Expensive Mining Conditions
- ALTERNATIVE TO UTILITY STEAM MARKETS
 - Export Market for Steam & Met Coal (Limited Growth)
- Allowance Market
- Continued Productivity Gains
- Limited Short Term Coal Growth Generation
- Pressures from Alternative Fuels
- Phase II - Real or Not?
- Environmental Concerns
- Deregulation of Utility Industry



CENTRAL APPALACHIA

LOW SULFUR COAL - CSX

1997 - 2004

- Excess Capacity
- Allowance Market
- Continued Productivity Gains
- Consolidations will Continue - Results in Most Efficient, Competitive Production of Product
- Growth in Coal Generation has Stalled - Some New Growth Over Short Term Possible from Increased Capacity at Existing Plants
- Pressures from Alternative Fuels such as Natural Gas , Increased Nuclear Generation, and Western Fuels
- Phase II - Real or Not?
- Environmental Concerns
- Deregulation of Utility Industry

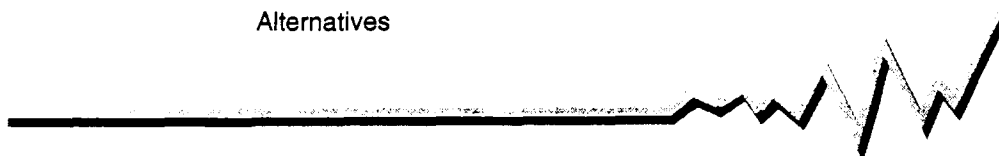


CENTRAL APPALACHIA

LOW SULFUR COAL - CSX (con't)

2005 - 2020

- Capacity / Supply Reach Equilibrium
- Reserve Depletion; Difficult Mining Conditions
- Possible Increase in Demand as some Nuclear units will be Retired
- CO2 Concerns
- New Technology will help Coal Compete with Gas and Other Alternatives



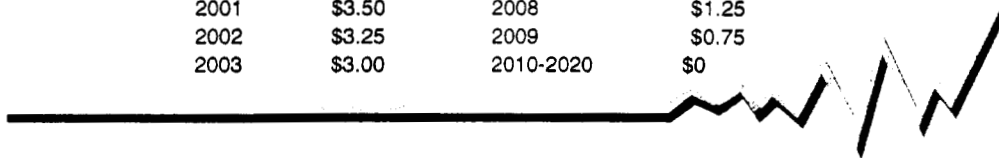
CENTRAL APPALACHIA

LOW SULFUR COAL - NS

- Limited Number of Players
- More Expensive Mining Conditions
- ALTERNATIVE TO UTILITY STEAM MARKETS
 - Export Market for Steam & Met Coal (Limited Growth)
- Same Pressures as CSX Coal, Environmental Issues, Alternative Fuels, Deregulation of Utility Industry

• PREMIUM FOR 1% SULFUR; 12000 BTU/ LB.; NS VS. CSX COAL

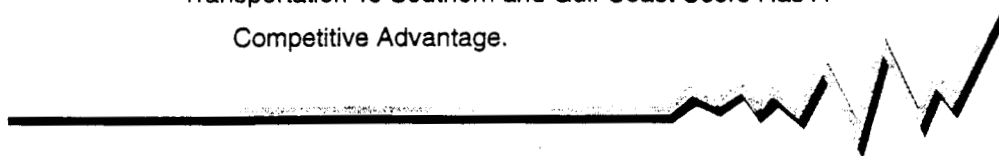
1997	\$4.50	2004	\$2.75
1998	\$4.25	2005	\$2.50
1999	\$4.00	2006	\$2.25
2000	\$3.75	2007	\$1.75
2001	\$3.50	2008	\$1.25
2002	\$3.25	2009	\$0.75
2003	\$3.00	2010-2020	\$0



ILLINOIS BASIN

MEDIUM SULFUR COAL

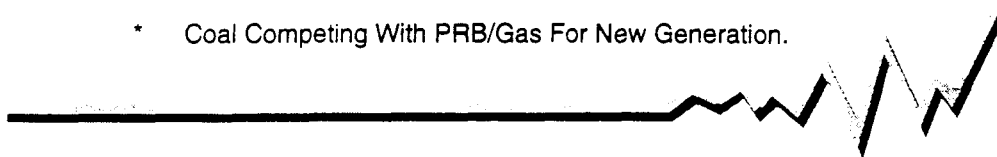
- Strong Demand With Increasing Supply Through 1999.
- Reserves For Low/Medium Sulfur Coals Are Projected To Be Depleted BY 2010.
- Productivity Improvements May Accelerate Depletion.
- Competing for New Generation with PRB / Natural Gas.
- Region Has Transportation Loading Flexibility For Both Rail and Barge.
- Transportation To Southern and Gulf Coast Users Has A Competitive Advantage.



ILLINOIS BASIN

HIGH SULFUR COAL

- Continuing Active Consolidation.
- * Midwest States May Provide Economic Incentives To Promote "In-State" Coal Use.
- * Coal Will Have Little Demand After Phase I, Except in Existing Scrubber Plants.
- * Beginning in 2010, Scrubber Technology and Cost Should Improve Demand for These Coals.
- * Continued Productivity Gains.
- * Coal Competing With PRB/Gas For New Generation.



ALABAMA

NSPS COAL

1997 - 1999

- Business as Usual
- Continued Low Demand for "New" Coal
- Continued Export / Industrial

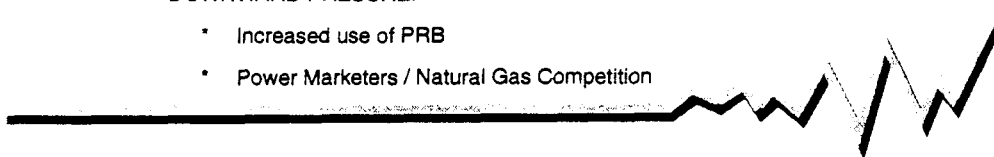
2000 - 2020

UPWARD PRESSURE:

- Increased Demand - Phase II
- Continued Export / Industrial
- Fewer Productivity Gains
- Geological Conditions

DOWNWARD PRESURE:

- Increased use of PRB
- Power Marketers / Natural Gas Competition



ALABAMA

LOW SULFUR COAL

1997 - 1999

Depressed 1997 Market

- Low Demand
- Increased Production

2000 - 2020

- Competes with Compliance Coal and SO2 Allowances



ALABAMA

MEDIUM SULFUR COAL

1997 - 1999

DOWNWARD MARKET PRESSURES:

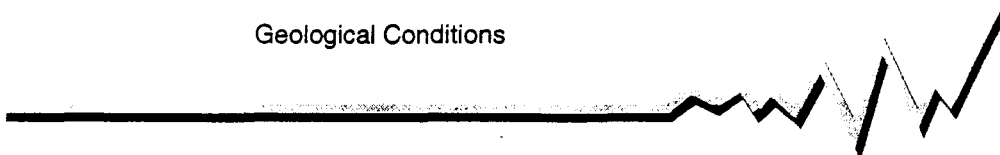
- Increased Production
- Plants Opening Specs & Blends

2000 - 2004

- Sulfur Penalties Force Thin Margins

2005 - 2020

- Costs Increase Due to Reserves and Geological Conditions



ALABAMA

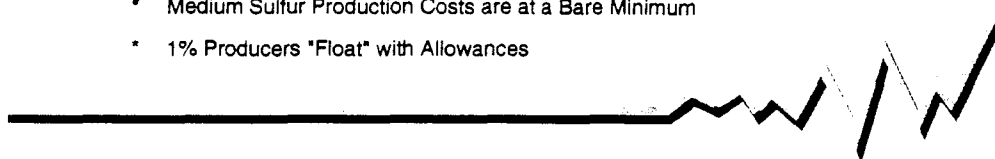
WHY BASE FORECAST ON NSPS AFTER 2000?

- PHASE II COMPLIANCE - ALL PLANTS AFFECTED

- MARKET SHARE
 - Over Half of Alabama Production is NSPS
 - Increased Production
 - Industrial / Export

- MAJOR PLAYERS WILL HAVE MORE CONTROL AS CURRENT CONTRACTS EXPIRE

- ALL COALS ARE IN BALANCE
 - Medium Sulfur Production Costs are at a Bare Minimum
 - 1% Producers "Float" with Allowances



POWDER RIVER BASIN

9200 BTU COAL

- Production / Capacity
- Demand
- Cost Implications



OTHER WESTERN

NSPS COAL

- * Production / Capacity / Demand in Equilibrium Long Term
- Occasional Demand Spikes (Export)
- * Cost Implications
- * Local Coal



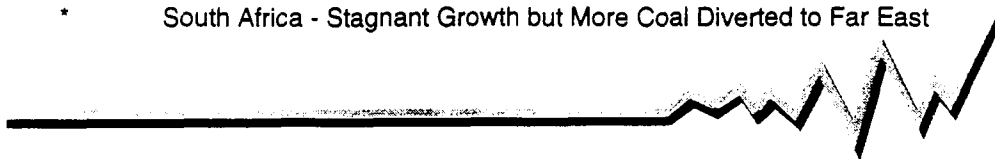
FOREIGN COAL

DEMAND

- * No Strong U.S Demand for these Coals in Preparation for Phase II
- * Strong Increase in Asian Demand
- * Slight Increase in European Demand

SUPPLY

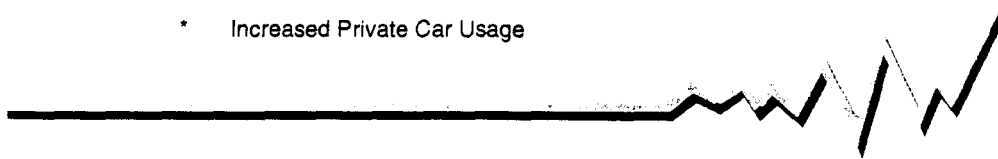
- Europe - Reduction in Indigenous Coal Production
 - Natural Gas Replaces Coal-Fired Generation
- Far East - Strong Increase in Indonesian Production
 - Continued Australian Production in Anticipation of Post 1999 Coal Demand
- * South America - Improvements in infrastructure
- * South Africa - Stagnant Growth but More Coal Diverted to Far East



FACTORS AFFECTING RAIL RATES

Downward Pressure

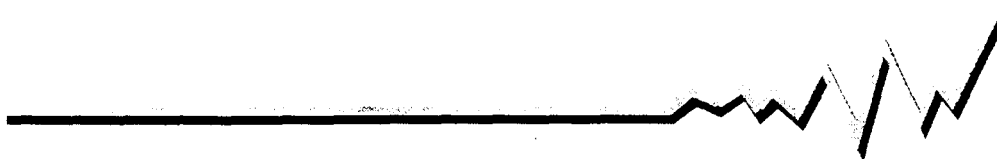
- * Productivity Improvements
- * Rail Construction Projects
- * OPEN RAIL ACCESS IS THE WILDCARD!!
- * New Electrical Capacity for Utilities will be Gas CT's and CC's
- * Potential for Two Transcontinental Railroads
- * Volume Discounts in Step Rates
- * Increased Private Car Usage



FACTORS AFFECTING RAIL RATES

Upward Pressure

- * Utility Deregulation Impact in Year 2000
- * Increases in Intermodal Deliveries
- * Merger Effects
- * Exports Have Slight to Moderate Growth



FACTORS AFFECTING BARGE RATES

- * Productivity Improvements - Moving Larger Volumes Over Greater Distances Creates Competition
- * Grain and Steel Movements
- * New Barge Construction and Delayed Retirements will Outpace Demand
- * Utility Deregulation will have Impact in Year 2000
- * Other Factors



FACTORS AFFECTING OCEAN RATES

- * Gas Becoming a Bigger Player in Europe
- * China has Switched From Net Exporter to Net Importer of Grain
- * Demand for Iron Ore and Steel is Slowing
- * Utility deregulation in U.S will have No Impact on Ocean Rates
- * IPP Demand in Asia



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1998 Fuel Panel Workshop

Natural Gas & Fuel Oil Price Forecasts

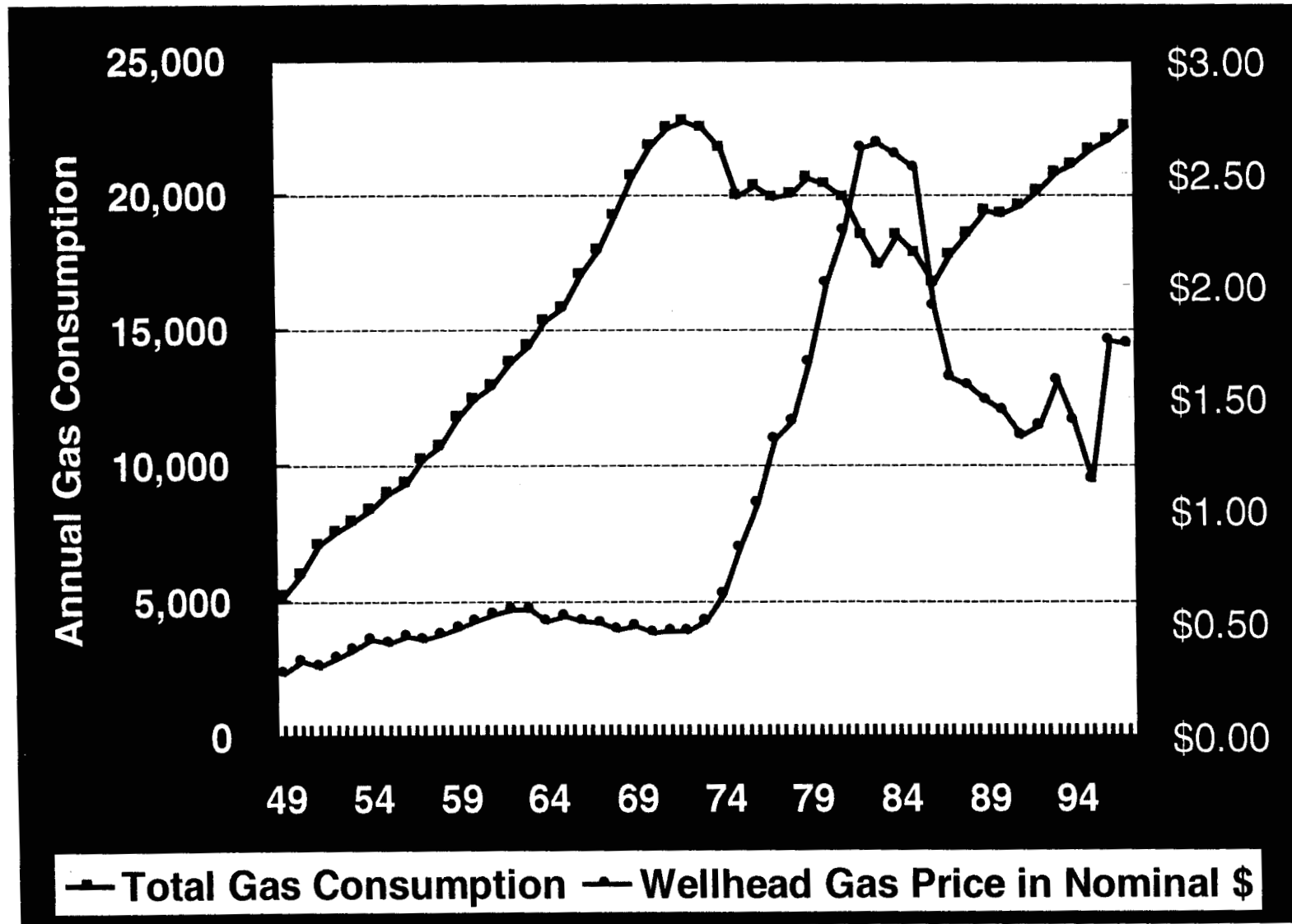
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Historical Look - Gas Demand & Prices

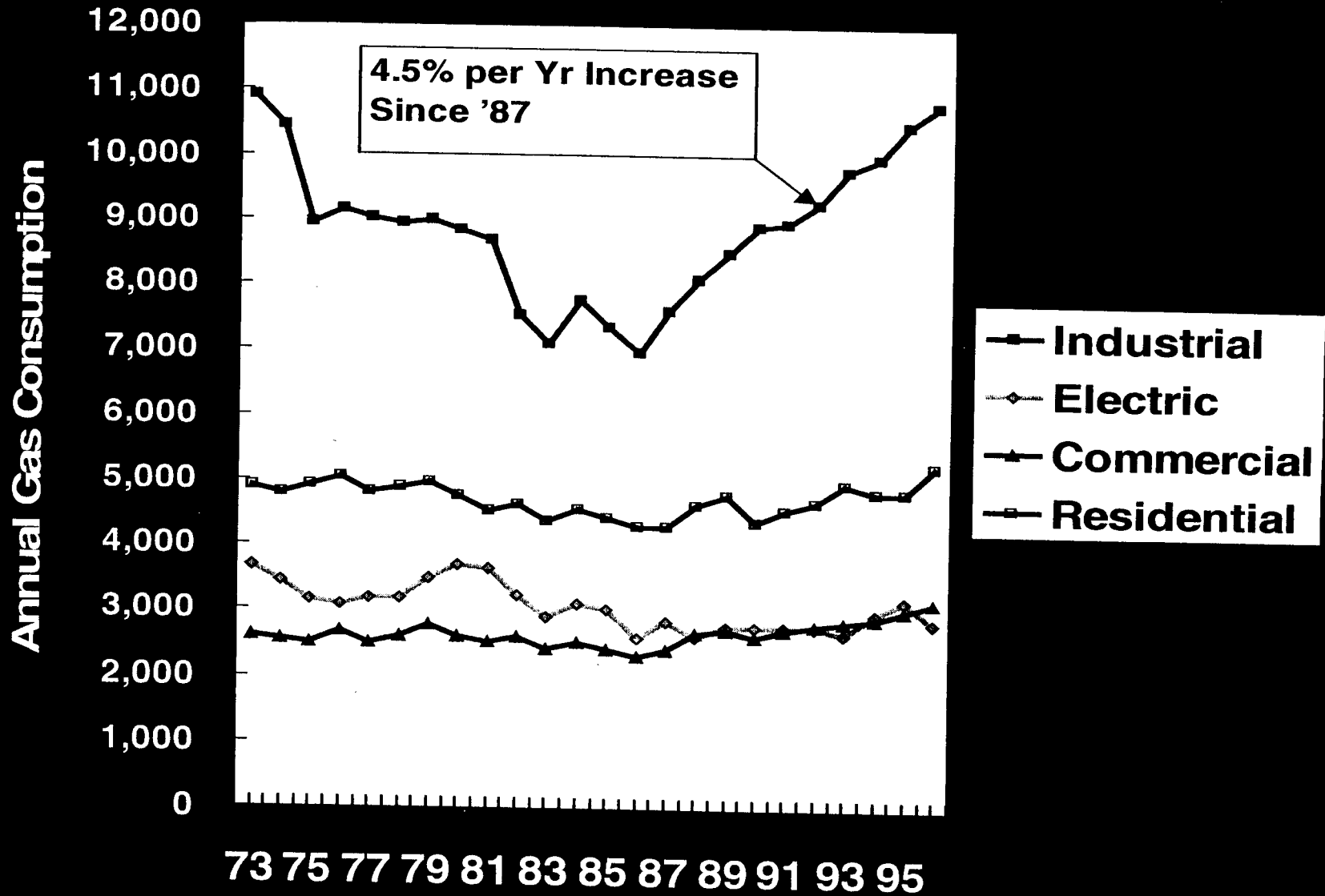
- **1949 to 1973, Gas Demand Increased 3.1%/yr.**
- **Government Prices Controls set prices at about \$0.50/MMBtu.**
- **Shortage of Gas as Prices were too low to make drilling economical.**
- **NGPA of 1978, set very high prices and deregulation of new gas by 1985.**
- **Higher prices stimulate drilling boom and gas surpluses.**
- **In 1985, surpluses & deregulation of gas prices caused lower gas prices.**
- **Lower prices simulated gas demand.**

Historical Look at Gas Demand & Prices

036



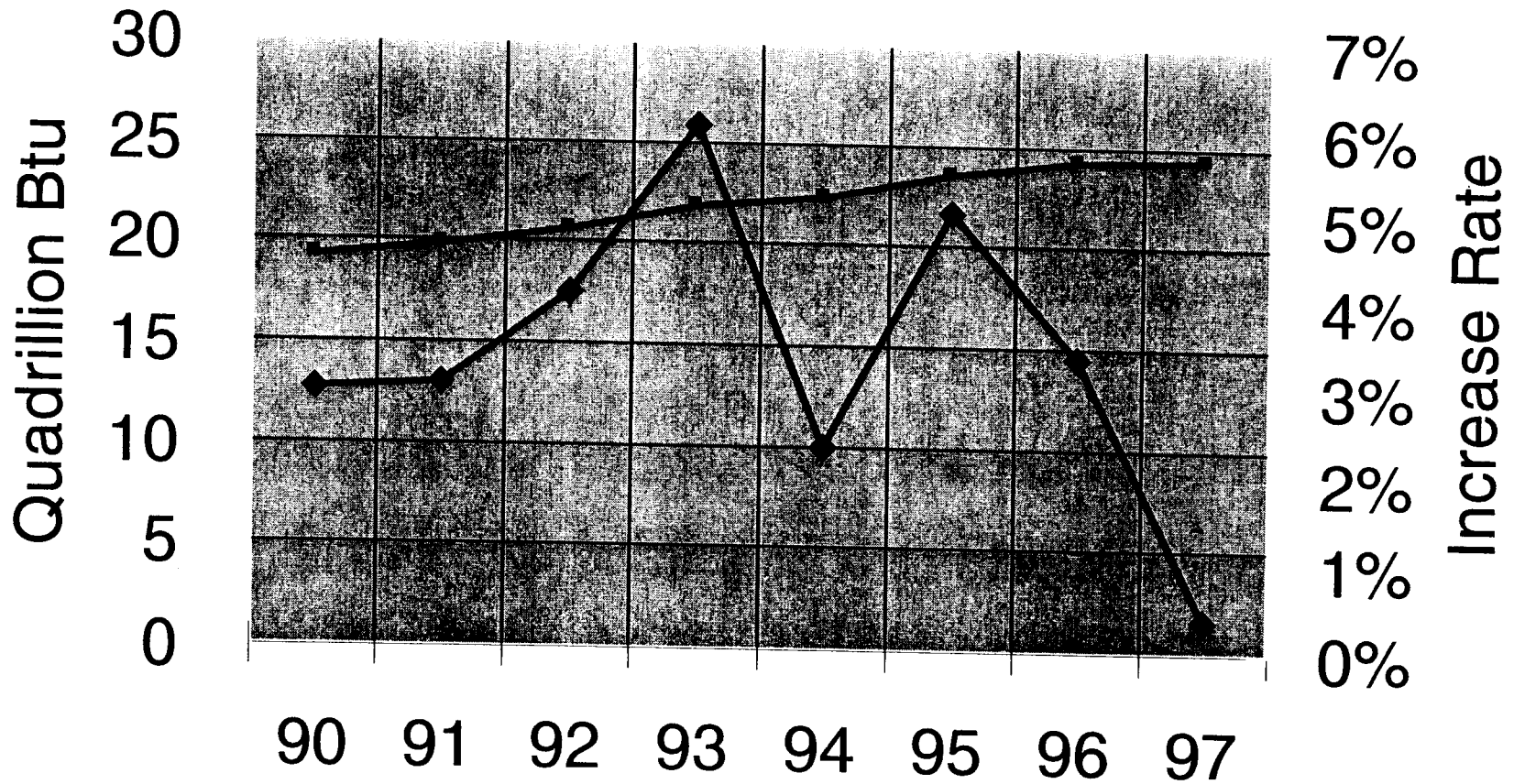
Natural Gas Consumption



Natural Gas Consumption

- **Since 1987, Industrial Gas Consumption has increased at the rate of 4.5% per year.**
- **Residential & Commercial have increased but only a small amount.**
- **Electric consumption has declined.**
- **The strong economy and industrial expansion have caused higher summer gas prices.**

Annual U.S. Gas Consumption



—■— Annual Consumption

0.00

Industrial Gas Consumption

- Since the 1990 recession, Industrial Gas Consumption has grown rapidly.
- In 1997, the Rate of growth in Industrial Gas Consumption slowed to near 0%.
- This makes sense due to low unemployment level and plant capacity being used.
- Therefore, we do not believe Industrial Gas Consumption will continue its rapid rate of increase.

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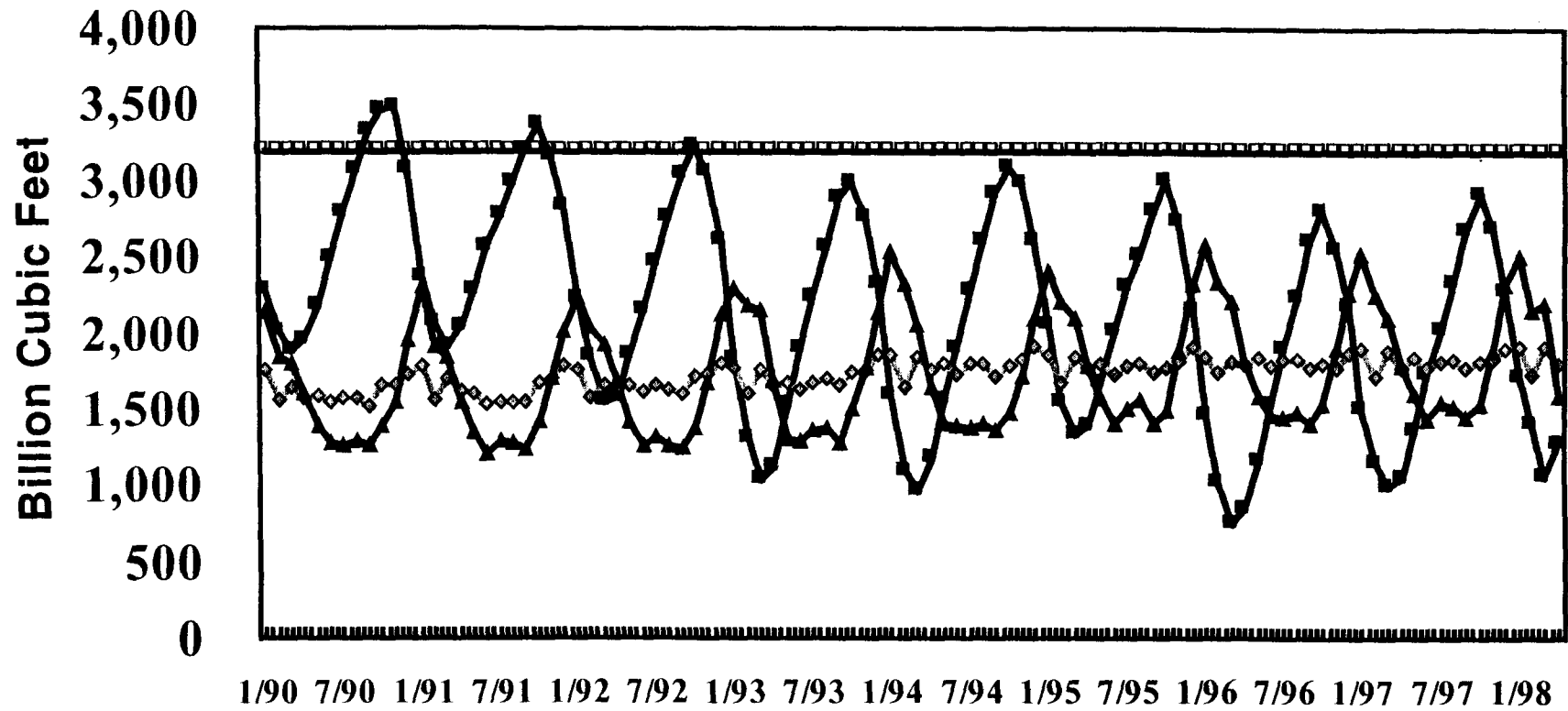
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**So, why have gas prices been
higher the past two years?**

Shortage of Gas

- **During the past three years, gas production has not increased as rapidly as gas demand.**
- **The result has been a 200 to 300 Bcf/yr shortage of gas.**
- **This is shown on the next chart that shows monthly gas storage, production and demand.**
- **The red level is gas storage levels. The black line is full gas storage.**

US Natural Gas Supply, Consumption & Storage



■ Storage ◇ Supply ▲ Consumption ▣ Full Storage

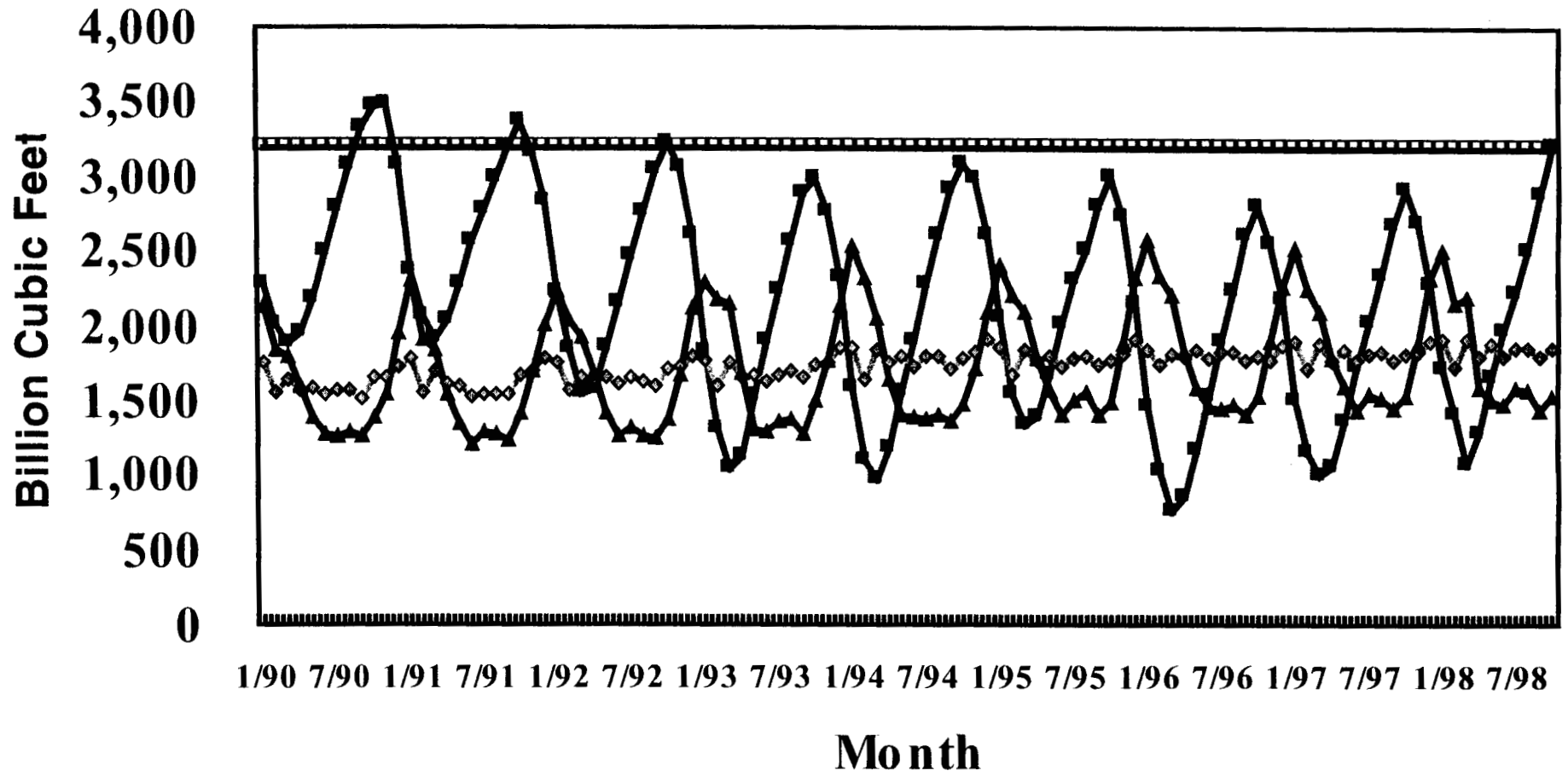
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Next, why are gas prices lower this year?

Next, why are gas prices lower this year?

- Gas supplies about 1 BCF higher.
- Nuclear generation higher.
- Hydro generation higher.
- Coal stocks higher.
- Rail improving.
- Gas storage levels higher.
- Oil Prices are lower.

US Natural Gas Supply, Consumption & Storage



Storage
 Supply
 Consumption
 Full Storage

EPU

1999

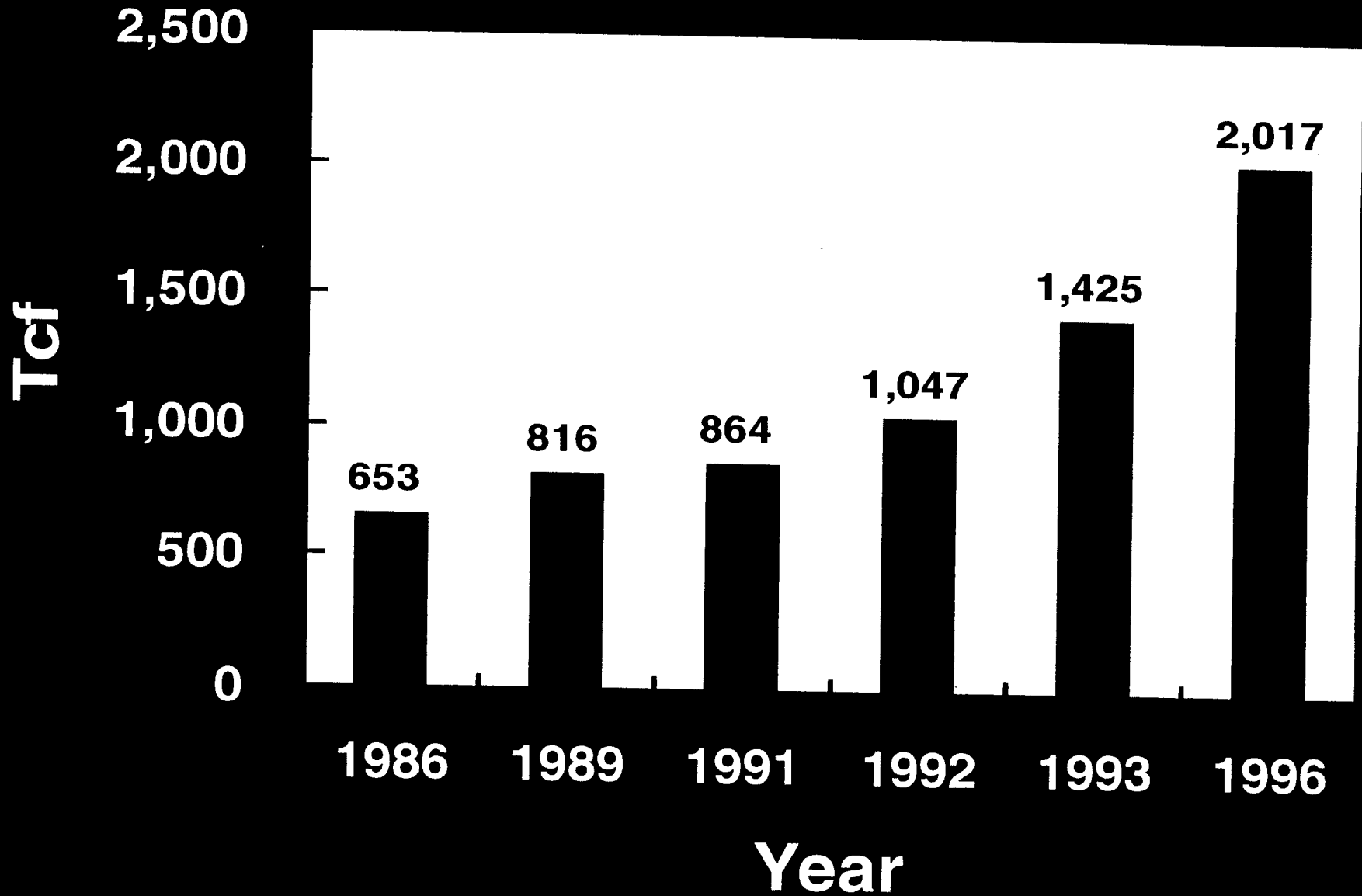
We will enter 1999 with gas storage levels full for the first time in three years. Unless we have weather-related supply interruptions in the fall, gas prices should approach \$1.50 per MMBtu by October. We will be better prepared to meet the expected cooler winter.

Where Are We Going?

Primarily driven by new gas-fired generation, gas demand wants to increase from 22 to 32 Trillion Cubic Feet per Year by 2010.

- **Will There Be Enough Supply?**

GRI Baseline Natural Gas Resource Base



U.S.

U.S. Resource Base

- If we believe GRI's numbers, the resource base is available.
- Will it be developed and at what price?
- Technology is the biggest factor in determining the long range marginal cost of develop new gas reserves.



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Planned Pipeline Expansions

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Gulf of Mexico to Onshore

1999

<u>Project</u>	<u>Cost</u> <u>Million \$</u>	<u>Capacity</u> <u>(Bcf / Day)</u>	<u>Delivery</u> <u>Location</u>	<u>Planned</u> <u>Inservice</u>
Mobile Bay (Transco)	\$172	0.35	Mobile Bay	Mid-1998
Destin	\$308	1.00	Meridian, MS	Mid-1998
Nautilus	\$120	0.60	St. Mary's Parish, LA	Nov - 1997
DIGS	\$54	0.50	Mobile Bay	Oct - 1997
Discovery	\$188	0.60	La Rosa, LA	Dec - 1997
Green Canyon	\$200	0.50	Offshore, LA	Mid - 1999
ANR	\$52	0.46	Offshore, LA	Mid-1998
Mississippi Canyon	\$25	0.30	Offshore, LAMS	Jan - 1999
Trunkline	\$52	0.50	Offshore, LA	Apr - 1998
Venice Gathering	\$39	<u>0.33</u>	Offshore, LA	Oct - 1997
Total Capacity Additions	\$1,210	4.14		
Annual BCF		1,511		
<u>% Increase in U.S. Supply</u>		7.48%		

0
37
25

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New Canadian Imports



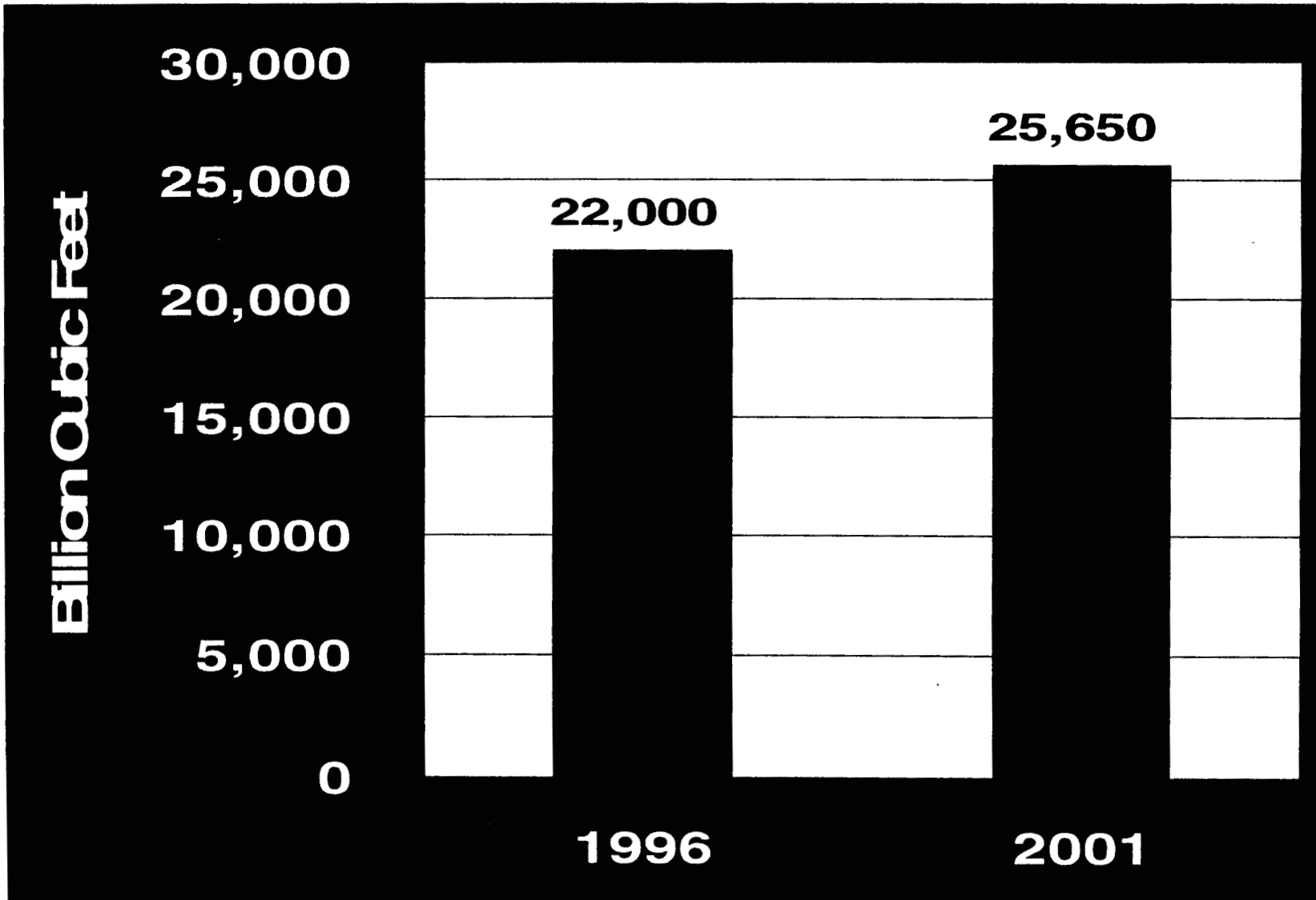
Gas Infrastructure

- **By 2000, Deepwater Gas Projects will increase gas supply by 3 to 4.5 Bcf per day.**
- **By 2001, New Canadian Supplies will increase Supplies by 3 to 5 Bcf per day.**
- **By 2001, Western/Rocky Mountain Expansions will add 1 to 2 Bcf per day.**
- **Net results will be capacity to handle about 25,650 Bcf per year (about 26 Tcf per year).**



Annual Gas Infrastructure

0.50



Gas Supply and Pipeline Infrastructure - Year 2001

- **25,650 - 22,000 = 3,650 Bcf per year.**
- **10 Bcf per Year in new gas supplies and infrastructure by 2001.**

Gas Supply - Near Term

- **The supply push should result in lower gas prices.**
- **Producers are responding to the lower gas prices by drilling less.**
- **How long will the surplus gas supplies last?**

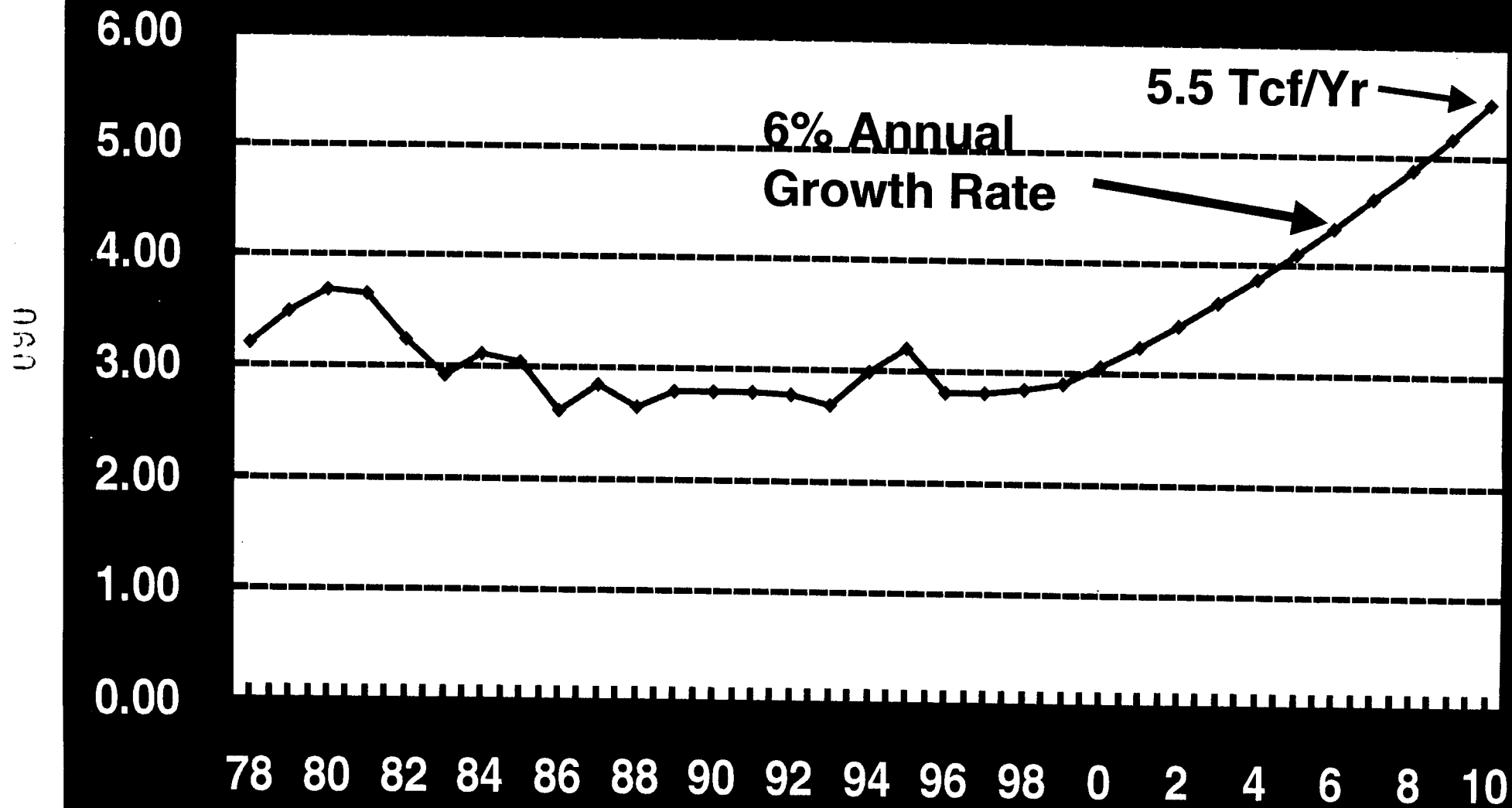
Future Gas Consumption

- **Gas Prices will be very dependent on how long the current surplus capacity will last.**
- **With Industrial, Commercial & Residential growing very slowly, Growth in Gas Consumption will be very dependent on new gas-fired electric generation and co-firing of gas to reduce NOX and Ozone.**

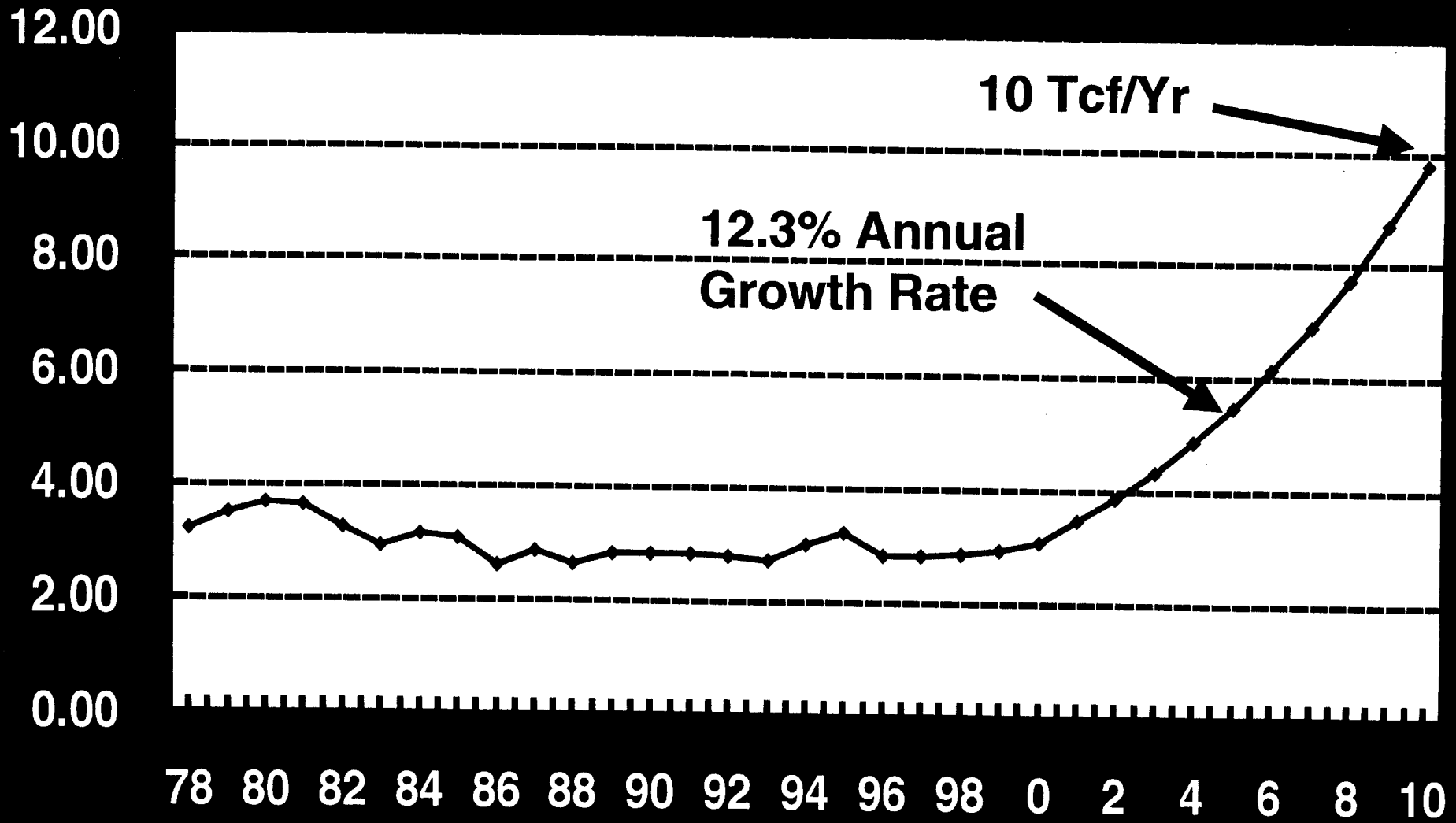
Future Gas Consumption

- **DOE, EVA and GRI are assuming gas-fired consumption will grow at 5 to 7% per year.**
- **However, the rate could be as high as 20% per year. This depends on how fast new generation is added and how quickly co-firing or re-burn takes place. Most likely, it will be somewhere in between.**
- **If we assume a 6% growth rate, the new capacity additions will be “used” by 2005.**

Annual Natural Gas Consumption Electric Generation - GRI Forecast

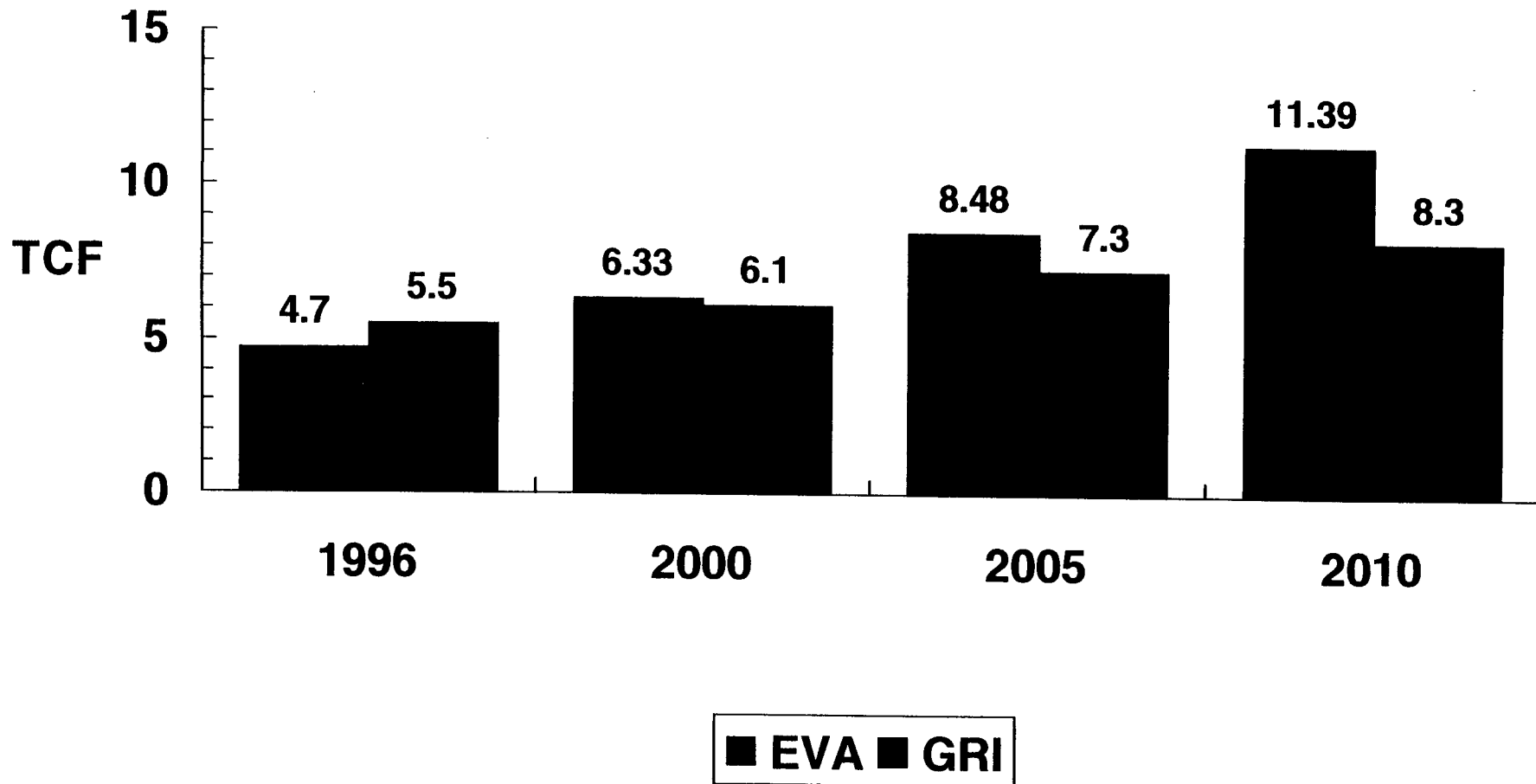


Annual Natural Gas Consumption Electric Generation



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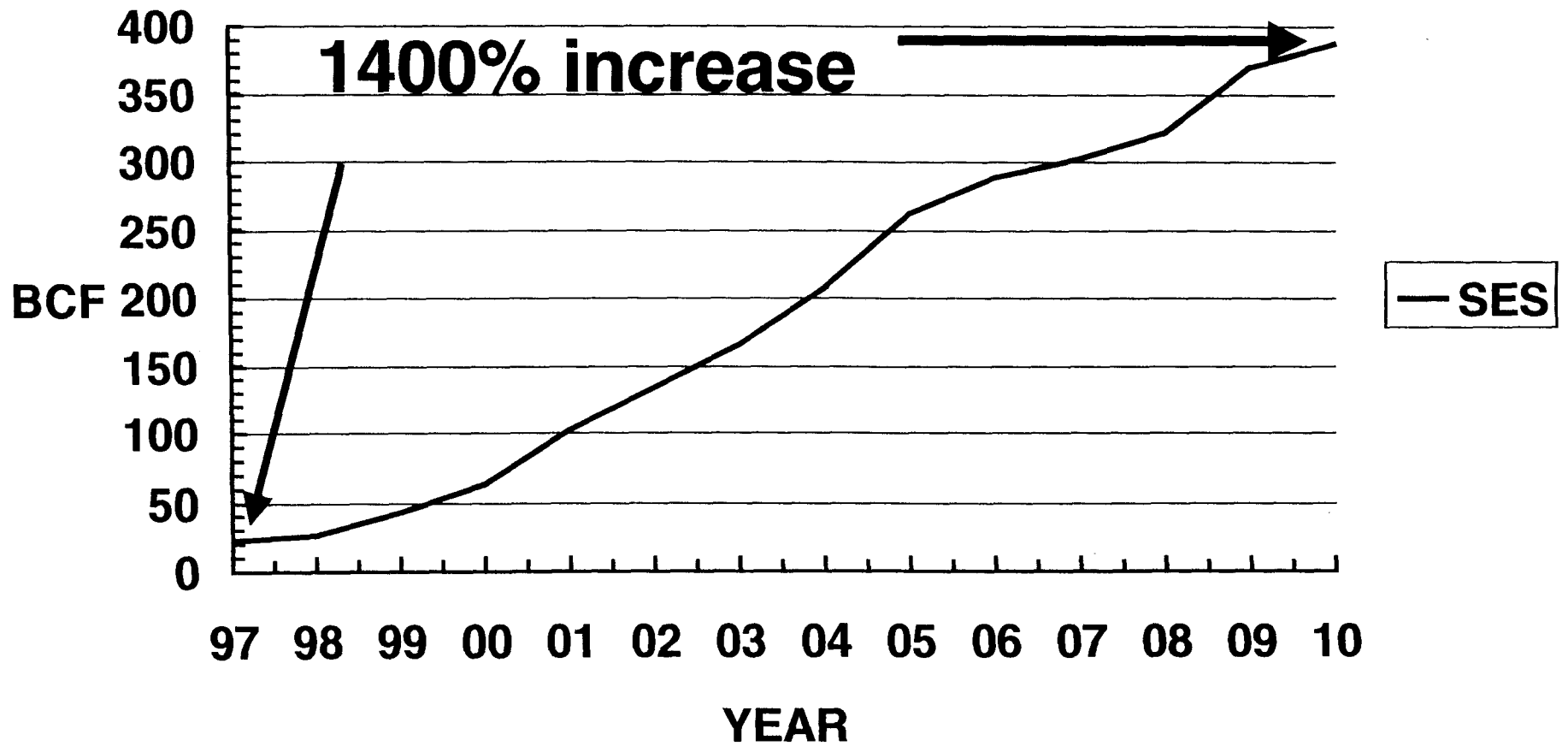
TOTAL US GAS USAGE FOR POWER GENERATION Without Kyoto or PM 2.5



052

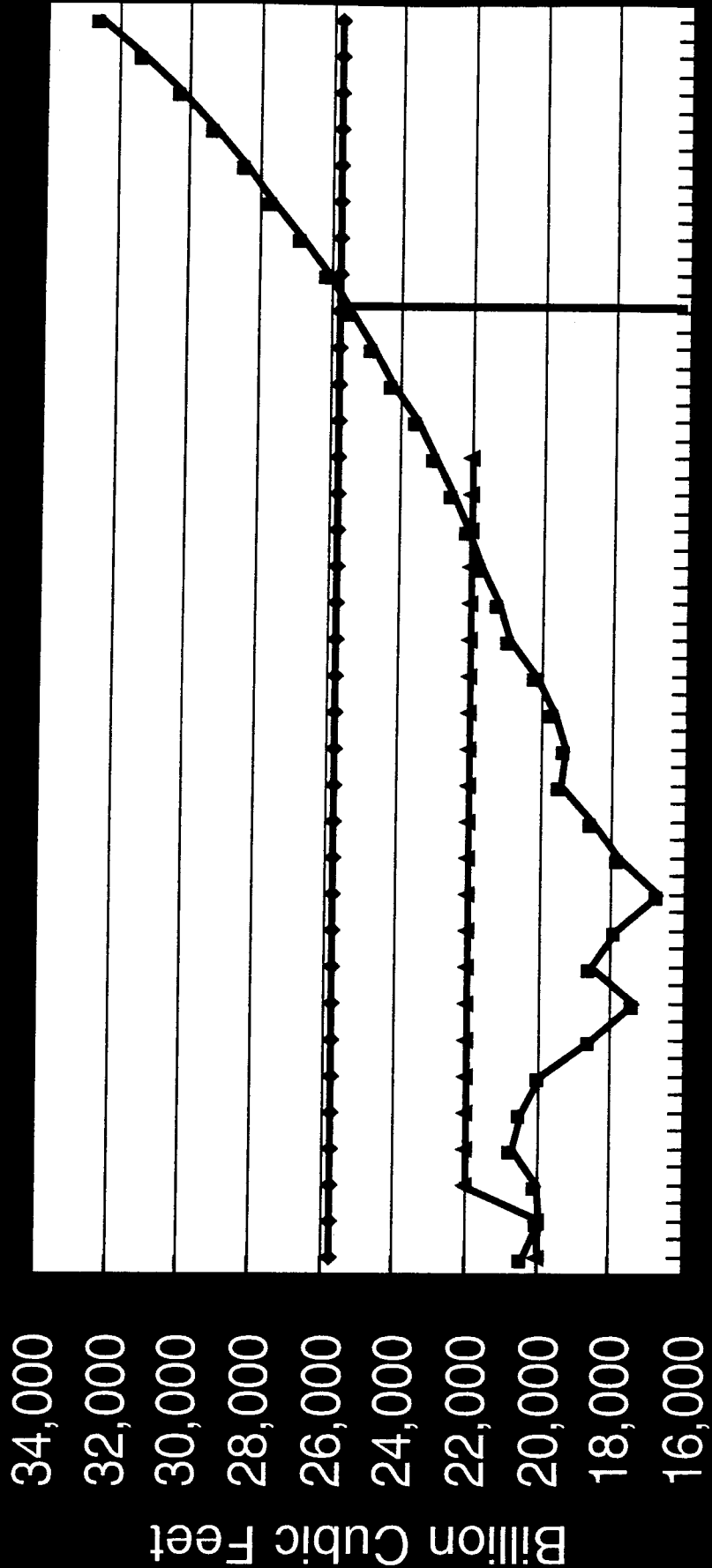
Southern Co.'s Electric System Gas Consumption

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Total U.S. Gas Consumption

Actual & Forecast — Planned Capacity — Current Capacity

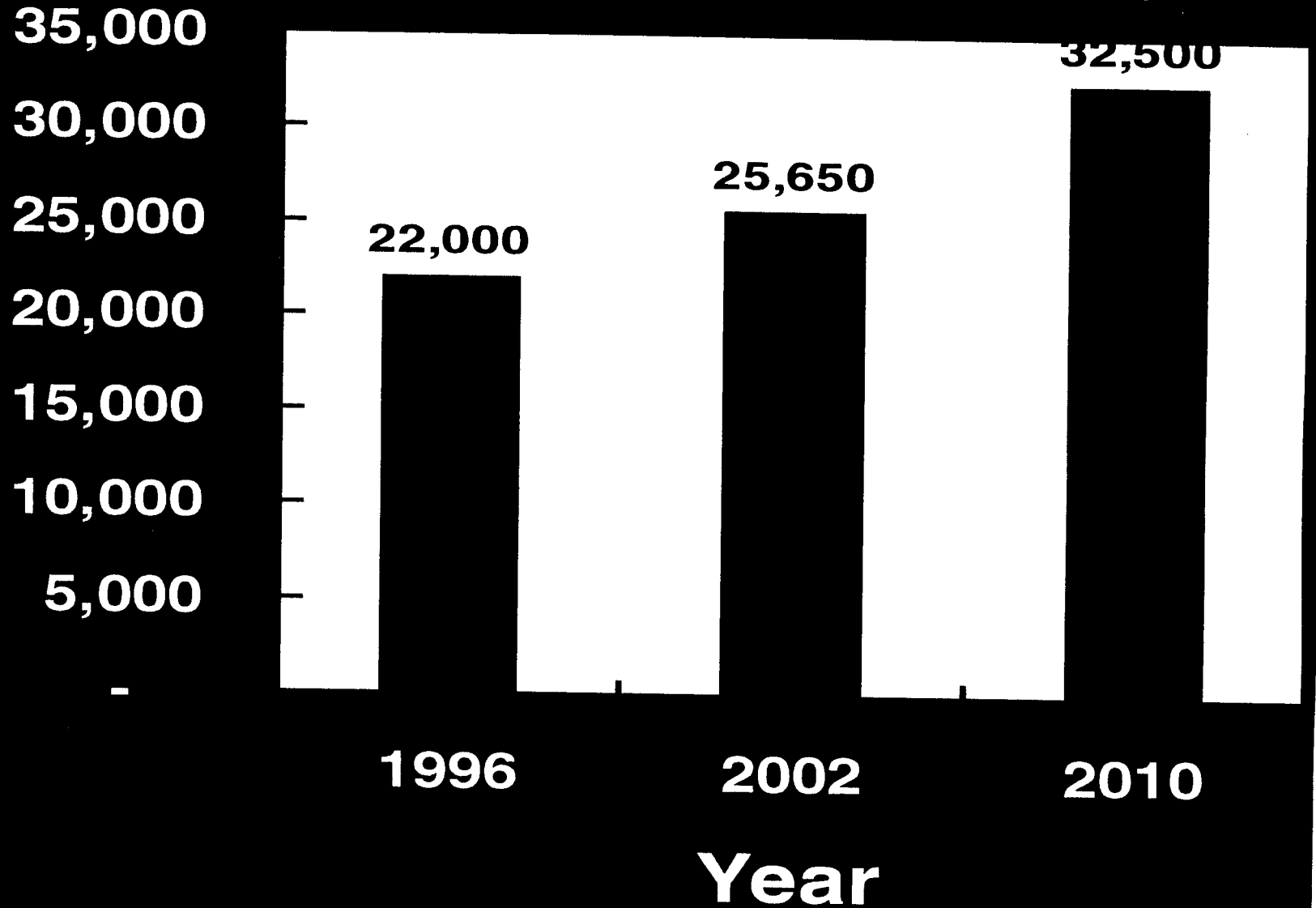


76 80 84 88 92 96 0 4 8
Year

At this time, we are assuming that the new capacity will be used sometime between 2002 and 2004. However, the industry should respond to the increasing demand by continuing to expand. Therefore, in our forecast, we assume that demand will cross the available supply line around 2005.

Next, because of the lower oil and gas prices we are experiencing today, drilling is beginning to slow. We have seen a drop of 10% in onshore drilling activity. Therefore, we are forecasting that prices will not be as low as some forecasters such as EVA or GRI.

Actual & Estimated Gas Consumption or Infrastructure Capacity



ES&O

32,500 - 26,650 =
5,850 Bcf per year
or
16 Bcf per day

Does Not Include PM 2.5
or Kyoto Treaty

Gas by Default Analysis

- **US Energy Consumption Grows at 1.3% per year.**
- **No new hydro.**
- **No new Nuclear.**
- **No new Coal.**
- **Limited Re-newables i.e. Solar etc.**
- **Growth is mostly Gas by Default.**



U.S. Energy Consumption in Quadrillion Btu

	Actual & Forecast						1996 to 2010 Estimated Annual Growth Rate
	<u>1990</u>	% of Total	<u>1996</u>	% of Total	<u>2010</u>	% of Total	
Coal	19,101	23.44%	20,498	22.80%	21,848	20.57%	0.47%
Natural Gas	19,296	23.68%	22,560	25.10%	32,500	30.60%	3.15%
Petroleum	33,553	41.18%	35,864	39.90%	41,225	38.81%	1.07%
Nuclear	6,579	8.07%	7,168	7.97%	6,853	6.45%	-0.31%
Hydro	2,946	3.62%	3,798	4.23%	3,800	3.58%	0.00%
Other	<u>0</u>	0.00%	<u>0</u>	0.00%	<u>0</u>	0.00%	
	81,475		89,888		106,226		1.30%
			1.72%				
Fossil Fuels	71,950	88.31%	78,922	87.80%	95,573	89.97%	

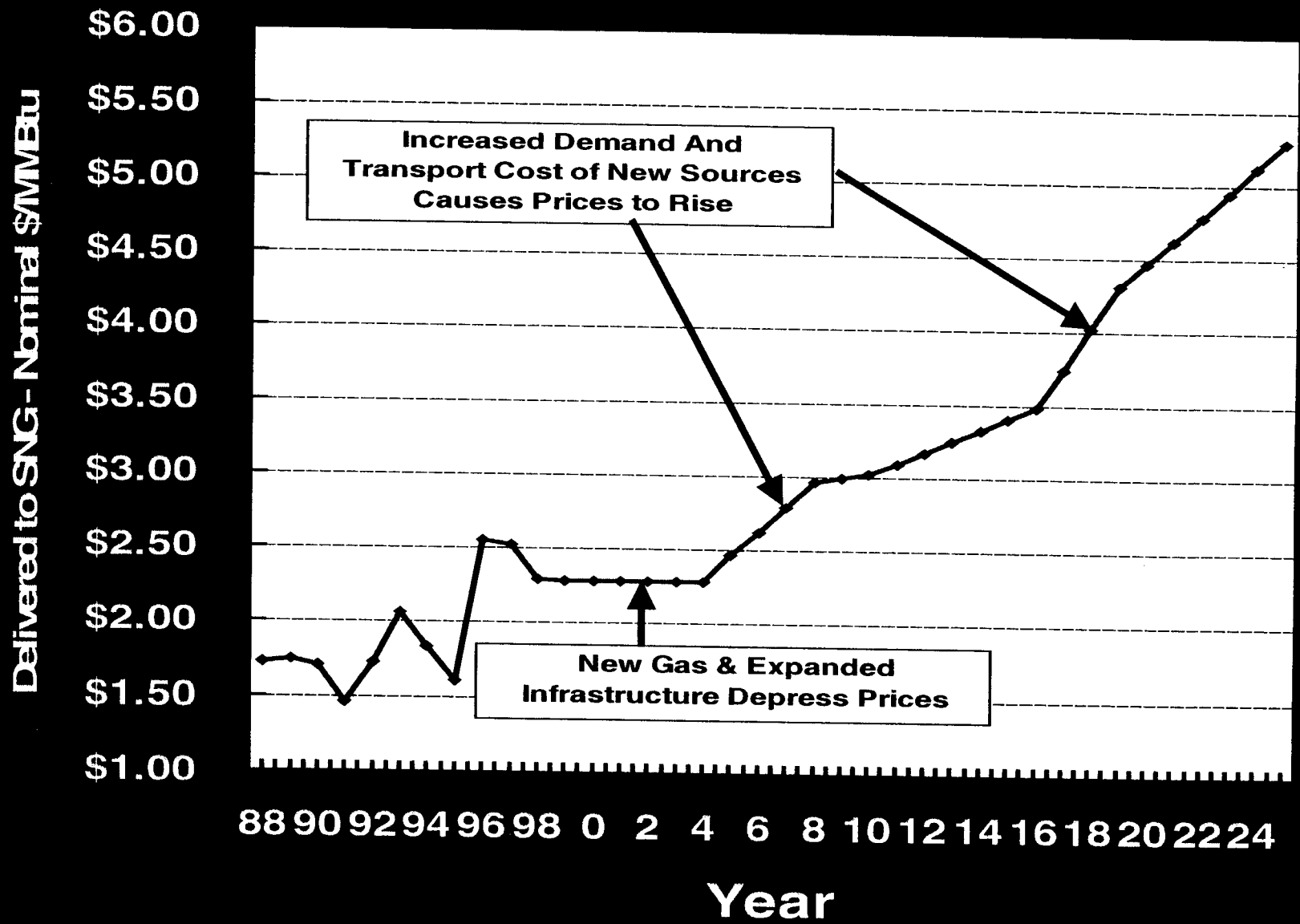
Actual #'s from DOE/EIA Monthly Energy Review

CO2 conversion factors from Form EIA-1605 (1996), Appendix B

Future Numbers are trend projections of the growth rate experienced from 1992 to 1996

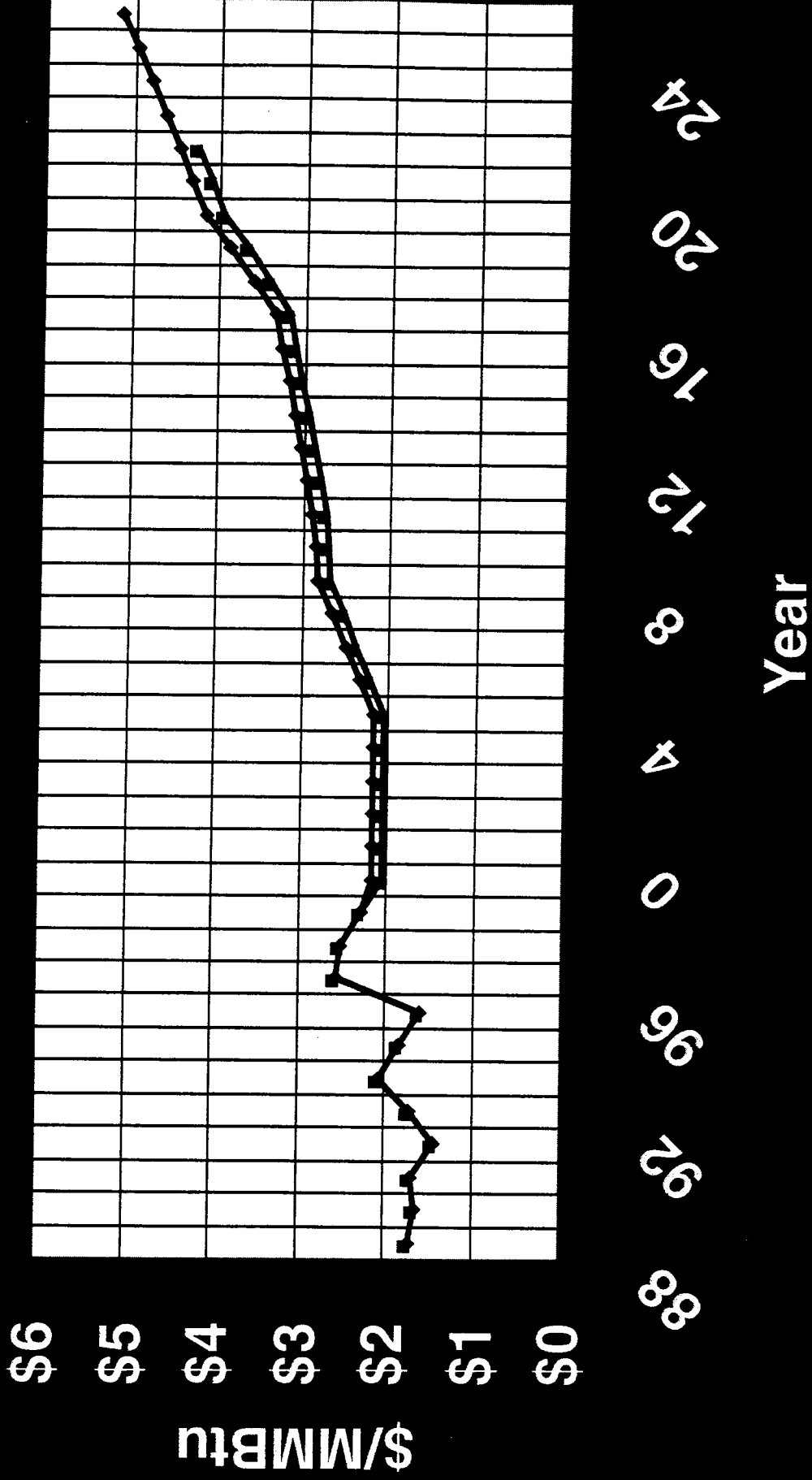
Natural Gas Price Forecast

1998 System Forecast - SNG Louisiana Gas Prices



074

SCS 1997 vs. 1998 Gas Forecast



— 1998 Gas Forecast — 1997 Gas Forecast

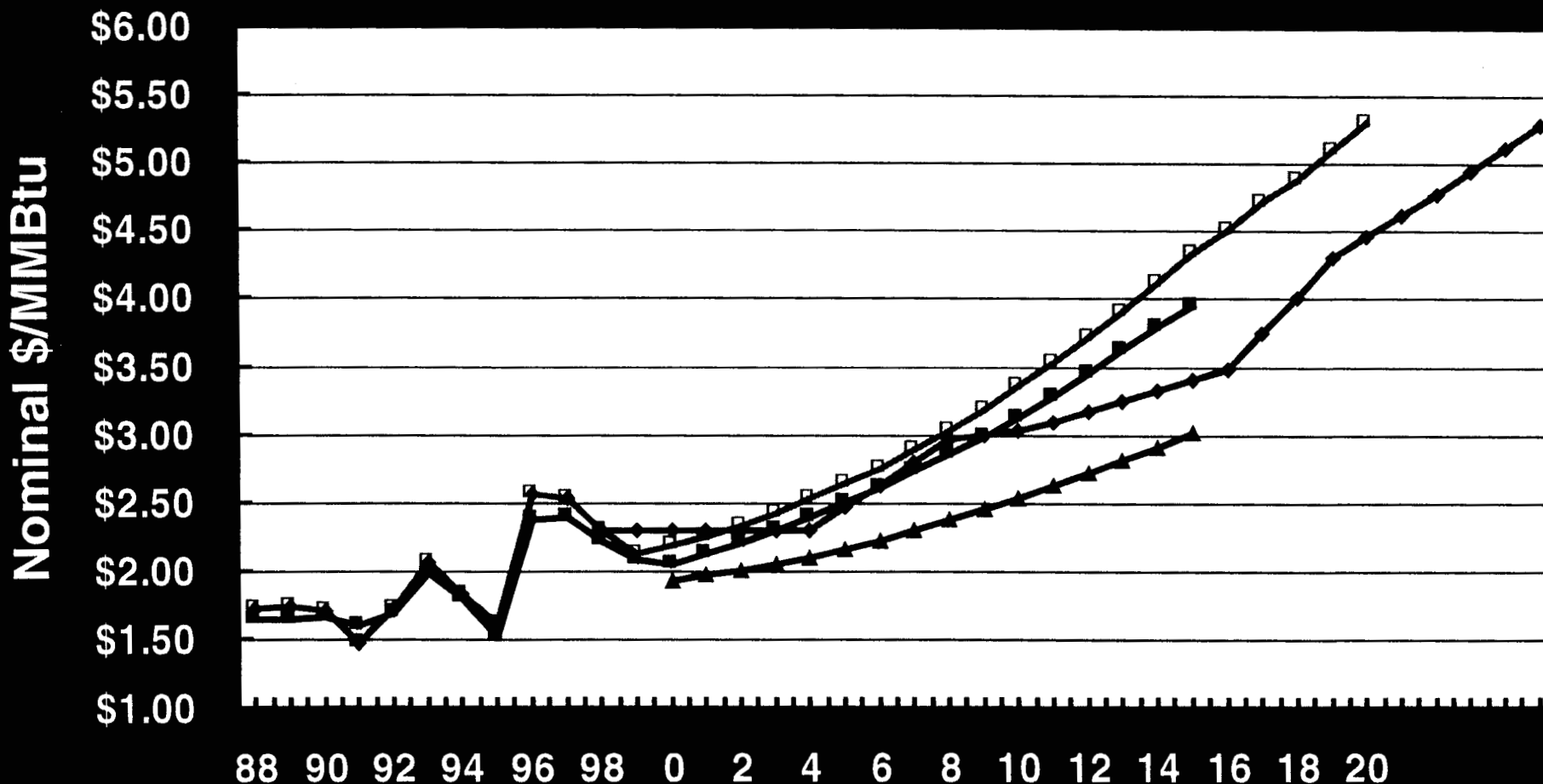
SCS 1998 Gas Price Forecast Baseload Plants

- **Gas Price Forecast is about 5% higher than last year.**
- **Price curve has the same shape.**
- **Price increases in 2004 due to demand push.**
- **Demand push lasts for four years until new pipelines and productions flat prices again.**
- **Another demand push occurs in 2016.**

Natural Gas Price Forecasts

SCS Forecast, DOE/EIA Annual Outlook, GRI Baseline & EVA

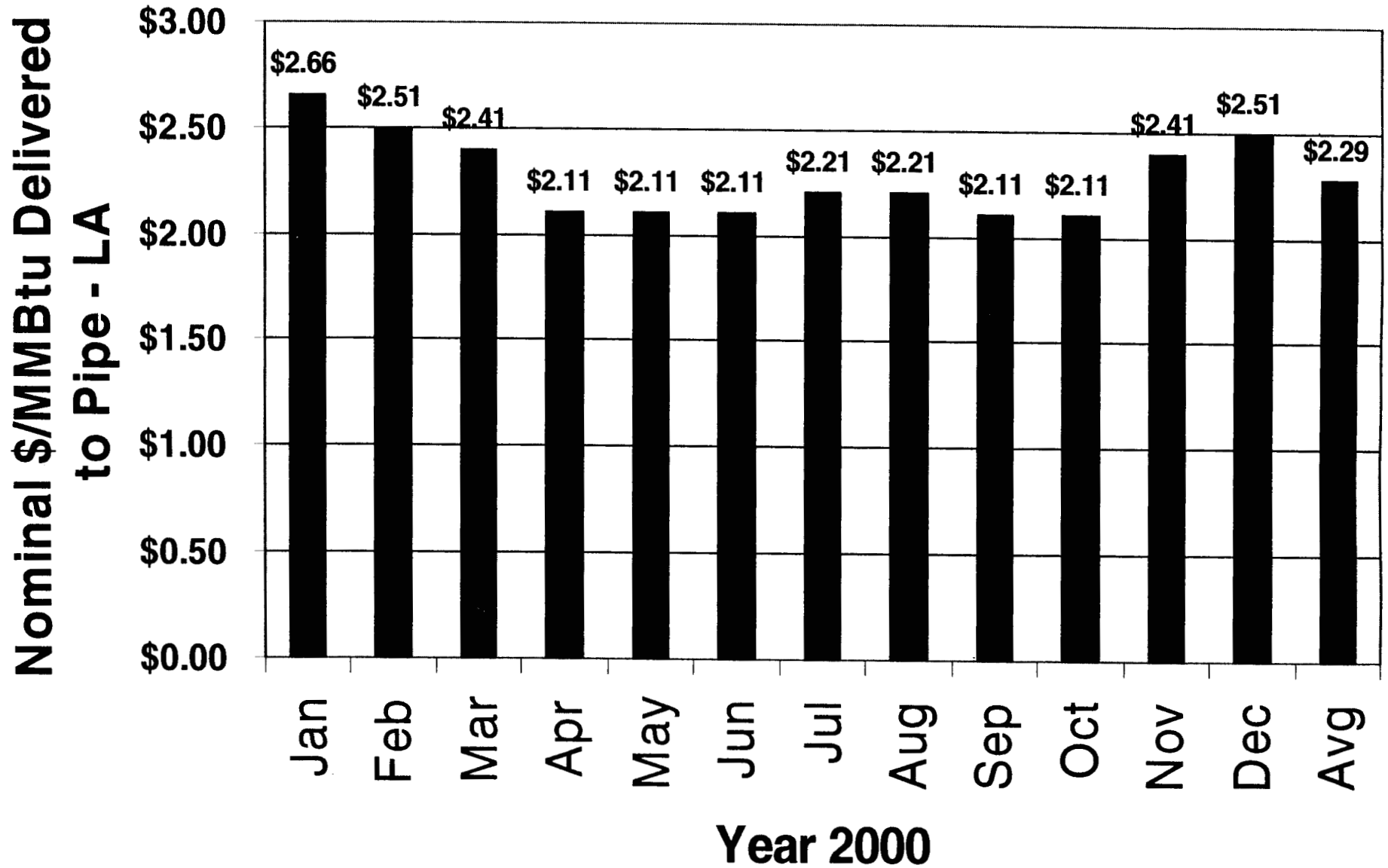
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DOE/EIA Avg Wellhead
 GRI - Avg Acquisition Price

1998 SCS - FOB SNG Louisiana
 EVA Forecast FOB Henry Hub

Monthly Forecasted Natural Gas Prices

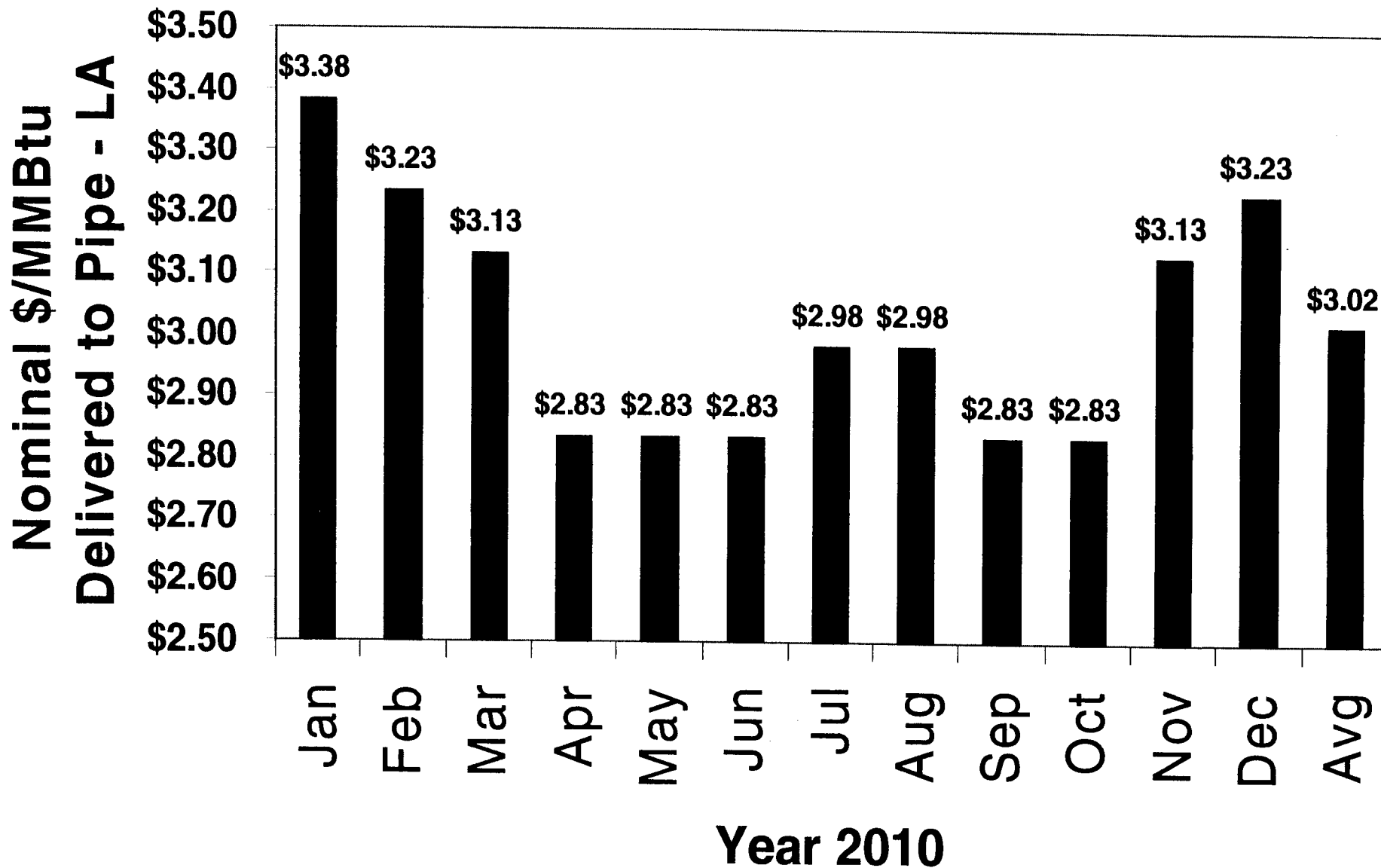


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Baseload Gas

We assume a difference pricing structure for baseload facilities. For instance, in 2001, we are assuming a level annual price of \$2.156 per MMBtu - delivered into SNG - Louisiana, for baseload generation. This takes into account forward buying to reduce spikes and buying on down dips in prices. This is an aggressive goal. Spot Month Prices are expected to average \$2.29 per MMBtu during 2001. This allows us to credit baseload facilities the advantage afforded by forward buying as opposed to taking what the market offers the day it is needed.

Monthly Forecasted Natural Gas Prices



6-11-09

Gas Transportation

- Limit CT expansions to 1,000 MW on Transco and 1,000 MW on SNG due to limited amount of interruptible capacity available.

Gas Transportation

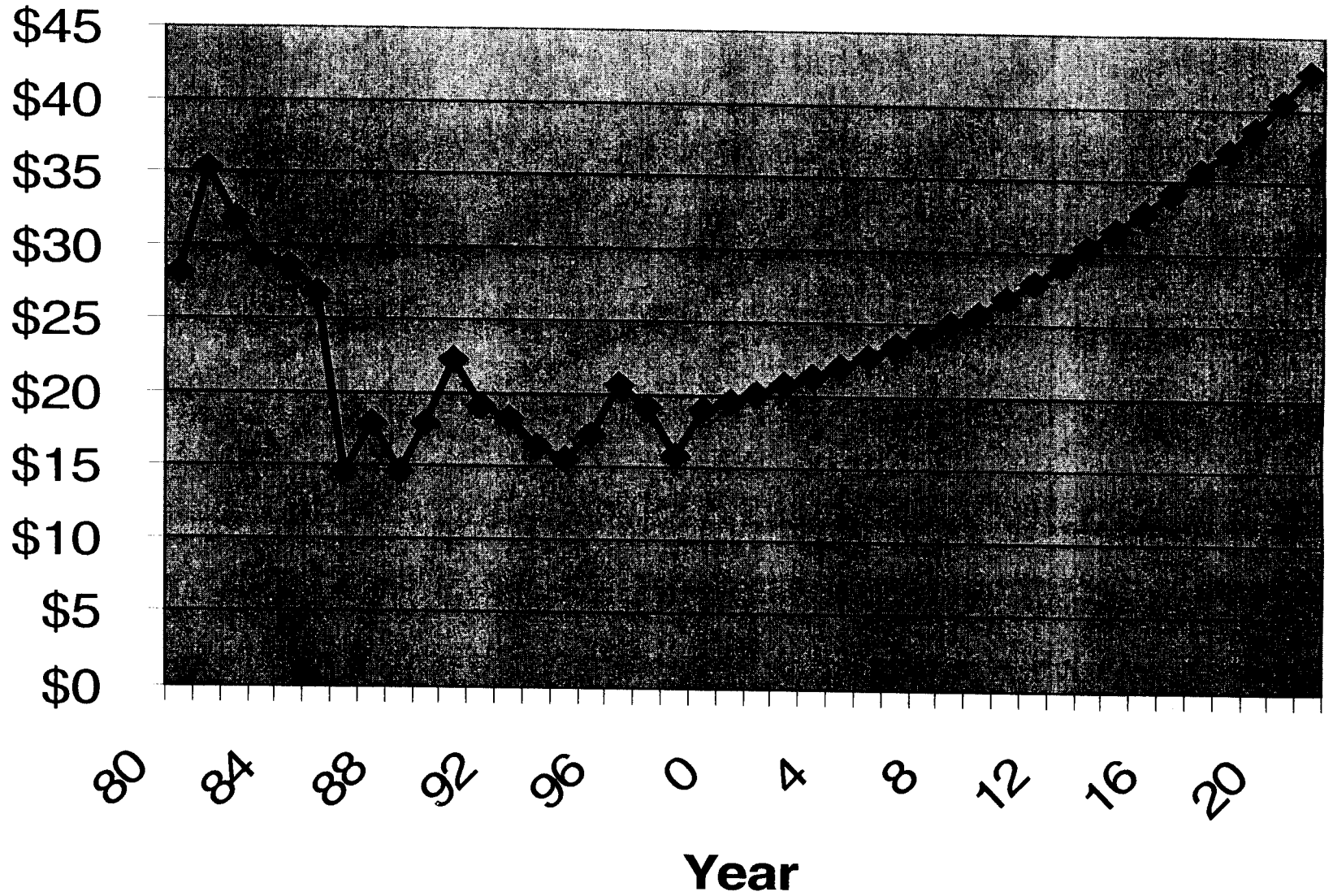
- Since area pipelines are fully subscribed, assume that pipelines must be expanded to accommodate new gas-fired combined cycle generation.
- Assume that 300,000 MMBtu per day of expansion can occur on Transco and SNG at maximum Tariff rates.

Gas Transportation

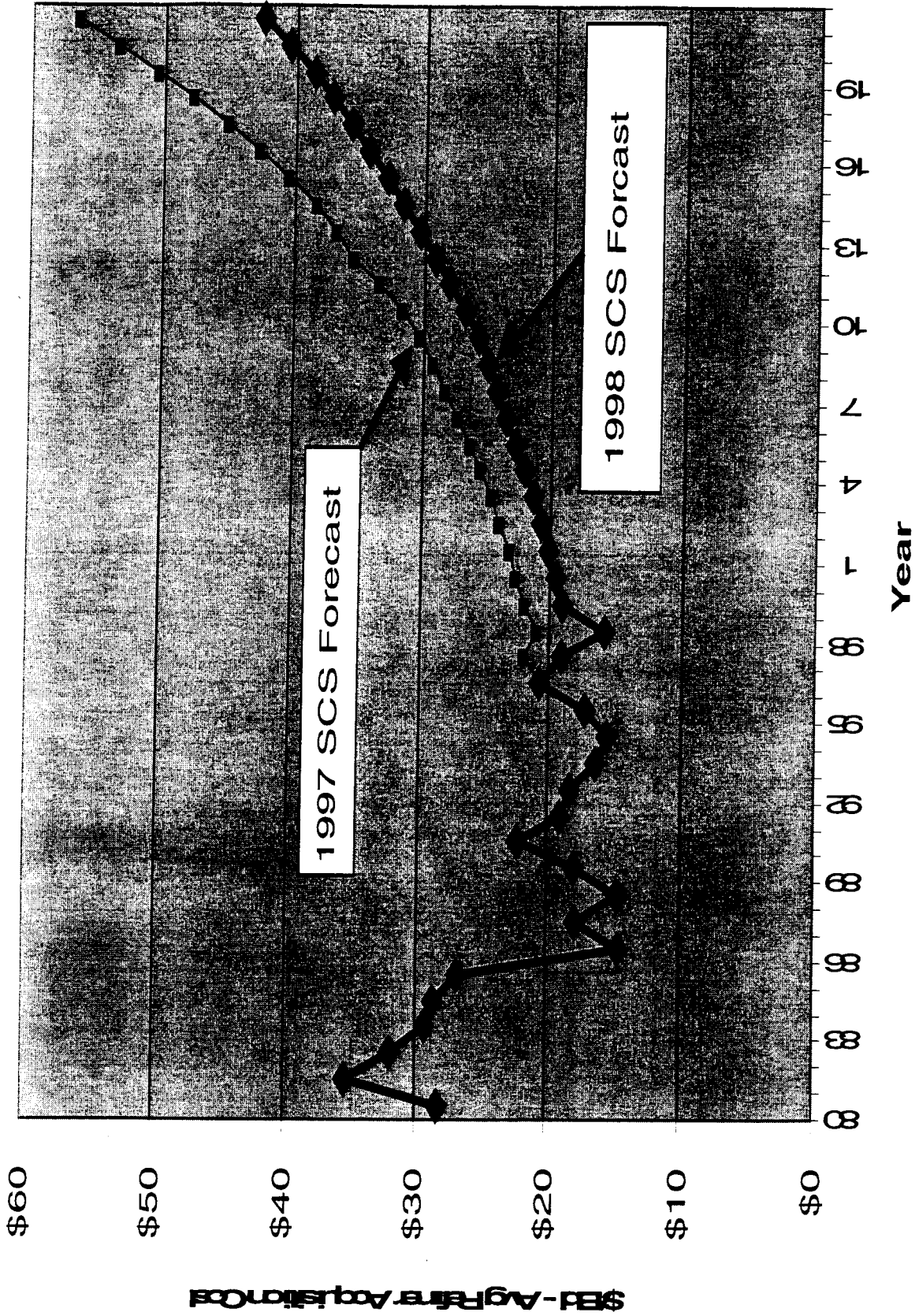
- Above 300,000 MMBtu/day, Transco and SNG will require higher firm transportation rates to expand pipelines.
- Assume that 5 to 10 days of storage capacity is purchased for new generation. This will cover cost of daily balancing and backup supplies.

Crude Oil Prices - Actual & Forecast

091
\$/Bbl - Avg Refiner Acquisition Cost



Crude Oil Prices - Actual & Forecast



**LATE-FILED EXHIBIT 2
DEPOSITION OF WILLIAM F. POPE**

TRANSMISSION STUDY SUMMARIES

083

Part 2 of 4
DN 06499-99
5/24/99

GULF - TRANSMISSION COST ASSOCIATED WITH SELF-BUILD OPTIONS FOR ECONOMIC EVALUATION PURPOSES

DANIEL OPTION

	Cost (millions,\$98)
Transmission Improvement to Coincide with Daniel Addition	
N. Brewton - Shoal River 500kv line, operate at 230kv, 60mi	60.0
Shoal River - Laguna 230kv line, 73 mi (Conversion of existing 115kv line & AEC tie)	46.5
Daniel CC connection and substation(includes GSU)	4.1
 Allocation of Incremental Transmission Cost Assumption:	
41.88% of Ellicot - N. Brewton 500kv, 60mi, operate at 230kv(est. total = \$57.5M)*	24.1
8.88% of Daniel - Big Creek 500kv, 21.5mi,operate at 230kv(est. total = \$24.2M)**	2.1
 TOTAL	 136.8

ASSUMPTIONS:

Phase Shifter In-service
 Barry - N. Brewton 500kv line in-service for 2001s
 Silverhill - Brentwood 230kv line in-service for 2000s
 Barry - Crist 230kv at 100°C operation for 2000s
 APC local area transmission problems related to the Barry - Bay Minette and the Barry - Deurwagr 115kv lines are solved.
 Gulf budgeted transmission improvements for 1998 - 2001 for local area requirements are in-service.
 Glendale - Glendale tap 115kv line improvement in-service for 2001s
 Short Circuit and Stability costs are assumed to not be significant to impact decision, hence they are not included.

NOTES:

Line construction lead time most likely will not allow the above improvements to be in-service to match the in-service date of the Daniel CC, then under certain contingency situations GULF may be required to institute combinations of 1) Back off generation at Daniel, and 2) Utilize operating procedures in APC and GULF, and possibly 3) Drop load.

* Based on APC's capital budget
 ** Based on APC and MPC budget PE

GULF - TRANSMISSION COST ASSOCIATED WITH SELF-BUILD OPTIONS FOR ECONOMIC EVALUATION PURPOSES

CRIST COGEN OPTION

	Cost (millions,\$98)		Cost (millions,\$98)
Transmission Improvement to Coincide With Crist Cogen Addition			
Crist cogen connection and substation(includes GSU)	17.0		17.0
Shoal River - Laguna 230kv line, 73 mi (Conversion of existing 115kv line & AEC tie)	46.5	(1) (2)	0.0
Crist - Shoal River 230kv line, 45mi	20.3	(1) (2)	0.0
Ellicot - Crist #2 230kv(or similar line), 60mi	36.0	(2)	0.0
Allocation of Incremental Transmission Cost Assumption:	0.0		0.0
TOTAL	119.8		17.0

ASSUMPTIONS:

Phase Shifter In-service

Barry - N. Brewton 500kv line in-service for 2001s

Silverhill - Brentwood 230kv line in-service for 2000s

Barry - Crist 230kv at 100°C operation for 2000s

APC local area transmission problems related to the Barry - Bay Minette and the Barry - Deurwagr 115kv lines are solved.

Gulf budgeted transmission improvements for 1998 - 2001 for local area requirements are in-service.

Glendale - Glendale tap 115kv line improvement in-service for 2001s

Short Circuit and Stability costs are assumed to not be significant to impact decision, hence they are not included.

NOTE:

Line construction lead time most likely will not allow the above improvements to be in-service to match the in-service date of the Crist cogen, then under certain contingency situations GULF may be required to institute combinations of 1) Back off generation at Crist, and 2) Utilize operating procedures in APC and GULF, and possibly 3) Drop load.

(1) Could be avoided if willing to take risk until future additional generation added at L. Smith or if generation added at L. Smith first.

(2) Economic analysis to be run with and without this cost where additional risks are assumed.

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3/13/98

**GULF - TRANSMISSION COST ASSOCIATED WITH SELF-BUILD OPTIONS
FOR ECONOMIC EVALUATION PURPOSES**

L. SMITH CC OPTION

	Cost (millions,\$98)		Cost (millions,\$98)
Transmission Improvement to Coincide With L. Smith Addition			
L. Smith CC connection and substation(includes GSU)	4.6		4.6
Future Transmission Improvement(by 2003)			
Ellicot - Crist #2 230kv(or similar line), 60mi	36.0	(1)	0.0
Allocation of Incremental Transmission Cost Assumption:	0.0		0.0
TOTAL	40.6		4.6

ASSUMPTIONS:

Phase Shifter In-service

Barry - N. Brewton 500kv line in-service for 2001s

Silverhill - Brentwood 230kv line in-service for 2000s

Barry - Crist 230kv at 100°C operation for 2000s

APC local area transmission problems related to the Barry - Bay Minette and
the Barry - Deurwagr 115kv lines are solved.

Gulf budgeted transmission improvements for 1998 - 2001 for local area requirements are in-service.

Glendale - Glendale tap 115kv line improvement in-service for 2001s

Short Circuit and Stability costs are assumed to not be significant to impact decision, hence they are not included.

NOTE:

Assumes GULF continues to meet their capacity needs with next generation added at L. Smith and not Crist or west of Crist

(1) Economic analysis to be run with and without this cost where additional risks are assumed.

glfsmCC\$.xls

3/13/98

Pod #2

**GULF - TRANSMISSION COST ASSOCIATED WITH SELF-BUILD OPTIONS
FOR ECONOMIC EVALUATION PURPOSES**

L. SMITH CT OPTION (1)

	Cost (millions,\$98)	Cost (millions,\$98)
Transmission Improvement to Coincide With L. Smith Addition		
L. Smith CC connection and substation(includes GSU)	4.6	4.6
Future Transmission Improvement(by 2003)		
Ellicot - Crist #2 230kv(or similar line), 60mi	36.0	(2) 0.0
Allocation of Incremental Transmission Cost Assumption:	0.0	0.0
TOTAL	40.6	4.6

ASSUMPTIONS:

Phase Shifter In-service

Barry - N. Brewton 500kv line in-service for 2001s

Silverhill - Brentwood 230kv line in-service for 2000s

Barry - Crist 230kv at 100°C operation for 2000s

APC local area transmission problems related to the Barry - Bay Minette and
the Barry - Deurwagr 115kv lines are solved.

Gulf budgeted transmission improvements for 1998 - 2001 for local area requirements are in-service.

Glendale - Glendale tap 115kv line improvement in-service for 2001s

Short Circuit and Stability costs are assumed to not be significant to impact decision, hence they are not included.

NOTE:

Assumes GULF continues to meet their capacity needs with next generation added at L. Smith and not Crist or west of Crist

(1) Assumes the new CTs will be run, out of economic dispatch if necessary, when L. Smith 1 or 2
are out of service and GULF load is higher than 90% of peak.

(2) Economic analysis to be run with and without this cost where additional risks are assumed.

glfsmCT\$.xis

3/13/98

GULF RFP Bid Evaluations
Transmission Grid and Connections Cost
 (98S. \$m)

Confidential

CONFIDENTIAL

	----- (Sithe) -----									----- (Polasky) -----									
Daniel	1064									1064									
Barry	1064									1064									
Theo	205									205									
Smith	0									0									
Sithe	530									0									
Polasky-S	0									177									
Polasky-M	0									213									
Sonat	0									0									
TOTAL	2863									2723									

	2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009
Recond. Barry - Crist w 1351ACSS																
Recond. Barry - Chickasaw with 2-1033ACSF				6.5												
Recond. Chickasaw - S. Hill #1 w 1351ACSE	6.0															
Recond. Chickasaw - S. Hill #2 w 1351ACSE	6.4															
Recond. Big Crk. - Chickasaw w 1351ACSE	2.1															
Recond. Blakely Is - Spanish Fl. w 795ACSE																
Construct Shoal Rvr. - Laguna 230 or comparable fl:	46.0								46.0							
Construct Ellicot - Crist 230kv 1351SSAC,60m																
Construct Crist - Shoal River 230kv 1351SSAC,42m																
Construct N. Brewton- Shoal River 230, 75% Compensate	45.6								45.6							
Polasky Connection - Santa Rosa									6.2							
Polasky Connection - Mobil									1.9							
Stability																
Short Circuit																
TOTAL	106.1	0.0	0.0	6.5	0.0	0.0	0.0	0.0	99.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0

GRAN TOTAL									112.6							
TOTAL (Normal Dollars for RevReq)	116.6	0.0	0.0	7.7	0.0	0.0	0.0	0.0	109.5	0.0	0.0	0.0	0.0	0.0	0.0	

	----- (Sonat) -----									----- (Smith) -----									
Daniel	1064									1064									
Barry	1064									1064									
Theo	205									205									
Smith	0									532									
Sithe	0									0									
Polasky-S	0									0									
Polasky-M	0									0									
Sonat	500									0									
TOTAL	2833									2865									

	2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009
Recond. Barry - Crist w 1351ACSS	7.2								7.2							
Recond. Barry - Chickasaw with 2-1033ACSF	6.5								6.5							
Recond. Chickasaw - S. Hill #1 w 1351ACSE	6.0								6.0							
Recond. Chickasaw - S. Hill #2 w 1351ACSE	6.4								6.4							
Recond. Big Crk. - Chickasaw w 1351ACSE	2.1								2.1							
Recond. Blakely Is - Spanish Fl. w 795ACSE	2.4								2.4							
Construct Shoal Rvr. - Laguna 230 or comparable fl:																
Construct Ellicot - Bellview 230kv 1351SSAC,60m																
Construct Crist - Shoal River 230kv 1351SSAC,42m																
Construct N. Brewton- Shoal River 230, 75% Compensate								45.6								45.6
Construct Sonat - Laguna 230kv 1351SSAC	26.0															
Smith 532 Improvements									3.1							
Smith Connection									2.2							
Sonat Connector	2.4															
Stability									1.2							
Short Circuit									0.3							
TOTAL	59.0	0.0	0.0	0.0	0.0	0.0	0.0	45.6	37.4	0.0	0.0	0.0	0.0	0.0	0.0	45.6

GRAN TOTAL									104.6							
TOTAL (Normal Dollars for RevReq)	64.6	0.0	0.0	0.0	0.0	0.0	0.0	59.1	41.1	0.0	0.0	0.0	0.0	0.0	59.1	

- Comments:**
- The ability to construct some facilities by in-service date is questionable
 - excludes GSU costs
 - Assumes Capacity Added in 2002
 - Costs are not TOTAL cost associated with generation option, but reflect those items that are not common among options.
 - Does Not include Losses
- Assumptions:**
- Utilized 1998 series base cases as starting point
 - 3600 mw to FL
 - Interface Impacts not included
 - Phase Shifter in service

Late-filed Exhibit #4 from
Deposition of William Pope

(Confidential)

CONFIDENTIAL

20 Year Self-Build

Year	Southern Units Additions			Accumulative MW	Summer Reserve Margin		Capital Costs (000\$)	Fixed O&M (000\$)	Fixed Fuel Charge (000\$)	Trans. Grid/Conn (000\$)	Trans. Losses (000\$)	Var. O&M / Fuel (000\$)	Expan. Plan Fixed Costs (000\$)	Total (000\$)	Present Worth Factor	PW Rev. Req. (000\$)	Accum. PW Rev. Req. (000\$)
	CC MW	CT MW	Total MW		Southern %	Gulf %											
2002	0	600	1174.1	1174.1	13.71	19.1%	25,754	1,413	10,306	0	(8,621)	2,845,354	19,676	2,893,881	1.0000	2,893,881	2,893,881
2003	600	300	900	2074.1	14.14	18.3%	42,214	2,491	17,667	0	(8,833)	2,970,115	63,277	3,086,930	0.9220	2,846,015	5,739,896
2004	600	0	600	2674.1	13.74	16.8%	40,124	2,563	17,667	0	(9,412)	3,110,154	97,434	3,258,529	0.8500	2,769,761	8,509,657
2005	1200	900	2100	4774.1	14.22	14.1%	38,132	2,637	17,667	0	(9,779)	3,318,365	198,701	3,565,722	0.7837	2,794,336	11,303,993
2006	600	0	600	5374.1	13.57	12.4%	36,231	2,713	17,667	0	(10,129)	3,480,084	234,153	3,760,718	0.7225	2,717,142	14,021,135
2007	0	1200	1200	6574.1	14.11	16.5%	34,412	2,791	17,667	0	(9,492)	3,693,345	276,997	4,015,719	0.6661	2,674,947	16,696,082
2008	300	300	600	7174.1	13.56	14.5%	32,649	2,871	17,667	0	(8,534)	3,905,621	306,733	4,257,007	0.6141	2,614,368	19,310,450
2009	600	600	1200	8374.1	14.06	12.2%	30,910	2,954	17,667	0	(6,478)	4,100,888	367,429	4,513,369	0.5662	2,555,486	21,865,936
2010	0	0	0	8374.1	14.4	18.3%	29,164	3,039	17,667	0	(4,370)	4,122,900	367,429	4,535,829	0.5220	2,367,771	24,233,707
2011	900	300	1200	9574.1	13.96	16.1%	27,425	3,126	17,667	0	(2,212)	4,231,956	438,991	4,716,953	0.4813	2,270,152	26,503,859
2012	900	600	1500	11074.1	14.06	11.0%	25,679	3,216	17,667	0	0	4,440,869	523,867	5,011,299	0.4437	2,223,587	28,727,445
2013	1800	0	1800	12874.1	14.23	9.4%	23,940	3,309	17,667	0	0	4,637,669	648,258	5,330,843	0.4091	2,180,771	30,908,216
2014	900	600	1500	14374.1	13.75	7.8%	22,195	3,404	17,667	0	0	4,846,042	736,511	5,625,819	0.3772	2,121,829	33,030,045
2015	1200	600	1800	16174.1	14.1	3.4%	20,455	3,502	17,667	0	0	5,090,296	847,938	5,979,858	0.3477	2,079,342	36,109,386
2016	1200	600	1800	17974.1	13.93		18,710	3,603	17,667	0	0	5,346,092	961,457	6,347,529	0.3206	2,034,932	37,144,319
2017	2100	600	2700	20674.1	13.84		17,137	3,707	17,667	0	0	5,845,007	1,144,105	7,027,623	0.2956	2,077,132	39,221,451
2018	1200	900	2100	22774.1	13.62		15,891	3,814	17,667	0	0	6,262,526	1,275,331	7,575,229	0.2725	2,064,248	41,285,699
2019	2100	0	2100	24874.1	14.09		14,812	3,924	17,667	0	0	6,778,473	1,437,584	8,252,459	0.2512	2,073,289	43,358,988
2020	1500	600	2100	26974.1	13.85		13,727	4,037	17,667	0	0	7,242,483	1,583,483	8,861,396	0.2316	2,052,527	45,411,515
2021	2100	1500	3600	30574.1	13.87		12,647	4,153	17,667	0	0	7,851,764	1,822,761	9,708,992	0.2135	2,073,344	47,484,859
2022	2100	300	2400	32974.1	13.78		4,960	1,780	7,361	0	0	8,407,006	2,008,764	10,429,872	0.1969	2,053,461	49,538,320

091

YEAR	PEAK DEMAND (MW)	STARTING CAPACITY (MW)	CAPACITY ADDITION (MW)	ENDING CAPACITY (MW)	PERCENT RESERVES
2002	2,265	2,123	574	2,697	19.1%
2003	2,280	2,697	0	2,697	18.3%
2004	2,309	2,697	0	2,697	16.8%
2005	2,347	2,697	-19	2,678	14.1%
2006	2,383	2,678	0	2,678	12.4%
2007	2,425	2,678	148	2,826	16.5%
2008	2,466	2,826	-3	2,823	14.5%
2009	2,515	2,823	-2	2,821	12.2%
2010	2,565	2,821	214	3,035	18.3%
2011	2,614	3,035	0	3,035	16.1%
2012	2,651	3,035	-92	2,943	11.0%
2013	2,678	2,943	-13	2,930	9.4%
2014	2,711	2,930	-7	2,923	7.8%
2015	2,751	2,923	-78	2,845	3.4%
2016	2,787	2,845	-467	2,378	-14.7%
2017	2,829	2,378	-80	2,298	-18.8%
2018	2,871	2,298	-208	2,090	-27.2%
2019	2,914	2,090	-495	1,595	-45.3%
2020	2,957	1,595	0	1,595	-46.1%
2021	3,016	1,595	0	1,595	-47.1%

DOCUMENT NUMBER-DATE

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DOCUMENT NUMBER-DATE

05938 MAY 10 08

Respondent A - 2 Cogen Facilities																		
Proposal Size (MW)	351.5																	
Year	CC MW	CT MW	Total MW	Accumula MW	Summer Reserve Margin Southern %	Gulf %	Capital Costs (000\$)	Fixed O&M (000\$)	Fixed Fuel Charge (000\$)	Trans. Grid/Conn (000\$)	Trans. Losses (000\$)	Provision G&F Var. O&M / Fuel (000\$)	Provision Fixed Expan. Plan Fixed Costs (000\$)	Total (000\$)	Present Worth Factor	PW Rev. Req. (000\$)	Accum. PW Rev. Req. (000\$)	Delta Resp. - Self/Built Accum. PW Rev. Req.
2002	300	600	1251.5	1251.5	13.95	9.2%	13,505			14,700	(4,617)	2,849,500	36,132	2,909,220	1.0000	2,909,220	2,909,220	16,338
2003	600	300	900	2151.5	14.37	8.5%	23,845			14,209	(4,730)	2,979,974	79,732	3,093,030	0.9220	2,851,639	5,760,859	20,863
2004	600	0	600	2751.5	13.97	7.2%	24,561			14,118	(5,048)	3,119,120	113,889	3,266,639	0.8500	2,776,665	8,537,513	27,896
2005	900	900	1800	4551.5	13.58	4.6%	25,297			12,761	(5,251)	3,332,824	197,757	3,563,388	0.7837	2,792,507	11,330,020	26,027
2006	600	300	900	5451.5	13.79	3.0%	26,056			13,702	(5,459)	3,494,161	244,016	3,772,477	0.7225	2,725,637	14,055,658	34,822
2007	0	1200	1200	6651.5	14.32		26,838			12,310	(5,127)	3,710,325	286,389	4,030,736	0.6661	2,684,850	16,740,608	44,826
2008	300	300	600	7251.5	13.77		27,643			11,073	(4,605)	3,925,396	316,125	4,275,632	0.6141	2,625,806	19,366,413	66,964
2009	900	300	1200	8451.5	14.26		28,472			706	(3,492)	4,112,282	384,964	4,522,933	0.5662	2,560,901	21,927,315	81,379
2010	0	0	0	8451.5	14.6		29,327			-3,065	(2,354)	4,133,298	384,964	4,542,170	0.5220	2,371,081	24,298,396	64,889
2011	600	600	1200	9651.5	14.16		30,206			-1,662	(1,190)	4,251,142	448,188	4,726,684	0.4813	2,274,835	26,573,231	69,372
2012	1200	300	1500	11151.5	14.25		31,113			-1,578	0	4,452,721	541,500	5,028,756	0.4437	2,229,114	28,802,345	74,800
2013	1500	0	1500	12651.5	13.68		32,046			-1,222	0	4,652,953	645,159	5,328,936	0.4091	2,179,991	30,982,336	74,120
2014	900	900	1800	14451.5	13.93		33,007			-530	0	4,866,361	745,858	5,644,696	0.3772	2,128,948	33,111,285	81,240
2015	1500	0	1500	15951.5	13.57		33,998			-2,876	0	5,097,448	853,445	5,982,015	0.3477	2,080,091	35,191,376	81,990
2016	1200	900	2100	18051.5	14.11		35,018			-1,560	0	5,358,861	979,880	6,372,199	0.3206	2,042,841	37,234,217	89,896
2017	1800	900	2700	20751.5	13.82		36,068			-338	0	5,866,194	1,153,355	7,055,279	0.2956	2,085,306	39,318,524	98,073
2018	1500	600	2100	22851.5	13.79		37,150			-5,872	0	6,276,676	1,293,927	7,601,882	0.2725	2,071,511	41,391,034	105,336
2019	1800	0	1800	24651.5	13.59		38,266			398	0	6,791,466	1,433,001	8,263,130	0.2512	2,075,970	43,467,004	108,016
2020	1800	600	2400	27051.5	14.02		39,413			-1,727	0	7,257,031	1,602,514	8,897,231	0.2316	2,060,828	45,527,832	116,317
2021	2100	1500	3600	30651.5	14.04		40,595			-3,746	0	7,866,821	1,841,792	9,745,462	0.2135	2,081,132	47,608,964	124,105
2022	2400	300	2700	33351.5	13.83		20,906			0	0	8,429,140	2,052,304	10,502,350	0.1969	2,067,731	49,676,695	138,374

*** This alternative would require an additional 76 MW to achieve 12.6% reserve margin requirement for Gulf Power

Capital Cost was supplied in \$/kW-month

Two sites were included in the proposal - 177 MW and 212 MW for a total of 389 MW, but have summer capacities of 157.2 and 194.3 MW
Capital costs for both sites were multiplied by their respective MW's and then divided by the total MW's

Year 2002 capital cost is for 7 months
Year 2012 capital cost is for 6 months

Additional MW Required to get to 12.6% 76

YEAR	PEAK DEMAND (MW)	STARTING CAPACITY (MW)	CAPACITY ADDITION (MW)	ENDING CAPACITY (MW)	PERCENT RESERVES
2002	2,266	2,123	352	2,475	9.2%
2003	2,280	2,475	0	2,475	8.5%
2004	2,309	2,475	0	2,475	7.2%
2005	2,347	2,475	-19	2,456	4.6%
2006	2,383	2,456	0	2,456	3.0%
2007	2,425	2,456	148	2,604	7.4%
2008	2,466	2,604	-3	2,601	5.5%
2009	2,515	2,601	-2	2,599	3.3%
2010	2,566	2,599	214	2,813	9.6%
2011	2,614	2,813	0	2,813	7.6%
2012	2,651	2,813	-92	2,721	2.6%
2013	2,678	2,721	-13	2,708	1.1%
2014	2,711	2,708	-7	2,701	-0.4%
2015	2,751	2,701	-78	2,623	-4.7%
2016	2,787	2,623	-467	2,156	-22.7%
2017	2,829	2,156	-80	2,076	-26.6%
2018	2,871	2,076	-208	1,868	-35.0%
2019	2,914	1,868	-495	1,373	-52.9%
2020	2,957	1,373	0	1,373	-53.6%
2021	3,016	1,373	0	1,373	-54.5%

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Respondent B - CC Proposal (7 Year Pricing)																		
Proposal Size (MW)	Southern Units Additions				Summer Reserve Margin		Capital Costs (000\$)	Fixed O&M (000\$)	Fixed Fuel Charge (000\$)	Trans. Grid/Conn (000\$)	Trans. Losses (000\$)	Var. O&M / Fuel (000\$)	Expan. Plan Fixed Costs (000\$)	Total (000\$)	Present Worth Factor	PW Rev. Req. (000\$)	Accum. PW Rev. Req. (000\$)	Delta Resp. - SelfBuild Accum. PW Rev. Req. (000\$)
	Year	CC MW	CT MW	Total MW	Accumulative MW	Southern %												
2002	0	900	1400	1400	14.4	15.8%	17,975	9,198	5,000	(7,786)	2,850,559	29,514	2,904,500	1.0000	2,904,500	2,904,500	10,818	
2003	600	0	600	2000	13.91	15.0%	31,667	15,768	5,423	(7,974)	2,979,099	63,043	3,087,027	0.9220	2,846,104	5,750,804	10,708	
2004	600	0	600	2600	13.52	13.6%	32,443	15,768	4,706	(8,494)	3,119,762	97,200	3,261,384	0.8500	2,772,188	8,522,792	13,136	
2005	900	1200	2100	4700	14.01	11.0%	33,227	15,768	3,828	(8,827)	3,333,174	191,625	3,566,796	0.7837	2,756,745	11,319,537	16,543	
2006	900	0	900	5600	14.21	9.3%	34,075	15,768	5,536	(9,141)	3,487,933	244,802	3,778,973	0.7225	2,730,331	14,049,867	28,732	
2007	0	900	900	6500	13.9		34,948	15,768	4,504	(8,565)	3,701,496	276,582	4,024,733	0.6661	2,680,951	16,730,819	34,737	
2008	300	600	900	7400	14.17		35,822	15,768	3,257	(7,703)	3,915,419	317,162	4,279,724	0.6141	2,628,319	19,359,138	48,688	
2009	1200	300	1500	8900	14.13		15,341	6,570	5,298	(5,849)	4,117,021	405,248	4,643,829	0.5662	2,572,819	21,931,757	66,822	
2010	0	0	0	8900	14.47		0	0	1,916	(3,917)	4,139,628	405,248	4,542,844	0.5220	2,371,433	24,303,191	69,484	
2011	600	600	1200	10100	14.02		0	0	4,156	(1,999)	4,258,007	488,471	4,728,836	0.4813	2,275,774	26,578,965	75,106	
2012	1200	300	1500	11600	14.12		0	0	4,607	0	4,459,226	561,784	5,025,617	0.4437	2,229,896	28,808,861	81,415	
2013	1500	0	1500	13100	13.55		0	0	2,444	0	4,658,921	665,443	5,326,808	0.4091	2,179,121	30,987,981	79,785	
2014	900	900	1800	14900	13.81		0	0	5,303	0	4,872,318	766,141	5,643,782	0.3772	2,128,596	33,116,577	86,532	
2015	1200	600	1800	16700	14.17		0	0	2,876	0	5,117,110	877,569	5,997,565	0.3477	2,085,496	35,202,072	82,686	
2016	1500	300	1800	18500	13.99		0	0	0	0	5,365,981	1,000,092	6,366,063	0.3206	2,040,871	37,242,943	96,824	
2017	1800	900	2700	21200	13.7		0	0	6,767	0	5,872,402	1,314,138	7,596,741	0.2966	2,004,554	39,327,498	106,047	
2018	1500	600	2100	23300	13.88		0	0	0	0	6,282,603	1,486,870	8,278,832	0.2725	2,070,110	41,397,608	111,909	
2019	1800	300	2100	25400	14.15		0	0	3,980	0	6,805,042	1,681,700	8,895,578	0.2512	2,079,427	43,477,035	118,047	
2020	1500	600	2100	27500	13.9		0	0	0	0	7,270,810	1,812,768	9,885,578	0.2318	2,057,565	45,534,700	123,186	
2021	2400	1200	3600	31100	13.93		0	0	0	0	7,872,211	1,861,928	9,734,139	0.2135	2,078,714	47,613,414	128,885	
2022	2100	300	2400	33500	13.83		0	0	0	0	8,428,212	2,047,932	10,476,144	0.1969	2,062,572	49,675,986	137,866	

YEAR	PEAK DEMAND (MW)	STARTING CAPACITY (MW)	CAPACITY ADDITION (MW)	ENDING CAPACITY (MW)	PERCENT RESERVES
2002	2,285	2,123	600	2,823	15.8%
2003	2,280	2,823	0	2,823	16.0%
2004	2,309	2,823	0	2,823	13.8%
2005	2,347	2,823	-19	2,804	11.0%
2006	2,383	2,804	0	2,804	9.3%
2007	2,425	2,804	148	2,752	13.5%
2008	2,466	2,752	-3	2,749	11.5%
2009	2,515	2,749	-502	2,247	-10.7%
2010	2,565	2,247	214	2,461	-4.1%
2011	2,614	2,461	0	2,461	-5.9%
2012	2,651	2,461	-92	2,369	-10.6%
2013	2,678	2,369	-13	2,356	-12.0%
2014	2,711	2,356	-7	2,349	-13.4%
2015	2,751	2,349	-78	2,271	-17.4%
2016	2,787	2,271	-467	1,804	-35.3%
2017	2,829	1,804	-80	1,724	-39.1%
2018	2,871	1,724	-208	1,516	-47.2%
2019	2,914	1,516	-496	1,021	-65.0%
2020	2,967	1,021	0	1,021	-65.5%
2021	3,016	1,021	0	1,021	-66.1%

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Respondent B - CC Proposal (10 Year Pricing)																		
Proposal Size (MW)	500																Delta Resp. - SelfBuild	
Year	CC MW	Southern Units Additions CT MW	Total MW	Accumulative MW	Summer Reserve Margin Southern %	Summer Reserve Margin Gulf %	Capital Costs (000\$)	Fixed O&M (000\$)	Fixed Fuel Charge (000\$)	Trans. Grid/Conn (000\$)	Trans. Losses (000\$)	Var. O&M / Fuel (000\$)	Expan. Plan Fixed Costs (000\$)	Total (000\$)	Present Worth Factor	PW Rev. Req. (000\$)	Accum. PW Rev. Req. (000\$)	Delta Accum. PW Rev. Req. (000\$)
2002	0	900	1400	1400	14.4	15.8%	16,537		9,198	5,000	(7,786)	2,849,873	29,514	2,902,336	1.0000	2,902,336	2,902,336	8,454
2003	600	0	600	2000	13.91	15.0%	29,117		15,768	5,423	(7,974)	2,977,438	83,043	3,062,816	0.9220	2,842,222	5,744,557	4,881
2004	600	0	600	2600	13.52	13.8%	29,845		15,768	4,706	(8,494)	3,117,630	97,200	3,256,655	0.8500	2,768,168	8,512,726	3,089
2005	900	1200	2100	4700	14.01	11.0%	30,591		15,768	3,828	(8,877)	3,331,506	191,825	3,564,492	0.7837	2,790,372	11,306,098	2,104
2006	900	0	900	5600	14.21	9.3%	31,356		15,768	5,536	(9,141)	3,486,960	244,802	3,775,281	0.7225	2,727,664	14,033,762	12,626
2007	0	900	900	6500	13.9		32,140		15,768	4,504	(8,565)	3,699,964	276,582	4,020,393	0.6661	2,678,061	16,711,822	18,740
2008	300	600	900	7400	14.17		32,944		15,768	3,257	(7,703)	3,914,713	317,182	4,276,140	0.6141	2,626,118	19,337,940	27,490
2009	600	300	900	8300	13.88		33,787		15,768	5,298	(5,849)	4,106,335	366,756	4,522,076	0.5662	2,560,416	21,898,356	32,420
2010	0	0	0	8300	14.2		34,611		15,768	1,916	(3,947)	4,129,873	366,758	4,544,977	0.5220	2,372,546	24,270,902	37,195
2011	900	300	1200	9500	13.77		35,477		15,768	4,156	(1,999)	4,239,282	438,318	4,731,002	0.4813	2,276,913	26,547,816	43,957
2012	1500	600	2100	11600	14.12		15,196		6,570	4,507	0	4,458,212	563,894	5,048,378	0.4437	2,240,040	28,787,856	60,410
2013	1500	0	1500	13100	13.65		0		0	2,444	0	4,658,921	667,553	5,328,918	0.4091	2,179,984	30,967,839	58,622
2014	900	900	1800	14900	13.81		0		0	5,300	0	4,872,318	768,251	5,645,872	0.3772	2,129,392	33,097,231	87,186
2015	1200	600	1800	16700	14.17		0		0	2,878	0	5,117,110	879,679	5,999,666	0.3477	2,066,229	35,163,459	74,073
2016	1500	300	1800	18500	13.99		0		0	0	0	5,365,961	1,002,202	6,368,163	0.3206	2,041,547	37,225,007	80,888
2017	1800	900	2700	21200	13.7		0		0	6,767	0	5,872,402	1,175,676	7,054,845	0.2966	2,065,178	39,310,185	88,734
2018	1500	600	2100	23300	13.68		0		0	0	0	6,282,603	1,316,248	7,598,851	0.2725	2,070,685	41,380,870	96,171
2019	1800	300	2100	25400	14.15		0		0	3,980	0	6,806,042	1,468,980	8,279,002	0.2512	2,079,967	43,460,827	101,840
2020	1500	600	2100	27500	13.9		0		0	0	0	7,270,810	1,614,878	8,885,688	0.2316	2,068,154	45,518,981	107,466
2021	2400	1200	3600	31100	13.93		0		0	0	0	7,872,211	1,864,038	9,736,249	0.2135	2,079,165	47,598,146	113,287
2022	2100	300	2400	33500	13.83		0		0	0	0	8,428,212	2,050,042	10,478,254	0.1969	2,062,987	49,661,133	122,813

YEAR	PEAK DEMAND (MW)	STARTING CAPACITY (MW)	CAPACITY ADDITION (MW)	ENDING CAPACITY (MW)	PERCENT RESERVES
2002	2,285	2,123	600	2,823	15.8%
2003	2,280	2,623	0	2,623	16.0%
2004	2,309	2,623	0	2,623	13.8%
2005	2,347	2,623	-19	2,604	11.0%
2006	2,383	2,604	0	2,604	9.3%
2007	2,425	2,604	148	2,752	13.8%
2008	2,486	2,752	-3	2,749	11.5%
2009	2,515	2,749	-2	2,747	9.2%
2010	2,565	2,747	214	2,961	15.4%
2011	2,614	2,961	0	2,961	13.3%
2012	2,651	2,961	-692	2,369	-10.6%
2013	2,678	2,369	-13	2,356	-12.0%
2014	2,711	2,356	-7	2,349	-13.4%
2015	2,751	2,349	-78	2,271	-17.4%
2016	2,787	2,271	-467	1,804	-35.3%
2017	2,829	1,804	-80	1,724	-39.1%
2018	2,871	1,724	-208	1,516	-47.2%
2019	2,914	1,516	-495	1,021	-65.0%
2020	2,957	1,021	0	1,021	-65.5%
2021	3,016	1,021	0	1,021	-66.1%

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Respondent B - CC Proposal (20 Year Pricing)															Delta			
Proposed Size (MW)	500														Resp. - SelfBuild			
Year	CC MW	Southern Units Additions		Accumulative MW	Summer Reserve Margin		Capital Costs (000\$)	Fixed O&M (000\$)	Fixed Fuel Charge (000\$)	Trans. Grid/Conn (000\$)	Trans. Losses (000\$)	Var. O&M / Fuel (000\$)	Expan. Plan Fixed Costs (000\$)	Total (000\$)	Present Worth Factor	PW Rev. Req. (000\$)	Accum. PW Rev. Req. (000\$)	Accum. PW Rev. Req. (000\$)
2002	0	900	1400	1400	14.4	15.8%	18,537		9,198	5,000	(7,786)	2,849,873	29,514	2,902,336	1.0000	2,902,336	2,902,336	8,464
2003	600	0	600	2000	13.91	16.0%	29,117		15,768	5,423	(7,974)	2,977,424	63,043	3,082,802	0.9220	2,842,209	5,744,545	4,848
2004	600	0	600	2600	13.62	13.8%	29,846		15,768	4,706	(8,494)	3,117,635	97,200	3,256,660	0.8500	2,768,173	8,512,717	3,080
2005	900	1200	2100	4700	14.01	11.0%	30,591		15,768	3,828	(8,827)	3,331,494	191,625	3,564,480	0.7837	2,750,362	11,306,080	2,086
2006	900	0	900	5600	14.21	9.3%	31,356		15,768	5,536	(9,141)	3,486,961	244,802	3,775,272	0.7225	2,727,657	14,033,737	12,802
2007	0	900	900	6500	13.9		32,140		15,768	4,504	(8,565)	3,699,962	276,582	4,020,391	0.6661	2,678,059	16,711,796	15,714
2008	300	600	900	7400	14.17		32,944		15,768	3,257	(7,703)	3,914,712	317,162	4,276,139	0.6141	2,626,117	19,337,914	27,464
2009	600	300	900	8300	13.86		33,787		15,768	5,298	(5,849)	4,106,333	366,756	4,522,074	0.5662	2,560,415	21,898,328	32,392
2010	0	0	0	8300	14.2		34,611		15,768	1,916	(3,947)	4,129,858	366,756	4,544,962	0.5220	2,472,539	24,270,867	37,180
2011	900	300	1200	9500	13.77		35,477		15,768	4,156	(1,999)	4,239,275	438,318	4,730,996	0.4813	2,276,910	26,547,777	43,918
2012	900	600	1500	11000	13.87		36,369		15,768	4,507	0	4,449,664	523,194	5,029,503	0.4437	2,231,664	28,779,441	51,998
2013	1500	300	1800	12800	14.04		37,293		15,768	2,444	0	4,652,223	639,069	5,346,797	0.4091	2,187,298	30,966,739	68,822
2014	1200	300	1500	14300	13.58		38,229		15,768	5,303	0	4,852,347	735,998	5,647,845	0.3772	2,130,060	33,096,799	88,764
2015	1500	300	1800	16100	13.93		39,165		15,768	2,876	0	5,089,863	856,284	6,000,936	0.3477	2,087,714	35,184,513	75,128
2016	1200	600	1800	17900	13.76		40,137		15,768	0	0	5,344,844	969,783	6,370,532	0.3206	2,042,307	37,226,820	82,801
2017	2100	900	3000	20900	14.18		41,135		15,768	6,787	0	5,849,680	1,165,590	7,078,940	0.2956	2,022,300	39,319,120	87,868
2018	1200	900	2100	23000	14.13		42,170		15,768	0	0	6,267,764	1,296,816	7,622,518	0.2725	2,077,134	41,396,253	110,668
2019	1800	0	1800	24800	13.92		43,230		15,768	3,980	0	6,782,263	1,435,890	8,281,132	0.2512	2,080,492	43,476,748	117,768
2020	1500	600	2100	26900	13.89		44,291		15,768	0	0	7,248,849	1,581,788	8,898,698	0.2318	2,058,851	45,535,597	124,082
2021	2100	1500	3600	30500	13.71		45,388		15,768	0	0	7,856,518	1,821,087	9,737,741	0.2135	2,079,483	47,615,080	130,221
2022	2400	600	3000	33500	13.83		49,441		6,570	0	0	8,435,465	2,048,020	10,507,496	0.1989	2,088,744	49,683,824	148,804

YEAR	PEAK DEMAND (MW)	STARTING CAPACITY (MW)	CAPACITY ADDITION (MW)	ENDING CAPACITY (MW)	PERCENT RESERVES
2002	2,266	2,123	600	2,823	15.8%
2003	2,280	2,823	0	2,823	16.0%
2004	2,309	2,823	0	2,823	13.8%
2005	2,347	2,823	-19	2,604	11.0%
2006	2,383	2,604	0	2,604	9.3%
2007	2,425	2,604	148	2,752	13.5%
2008	2,466	2,752	-3	2,749	11.5%
2009	2,515	2,749	-2	2,747	9.2%
2010	2,566	2,747	214	2,961	16.4%
2011	2,614	2,961	0	2,961	13.3%
2012	2,651	2,961	-92	2,869	8.2%
2013	2,678	2,869	-13	2,856	6.6%
2014	2,711	2,856	-7	2,849	5.1%
2015	2,751	2,849	-78	2,771	0.7%
2016	2,787	2,771	-467	2,304	-17.3%
2017	2,829	2,304	-80	2,224	-21.4%
2018	2,871	2,224	-208	2,016	-29.8%
2019	2,914	2,016	-496	1,521	-47.8%
2020	2,957	1,521	0	1,521	-48.6%
2021	3,016	1,521	0	1,521	-49.6%

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Respondent B - CT Proposal (7 Year Pricing)																		
Proposal Size (MW)	486																	
Year	Southern Units Additions				Summer Reserve Margin		Capital Costs (000\$)	Fixed O&M (000\$)	Fixed Fuel Charge (000\$)	Trans. Grid/Conn (000\$)	Trans. Losses (000\$)	Var. O&M / Fuel (000\$)	Expan. Plan Fixed Costs (000\$)	Total (000\$)	Present Worth Factor	PW Rev. Req. (000\$)	Accum. PW Rev. Req. (000\$)	Delta Resp. - Self-Build Accum. PW Rev. Req. (000\$)
	CC MW	CT MW	Total MW	Accumulative MW	Southern %	Gulf %												
2002	300	600	1366	1366	14.36	15.2%	13,479			5,000	(800)	2,859,321	36,132	2,913,132	1.0000	2,913,132	2,913,132	19,250
2003	600	0	600	1966	13.87	14.4%	23,680			5,423	(814)	2,989,568	69,660	3,087,517	0.9220	2,846,556	5,759,687	19,791
2004	900	0	900	2866	14.37	13.0%	24,106			4,706	(846)	3,122,948	120,896	3,271,810	0.8560	2,781,050	8,540,730	31,080
2005	900	900	1800	4666	13.97	10.4%	23,578			3,828	(872)	3,336,594	204,764	3,567,892	0.7857	2,496,037	11,336,774	32,781
2006	300	600	900	5566	14.17	8.7%	24,958			5,536	(876)	3,501,673	244,106	3,775,397	0.7225	2,121,747	14,064,522	43,287
2007	0	900	900	6466	13.86		25,384			4,504	(803)	3,718,517	275,884	4,023,466	0.6661	2,680,121	16,744,643	48,581
2008	600	300	900	7366	14.14		25,810			3,257	(733)	3,927,553	324,511	4,280,398	0.6141	2,628,733	19,373,375	62,926
2009	900	600	1500	8866	14.13		11,042			5,298	(564)	4,118,229	404,453	4,538,458	0.5862	2,569,692	21,943,067	77,131
2010	0	0	0	8866	14.47		0			1,916	(386)	4,139,628	404,453	4,545,611	0.5220	2,372,877	24,315,944	82,238
2011	600	600	1200	10066	14.02		0			4,156	(198)	4,258,007	467,677	4,729,641	0.4813	2,276,259	26,592,203	88,344
2012	1200	300	1500	11566	14.12		0			4,507	0	4,459,225	560,989	5,024,721	0.4437	2,229,543	28,821,746	94,300
2013	1500	0	1500	13066	13.55		0			2,444	0	4,658,921	664,648	5,326,013	0.4091	2,178,756	31,000,541	92,326
2014	900	900	1800	14866	13.81		0			4,872,318	0	4,872,318	765,347	5,642,968	0.3772	2,128,296	33,128,838	98,793
2015	1200	600	1800	16666	14.17		0			5,117,110	0	5,117,110	876,774	5,996,760	0.3477	2,085,219	35,214,056	104,670
2016	1500	300	1800	18466	13.99		0			5,365,961	0	5,365,961	999,297	6,365,258	0.3206	2,040,616	37,254,672	110,363
2017	1800	900	2700	21166	13.68		0			6,767	0	5,872,402	1,172,772	7,051,941	0.2956	2,084,320	39,338,992	117,541
2018	1500	600	2100	23266	13.7		0			6,282,603	0	6,282,603	1,313,344	7,596,947	0.2725	2,069,893	41,408,886	123,187
2019	1800	300	2100	25366	14.15		0			3,980	0	6,806,042	1,466,076	8,276,098	0.2512	2,079,228	43,488,113	129,128
2020	1500	600	2100	27466	13.9		0			2,270,810	0	7,270,810	1,611,974	8,882,784	0.2316	2,067,481	45,545,595	134,080
2021	2400	1200	3600	31966	13.93		0			7,872,211	0	7,872,211	1,861,134	9,733,345	0.2135	2,078,544	47,624,139	139,280
2022	2100	300	2400	33466	13.83		0			8,428,212	0	8,428,212	2,047,137	10,475,349	0.1969	2,062,415	49,686,555	148,234

YEAR	PEAK DEMAND (MW)	STARTING CAPACITY (MW)	CAPACITY ADDITION (MW)	ENDING CAPACITY (MW)	PERCENT RESERVE
2002	2,265	2,123	486	2,609	15.2%
2003	2,280	2,609	0	2,609	14.4%
2004	2,309	2,609	0	2,609	13.0%
2005	2,347	2,609	-19	2,590	10.4%
2006	2,383	2,590	0	2,590	8.7%
2007	2,425	2,590	148	2,738	12.9%
2008	2,466	2,738	-3	2,735	10.9%
2009	2,515	2,735	-488	2,247	-10.7%
2010	2,565	2,247	214	2,461	-4.1%
2011	2,614	2,461	0	2,461	-5.9%
2012	2,651	2,461	-92	2,369	-10.6%
2013	2,678	2,369	-13	2,356	-12.0%
2014	2,711	2,356	-7	2,349	-13.4%
2015	2,751	2,349	-78	2,271	-17.4%
2016	2,787	2,271	-467	1,804	-35.3%
2017	2,829	1,804	-80	1,724	-39.1%
2018	2,871	1,724	-208	1,516	-47.2%
2019	2,914	1,516	-495	1,021	-65.0%
2020	2,957	1,021	0	1,021	-65.5%
2021	3,016	1,021	0	1,021	-66.1%

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Respondent B - CT Proposal (10 Year Pricing)																		
Year	Southern Units Additions				Summer Reserve Margin		Capital Costs (000\$)	Fixed O&M (000\$)	Fixed Fuel Charge (000\$)	Trans. Grid/Conn (000\$)	Trans. Losses (000\$)	Var. O&M/Fuel (000\$)	Expen. Plan Fixed Costs (000\$)	Total (000\$)	Present Worth Factor	PW Rev. Req. (000\$)	Accum. PW Rev. Req. (000\$)	Delta Resp. - SelfBuild Accum. PW Rev. Req. (000\$)
	CC MW	CT MW	Total MW	Accumulative MW	Southern %	Gulf %												
2002	300	600	1386	1386	14.36	15.2%	12,245	5,000	(800)	2,859,221	36,132	2,911,798	1.0000	2,911,798	2,911,798	17,917		
2003	600	0	1986	1986	13.87	14.4%	21,504	5,423	(814)	2,989,490	69,660	3,065,253	0.9229	2,844,468	5,156,266	16,370		
2004	900	0	2886	2886	14.37	13.0%	21,880	4,706	(846)	3,122,869	120,896	3,269,505	0.8509	2,179,091	8,535,357	25,700		
2005	900	900	1800	4686	13.97	10.4%	22,263	3,828	(872)	3,336,487	204,764	3,566,470	0.7837	2,194,923	11,330,280	26,287		
2006	300	600	900	5586	14.17	8.7%	22,653	5,536	(876)	3,501,591	244,106	3,773,009	0.7225	2,226,022	14,056,302	36,167		
2007	0	900	900	6486	13.86		23,049	4,504	(803)	3,718,356	275,884	4,020,990	0.6661	2,678,458	16,734,760	38,678		
2008	600	300	900	7386	14.14		23,453	3,257	(733)	3,927,304	324,511	4,277,881	0.6141	2,627,187	19,361,947	51,497		
2009	900	0	900	8286	13.82		23,863	5,298	(564)	4,113,285	382,248	4,524,130	0.5662	2,561,579	21,923,526	57,590		
2010	0	0	0	8286	14.17		24,281	1,916	(386)	4,135,383	382,248	4,543,441	0.5229	2,371,745	24,295,271	61,564		
2011	600	600	1200	9486	13.73		24,705	4,156	(198)	4,251,696	445,471	4,725,830	0.4813	2,274,424	26,569,695	66,806		
2012	1200	900	2100	11586	14.12		10,573	4,507	0	4,459,066	562,611	5,026,758	0.4437	2,234,883	28,804,578	77,133		
2013	1500	0	1500	13086	13.55		0	2,444	0	4,658,920	666,270	5,327,634	0.4091	2,179,458	30,984,037	75,821		
2014	900	900	1800	14886	13.81		0	5,303	0	4,872,318	766,968	5,644,589	0.3772	2,128,908	33,112,945	82,900		
2015	1200	600	1800	16686	14.17		0	2,876	0	5,117,110	878,396	5,998,382	0.3477	2,085,783	35,198,727	89,341		
2016	1500	300	1800	18486	13.99		0	0	0	5,365,961	1,000,919	6,366,880	0.3206	2,041,136	37,239,863	96,546		
2017	1800	900	2700	21186	13.7		0	6,767	0	5,872,402	1,174,393	7,053,562	0.2956	2,084,799	39,324,662	103,211		
2018	1500	600	2100	23286	13.68		0	0	0	6,282,603	1,314,965	7,597,568	0.2725	2,070,335	41,394,997	109,299		
2019	1800	300	2100	25386	14.15		0	3,980	0	6,806,042	1,467,697	8,277,719	0.2512	2,079,635	43,474,633	116,846		
2020	1500	600	2100	27486	13.9		0	0	0	7,270,810	1,613,595	8,884,405	0.2316	2,057,857	45,532,480	126,974		
2021	2400	1200	3600	31086	13.93		0	0	0	7,872,211	1,862,755	9,734,966	0.2135	2,078,891	47,611,380	126,521		
2022	2100	300	2400	33486	13.83		0	0	0	8,428,212	2,048,759	10,476,971	0.1969	2,062,734	49,674,115	136,794		

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YEAR	PEAK DEMAND (MW)	STARTING CAPACITY (MW)	CAPACITY ADDITION (MW)	ENDING CAPACITY (MW)	PERCENT RESERVES
2002	2,265	2,123	486	2,609	15.2%
2003	2,280	2,609	0	2,609	14.4%
2004	2,309	2,609	0	2,609	13.0%
2005	2,347	2,609	-19	2,590	10.4%
2006	2,383	2,590	0	2,590	8.7%
2007	2,425	2,590	148	2,738	12.9%
2008	2,466	2,738	-3	2,735	10.9%
2009	2,515	2,735	-2	2,733	8.7%
2010	2,565	2,733	214	2,947	14.9%
2011	2,614	2,947	0	2,947	12.7%
2012	2,651	2,947	-578	2,369	-10.6%
2013	2,678	2,369	-13	2,356	-12.0%
2014	2,711	2,356	-7	2,349	-13.4%
2015	2,751	2,349	-78	2,271	-17.4%
2016	2,787	2,271	-467	1,804	-35.3%
2017	2,829	1,804	-80	1,724	-39.1%
2018	2,871	1,724	-208	1,516	-47.2%
2019	2,914	1,516	-495	1,021	-65.0%
2020	2,957	1,021	0	1,021	-65.5%
2021	3,016	1,021	0	1,021	-66.1%

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Respondent B - CT Proposal (20 Year Pricing)

Year	Southern Units Additions		Summer Reserve Margin		Capital Costs (000\$)	Fixed O&M (000\$)	Fixed Fuel Charge (000\$)	Trans. (000\$)	Dist/Conn (000\$)	Losses (000\$)	Trans. (000\$)	Var. O&M (000\$)	Expn. Plan (000\$)	Fixed Costs (000\$)	Total (000\$)	Present Worth Factor (000\$)	Accum. PW Rev. Req. (000\$)	Accum. PW Rev. Req. (000\$)	Data	
	CC	CT	Total	Accumulative																
2022	300	1366	1366	15.2%	12,245	5,000	2,989,481	3,132	2,911,798	69,660	3,085,254	0.9220	2,844,669	5,756,267	17,917	16,377	25,701	26,903	36,193	51,442
2021	600	1366	1366	14.4%	12,504	5,423	3,122,869	(946)	3,269,505	204,764	3,566,490	0.8570	2,794,991	6,539,358	20,303	36,193	36,193	36,193	51,442	103,776
2020	900	1366	1366	13.0%	13,977	3,828	3,306,487	(872)	3,501,590	244,105	3,745,695	0.7875	2,794,991	11,330,296	26,903	36,193	36,193	36,193	51,442	101,887
2019	900	1366	1366	8.7%	13,068	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.6641	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2018	900	1366	1366	7.0%	13,667	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.5662	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2017	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.4813	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2016	900	1366	1366	0	13,821	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.4117	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2015	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.3520	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2014	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.3013	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2013	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.2580	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2012	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.2210	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2011	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.1890	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2010	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.1611	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2009	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.1360	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2008	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.1140	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2007	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0950	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2006	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0790	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2005	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0660	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2004	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0550	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2003	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0460	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2002	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0390	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2001	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0340	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
2000	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0300	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1999	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0270	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1998	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0250	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1997	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0230	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1996	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0210	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1995	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0190	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1994	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0170	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1993	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0150	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1992	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0130	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1991	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0110	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1990	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0090	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1989	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0070	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1988	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0050	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1987	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0030	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1986	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0010	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1985	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0000	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1984	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0000	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1983	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0000	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338
1982	900	1366	1366	0	14,171	4,504	3,218,354	(803)	3,318,354	275,884	3,594,238	0.0000	2,678,470	16,794,798	26,903	36,193	36,193	36,193	51,442	99,338

Year	Peak Demand (MW)	Starting Capacity (MW)	Ending Capacity (MW)	Reserves Percent
2022	2,265	2,123	486	15.2%
2021	2,280	2,609	0	14.4%
2020	2,309	2,609	0	13.0%
2019	2,347	2,609	-19	8.7%
2018	2,383	2,590	0	12.9%
2017	2,425	2,738	148	10.9%
2016	2,466	2,738	-3	10.9%
2015	2,515	2,733	-2	8.7%
2014	2,565	2,733	214	14.9%
2013	2,614	2,947	0	12.7%
2012	2,664	2,947	-92	7.7%
2011	2,711	2,855	-13	6.1%
2010	2,757	2,842	-7	4.6%
2009	2,803	2,835	-78	0.2%
2008	2,847	2,757	-67	-1.8%
2007	2,890	2,290	-80	-2.9%
2006	2,934	2,210	-206	-30.3%
2005	2,978	2,002	-495	-48.3%
2004	3,016	1,507	0	-49.0%
2003	3,057	1,507	0	-50.0%

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Respondent C															Delta				
Proposed Size (MW)	Southern Units Additions				Summer Reserve Margin		Capital Costs	Fixed O&M	Fixed Fuel Charge	Trans. Grid/Conn	Trans. Losses	Var. O&M/Fuel	Expan. Plan Fixed Costs	Total	Present Worth Factor	PW Rev Req	Accum PW Rev Req	Resp - SelfBuild	Accum PW Rev Req
Year	CC MW	CT MW	Total MW	Accumulative MW	Southern %	Out %	(000\$)	(000\$)	(000\$)	(000\$)	(000\$)	(000\$)	(000\$)		(000\$)	(000\$)		(000\$)	
2002	0	600	1132	1132	13.58	17.22	19,726	2,432	10,181	16,200	(14,820)	2,849,310	19,676	2,902,705	1.0000	2,902,705	2,902,705	8,824	
2003	600	300	900	2032	14.01	16.45	33,816	4,294	17,454	15,727	(15,141)	2,976,819	63,277	3,096,247	0.9220	2,854,604	5,757,310	17,414	
2004	600	0	600	2632	13.62	14.98	33,816	4,423	17,454	15,529	(16,343)	3,117,457	97,434	3,269,770	0.8500	2,779,316	8,536,626	26,969	
2005	900	1200	2100	4732	14.1	12.31	33,816	4,555	17,454	15,440	(17,062)	3,330,758	191,858	3,576,820	0.7837	2,803,033	11,339,659	36,666	
2006	900	0	900	5632	14.3	10.62	33,816	4,692	17,454	16,332	(17,658)	3,485,697	245,036	3,785,369	0.7225	2,734,952	14,074,611	53,476	
2007	0	1500	1500	7132	14.18		14,090	2,014	7,272	16,664	(16,587)	3,720,459	298,002	4,041,914	0.6661	2,692,396	16,767,008	70,925	
2008	600	0	600	7732	13.63		0	0	0	13,841	(14,898)	3,900,753	335,784	4,265,480	0.6141	2,619,571	19,386,578	78,129	
2009	900	300	1200	8932	14.13		0	0	0	3,709	(11,298)	4,118,522	404,623	4,515,555	0.5662	2,556,724	21,943,302	77,367	
2010	0	0	0	8932	14.47		0	0	0	-2,107	(7,617)	4,139,628	404,623	4,534,527	0.5220	2,367,091	24,310,394	76,687	
2011	600	600	1200	10132	14.02		0	0	0	1,662	(3,853)	4,258,007	467,847	4,723,663	0.4813	2,273,362	26,583,775	79,917	
2012	1200	300	1500	11632	14.12		0	0	0	1,803	0	4,459,226	561,159	5,022,188	0.4437	2,228,419	28,812,194	84,748	
2013	1500	0	1500	13132	13.55		0	0	0	-244	0	4,658,921	664,818	5,323,495	0.4091	2,177,765	30,989,959	81,742	
2014	900	900	1800	14932	13.81		0	0	0	2,917	0	4,872,318	765,517	5,640,752	0.3772	2,127,461	33,117,419	87,374	
2015	1200	600	1800	16732	14.17		0	0	0	-1,726	0	5,117,110	876,944	5,992,328	0.3477	2,083,678	35,201,097	91,711	
2016	1500	300	1800	18532	13.99		0	0	0	-624	0	5,365,961	999,467	6,364,804	0.3206	2,040,471	37,241,568	97,249	
2017	1800	900	2700	21232	13.7		0	0	0	3,722	0	5,872,402	1,172,942	7,049,066	0.2956	2,083,470	39,325,038	103,687	
2018	1500	600	2100	23332	13.68		0	0	0	-4,771	0	6,282,603	1,313,514	7,591,346	0.2725	2,068,640	41,393,677	107,979	
2019	1800	300	2100	25432	14.15		0	0	0	796	0	6,806,042	1,466,246	8,273,084	0.2512	2,078,471	43,472,148	113,160	
2020	1500	600	2100	27532	13.9		0	0	0	3,454	0	7,270,810	1,612,144	8,886,408	0.2316	2,058,321	45,530,469	118,954	
2021	2400	1200	3600	31132	13.93		0	0	0	-2,810	0	7,872,211	1,861,304	9,730,705	0.2135	2,077,981	47,608,450	123,591	
2022	2100	300	2400	33532	13.83		0	0	0	-2,032	0	8,428,212	2,047,307	10,473,487	0.1969	2,062,049	49,670,498	132,170	

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YEAR	PEAK DEMAND (MW)	STARTING CAPACITY (MW)	CAPACITY ADDITION (MW)	ENDING CAPACITY (MW)	PERCENT RESERVES
2002	2,265	2,123	532	2,655	17.2%
2003	2,280	2,655	0	2,655	16.4%
2004	2,309	2,655	0	2,655	15.0%
2005	2,347	2,655	-19	2,636	12.3%
2006	2,383	2,636	0	2,636	10.6%
2007	2,425	2,636	-364	2,252	-7.1%
2008	2,466	2,252	-3	2,249	-8.8%
2009	2,515	2,249	-2	2,247	-10.7%
2010	2,565	2,247	214	2,461	-4.1%
2011	2,614	2,461	0	2,461	-5.9%
2012	2,651	2,461	-92	2,369	-10.6%
2013	2,678	2,369	-13	2,356	-12.0%
2014	2,711	2,356	-7	2,349	-13.4%
2015	2,751	2,349	-78	2,271	-17.4%
2016	2,787	2,271	-467	1,804	-35.3%
2017	2,829	1,804	-80	1,724	-39.1%
2018	2,871	1,724	-208	1,516	-47.2%
2019	2,914	1,516	-495	1,021	-65.0%
2020	2,957	1,021	0	1,021	-65.5%
2021	3,016	1,021	0	1,021	-66.1%

Respondent C Proposal with Fixed and Levelized Energy Price																		
Proposal Size (MW)	532																	
Year	Southern Units Additions				Summer Reserve Margin		Capital Costs (000\$)	Fixed O&M (000\$)	Fixed Fuel Charge (000\$)	Trans. Grid/Conn (000\$)	Trans. Losses (000\$)	Var. O&M / Fuel (000\$)	Expan. Plan Fixed Costs (000\$)	Total (000\$)	Present Worth Factor	PW Rev. Req. (000\$)	Accum. PW Rev. Req. (000\$)	Delta Resp. - SelfBuild
	CC MW	CT MW	Total MW	Accumulative MW	Southern %	Gulf %												Accum. PW Rev. Req. (000\$)
2002	300	300	1132	1132	13.58	17.2%	19,726	2,432	10,181	16,200	(14,820)	2,854,971	26,293	2,914,983	1.0000	2,914,983	2,914,983	21,102
2003	600	300	900	2032	14.01	16.4%	33,816	4,294	17,454	15,727	(15,141)	2,985,347	69,894	3,111,392	0.9220	2,868,567	5,783,551	43,655
2004	600	0	600	2632	13.62	15.0%	33,816	4,423	17,454	15,529	(18,343)	3,126,151	104,051	3,285,061	0.8500	2,792,331	8,576,881	66,224
2005	1200	900	2100	4732	14.1	12.3%	33,816	4,565	17,454	15,440	(17,062)	3,331,532	205,318	3,591,054	0.7837	2,814,188	11,390,069	66,076
2006	300	600	900	5632	14.3	10.6%	33,816	4,692	17,454	16,332	(17,658)	3,495,943	244,659	3,795,238	0.7225	2,742,083	14,132,152	111,017
2007	0	1500	1500	7132	14.18		14,090	2,014	7,272	16,664	(16,587)	3,722,618	297,624	4,043,695	0.6661	2,693,583	16,825,734	129,652
2008	600	0	600	7732	13.63		0	0	0	13,841	(14,896)	3,930,753	335,407	4,265,103	0.6141	2,619,339	19,445,074	134,624
2009	900	300	1200	8932	14.13		0	0	0	3,709	(11,298)	4,118,522	404,246	4,515,178	0.5662	2,556,510	22,001,584	135,649
2010	0	0	0	8932	14.47		0	0	0	-2,107	(7,617)	4,139,628	404,246	4,534,150	0.5220	2,366,894	24,368,479	134,772
2011	600	600	1200	10132	14.02		0	0	0	1,662	(3,853)	4,258,007	467,470	4,723,286	0.4813	2,273,200	26,641,679	137,620
2012	1200	300	1500	11632	14.12		0	0	0	1,803	0	4,459,225	560,782	5,021,810	0.4437	2,228,251	28,869,930	142,484
2013	1500	0	1500	13132	13.55		0	0	0	-244	0	4,658,921	664,441	5,323,118	0.4091	2,177,611	31,047,540	136,324
2014	900	900	1800	14932	13.81		0	0	0	2,917	0	4,872,318	765,140	5,640,375	0.3772	2,127,318	33,174,859	144,614
2015	1200	600	1800	16732	14.17		0	0	0	-1,726	0	5,117,110	876,567	5,991,951	0.3477	2,083,547	35,258,405	148,019
2016	1500	300	1800	18532	13.98		0	0	0	-624	0	5,365,961	999,090	6,364,427	0.3206	2,040,360	37,298,755	154,436
2017	1800	900	2700	21232	13.7		0	0	0	3,722	0	5,872,402	1,172,565	7,048,689	0.2956	2,083,359	39,382,114	160,663
2018	1500	600	2100	23332	13.68		0	0	0	-4,771	0	6,282,603	1,313,137	7,590,969	0.2725	2,068,537	41,450,651	164,952
2019	1800	300	2100	25432	14.15		0	0	0	796	0	6,806,042	1,465,869	8,272,707	0.2512	2,078,376	43,529,027	170,039
2020	1500	600	2100	27532	13.9		0	0	0	3,454	0	7,270,810	1,611,767	8,886,031	0.2316	2,058,234	45,587,260	175,745
2021	2400	1200	3600	31132	13.93		0	0	0	-2,810	0	7,872,211	1,860,927	9,730,328	0.2135	2,077,900	47,665,161	180,302
2022	2100	300	2400	33632	13.83		0	0	0	-2,032	0	8,428,212	2,046,930	10,473,110	0.1969	2,061,974	49,727,135	188,614

YEAR	PEAK DEMAND (MW)	STARTING CAPACITY (MW)	CAPACITY ADDITION (MW)	ENDING CAPACITY (MW)	PERCENT RESERVES
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2003	2,280	2,655	0	2,655	16.4%
2004	2,309	2,655	0	2,655	15.0%
2005	2,347	2,655	-19	2,636	12.3%
2006	2,383	2,636	0	2,636	10.6%
2007	2,425	2,636	-384	2,252	-7.1%
2008	2,466	2,252	-3	2,249	-8.8%
2009	2,515	2,249	-2	2,247	-10.7%
2010	2,565	2,247	214	2,461	-4.1%
2011	2,614	2,461	0	2,461	-5.9%
2012	2,651	2,461	-92	2,369	-10.6%
2013	2,678	2,369	-13	2,356	-12.0%
2014	2,711	2,356	-7	2,349	-13.4%
2015	2,751	2,349	-78	2,271	-17.4%
2016	2,787	2,271	-467	1,804	-35.3%
2017	2,829	1,804	-80	1,724	-39.1%
2018	2,871	1,724	-208	1,516	-47.2%
2019	2,914	1,516	-495	1,021	-65.0%
2020	2,957	1,021	0	1,021	-65.5%
2021	3,016	1,021	0	1,021	-66.1%

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EXHIBIT "B"

LATE-FILED EXHIBIT 1
DEPOSITION OF WILLIAM F. POPE

IRP FUEL ASSUMPTIONS

This document consisting of pages 23 through 82 is confidential in its entirety including all text, tables and graphs.

LATE-FILED EXHIBIT 1
DEPOSITION OF WILLIAM F. POPE

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