



West Florida Natural Gas Co.

"energy for all seasons"

J.E. McIntyre
President

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January 24, 1991

Mr. Steve Tribble, Director
Division of Records and Reporting
Florida Public Service Commission
101 E. Gaines Street
Tallahassee, FL 32399-0850

910086 - ~~EG~~ EG

Dear Mr. Tribble:

Enclosed for filing on behalf of West Florida Natural Gas Company are the original and 15 copies of the Company's Petition for Approval of Modified Conservation Plan including attachments.

Please acknowledge receipt of this document by stamping and returning the enclosed extra copy of this letter.

Thank you for your assistance.

Sincerely,

Patti Smith
Controller

PS:pc

Enclosures

cc (w/ encl.): R. S. Goldman

RECEIVED & FILED

FPSC-BUREAU OF RECORDS

Attached Programs
DOCUMENT NUMBER 00826

00826 JAN 25 1991

FPSC-RECORDS/REPORTS

Petition
DOCUMENT NUMBER 00825

00825 JAN 25 1991

FPSC-RECORDS/REPORTS



West Florida Natural Gas *"energy for all seasons"*

ENERGY CONSERVATION AND PROMOTIONAL PROGRAM

(Proposed January 1991)

DOCUMENT # 100-1017
#0826 JAN 25 1991
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ENERGY CONSERVATION AND PROMOTIONAL PROGRAMS

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INTRODUCTION

The Florida Energy Efficiency and Conservation Act (FEECA) [Sections 366.80 - 366.82, Florida Statutes] requires the Florida Public Service Commission (the Commission) to adopt goals for increasing the efficiency of energy consumption including goals designed to increase the conservation of expensive resources such as petroleum fuels and to reduce and control the growth rates of electric consumption. By its Order No. 22176, the Commission adopted the goals expressed in Rule 25-17.001.

Guided by this Order, West Florida Natural Gas Company (WFNG) voluntarily submits these plans and programs to assist the State of Florida in achieving greater energy conservation and efficiency. Natural gas, as well as electric, utilities should promote the use of natural gas to conserve expensive materials and to promote the most efficient use of the State's energy resources. Such programs, whether gas or electric, should optimize the use of existing facilities within the State of Florida to avoid the cost of building new facilities prematurely. We also have a responsibility to minimize rate increases and the total cost paid for energy by Florida's energy ratepayers.

The programs proposed in this submittal are designed to:

- (1) Reduce electric kilowatt hour (KWH) consumption and kilowatt demand (KWD), including periods of peak electric use, in order to decrease the need for building additional electric generating capacity.
- (2) Increase the conservation of petroleum fuels by promoting the direct use of natural gas as a substitute for oil and oil-derived electric energy when this substitution is

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**PROGRAM BACKGROUND AND COST
EFFECTIVENESS ANALYSIS ASSUMPTIONS**

A direct benefit to gas ratepayers of \$21,757,869 (present value), less a program cost of \$6,544,436 (present value) to be paid by the West Florida Natural Gas Company ratepayers for a net direct benefit to the ratepayers of \$15,213,433 (present value) is shown in the section headed "Summary of Program Costs/Benefits to Electric and Gas Ratepayers." Electric ratepayers receive a \$67,578,556 (present value) net benefit, to comprise a total net benefit to the State, projected by West Florida Natural Gas Company at a net present value of \$39,099,899 in benefits over twenty (20) years.

The assumptions and basic data utilized in the preparation of the benefit/cost analysis contained in this document are as follows:

The average consumption data for gas appliances is based on information taken from customer historical use patterns in Northwest and Central Florida and are as follows:

Residential Energy Efficient	Water Heaters	300 Therms/Yr
	Range	110 Therms/Yr
	Dryer	120 Therms/Yr
	Furnace	380 Therms/Yr
Commercial Energy Efficient	Water Heaters	2,300 Therms/Yr
	Range	630 Therms/Yr
	Fryer	880 Therms/Yr
	Dryer	660 Therms/Yr

The average consumption data for residential/electric appliances was based on ASHRAE's "Degree Days Method" and agree with West Florida Natural Gas Company estimations, with Gulf Power Company publications concerning estimated usage and with PSC staff in meetings held in conjunction with the initial development of the original 1985-1989 conservation programs.

They are as follows:

Residential	Water Heater	4,500 KW/Yr	.91 KWD
	Range	1,650 KW/Yr	nil
	Dryer	1,800 KW/Yr	nil
	Strip Heat	5,700 KW/Yr	7.5 KWD

Consumption data for commercial electric appliances is based on conversion of the equivalent gas appliance consumptions and is as follows:

Commercial	Water Heater	56,950 KW/Yr	10.8 KWD
	Range	18,570 KW/Yr	6.7 KWD
	Fryer	21,470 KW/Yr	7.2 KWD
	Dryer	19,340 KW/Yr	7.0 KWD

In all instances, KW demand reduction refers to a reduction in electric generating capacity.

The assumptions and data used in the cost effectiveness analysis were obtained from the following sources:

Program personnel cost - WFNG estimate of manpower needed to carry out the proposed programs.

Advertising cost - West Florida Natural Gas budget estimates of an amount of advertising reasonably needed to promote the programs.

Fuel cost - WFNG 1991 cost of natural gas.

KWH produced from a ton of coal - 2,076 KWH/ton, information previously provided by the Public Service Commission office.

KWH produced from a barrel of #6 oil - 613 KW/bbl, information provided in People's Gas System, Inc. approved conservation plan, Order No. 23462.

Percentage breakout of energy production by fuel type - The conservation programs are designed to reduce the demand on coal and oil use in electric production. The split is 80.4% coal and 19.6% oil of the fuel to be conserved. This information was provided in People's Gas System, Inc. approved conservation plan, Order No. 23462.

Power plant construction cost - \$721/KW, information from PSC Order 22341.

Escalation rate on cost - 5.4%, information from PSC Order 22341.

Discount rate on cost - 10.45%, information from PSC Order 22341.

Price per ton of coal - provided by Jacksonville Electric Authority.

Price per barrel of oil - from Platt's Oil Gram.

Assumptions related to individual programs are based on WFNG historical estimates of program participation.

The cost/benefit evaluations for West Florida Natural Gas ratepayers make the following assumptions:

1. The number of appliances which are in service from 2000 through 2011 is constant. In spite of a life expectancy of approximately 10 years for any given appliance, it is reasonably assumed that once an appliance is put into service it will be replaced at the end of its useful life with another similar appliance.
2. Average Annual Therm Consumption and Average Allowance per Customer were determined by weighted averages based upon historical data on the numbers and types of appliances for which allowances have previously been paid.
3. Installation Distribution by type of service (i.e., new on main, added load, reactivate or heat only) is based on West Florida Natural Gas Company's actual historical data where available and future projections.
4. While natural gas service lines are normally capitalized, for the purpose of this conservation plan, the costs were assumed to be a direct expense to the program. While it can be assumed there will be an incremental increase in Operation and Maintenance costs with the addition of new or incremental loads, the impact of these costs was determined to be insignificant in comparison to the total benefits derived from the proposed programs.

All programs with the exception of the "Natural Gas Water Heater Retention Program" and "Gas Appliance Energy Savings Payback Program" may or may not require a new service line and meter set depending on whether the particular customer is having his first gas appliance(s) installed. Construction of a service line and meter set in any case would be done in accordance with WFNG's current tariff and would not be dependent upon participation in the conservation program.

The average cost of a service line and meter set installation is as follows:

	<u>Residential</u>	<u>Commercial</u>
Service Line	\$255	\$315
Regulator/Meter Set	<u>120</u>	<u>195</u>
Total	\$375	\$510

5. Consistent with the currently approved conservation programs cost effectiveness analysis, the estimated cost to the electric companies of the oil and coal used to generate power were used as a basis for deferred cost. Following the same logic, the cost of gas to the gas company was used as the off-setting factor for these deferred costs.

EXECUTIVE SUMMARY

West Florida Natural Gas Company operated three successful Energy Conservation Programs from 1985 through 1990. These programs were all directed toward increasing energy efficiency within the residential segment of our market. Customers in Panama City and Ocala benefitted from these programs through increased awareness of energy conservation which we promoted through various local media. All programs were well accepted by the population as was proven by the increased numbers of residential customers added in each of our marketing areas.

The rebates which were paid to customers who participated in any of the programs, greatly assisted them in defraying initial installation costs. These incentives were an important factor in influencing each customer's decision to use energy efficient natural gas appliances.

West Florida Natural Gas Company is proposing to continue its three original programs and to add three new conservation programs. Two of these, the Commercial Electric Resistance Appliance Program and the Gas Space Conditioning Program target the high priority commercial customers. These programs, along with a new Gas Water Heater Load Retention Program and the three original programs, are designed to continue West Florida Natural Gas Company's commitment to energy conservation.

PROGRAM SUMMARY

I. Residential Electric Resistance Appliance & Oil Heating Replacement Program

The Residential Electric Resistance Appliance and Oil Heating Replacement Program is designed to reduce the escalating rates of electric and oil consumption and to optimize the use of natural gas facilities. This program will promote the replacement of electric water heaters, space and central heaters, ranges, and dryers. It will also promote the replacement of oil heating with energy efficient natural gas heating.

II. Residential Home Builder Program

The Residential Home Builders Program is designed to increase the use of efficient natural gas in private residences by encouraging home builders to install energy efficient natural gas appliances in new residences in lieu of electrical appliances. This substitution will conserve energy, as well as lower the ratepayer's total annual energy costs.

III. Gas Appliance Energy Savings Payback Program

The Gas Appliance Energy Savings Payback Program is designed to promote the replacement of standard gas appliances with energy efficient natural gas appliances and to ensure that new installations comply with the energy efficiency standards set forth in the Florida Energy Code. The program focuses on water heaters, central furnaces, ranges, and dryers.

IV. Gas Water Heater Load Retention Program

The Gas Water Heater Load Retention Program is designed to encourage the continued use of natural gas water heaters, effectively reducing conversions from natural gas to electricity. This program promotes the efficiencies of natural gas and supports the conservation of petroleum fuels, KWH consumption and KW demand.

V. Gas Space Conditioning Allowance Program

The Gas Space Conditioning Allowance Program is designed to convert customers from electric space conditioning equipment to energy efficient natural gas equipment and to initially install gas space conditioning equipment instead of electric equipment. This program will reduce summer as well as winter peak demand and contribute to the conservation of KWH consumption.

VI. Commercial Electric Resistance Appliance Replacement Program

The Commercial Electric Resistance Appliance Replacement Program is designed to promote the use of natural gas to high priority customers. This program is aimed at the conversion of non-residential customers from electric resistance appliances to energy efficient natural gas appliances.

**West Florida Natural Gas Company
Energy Conservation and Promotional Programs**

<u>Program Details</u>	<u>Benefit To Electric Ratepayers</u>	<u>Benefit To Gas Ratepayers</u>	<u>Program Cost Gas Utility Ratepayers</u>	<u>Net Benefit Gas Utility Ratepayers</u>	<u>Approval Year/No</u>
Residential Electric Resistance Appliance and Oil Heating Replacement	\$17,257,017	\$ 7,818,416	\$2,628,228	\$4,883,188	
Residential Home Builder	\$18,881,080	\$ 4,588,377	\$1,720,033	\$2,688,344	
Gas Appliance Energy Savings Payback	\$ 8,262,050	\$ 1,232,031	\$ 184,063	\$1,087,878	
Gas Water Heater Load Retention	\$ 1,885,730	\$ 1,731,889	\$ 325,280	\$1,408,609	
Gas Space Conditioning Allowance	\$ 4,848,817	\$ 2,210,385	\$ 642,845	\$1,667,750	
Commercial Electric Resistance Appliance Replacement	\$18,333,182	\$ 4,174,761	\$ 888,197	\$3,308,664	
TOTAL PROGRAM BENEFIT (COST)	\$67,578,556	\$21,757,869	\$6,544,436	\$15,213,433	

Note: All benefit and cost figures are present values.

**West Florida Natural Gas Company
Benefit/Cost Ratios
All Programs**

<u>Program</u>	Electric Ratepayers		Gas Ratepayers	
	<u>Ratio (To 1)</u>	<u>Payback (In Yrs)</u>	<u>Ratio (To 1)</u>	<u>Payback (In Yrs)</u>
Residential Electric Resistance Appliance and Oil Heating Replacement Program	7.11	.14	2.76	.36
Residential Home Builders Program	11.98	.08	2.67	.37
Gas Appliance Energy Savings Payback Program	50.30	.02	7.51	.13
Gas Water Heater Load Retention Program	7.14	.14	5.32	.19
Gas Space Conditioning Program	8.55	.12	3.44	.29
Commercial Electric Resistance Appliance Replacement Program	19.86	.05	4.82	.21

RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE & OIL HEATING REPLACEMENT PROGRAM

I. Program Description

The Residential Electric Resistance Appliance and Oil Heating Replacement Program is designed to reduce the escalating rates of electric and oil consumption and to optimize the use of natural gas facilities. This program targets the reactivation of existing service lines and the conversion of seasonal gas heating customers to year round usage, as well as the conversion of new customers from electric and oil appliances to natural gas appliances. This program will promote the replacement of electric water heaters, space and central heaters, ranges, and dryers where it is most effective to do so. This program will also promote the replacement of oil heating with energy efficient natural gas space and central heating.

II. Program Participation Standards

Any current or potential residential customer using an electric water heater, electric central heater, range, clothes dryer, or space heater, or using an oil central heater or space heater is eligible to participate in the program. The customer must simply replace an electric or oil appliance with a natural gas appliance. The participating customer will receive a monetary incentive to help defray the additional costs associated with the gas piping and appliance venting required for conversion from electric or oil energy to natural

gas.

Energy efficient natural gas appliances can be defined as follows:

1. Residential energy efficient water heaters are those heaters complying with the standards as set forth in ASHRAE 90.
2. Energy efficient residential furnaces are those that meet or exceed Section 9 of the Florida Energy Code for Building Construction.
3. All other gas appliances considered to be energy efficient must meet or exceed the current Florida Energy Code for Building Construction.

The eligible appliances and the corresponding allowances under the program are as follows:

Year	Water Heater	Central			Space Heat	
		Heat	Range	Dryer	<50,000Btu	>50,000Btu
1990	180	400	60	60	0	0
1991	250	500	150	150	150	300
1992	250	500	150	150	150	300
1993	250	500	150	150	150	300
1994	250	500	150	150	150	300
1995	250	500	150	150	150	300

III. Benefits and Costs

The following effects in decreasing winter peak KWD and annual KWH consumptions are expected with the replacement of electric resistance appliances and

oil heating by energy efficient natural gas appliances:

Electric

Appliance	KWD Displacement	Annual KWH Consumption
each water heater	.91	4,500
each central heater	7.5	5,700
each range	-0-	1,650
each clothes dryer	-0-	1,800
each space heater	5.0	3,400

Demand and annual consumption information is based on ASHRAE's "Degree Day Method" and agree with West Florida Natural Gas Company estimates and with previously published usage data from Gulf Power Company. It is anticipated that an individual customer who switches from electricity or oil to natural gas can expect his annual energy savings to be the sum of the values for the appliances listed above which he replaces. Company-wide projections for the program and the accumulated demand and energy savings are shown on Table A-1.

The number of customers who have participated in this program in the past and projections for anticipated new participants are shown on Table A-2.

Based on historical participation, as well as on projections of future participation, first year costs are anticipated as follows:

Per customer	\$6.46/52,260	Total Customers
Administrative	\$62,900.00	
Incentive	\$274,815.00	

IV. Cost Effectiveness Methodology

Based on the cost effectiveness methodology used in currently approved conservation programs, and using the assumptions listed, a benefit/cost ratio of 7.11 to 1 with a payback period of .14 years will be achieved for the State of Florida. The ratepayers of West Florida Natural Gas Company will receive a benefit/cost ratio of 2.76 to 1 with a payback period of .38 years. The cost effectiveness calculations follow Table A-2.

V. Program Monitoring and Evaluation

The progress of the West Florida Natural Gas Company Electric Resistance Appliance and Oil Heating Replacement Program is monitored monthly at both branches of the company. The Panama City office also submits a semi-annual report to the Florida Public Service Commission for both divisions. Feedback received from both branches is constantly evaluated and any necessary revisions will be proposed to the program based upon these evaluations. Allowances paid to eligible participants under the program guidelines are based upon documentation and information necessary for Florida Public Service Commission audit purposes.

ATTACHMENT A - 1

RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE
AND OIL HEATING REPLACEMENT PROGRAM

PROJECTED FORECASTED CONSERVATION

<u>YEAR</u>	<u>AVOIDED CAPACITY</u>	<u>ANNUAL KWH REDUCTION</u>
1991	2,512	3,805,055
1992	2,663	4,033,358
1993	2,822	4,275,360
1994	2,992	4,531,881
1995	3,171	4,803,794
1996	3,362	5,092,022
1997	3,563	5,397,543
1998	3,563	5,397,543
1999	3,563	5,397,543
2000	3,563	5,397,543
TOTAL	31,774	48,131,643

ATTACHMENT A-2

**RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE
AND OIL HEATING REPLACEMENT PROGRAM**

YEAR	# OF ELIGIBLE PARTICIPANTS	# OF ACTUAL APPLIANCES	% OF ACTUAL TO ELIGIBLE
1985	200,000	1,062	0.53%
1986	200,000	1,151	0.58%
1987	200,000	991	0.50%
1988	200,000	1,144	0.57%
1989	200,000	616	0.31%
1990	200,000	400	0.20%
1991	200,000	985	0.49%
1992	200,000	1,044	0.52%
1993	200,000	1,107	0.55%
1994	200,000	1,173	0.59%
1995	200,000	1,244	0.62%
1996	200,000	1,318	0.66%
1997	200,000	1,397	0.70%
1998	200,000	1,397	0.70%
1999	200,000	1,397	0.70%
2000	200,000	1,397	0.70%

RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE AND OIL REPLACEMENT PROGRAM

Results from Allowance Program

Estimated Gas Company Expenditures

1. Personnel Costs	\$334,792
2. Advertising Costs	\$494,280
3. Installation Allowances	\$3,622,280
4. Total Costs	\$4,451,352
5. Present Value of Total	\$2,826,228

Reductions

6. KW	31,774
7. MWH	529,452

Estimated Electric Company Benefits

8. Construction Savings	\$29,866,740
9. Fuel Purchase Savings	
A. Oil	\$2,700,418
B. Coal	\$1,458,629
10. Total Savings	\$34,025,787

Net Present Value of Total Program

11. Net Present Value	\$20,083,245
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Net Benefits from Cumulative Totals

Col 11 - Col 5	\$17,257,017
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Benefit/Cost Ratio from Cumulative Totals

Col 11 / Col 5

7.11 TO 1

Discount Payback

Col 5 / Col 11 (YEARS)

0.14 YEARS

LIST OF ASSUMPTIONS

RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE AND OIL HEATING REPLACEMENT PROGRAM

1. 1991 Program Personnel Costs. Escalation Rate - Personnel Costs.	25,400 /YR 6.0% /YR
2. 1991 Advertising Costs. Escalation Rate - Advertising Costs.	37,500 /YR 6.0% /YR
3. Fuel Cost of Natural Gas 1991 Escalation Rate - Fuel Cost Natural Gas	\$0.2864 /THERM 3.0% /YR
4. KWH Produced from Ton of Coal	2076 KWH
5. KWH Produced from Barrel #6 Oil	613 KWH
6. Percentage Breakdown of Displaced Fuel From Reduced KWH Generation	19.6% OIL 80.4% COAL
7. 1991 Construction Cost per KW. (Pulverized Coal) Escalation Rate of Construction.	\$721 /KW 5.4% /YR
8. KW is eliminated at the time of its deferral.	
9. Average Allowance for Gas Appliance Replacing Electric	\$279 /APP
10. Demand Displacement - Water Heating	.91 KW
- Central Heating	7.50 KW
- Space Heating	5.00 KW
11. Average Natural Gas Annual Therm Consumption Per Installed Appliance	228 THERM
12. Period of Appliance Use.	10 YRS
13. Price of Oil per Barrel Escalation Rate	\$20.50 /BL 4.0% /YR
14. Price of Coal per Ton Escalation Rate	\$42.00 /TON 3.0% /YR

15. Discount Rate or Rate of Time Preference

10.45% /TON

16. Gas Appliances Installed during Program 1st Year
Escalation Rate

985 APPL
6.0% /YR

	Number	Allowance	KWH Displaced	KW Avoided	Gas Therms
Water Heater	370	\$250	0.91	4500	300
Central Heat	240	500	7.50	5700	380
Range	180	150	NIL	1650	110
Dryer	150	150	NIL	1800	120
Space Heat:					
<50,000Btu	37	150	5.00	3400	270
>50,000Btu	38	300	5.00	3400	270
Total	985				
Weighted Average Allowance			\$279		
Weighted Average KW			2.55		
Weighted Average KWH			3863		
Weighted Average Therms Gas			261		

**RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE
AND OIL HEATING REPLACEMENT PROGRAM**

TABLE - 1 - PROGRAM COSTS

YEAR	PERSONNEL COSTS	ADVERTISING COSTS	INSTALLATION ALLOWANCES	TOTAL COSTS
1991	25,400	37,500	274,815	337,715
1992	26,924	39,750	291,304	357,978
1993	28,539	42,135	308,782	379,457
1994	30,252	44,663	327,309	402,224
1995	32,067	47,343	346,948	426,357
1996	33,991	50,183	367,764	451,939
1997	36,030	53,194	389,830	479,055
1998	38,192	56,386	413,220	507,798
1999	40,484	59,769	438,013	538,266
2000	42,913	63,355	464,294	570,562
	334,792	494,280	3,622,280	4,451,352

SUMMARY SHEET ITEMS 1, 2, 3, AND 4.

TABLE - 2 - PRESENT VALUE OF TOTAL COSTS

YEAR	TOTAL COSTS	DISCOUNT FACTOR	PRESENT VALUE
1991	337,715	1.00000	337,715
1992	357,978	0.90539	324,110
1993	379,457	0.81973	311,052
1994	402,224	0.74217	298,519
1995	426,357	0.67195	286,491
1996	451,939	0.60838	274,951
1997	479,055	0.55081	263,868
1998	507,798	0.49870	253,239
1999	538,266	0.45152	243,038
2000	570,562	0.40880	233,246
TOTAL			2,826,228

SUMMARY SHEET ITEM 5

TABLE - 3 - ESTIMATED NUMBER OF NATURAL GAS APPLIANCES INSTALLED

YEAR	APPLIANCES INSTALLED	KW DISPLACED	KWH AVOIDED
1991	985	2,512	3,805,055
1992	1,044	2,663	4,033,358
1993	1,107	2,822	4,275,360
1994	1,173	2,992	4,531,881
1995	1,244	3,171	4,803,794
1996	1,318	3,362	5,092,022
1997	1,397	3,563	5,397,543
1998	1,397	3,563	5,397,543
1999	1,397	3,563	5,397,543
2000	1,397	3,563	5,397,543
	12,459	31,774	48,131,642

**RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE
AND OIL HEATING REPLACEMENT PROGRAM**

TABLE - 4 - KW AVOIDANCE AND KWH REDUCTIONS FROM PROGRAM

<u>YEAR</u>	<u>KW</u>	<u>KWH</u>	<u>MWH CUMULATIVE</u>
1991	2,512	3,805,055	3,805
1992	2,663	4,033,358	7,838
1993	2,822	4,275,360	12,114
1994	2,992	4,531,881	16,646
1995	3,171	4,803,794	21,449
1996	3,362	5,092,022	26,541
1997	3,563	5,397,543	31,939
1998	3,563	5,397,543	37,337
1999	3,563	5,397,543	42,734
2000	3,563	5,397,543	48,132
2001			48,132
2002			44,327
2003			40,294
2004			36,018
2005			31,486
2006			26,683
2007			21,591
2008			16,193
2009			10,795
2010			5,398
			<u>529,452</u>

SUMMARY SHEET ITEMS 6 A

TABLE - 5 - TOTAL CONSTRUCTION COSTS DEFERRED

<u>YEAR</u>	<u>KW DEFERRED</u>	<u>COSTS PER KW</u>	<u>TOTAL CONSTRUCTION COSTS DEFERRED</u>
1991	2,512	721	1,811,152
1992	2,663	760	2,023,704
1993	2,822	801	2,260,339
1994	2,992	844	2,525,915
1995	3,171	890	2,821,590
1996	3,362	938	3,153,088
1997	3,563	989	3,522,044
1998	3,563	1,042	3,712,234
1999	3,563	1,098	3,912,695
2000	3,563	1,157	4,123,980
			<u>29,866,740</u>

SUMMARY SHEET ITEM 8

**RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE
AND OIL HEATING REPLACEMENT PROGRAM**

FUEL SAVINGS - OIL

<u>YEAR</u>	<u>KWH REDUCED</u>	<u>19.6¢ OIL</u>	<u>KW/BBL</u>	<u>\$/BBL</u>	<u>AVOIDED COSTS</u>
1991	3,805,055	745,791	613	20.50	24,941
1992	7,838,413	1,536,329	613	21.32	53,433
1993	12,113,773	2,374,300	613	22.17	85,881
1994	16,648,654	3,262,548	613	23.06	122,730
1995	21,449,448	4,204,092	613	23.98	164,475
1996	26,541,470	5,202,128	613	24.94	211,661
1997	31,939,013	6,260,047	613	25.94	264,893
1998	37,336,556	7,317,965	613	26.98	322,045
1999	42,734,099	8,375,883	613	28.06	383,346
2000	48,131,642	9,433,802	613	29.18	449,035
2001	48,131,642	9,433,802	613	30.35	466,996
2002	44,326,587	8,688,011	613	31.56	447,281
2003	40,293,229	7,897,473	613	32.82	422,845
2004	36,017,869	7,059,502	613	34.13	393,098
2005	31,485,988	6,171,254	613	35.50	357,383
2006	26,682,194	5,229,710	613	36.92	314,971
2007	21,590,172	4,231,674	613	38.40	265,057
2008	16,192,629	3,173,755	613	39.93	206,744
2009	10,795,086	2,115,837	613	41.53	143,343
2010	5,397,543	1,057,918	613	43.19	74,538
TOTAL					5,174,697

FUEL SAVINGS - COAL

<u>YEAR</u>	<u>KWH REDUCED</u>	<u>80.4¢ COAL</u>	<u>KW/TON</u>	<u>\$/TON</u>	<u>AVOIDED COSTS</u>
1991	3,805,055	3,059,264	2,076	42.00	61,893
1992	7,838,413	6,302,084	2,076	43.26	131,324
1993	12,113,773	9,739,473	2,076	44.56	209,041
1994	16,645,654	13,383,106	2,076	45.89	295,863
1995	21,449,448	17,245,356	2,076	47.27	392,684
1996	26,541,470	21,339,342	2,076	48.69	500,483
1997	31,939,013	25,678,966	2,076	50.15	620,330
1998	37,336,556	30,018,591	2,076	51.65	746,918
1999	42,734,099	34,358,216	2,076	53.20	880,543
2000	48,131,642	38,697,840	2,076	54.80	1,021,513
2001	48,131,642	38,697,840	2,076	56.44	1,052,158
2002	44,326,587	35,638,576	2,076	58.14	998,049
2003	40,293,229	32,395,756	2,076	59.88	934,451
2004	36,017,869	28,958,367	2,076	61.68	860,359
2005	31,485,988	25,314,734	2,076	63.53	774,670
2006	26,682,194	21,452,484	2,076	65.43	676,173
2007	21,590,172	17,358,498	2,076	67.40	563,546
2008	16,192,629	13,018,874	2,076	69.42	435,340
2009	10,795,086	8,679,249	2,076	71.50	298,933
2010	5,397,543	4,339,625	2,076	73.65	153,951
TOTAL					11,608,220

**RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE
AND OIL HEATING REPLACEMENT PROGRAM**

ANNUAL FUEL CONSUMPTION - NATURAL GAS

<u>YEAR</u>	<u>THERMS CONSUMED</u>	<u>THERMS CUMULATIVE</u>	<u>\$/THERM</u>	<u>TOTAL COSTS</u>
1991	224,580	224,580	0.2864	64,320
1992	238,055	462,635	0.2950	136,474
1993	252,338	714,973	0.3038	217,239
1994	267,478	982,451	0.3130	307,465
1995	283,527	1,265,978	0.3223	408,083
1996	300,539	1,566,517	0.3320	520,109
1997	318,571	1,885,088	0.3420	644,656
1998	337,685	2,222,773	0.3522	782,941
1999	357,946	2,580,720	0.3628	936,293
2000	379,423	2,960,143	0.3737	1,106,167
2001		2,960,143	0.3849	1,139,352
2002		2,735,563	0.3964	1,084,499
2003		2,497,508	0.4083	1,019,827
2004		2,245,170	0.4206	944,292
2005		1,977,692	0.4332	856,747
2006		1,694,165	0.4462	755,939
2007		1,393,626	0.4596	640,494
2008		1,075,055	0.4734	508,905
2009		737,370	0.4876	359,524
2010		379,423	0.5022	190,548

NATURAL GAS FUEL COST - DISPLACEMENT DISTRIBUTION

<u>YEAR</u>	<u>TOTAL NATURAL GAS COST</u>	<u>19.6¢ OIL</u>	<u>80.4¢ COAL</u>
1991	64,320	12,607	51,713
1992	136,474	26,749	109,725
1993	217,239	42,579	174,660
1994	307,465	60,263	247,202
1995	408,083	79,984	328,098
1996	520,109	101,941	418,168
1997	644,656	126,353	518,303
1998	782,941	153,456	629,484
1999	936,293	183,513	752,779
2000	1,106,167	216,809	889,358
2001	1,139,352	223,313	916,039
2002	1,084,499	212,562	871,937
2003	1,019,827	199,886	819,941
2004	944,292	185,081	759,211
2005	856,747	167,922	688,825
2006	755,939	148,164	607,775
2007	640,494	125,537	514,957
2008	508,905	99,745	409,159
2009	359,524	70,467	289,058
2010	190,548	37,347	153,201
TOTAL		2,474,279	10,149,593

**RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE
AND OIL HEATING REPLACEMENT PROGRAM**

TABLE - 6 - FUEL SAVINGS OIL

YEAR	AVOIDED OIL COSTS	GAS COSTS	FUEL SAVINGS
1991	24,941	12,607	12,334
1992	53,433	26,749	26,684
1993	85,881	42,579	43,302
1994	122,730	60,263	62,467
1995	164,475	79,984	84,491
1996	211,661	101,941	109,720
1997	264,893	126,353	138,540
1998	322,045	153,456	168,589
1999	383,346	183,513	199,833
2000	449,035	216,809	232,226
2001	466,996	223,313	243,683
2002	447,281	212,562	234,719
2003	422,845	199,886	222,959
2004	393,098	185,081	208,017
2005	357,383	167,922	189,461
2006	314,971	148,164	166,807
2007	265,057	125,537	139,520
2008	206,744	99,745	106,999
2009	143,343	70,467	72,876
2010	74,538	37,347	37,191
			2,700,418

SUMMARY SHEET ITEM 9A

TABLE - 7 - FUEL SAVINGS COAL

YEAR	AVOIDED OIL COSTS	GAS COSTS	FUEL SAVINGS
1991	61,893	51,713	10,180
1992	131,324	109,725	21,599
1993	209,041	174,660	34,381
1994	295,863	247,202	48,661
1995	392,684	328,098	64,586
1996	500,483	418,168	82,315
1997	620,330	518,303	102,027
1998	746,918	629,484	117,434
1999	880,543	752,779	127,764
2000	1,021,513	889,358	132,155
2001	1,052,158	916,039	136,119
2002	998,049	871,937	126,112
2003	934,451	819,941	114,510
2004	860,359	759,211	101,148
2005	774,670	688,825	85,845
2006	676,173	607,775	68,398
2007	563,546	514,957	48,589
2008	435,340	409,159	26,181
2009	298,933	289,058	9,875
2010	153,951	153,201	750
			<hr/> <hr/> 1,458,629 <hr/> <hr/>

SUMMARY SHEET ITEM 9B

**RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE
AND OIL HEATING REPLACEMENT PROGRAM**

TABLE - 8 - TOTAL SAVINGS

YEAR	CONSTRUCTION DEFERRED	OIL SAVINGS	COAL SAVINGS	TOTAL SAVINGS
1991	1,811,152	12,334	10,180	1,833,666
1992	2,023,704	26,684	21,599	2,071,987
1993	2,260,339	43,302	34,381	2,338,022
1994	2,525,915	62,467	48,661	2,637,043
1995	2,821,590	84,491	64,586	2,970,667
1996	3,153,088	109,720	82,315	3,345,123
1997	3,522,044	138,540	102,027	3,762,611
1998	3,712,234	168,589	117,434	3,998,257
1999	3,912,695	199,833	127,764	4,240,292
2000	4,123,980	232,226	132,155	4,488,361
2001		243,683	136,119	379,802
2002		234,719	126,112	360,831
2003		222,959	114,510	337,469
2004		208,017	101,148	309,165
2005		189,461	85,845	275,306
2006		166,807	68,398	235,205
2007		139,520	48,589	188,109
2008		106,999	26,181	133,180
2009		72,876	9,875	82,751
2010		37,191	750	37,941

TABLE - 9 - NET PRESENT VALUE OF TOTAL PROGRAM

YEAR	TOTAL COST	DISCOUNT RATE 10.5%	PRESENT VALUE
1991	1,833,666	1.0000	1,833,666
1992	2,071,987	0.9054	1,875,977
1993	2,338,022	0.8197	1,916,477
1994	2,637,043	0.7422	1,957,213
1995	2,970,667	0.6720	1,996,288
1996	3,345,123	0.6084	2,035,173
1997	3,762,611	0.5508	2,072,446
1998	3,998,257	0.4987	1,993,931
1999	4,240,292	0.4515	1,914,492
2000	4,488,361	0.4088	1,834,842
2001	379,802	0.3701	140,565
2002	360,831	0.3351	120,914
2003	337,469	0.3034	102,388
2004	309,165	0.2747	84,928
2005	275,306	0.2487	68,469
2006	235,205	0.2252	52,968
2007	188,109	0.2039	38,355
2008	133,180	0.1846	24,585
2009	82,751	0.1671	13,828
2010	37,941	0.1513	5,740
TOTAL			20,083,245

**WEST FLORIDA NATURAL GAS RATEPAYER BENEFITS
RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE & OIL HEATING
REPLACEMENT PROGRAM**

WEST FLORIDA NATURAL GAS RATE PAYER BENEFITS

**RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE & OIL HEATING
REPLACEMENT PROGRAM**

Results from Allowance Program

Estimated Gas Company Expenditures

1. Personnel Costs	\$334,792
2. Advertising Costs	\$494,280
3. Installation Allowances	\$3,622,280
4. Total Costs	\$4,451,352
5. Present Value of Total Costs	\$2,826,228

Present Value of Total Program Benefits

6. Present Value Benefits	\$7,819,416
7. Present Value of Total Costs	\$2,826,228
8. Line 6 - Line 7	\$4,993,188

Benefit/Cost Ratio from Cumulative Totals

Line 6 / Line 7 **2.76 TO 1**

Discount Payback

Line 7 / Line 6 (Years) **.36 YRS**

GAS RATEPAYERS COST EFFECTIVENESS ANALYSIS

LIST OF ASSUMPTIONS

RESIDENTIAL ELECTRIC RESISTANCE APPLIANCE & OIL HEATING REPLACEMENT PROGRAM

1.	1991 Program Personnel Costs	\$25,400 /YR
	Escalation Rate - Personnel Costs	6.0% /YR
2.	1991 Advertising Costs	\$37,500 /YR
	Escalation Rate - Advertising Costs	6.0% /YR
3.	Applicable Non-Gas Energy Charge	\$0.2847 /THERM
	Escalation Rate - Non-Gas Energy Charge	0.0% /YR
5.	Average Natural Gas Annual Therm Consumption Per Installed Appliance	228 THERM
6.	Period of Appliance Use	10 YEARS
7.	Discount Rate or Rate of Time Preference	10.45% /YR
8.	Appliances Installed during Program 1st Year	985
	Escalation Rate	6.0% /YR
9.	Average Allowance Per Appliance	\$276
10.	Demand Charges (\$/TH)	\$0.02284
11.	Monthly Service Charge	\$6
12.	Heat Only Disconnect Period (Months)	6
13.	Cost to Cap Service at Main	\$125
	Escalation Rate	3.0%
14.	Cost to Run Service from Main/Set Regulator and Meter	\$375
	Cost to Set Regulator and Meter Only	\$120
	Escalation Rate	3.0%

15. Installation Distribution:

Heat Only	10.0%
Reactivate	10.0%
New on Main	45.0%
Added Load	35.0%

NUMBER OF APPLIANCES INSTALLED

<u>YEAR</u>	<u>APPLIANCES INSTALLED</u>	<u>APPLIANCES IN SERVICE</u>
1991	985	985
1992	1,044	2,029
1993	1,107	3,136
1994	1,173	4,309
1995	1,244	5,553
1996	1,318	6,871
1997	1,397	8,268
1998	1,481	9,749
1999	1,570	11,319
2000	1,664	12,983
2001	0	12,983
2002	0	12,983
2003	0	12,983
2004	0	12,983
2005	0	12,983
2006	0	12,983
2007	0	12,983
2008	0	12,983
2009	0	12,983
2010	0	12,983
TOTAL	12,983	

TABLE 1 - PROGRAM COSTS

<u>YEAR</u>	<u>PERSONNEL COSTS</u>	<u>ADVERTISING COSTS</u>	<u>INSTALLATION ALLOWANCES</u>	<u>TOTAL COSTS</u>
1991	25,400	37,500	274,815	337,715
1992	26,924	39,750	291,304	357,978
1993	28,539	42,135	308,782	379,457
1994	30,252	44,663	327,309	402,224
1995	32,067	47,343	346,948	426,357
1996	33,991	50,183	367,764	451,939
1997	36,030	53,194	389,830	479,055
1998	38,192	56,386	413,220	507,798
1999	40,484	59,769	438,013	538,266
2000	42,913	63,355	464,294	570,562
TOTAL	334,792	494,280	3,622,280	4,451,352

SUMMARY SHEET ITEMS 1, 2, 3 AND 4

TABLE 2 - PRESENT VALUE OF TOTAL COSTS

<u>YEAR</u>	<u>TOTAL COSTS</u>	<u>DISCOUNT FACTOR</u>	<u>PRESENT VALUE</u>
1991	337,715	1.00000	337,715
1992	357,978	0.90539	324,110
1993	379,457	0.81973	311,052
1994	402,324	0.74217	298,519
1995	426,357	0.67195	286,491
1996	451,939	0.60838	274,951
1997	479,055	0.55081	263,868
1998	507,798	0.49870	253,239
1999	538,266	0.45152	243,038
2000	570,562	0.40880	233,246
TOTAL	4,451,351		2,826,228

SUMMARY SHEET ITEM 5**TABLE 3 - ESTIMATED NUMBER OF THERMS ADDED**

<u>YEAR</u>	<u>THERMS ADDED</u>	<u>THERMS CUMULATIVE</u>	<u>GROSS MARGIN</u>	<u>"A" TOTAL MARGIN</u>
1991	224,580	224,580	0.2648	59,478
1992	238,032	462,612	0.2648	122,518
1993	252,396	715,008	0.2648	189,363
1994	267,444	982,452	0.2648	260,193
1995	283,632	1,266,084	0.2648	335,310
1996	300,504	1,566,588	0.2648	414,895
1997	318,516	1,885,104	0.2648	499,251
1998	337,668	2,222,772	0.2648	588,679
1999	357,960	2,580,732	0.2648	683,481
2000	379,392	2,960,124	0.2648	783,959
2001		2,960,124	0.2648	783,959
2002		2,960,124	0.2648	783,959
2003		2,960,124	0.2648	783,959
2004		2,960,124	0.2648	783,959
2005		2,960,124	0.2648	783,959
2006		2,960,124	0.2648	783,959
2007		2,960,124	0.2648	783,959
2008		2,960,124	0.2648	783,959
2009		2,960,124	0.2648	783,959
2010		2,960,124	0.2648	783,959
2011		2,960,124	0.2648	783,959
TOTAL	2,960,124			12,560,678

NEW SERVICE & METER SETS
TABLE 4 - OPERATING COSTS & SAVINGS

<u>YEAR</u>	<u>COSTS</u>	<u>CUT & CAP SAVINGS</u>	<u>"B" NET</u>
1991	178,039	12,313	(165,726)
1992	194,383	13,443	(180,940)
1993	212,227	14,677	(197,550)
1994	231,709	16,024	(215,685)
1995	252,980	17,495	(235,485)
1996	276,204	19,101	(257,103)
1997	301,560	20,855	(280,705)
1998	329,243	22,769	(306,474)
1999	359,467	24,859	(334,608)
2000	392,466	27,142	(365,325)
TOTAL	2,728,278	188,678	(2,539,601)

TABLE 5 - DEMAND DISPLACEMENT CHARGES AND CUSTOMER SERVICE CHARGES

<u>YEAR</u>	<u>APPLIANCES IN SERVICE</u>	<u>DEMAND DISPLACE</u>	<u>CUST SERVICE CHARGE</u>	<u>"C" TOTAL CONTRIB.</u>
1991	985	5,129	67,374	72,503
1992	2,029	10,567	138,790	149,357
1993	3,136	16,330	214,492	230,822
1994	4,309	22,439	294,735	317,175
1995	5,553	28,915	379,794	408,708
1996	6,871	35,779	469,955	505,734
1997	8,268	43,055	565,526	608,582
1998	9,749	50,768	666,832	717,600
1999	11,319	58,944	774,216	833,160
2000	12,983	67,610	888,043	955,653
2001	12,983	67,610	888,043	955,653
2002	12,983	67,610	888,043	955,653
2003	12,983	67,610	888,043	955,653
2004	12,983	67,610	888,043	955,653
2005	12,983	67,610	888,043	955,653
2006	12,983	67,610	888,043	955,653
2007	12,983	67,610	888,043	955,653
2008	12,983	67,610	888,043	955,653
2009	12,983	67,610	888,043	955,653
2010	12,983	67,610	888,043	955,653
2011	12,983	67,610	888,043	955,653
TOTAL		1,083,246	14,228,231	15,311,477

TABLE 6 - PRESENT VALUE OF TOTAL PROGRAM

<u>YEAR</u>	<u>(A + B + C) TOTAL CONTRIB.</u>	<u>DISCOUNT FACTOR</u>	<u>PRESENT VALUE</u>
1991	(33,745)	1.00000	(33,745)
1992	90,935	0.90539	82,332
1993	222,635	0.81973	182,500
1994	361,682	0.74217	268,430
1995	508,533	0.67195	341,709
1996	663,527	0.60838	403,676
1997	827,128	0.55081	455,590
1998	999,806	0.49870	498,603
1999	1,182,033	0.45152	533,711
2000	1,374,287	0.40880	561,808
2001	1,739,612	0.37012	643,865
2002	1,739,612	0.33510	582,944
2003	1,739,612	0.30340	527,798
2004	1,739,612	0.27469	477,854
2005	1,739,612	0.24870	432,642
2006	1,739,612	0.22517	391,708
2007	1,739,612	0.20387	354,655
2008	1,739,612	0.18458	321,098
2009	1,739,612	0.16712	290,724
2010	1,739,612	0.15130	263,203
2011	1,739,612	0.13699	238,309
TOTAL	25,332,552		7,819,416

SUMMARY SHEET ITEM NUMBER 6

RESIDENTIAL HOME BUILDER PROGRAM

I. Program Description

The Residential Home Builders Program is designed to increase the use of efficient natural gas in private residences by encouraging home builders to install energy efficient natural gas appliances in new residences in lieu of electrical appliances. This substitution will conserve energy, as well as lower the ratepayer's total annual energy costs.

Past objections to installing natural gas appliances in new homes included the additional initial costs required for piping, appliance connections, combustion air provisions, and gas appliance venting. This program proposes allowances payable to the builders to help defray the added costs for installing natural gas appliances, thus making these appliances more attractive and competitive to home builders. These additional costs have been determined by builders in the area to be between \$500.00 and \$700.00. The average cost in the State of Florida, as a whole, is \$950.00 to install natural gas piping and venting in the typical Florida home.

II. Program Participation Standards

Any builder of a new single or multi-family residential dwelling who installs energy efficient gas fired heating or water heating is eligible to participate in this program. A cash allowance will be paid to each participant to help defray the additional costs associated with the construction of piping and venting that natural gas appliances require. An incentive is justified because the installation of natural gas equipment increases total

construction costs without an offsetting decrease in electrical wiring costs. This allowance represents a 63% conservation incentive factor, leaving only 37% of the extra costs to be absorbed by the local contractor.

The allowances that are paid under this program are as follows:

<u>Year</u>	<u>Heating</u>	<u>Water Heater</u>	<u>Range</u>	<u>Dryer</u>
1990	225	100	50	60
1991	250	150	100	100
1992	250	150	100	100
1993	250	150	100	100
1994	250	150	100	100
1995	250	150	100	100

III. Benefits and Costs

The following effects in decreasing average kilowatt (KWH) consumption and kilowatt demand (KWD) displacement are expected with the installation of natural-gas appliances in new residences:

<u>Appliance</u>	<u>KWD Displacement</u>	<u>Annual KWH Consumption</u>
each central heater	7.50	5700
each water heater	.91	4500
each range	-0-	1650
each clothes dryer	-0-	1800

Company-wide projections for this program, as well as the demand and energy savings are listed on Table A-1. The number of residences built under this program in

the past and projections for future residences eligible under the program guidelines are listed on Table A-2.

Based on historical construction data and on projections for future construction trends, first year costs are anticipated to be:

Per Customer	\$4.42 / 52,280	Total Customers
Administrative	\$48,875	
Incentives	\$180,950	

IV. Cost Effectiveness Methodology

Based on the cost effectiveness methodology used in currently approved conservation programs, and using the assumptions listed, a benefit/cost ratio of 11.98 to 1 with a payback period of .08 years will be achieved for the State of Florida. The ratepayers of West Florida Natural Gas Company will receive a benefit/cost ratio of 2.67 to 1 with a payback period of .37 years.

V. Program Monitoring and Evaluation

The progress of the West Florida Natural Gas Company Residential Home Builder Program is monitored monthly at both divisions of the company. The Panama City office also submits a semi-annual report to the Florida Public Service Commission for both divisions. Feedback received from both divisions is constantly evaluated, and any revisions will be proposed to the program based upon these evaluations. Allowances paid to eligible participants under the program guidelines are based upon documentation and information necessary for Florida Public Service Commission audit purposes.

ATTACHMENT A - 1

**RESIDENTIAL HOME BUILDER PROGRAM
PROJECTED FORECASTED CONSERVATION**

YEAR	AVOIDED CAPACITY	ANNUAL KWH REDUCTION
1991	3,238	4,390,540
1992	3,335	4,522,256
1993	3,435	4,657,924
1994	3,538	4,797,662
1995	3,644	4,941,591
1996	3,754	5,089,839
1997	3,866	5,242,534
1998	3,866	5,242,534
1999	3,866	5,242,534
2000	3,866	5,242,534
TOTAL	36,408	49,369,950

ATTACHMENT A-2

RESIDENTIAL HOME BUILDER PROGRAM

<u>YEAR</u>	<u># OF ELIGIBLE PARTICIPANTS</u>	<u># OF ACTUAL PARTICIPATING HOMES</u>	<u>% OF ACTUAL TO ELIGIBLE</u>
1985	28,500	720	2.53%
1986	28,500	897	3.15%
1987	28,500	649	2.28%
1988	28,500	829	2.91%
1989	28,500	417	1.46%
1990	28,500	360	1.26%
1991	28,500	385	1.35%
1992	28,500	397	1.39%
1993	28,500	408	1.43%
1994	28,500	421	1.48%
1995	28,500	433	1.52%
1996	28,500	446	1.57%
1997	28,500	460	1.61%
1998	28,500	474	1.66%
1999	28,500	488	1.71%
2000	28,500	502	1.76%

RESIDENTIAL HOME BUILDER PROGRAM

Results from Allowance Program

Estimated Gas Company Expenditures

1. Personnel Costs	\$312,104
2. Advertising Cost	\$259,657
3. Installation Allowances	\$2,074,580
4. Total Costs	\$2,646,341
5. Present Value of Total	\$1,720,033

Reductions

6. KW	36,408
7. MWH	543,069

Estimated Electric Company Benefits

8. Construction Savings	\$33,940,441
9. Fuel Purchase Savings	
A. Oil	\$2,489,982
B. Coal	\$427,207
10. Total Savings	\$36,857,630

Net Present Value of Total Program

11. Net Present Value	\$20,611,123
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Net Benefits from Cumulative Totals

Col 11 - Col 5	\$18,891,090
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Benefit/Cost Ratio from Cumulative Totals

Col 11 / Col 5

11.98 TO 1

Discount Payback

Col 5 / Col 11 (Years)

.08 YEARS

LIST OF ASSUMPTIONS

RESIDENTIAL HOME BUILDER PROGRAM

1.	1991 Program Personnel Costs. Escalation Rate - Personnel Costs.	27,225 /YR 3.0% /YR
2.	1991 Advertising Costs. Escalation Rate - Advertising Costs.	22,650 /YR 3.0% /YR
3.	Fuel cost of Natural Gas 1991 Escalation Rate - Fuel Cost Natural Gas	\$0.28644 /THERM 3.0% /YR
4.	KWH Produced from Ton/Coal	2076 KWH
5.	KWH Produced from Barrel #6 Oil	613 KWH
6.	Percentage Breakdown of Displaced Fuel from Reduced KWH Generation	19.6% OIL 80.4% COAL
7.	1991 Construction Cost per KW. (Pulverized Coal) Escalation Rate of Construction.	\$721 /KW 5.4% /YR
8.	Average Allowance per Installation 385 Central Heaters, 385 Water Heaters, 150 Ranges & 120 Dryers (Central Heater = \$250, Water Heater = \$150) (Range = \$100, Dryer = \$100)	\$470 /INS
9.	Average KW for Gas Appliances Each Installation (Central Heater = 5700, Water Heater = 4500) (Range = 1650, Dryer = 1800)	11,404 KW
10.	Demand Displacement Winter Peak. (Water Heater = .91, Central Heater = 7.50) (Range and Dryer = nil)	8.41 KW
11.	Natural Gas Annual Therm consumption per Installation. (Water Heater = 300, Central Heater = 380) (Range = 110, Dryer = 120)	760 THERM
12.	Period of Appliance Use.	10 YRS

- 13. Homes Installing Gas During Program 1st Year Escalation Rate 385 UNITS
3.0% /YR
- 14. Price of Oil per Barrel Escalation Rate \$20.50 /BBL
4.0% /YR
- 15. Price of Coal per Ton Escalation Rate \$42.00 /TON
3.0% /YR
- 16. Discount Rate or Rate of Time Preference 10.45% /YR
- 17. Number of Appliance Installations During Program Life

1991	1040	1993	1103	1995	1170
1992	1071	1994	1136	1996	1205

RESIDENTIAL HOME BUILDER PROGRAM

TABLE - 1 - PROGRAM COSTS

YEAR	PERSONNEL COSTS	ADVERTISING COSTS	INSTALLATION ALLOWANCES	TOTAL COSTS
1991	27,225	22,650	180,950	230,825
1992	28,042	23,330	186,590	237,961
1993	28,883	24,029	191,760	244,672
1994	29,749	24,750	197,870	252,370
1995	30,642	25,493	203,510	259,645
1996	31,561	26,258	209,620	267,439
1997	32,508	27,045	216,200	275,753
1998	33,483	27,857	222,780	284,120
1999	34,488	28,692	229,360	292,540
2000	35,522	29,553	235,940	301,016
	312,104	259,657	2,074,580	2,646,341

SUMMARY SHEET ITEMS 1, 2, 3, AND 4.

TABLE - 2 - PRESENT VALUE OF TOTAL COSTS

YEAR	TOTAL COSTS	DISCOUNT FACTOR	PRESENT VALUE
1991	230,825	1.00000	230,825
1992	237,961	0.90539	215,448
1993	244,672	0.81973	200,565
1994	252,370	0.74217	187,301
1995	259,645	0.67195	174,468
1996	267,439	0.60838	162,704
1997	275,753	0.55081	151,888
1998	284,120	0.49870	141,691
1999	292,540	0.45152	132,088
2000	301,016	0.40880	123,055
TOTAL			1,720,033

SUMMARY SHEET ITEM 5

**TABLE - 3 - ESTIMATED INSTALLATIONS OF
NATURAL GAS HOMES**

YEAR	WATER HEATERS DISPLACED	KW DISPLACED	KWH AVOIDED
1991	385	3,238	4,390,540
1992	397	3,335	4,522,256
1993	408	3,435	4,657,924
1994	421	3,538	4,797,662
1995	433	3,644	4,941,591
1996	446	3,754	5,089,839
1997	460	3,866	5,242,534
1998	474	3,866	5,242,534
1999	488	3,866	5,242,534
2000	502	3,866	5,242,534
	4,414	36,408	49,369,950

RESIDENTIAL HOME BUILDER PROGRAM

TABLE - 4 - KW AVOIDANCE AND KWH REDUCTIONS FROM PROGRAM

<u>YEAR</u>	<u>KW</u>	<u>KWH</u>	<u>MWH CUMULATIVE</u>
1991	3,238	4,390,540	4,391
1992	3,335	4,522,256	8,913
1993	3,435	4,657,924	13,571
1994	3,538	4,797,662	18,368
1995	3,644	4,941,591	23,310
1996	3,754	5,089,839	28,400
1997	3,866	5,242,534	33,642
1998	3,866	5,242,534	38,885
1999	3,866	5,242,534	44,127
2000	3,866	5,242,534	49,370
2001			49,370
2002			44,979
2003			40,457
2004			35,799
2005			31,002
2006			26,060
2007			20,970
2008			15,728
2009			10,485
2010			5,243
			<u>543,069</u>

SUMMARY SHEET ITEMS 6

TABLE - 5 - TOTAL CONSTRUCTION COSTS DEFERRED

<u>YEAR</u>	<u>KW DEFERRED</u>	<u>COSTS PER KW</u>	<u>TOTAL CONSTRUCTION COSTS DEFERRED</u>
1991	3,238	721	2,334,490
1992	3,335	760	2,534,369
1993	3,435	801	2,751,362
1994	3,538	844	2,986,933
1995	3,644	890	3,242,674
1996	3,754	938	3,520,312
1997	3,866	989	3,821,721
1998	3,866	1,042	4,028,094
1999	3,866	1,098	4,245,611
2000	3,866	1,157	4,474,874
			<u>33,940,441</u>

SUMMARY SHEET ITEM 8

RESIDENTIAL HOME BUILDER PROGRAM

FUEL SAVINGS - OIL

<u>YEAR</u>	<u>KWH REDUCED</u>	<u>19.6¢ OIL</u>	<u>KW/BBL</u>	<u>\$/BBL</u>	<u>AVOIDED COSTS</u>
1991	4,390,540	860,546	613	20.50	28,778
1992	8,912,796	1,746,908	613	21.32	60,757
1993	13,570,720	2,659,861	613	22.17	96,210
1994	18,368,382	3,600,203	613	23.06	135,432
1995	23,309,973	4,568,755	613	23.98	178,741
1996	28,399,812	5,566,363	613	24.94	226,481
1997	33,642,346	6,593,900	613	25.94	279,020
1998	38,884,880	7,621,436	613	26.98	335,400
1999	44,127,414	8,648,973	613	28.06	395,845
2000	49,369,948	9,676,510	613	29.18	460,588
2001	49,369,948	9,676,510	613	30.35	479,011
2002	44,979,408	8,815,964	613	31.56	453,868
2003	40,457,152	7,929,602	613	32.82	424,566
2004	35,799,228	7,016,649	613	34.13	390,712
2005	31,001,566	6,076,307	613	35.50	351,884
2006	26,059,975	5,107,755	613	36.92	307,626
2007	20,970,136	4,110,147	613	38.40	257,445
2008	15,727,602	3,082,610	613	39.93	200,807
2009	10,485,068	2,055,073	613	41.53	139,226
2010	5,242,534	1,027,537	613	43.19	72,398
TOTAL					5,274,795

FUEL SAVINGS - COAL

<u>YEAR</u>	<u>KWH REDUCED</u>	<u>80.4¢ COAL</u>	<u>KW/TON</u>	<u>\$/TON</u>	<u>AVOIDED COSTS</u>
1991	4,390,540	3,529,994	2,076	42.00	71,416
1992	8,912,796	7,165,888	2,076	43.26	149,324
1993	13,570,720	10,910,859	2,076	44.56	234,183
1994	18,368,382	14,768,179	2,076	45.89	326,483
1995	23,309,973	18,741,218	2,076	47.27	426,745
1996	28,399,812	22,833,449	2,076	48.69	535,525
1997	33,642,346	27,048,446	2,076	50.15	653,413
1998	38,884,880	31,263,444	2,076	51.65	777,892
1999	44,127,414	35,478,441	2,076	53.20	909,252
2000	49,369,948	39,693,438	2,076	54.80	1,047,793
2001	49,369,948	39,693,438	2,076	56.44	1,079,227
2002	44,979,408	36,163,444	2,076	58.14	1,012,748
2003	40,457,152	32,527,550	2,076	59.88	938,253
2004	35,799,228	28,782,579	2,076	61.68	855,137
2005	31,001,566	24,925,259	2,076	63.53	762,751
2006	26,059,975	20,952,220	2,076	65.43	660,405
2007	20,970,136	16,859,989	2,076	67.40	547,362
2008	15,727,602	12,644,992	2,076	69.42	422,837
2009	10,485,068	8,429,995	2,076	71.50	290,348
2010	5,242,534	4,214,997	2,076	73.65	149,529
TOTAL					11,850,624

RESIDENTIAL HOME BUILDER PROGRAM

ANNUAL FUEL CONSUMPTION - NATURAL GAS

<u>YEAR</u>	<u>THERMS CONSUMED</u>	<u>THERMS CUMULATIVE</u>	<u>\$/THERM</u>	<u>TOTAL COSTS</u>
1991	292,600	292,600	0.2864	83,801
1992	301,720	594,320	0.2950	175,320
1993	310,080	904,400	0.3038	274,794
1994	319,960	1,224,360	0.3130	383,172
1995	329,080	1,553,440	0.3223	500,745
1996	338,960	1,892,400	0.3320	628,307
1997	349,600	2,242,000	0.3420	766,711
1998	360,240	2,602,240	0.3522	916,602
1999	370,880	2,973,120	0.3628	1,078,657
2000	381,520	3,354,640	0.3737	1,253,585
2001		3,354,640	0.3849	1,291,193
2002		3,062,040	0.3964	1,213,929
2003		2,760,320	0.4083	1,127,143
2004		2,450,240	0.4206	1,030,542
2005		2,130,280	0.4332	922,849
2006		1,801,200	0.4462	803,699
2007		1,462,240	0.4596	672,028
2008		1,112,640	0.4734	526,697
2009		752,400	0.4876	366,853
2010		381,520	0.5022	191,601

NATURAL GAS FUEL COST - DISPLACEMENT DISTRIBUTION

<u>YEAR</u>	<u>TOTAL NATURAL GAS COST</u>	<u>19.6%</u> <u>OIL</u>	<u>80.4%</u> <u>COAL</u>
1991	83,801	16,425	67,376
1992	175,320	34,363	140,957
1993	274,794	53,860	220,935
1994	383,172	75,102	308,070
1995	500,745	98,146	402,599
1996	628,307	123,148	505,159
1997	766,711	150,275	616,436
1998	916,602	179,654	736,948
1999	1,078,657	211,417	867,240
2000	1,253,585	245,703	1,007,883
2001	1,291,193	253,074	1,038,119
2002	1,213,929	237,930	975,999
2003	1,127,143	220,920	906,223
2004	1,030,542	201,986	828,556
2005	922,849	180,878	741,971
2006	803,699	157,525	646,174
2007	672,028	131,717	540,310
2008	526,697	103,233	423,464
2009	366,853	71,903	294,950
2010	191,601	37,554	154,047
TOTAL		2,784,813	11,423,416

RESIDENTIAL HOME BUILDER PROGRAM

TABLE - 6 - FUEL SAVINGS OIL

YEAR	AVOIDED OIL COSTS	GAS COSTS	FUEL SAVINGS
1991	28,778	16,425	12,353
1992	60,757	34,363	26,394
1993	96,210	53,860	42,350
1994	135,432	75,102	60,330
1995	178,741	98,146	80,595
1996	226,481	123,148	103,333
1997	279,020	150,275	128,745
1998	335,400	179,654	155,746
1999	395,845	211,417	184,428
2000	460,588	245,703	214,885
2001	479,011	253,074	225,937
2002	453,868	237,930	215,938
2003	424,566	220,920	203,646
2004	390,712	201,986	188,726
2005	351,884	180,878	171,006
2006	307,626	157,525	150,101
2007	257,445	131,717	125,728
2008	200,807	103,233	97,574
2009	139,226	71,903	67,323
2010	72,398	37,554	34,844
			2,489,982

SUMMARY SHEET ITEM 9A

TABLE - 7 - FUEL SAVINGS COAL

YEAR	AVOIDED OIL COSTS	GAS COSTS	FUEL SAVINGS
1991	71,416	67,376	4,040
1992	149,324	140,957	8,367
1993	234,183	220,935	13,248
1994	326,483	308,070	18,413
1995	426,745	402,599	24,146
1996	535,525	505,159	30,366
1997	653,413	616,436	36,977
1998	777,892	736,948	40,944
1999	909,252	867,240	42,012
2000	1,047,793	1,007,883	39,910
2001	1,079,227	1,038,119	41,108
2002	1,012,748	975,999	36,749
2003	938,253	906,223	32,030
2004	855,137	828,556	26,581
2005	762,751	741,971	20,780
2006	660,405	646,174	14,231
2007	547,362	540,310	7,052
2008	422,837	423,464	(627)
2009	290,348	294,950	(4,602)
2010	149,529	154,047	(4,518)
			<hr/>
			427,207

SUMMARY SHEET ITEM 9B

RESIDENTIAL HOME BUILDER PROGRAM

TABLE - 8 - TOTAL SAVINGS

<u>YEAR</u>	<u>CONSTRUCTION DEFERRED</u>	<u>OIL SAVINGS</u>	<u>COAL SAVINGS</u>	<u>TOTAL SAVINGS</u>
1991	2,334,490	12,353	4,040	2,350,883
1992	2,534,369	26,394	8,367	2,569,130
1993	2,751,362	42,350	13,248	2,806,960
1994	2,986,933	60,330	18,413	3,065,676
1995	3,242,674	80,595	24,146	3,347,415
1996	3,520,312	103,333	30,366	3,654,011
1997	3,821,721	128,745	36,977	3,987,443
1998	4,028,094	155,746	40,944	4,224,784
1999	4,245,611	184,428	42,012	4,472,051
2000	4,474,874	214,885	39,910	254,795
2001		225,937	41,108	267,045
2002		215,938	36,749	252,687
2003		203,646	32,030	235,676
2004		188,726	26,581	215,307
2005		171,006	20,780	191,786
2006		150,101	14,231	164,332
2007		125,728	7,052	132,780
2008		97,574	(627)	96,947
2009		67,323	(4,602)	62,721
2010		34,844	(4,518)	30,326

TABLE - 9 - NET PRESENT VALUE OF TOTAL PROGRAM

<u>YEAR</u>	<u>TOTAL COST</u>	<u>DISCOUNT RATE</u> 10.5%	<u>PRESENT VALUE</u>
1991	2,350,883	1.0000	2,350,883
1992	2,569,130	0.9054	2,326,090
1993	2,806,960	0.8197	2,300,865
1994	3,065,676	0.7422	2,275,345
1995	3,347,415	0.6720	2,249,463
1996	3,654,011	0.6084	2,223,100
1997	3,987,443	0.5508	2,196,284
1998	4,224,784	0.4987	2,106,900
1999	4,472,051	0.4515	2,019,131
2000	254,795	0.4088	104,160
2001	267,045	0.3701	98,833
2002	252,687	0.3351	84,675
2003	235,676	0.3034	71,504
2004	215,307	0.2747	59,145
2005	191,786	0.2487	47,697
2006	164,332	0.2252	37,008
2007	132,780	0.2039	27,074
2008	96,947	0.1846	17,896
2009	62,721	0.1671	10,481
2010	30,326	0.1513	4,588
TOTAL			20,611,123

**WEST FLORIDA NATURAL GAS RATEPAYER BENEFITS
RESIDENTIAL HOME BUILDER PROGRAM**

WEST FLORIDA NATURAL GAS RATE PAYER BENEFITS

RESIDENTIAL HOME BUILDER PROGRAM

Results from Allowance Program

Estimated Gas Company Expenditures

1. Personnel Costs	\$312,104
2. Advertising Costs	\$259,657
3. Installation Allowances	\$2,074,580
4. Total Costs	\$2,646,341
5. Present Value of Total Costs	\$1,720,033

Present Value of Total Program Benefits

6. Present Value Benefits	\$4,589,377
7. Present Value of Total Costs	\$1,720,033
8. Line 6 - Line 7	\$2,869,344

Benefit/Cost Ratio from Cumulative Totals

Line 6 / Line 7 **2.67 TO 1**

Discount Payback

Line 7 / Line 6 (Years) **.37 YRS**

GAS RATEPAYERS COST EFFECTIVENESS ANALYSIS

LIST OF ASSUMPTIONS

RESIDENTIAL HOME BUILDER PROGRAM

1.	1991 Program Personnel Costs Escalation Rate - Personnel Costs	\$27,225 /YR 3.0% /YR
2.	1991 Advertising Costs Escalation Rate - Advertising Costs	\$22,650 /YR 3.0% /YR
3.	Applicable Non-Gas Energy Charge Escalation Rate - Non-Gas Energy Charge	\$0.2847 /THERM 0.0% /YR
5.	Average Natural Gas Annual Therm Consumption per Installed Appliance	760 THERM
6.	Period of Appliance Use	10 YEARS
7.	Discount Rate or Rate of Time Preference	10.45% /YR
8.	Homes Installing Gas During Program 1st Year Escalation Rate	385 3.0% /YR
9.	Average Allowance per Installation	\$470
10.	Demand Charges (\$/TH)	\$0.02284
11.	Monthly Service Charge	\$6
12.	Heat Only Disconnect Period (Months)	6
13.	Cost to Cap Service at Main Escalation Rate	\$125 3.0%
14.	Cost to Run Service from Main/Set Regulator and Meter Cost to Set Regulator and Meter Only Escalation Rate	\$375 \$120 3.0%
15.	Installation Distribution:	
	Heat Only	0.0%
	Reactivate	0.0%
	New on Main	100.0%
	Added Load	0.0%

NUMBER OF HOMES PARTICIPATING

<u>YEAR</u>	<u>HOMES PARTICIPATING</u>	<u>HOMES ON MAIN</u>
1991	385	385
1992	397	782
1993	408	1,190
1994	421	1,611
1995	433	2,044
1996	446	2,490
1997	460	2,950
1998	474	3,424
1999	488	3,911
2000	502	4,414
2001	0	4,414
2002	0	4,414
2003	0	4,414
2004	0	4,414
2005	0	4,414
2006	0	4,414
2007	0	4,414
2008	0	4,414
2009	0	4,414
2010	0	4,414
TOTAL	4,414	

TABLE 1 - PROGRAM COSTS

<u>YEAR</u>	<u>PERSONNEL COSTS</u>	<u>ADVERTISING COSTS</u>	<u>INSTALLATION ALLOWANCES</u>	<u>TOTAL COSTS</u>
1991	27,225	22,650	180,950	230,825
1992	28,042	23,330	186,590	237,961
1993	28,883	24,029	191,760	244,672
1994	29,749	24,750	197,870	252,370
1995	30,642	25,493	203,510	259,645
1996	31,561	26,258	209,620	267,439
1997	32,508	27,045	216,200	275,753
1998	33,483	27,857	222,780	284,120
1999	34,488	28,692	229,360	292,540
2000	35,522	29,553	235,940	301,016
TOTAL	312,104	259,657	2,074,580	2,646,341

SUMMARY SHEET ITEMS 1, 2, 3 AND 4

TABLE 2 - PRESENT VALUE OF TOTAL COSTS

<u>YEAR</u>	<u>TOTAL COSTS</u>	<u>DISCOUNT FACTOR</u>	<u>PRESENT VALUE</u>
1991	230,825	1.00000	230,825
1992	237,961	0.90539	215,448
1993	244,672	0.81973	200,565
1994	252,370	0.74217	187,301
1995	259,645	0.67195	174,468
1996	267,439	0.60838	162,705
1997	275,753	0.55081	151,888
1998	284,120	0.49870	141,691
1999	292,540	0.45152	132,088
2000	301,016	0.40880	123,055
TOTAL			1,720,033

SUMMARY SHEET ITEM 5

TABLE 3 - ESTIMATED NUMBER OF THERMS ADDED

<u>YEAR</u>	<u>THERMS ADDED</u>	<u>THERMS CUMULATIVE</u>	<u>GROSS MARGIN</u>	<u>"A" TOTAL MARGIN</u>
1991	292,600	292,600	0.2648	77,492
1992	301,720	594,320	0.2648	157,400
1993	310,080	904,400	0.2648	239,521
1994	319,960	1,224,360	0.2648	324,260
1995	329,080	1,553,440	0.2648	411,413
1996	338,960	1,892,400	0.2648	501,183
1997	349,600	2,242,000	0.2648	593,771
1998	360,240	2,602,240	0.2648	689,177
1999	370,880	2,973,120	0.2648	787,401
2000	381,520	3,354,640	0.2648	888,443
2001		3,354,640	0.2648	888,443
2002		3,354,640	0.2648	888,443
2003		3,354,640	0.2648	888,443
2004		3,354,640	0.2648	888,443
2005		3,354,640	0.2648	888,443
2006		3,354,640	0.2648	888,443
2007		3,354,640	0.2648	888,443
2008		3,354,640	0.2648	888,443
2009		3,354,640	0.2648	888,443
2010		3,354,640	0.2648	888,443
2011		3,354,640	0.2648	888,443
TOTAL	3,354,640			14,442,933

NEW SERVICE & METER SETS
TABLE 4 - OPERATING COSTS & SAVINGS

YEAR	COSTS	CUT & CAP SAVINGS	"B" NET
1991	144,375	0	(144,375)
1992	148,875	0	(148,875)
1993	153,000	0	(153,000)
1994	157,875	0	(157,875)
1995	162,375	0	(162,375)
1996	167,250	0	(167,250)
1997	172,500	0	(172,500)
1998	177,750	0	(177,750)
1999	183,000	0	(183,000)
2000	188,250	0	(188,250)
TOTAL	1,655,250	0	(1,655,250)

TABLE 5 - DEMAND DISPLACEMENT CHARGES AND CUSTOMER SERVICE CHARGES

YEAR	HOMES ON MAIN	DEMAND DISPLACE	CUST SERVICE CHARGE	"C" TOTAL CONTRIB.
1991	385	6,683	27,720	34,403
1992	782	13,574	28,552	42,126
1993	1,190	20,656	29,408	50,065
1994	1,611	27,964	30,290	58,255
1995	2,044	35,481	31,199	66,680
1996	2,490	43,222	32,135	75,357
1997	2,950	51,207	33,099	84,306
1998	3,424	59,435	34,092	93,527
1999	3,911	67,889	35,115	103,004
2000	4,414	76,620	36,168	112,788
2001	4,414	76,620	36,168	112,788
2002	4,414	76,620	36,168	112,788
2003	4,414	76,620	36,168	112,788
2004	4,414	76,620	36,168	112,788
2005	4,414	76,620	36,168	112,788
2006	4,414	76,620	36,168	112,788
2007	4,414	76,620	36,168	112,788
2008	4,414	76,620	36,168	112,788
2009	4,414	76,620	36,168	112,788
2010	4,414	76,620	36,168	112,788
2011	4,414	76,620	36,168	112,788
TOTAL		1,245,552	715,627	1,961,179

TABLE 6 - PRESENT VALUE OF TOTAL PROGRAM

YEAR	(A + B + C) TOTAL CONTRIB.	DISCOUNT FACTOR	PRESENT VALUE
1991	(32,480)	1.00000	(32,480)
1992	50,651	0.90539	45,859
1993	136,586	0.81973	111,963
1994	224,640	0.74217	166,721
1995	315,718	0.67195	212,146
1996	409,290	0.60838	249,004
1997	505,577	0.55081	278,477
1998	604,954	0.49870	301,691
1999	707,405	0.45152	319,407
2000	812,981	0.40880	332,347
2001	1,001,231	0.37012	370,576
2002	1,001,231	0.33510	335,513
2003	1,001,231	0.30340	303,773
2004	1,001,231	0.27469	275,028
2005	1,001,231	0.24870	249,006
2006	1,001,231	0.22517	225,447
2007	1,001,231	0.20387	204,121
2008	1,001,231	0.18458	184,807
2009	1,001,231	0.16712	167,326
2010	1,001,231	0.15130	151,486
2011	1,001,231	0.13699	137,159
TOTAL	14,748,863		4,589,377

SUMMARY SHEET ITEM NUMBER 6

GAS APPLIANCE ENERGY SAVINGS PAYBACK PROGRAM

I. Program Description:

The Gas Appliance Energy Savings Payback Program is designed to promote the replacement of standard gas appliances with energy efficient natural gas appliances and to ensure that new installations comply with the energy efficiency standards set forth in the Florida Energy Code. The program focuses on water heaters, central furnaces, ranges, and dryers. Monetary installation allowances are added to the program to encourage potential customers to install the more expensive energy efficient natural gas appliances rather than the standard natural gas or electric appliances.

II. Program Participation:

Any current or potential residential customer installing a water heater, central furnace, range, or dryer is eligible to participate in the program. The participant must install a new energy efficient natural gas appliance in place of a standard natural gas model or an electric unit within an existing residential dwelling. The participating customer will receive a monetary incentive to help defray the additional costs associated with gas piping, electrical wiring for pilotless ignition units, and the special venting required to comply with the current Florida energy codes.

Customers who are eligible to participate in this program may also qualify for benefits from another program. The customer who is eligible under more than one conservation program will receive the benefits from each one under which he qualifies.

III. Benefits and Costs:

The following effects in decreasing winter peak kilowatt displacement and annual kilowatt hour consumption are expected when a customer installs an energy efficient gas appliance rather than a standard natural gas or electric model:

<u>Appliance</u>	<u>Standard</u>	<u>High Efficiency</u>	<u>Savings per Year</u>
Water Heater	300	225	75
Central Furnace	380	300	80
Range	50	38	12
Dryer	54	40	14

Consumptions shown are average figures from customer accounts in our service area and agree with the present Conservation Program administered by West Florida Natural Gas Company since 1984.

It is anticipated that an individual customer who participates in this program can expect annual energy savings to be the sum of the values for the appliances listed above which he replaces. Company-wide projections for the program, as well as the accumulated demand and energy savings are shown on Attachment A-1.

The number of customers who have participated in this program in the past and projections for anticipated future participation are shown on Attachment A-2.

Based on historical participation as well as on projections of future participation, first year costs are anticipated as follows:

Per Customer	\$.41 / 52,260 Total Customers
Administration	\$8,000

Incentives \$15,500

IV. Cost Effectiveness Methodology:

Based on the cost effectiveness methodology used in currently approved conservation programs, and using the assumptions listed, a benefit/cost ratio of 50.3 to 1 with a payback period of .02 years will be achieved for the State of Florida. The ratepayers of West Florida Natural Gas Company will receive a benefit/cost ratio of 7.51 to 1 with a payback period of .13 years. The cost effectiveness calculations follow Table A-2.

V. Program Monitoring and Evaluation:

The progress of West Florida Natural Gas Company Gas Appliance Energy Savings Payback Program is monitored monthly at both divisions of the company. The Panama City office also submits a semi-annual report to the Florida Public Service Commission for both divisions. Feedback from both divisions is constantly evaluated and any necessary revisions will be proposed to the program based upon these evaluations. Allowances paid to eligible participants under the program guidelines are based upon documentation and information necessary for Florida Public Service Commission audit purposes.

ATTACHMENT A - 1

GAS ENERGY SAVINGS PAYBACK (ESP) PROGRAM

PROJECTED FORECASTED CONSERVATION

YEAR	AVOIDED CAPACITY	ANNUAL KWH REDUCTION
1991	1,135	1,591,540
1992	1,169	1,639,286
1993	1,204	1,688,465
1994	1,240	1,739,119
1995	1,277	1,791,292
1996	1,315	1,845,031
1997	1,355	1,900,382
1998	1,395	1,957,393
1999	1,437	2,016,115
2000	1,480	2,076,599
TOTAL	13,007	18,245,222

ATTACHMENT A-2

GAS ENERGY SAVINGS PAYBACK (ESP) PROGRAM

<u>YEAR</u>	<u># OF ELIGIBLE PARTICIPANTS</u>	<u># OF ACTUAL APPLIANCES</u>	<u>% OF ACTUAL TO ELIGIBLE</u>
1985	200,000	408	0.20%
1986	200,000	458	0.23%
1987	200,000	322	0.16%
1988	200,000	483	0.24%
1989	200,000	334	0.17%
1990	200,000	254	0.13%
1991	200,000	310	0.16%
1992	200,000	319	0.16%
1993	200,000	329	0.16%
1994	200,000	339	0.17%
1995	200,000	349	0.17%
1996	200,000	359	0.18%
1997	200,000	370	0.19%
1998	200,000	381	0.19%
1999	200,000	393	0.20%
2000	200,000	404	0.20%

GAS APPLIANCE ENERGY SAVINGS PAYBACK (ESP) PROGRAM

RESULTS FROM ALLOWANCE PROGRAM

Estimated Gas Company Expenditures

1. Personnel Costs	\$20,635
2. Advertising Costs	\$55,359
3. Installation Allowances	\$177,690
4. Total Costs	\$253,684
5. Present Value of Total	\$164,053

Reductions

6. KW	13,007
7. MWH	499,216

Estimated Electric Company Benefits

8. Construction Savings	\$11,894,983
9. Fuel Purchase Savings	
A. Oil	\$1,407,601
B. Coal	\$2,226,397
10. Total Savings	\$15,528,981

Net Present Value of Total Program

11. Net Present Value	\$8,252,050
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Net Benefits from Cumulative Totals

Col 11 - Col 5	\$8,087,997
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Benefit/Cost Ratio from Cumulative Totals

Col 11 / Col 5

50.3 TO 1

Discount Payback

Col 5 / Col 11 (Years)

0.02 YEARS

LIST OF ASSUMPTIONS

GAS APPLIANCE ENERGY SAVINGS PAYBACK (ESP) PROGRAM

1.	1991 Program Personnel Costs. Escalation Rate - Personnel Costs.	1,800 /YR 3.0% /YR
2.	1991 Advertising Costs. Escalation Rate - Advertising Costs.	4,200 /YR 6.0% /YR
3.	Fuel Cost of Natural Gas 1991 Escalation Rate - Fuel Cost Natural Gas	\$0.2864 /THERM 3.0% /YR
4.	KWH Produced from Ton of Coal	2076 KWH
5.	KWH Produced from Barrel #6 Oil	613 KWH
6.	Percentage Breakdown of Displaced Fuel from Reduced KWH Generation	19.6% OIL 80.4% COAL
7.	1991 Construction Cost per KW. (Pulverized Coal) Escalation Rate of Construction.	\$721 /KW 5.4% /YR
8.	KW is eliminated at the time of its deferral.	
9.	Average Allowance for Each Energy Efficient Appliance Installed.	\$50 /APP
10.	Demand Displacement	
	- Water Heating	.91 KW
	- Central Heating	7.50 KW
	- Range	NIL
	- Dryer	NIL
11.	Average Natural Gas Annual Therm Consumption per Installed Appliance	171 THERM
12.	Period of Appliance Use.	10 YRS

- | | | |
|-----|---|----------------------------------|
| 13. | Price of Oil per Barrel
Escalation Rate | \$20.50 /BL
4.0% /YR |
| 14. | Price of Coal per Ton
Escalation Rate | \$42.00 /TON
3.0% /YR |
| 15. | Discount Rate or Rate of Time Preference | 10.45% /TON |
| 16. | Gas Appliances Installed During Program 1st Year
Escalation Rate | 310 APPL
3.0% /YR |

	Number	Allowance	KW Displaced	KWH Avoided	Gas Therms
Water Heater	10	\$50	0.91	4500	225
Central Heat	150	50	7.50	9450	300
Range	75	50	NIL	722	38
Dryer	75	50	NIL	1000	40
Total	310				
Weighted Average Allowance			\$50		
Weighted Average KW			3.66		
Weighted Average KWH			5134		
Weighted Average Therms Gas			171		

GAS ENERGY SAVINGS PAYBACK (ESP) PROGRAM

TABLE - 1 - PROGRAM COSTS

YEAR	PERSONNEL COSTS	ADVERTISING COSTS	INSTALLATION ALLOWANCES	TOTAL COSTS
1991	1,800	4,200	15,500	21,500
1992	1,854	4,452	15,965	22,271
1993	1,910	4,719	16,444	23,073
1994	1,967	5,002	16,937	23,906
1995	2,026	5,302	17,445	24,774
1996	2,087	5,621	17,969	25,676
1997	2,149	5,958	18,508	26,615
1998	2,214	6,315	19,063	27,592
1999	2,280	6,694	19,635	28,609
2000	2,349	7,096	20,224	29,668
	20,635	55,359	177,690	253,684

SUMMARY SHEET ITEMS 1, 2, 3, AND 4.

TABLE - 2 - PRESENT VALUE OF TOTAL COSTS

YEAR	TOTAL COSTS	DISCOUNT FACTOR	PRESENT VALUE
1991	21,500	1.00000	21,500
1992	22,271	0.90539	20,164
1993	23,073	0.81973	18,913
1994	23,906	0.74217	17,743
1995	24,774	0.67195	16,647
1996	25,676	0.60838	15,621
1997	26,615	0.55081	14,660
1998	27,592	0.49870	13,760
1999	28,609	0.45152	12,918
2000	29,668	0.40880	12,128
TOTAL			164,053

SUMMARY SHEET ITEM 5

**TABLE - 3 - ESTIMATED NUMBER OF NATURAL GAS
AND OIL HEATING APPLIANCES INSTALLED**

YEAR	APPLIANCES INSTALLED	KW DISPLACED	KWH AVOIDED
1991	310	1,135	1,591,540
1992	319	1,169	1,639,286
1993	329	1,204	1,688,465
1994	339	1,240	1,739,119
1995	349	1,277	1,791,292
1996	359	1,315	1,845,031
1997	370	1,355	1,900,382
1998	381	1,395	1,957,393
1999	393	1,437	2,016,115
2000	404	1,480	2,076,599
	3,554	13,007	18,245,222

GAS ENERGY SAVINGS PAYBACK (ESP) PROGRAM

TABLE - 4 - KW AVOIDANCE AND KWH REDUCTIONS FROM PROGRAM

YEAR	KW	KWH	MWH CUMULATIVE
1991	1,135	1,591,540	1,592
1992	1,169	1,639,286	3,231
1993	1,204	1,688,465	4,919
1994	1,240	1,739,119	6,658
1995	1,277	1,791,292	8,450
1996	1,315	1,845,031	10,295
1997	1,355	1,900,382	12,195
1998	1,355	1,900,382	14,095
1999	1,355	1,900,382	15,996
2000	1,355	1,900,382	17,896
2001			48,132
2002			46,540
2003			44,901
2004			43,213
2005			41,474
2006			39,682
2007			37,837
2008			35,937
2009			34,037
2010			32,136
			499,216

SUMMARY SHEET ITEMS

TABLE - 5 - TOTAL CONSTRUCTION COSTS DEFERRED

YEAR	KW DEFERRED	COSTS PER KW	TOTAL CONSTRUCTION COSTS DEFERRED
1991	1,135	721	818,335
1992	1,169	760	888,363
1993	1,204	801	964,368
1994	1,240	844	1,046,836
1995	1,277	890	1,136,288
1996	1,315	938	1,233,287
1997	1,355	989	1,339,424
1998	1,355	1,042	1,411,753
1999	1,355	1,098	1,487,988
2000	1,355	1,157	1,568,339
			11,894,983

SUMMARY SHEET ITEM 8

GAS ENERGY SAVINGS PAYBACK (ESP) PROGRAM

FUEL SAVINGS - OIL

<u>YEAR</u>	<u>KWH REDUCED</u>	<u>19.6¢ OIL</u>	<u>KW/BBL</u>	<u>\$/BBL</u>	<u>AVOIDED COSTS</u>
1991	1,591,540	311,942	613	20.50	10,432
1992	3,230,826	633,242	613	21.32	22,024
1993	4,919,291	964,181	613	22.17	34,875
1994	6,658,410	1,305,048	613	23.06	49,093
1995	8,449,702	1,656,142	613	23.98	64,792
1996	10,294,733	2,017,768	613	24.94	82,098
1997	12,195,115	2,390,243	613	25.94	101,143
1998	14,095,497	2,762,717	613	26.98	121,580
1999	15,995,879	3,135,192	613	28.06	143,491
2000	17,896,261	3,507,667	613	29.18	166,960
2001	17,896,261	3,507,667	613	30.35	173,638
2002	16,304,721	3,195,725	613	31.56	164,524
2003	14,665,435	2,874,425	613	32.82	153,902
2004	12,976,970	2,543,486	613	34.13	141,630
2005	11,237,851	2,202,619	613	35.50	127,556
2006	9,446,559	1,851,526	613	36.92	111,512
2007	7,601,528	1,489,899	613	38.40	93,322
2008	5,701,146	1,117,425	613	39.93	72,791
2009	3,800,764	744,950	613	41.53	50,469
2010	1,900,382	372,475	613	43.19	26,244
TOTAL					1,912,076

FUEL SAVINGS - COAL

<u>YEAR</u>	<u>KWH REDUCED</u>	<u>80.4¢ COAL</u>	<u>KW/TON</u>	<u>\$/TON</u>	<u>AVOIDED COSTS</u>
1991	1,591,540	1,279,598	2,076	42.00	25,888
1992	3,230,826	2,597,584	2,076	43.26	54,129
1993	4,919,291	3,955,110	2,076	44.56	84,890
1994	6,658,410	5,353,362	2,076	45.89	118,348
1995	8,449,702	6,793,560	2,076	47.27	154,692
1996	10,294,733	8,276,965	2,076	48.69	194,124
1997	12,195,115	9,804,872	2,076	50.15	236,858
1998	14,095,497	11,332,780	2,076	51.65	281,980
1999	15,995,879	12,860,687	2,076	53.20	329,597
2000	17,896,261	14,388,594	2,076	54.80	379,818
2001	17,896,261	14,388,594	2,076	56.44	391,212
2002	16,304,721	13,108,996	2,076	58.14	367,114
2003	14,665,435	11,791,010	2,076	59.88	340,110
2004	12,976,970	10,433,484	2,076	61.68	309,981
2005	11,237,851	9,035,232	2,076	63.53	276,492
2006	9,446,559	7,595,033	2,076	65.43	239,392
2007	7,601,528	6,111,629	2,076	67.40	198,415
2008	5,701,146	4,583,721	2,076	69.42	153,276
2009	3,800,764	3,055,814	2,076	71.50	105,249
2010	1,900,382	1,527,907	2,076	73.65	54,203
TOTAL					4,295,768

GAS ENERGY SAVINGS PAYBACK (ESP) PROGRAM

ANNUAL FUEL CONSUMPTION - NATURAL GAS

YEAR	THERMS CONSUMED	THERMS CUMULATIVE	\$/THERM	TOTAL COSTS
1991	53,010	53,010	0.2864	15,182
1992	54,600	107,610	0.2950	31,744
1993	56,238	163,849	0.3038	49,784
1994	57,925	221,774	0.3130	69,406
1995	59,663	281,437	0.3223	90,720
1996	61,453	342,890	0.3320	113,845
1997	63,297	406,187	0.3420	138,906
1998	65,196	471,383	0.3522	166,038
1999	67,151	538,534	0.3628	195,382
2000	69,166	607,700	0.3737	227,090
2001		607,700	0.3849	233,902
2002		554,690	0.3964	219,904
2003		500,090	0.4083	204,206
2004		443,851	0.4206	186,679
2005		385,926	0.4332	167,185
2006		326,263	0.4462	145,579
2007		264,810	0.4596	121,703
2008		201,513	0.4734	95,391
2009		136,317	0.4876	66,465
2010		69,166	0.5022	34,735

NATURAL GAS FUEL COST - DISPLACEMENT DISTRIBUTION

YEAR	TOTAL NATURAL GAS COST	19.6% OIL	80.4% COAL
1991	15,182	2,976	12,206
1992	31,744	6,222	25,522
1993	49,784	9,758	40,026
1994	69,406	13,604	55,802
1995	90,720	17,781	72,939
1996	113,845	22,314	91,531
1997	138,906	27,226	111,681
1998	166,038	32,543	133,494
1999	195,382	38,295	157,087
2000	227,090	44,510	182,580
2001	233,902	45,845	188,057
2002	219,904	43,101	176,803
2003	204,206	40,024	164,181
2004	186,679	36,589	150,090
2005	167,185	32,768	134,417
2006	145,579	28,533	117,046
2007	121,703	23,854	97,849
2008	95,391	18,697	76,695
2009	66,465	13,027	53,438
2010	34,735	6,808	27,927
TOTAL		504,474	2,069,373

GAS ENERGY SAVINGS PAYBACK (ESP) PROGRAM**TABLE - 6 - FUEL SAVINGS OIL**

YEAR	AVOIDED OIL COSTS	GAS COSTS	FUEL SAVINGS
1991	10,432	2,976	7,456
1992	22,024	6,222	15,802
1993	34,875	9,758	25,117
1994	49,093	13,604	35,489
1995	64,792	17,781	47,011
1996	82,098	22,314	59,784
1997	101,143	27,226	73,917
1998	121,580	32,543	89,037
1999	143,491	38,295	105,196
2000	166,960	44,510	122,450
2001	173,638	45,845	127,793
2002	164,524	43,101	121,423
2003	153,902	40,024	113,878
2004	141,630	36,589	105,041
2005	127,556	32,768	94,788
2006	111,512	28,533	82,979
2007	93,322	23,854	69,468
2008	72,791	18,697	54,094
2009	50,469	13,027	37,442
2010	26,244	6,808	19,436
			1,407,601

SUMMARY SHEET ITEM 9A

TABLE - 7 - FUEL SAVINGS COAL

<u>YEAR</u>	<u>AVOIDED OIL COSTS</u>	<u>GAS COSTS</u>	<u>FUEL SAVINGS</u>
1991	25,888	12,206	13,682
1992	54,129	25,522	28,607
1993	84,890	40,026	44,864
1994	118,348	55,802	62,546
1995	154,692	72,939	81,753
1996	194,124	91,531	102,593
1997	236,858	111,681	125,177
1998	281,980	133,494	148,486
1999	329,597	157,087	172,510
2000	379,818	182,580	197,238
2001	391,212	188,057	203,155
2002	367,114	176,803	190,311
2003	340,110	164,181	175,929
2004	309,981	150,090	159,891
2005	276,492	134,417	142,075
2006	239,392	117,046	122,346
2007	198,415	97,849	100,566
2008	153,276	76,695	76,581
2009	105,249	53,438	51,811
2010	54,203	27,927	26,276
			<hr/> <hr/> 2,226,397 <hr/> <hr/>

SUMMARY SHEET ITEM 9B

GAS ENERGY SAVINGS PAYBACK (ESP) PROGRAM

TABLE - 8 - TOTAL SAVINGS

YEAR	CONSTRUCTION DEFERRED	OIL SAVINGS	COAL SAVINGS	TOTAL SAVINGS
1991	818,335	7,456	13,682	839,473
1992	888,363	15,802	28,607	932,772
1993	964,368	25,117	44,864	1,034,349
1994	1,046,836	35,489	62,546	1,144,871
1995	1,136,288	47,011	81,753	1,265,052
1996	1,233,287	59,784	102,593	1,395,664
1997	1,339,424	73,917	125,177	1,538,518
1998	1,411,753	89,037	148,486	1,649,276
1999	1,487,988	105,196	172,510	1,765,694
2000	1,568,339	122,450	197,238	319,688
2001		127,793	203,155	330,948
2002		121,423	190,311	311,734
2003		113,878	175,929	289,807
2004		105,041	159,891	264,932
2005		94,788	142,075	236,863
2006		82,979	122,346	205,325
2007		69,468	100,566	170,034
2008		54,094	76,581	130,675
2009		37,442	51,811	89,253
2010		19,436	26,276	45,712

TABLE - 9 - NET PRESENT VALUE OF TOTAL PROGRAM

YEAR	TOTAL COST	DISCOUNT RATE 10.5%	PRESENT VALUE
1991	839,473	1.0000	839,473
1992	932,772	0.9054	844,532
1993	1,034,349	0.8197	847,856
1994	1,144,871	0.7422	849,723
1995	1,265,052	0.6720	850,115
1996	1,395,664	0.6084	849,122
1997	1,538,518	0.5508	847,416
1998	1,649,276	0.4987	822,494
1999	1,765,694	0.4515	797,211
2000	319,688	0.4088	130,688
2001	330,948	0.3701	122,484
2002	311,734	0.3351	104,462
2003	289,807	0.3034	87,927
2004	264,932	0.2747	72,777
2005	236,863	0.2487	58,908
2006	205,325	0.2252	46,239
2007	170,034	0.2039	34,670
2008	130,675	0.1846	24,123
2009	89,253	0.1671	14,914
2010	45,712	0.1513	6,916
TOTAL			8,252,050

**WEST FLORIDA NATURAL GAS RATEPAYER BENEFITS
GAS ENERGY SAVINGS PAYBACK (ESP) PROGRAM**

WEST FLORIDA NATURAL GAS RATEPAYER BENEFITS

GAS APPLIANCE ENERGY SAVINGS PAYBACK (ESP) PROGRAM

Results from Allowance Program

Estimated Gas Company Expenditures

1. Personnel Costs	\$20,635
2. Advertising Costs	\$55,359
3. Installation Allowances	\$177,690
4. Total Costs	\$253,684
5. Present Value of Total Costs	\$164,053

Present Value of Total Program Benefits

6. Present Value Benefits	\$1,232,031
7. Present Value of Total Costs	\$164,053
8. Line 6 - Line 7	\$1,067,978

Benefit/Cost Ratio from Cumulative Totals

Line 6 / Line 7 **7.51 TO 1**

Discount Payback

Line 7 / Line 6 (Years) **.13 YRS**

GAS RATEPAYERS COST EFFECTIVENESS ANALYSIS

LIST OF ASSUMPTIONS

GAS APPLIANCE ENERGY SAVINGS PAYBACK (ESP) PROGRAM

1.	1991 Program Personnel Costs Escalation Rate - Personnel Costs	\$1,800 /YR 3.0% /YR
2.	1991 Advertising Costs Escalation Rate - Advertising Costs	\$4,200 /YR 6.0% /YR
3.	Applicable Non-Gas Energy Charge Escalation Rate - Non-Gas Energy Charge	\$0.3026 /THERM 0.0% /YR
5.	Average Natural Gas Annual Therm Consumption per Installed Appliance	171 THERM
6.	Period of Appliance Use	10 YEARS
7.	Discount Rate or Rate of Time Preference	10.45% /YR
8.	Appliances Installed During Program 1ST Year Escalation Rate	310 3.0% /YR
9.	Average Allowance per Customer	\$50
10.	Demand Charges (\$/TH)	\$0.02284
11.	Monthly Service Charge	\$8
12.	Heat Only Disconnect Period (Months)	6
13.	Cost to Cap Service at Main Escalation Rate	\$125 3.0%
14.	Cost to Run Service from Main/Set Regulator and Meter Cost to Set Regulator and Meter Only Escalation Rate	\$375 \$120 3.0%

15. Installation Distribution:	
Heat Only	0.0%
Reactivate	0.0%
New on Main	0.0%
Added Load	0.0%

NUMBER OF APPLIANCES INSTALLED

<u>YEAR</u>	<u>APPLIANCES INSTALLED</u>	<u>APPLIANCES IN SERVICE</u>
1991	310	310
1992	319	629
1993	329	958
1994	339	1,297
1995	349	1,646
1996	359	2,005
1997	370	2,375
1998	381	2,757
1999	393	3,149
2000	404	3,554
TOTAL	3,554	

TABLE 1 - PROGRAM COSTS

<u>YEAR</u>	<u>PERSONNEL COSTS</u>	<u>ADVERTISING COSTS</u>	<u>INSTALLATION ALLOWANCES</u>	<u>TOTAL COSTS</u>
1991	1,800	4,200	15,500	21,500
1992	1,854	4,452	15,965	22,271
1993	1,910	4,719	16,444	23,073
1994	1,967	5,002	16,937	23,906
1995	2,026	5,302	17,445	24,774
1996	2,087	5,621	17,969	25,676
1997	2,149	5,958	18,508	26,615
1998	2,214	6,315	19,063	27,592
1999	2,280	6,694	19,635	28,609
2000	2,349	7,096	20,224	29,668
TOTAL	20,635	55,359	177,690	253,684

SUMMARY SHEET ITEMS 1, 2, 3 AND 4

TABLE 2 - PRESENT VALUE OF TOTAL COSTS

<u>YEAR</u>	<u>TOTAL COSTS</u>	<u>DISCOUNT FACTOR</u>	<u>PRESENT VALUE</u>
1991	21,500	1.00000	21,500
1992	22,271	0.90539	20,164
1993	23,073	0.81973	18,914
1994	23,906	0.74217	17,742
1995	24,774	0.67195	16,647
1996	25,676	0.60838	15,621
1997	26,615	0.55081	14,660
1998	27,592	0.49870	13,760
1999	28,609	0.45152	12,918
2000	29,668	0.40880	12,128
TOTAL	253,684		164,053

SUMMARY SHEET ITEM 5**TABLE 3 - ESTIMATED NUMBER OF THERMS ADDED**

<u>YEAR</u>	<u>THERMS ADDED</u>	<u>THERMS CUMULATIVE</u>	<u>GROSS MARGIN</u>	<u>"A" TOTAL MARGIN</u>
1991	53,010	53,010	0.2648	14,039
1992	54,549	107,559	0.2648	28,486
1993	56,259	163,818	0.2648	43,386
1994	57,969	221,787	0.2648	58,738
1995	59,679	281,466	0.2648	74,543
1996	61,389	342,855	0.2648	90,802
1997	63,270	406,125	0.2648	107,558
1998	65,151	471,276	0.2648	124,813
1999	67,203	538,479	0.2648	142,611
2000	69,084	607,563	0.2648	160,907
2001		607,563	0.2648	160,907
2002		607,563	0.2648	160,907
2003		607,563	0.2648	160,907
2004		607,563	0.2648	160,907
2005		607,563	0.2648	160,907
2006		607,563	0.2648	160,907
2007		607,563	0.2648	160,907
2008		607,563	0.2648	160,907
2009		607,563	0.2648	160,907
2010		607,563	0.2648	160,907
2011		607,563	0.2648	160,907
TOTAL	607,563			2,615,859

NEW SERVICE & METER SETS
TABLE 4 - OPERATING COSTS & SAVINGS

<u>YEAR</u>	<u>COSTS</u>	<u>CUT & CAP SAVINGS</u>	<u>"B" NET</u>
1991	0	0	0
1992	0	0	0
1993	0	0	0
1994	0	0	0
1995	0	0	0
1996	0	0	0
1997	0	0	0
1998	0	0	0
1999	0	0	0
2000	0	0	0
TOTAL	0	0	0

TABLE 5 - DEMAND DISPLACEMENT CHARGES AND CUSTOMER SERVICE CHARGES

<u>YEAR</u>	<u>APPLIANCE IN SERVICE</u>	<u>DEMAND DISPLACE</u>	<u>CUST SERVICE CHARGE</u>	<u>"C" TOTAL CONTRIB.</u>
1991	310	1,211	22,320	23,531
1992	629	2,457	22,990	25,446
1993	958	3,742	23,679	27,421
1994	1,297	5,066	24,390	29,455
1995	1,646	6,429	25,121	31,550
1996	2,005	7,831	25,875	33,706
1997	2,375	9,276	26,651	35,927
1998	2,756	10,764	27,451	38,215
1999	3,149	12,299	28,274	40,573
2000	3,553	13,877	29,123	42,999
2001	3,553	13,877	36,168	50,045
2002	3,553	13,877	36,168	50,045
2003	3,553	13,877	36,168	50,045
2004	3,553	13,877	36,168	50,045
2005	3,553	13,877	36,168	50,045
2006	3,553	13,877	36,168	50,045
2007	3,553	13,877	36,168	50,045
2008	3,553	13,877	36,168	50,045
2009	3,553	13,877	36,168	50,045
2010	3,553	13,877	36,168	50,045
2011	3,553	13,877	36,168	50,045
TOTAL		225,594	653,722	879,315

TABLE 6 - PRESENT VALUE OF TOTAL PROGRAM

YEAR	(A + B + C) TOTAL CONTRIB.	DISCOUNT FACTOR	PRESENT VALUE
1991	37,570	1.00000	37,570
1992	53,932	0.90539	48,830
1993	70,807	0.81973	58,043
1994	88,193	0.74217	65,454
1995	106,093	0.67195	71,289
1996	124,508	0.60838	75,748
1997	143,485	0.55081	79,033
1998	163,028	0.49870	81,302
1999	183,184	0.45152	82,711
2000	203,906	0.40880	83,357
2001	210,952	0.37012	78,077
2002	210,952	0.33510	70,690
2003	210,952	0.30340	64,003
2004	210,952	0.27469	57,946
2005	210,952	0.24870	52,464
2006	210,952	0.22517	47,500
2007	210,952	0.20387	43,007
2008	210,952	0.18458	38,937
2009	210,952	0.16712	35,254
2010	210,952	0.15130	31,917
2011	210,952	0.13699	28,898
TOTAL	3,495,175		1,232,031

SUMMARY SHEET ITEM NUMBER 6

TABLE 6 - PRESENT VALUE OF TOTAL PROGRAM

YEAR	(A + B + C) TOTAL CONTRIB.	DISCOUNT FACTOR	PRESENT VALUE
1991	37,570	1.00000	37,570
1992	53,932	0.90539	48,830
1993	70,807	0.81973	58,043
1994	88,193	0.74217	65,454
1995	106,093	0.67195	71,289
1996	124,508	0.60838	75,748
1997	143,485	0.55081	79,033
1998	163,028	0.49870	81,302
1999	183,184	0.45152	82,711
2000	203,906	0.40880	83,357
2001	210,952	0.37012	78,077
2002	210,952	0.33510	70,690
2003	210,952	0.30340	64,003
2004	210,952	0.27469	57,946
2005	210,952	0.24870	52,464
2006	210,952	0.22517	47,500
2007	210,952	0.20387	43,007
2008	210,952	0.18458	38,937
2009	210,952	0.16712	35,254
2010	210,952	0.15130	31,917
2011	210,952	0.13699	28,898
TOTAL	3,495,175		1,232,031

SUMMARY SHEET ITEM NUMBER 6

GAS WATER HEATER LOAD RETENTION PROGRAM

I. Program Description

The Gas Water Heater Load Retention Program is designed to urge the continued use of natural gas water heaters, effectively reducing conversions from natural gas to electricity. Past tendencies, often under emergency situations, such as leaking or inoperative equipment, have been to make a quick fix by replacing an existing natural gas water heater with an electric model because of lower initial costs and easier installation. When these electric models are installed, efforts designed to reduce electric consumption and KW demand are circumvented. This program promotes the efficiencies of natural gas and supports the conservation of petroleum fuels, KWH consumption and KW demand.

This program is specifically aimed at residential gas water heater installations because water heaters are generally the greatest energy user in the home on a year around basis. By providing incentives to keep this appliance in place, the program keeps the customer using natural gas for water heating instead of changing to electricity.

II. Program Participation Standards

Any current customer using natural gas for residential water heating is eligible to participate in the program when he replaces an existing natural gas water heater with an energy efficient natural gas water heater. The allowance paid to the participant is designed to help defray the higher purchase cost associated with gas water heaters and

generally higher installation cost over equivalent electric water heaters.

Allowances under the program are as follows:

<u>YEAR</u>	<u>WATER HEATER</u>
1990	\$ 0
1991	100
1992	100
1993	100
1994	100

II. Benefits and Costs

The following effect in winter peak KWD and annual KWH consumptions is expected to continue with the retention of gas water heater load:

Each Water Heater	.91KWD	4,500 KWH
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Projections of the customers expected to utilize the program and the demand and energy saving associated are shown on Table A-1.

Projections of new participants in this program are shown on Table A-2.

Based on projections of customers expected to participate in the program, first year costs are anticipated as follows:

Per customer	\$84/52,280 Total Customers
Administrative	\$12,155.00
Incentives	\$31,500.00

IV. Cost Effectiveness Methodology

Based on the cost effectiveness methodology used in currently approved conservation programs and using the assumptions listed, a benefit/cost ratio of 7.14 to 1 with a payback period of .14 years will be achieved for the State of Florida. The ratepayers of West Florida Natural Gas Company will receive a benefit/cost ratio of 5.32 to 1 with a payback period of .19 years.

V. Program Monitoring and Evaluation

The progress of the West Florida Natural Gas Gas Water Heater Load Retention Program will be monitored monthly at both divisions of the company. The Panama City office will also submit a semi-annual report to the Florida Public Service Commission for both divisions. Feedback received from both divisions will be constantly evaluated, and any revisions will be proposed to the program based upon these evaluations. Allowances paid under the program guidelines are based upon documentation and information necessary for Florida Public Service Commission audit purposes.

ATTACHMENT A - 1

GAS WATER HEATER LOAD RETENTION PROGRAM

PROJECTED FORECASTED CONSERVATION

<u>YEAR</u>	<u>AVOIDED CAPACITY</u>	<u>ANNUAL KWH REDUCTION</u>
1991	287	1,417,500
1992	295	1,460,025
1993	304	1,503,826
1994	313	1,548,941
1995	323	1,595,409
1996	332	1,643,271
1997	342	1,692,569
1998	353	1,743,346
1999	363	1,795,647
2000	374	1,849,516
TOTAL	3,286	16,250,049

ATTACHMENT A-2

GAS WATER HEATER LOAD RETENTION PROGRAM

YEAR	‡ OF ELIGIBLE PARTICIPANTS	‡ OF ACTUAL PARTICIPATING HOMES	‡ OF ACTUAL TO ELIGIBLE
1985			
1986			
1987			
1988			
1989			
1990			
1991	52,260	315	0.60‡
1992	52,783	324	0.61‡
1993	53,310	334	0.63‡
1994	53,844	344	0.64‡
1995	54,382	355	0.65‡
1996	54,926	365	0.66‡
1997	55,475	376	0.68‡
1998	56,030	387	0.69‡
1999	56,590	399	0.71‡
2000	57,156	411	0.72‡

GAS WATER HEATER LOAD RETENTION PROGRAM

RESULTS FROM ALLOWANCE PROGRAM

Estimated Gas Company Expenditures

1. Personnel Costs	\$77,954
2. Advertising Costs	\$61,389
3. Installation Allowances	\$361,112
4. Total Costs	\$500,456
5. Present Value of Total	\$325,280

Reductions

6. KW	3,286
7. MWH	176,901

Estimated Electric Company Benefits

8. Construction Savings	\$3,075,104
9. Fuel Purchase Savings	
A. Oil	\$841,790
B. Coal	\$219,852
10. Total Savings	\$4,136,746

Net Present Value of Total Program

11. Net Present Value	\$2,321,010
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Net Benefits from Cumulative Totals

Col 11 - Col 5	\$1,995,730
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Benefit/Cost Ratio from Cumulative Totals

Col 11 / Col 5

7.14 TO 1

Discount Payback

Col 5 / Col 11 (Years)

.14 YRS

LIST OF ASSUMPTIONS

GAS WATER HEATER LOAD RETENTION PROGRAM

1.	1991 Program Personnel Costs. Escalation Rate - Personnel Costs.	6,800 /YR 3.0% /YR
2.	1991 Advertising Costs. Escalation Rate - Advertising Costs.	5,355 /YR 3.0% /YR
3.	Fuel Cost of Natural Gas 1991. Escalation Rate - Fuel Cost Natural Gas	\$0.2864 /THER 3.0% /YR
4.	KWH Produced from Ton of Coal.	2076 KWH
5.	KWH Produced from Barrel #6 Oil.	613 KWH
6.	Percentage Breakdown of Displaced Fuel From Reduced KWH Generation.	19.6% OIL 80.4% COAL
7.	1991 Construction Cost per KW. (Pulverized Coal) Escalation Rate of Construction.	\$721 /KW 5.4% /YR
8.	Treatment of Deferred KW - It is treated as being eliminated at the time of its deferral.	
9.	Allowance per Customer Toward Installation of Natural Gas Water Heater on a per Unit Basis. Average KWH for Water Heater Being Replaced	\$100.00 /WH 4,500 KWH/WH
10.	Demand Displacement (Winter) and Summer Peak.	0.91 KW
11.	Annual KWH Reductions 1st Year	1,417,500 KWH
12.	Estimated Annual Hours of Operation. (Electric)	1560 HRS/YR
13.	Estimated Percent of Full Load on Time (Electric)	18% ON
14.	Natural Gas Annual Therm Consumption per Installation	300 THERM
15.	Period of Appliance Use.	10 YRS

- 16. **Water Heaters Displaced During Program 1st Year Escalation Rate** 315 UNITS
3.0% /YR
- 17. **Price of Oil per Barrel Escalation Rate** \$20.50 /BL
4.0% /YR
- 18. **Price of Coal per Ton Escalation Rate** \$42.00 /TON
3.0% /YR
- 19. **Discount Rate or Rate of Time Preference** 10.45% /YR
- 20. **Water Heaters Displaced During Program Life**

1991	315	1995	355	1999	399
1992	324	1996	365	2000	411
1993	334	1997	376		
1994	344	1998	387		

**TABLE - 3 - ESTIMATED INSTALLATIONS OF
NATURAL GAS WATER HEATERS**

YEAR	WATER HEATERS RETAINED	KW DISPLACED	KWH AVOIDED
1991	315	287	1,417,500
1992	324	295	1,460,025
1993	334	304	1,503,826
1994	344	313	1,548,941
1995	355	323	1,595,409
1996	365	332	1,643,271
1997	376	342	1,692,569
1998	387	353	1,743,346
1999	399	363	1,795,647
2000	411	374	1,849,516
	3,611	3,286	16,250,049

GAS WATER HEATER LOAD RETENTION PROGRAM

TABLE - 4 - KW AVOIDANCE AND KWH REDUCTIONS FROM PROGRAM

<u>YEAR</u>	<u>KW</u>	<u>KWH</u>	<u>MWH CUMULATIVE</u>
1991	287	1,417,500	1,418
1992	295	1,460,025	2,878
1993	304	1,503,826	4,381
1994	313	1,548,941	5,930
1995	323	1,595,409	7,526
1996	332	1,643,271	9,169
1997	342	1,692,569	10,862
1998	353	1,743,346	12,605
1999	363	1,795,647	14,401
2000	374	1,849,516	16,250
2001			16,250
2002			14,833
2003			13,373
2004			11,869
2005			10,320
2006			8,724
2007			7,081
2008			5,389
2009			3,645
2010			1,850
			<u>176,901</u>

SUMMARY SHEET ITEMS 6 AND 7.

TABLE - 5 - TOTAL CONSTRUCTION COSTS DEFERRED

<u>YEAR</u>	<u>KW DEFERRED</u>	<u>COSTS PER KW</u>	<u>TOTAL CONSTRUCTION COSTS DEFERRED</u>
1991	287	721	206,675
1992	295	760	224,370
1993	304	801	243,581
1994	313	844	264,436
1995	323	890	287,077
1996	332	938	311,657
1997	342	989	338,341
1998	353	1,042	367,309
1999	363	1,098	398,758
2000	374	1,157	432,900
			<u>3,075,104</u>

SUMMARY SHEET ITEM 8

GAS WATER HEATER LOAD RETENTION PROGRAM

FUEL SAVINGS - OIL

<u>YEAR</u>	<u>KWH REDUCED</u>	<u>19.6¢ OIL</u>	<u>KW/BBL</u>	<u>\$/BBL</u>	<u>AVOIDED COSTS</u>
1991	1,417,500	277,830	613	20.50	9,291
1992	2,877,525	563,995	613	21.32	19,616
1993	4,381,351	858,745	613	22.17	31,062
1994	5,930,292	1,162,337	613	23.06	43,725
1995	7,525,701	1,475,037	613	23.98	57,707
1996	9,168,972	1,797,119	613	24.94	73,120
1997	10,861,541	2,128,862	613	25.94	90,083
1998	12,604,887	2,470,558	613	26.98	108,723
1999	14,400,534	2,822,505	613	28.06	129,180
2000	16,250,050	3,185,010	613	29.18	151,602
2001	16,250,050	3,185,010	613	30.35	157,666
2002	14,832,550	2,907,180	613	31.56	149,669
2003	13,372,525	2,621,015	613	32.82	140,334
2004	11,868,699	2,326,265	613	34.13	129,535
2005	10,319,758	2,022,673	613	35.50	117,135
2006	8,724,349	1,709,972	613	36.92	102,987
2007	7,081,078	1,387,891	613	38.40	86,933
2008	5,388,509	1,056,148	613	39.93	68,799
2009	3,645,163	714,452	613	41.53	48,402
2010	1,849,516	362,505	613	43.19	25,541
TOTAL					1,741,108

FUEL SAVINGS - COAL

<u>YEAR</u>	<u>KWH REDUCED</u>	<u>80.4¢ COAL</u>	<u>KW/TON</u>	<u>\$/TON</u>	<u>AVOIDED COSTS</u>
1991	1,417,500	1,139,670	2,076	42.00	23,057
1992	2,877,525	2,313,530	2,076	43.26	48,210
1993	4,381,351	3,522,606	2,076	44.56	75,607
1994	5,930,292	4,767,955	2,076	45.89	105,406
1995	7,525,701	6,050,664	2,076	47.27	137,776
1996	9,168,972	7,371,853	2,076	48.69	172,896
1997	10,861,541	8,732,679	2,076	50.15	210,956
1998	12,604,887	10,134,329	2,076	51.65	252,161
1999	14,400,534	11,578,029	2,076	53.20	296,725
2000	16,250,050	13,065,040	2,076	54.80	344,880
2001	16,250,050	13,065,040	2,076	56.44	355,226
2002	14,832,550	11,925,370	2,076	58.14	333,967
2003	13,372,525	10,751,510	2,076	59.88	310,126
2004	11,868,699	9,542,434	2,076	61.68	283,508
2005	10,319,758	8,297,085	2,076	63.53	253,903
2006	8,724,349	7,014,377	2,076	65.43	221,090
2007	7,081,078	5,693,187	2,076	67.40	184,830
2008	5,388,509	4,332,361	2,076	69.42	144,870
2009	3,645,163	2,930,711	2,076	71.50	100,940
2010	1,849,516	1,487,011	2,076	73.65	52,753
TOTAL					3,908,887

GAS WATER HEATER LOAD RETENTION PROGRAM

ANNUAL FUEL CONSUMPTION - NATURAL GAS

<u>YEAR</u>	<u>THERMS CONSUMED</u>	<u>THERMS CUMULATIVE</u>	<u>\$/THERM</u>	<u>TOTAL COSTS</u>
1991	94,500	94,500	0.2864	27,065
1992	97,335	191,835	0.2950	56,590
1993	100,255	292,090	0.3038	88,749
1994	103,263	395,353	0.3130	123,728
1995	106,361	501,713	0.3223	161,725
1996	109,551	611,265	0.3320	202,950
1997	112,838	724,103	0.3420	247,626
1998	116,223	840,326	0.3522	295,993
1999	119,710	960,036	0.3628	348,304
2000	123,301	1,083,337	0.3737	404,829
2001		1,083,337	0.3849	416,974
2002		988,837	0.3964	392,019
2003		891,502	0.4083	364,034
2004		791,247	0.4206	332,789
2005		687,984	0.4332	298,039
2006		581,624	0.4462	259,522
2007		472,072	0.4596	216,959
2008		359,234	0.4734	170,053
2009		243,011	0.4876	118,487
2010		123,301	0.5022	61,923

NATURAL GAS FUEL COST - DISPLACEMENT DISTRIBUTION

<u>YEAR</u>	<u>TOTAL NATURAL GAS COST</u>	<u>19.6% OIL</u>	<u>80.4% COAL</u>
1991	27,065	5,305	21,760
1992	56,590	11,092	45,498
1993	88,749	17,395	71,354
1994	123,728	24,251	99,478
1995	161,725	31,698	130,027
1996	202,950	39,778	163,172
1997	247,626	48,535	199,091
1998	295,993	58,015	237,978
1999	348,304	68,268	280,036
2000	404,829	79,346	325,482
2001	416,974	81,727	335,247
2002	392,019	76,836	315,183
2003	364,034	71,351	292,683
2004	332,789	65,227	267,562
2005	298,039	58,416	239,623
2006	259,522	50,866	208,655
2007	216,959	42,524	174,435
2008	170,053	33,330	136,722
2009	118,487	23,223	95,263
2010	61,923	12,137	49,786
TOTAL		899,318	3,689,038

GAS WATER HEATER LOAD RETENTION PROGRAM

TABLE - 6 - FUEL SAVINGS OIL

<u>YEAR</u>	<u>AVOIDED OIL COSTS</u>	<u>GAS COSTS</u>	<u>FUEL SAVINGS</u>
1991	9,291	5,305	3,986
1992	19,616	11,092	8,524
1993	31,062	17,395	13,667
1994	43,725	24,251	19,474
1995	57,707	31,698	26,009
1996	73,120	39,778	33,342
1997	90,083	48,535	41,548
1998	108,723	58,015	50,708
1999	129,180	68,268	60,912
2000	151,602	79,346	72,256
2001	157,666	81,727	75,939
2002	149,669	76,836	72,833
2003	140,334	71,351	68,983
2004	129,535	65,227	64,308
2005	117,135	58,416	58,719
2006	102,987	50,866	52,121
2007	86,933	42,524	44,409
2008	68,799	33,330	35,469
2009	48,402	23,223	25,179
2010	25,541	12,137	13,404
			<hr/> <hr/>
			841,790

SUMMARY SHEET ITEM 9A

TABLE - 7 - FUEL SAVINGS COAL

YEAR	AVOIDED OIL COSTS	GAS COSTS	FUEL SAVINGS
1991	23,057	21,760	1,297
1992	48,210	45,498	2,712
1993	75,607	71,354	4,253
1994	105,406	99,478	5,928
1995	137,776	130,027	7,749
1996	172,896	163,172	9,724
1997	210,956	199,091	11,865
1998	252,161	237,978	14,183
1999	296,725	280,036	16,689
2000	344,880	325,482	19,398
2001	355,226	335,247	19,979
2002	333,967	315,183	18,784
2003	310,126	292,683	17,443
2004	283,508	267,562	15,946
2005	253,903	239,623	14,280
2006	221,090	208,655	12,435
2007	184,830	174,435	10,395
2008	144,870	136,722	8,148
2009	100,940	95,263	5,677
2010	52,753	49,786	2,967
			<hr/> 219,852 <hr/>

SUMMARY SHEET ITEM 9B

GAS WATER HEATER LOAD RETENTION PROGRAM

TABLE - 8 - TOTAL SAVINGS

YEAR	CONSTRUCTION DEFERRED	OIL SAVINGS	COAL SAVINGS	TOTAL SAVINGS
1991	206,675	3,986	1,297	211,958
1992	224,370	8,524	2,712	235,606
1993	243,581	13,667	4,253	261,501
1994	264,436	19,474	5,928	289,838
1995	287,077	26,009	7,749	320,835
1996	311,657	33,342	9,724	354,723
1997	338,341	41,548	11,865	391,754
1998	367,309	50,708	14,183	432,200
1999	398,758	60,912	16,689	476,359
2000	432,900	72,256	19,398	524,554
2001		75,939	19,979	95,918
2002		72,833	18,784	91,617
2003		68,983	17,443	86,426
2004		64,308	15,946	80,254
2005		58,719	14,280	72,999
2006		52,121	12,435	64,556
2007		44,409	10,395	54,804
2008		35,469	8,148	43,617
2009		25,179	5,677	30,856
2010		13,404	2,967	16,371

TABLE - 9 - NET PRESENT VALUE OF TOTAL PROGRAM

YEAR	TOTAL COST	DISCOUNT RATE 10.5%	PRESENT VALUE
1991	211,958	1.0000	211,958
1992	235,606	0.9054	213,318
1993	261,501	0.8197	214,352
1994	289,838	0.7422	215,118
1995	320,835	0.6720	215,601
1996	354,723	0.6084	215,813
1997	391,754	0.5508	215,778
1998	432,200	0.4987	215,538
1999	476,359	0.4515	215,076
2000	524,554	0.4088	214,438
2001	95,918	0.3701	35,499
2002	91,617	0.3351	30,701
2003	86,426	0.3034	26,222
2004	80,254	0.2747	22,046
2005	72,999	0.2487	18,155
2006	64,556	0.2252	14,538
2007	54,804	0.2039	11,175
2008	43,617	0.1846	8,052
2009	30,856	0.1671	5,156
2010	16,371	0.1513	2,477
TOTAL			2,321,010

WEST FLORIDA NATURAL GAS COMPANY - RATEPAYER BENEFITS
GAS WATER HEATER LOAD RETENTION PROGRAM

WEST FLORIDA NATURAL GAS COMPANY - RATE PAYER BENEFITS

GAS WATER HEATER LOAD RETENTION PROGRAM

Results from Allowance Program

Estimated Gas Company Expenditures

1. Personnel Costs	\$77,954
2. Advertising Costs	\$61,389
3. Installation Allowances	\$361,112
4. Total Costs	\$500,456
5. Present Value of Total Cost	\$325,280

Present Value of Total Program Benefits

6. Present Value Benefits	\$1,731,889
7. Present Value of Total Costs	\$325,280
8. Line 6 - Line 7	\$1,406,609

Benefit/Cost Ratio from Cumulative Totals

Line 6 / Line 7 5.32 TO 1

Discount Payback

Line 7 / Line 6 (Years) .19 YRS

GAS RATEPAYERS COST EFFECTIVENESS ANALYSIS

LIST OF ASSUMPTIONS

GAS WATER HEATER LOAD RETENTION PROGRAM

1.	1991 Program Personnel Costs. Escalation Rate - Personnel Costs.	\$6,800 /YR 3.0% /YR
2.	1991 Advertising Costs. Escalation Rate - Advertising Costs.	\$5,355 /YR 3.0% /YR
3.	Applicable Non-Gas Energy Charge. Escalation Rate - Non-Gas Energy Charge	\$0.2847 THERM 0.0% /YR
4.	Average Natural Gas Annual Therm Consumption per Installed Appliance	300 THERM
5.	Period of Appliance Use.	10 YRS
6.	Discount Rate or Rate of Time Preference	10.45% /YR
7.	Appliances Installed During Program 1st Year Escalation Rate	315 3.0% /YR
8.	Average Allowance per Customer	\$100
9.	Demand Charges (\$/TH)	\$0.02284
10.	Monthly Service Charge	\$8
11.	Heat Only Disconnect Period (Months)	6
12.	Cost to Cap Service at Main Escalation Rate	\$125 3.0%
13.	Cost to Run Service from Main/Set Regulator and Meter Cost to Set Regulator and Meter Only Escalation Rate	\$375 \$120 3.0%

14. Installation Distribution:

Heat Only

0.0%

Reactivate

0.0%

New on Main

0.0%

Added Load

0.0%

NUMBER OF APPLIANCES INSTALLED

<u>YEAR</u>	<u>APPLIANCES INSTALLED</u>	<u>APPLIANCES IN SERVICE</u>
1991	315	315
1992	324	639
1993	334	974
1994	344	1,318
1995	355	1,672
1996	365	2,038
1997	376	2,414
1998	387	2,801
1999	399	3,200
2000	411	3,611
2001	0	3,611
2002	0	3,611
2003	0	3,611
2004	0	3,611
2005	0	3,611
2006	0	3,611
2007	0	3,611
2008	0	3,611
2009	0	3,611
2010	0	3,611
TOTAL	3,611	

TABLE 1 - PROGRAM COSTS

<u>YEAR</u>	<u>PERSONNEL COSTS</u>	<u>ADVERTISING COSTS</u>	<u>INSTALLATION ALLOWANCES</u>	<u>TOTAL COSTS</u>
1991	6,800	5,355	31,500	43,655
1992	7,004	5,516	32,445	44,965
1993	7,214	5,681	33,418	46,314
1994	7,431	5,852	34,421	47,703
1995	7,653	6,027	35,454	49,134
1996	7,883	6,208	36,517	50,608
1997	8,120	6,394	37,613	52,126
1998	8,363	6,586	38,741	53,690
1999	8,614	6,784	39,903	55,301
2000	8,872	6,987	41,100	56,960
TOTAL	77,954	61,389	361,112	500,456

SUMMARY SHEET ITEMS 1, 2, 3 AND 4

TABLE 2 - PRESENT VALUE OF TOTAL COSTS

YEAR	TOTAL COSTS	DISCOUNT FACTOR	PRESENT VALUE
1991	43,655	1.00000	43,655
1992	44,965	0.90539	40,711
1993	46,314	0.81973	37,965
1994	47,703	0.74217	35,404
1995	49,134	0.67195	33,016
1996	50,608	0.60838	30,789
1997	52,126	0.55081	28,712
1998	53,690	0.49870	26,775
1999	55,301	0.45152	24,970
2000	56,960	0.40880	23,285
TOTAL	500,456		325,281

SUMMARY SHEET ITEM 5**TABLE 3 - ESTIMATED NUMBER OF THERMS ADDED**

YEAR	THERMS ADDED	THERMS CUMULATIVE	GROSS MARGIN	"A" TOTAL MARGIN
1991	94,500	94,500	0.26484	25,027
1992	97,200	191,700	0.26484	50,770
1993	100,200	291,900	0.26484	77,307
1994	103,200	395,100	0.26484	104,638
1995	106,500	501,600	0.26484	132,844
1996	109,500	611,100	0.26484	161,844
1997	112,800	723,900	0.26484	191,718
1998	116,100	840,000	0.26484	222,466
1999	119,700	959,700	0.26484	254,167
2000	123,300	1,083,000	0.26484	286,822
2001		1,083,000	0.26484	286,822
2002		1,083,000	0.26484	286,822
2003		1,083,000	0.26484	286,822
2004		1,083,000	0.26484	286,822
2005		1,083,000	0.26484	286,822
2006		1,083,000	0.26484	286,822
2007		1,083,000	0.26484	286,822
2008		1,083,000	0.26484	286,822
2009		1,083,000	0.26484	286,822
2010		1,083,000	0.26484	286,822
2011		1,083,000	0.26484	286,822
TOTAL	1,083,000			4,662,641

NEW SERVICE & METER SETS
TABLE 4 - OPERATING COSTS & SAVINGS

YEAR	COSTS	CUT & CAP SAVINGS	"B" NET
1991	0	0	0
1992	0	0	0
1993	0	0	0
1994	0	0	0
1995	0	0	0
1996	0	0	0
1997	0	0	0
1998	0	0	0
1999	0	0	0
2000	0	0	0
TOTAL	0	0	0

TABLE 5 - DEMAND DISPLACEMENT CHARGES AND CUSTOMER SERVICE CHARGES

YEAR	APPLIANCES IN SERVICE	DEMAND DISPLACE	CUST SERVICE CHARGE	"C" TOTAL CONTRIB.
1991	315	2,158	0	2,158
1992	639	4,378	0	4,378
1993	974	6,674	0	6,674
1994	1,318	9,031	0	9,031
1995	1,672	11,457	0	11,457
1996	2,038	13,964	0	13,964
1997	2,414	16,541	0	16,541
1998	2,801	19,192	0	19,192
1999	3,200	21,926	0	21,926
2000	3,611	24,743	0	24,743
2001	3,611	24,743	0	24,743
2002	3,611	24,743	0	24,743
2003	3,611	24,743	0	24,743
2004	3,611	24,743	0	24,743
2005	3,611	24,743	0	24,743
2006	3,611	24,743	0	24,743
2007	3,611	24,743	0	24,743
2008	3,611	24,743	0	24,743
2009	3,611	24,743	0	24,743
2010	3,611	24,743	0	24,743
2011	3,611	24,743	0	24,743
TOTAL		402,238	0	402,238

TABLE 6 - PRESENT VALUE OF TOTAL PROGRAM

YEAR	(A + B + C) TOTAL CONTRIB.	DISCOUNT FACTOR	PRESENT VALUE
1991	27,185	1.00000	27,185
1992	55,148	0.90539	49,931
1993	83,981	0.81973	68,842
1994	113,669	0.74217	84,362
1995	144,301	0.67195	96,963
1996	175,808	0.60838	106,958
1997	208,259	0.55081	114,711
1998	241,658	0.49870	120,515
1999	276,093	0.45152	124,662
2000	311,565	0.40880	127,368
2001	311,565	0.37012	115,316
2002	311,565	0.33510	104,405
2003	311,565	0.30340	94,529
2004	311,565	0.27469	85,584
2005	311,565	0.24870	77,486
2006	311,565	0.22517	70,155
2007	311,565	0.20387	63,519
2008	311,565	0.18458	57,509
2009	311,565	0.16712	52,069
2010	311,565	0.15130	47,140
2011	311,565	0.13699	42,681
TOTAL	5,064,883		1,731,889

SUMMARY SHEET ITEM NUMBER 6

GAS SPACE CONDITIONING ALLOWANCE PROGRAM

I. Program Description

The Gas Space Conditioning Allowance Program is designed to convert customers from electric space conditioning equipment to energy efficient natural gas space conditioning equipment and to initially install gas space conditioning equipment instead of electric equipment. The program offers an allowance to help reduce generally higher initial costs of gas space conditioning equipment over equivalent electric space conditioners. This program will also reduce summer as well as winter peak demand and contribute to the conservation of KWH consumption.

The Gas Space Conditioning Allowance Program is intended to encourage participation by residential and commercial firm gas customers and is intended to apply to total space conditioning which includes not only heating and cooling but humidity control as well.

II. Program Participation Standards

Any current or potential residential or commercial customer using gas for space conditioning for the first time would be offered an incentive allowance of \$100.00 per ton to assist in defraying the additional cost of conversion from electric or initial installation to natural gas and the cost of energy efficient natural gas equipment. The program is available to customers replacing electric space conditioning with gas equipment, or installing gas space conditioning for the first time, provided the new equipment has a

COP of .8 or above. Although the program is open to residential customers, commercial customers will receive the most benefit due to installations of high tonnage units in larger commercial establishments.

The allowance is \$100.00 per ton, payable to a maximum 100 tons per project.

III. Benefits and Costs

The following effects in decreasing summer peak KWD and annual KWH consumptions are expected with the replacement of 1 (one) ton of electric space conditioning with energy efficient natural gas space conditioning:

<u>Tonnage</u>	<u>KWD Displacement</u>	<u>Annual KWH Consumption</u>
1 (one) Ton	1	2,500

Company-wide projections of the program with demand and energy savings are shown on Table A-1.

The number of customers anticipated to participate are shown as projections on Table A-2.

Based on projections of customers expected to participate in the program, first year costs are anticipated as follows:

Per Customer	\$.74/52,260	Total Customers
Administrative	\$12,190.00	
Incentives	\$26,500.00	

IV. Cost Effectiveness Methodology

Based on the cost effectiveness methodology used in currently approved conservation programs, and using the assumptions listed, a benefit/cost ratio of 8.55 to 1 with a payback period of .12 years will be achieved for the State of Florida. The ratepayers of West Florida Natural Gas Company will receive a benefit/cost ratio of 3.44 to 1 with a payback period of .29 years.

V. Program Monitoring and Evaluation

The progress of the West Florida Natural Gas Company Gas Space Conditioning Allowance Program will be monitored monthly at both divisions of the company. The Panama City office will also submit a semi-annual report to the Florida Public Service Commission for both divisions. Feedback received from both divisions will be constantly evaluated, and any revisions will be proposed to the program based upon these evaluations. Allowances paid to eligible participants under the program guidelines are based upon documentation and information necessary for Florida Public Service Commission audit purposes.

ATTACHMENT A - 1

GAS SPACE CONDITIONING ALLOWANCE PROGRAM
PROJECTED FORECASTED CONSERVATION

YEAR	AVOIDED CAPACITY	ANNUAL KWH REDUCTION
1991	292	728,750
1992	364	910,938
1993	455	1,138,672
1994	569	1,423,340
1995	712	1,779,175
1996	890	2,223,969
1997	1,112	2,779,961
1998	1,390	3,474,951
1999	1,737	4,343,688
2000	2,172	5,429,611
TOTAL	9,693	24,233,053

ATTACHMENT A-2

GAS SPACE CONDITIONING ALLOWANCE PROGRAM

<u>YEAR</u>	<u># OF ELIGIBLE PARTICIPANTS</u>	<u># OF ACTUAL PARTICIPATING HOMES</u>	<u>% OF ACTUAL TO ELIGIBLE</u>
1985			
1986			
1987			
1988			
1989			
1990			
1991	200,000	40	0.02%
1992	200,000	50	0.03%
1993	200,000	63	0.03%
1994	200,000	78	0.04%
1995	200,000	98	0.05%
1996	200,000	122	0.06%
1997	200,000	153	0.08%
1998	200,000	191	0.10%
1999	200,000	238	0.12%
2000	200,000	298	0.15%

GAS SPACE CONDITIONING ALLOWANCE PROGRAM

RESULTS FROM ALLOWANCE PROGRAM

Estimated Gas Company Expenditures

1. Personnel Costs	\$157,619
2. Advertising Costs	\$98,197
3. Installation Allowances	\$881,202
4. Total Costs	\$1,137,018
5. Present Value of Total	\$642,644

Reductions

6. KW	9,683
7. MWH	281,133

Estimated Electric Company Benefits

8. Construction Savings	\$9,769,292
9. Fuel Purchase Savings	
A. Oil	\$1,142,679
B. Coal	\$(493,688)
10. Total Savings	\$10,418,283

Net Present Value of Total Program

11. Net Present Value	\$5,492,161
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Net Benefits from Cumulative Totals

Col 11 - Col 5	\$4,849,517
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Benefit/Cost Ratio from Cumulative Totals

Col 11 / Col 5

8.55 TO 1

Discount Payback

Col 5 / Col 11 (Years)

0.12 YEARS

LIST OF ASSUMPTIONS

GAS SPACE CONDITIONING ALLOWANCE PROGRAM

1.	1991 Program Personnel Costs. Escalation Rate - Personnel Costs.	4,740 /YR 25.0% /YR
2.	1991 Advertising Costs. Escalation Rate - Advertising Costs.	7,450 /YR 6.0% /YR
3.	Fuel Cost of Natural Gas 1991 Escalation Rate - Fuel Cost Natural Gas	\$0.2864 /THERM 3.0% /YR
4.	KWH Produced from Ton of Coal	2076 KWH
5.	KWH Produced from Barrel #6 Oil	613 KWH
6.	Percentage Breakdown of Displaced Fuel from Reduced KWH Generation	19.6% OIL 80.4% COAL
7.	1990 Construction Cost per KW. (Pulverized Coal) Escalation Rate of Construction.	\$721 /KW 5.4% /YR
8.	Treatment of Deferred KW - It is treated as being eliminated at the time of its deferral.	
9.	Allowance per Customer Toward Installation of Gas AC/HEAT Unit on a \$/Ton Basis. Average KW Displaced per Ton	\$100.00 /TON 1.1 KW
10.	Demand Displacement Winter and Summer Peak.	1.1 KW
11.	Annual KWH Reductions 1st Year	728,750 KW
12.	Estimated Annual Hours of Operation.	2500 HRS/YR
13.	Natural Therm Consumption per Ton per Hour	0.0840 THERMS
14.	Natural Gas Annual Therm Consumption per Ton	210 THERMS
15.	Period of Appliance Use.	10 YRS

- 16. **Units Installed During Program 1st Year Escalation Rate** 40 UNITS
25.0% /YR
- 17. **Price of Oil per Barrel Escalation Rate** \$20.50 /BBL
4.0% /YR
- 18. **Price of Coal per Ton Escalation Rate** \$42.00 /TON
3.0% /YR
- 19. **Discount Rate or Rate of Time Preference** 10.45% /YR

20. **Tons Installed During Program Life**

1991	285	1995	647	1999	1580
1992	331	1996	809	2000	1974
1993	414	1997	1011		
1994	518	1998	1284		

21. **Most tonnage will be used by commercial customers; therefore these figures reflect commercial rates.**

GAS SPACE CONDITIONING ALLOWANCE PROGRAM

TABLE - 1 - PROGRAM COSTS

YEAR	PERSONNEL COSTS	ADVERTISING COSTS	INSTALLATION ALLOWANCES	TOTAL COSTS
1991	4,740	7,450	26,500	38,690
1992	5,925	7,897	33,125	46,947
1993	7,406	8,371	41,406	57,183
1994	9,258	8,873	51,758	69,889
1995	11,572	9,405	64,697	85,675
1996	14,465	9,970	80,872	105,307
1997	18,082	10,568	101,089	129,739
1998	22,602	11,202	126,362	160,166
1999	28,253	11,874	157,952	198,079
2000	35,316	12,587	197,440	245,343
	157,619	98,197	881,202	1,137,018

SUMMARY SHEET ITEMS 1, 2, 3, AND 4.

TABLE - 2 - PRESENT VALUE OF TOTAL COSTS

YEAR	TOTAL COSTS	DISCOUNT FACTOR	PRESENT VALUE
1991	38,690	1.00000	38,690
1992	46,947	0.90539	42,505
1993	57,183	0.81973	46,875
1994	69,889	0.74217	51,869
1995	85,675	0.67195	57,569
1996	105,307	0.60838	64,066
1997	129,739	0.55081	71,462
1998	160,166	0.49870	79,875
1999	198,079	0.45152	89,437
2000	245,343	0.40880	100,296
TOTAL			642,644

SUMMARY SHEET ITEM 5

**TABLE - 3 - ESTIMATED INSTALLATIONS OF
NATURAL GAS AC TONS**

YEAR	TONS INSTALLED	KW DISPLACED	KWH AVOIDED
1991	265	292	728,750
1992	331	364	910,938
1993	414	455	1,138,672
1994	518	569	1,423,340
1995	647	712	1,779,175
1996	809	890	2,223,969
1997	1,011	1,112	2,779,961
1998	1,264	1,390	3,474,951
1999	1,580	1,737	4,343,688
2000	1,974	2,172	5,429,611
	8,812	9,693	24,233,053

GAS SPACE CONDITIONING ALLOWANCE PROGRAM

TABLE - 4 - KW AVOIDANCE AND KWH REDUCTIONS FROM PROGRAM

<u>YEAR</u>	<u>KW</u>	<u>KWH</u>	<u>MWH CUMULATIVE</u>
1991	292	728,750	729
1992	364	910,938	1,640
1993	455	1,138,672	2,778
1994	569	1,423,340	4,202
1995	712	1,779,175	5,981
1996	890	2,223,969	8,205
1997	1,112	2,779,961	10,985
1998	1,390	3,474,951	14,460
1999	1,737	4,343,688	18,803
2000	2,172	5,429,611	24,233
2001			24,233
2002			23,504
2003			22,593
2004			21,455
2005			20,031
2006			18,252
2007			16,028
2008			13,248
2009			9,773
2010			5,430
			<u>261,133</u>

SUMMARY SHEET ITEMS 6 AND 7.

TABLE - 5 - TOTAL CONSTRUCTION COSTS DEFERRED

<u>YEAR</u>	<u>KW DEFERRED</u>	<u>COSTS PER KW</u>	<u>TOTAL CONSTRUCTION COSTS DEFERRED</u>
1991	292	721	210,172
1992	364	760	276,901
1993	455	801	364,817
1994	569	844	480,646
1995	712	890	633,252
1996	890	938	834,309
1997	1,112	989	1,099,202
1998	1,390	1,042	1,448,199
1999	1,737	1,098	1,908,002
2000	2,172	1,157	2,513,793
			<u>9,769,292</u>

SUMMARY SHEET ITEM 8

GAS SPACE CONDITIONING ALLOWANCE PROGRAM

FUEL SAVINGS - OIL

<u>YEAR</u>	<u>KWH REDUCED</u>	<u>19.68 OIL</u>	<u>KW/BBL</u>	<u>\$/BBL</u>	<u>AVOIDED COSTS</u>
1991	728,750	142,835	613	20.50	4,777
1992	1,639,688	321,379	613	21.32	11,177
1993	2,778,360	544,559	613	22.17	19,697
1994	4,201,700	823,533	613	23.06	30,980
1995	5,980,875	1,172,252	613	23.98	45,861
1996	8,204,844	1,608,149	613	24.94	65,431
1997	10,984,805	2,153,022	613	25.94	91,105
1998	14,459,756	2,834,112	613	26.98	124,722
1999	18,803,444	3,685,475	613	28.06	168,676
2000	24,233,055	4,749,679	613	29.18	226,078
2001	24,233,055	4,749,679	613	30.35	235,121
2002	23,504,305	4,606,844	613	31.56	237,172
2003	22,593,367	4,428,300	613	32.82	237,099
2004	21,454,695	4,205,120	613	34.13	234,156
2005	20,031,355	3,926,146	613	35.50	227,367
2006	18,252,180	3,577,427	613	36.92	215,459
2007	16,028,211	3,141,529	613	38.40	196,774
2008	13,248,250	2,596,657	613	39.93	169,151
2009	9,773,299	1,915,567	613	41.53	129,775
2010	5,429,611	1,064,204	613	43.19	74,981
TOTAL					2,745,559

FUEL SAVINGS - COAL

<u>YEAR</u>	<u>KWH REDUCED</u>	<u>80.48 COAL</u>	<u>KW/TON</u>	<u>\$/TON</u>	<u>AVOIDED COSTS</u>
1991	728,750	585,915	2,076	42.00	11,854
1992	1,639,688	1,318,309	2,076	43.26	27,471
1993	2,778,360	2,233,801	2,076	44.56	47,945
1994	4,201,700	3,378,167	2,076	45.89	74,682
1995	5,980,875	4,808,624	2,076	47.27	109,494
1996	8,204,844	6,596,695	2,076	48.69	154,716
1997	10,984,805	8,831,783	2,076	50.15	213,351
1998	14,459,756	11,625,644	2,076	51.65	289,267
1999	18,803,444	15,117,969	2,076	53.20	387,448
2000	24,233,055	19,483,376	2,076	54.80	514,306
2001	24,233,055	19,483,376	2,076	56.44	529,735
2002	23,504,305	18,897,461	2,076	58.14	529,218
2003	22,593,367	18,165,067	2,076	59.88	523,969
2004	21,454,695	17,249,575	2,076	61.68	512,489
2005	20,031,355	16,105,209	2,076	63.53	492,844
2006	18,252,180	14,674,753	2,076	65.43	462,542
2007	16,028,211	12,886,682	2,076	67.40	418,368
2008	13,248,250	10,651,593	2,076	69.42	356,180
2009	9,773,299	7,857,732	2,076	71.50	270,638
2010	5,429,611	4,365,407	2,076	73.65	154,865
TOTAL					6,081,381

GAS SPACE CONDITIONING ALLOWANCE PROGRAM

ANNUAL FUEL CONSUMPTION - NATURAL GAS

<u>YEAR</u>	<u>THERMS CONSUMED</u>	<u>THERMS CUMULATIVE</u>	<u>\$/THERM</u>	<u>TOTAL COSTS</u>
1991	55,650	55,650	0.2864	15,940
1992	69,563	125,213	0.2950	36,942
1993	86,953	212,166	0.3039	64,474
1994	108,691	320,857	0.3130	100,428
1995	135,864	456,721	0.3224	147,243
1996	169,830	626,552	0.3321	208,054
1997	212,288	838,840	0.3420	286,904
1998	265,360	1,104,199	0.3523	388,993
1999	331,700	1,435,899	0.3629	521,021
2000	414,625	1,850,524	0.3737	691,613
2001		1,850,524	0.3850	712,362
2002		1,794,874	0.3965	711,667
2003		1,725,312	0.4084	704,609
2004		1,638,358	0.4206	689,170
2005		1,529,667	0.4333	662,753
2006		1,393,803	0.4463	622,004
2007		1,223,972	0.4597	562,601
2008		1,011,684	0.4734	478,974
2009		746,325	0.4876	363,941
2010		414,625	0.5023	208,255

NATURAL GAS FUEL COST - DISPLACEMENT DISTRIBUTION

<u>YEAR</u>	<u>TOTAL NATURAL GAS COST</u>	<u>19.6% OIL</u>	<u>80.4% COAL</u>
1991	15,940	3,124	12,816
1992	36,942	7,241	29,701
1993	64,474	12,637	51,837
1994	100,428	19,684	80,744
1995	147,243	28,860	118,383
1996	208,054	40,779	167,276
1997	286,904	56,233	230,670
1998	388,993	76,243	312,750
1999	521,021	102,120	418,901
2000	691,613	135,556	556,057
2001	712,362	139,623	572,739
2002	711,667	139,487	572,181
2003	704,609	138,103	566,505
2004	689,170	135,077	554,093
2005	662,753	129,900	532,853
2006	622,004	121,913	500,091
2007	562,601	110,270	452,332
2008	478,974	93,879	385,095
2009	363,941	71,333	292,609
2010	208,255	40,818	167,437
TOTAL		1,602,878	6,575,072

GAS SPACE CONDITIONING ALLOWANCE PROGRAM**TABLE - 6 - FUEL SAVINGS OIL**

<u>YEAR</u>	<u>AVOIDED OIL COSTS</u>	<u>GAS COSTS</u>	<u>FUEL SAVINGS</u>
1991	4,777	3,124	1,653
1992	11,177	7,241	3,936
1993	19,697	12,637	7,060
1994	30,980	19,684	11,296
1995	45,861	28,860	17,001
1996	65,431	40,779	24,652
1997	91,105	56,233	34,872
1998	124,722	76,243	48,479
1999	168,676	102,120	66,556
2000	226,078	135,556	90,522
2001	235,121	139,623	95,498
2002	237,172	139,487	97,685
2003	237,099	138,103	98,996
2004	234,156	135,077	99,079
2005	227,367	129,900	97,467
2006	215,459	121,913	93,546
2007	196,774	110,270	86,504
2008	169,151	93,879	75,272
2009	129,775	71,333	58,442
2010	74,981	40,818	34,163
			<u>1,142,679</u>

SUMMARY SHEET ITEM 9A

TABLE - 7 - FUEL SAVINGS COAL

YEAR	AVOIDED COAL COSTS	GAS COSTS	FUEL SAVINGS
1991	11,854	12,816	(962)
1992	27,471	29,701	(2,230)
1993	47,945	51,837	(3,892)
1994	74,682	80,744	(6,062)
1995	109,494	118,383	(8,889)
1996	154,716	167,276	(12,560)
1997	213,351	230,670	(17,319)
1998	289,267	312,750	(23,483)
1999	387,448	418,901	(31,453)
2000	514,306	556,057	(41,751)
2001	529,735	572,739	(43,004)
2002	529,218	572,181	(42,963)
2003	523,969	566,505	(42,536)
2004	512,489	554,093	(41,604)
2005	492,844	532,853	(40,009)
2006	462,542	500,091	(37,549)
2007	418,368	452,332	(33,964)
2008	356,180	385,095	(28,915)
2009	270,638	292,609	(21,971)
2010	154,865	167,437	(12,572)
			<hr/> (493,688) <hr/>

SUMMARY SHEET ITEM 9B

GAS SPACE-CONDITIONING ALLOWANCE PROGRAM

TABLE - 8 - TOTAL SAVINGS

<u>YEAR</u>	<u>CONSTRUCTION DEFERRED</u>	<u>OIL SAVINGS</u>	<u>COAL SAVINGS</u>	<u>TOTAL SAVINGS</u>
1991	210,172	1,653	(962)	210,863
1992	276,901	3,936	(2,230)	278,607
1993	364,817	7,060	(3,892)	367,985
1994	480,646	11,296	(6,062)	485,880
1995	633,252	17,001	(8,889)	641,364
1996	834,309	24,652	(12,560)	846,401
1997	1,099,202	34,872	(17,319)	1,116,755
1998	1,488,199	48,479	(23,483)	1,513,195
1999	1,908,002	66,556	(31,453)	1,943,105
2000	2,513,793	90,522	(41,751)	2,562,564
2001		95,498	(43,004)	52,494
2002		97,685	(42,963)	54,722
2003		98,996	(42,536)	56,460
2004		99,079	(41,604)	57,475
2005		97,467	(40,009)	57,458
2006		93,546	(37,549)	55,997
2007		86,504	(33,964)	52,540
2008		75,272	(28,915)	46,357
2009		58,442	(21,971)	36,471
2010		34,163	(12,572)	21,591

TABLE - 9 - NET PRESENT VALUE OF TOTAL PROGRAM

<u>YEAR</u>	<u>TOTAL COST</u>	<u>DISCOUNT RATE 10.5%</u>	<u>PRESENT VALUE</u>
1991	210,863	1.0000	210,863
1992	278,607	0.9054	252,251
1993	367,985	0.8197	301,637
1994	485,880	0.7422	360,620
1995	641,364	0.6720	430,997
1996	846,401	0.6084	514,950
1997	1,116,755	0.5508	615,109
1998	1,513,195	0.4987	754,630
1999	1,943,105	0.4515	877,312
2000	2,562,564	0.4088	1,047,576
2001	52,494	0.3701	19,428
2002	54,722	0.3351	18,337
2003	56,460	0.3034	17,130
2004	57,475	0.2747	15,788
2005	57,458	0.2487	14,290
2006	55,997	0.2252	12,611
2007	52,540	0.2039	10,713
2008	46,357	0.1846	8,558
2009	36,471	0.1671	6,094
2010	21,591	0.1513	3,267
TOTAL			5,492,161

**WEST FLORIDA NATURAL GAS RATEPAYER BENEFITS
GAS SPACE CONDITIONING ALLOWANCE PROGRAM**

WEST FLORIDA NATURAL GAS RATE PAYER BENEFITS

GAS SPACE CONDITIONING ALLOWANCE PROGRAM

Results from Allowance Program

Estimated Gas Company Expenditures

1. Personnel Costs	\$157,619
2. Advertising Costs	\$98,197
3. Installation Allowances	\$881,202
4. Total Costs	\$1,137,018
5. Present Value of Total Costs	\$842,645

Present Value of Total Program Benefits

6. Present Value Benefits	\$2,210,395
7. Present Value of Total Costs	\$842,645
8. Line 6 - Line 7	\$1,567,750

Benefit/Cost Ratio from Cumulative Totals

Line 6 / Line 7 3.44 TO 1

Discount Payback

Line 7 / Line 6 (Years) .29 YRS

GAS RATEPAYERS COST EFFECTIVENESS ANALYSIS

LIST OF ASSUMPTIONS

GAS SPACE CONDITIONING ALLOWANCE PROGRAM

1.	1991 Program Personnel Costs	\$4,740 /YR
	Escalation Rate - Personnel Costs	25.0% /YR
2.	1991 Advertising Costs	\$7,450 /YR
	Escalation Rate - Advertising Costs	6.0% /YR
3.	Applicable Non-Gas Energy Charge	\$0.1362 /THERM
	Escalation Rate - Non-Gas Energy Charge	0.0% /YR
5.	Average Natural Gas Annual Therm Consumption per Installed Appliance	1391 THERM
6.	Period of Appliance Use	10 YEARS
7.	Discount Rate or Rate of Time Preference	10.45% /YR
8.	Appliances Installed During Program 1st Year	40
	Escalation Rate	25.0% /YR
9.	Average Allowance per Customer	\$863
10.	Demand Charges (\$/TH)	\$0.02284
11.	Monthly Service Charge	\$15
12.	Heat Only Disconnect Period (Months)	6
13.	Cost to Cap Service at Main	\$125
	Escalation Rate	3.0%
14.	Cost to Run Service from Main/Set Regulator and Meter	\$510
	Cost to Set Regulator and Meter Only	\$195
	Escalation Rate	3.0%

15. Installation Distribution:	
Heat Only	0.0%
Reactivate	5.0%
New on Main	50.0%
Added Load	45.0%

16. Most tonnage will be used by commercial customers; therefore, these figures reflect commercial rates.

NUMBER OF APPLIANCES INSTALLED

<u>YEAR</u>	<u>APPLIANCES INSTALLED</u>	<u>APPLIANCES IN SERVICE</u>
1991	40	40
1992	50	90
1993	63	153
1994	78	231
1995	98	328
1996	132	450
1997	153	603
1998	191	794
1999	238	1,032
2000	298	1,330
2001	0	1,330
2002	0	1,330
2003	0	1,330
2004	0	1,330
2005	0	1,330
2006	0	1,330
2007	0	1,330
2008	0	1,330
2009	0	1,330
2010	0	1,330
TOTAL	1,330	

TABLE 1 - PROGRAM COSTS

<u>YEAR</u>	<u>PERSONNEL COSTS</u>	<u>ADVERTISING COSTS</u>	<u>INSTALLATION ALLOWANCES</u>	<u>TOTAL COSTS</u>
1991	4,740	7,450	26,500	38,690
1992	5,925	7,897	33,125	46,947
1993	7,406	8,371	41,406	57,183
1994	9,258	8,873	51,758	69,889
1995	11,572	9,405	64,697	85,675
1996	14,465	9,970	80,872	105,307
1997	18,082	10,568	101,089	129,739
1998	22,602	11,202	126,362	160,166
1999	28,253	11,874	157,952	198,079
2000	35,316	12,587	197,440	245,343
TOTAL	157,619	98,197	881,202	1,137,018

SUMMARY SHEET ITEMS 1, 2, 3 AND 4

TABLE 2 - PRESENT VALUE OF TOTAL COSTS

YEAR	TOTAL COSTS	DISCOUNT FACTOR	PRESENT VALUE
1991	38,690	1.00000	38,690
1992	46,947	0.90539	42,505
1993	57,183	0.81973	46,875
1994	69,889	0.74217	51,870
1995	85,675	0.67195	57,569
1996	105,307	0.60838	64,067
1997	129,739	0.55081	71,462
1998	160,166	0.49870	79,875
1999	198,079	0.45152	89,437
2000	245,343	0.40880	100,296
TOTAL	1,137,018		642,645

SUMMARY SHEET ITEM 5**TABLE 3 - ESTIMATED NUMBER OF THERMS ADDED**

YEAR	THERMS ADDED	THERMS CUMULATIVE	GROSS MARGIN	"A" TOTAL MARGIN
1991	55,640	55,640	0.12928	7,193
1992	69,550	125,190	0.12928	16,185
1993	139,163	264,353	0.12928	34,176
1994	108,498	372,851	0.12928	48,202
1995	136,318	509,169	0.12928	65,825
1996	169,702	678,871	0.12928	87,764
1997	212,823	891,694	0.12928	115,278
1998	265,681	1,157,375	0.12928	149,625
1999	331,058	1,488,433	0.12928	192,425
2000	414,518	1,902,951	0.12928	246,014
2001		1,902,951	0.12928	246,014
2002		1,902,951	0.12928	246,014
2003		1,902,951	0.12928	246,014
2004		1,902,951	0.12928	246,014
2005		1,902,951	0.12928	246,014
2006		1,902,951	0.12928	246,014
2007		1,902,951	0.12928	246,014
2008		1,902,951	0.12928	246,014
2009		1,902,951	0.12928	246,014
2010		1,902,951	0.12928	246,014
2011		1,902,951	0.12928	246,014
TOTAL	1,902,951			3,668,836

NEW SERVICE & METER SETS
TABLE 4 - OPERATING COSTS & SAVINGS

YEAR	COSTS	CUT & CAP SAVINGS	"B" NET
1991	10,590	0	(10,590)
1992	13,635	0	(13,635)
1993	17,555	0	(17,555)
1994	22,602	0	(22,602)
1995	29,099	0	(29,099)
1996	37,466	0	(37,466)
1997	48,237	0	(48,237)
1998	62,105	0	(62,105)
1999	79,960	0	(79,960)
2000	102,949	0	(102,949)
TOTAL	424,197	0	(424,197)

TABLE 5 - DEMAND DISPLACEMENT CHARGES AND CUSTOMER SERVICE CHARGES

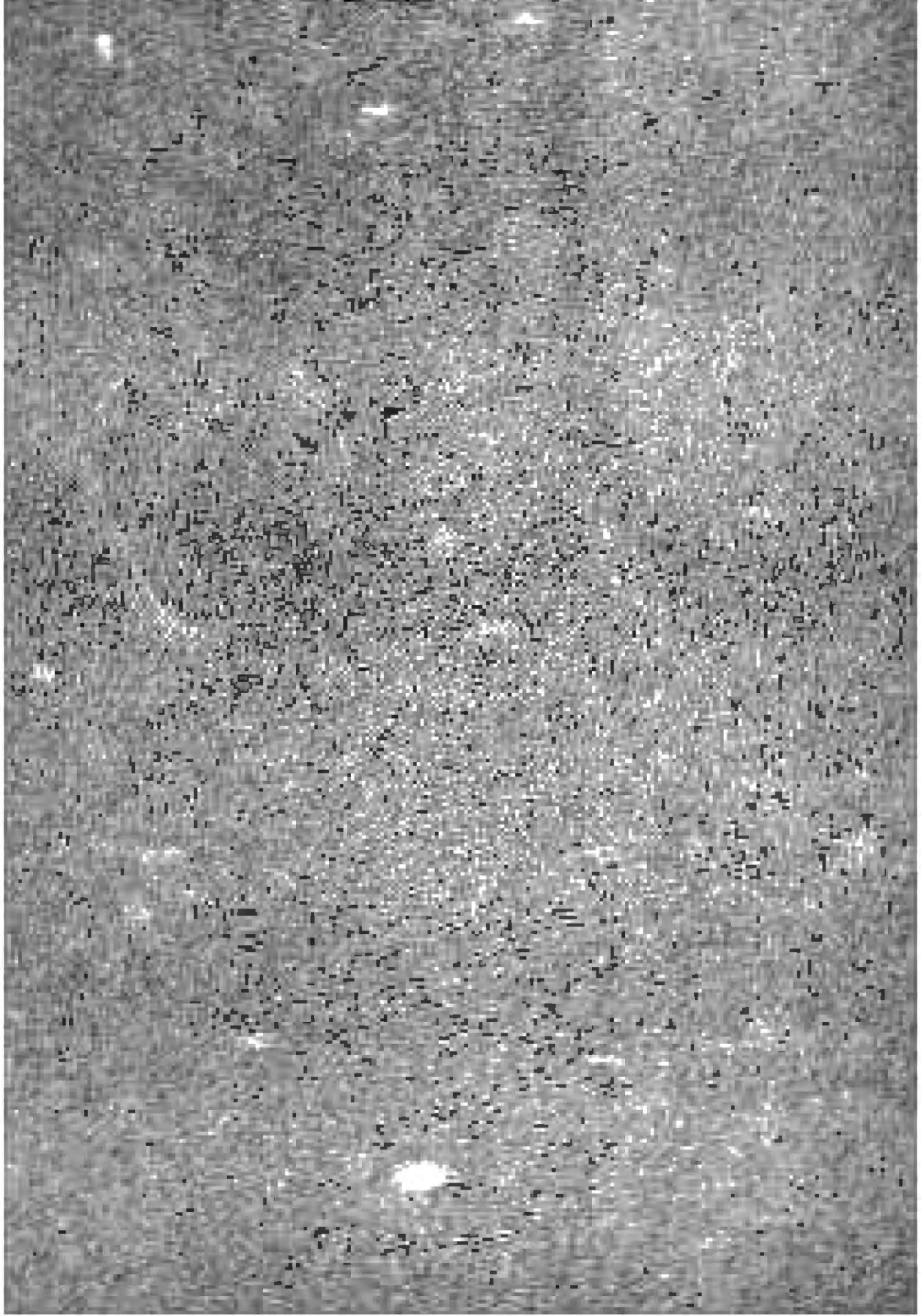
YEAR	APPLIANCES IN SERVICE	DEMAND DISPLACE	CUST SERVICE CHARGE	"C" TOTAL CONTRIB.
1991	40	1,271	7,200	8,471
1992	90	2,859	16,200	19,059
1993	153	4,861	27,540	32,401
1994	231	7,339	41,580	48,919
1995	328	10,421	59,040	69,461
1996	450	14,297	81,000	95,297
1997	603	19,158	108,540	127,698
1998	794	25,226	142,920	168,146
1999	1,032	32,787	185,760	218,547
2000	1,330	42,255	239,400	281,655
2001	1,330	42,255	239,400	281,655
2002	1,330	42,255	239,400	281,655
2003	1,330	42,255	239,400	281,655
2004	1,330	42,255	239,400	281,655
2005	1,330	42,255	239,400	281,655
2006	1,330	42,255	239,400	281,655
2007	1,330	42,255	239,400	281,655
2008	1,330	42,255	239,400	281,655
2009	1,330	42,255	239,400	281,655
2010	1,330	42,255	239,400	281,655
2011	1,330	42,255	239,400	281,655
TOTAL		625,274	3,542,580	4,167,854

TABLE 6 - PRESENT VALUE OF TOTAL PROGRAM

<u>YEAR</u>	<u>(A + B + C) TOTAL CONTRIB.</u>	<u>DISCOUNT FACTOR</u>	<u>PRESENT VALUE</u>
1991	5,074	1.00000	5,074
1992	21,610	0.90539	19,565
1993	49,022	0.81973	40,185
1994	74,519	0.74217	55,306
1995	106,186	0.67195	71,352
1996	145,595	0.60838	88,577
1997	194,739	0.55081	107,264
1998	255,666	0.49870	127,500
1999	331,012	0.45152	149,458
2000	424,720	0.40880	173,626
2001	527,669	0.37012	195,301
2002	527,669	0.33510	176,822
2003	527,669	0.30340	160,095
2004	527,669	0.27469	144,945
2005	527,669	0.24870	131,231
2006	527,669	0.22517	118,815
2007	527,669	0.20387	107,576
2008	527,669	0.18458	97,397
2009	527,669	0.16712	88,184
2010	527,669	0.15130	79,836
2011	527,669	0.13699	72,285
TOTAL	7,412,498		2,210,395

SUMMARY SHEET ITEM NUMBER 6

APPLIANCE



COMMERCIAL ELECTRIC RESISTANCE APPLIANCE REPLACEMENT PROGRAM

I. Program Description

The Commercial Electric Resistance Appliance Replacement Program is designed to promote the use of natural gas to high priority customers. This program is aimed at the conversion of non-residential customers from electric resistance appliances to energy efficient natural gas appliances. These conversions will effectively reduce KWH and KWD within our service area, as well as reduce the escalating rates of electric consumption.

II. Program Participation Standards

This program offers non-residential customers an incentive allowance of \$30.00/KWD to assist in defraying the additional cost associated with natural gas piping and venting required for conversion from electricity to natural gas and the cost of an energy efficient natural gas appliance. The program is available to any non-residential customer replacing an electric appliance with input of 6,000 watts or more. Replacement equipment must be an energy efficient natural gas appliance.

The Commercial Electric Resistance Appliance Replacement Program applies to all energy efficient commercial gas appliances including, but not limited to, the following examples:

Water heaters and boilers

Central heating furnaces

Fryers and

Other cooking equipment

The monetary allowance is \$30.00 per KWD, maximum of 100 KWD deferred.

The allowance paid is based on KWD deferred. The formula below is to be used in calculating the customer's allowance:

$$\frac{\text{no. of watts input (min. 6000)}}{1000} = \text{KWD} \times \text{incentive} = \text{allowance}$$

II. Benefits and Costs

The following effect in decreasing winter peak KWD and annual KWH consumption is expected with the replacement of commercial electric resistance appliances with energy efficient natural gas appliances:

<u>Appliance</u>	<u>KWD Displacement</u>	<u>Annual KWH Consumption</u>
Water Heater	25	43,800

Company-wide projections of the program with demand and energy savings are shown on Table A-1.

Projections of anticipated new customer participants are shown on Table A-2.

Based on projections of customers expected to participate in the program, first year costs are anticipated as follows:

Per customer	\$2.22/52,260	Total Customers
Administrative	\$26,250.00	
Incentives	\$90,000.00	

IV. Cost Effectiveness Methodology

Based on the cost effectiveness methodology used in currently approved

conservation programs, and using the assumptions listed, a benefit/cost ratio of 19.86 to 1 with a payback period of .05 years will be achieved for the State of Florida. The ratepayers of West Florida Natural Gas Company will receive a benefit/cost ratio of 4.82 to 1 with a payback period of .21 years.

V. Program Monitoring and Evaluation

The progress of the West Florida Natural Gas Company Commercial Electric Resistance Appliance Replacement Program will be monitored monthly at both divisions of the company. The Panama City office will also submit a semi-annual report to the Florida Public Service Commission for both divisions. Feedback received from both divisions will be constantly evaluated, and any necessary revisions will be proposed to the program based upon these evaluations. Allowances paid to eligible participants under the program guidelines are made based upon documentation and information necessary for Florida Public Service Commission audit purposes.

ATTACHMENT A - 1

**COMMERCIAL ELECTRIC RESISTANCE
APPLIANCE REPLACEMENT PROGRAM
PROJECTED FORECASTED CONSERVATION**

YEAR	AVOIDED CAPACITY	ANNUAL KWH REDUCTION
1991	1,152	9,975,000
1992	1,187	10,274,250
1993	1,222	10,582,478
1994	1,259	10,899,952
1995	1,297	11,226,950
1996	1,335	11,563,759
1997	1,376	11,910,672
1998	1,417	12,267,992
1999	1,459	12,636,032
2000	1,503	13,015,113
TOTAL	13,206	114,352,196

ATTACHMENT A-2

**COMMERCIAL ELECTRIC RESISTANCE
APPLIANCE REPLACEMENT PROGRAM**

YEAR	# OF ELIGIBLE PARTICIPANTS	# OF ACTUAL APPLIANCES	% OF ACTUAL TO ELIGIBLE
1985			
1986			
1987			
1988			
1989			
1990			
1991	3,750	120	3.20%
1992	3,863	124	3.20%
1993	3,978	127	3.20%
1994	4,098	131	3.20%
1995	4,221	135	3.20%
1996	4,347	139	3.20%
1997	4,478	143	3.20%
1998	4,612	148	3.20%
1999	4,750	152	3.20%
2000	4,893	157	3.20%

COMMERCIAL ELECTRIC RESISTANCE APPLIANCE REPLACEMENT PROGRAM

RESULTS FROM ALLOWANCE PROGRAM

Estimated Gas Company Expenditures

1. Personnel Costs	\$180,556
2. Advertising Costs	\$120,371
3. Installation Allowances	\$1,031,749
4. Total Costs	\$1,332,676
5. Present Value of Total	\$868,197

Reductions

6. KW	13,206
7. MWH	1,244,857

Estimated Electric Company Benefits

8. Construction Savings	\$12,358,346
9. Fuel Purchase Savings	
A. Oil	\$9,231,680
B. Coal	\$15,116,509
10. Total Savings	\$36,706,535

Net Present Value of Total Program

11. Net Present Value	\$17,199,349
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Net Benefits from Cumulative Totals

Col 11 - Col 5	\$16,333,152
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Benefit/Cost Ratio from Cumulative Totals

Col 11 / Col 5

19.86 TO 1

Discount Payback

Col 5 / Col 11 (Years)

.05 YRS

LIST OF ASSUMPTIONS

COMMERCIAL ELECTRIC APPLIANCE RESISTANCE PROGRAM

1.	1991 Program Personnel Costs. Escalation Rate - Personnel Costs.	15,750 /YR 3.0% /YR
2.	1991 Advertising Costs. Escalation Rate - Advertising Costs.	10,500 /YR 3.0% /YR
3.	Fuel Cost of Natural Gas 1991. Escalation Rate - Fuel Cost Natural Gas.	\$0.28644 /THER 3.0% /YR
4.	KWH Produced from Ton of Coal.	2076 KWH
5.	KWH Produced from Barrel #6 OIL.	613 KWH
6.	Percentage Breakdown of Displaced Fuel from Reduced KWH Generation.	19.6% OIL 80.4% COAL
7.	1991 Construction Cost per KW. (Pulverized Coal) Escalation Rate of Construction.	\$721 /KW 5.4% /YR
8.	Treatment of Deferred KW - It is treated as being eliminated at the time of its deferral.	
9.	Allowance per Customer Toward Installation of Commercial Natural Gas Water Heater on a \$/KW Basis. Average KW for Water Heater Being Replaced	\$30.00 /KW 25.0 KW/WH
10.	Demand Displacement (Winter) and Summer Peak.	9.6 KW
11.	Annual KWH Reductions 1st Year	28,800 KWH
12.	Estimated Annual Hours of Operation.	3325 HRS/YR
13.	Estimated Percent of Full Load on Time	38% ON
14.	Natural Gas Annual Therm Consumption per installation	2645 THERM
15.	Period of Appliance Use.	10 YRS
16.	Appliances Displaced During Program 1st Year	120 UNITS

- | | | |
|------------|---|---------------------|
| | Escalation Rate | 3.0% /YR |
| 17. | Price of Oil per Barrel | \$20.50 /BL |
| | Escalation Rate | 4.0% /YR |
| 18. | Price of coal per Ton | \$42.00 /TON |
| | Escalation Rate | 3.0% /YR |
| 19. | Discount Rate or Rate of Time Preference | 10.45% /YR |
| 20. | Appliances Displaced During Program Life | |

1991	120	1995	135	1999	152
1992	124	1996	139	2000	157
1993	127	1997	143		
1994	131	1998	148		

COMMERCIAL ELECTRIC RESISTANCE APPLIANCE REPLACEMENT PROGRAM

TABLE - 1 - PROGRAM COSTS

<u>YEAR</u>	<u>PERSONNEL COSTS</u>	<u>ADVERTISING COSTS</u>	<u>INSTALLATION ALLOWANCES</u>	<u>TOTAL COSTS</u>
1991	15,750	10,500	90,000	116,250
1992	16,223	10,815	92,700	119,738
1993	16,709	11,139	95,481	123,330
1994	17,210	11,474	98,345	127,030
1995	17,727	11,818	101,296	130,840
1996	18,259	12,172	104,335	134,766
1997	18,806	12,538	107,465	138,809
1998	19,371	12,914	110,689	142,973
1999	19,952	13,301	114,009	147,262
2000	20,550	13,700	117,430	151,680
	<u>180,556</u>	<u>120,371</u>	<u>1,031,749</u>	<u>1,332,676</u>

SUMMARY SHEET ITEMS 1, 2, 3, AND 4.

TABLE - 2 - PRESENT VALUE OF TOTAL COSTS

<u>YEAR</u>	<u>TOTAL COSTS</u>	<u>DISCOUNT FACTOR</u>	<u>PRESENT VALUE</u>
1991	116,250	1.00000	116,250
1992	119,738	0.90539	108,409
1993	123,330	0.81973	101,097
1994	127,030	0.74217	94,277
1995	130,840	0.67195	87,918
1996	134,766	0.60838	81,989
1997	138,809	0.55081	76,457
1998	142,973	0.49870	71,301
1999	147,262	0.45152	66,492
2000	151,680	0.40880	62,007
TOTAL			866,197

SUMMARY SHEET ITEM 5

**TABLE - 3 - ESTIMATED INSTALLATIONS OF
NATURAL GAS HOMES**

YEAR	WATER HEATERS DISPLACED	KW DISPLACED	KWH AVOIDED
1991	120	1,152	9,975,000
1992	124	1,187	10,274,250
1993	127	1,222	10,582,478
1994	131	1,259	10,899,952
1995	135	1,297	11,226,950
1996	139	1,335	11,563,759
1997	143	1,376	11,910,672
1998	148	1,417	12,267,992
1999	152	1,459	12,636,032
2000	157	1,503	13,015,113
	1,376	13,206	114,352,196

COMMERCIAL ELECTRIC RESISTANCE APPLIANCE REPLACEMENT PROGRAM

TABLE - 4 - KW AVOIDANCE AND KWH REDUCTIONS FROM PROGRAM

<u>YEAR</u>	<u>KW</u>	<u>KWH</u>	<u>MWH CUMULATIVE</u>
1991	1,152	9,975,000	9,975
1992	1,187	10,274,250	20,249
1993	1,222	10,582,478	30,832
1994	1,259	10,899,952	41,732
1995	1,297	11,226,950	52,959
1996	1,335	11,563,759	64,522
1997	1,376	11,910,672	76,433
1998	1,417	12,267,992	88,701
1999	1,459	12,636,032	101,337
2000	1,503	13,015,113	114,352
2001			114,352
2002			104,377
2003			94,103
2004			83,520
2005			72,620
2006			61,393
2007			49,830
2008			37,919
2009			25,651
2010			13,015
			<u>1,244,857</u>

SUMMARY SHEET ITEMS 6 AND 7.

TABLE - 5 - TOTAL CONSTRUCTION COSTS DEFERRED

<u>YEAR</u>	<u>KW DEFERRED</u>	<u>COSTS PER KW</u>	<u>TOTAL CONSTRUCTION COSTS DEFERRED</u>
1991	1,152	721	830,592
1992	1,187	760	901,707
1993	1,222	801	978,911
1994	1,259	844	1,062,726
1995	1,297	890	1,153,716
1996	1,335	938	1,252,498
1997	1,376	989	1,359,737
1998	1,417	1,042	1,476,157
1999	1,459	1,098	1,602,546
2000	1,503	1,157	1,739,756
			<u>12,358,346</u>

SUMMARY SHEET ITEM 8

COMMERCIAL ELECTRIC RESISTANCE APPLIANCE REPLACEMENT PROGRAM

FUEL SAVINGS - OIL

YEAR	KWH REDUCED	19.6¢ OIL	KM/BBL	\$/BBL	AVOIDED COSTS
1991	9,975,000	1,955,100	613	20.50	65,383
1992	20,249,250	3,968,853	613	21.32	138,036
1993	30,831,728	6,043,019	613	22.17	218,582
1994	41,731,680	8,179,409	613	23.06	307,691
1995	52,958,630	10,379,891	613	23.98	406,087
1996	64,522,389	12,646,388	613	24.94	514,549
1997	76,433,061	14,980,880	613	25.94	633,915
1998	88,701,053	17,385,406	613	26.98	765,088
1999	101,337,085	19,862,069	613	28.06	909,043
2000	114,352,198	22,413,031	613	29.18	1,066,827
2001	114,352,198	22,413,031	613	30.35	1,109,500
2002	104,377,198	20,457,931	613	31.56	1,053,227
2003	94,102,948	18,444,178	613	32.82	987,536
2004	83,520,470	16,370,012	613	34.13	911,540
2005	72,620,518	14,233,622	613	35.50	824,281
2006	61,393,568	12,033,139	613	36.92	724,724
2007	49,829,809	9,766,643	613	38.40	611,747
2008	37,919,137	7,432,151	613	39.93	484,144
2009	25,651,145	5,027,624	613	41.53	340,609
2010	13,015,113	2,550,962	613	43.19	179,734
TOTAL					12,252,244

FUEL SAVINGS - COAL

YEAR	KWH REDUCED	80.4¢ COAL	KW/TON	\$/TON	AVOIDED COSTS
1991	9,975,000	8,019,900	2,076	42.00	162,252
1992	20,249,250	16,280,397	2,076	43.26	339,253
1993	30,831,728	24,788,709	2,076	44.56	532,047
1994	41,731,680	33,552,271	2,076	45.89	741,747
1995	52,958,630	42,578,739	2,076	47.27	969,535
1996	64,522,389	51,876,001	2,076	48.69	1,216,675
1997	76,433,061	61,452,181	2,076	50.15	1,484,508
1998	88,701,053	71,315,647	2,076	51.65	1,774,465
1999	101,337,085	81,475,016	2,076	53.20	2,088,066
2000	114,352,198	91,939,167	2,076	54.80	2,426,932
2001	114,352,198	91,939,167	2,076	56.44	2,499,740
2002	104,377,198	83,919,267	2,076	58.14	2,350,137
2003	94,102,948	75,658,770	2,076	59.88	2,182,368
2004	83,520,470	67,150,458	2,076	61.68	1,995,055
2005	72,620,518	58,386,896	2,076	63.53	1,786,728
2006	61,393,568	49,360,429	2,076	65.43	1,555,820
2007	49,829,809	40,063,166	2,076	67.40	1,300,657
2008	37,919,137	30,486,986	2,076	69.42	1,019,458
2009	25,651,145	20,623,521	2,076	71.50	710,321
2010	13,015,113	10,464,151	2,076	73.65	371,222
TOTAL					27,506,984

COMMERCIAL ELECTRIC RESISTANCE APPLIANCE REPLACEMENT PROGRAM

ANNUAL FUEL CONSUMPTION - NATURAL GAS

<u>YEAR</u>	<u>THERMS CONSUMED</u>	<u>THERMS CUMULATIVE</u>	<u>\$/THERM</u>	<u>TOTAL COSTS</u>
1991	317,400	317,400	0.2864	90,903
1992	326,922	644,322	0.2950	190,070
1993	336,730	981,052	0.3038	298,084
1994	346,832	1,327,883	0.3130	415,570
1995	357,236	1,685,120	0.3223	543,191
1996	367,954	2,053,073	0.3320	681,653
1997	378,992	2,432,065	0.3420	811,709
1998	390,362	2,822,427	0.3522	994,160
1999	402,073	3,224,500	0.3628	1,169,858
2000	414,135	3,638,635	0.3737	1,359,711
2001		3,638,635	0.3849	1,400,502
2002		3,321,235	0.3964	1,316,686
2003		2,994,313	0.4083	1,222,692
2004		2,657,583	0.4206	1,117,748
2005		2,310,752	0.4332	1,001,031
2006		1,953,515	0.4462	871,662
2007		1,585,562	0.4596	728,705
2008		1,206,570	0.4734	571,161
2009		816,208	0.4876	397,964
2010		414,135	0.5022	207,980

NATURAL GAS FUEL COST - DISPLACEMENT DISTRIBUTION

<u>YEAR</u>	<u>TOTAL NATURAL GAS COST</u>	<u>19.6%</u> <u>OIL</u>	<u>80.4%</u> <u>COAL</u>
1991	90,903	17,817	73,086
1992	190,070	37,254	152,816
1993	298,084	58,425	239,660
1994	415,570	81,452	334,119
1995	543,191	106,465	436,726
1996	681,653	133,604	548,049
1997	811,709	163,015	668,694
1998	994,160	194,855	799,305
1999	1,169,858	229,292	940,566
2000	1,359,711	266,503	1,093,208
2001	1,400,502	274,498	1,126,004
2002	1,316,686	258,070	1,058,615
2003	1,222,692	239,648	983,044
2004	1,117,748	219,079	898,669
2005	1,001,031	196,202	804,829
2006	871,662	170,846	700,816
2007	728,705	142,826	585,879
2008	571,161	111,947	459,213
2009	397,964	78,001	319,963
2010	207,980	40,764	167,216
TOTAL		3,020,564	12,390,477

**COMMERCIAL ELECTRIC RESISTANCE
APPLIANCE REPLACEMENT PROGRAM**

TABLE - 6 - FUEL SAVINGS OIL

<u>YEAR</u>	<u>AVOIDED OIL COSTS</u>	<u>GAS COSTS</u>	<u>FUEL SAVINGS</u>
1991	65,383	17,817	47,566
1992	138,036	37,254	100,782
1993	218,582	58,425	160,157
1994	307,691	81,452	226,239
1995	406,087	106,465	299,622
1996	514,549	133,604	380,945
1997	633,915	163,015	470,900
1998	765,088	194,855	570,233
1999	909,043	229,292	679,751
2000	1,066,827	266,503	800,324
2001	1,109,500	274,498	835,002
2002	1,053,227	258,070	795,157
2003	987,536	239,648	747,888
2004	911,540	219,079	692,461
2005	824,281	196,202	628,079
2006	724,724	170,846	553,878
2007	611,747	142,826	468,921
2008	484,144	111,947	372,197
2009	340,609	78,001	262,608
2010	179,734	40,764	138,970
			<u>9,231,680</u>

SUMMARY SHEET ITEM 9A

TABLE - 7 - FUEL SAVINGS COAL

<u>YEAR</u>	<u>AVOIDED OIL COSTS</u>	<u>GAS COSTS</u>	<u>FUEL SAVINGS</u>
1991	162,252	73,086	89,166
1992	339,253	152,816	186,437
1993	532,047	239,660	292,387
1994	741,747	334,119	407,628
1995	969,535	436,726	532,809
1996	1,216,675	548,049	668,626
1997	1,484,508	668,694	815,814
1998	1,774,465	799,305	975,160
1999	2,088,066	940,566	1,147,500
2000	2,426,932	1,093,208	1,333,724
2001	2,499,740	1,126,004	1,373,736
2002	2,350,137	1,058,615	1,291,522
2003	2,182,368	983,044	1,199,324
2004	1,995,055	898,669	1,096,386
2005	1,786,728	804,829	981,899
2006	1,555,820	700,816	855,004
2007	1,300,657	585,879	714,778
2008	1,019,458	459,213	560,245
2009	710,321	319,963	390,358
2010	371,222	167,216	204,006
			<u>15,116,509</u>

SUMMARY SHEET ITEM 9B

COMMERCIAL ELECTRIC RESISTANCE APPLIANCE REPLACEMENT PROGRAM

TABLE - 8 - TOTAL SAVINGS

<u>YEAR</u>	<u>CONSTRUCTION DEFERRED</u>	<u>OIL SAVINGS</u>	<u>COAL SAVINGS</u>	<u>TOTAL SAVINGS</u>
1991	830,592	47,566	89,166	967,324
1992	901,707	100,782	186,437	1,188,926
1993	978,911	160,157	292,387	1,431,455
1994	1,062,726	226,239	407,628	1,696,593
1995	1,153,716	299,622	532,809	1,986,147
1996	1,252,498	380,945	668,626	2,302,069
1997	1,359,737	470,900	815,814	2,646,451
1998	1,476,157	570,233	975,160	3,021,550
1999	1,602,546	679,751	1,147,500	3,429,797
2000	1,739,756	800,324	1,333,724	3,873,804
2001		835,002	1,373,736	2,208,738
2002		795,157	1,291,522	2,086,679
2003		747,888	1,199,324	1,947,212
2004		692,461	1,096,386	1,788,847
2005		628,079	981,899	1,609,978
2006		553,878	855,004	1,408,882
2007		468,921	714,778	1,183,699
2008		372,197	560,245	932,442
2009		262,608	390,358	652,966
2010		138,970	204,006	342,976

TABLE - 9 - NET PRESENT VALUE OF TOTAL PROGRAM

<u>YEAR</u>	<u>TOTAL COST</u>	<u>DISCOUNT RATE 10.5%</u>	<u>PRESENT VALUE</u>
1991	967,324	1.0000	967,324
1992	1,188,926	0.9054	1,076,454
1993	1,431,455	0.8197	1,173,364
1994	1,696,593	0.7422	1,259,211
1995	1,986,147	0.6720	1,334,691
1996	2,302,069	0.6084	1,400,579
1997	2,646,451	0.5508	1,457,665
1998	3,021,550	0.4987	1,506,847
1999	3,429,797	0.4515	1,548,553
2000	3,873,804	0.4088	1,583,611
2001	2,208,738	0.3701	817,454
2002	2,086,679	0.3351	699,246
2003	1,947,212	0.3034	590,784
2004	1,788,847	0.2747	491,396
2005	1,609,978	0.2487	400,402
2006	1,408,882	0.2252	317,280
2007	1,183,699	0.2039	241,356
2008	932,442	0.1846	172,129
2009	652,966	0.1671	109,111
2010	342,976	0.1513	51,892
TOTAL			17,199,349

WEST FLORIDA NATURAL GAS COMPANY RATEPAYER BENEFITS

COMMERCIAL ELECTRIC RESISTANCE

APPLIANCE REPLACEMENT PROGRAM

WEST FLORIDA NATURAL GAS COMPANY RATEPAYER BENEFITS

COMMERCIAL ELECTRIC RESISTANCE APPLIANCE REPLACEMENT PROGRAM

RESULTS FROM ALLOWANCE PROGRAM

Estimated Gas Company Expenditures

1. Personnel Costs	\$180,556
2. Advertising Costs	\$120,371
3. Installation Allowances	\$1,031,749
4. Total Costs	\$1,332,676
5. Present Value of Total Costs	\$866,197

Present Value of Total Program Benefits

6. Present Value Benefits	\$4,174,761
7. Present Value of Total Costs	\$866,197
8. Line 6 - Line 7	\$3,308,564

Benefit/Cost Ratio from Cumulative Totals

Line 6 / Line 7	4.82 TO 1
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Discount Payback

Line 7 / Line 6 (Years)	.21 YRS
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GAS RATEPAYERS COST EFFECTIVENESS ANALYSIS

LIST OF ASSUMPTIONS

COMMERCIAL ELECTRIC RESISTANCE APPLIANCE REPLACEMENT PROGRAM

1.	1991 Program Personnel Costs. Escalation Rate - Personnel Costs.	\$15,750 /YR 3.0% /YR
2.	1991 Advertising Costs. Escalation Rate - Advertising Costs.	\$10,500 /YR 3.0% /YR
3.	Applicable Non-Gas Energy Charge. Escalation Rate - Non-Gas Energy Charge.	\$0.1362 /THR 0.0% /YR
4.	Average Natural Gas Annual Therm Consumption per Installed Appliance	2645 THR
5.	Period of Appliance Use.	10 YRS
6.	Discount Rate or Rate of Time Preference	10.45% /YR
7.	Appliances Installed During Program 1st Year Escalation Rate	120 3.0% /YR
8.	Average Allowance per Customer	\$750
9.	Demand Charges (\$/TH)	\$0.02284
10.	Monthly Service Charge	\$15
11.	Heat Only Disconnect Period (Months)	6
12.	Cost to Cap Service at Main Escalation Rate	\$125 3.0% /YR
13.	Cost to Run Service from Main/Set Regulator and Meter Cost to Set Regulator and Meter Only Escalation Rate	\$510 \$195 3.0% /YR

14. Installation Distribution:

Heat Only

5.0%

Reactive

2.0%

New on Main

53.0%

Added Load

40.0%

NUMBER OF APPLIANCES INSTALLED

<u>YEAR</u>	<u>APPLIANCES INSTALLED</u>	<u>APPLIANCES IN SERVICE</u>
1991	120	120
1992	124	244
1993	127	371
1994	131	502
1995	135	637
1996	139	776
1997	143	919
1998	148	1,067
1999	152	1,219
2000	157	1,376
2001	0	1,376
2002	0	1,376
2003	0	1,376
2004	0	1,376
2005	0	1,376
2006	0	1,376
2007	0	1,376
2008	0	1,376
2009	0	1,376
2010	0	1,376
TOTAL	1,376	

TABLE 1 - PROGRAM COSTS

<u>YEAR</u>	<u>PERSONNEL COSTS</u>	<u>ADVERTISING COSTS</u>	<u>INSTALLATION ALLOWANCES</u>	<u>TOTAL COSTS</u>
1991	15,750	10,500	90,000	116,250
1992	16,223	10,815	92,700	119,738
1993	16,709	11,139	95,481	123,330
1994	17,210	11,474	98,345	127,030
1995	17,727	11,818	101,296	130,840
1996	18,259	12,172	104,335	134,766
1997	18,806	12,538	107,465	138,809
1998	19,371	12,914	110,689	142,973
1999	19,952	13,301	114,009	147,262
2000	20,550	13,700	117,430	151,680
TOTAL	180,556	120,371	1,031,749	1,332,676

SUMMARY SHEET ITEMS 1, 2, 3 AND 4

TABLE 2 - PRESENT VALUE OF TOTAL COSTS

<u>YEAR</u>	<u>TOTAL COSTS</u>	<u>DISCOUNT FACTOR</u>	<u>PRESENT VALUE</u>
1991	116,250	1.00000	116,250
1992	119,738	0.90539	108,410
1993	123,329	0.81973	101,096
1994	127,029	0.74217	94,277
1995	130,841	0.67195	87,919
1996	134,766	0.60838	81,989
1997	138,809	0.55081	76,457
1998	142,974	0.49870	71,301
1999	147,262	0.45152	66,492
2000	151,680	0.40880	62,007
TOTAL	1,332,678		866,198

SUMMARY SHEET ITEM 5**TABLE 3 - ESTIMATED NUMBER OF THERMS ADDED**

<u>YEAR</u>	<u>THERMS ADDED</u>	<u>THERMS CUMULATIVE</u>	<u>GROSS MARGIN</u>	<u>"A" TOTAL MARGIN</u>
1991	317,400	317,400	0.12928	41,033
1992	327,980	645,380	0.12928	83,435
1993	335,915	981,295	0.12928	126,862
1994	346,495	1,327,790	0.12928	171,657
1995	357,075	1,684,865	0.12928	217,819
1996	367,655	2,052,520	0.12928	265,350
1997	378,235	2,430,755	0.12928	314,248
1998	391,460	2,822,215	0.12928	364,856
1999	402,040	3,224,255	0.12928	416,832
2000	415,265	3,639,520	0.12928	470,517
2001		3,639,520	0.12928	470,517
2002		3,639,520	0.12928	470,517
2003		3,639,520	0.12928	470,517
2004		3,639,520	0.12928	470,517
2005		3,639,520	0.12928	470,517
2006		3,639,520	0.12928	470,517
2007		3,639,520	0.12928	470,517
2008		3,639,520	0.12928	470,517
2009		3,639,520	0.12928	470,517
2010		3,639,520	0.12928	470,517
2011		3,639,520	0.12928	470,517
TOTAL	3,639,520			7,648,297

NEW SERVICE & METER SETS
TABLE 4 - OPERATING COSTS & SAVINGS

<u>YEAR</u>	<u>COSTS</u>	<u>CUT & CAP SAVINGS</u>	<u>"B" NET</u>
1991	32,904	300	(32,604)
1992	34,908	309	(34,599)
1993	37,034	318	(36,715)
1994	39,289	328	(38,961)
1995	41,682	338	(41,344)
1996	44,220	348	(43,872)
1997	46,913	358	(46,555)
1998	49,770	369	(49,401)
1999	52,801	380	(52,421)
2000	56,017	391	(55,625)
TOTAL	435,538	3,439	(432,099)

TABLE 5 - DEMAND DISPLACEMENT CHARGES AND CUSTOMER SERVICE CHARGES

<u>YEAR</u>	<u>APPLIANCES IN SERVICE</u>	<u>DEMAND DISPLACE</u>	<u>CUST SERVICE CHARGE</u>	<u>"C" TOTAL CONTRIB.</u>
1991	120	7,249	21,060	28,309
1992	244	14,740	43,380	58,120
1993	371	22,413	66,240	88,653
1994	502	30,327	89,820	120,147
1995	637	38,482	114,120	152,602
1996	776	46,880	139,140	186,020
1997	919	55,518	164,880	220,398
1998	1,067	64,459	191,520	255,979
1999	1,219	73,642	218,880	292,522
2000	1,376	83,127	247,140	330,267
2001	1,376	83,127	247,140	330,267
2002	1,376	83,127	247,140	330,267
2003	1,376	83,127	247,140	330,267
2004	1,376	83,127	247,140	330,267
2005	1,376	83,127	247,140	330,267
2006	1,376	83,127	247,140	330,267
2007	1,376	83,127	247,140	330,267
2008	1,376	83,127	247,140	330,267
2009	1,376	83,127	247,140	330,267
2010	1,376	83,127	247,140	330,267
2011	1,376	83,127	247,140	330,267
TOTAL		1,351,231	4,014,720	5,365,951

TABLE 6 - PRESENT VALUE OF TOTAL PROGRAM

<u>YEAR</u>	<u>(A + B + C) TOTAL CONTRIB.</u>	<u>DISCOUNT FACTOR</u>	<u>PRESENT VALUE</u>
1991	36,738	1.00000	36,738
1992	106,957	0.90539	96,837
1993	178,799	0.81973	146,567
1994	252,842	0.74217	187,652
1995	329,077	0.67195	221,123
1996	407,497	0.60838	247,913
1997	488,091	0.55081	268,846
1998	571,434	0.49870	284,974
1999	656,933	0.45152	296,618
2000	745,158	0.40880	304,621
2001	800,784	0.37012	296,386
2002	800,784	0.33510	268,343
2003	800,784	0.30340	242,958
2004	800,784	0.27469	219,967
2005	800,784	0.24870	199,155
2006	800,784	0.22517	180,312
2007	800,784	0.20387	163,256
2008	800,784	0.18458	147,809
2009	800,784	0.16712	133,827
2010	800,784	0.15130	121,159
2011	800,784	0.13699	109,699
TOTAL	12,582,148		4,174,761

SUMMARY SHEET ITEM NUMBER 6

ADVERTISING AND PROMOTION

I. Program Description

Aggressive advertising and promotional programs will be necessary to attain the goals of the West Florida Natural Gas Company Conservation Plan. Through the use of effective advertising, West Florida Natural Gas will promote the careful use of natural gas to existing, as well as potential customers. Concentration will be on natural gas energy conservation and the importance of balancing fuel mix and energy use along with reducing kilowatt demand and kilowatt hour consumption.

II. Program Participation

Through the various media available, West Florida Natural Gas advertising will concentrate on promoting the use of natural gas and natural gas appliances, as well as the need to conserve scarce resources.

Broadcast: Selective conservation advertising in the
Panama City and Ocala markets.

**Newspapers/
Magazines:** Conservation promotion advertising.

Print: Individual promotions

- bill enclosures
- consumer education and conservation
handout material

- Appliance Replacement Program
- Builder Program
- Energy Savings Payback Program

**Personal
Appearances:**

By Marketing and Customer Service Staff.

The advertising and promotional schedules and costs are addressed within the individual programs.

WEST FLORIDA NATURAL GAS COMPANY
CUMULATIVE IMPACT OF CONSERVATION PROGRAM

<u>Year</u>	<u>Avoided Capacity</u>	<u>Annual KWH Reduced</u>
1991	8,616	21,908,385
1992	9,013	22,840,113
1993	9,442	23,846,725
1994	9,911	24,940,895
1995	10,424	26,138,211
1996	10,988	27,457,891
1997	11,614	28,923,661
1998	11,984	30,083,759
1999	12,425	31,431,559
2000	12,958	33,010,916