S.C. Utility Demand-Side Management and System Overview 2006

A Report by the South Carolina Energy Office Division of Insurance and Grants Services State Budget and Control Board



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Executive Summary

Introduction

Demand-side management (DSM) involves modifying energy use to maximize energy efficiency. In contrast to supply-side strategies, which increase energy supplies by, for example, building new power plants, DSM strives to get the most out of existing energy resources.

The South Carolina Energy Office (SCEO) surveys electric and natural gas utilities in order to provide information about power usage and DSM programs being used in South Carolina. These data were submitted by the retail distributors of electricity and natural gas in the state. The responding utilities included the state-owned utility Santee Cooper, investor-owned utilities, municipal utilities, and electric cooperative utilities. Additional information is included to provide a more comprehensive understanding of the energy industry in South Carolina.

Objective of Report

The legislation requiring this report was passed in 1992 by the South Carolina General Assembly. (See Appendix A.) The intent of the legislation was to measure and report the activities being undertaken to lower electric and natural gas needs in South Carolina, and to present that information to the people of the state, its elected officials and the utilities themselves, with the hope of encouraging the implementation of DSM practices. The 2006 report highlights 28 utilities having DSM programs. The programs that were reported by the large utilities this year are relatively unchanged from the last report. In addition to DSM activity, specific data is requested each year including: peak system demand; total annual system usage; total miles of distribution line; number of customers; and total power generated by qualified facilities.

Aside from the programs established by the utilities, a comprehensive DSM Market Assessment was recently undertaken by Duke Energy to assess the cost and benefits of DSM programs in its present and future energy markets.

Definition of Terms Used in This Report

Cogeneration systems produce electricity and process steam or heat from a single fuel source. These systems are put in place to reduce the amount of energy that large consumers use. See **Qualified Facilities** below.

Demand-side management (DSM) refers to the use of cost-effective conservation, efficiency, and load management programs that help to reduce the demand for and cost of energy services. Demand-side management is a resource option that complements power supply. It not only saves the customer money, but also helps the utility achieve less pollution and avoid more costly supply-side investments.

Decatherm (DT) is a unit of measurement of natural gas, equal to 1,000,000 BTUs or 293 kWh.

Kilowatt (kW) is a measure of real power, equal to 1,000 watts. A common equivalent is that 3/4 kW is equal to one horsepower. Higher quantities are expressed in megawatts (MW), equal to one million watts. A typical coal-fired electric plant produces about 300 MW.

Kilowatt-hour (kWh) is a unit of electrical measurement indicating the expenditure of 1,000 watts for one hour. Higher quantities are expressed in megawatt-hours (MWh), or the expenditure of one thousand kilowatts for one hour.

Load management shifts demand for power from periods of peak demand to periods of less demand. Although this process may more efficiently utilize generation and transmission systems and thus reduce the need for construction of generation and transmission facilities, it does not necessarily decrease the overall use of energy.

Qualified Facilities (QF) are defined by the Public Utilities Regulatory Policies Act of 1978 as: industrial cogeneration facilities and independent power producers using renewable fuel sources, including wood wastes and other biomass, incinerated municipal solid waste and small-scale hydro-electricity. These facilities are used to offset the amount of power that large users purchase from the utility and in some circumstances the facility may sell power to the utility grid.

The Status of Utility Demand-Side Management Activities for 2006

Introduction

The South Carolina Energy Conservation and Efficiency Act of 1992 requires all utilities to report their demand-side activities. The relevant section of the S.C. Code of Laws can be found in Appendix A. Pursuant to this law, the South Carolina Energy Office (SCEO) conducted a survey of electric and natural gas utilities to acquire a better understanding of the current status of power demand and usage in South Carolina as of year-end 2006. The purpose of this survey was to gather specific data from each individual utility to be aggregated in order to assess the overall status of energy supply and demand in South Carolina. Five quantitative and one qualitative questions were asked. Examples of these surveys and the cover letter explaining the survey can be found in Appendices B, C and D.

The objective of this report is to report on the Demand-Side Management (DSM) activities of those utilities that provided such information. In addition, it also provides an overview of the basic peak system demand, total annual system usage, total miles of distribution line, number of customers, and power generation supplied from qualified facilities.

DSM is the process of managing the consumption of energy through the use of cost-effective conservation, efficiency, and load management programs in order to reduce the demand for, and cost of, energy services. In contrast to "supply-side" strategies, which increase energy supplies (by building new power plants, for example), DSM strives to get the most out of existing energy resources, whether electric or gas. DSM involves utility consumers changing their energy use habits and using energy-efficient appliances, equipment, and buildings. Demand-side management is a resource option that complements power supply. The goal of demand-side management is to smooth out the daily peaks and valleys in electric or gas energy demand to make the most efficient use of energy resources and to defer the need to develop new power plants. Additionally, savings to customers and reduction of pollution are indirectly achieved through DSM. Demand-side activities reshape energy use and demand, and provide an important component of the energy resource mix.

Background

The primary objective of most DSM programs has been to provide cost-effective energy and capacity resources to help defer the need for new sources of power, including generating facilities, power purchases, and transmission and distribution capacity additions. However, due to changes occurring within the industry, electric utilities have begun to use DSM to enhance customer service. DSM refers only to energy and load-shape modifying activities undertaken in response to utility-administered programs. It

does not refer to energy and load-shape changes arising from the normal operation of the marketplace or from government-mandated energy-efficiency standards.

Since interest in DSM programs has waned in both South Carolina and the nation during the past few years, this edition of the report is not an attempt to quantify the savings from demand-side management programs, or to provide an in-depth analysis of the various demand-side management activities undertaken by some of the utilities. Instead, S.C. Utility Demand-Side Management and System Overview 2006 provides quantitative power usage information submitted by retail distributors of electricity and natural gas in South Carolina, including investor-owned utilities, the state-owned Santee Cooper system, electric cooperatives, and municipalities. Detailed definitions of typical DSM programs implemented by the utilities are provided and the utilities that use them are identified.

<u>Categories of Electricity Demand-Side Management Programs</u>

Conservation

Conservation programs are designed to entice consumers to use less electricity through changes in working and living habits, thereby reducing their need for electricity. Included in this category are public education and awareness programs that promote energy-reducing methods such as maintaining conservative thermostat settings, turning off appliances when not in use, and installing low-flow showerheads.

It is difficult to quantify the results of any one program, but many electric suppliers continue to conduct energy awareness advertising campaigns, demonstrations and seminars for various classes of customers.

Energy Efficiency

Energy efficiency programs reduce energy consumption by encouraging consumers to use energy more efficiently. There are many programs available, and each program is intended for a specific group of electricity users. Some of the targeted groups are newly built residences, existing residences, industry, commercial buildings, and agricultural users. These programs promote the use of more effective building insulation, high efficiency industrial equipment, appliances, air conditioning equipment and lighting. Incentives consist of more favorable rate schedules, cash rebates, low interest loans, and technical assistance.

Load Management

Demand-side activities in this category reduce the instantaneous demand for electricity by limiting or discouraging use during periods of high demand. For many reasons, it typically costs more to supply power during peak periods. For example, some older, less efficient plants are only used to meet peak hour demand. Furthermore, other newer facilities are also only brought online during peak times because they use more expensive fuel (e.g., natural gas or fuel oil). Therefore, transferring the use of energy to periods of lower demand allows the energy to be generated and distributed using more

efficient, base-load generating plants. Typical load management activities include allowing **direct**, **remote control** of air conditioners and water heaters, **interruptible rate schedules** for large customers, **thermal energy storage** systems using off-peak power, and **time-of-use** rates.

Standby Generation Programs

Standby generation programs provide incentives for customers owning standby generators to utilize them during periods of high demand, thereby reducing the system peak demand. This is a generation displacement program similar to cogeneration, although this category is not a qualified source as defined by the Public Utilities Regulatory Policies Act (PURPA) of 1978. The requirements for these programs vary, but there is usually a payment from the electric company for the amount of capacity that is displaced by the generator as well as a fuel supplement payment based on kWh. Most suppliers require participants to have a minimum size generator as well as an agreement regarding its operation.

Voltage Reduction

Voltage reduction programs reduce the supplied voltage of electricity to all customers, usually between 2% and 5% percent. Lowering the supplied voltage has the overall effect of reducing the demand for electricity. There is some controversy concerning the effects of this practice, and as a result, it is used primarily as a last resort before interrupting the supply of electricity. Some municipalities employ this practice for reducing the load during critical periods, thereby reducing the peak demand and energy consumption for all customers in each sector.

Results and Findings of The 2006 Survey

The results and findings of the survey are split into two sections: Electricity, beginning on this page, and Natural Gas beginning on page 20.

Electricity Results and Findings

Data submittals were received from 40 of the 46 electric utilities operating in South Carolina. Of the six utilities that failed to report, all were municipal facilities and therefore are relatively low level producers. Central Electric Power Cooperative, Inc. submitted a report on behalf of all distribution electric cooperatives. These cooperatives, as well as the one state-owned electric utility and all investor-owned electric utilities, are fully represented in this report.

Twenty-eight of the 46 electric utilities reported having active DSM programs: three investor-owned utilities, the state-owned Santee Cooper, four municipal utilities and all twenty cooperatives. Annual peak demand reached 17,228 MW in 2006 that led to more

than 81,000,000 MWh of electricity used in 2006, as indicated by data from the reporting utilities.

Annual Peak System Demand

The 2006 survey requested the utilities to provide the total amount of retail energy demand in MW during the highest annual peak demand during the calendar year. Figure 1 indicates that South Carolina Electric and Gas (SCE&G) and Duke Energy accounted for the largest shares of peak demand with 27.9 percent and 26.9 percent, respectively. These figures represent a decrease in percentage share for both providers since the 2004 report. This reduction in share was met by an increase of 2.6% by the Cooperative providers in the state over the same period of time.

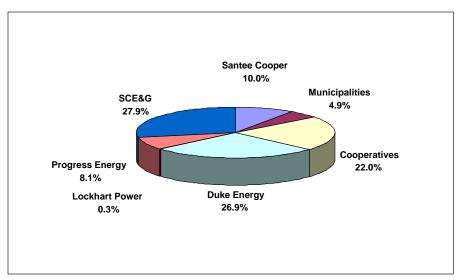


Figure 1. Utility Share of Annual Peak Demand*

*S.C. Total Peak System Demand in 2006= 17,274 MW

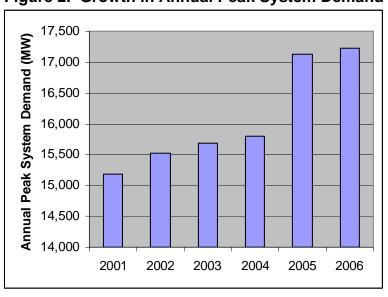


Figure 2. Growth in Annual Peak System Demand

Total Annual System Consumption

A goal of demand-side activities is to increase efficiency by reducing the overall amount of energy used over time (as opposed to the peak demand amount used at a given instant). This energy is measured in megawatt hours (MWh) and is based on annual consumption. Whereas the lowering of peak demand decreases the need for additional power plants, reducing the amount of energy consumed conserves fuel resources and reduces harmful emissions into the atmosphere.

Figure 3 illustrates the total amount of annual generation in MWh that was used by retail customers during 2006. Over 81,000,000 MWh of electricity were used in 2006 by customers of reporting utilities. Two investor-owned utilities, SCE&G (26.6%) and Duke Energy (26.8%), account for the largest amounts of total electricity consumption in South Carolina for this category; however, both utilities have shown decreases in share of total generation from previous years.

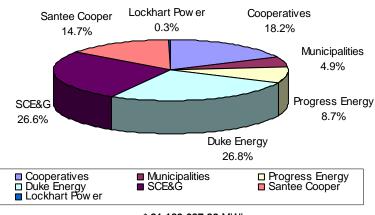


Figure 3. Total Annual System Consumption in South Carolina, 2006*

* 81,189,687.22 MWh

According to data submitted by utilities, total annual system generation for retail consumption has increased by 6.8 percent over the past five years, as shown in Figure 4.

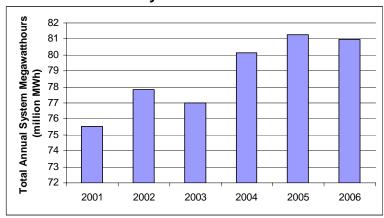


Figure 4. Growth of Annual System Generation for Retail Consumption

Miles of Distribution Line

In 2006, there were 134,561 total miles of power distribution line. This is a 1.5 percent increase over the previous year. Interestingly enough, Figure 5 shows that the electric cooperatives are responsible for nearly half of all distribution line in the state. The dramatic difference between generation and distribution line for the cooperatives is attributed to the fact that the cooperatives purchase a large majority of their power from the larger investor-owned and state-owned utilities but retain the responsibility for, and control of, the distribution lines.

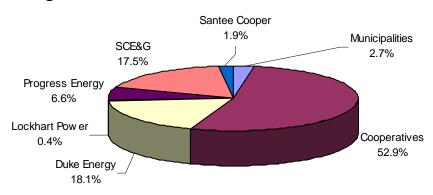


Figure 5. Total Miles of Power Distribution Line, 2006*

*134,561 miles of distribution line

Number of Customers

The number of retail electricity customers of utilities in South Carolina was 2,330,189 in 2006. Historically, SCE&G has had the largest electric power customer base in South Carolina, accounting for 26.8 percent of the total number of customers in 2006. Submitted data shows an annualized customer growth rate of about 2 percent over the past five years.

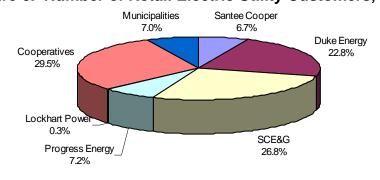


Figure 6. Number of Retail Electric Utility Customers, 2006*

*2,330,189 total retail customers

Qualified Facilities

The Public Utilities Regulatory Policies Act (PURPA) allows end users who need to generate power for their facilities to make any excess power available to the electric utilities supplying those users. PURPA also allows private companies to generate and to supply electricity to public utilities if that power is generated using approved energy resources. A qualified facility, as defined by PURPA, includes industrial cogeneration facilities and small scale independent power producers using PURPA approved fuel sources, including wood wastes, incinerated municipal solid waste, small-scale hydroelectricity and renewable sources. Qualified facilities reduce the need for new power plants just as load management does, by reducing the demand on utilities' systems at peak times. In South Carolina there are 14 qualified facilities with the capacity to provide approximately 556 MW of power, which helps contribute to the ability to meet system peak demand.

Electricity from qualified facilities is classified into two categories: 1) purchase, meaning that the utilities purchase the power generated; and 2) displace, meaning that the power is used by the facility itself, which would otherwise be using power from the utility's grid. Displacement from qualified facilities, in other words, is analogous to demand-side activities presented by some utilities in this report, in that it contributes to reducing overall system peak. Purchase is a direct, non-utility addition to total system peak capacity. As shown in Table 1, qualified facilities in South Carolina had the capacity to provide 556 MW of power in 2006.

The survey distributed by the SCEO requested the total generation of MWh supplied from qualified producers or avoided due to their operation. From the submitted data Duke Energy accounted for 41.7 percent of such generation in 2006, SCE&G for 36.7 percent, and Progress Energy for 21.4 percent.

Table 1. Listing of Electricity Qualified Facilities, 2006

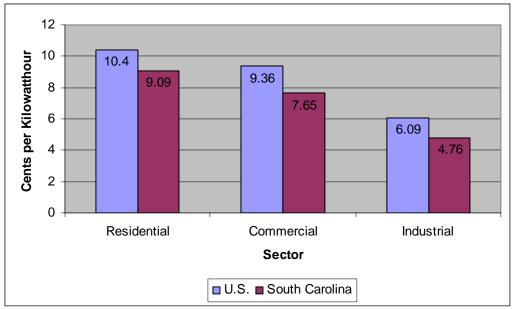
Utility	Plant Owner	Location	Fuel Type	Capacity (MW)	Purchase/ Displace
Progress Energy	Montenay Charleston RRI	Charleston	Solid Waste	13.000	Purchase/Displace
Progress Energy	Foster Wheeler	Charleston	Refuse	8.700	Purchase
Progress Energy	Stone Container	Florence	Wood Chips	68.000	Purchase
Progress Energy	Invista	Camden	Coal waste TOTAL=	30.000 119.700	Displace
Duke Energy	Aquenergy	Multiple	Hydro	8.700	Purchase
Duke Energy	Customer-self generation	Multiple	Multiple	105.000	Displace
Duke Energy	Bob Jones University	Greenville	Diesel	4.400	Displace
Duke Energy	Cherokee County	Gaffney	Gas	100.000	Purchase
Duke Energy	Converse Energy	Clifton	Hydro	1.250	Purchase
Duke Energy	Daniel Nelson Evans	Spartanburg	Hydro	.225	Purchase
Duke Energy	Northbrook Carolina Hydro	Multiple	Hydro	7.400	Purchase
Duke Energy	Pacolet River Power	Clifton	Hydro	.800	Purchase
Duke Energy	Pelzer Hydro Co.	Pelzer	Hydro TOTAL=	5.300 233.075	Purchase
SCE&G	International Paper	Eastover/Georgetown	Wood waste TOTAL=	205.200 205.200	Purchase/Displace
TOTAL				557.975	

Source: South Carolina Office of Regulatory Staff; U.S. Department of Energy.

Supplemental Electricity Data

This section includes electric data research findings gathered from sources other than the reporting utilities. These figures are included to provide a better overall picture of the status of the electric industry in South Carolina.

Figure 7: U.S. and South Carolina Comparison of Electric Utility Average Rate per kWh by Sector, 2006



Source: Energy Information Administration. Electric Sales and Revenue Database File

The tables on the following pages provide an overview of statistical information for South Carolina utilities. Specifically, Table 2 provides a profile of residential statistical information. Table 3 presents a statistical breakdown of electric utilities that provide power to the commercial sector, and Table 4 provides statistical information on the 33 utilities in South Carolina that provide power in the industrial sector in South Carolina.

Table 2. Class of Ownership, Number of Bundled Ultimate Consumers, Revenue, Sales, and Average Retail Price for the Residential Sector in South Carolina, by Utility, 2005

Entity	Class of Ownership	Number of Consumers	Revenue (thousand dollars)	Sales (megawatt hours)	Average Price (cents/kWh)
Abbeville City of	Public	3,070	3.298	33,724	9.78
Aiken Electric Coop Inc	Cooperative	39.629	57,538	581,464	9.90
Bamberg Board of Public Works	Public	1,458	1,567	21,178	7.40
Berkeley Electric Coop Inc	Cooperative	64,050	102,790	1,154,464	8.90
Black River Electric Coop, Inc	Cooperative	25,276	37,372	456,650	8.18
Blue Ridge Electric Coop Inc	Cooperative	55,808	68,552	720,898	9.51
Broad River Electric Coop, Inc	Cooperative	18,667	23,706	258,266	9.18
City of Bennettsville	Public	4,170	4,818	56,621	8.51
City of Camden	Public	9,538	8,289	103,592	8.00
City of Due West	Public	316	399	2,900	13.76
City of Gaffney	Public	6.002	5,962	70,613	8.44
City of Georgetown	Public	3,833	4,260	52,249	8.15
City of Laurens	Public	4,397	4,499	43,983	10.23
City of Newberry	Public	3,992	4,012	45,030	8.91
City of Orangeburg	Public	20,264	19,205	299,301	6.42
City of Rock Hill	Public	30,585	25,238	289,659	8.71
City of Seneca	Public	6.325	5,311	61,659	8.61
City of Union	Public	5.988	6.512	65.807	9.90
City of Westminster	Public	1,355	1,483	13,506	10.98
Clinton Combined Utility Sys	Public	3,690	3,909	38,324	10.90
Coastal Electric Coop, Inc	Cooperative	10,120	15,462	151,372	10.21
Duke Energy Corporation	Investor Owned	424,499	438,994	6,143,274	7.15
Easley Combined Utility System	Public	11,157	13,666	148,670	9.19
			,	,	9.19
Edisto Electric Coop, Inc Fairfield Electric Coop, Inc	Cooperative	14,972 21,106	23,808 28,976	246,581	8.60
Greenwood Commissioners-Pub Wk	Cooperative Public		8,074	336,736	
		11,133 11,937		116,827	6.91
Greer Commission of Public Wks	Public		12,896	141,351	9.12
Haywood Electric Member Corp	Cooperative	11	7	45	15.56
Horry Electric Coop Inc	Cooperative	48,384	73,412	755,590	9.72
Laurens Electric Coop, Inc	Cooperative	43,877	52,871	618,974	8.54
Little River Electric Coop Inc	Cooperative	11,282	13,711	153,422	8.94
Lockhart Power Co	Investor Owned	5,134	5,858	70,985	8.25
Lynches River Elec. Coop, Inc	Cooperative	19,246	23,365	256,123	9.12
Marlboro Electric Coop, Inc	Cooperative	5,295	8,398	88,082	9.53
Mid-Carolina Electric Coop Inc	Cooperative	40,437	58,442	665,580	8.78
Newberry Electric Coop, Inc	Cooperative	11,281	13,866	160,995	8.61
Palmetto Electric Coop Inc	Cooperative	52,610	66,790	891,415	7.49
Pee Dee Electric Coop, Inc	Cooperative	27,815	43,853	465,181	9.43
Progress Energy Carolinas Inc	Investor Owned	137,460	186,513	2,195,966	8.49
Santee Electric Coop, Inc	Cooperative	40,468	60,721	653,974	9.28
South Carolina Electric & Gas Co	Investor Owned	512,289	745,442	7,633,956	9.76
Santee Cooper	Public	121,440	129,824	1,625,064	7.99
Town of McCormick	Public	883	1,011	10,688	9.46
Town of Prosperity	Public	623	533	7,105	7.50
Town of Winnsboro	Public	3,448	2,953	30,800	9.59
Tri-County Electric Coop, Inc	Cooperative	17,029	26,353	254,014	10.37
York Electric Coop Inc	Cooperative	32,197	42,585	483,105	8.81

Source: Energy Information Administration. Electric Sales and Revenue Database File

Table 3. Class of Ownership, Number of Bundled Ultimate Consumers, Revenue, Sales, and Average Retail Price for the Commercial Sector by State, Utility, 2005

			Revenue	Sales	
	Class of	Number of	(thousand	(megawatt	Average Price
Entity	Ownership	Consumers	`dollars)	hours)	(cents/kWh)
Abbeville City of	Public	526	2,560	28,724	8.91
Aiken Electric Coop Inc	Cooperative	2,737	9,951	118,655	8.39
Bamberg Board of Public Works	Public	366	1,518	21,326	7.12
Berkeley Electric Coop Inc	Cooperative	7,114	17,213	194,889	8.83
Black River Electric Coop, Inc	Cooperative	3,625	8,638	97,616	8.85
Blue Ridge Electric Coop Inc	Cooperative	4.749	12.686	149.975	8.46
Broad River Electric Coop, Inc	Cooperative	649	2,382	27,132	8.78
City of Bennettsville	Public	639	3,550	41,715	8.51
City of Camden	Public	1,476	5,711	68,202	8.37
City of Due West	Public	30	398	8,922	4.46
City of Gaffney	Public	1,203	8,797	93,808	9.38
City of Georgetown	Public	1,215	7,789	83,930	9.28
City of Laurens	Public	855	4,282	55,918	7.66
City of Newberry	Public	847	5,188	63,305	8.20
City of Orangeburg	Public	3,373	7.077	101,891	6.95
City of Rock Hill	Public	3,198	30.347	366,099	8.29
City of Seneca	Public	1,020	7,304	70,570	10.35
City of Union	Public	1,094	5,225	56,379	9.27
City of Westminster	Public	242	1,454	13,599	10.69
Clinton Combined Utility Sys	Public	611	4,119	44,639	9.23
Coastal Electric Coop, Inc	Cooperative	904	2,391	20,213	11.83
Duke Energy Corporation	Investor Owned	83.405	333,257	5.440.921	6.13
Easley Combined Utility System	Public	1,647	11,508	129,306	8.90
Edisto Electric Coop, Inc	Cooperative	4,223	5,055	47,864	10.56
Fairfield Electric Coop, Inc	Cooperative	1.102	6,236	75,777	8.23
Greenwood Commissioners-Pub Wk	Public	2,410	4,166	54,862	7.59
Greer Commission of Public Wks	Public	3.802	10.705	130.533	8.20
Haywood Electric Member Corp	Cooperative	3,002	5	56	8.93
Horry Electric Coop Inc	Cooperative	6,802	14,892	156,974	9.49
Laurens Electric Coop, Inc	Cooperative	4,670	13,473	170,240	7.91
Little River Electric Coop Inc	Cooperative	2,118	3,563	38,714	9.20
Lockhart Power Co	Investor Owned	1,165	1,796	20,053	8.96
Lynches River Elec. Coop, Inc	Cooperative	887	3,494	39,958	8.74
Marlboro Electric Coop, Inc	Cooperative	1,181	3,494	32,502	9.74
Mid-Carolina Electric Coop Inc	Cooperative	5,476	17,822	214,136	8.32
Newberry Electric Coop, Inc	Cooperative	5,476	1,086	12.452	8.72
Palmetto Electric Coop Inc	Cooperative	9,202	35,853	486,146	7.37
Pee Dee Electric Coop, Inc	Cooperative	1,710	6,125	67,359	9.09
Progress Energy Carolinas Inc	Investor Owned	31,954	139,451	1,843,903	7.56
		2,553	,	94,200	8.87
Santee Electric Coop, Inc South Carolina Electric & Gas Co	Cooperative Investor Owned	2,553 87,009	8,354 591,350	7,592,047	7.79
	Public		,		
South Carolina Pub Serv Auth		27,548	139,371	1,936,514	7.20
Town of McCormick	Public	199	640	6,749	9.48
Town of Prosperity	Public	139	255	3,682	6.93
Town of Winnsboro	Public	602	1,185	14,900	7.95
Tri-County Electric Coop, Inc	Cooperative	538	4,502	49,127	9.16
York Electric Coop Inc	Cooperative	2,885	9,058	111,388	8.13

Source: Energy Information Administration. Electric Sales and Revenue Database File

Table 4. Class of Ownership, Number of Bundled Ultimate Consumers, Revenue, Sales, and Average Retail Price per kilowatt for the Industrial Sector in South Carolina, by Utility, 2005

Entity	Class of Ownership	Number of Consumers	Revenue (thousand dollars)	Sales (megawatt hours)	Average Price (c/kWh)
Aiken Electric Coop Inc	Cooperative	14	9,878	183,300	5.39
Bamberg Board of Public Works	Public	5	432	7,903	5.47
Berkeley Electric Coop Inc	Cooperative	234	11,334	168,340	6.73
Black River Electric Coop, Inc	Cooperative	18	7,263	122,846	5.91
Blue Ridge Electric Coop Inc	Cooperative	26	4,056	74,306	5.46
Broad River Electric Coop, Inc	Cooperative	4	1,997	29,207	6.84
City of Due West	Public	1	8	65	12.31
City of Gaffney	Public	28	1,865	42,959	4.34
City of Newberry	Public	13	4,143	64,645	6.41
City of Orangeburg	Public	350	26,742	522,108	5.12
City of Rock Hill	Public	9	3,817	50,400	7.57
City of Seneca	Public	4	1,692	30,030	5.63
City of Union	Public	14	665	7,816	8.51
Clinton Combined Utility Sys	Public	6	2,243	32,837	6.83
Duke Energy Corporation	Investor Owned	1,819	389,907	10,279,050	3.79
Edisto Electric Coop, Inc	Cooperative	16	1,522	21,186	7.18
Fairfield Electric Coop, Inc	Cooperative	14	10,453	204,427	5.11
Greenwood Commissioners-Pub Wk	Public	172	6,289	127,940	4.92
Horry Electric Coop Inc	Cooperative	7	2,258	32,692	6.91
Laurens Electric Coop, Inc	Cooperative	26	7,802	135,567	5.76
Lockhart Power Co	Investor Owned	10	5,696	123,260	4.62
Lynches River Elec. Coop, Inc	Cooperative	11	3,796	57,255	6.63
Marlboro Electric Coop, Inc	Cooperative	7	26,742	613,377	4.36
Mid-Carolina Electric Coop Inc	Cooperative	5	1,597	28,534	5.60
Newberry Electric Coop, Inc	Cooperative	82	6,838	101,360	6.75
Palmetto Electric Coop Inc	Cooperative	10	3,434	59,841	5.74
Pee Dee Electric Coop, Inc	Cooperative	21	20,303	399,203	5.09
Progress Energy Carolinas Inc	Investor Owned	773	167,877	3,243,126	5.18
Santee Electric Coop, Inc	Cooperative	17	33,082	641,970	5.15
South Carolina Electric & Gas Co	Investor Owned	877	327,684	6,651,036	4.93
South Carolina Public Service Authority	Public	34	360,510	7,909,248	4.56
Town of Winnsboro	Public	39	3,030	38,100	7.95
Tri-County Electric Coop, Inc	Cooperative	92	220	1,921	11.45
York Electric Coop Inc	Cooperative	28	4,389	74,600	5.88

Source: Energy Information Administration. *Electric Sales and Revenue Database File*

Demand-Side Management Activities, 2006

This section provides the DSM activities of the utilities which submitted such reports to the SCEO. Included are program activities from all twenty electric cooperatives, four municipalities, three investor-owned utilities, and the state-owned utility, Santee Cooper. The following information was taken directly from the surveys submitted by the utility companies. To maintain the objectivity of this report, minimal changes were made to the content or length of the responses.

Cooperatives

All 20 cooperatives reported having DSM activities in place. The estimated annual reductions achieved for 2006 peak demand were close to 80 MW for all cooperatives combined.

Central Electric Power Cooperative, Inc.

There are three programs (described below) that are available to all 20 distribution cooperatives, but currently only the 15 original member cooperatives of the Central Electric Power Cooperative, Inc. organization are participating. These cooperatives are:

- Aiken Electric Cooperative,
- Berkeley Electric Cooperative,
- Black River Electric Cooperative,
- Coastal Electric Cooperative,
- Edisto Electric Cooperative,
- Fairfield Electric Cooperative,
- Horry Electric Cooperative,
- Lynches River Electric Cooperative,
- Marlboro Electric Cooperative,
- Mid-Carolina Electric Cooperative,
- Newberry Electric Cooperative,
- Palmetto Electric Cooperative,
- Pee Dee Electric Cooperative,
- Santee Electric Cooperative,
- Tri-County Electric Cooperative,

Good Cents Program

The Good Cents Program provides residential customers an incentive to build new homes to higher levels of energy efficiency and improve existing homes by upgrading heating and air conditioning equipment and the thermal envelope to high energy efficiency standards. All homes are evaluated to determine if they meet the standards set for the program. Inspections are completed during construction for new homes and at the completion of construction for new and improved homes.

H₂O Advantage Water Heating Program

H₂O Advantage is a storage water heating program designed to shift the demand related to water heating off-peak. This is accomplished with the installation of an electronic timer or radio controlled switch on an 80-gallon water heater.

Direct Control Load Management Program

The load management programs offered focus on two areas: reducing the impact of water heaters during peak system demand and the impact of air conditioning during peak system demand.

Saluda River Electric Cooperative, Inc.

The five cooperatives that are the newest members of Central Electric Cooperative are also members of Saluda River Electric Cooperative. They are: Blue Ridge Electric Cooperative, Broad River Electric Cooperative, Laurens Electric Cooperative, Little River Electric Cooperative, and York Electric Cooperative. They participate in the following programs:

Energy Conservation Rates and Time of Use rates

Energy Conservation Rates are electricity rates that are structured to cost the consumer more at times of peak usage to encourage them to use less and thereby reduce demand.

The Saluda River Electric Cooperative also provides two types of Time of Use programs that aim at two different types of consumers in their system: Large Consumer and Residential. Time of Use rates are fundamentally similar to Energy Conservation Rates in that they are structured to cost the consumer more at times of peak usage to encourage them to use less and thereby reduce demand.

Municipalities

There were four municipalities that reported the use of DSM programs in 2006.

City of Rock Hill

The City of Rock Hill reported having a Standby Generation Program with 15 facilities with 17 different generators in the system. These generators were all diesel-fired engines with a total capacity of 5780 KW.

Orangeburg Department of Public Utilities

The Orangeburg Department of Public Works has a Time-of-Use program in place that is tailored around irrigation systems.

City of Camden

The City of Camden Electric Department uses a radio-based Load Management system to operate voltage reduction at their substations, two small generators, air conditioner switches, and water heater switches. The City reported that the computer that dispatches the load management signal is nearing the end of its useful life and the City has already purchased a SCADA system which will begin operation in 2007.

City of Newberry

The City of Newberry has Standby Generation capacity of 10MW that it uses to supply itself during annual peak hours thereby reducing wholesale demand purchases and cost.

Investor-Owned Utilities

There were three investor-owned utilities that reported having DSM activities.

Duke Energy Company

Residential Load Control – Air Conditioning (RIDER LC)

This program is designed to provide a source of interruptible capacity to Duke at any time it encounters capacity problems during the cooling months of the year. Participants receive billing credits during the billing months of July through October for allowing Duke to interrupt electric service to their central air conditioning systems when capacity problems arise.

Residential Load Control – Water Heating (RIDER LC)

This program is designed to provide a source of interruptible capacity to Duke at any time it encounters capacity problems during the year. Participants receive billing credits each month of the year for allowing Duke to interrupt electric service to their water heaters when capacity problems arise. This program was closed to new installations on January 1, 1993 in North Carolina, and on February 17, 1993 in South Carolina.

Standby Generator Control (RIDER SG)

This program is designed to provide a source of interruptible capacity to Duke at any time it encounters capacity problems during the year. Participants in the program contractually agree to transfer electrical loads from the Duke source to their standby generators when so requested by Duke. The generators in this program do not operate in parallel with Duke's system and, therefore, cannot "backfeed" (or export power) into the Duke system. Participating customers receive payments for capacity and/or energy based on the amount of capacity and/or energy transferred.

Interruptible Power Service (RIDER IS)

This program is designed to provide a source of interruptible capacity to Duke at any time it encounters capacity problems during the year. Participants in the program contractually agree to reduce their electrical loads to specified levels when so requested by Duke. Failure to do so results in a penalty for the increment of demand which exceeds a specified level. The program has not been available to new participants since 1992.

Existing Residential Housing Program

This residential program represents Duke's activities in the existing residential market to encourage increased energy efficiency in existing residential structures, and to encourage the use of efficient electric end-uses. This program consists of the following options:

- 1) High Efficiency Heat Pump Program (discontinued as of August 1998)
- 2) Residential HVAC Tune-up Program (discontinued as of August 1998)
- 3) Residential Energy Products Loan Program

Independent DSM Market Assessment

Duke Energy conducted an independent assessment of its energy market in South Carolina to determine the potential power usage reduction that DSM programs may have. A draft report was released on May 17, 2007 and presented a long-term DSM action plan. Research was conducted by two contracted parties and focused on the areas of design, implementation, oversight and cost effectiveness of DSM programs. The official report's release date is unknown as of the date of this publication.

South Carolina Electric & Gas

The Demand-Side Management Programs at SCE&G can be divided into three major categories: Customer Information Programs, Energy Conservation Programs and Load Management Programs.

<u>Customer Information Programs</u>

SCE&G's customer information programs fall under two headings: the annual energy campaigns and the web-based information initiative. Following is a brief description of each.

The 2006 Energy Campaigns

In 2006 as in the past, SCE&G continued to proactively educate its customers and create awareness of issues related to energy and conservation management.

- Weatherline promote energy saving tips on the Weatherline.
- Bill Inserts a bill insert issued to targeted customers promoting the Low-Income Home Energy Assistance Program (LIHEAP).
- Brochures/Printed Materials energy saving tips available on various printed materials in business offices.
- News Releases distributed to print and broadcast media throughout SCE&G's service territory.
- Featured News Guests SCE&G energy experts conducted several interviews with the media regarding energy conservation and useful tips.
- Web site energy saving tips and other conservation information placed on the company's Web site. The address for the Web site was promoted in most of the communication channels mentioned above.
- Speakers Bureau Representatives from SCE&G talk to local organizations about energy conservation and use company-produced video that highlights energy conservation.
- Energy Awareness Month company used the month as an opportunity to send information to the media discussing energy costs and savings tips.
- WEB-Based Information and Services Programs: SCE&G now has available a Web-based tool which allows customers to access current and historical consumption data and compare their energy usage month-to-month and yearto-year, noting trends and spikes in their consumption. Feedback on this tool has been positive and nearly 166,000 customers have registered to access this tool as well as other account related information. The SCE&G Web site

supports all communication efforts to promote energy savings tips. The "Manage Energy Use" section of the SCE&G Web site, which features a bill estimator tool, video instruction on weatherization and other useful content, averaged 12,000 visits in 2006. For business customers, online information includes: power quality technical assistance, conversion assistance, new construction information, expert energy assistance and more.

Energy Conservation Programs

There are three energy conservation programs: the Value Visit Program, the Conservation Rate and our use of seasonal rate structures. A description of each follows:

- Value Visit Program: The Value Visit Program is designed to assist residential electric customers that are considering an investment in upgrading their home's energy efficiency. We visit the customer's home and guide them in their purchase of energy related equipment and materials such as heating and cooling systems, duct insulation, attic insulation, storm windows, etc. Our representative explains the benefits of upgrading different areas of the home and what affect upgrading these areas will have on energy bills and comfort levels as well as informing the customer on the many rebates we offer for upgrading certain areas of the home (see attached rebate schedule). We also offer financing for qualified customers which makes upgrading to a higher energy efficiency level even easier. The Value Visit Program is often used in conjunction with our Rate 6 Program to achieve the maximum benefit for customers wanting to reduce their energy usage, make their homes more comfortable and to increase their home's overall value. There is a \$25 charge for the program, but this charge is reimbursed if the customer implements any suggested upgrade within 90 days of the visit. Information on this program is available on our website or by brochure.
 - o 0 to R30 attic insulation \$6.00 per 100 sq.ft.
 - o R11 to R30 attic insulation \$3.00 per 100 sq.ft.
 - Storm windows \$30.00 per house
 - Duct insulation \$60.00 per house
 - Wall Insulation \$80.00 per house
- Rate 6 Energy Saver/Energy Conservation Program: The Rate 6 Energy Saver / Energy Conservation Program rewards homeowners and home builders who upgrade their existing homes or build their new homes to a high level of energy efficiency with a reduced electric rate. This reduced rate, combined with a significant reduction in energy usage, provides for considerable savings for our customers. Participation in the program is very easy as the requirements are prescriptive and do not require a large monetary investment which is beneficial to all of our customers and trade allies. Homes built to this standard also have improved comfort levels and increased re-sale value over homes built to the minimum building code standards which are also a significant benefit to our customers. Information on this program is available on our website and by brochure.

 Seasonal Rates: Many of our rates are designed with components that vary by season. Energy provided in the peak usage season is charged a premium to encourage conservation and efficient use.

Load Management Programs

SCE&G's load management programs have as their primary goal the reduction of the need for additional generating capacity. There are four load management programs: Standby generator program; Interruptible load program; Real Time Pricing Rate; and the Time of Use Rates. A description of each follows.

- Standby Generator Program: The Standby Generator I Program was introduced in 1990 to serve as a load management tool. General guidelines authorize SCE&G to initiate a standby generator run request when reserve margins are stressed due to a temporary reduction in system generating capability, or high customer demand. The Standby Generator II Program was developed in 2000, authorizing standby generator runs for revenue producing opportunities during times of high market prices. Through consumption avoidance, generator customers release capacity back to SCE&G where it is then used to satisfy system demand. Qualifying customers (able to defer a minimum of 200 kW) receive financial credits determined initially by recording the customer's demand during a load test. Future demand credits are based on what the customer actually delivers when SCE&G requests them to run their generator(s). This program allows customers to reduce their monthly operating costs, as well as earn a return on their generating equipment investment.
- Interruptible Load Program: SCE&G has over 200 megawatts of interruptible customer load under contract. Participating customers receive a discount on their demand charges for shedding load when SCE&G is short of capacity.
- Real Time Pricing (RTP) Rate: A number of customers receive power under SCE&G's real time pricing rate. During peak usage periods throughout the year when capacity is low in the market, the RTP rate sends a high price signal to participating customers who encourages conservation and load shifting. Of course during low usage periods, prices are lower.
- Time of Use Rates: SCE&G's time of use rates contain higher charges during the peak usage periods of the day to encourage conservation and load shifting during these periods.

Progress Energy

Progress Energy Carolinas, Inc. (PEC) has a number of conservation and energy efficiency, load management, cogeneration, and renewable energy programs in effect. These include the following programs:

Residential Programs:

Education and Awareness

Education and awareness are used to promote energy efficiency to customers. This encompasses the retrofit and new home markets for all types of residential structures (single family, multi-family, and manufactured housing). PEC

proactively educates the end-use customers, assists them with questions and provides additional information, as needed, concerning energy efficiency.

Home Energy Check

Home Energy Check is an energy analysis tool (audit) first implemented in 2001 to assist residential consumers to better understand their energy usage and make personalized recommendations for energy improvements. The tool consists of an on-line and mail-in version, depending on the customer's requirements. The on-line version links to a Lawrence Berkeley National Laboratory audit developed for the U.S. Department of Energy (DOE): http://homeenergysaver.lbl.gov/. In January 2005, PEC implemented a new improved Home Energy Check on its web site: www.progress-energy.com

Energy Efficient Home

In the early 1980's, PEC introduced the Energy Efficient Home program. This program provides residential customers with a 5 percent discount of the energy and demand portions of their electricity bills when their homes meet certain thermal efficiency standards that are significantly above the existing building codes and standards. Through December 2006, almost 295,000 dwellings qualify for the discount.

Currently, PEC utilizes the ENERGY STAR standard for new applications for the energy conservation discount. ENERGY STAR is the national symbol for energy efficiency. It is a partnership between the DOE, the U.S. Environmental Protection Agency (EPA), local utilities, product manufacturers, and retailers. Homes built with this label are at least 30% more efficient than the national Model Energy Code, have greater value, lower operating costs, increased durability, comfort, and safety. Features of an Energy Star Home include:

- Improved insulation
- Advanced windows
- Tightly-sealed ducts
- · High-efficiency heating and cooling
- Reduced air infiltration

Homes that pass an ENERGY STAR test receive a certificate as well as a 5 percent discount on energy and demand portions of their electric bills. Builders receive training in building energy efficient homes, and a means of differentiating their product on the market place.

Energy Efficiency Financing Program

The *Energy Efficiency Financing Program* offers low-interest loans so that customers can purchase heating and cooling systems, storm windows and doors, insulation and other cost-effective home improvements. Progress Energy sponsors the program which is administered by Volt VIEWtech in California, and dealer screening is performed by Smart Consumer Services of Asheville, North Carolina.

Large Load Curtailment:

Progress Energy Carolinas utilizes three tariffs whereby industrial and commercial customers receive discounts for PEC's ability to curtail system load during times of high energy costs and/or capacity constrained periods. Currently, there are 317 MW of curtailable load under these tariffs on PEC's system.

Voltage Control:

This procedure involves reducing distribution voltage by up to 5 percent during periods of capacity constraints and can reduce peak load requirements about 57 MW. Typically, this level of reduction does not adversely impact customer equipment or operations.

State-Owned Utility

Santee Cooper (South Carolina Public Service Authority)

Good Cents New and Improved Home Program

The Good Cents Program provides residential customers an incentive to build new homes to higher levels of energy efficiency and improve existing homes by upgrading heating and air conditioning equipment and the thermal envelope to high energy efficiency standards. All homes are evaluated to determine if they meet the standards set for the program. Inspections are completed during construction for new homes and at the completion of construction for new and improved homes.

Note: Santee Cooper reports that participation in The Good Cents Program in 2005 resulted in an estimated demand savings of 15,470 kW and an estimated energy savings of 22,101,000 kWh. Total expenditures for the Good Cents Program incurred by Santee Cooper were \$202,559.21. (Demand savings are based on summer peak demand reduction of 1.05 kW).

H₂O Advantage Water Heating Program

H₂O Advantage is a storage water heating program designed to shift the demand related to water heating off-peak. This is accomplished with the installation of an electronic timer or radio controlled switch on an 80-gallon water heater. This program began in 1990 and was offered for the last time in 2000. The contract spans ten years so this program will no longer affect the system after 2010.

Note: Santee Cooper reports that program participation in 2005 resulted in an estimated demand savings of 853 kW. Total expenditures for the H₂O Advantage Program incurred through Santee Cooper in 2005 for existing participants were \$167,294.85.

Commercial Good Cents

Commercial Good Cents is offered to commercial customers building new facilities with improved efficiency in the building thermal envelope, heating and cooling equipment, and lighting. Commercial customers that meet program standards are given an up-front rebate to encourage participation in the program.

Note: Santee Cooper reports that program participation in 2005 resulted in demand savings of 119 kW and estimated energy savings of 182,884 kWh. Total expenditures for the Commercial Good Cents program incurred through Santee Cooper in 2005 were \$24,620.

Thermal Storage Cooling Program

The Thermal Storage Cooling Program shifts energy used by commercial customers for air conditioning from peak to off-peak hours by utilizing thermal energy stored in a medium such as ice or water. Rebates are offered to customers who install this type of equipment. There is currently one active user in this program.

Natural Gas Results and Findings

For purposes of the 2006 report, the survey requested annual decatherm (DT) peak system demand, total annual system DT sales, total miles of distribution line, and total numbers of customers. Eleven out of 17 natural gas utilities submitted their data for the survey. According to survey data, during 2006 the annual peak system demand for reporting facilities was 2.5 million DT, the total annual system use was 90 million DT, there were over 20,000 miles of distribution line, and 571,272 natural gas customers.

As discussed in the electricity section, the basic purpose of demand-side activities is to change energy-use decisions of customers in ways that are beneficial to both the customers and the utility itself. Whereas electric utilities must meet their load instantaneously, natural gas suppliers have the ability to store gas and use interruptible contracts to maintain reliability. There are two categories of demand-side activities for natural gas: conservation and load management programs.

Annual Peak System Demand

Of the 10 natural gas utilities submitting data, Clinton-Newberry Natural Gas Authority had the highest annual peak system demand with 1,322,758 DT of the 2.5 million DT in 2006. This output by Clinton- Newbery accounts for over half of the 2006 peak demand of natural gas.

Total Annual System Data and Customers

During the years between 2001 to 2006, the total annual system consumption of natural gas in decatherms averaged over 90 million DT with the highest reported consumption occurring in 2002 at 94 million DT. Total consumption in 2006 came in at just over 90 million DT. Trends over the past five years seem to indicate steady levels of consumption of natural gas with a slight variation year to year. In 2006, SCE&G accounted for 48.8 percent of the total natural gas sold to customers as indicated by the reporting entities, followed by Piedmont Natural Gas Company with 24.8 percent. Figure 8 shows the total annual system consumption over the past 5 years.

According to data submitted for the survey, the total number of natural gas customers for all classes (residential, commercial, and industrial) was 571,272. This was a rise of

11.3 percent from 2001 to 2006. In 2006, SCE&G served 47.9 percent of all natural gas customers, and Piedmont Natural Gas Company accounted for 26 percent.

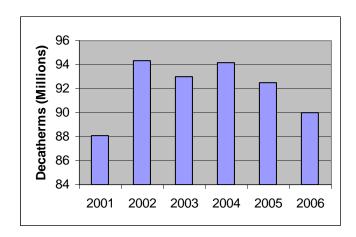


Figure 8. Total Annual System Demand (Millions of Decatherms), 2001-2006

Total Distribution Lines

In 2006, there were 19,395 miles of distribution lines for natural gas in South Carolina. By far the largest owner of these lines was SCE&G with 62 percent of the total, or 15,144 miles of distribution lines. Figure 9 shows the ownership of distribution lines by percent, 2006.

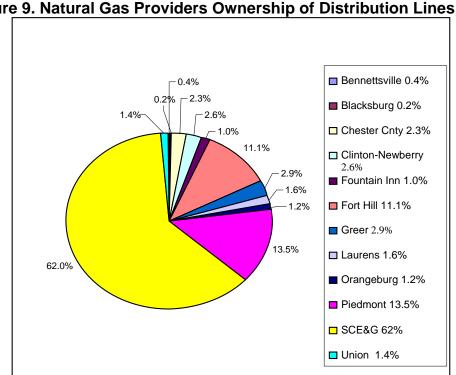


Figure 9. Natural Gas Providers Ownership of Distribution Lines, 2006

*Total Miles of Distribution in 2006 = 19,395

Supplemental Natural Gas Data

South Carolina has historically had higher prices than the national average for natural gas. South Carolina natural gas prices have risen by \$11.15 per thousand cubic feet from 1986 to 2006 in the residential sector, as compared to the U.S. average of \$7.93. However, a large portion of these increases were experienced over the six year period from 2000-2006. See Figure 10.

Figure 10. Dollars per Thousand Cubic Feet, U.S. and South Carolina, 1986-2006

Source: Energy Information Administration

Demand-Side Management Activities

None of the natural gas providers in the state reported programs that are intended to reduce demand. This is no different than previous years' reporting.

Appendices:

Appendix A: South Carolina State Statute Authorizing DSM Report

SECTION 58-37-30. Reports on demand-side activities of gas and electric utilities; forms.

- (A) The South Carolina Public Service Commission must report annually to the General Assembly on available data regarding the past, on-going, and projected status of demand-side activities and purchase of power from qualifying facilities, as defined in the Public Utilities Regulatory Policies Act of 1978, by electrical utilities and public utilities providing gas services subject to the jurisdiction of the Public Service Commission.
- (B) Electric cooperatives providing resale or retail services, municipally-owned electric utilities, and the South Carolina Public Service Authority shall report annually to the State Energy Office on available data regarding the past, on-going, and projected status of demand-side activities and purchase of power from qualifying facilities. For electric cooperatives, submission to the State Energy Office of a report on demand-side activities in a format complying with then current Rural Electrification Administration regulations constitutes compliance with this subsection. An electric cooperative providing resale services may submit a report in conjunction with and on behalf of any electric cooperative which purchases electric power and energy from it. The State Energy Office must compile and submit this information annually to the General Assembly.
- (C) The State Energy Office may provide forms for the reports required by this section to the Public Service Commission and to electric cooperatives, municipally-owned electric utilities, and the South Carolina Public Service Authority. The office shall strive to minimize differing formats for reports, taking into account the reporting requirements of other state and federal agencies. For electrical utilities and public utilities providing gas services subject to the jurisdiction of the commission, the reporting form must be in a format acceptable to the commission.

Appendix B: 2006 Demand-Side Management Survey Cover Letter

STATE OF SOUTH CAROLINA State Budget and Control Board

SOUTH CAROLINA ENERGY OFFICE

MARK SANFORD, CHAIRMAN GOVERNOR THOMAS RAVENEL STATE TREASURER RICHARD ECKSTROM COMPTROLLER GENERAL



1201 MAIN STREET, SUITE 430 COLUMBIA, SOUTH CAROLINA 29201 (803) 737-8030 Toll-free 1-800-851-8899 Fax (803) 737-9846 HUGH K. LEATHERMAN, SR. CHAIRMAN, SENATE FINANCE COMMITTEE

DANIEL T. COOPER CHAIRMAN, WAYS AND MEANS COMMITTEE

HENRY J. WHITE EXECUTIVE DIRECTOR

Name, title Company Address: City state zip

Dear (name)

I am writing to request information about ongoing and projected demand-side management activities that your utility conducts. We are requesting this information in accordance with South Carolina Code of Laws Section 58-37-10 which requires utilities to report demand-side management activities. A demand side activity is defined as "a program conducted by a producer, supplier, or distributor of energy for the reduction or more efficient use of energy requirements of the producer's, supplier's, or distributor's customers, including, but not limited to, conservation and energy efficiency, load management, cogeneration, and renewable energy technologies." Information can be in the form of a brief narrative description.

Because of significant public interest in "green power" we'd also like to know about any green power initiatives underway or anticipated. Finally, please use the enclosed form to report quantitative information about your overall system.

Please return the completed descriptions and forms to Chris Daetwyler, South Carolina Energy Office, Suite 430, 1201 Main St., Columbia, SC, 29201 no later than March 15, 2007. If you prefer, you may email it to XXXX@energy.sc.gov or fax it to 803-737-9846.

If you are interested in seeing our most recent compilation of this data, please visit www.energy.sc.gov, then click on "public information" then "publications available on the web" then "2004 DSM Report." We hope to make this reporting requirement as simple for you as possible, and welcome your suggestions for improvement.

If you have any questions, please contact Chris Daetwyler at XXXX@energy.sc.gov or me (803-737-XXXX.)

Sincerely,

Mitchell M. Perkins

Director, State Energy Program

Appendix C: 2006 Demand-Side Management Survey for Electric Utilities

through December 2006.

Electricity	Lieb		
Overall System Data	Utility:		
Quantitative Data Please provide system summary totals for 12-month periods (c basis) using actual	·		
annual values for each of the previous six calendar years, Jan	uary 2001		

			ACTUA	L		
Data Description	2001	2002	2003	2004	2005	2006
(1) Annual MW peak system demand, excluding sales for re-sale.						
(2) Total annual system MWh , excluding sales for resale.						
(3) Total miles of distribution line in service area (in miles).						
(4) Total number of customers (all classes).						
(5) Total generation (kWh) supplied from qualified facilities (IPP, cogeneration) or avoided due to their operation (NOTE: please attach a list showing the identity and generating capacity of each qualified producer in the system).						

Appendix D: 2006 Demand-Side Management Survey for Gas Utilities

Natural Gas	Liebe		
Overall System Data	Utility: 		
Quantitative Data Please provide system summary totals for 12-month periods (on a basis): "*using actual annual values for each of the previous six calendar years, January through December 2006.	•		

				ACTUAL	_		
Data Description	200	1	2002	2003	2004	2005	2006
(1) Annual deca-therm (DT) peak system demand, excluding sales for re-sale.							
(2) Total annual system deca-therm (DT), excluding sales for re-sale.							
(3) Total miles of distribution line in service area (in miles).							
(4) Total number of customers (all classes).							

Appendix E: 2006 Demand-Side Management Survey Participants

Electric Utilities

Abbeville, City of Little River Electric Cooperative Aiken Electric Cooperative **Lockhart Power Company** Berkeley Electric Cooperative Lynches River Electric Cooperative Black River Electric Cooperative Marlboro Electric Cooperative Blue Ridge Electric Cooperative Mid-Carolina Electric Cooperative **Broad River Electric Cooperative** Newberry, City of Bennettsville, City of Newberry Electric Cooperative Camden, City of Orangeburg Department of Public Utilities Clinton, City of Palmetto Electric Cooperative Coastal Electric Cooperative Pee Dee Electric Cooperative Duke Energy Company Progress Energy (formerly CP&L) Easley Combined Utility System Rock Hill, City of Edisto Electric Cooperative Santee Cooper Santee Electric Cooperative Fairfield Electric Cooperative Gaffney Board of Public Works South Carolina Electric & Gas Company Georgetown, City of Tri-County Electric Cooperative Greer Commission of Public Works Union, City of Horry Electric Cooperative Westminster, City of Laurens Commission of Public Works Winnsboro, Town of

Natural Gas Utilities

Laurens Electric Cooperative

Bennettsville, City of	Greer Commission of Public Works
Blacksburg, Town of	Laurens Commission of Public Works
Chester County Natural Gas Authority	Orangeburg Department of Public Utilities
Clinton-Newberry Natural Gas Authority	Piedmont Natural Gas Company
Fort Hill Natural Gas Authority	South Carolina Electric & Gas Company
Fountain Inn, City of	Union, City of

York Electric Cooperative





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