Electric Trade in the United States 1996

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Energy Information Administration
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Contacts

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Questions regarding the contents of this report may be directed to:

Electric Power Division
Office of Coal, Nuclear, Electric and Alternate Fuels
Energy Information Administration, EI-53
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, DC 20585
FAX (202/254-5765)

Questions of a general nature should be directed to:

Robert Schnapp (202/426-1211), Director of the Electric Power Division Robert.Schnapp@eia.doe.gov Betsy O'Brien (202/426-1180), Chief of the Market Assessment Branch Betsy.OBrien@eia.doe.gov

John Makens (202/426-1165), Project Manager John.Makens@eia.doe.gov

Principal data analyst and author for the *Electric Trade in United States* report was John W. Makens of the Electric Power Division.

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Executive Summary

In the past, wholesale trade in electricity played an important role for the U.S. electric utility industry in helping to reduce costs and for providing reliability support. Today, it has an even more important role in the new competitive electric power industry. For in 1996, the wholesale trade market totaled 2.3 trillion kilowatthours. This total, expressed in another way, means that 73 percent of total sales to ultimate consumers were part of a wholesale electricity trade transaction which linked together the contract path from source generation to end-use consumption (Table 3).

Participation in wholesale, or bulk power, transactions has increased through the regulatory actions of the Federal Energy Regulatory Commission's (FERC) when it started the process to authorize market competition for the wholesale trade sector of the electric power industry. Electric utilities, power marketers, and many industrial companies are buying and selling their power under the new rules for this market. There is now more power supply options (both for acquiring physical energy and financial protection). New competitive markets have also been proposed for electrical system support services. From this, the hope for the future is that competiton will lead to improved reliability.

The Electric Power Industry and Wholesale Trade

This publication on electric trade data provides information on the electric power industry during 1996. The information furnished provide important information on the wholesale structure found within the U.S. electric power industry. The patterns of interutility trade in the report support analyses of wholesale power transactions and provide input for a broader understanding of bulk power market issues that defines the emerging national electric energy policies. The report includes information on the quantity of power purchased, sold, exchanged, and wheeled; the geographical locations of transactions and ownership classes involved; and the revenues and costs. The util-

ities covered in this publication include all U.S. electric utilities in the 50 States and the District of Columbia. Electric utilities fall into four basic ownership classifications: investor-owned (privately owned), publicly owned, cooperative, and power marketers. Publicly owned utilities may be Federally owned, State-owned, or municipally owned.

In 1996, there were 3,195 electric utilities in the United States and 65 power marketers (active reporters for a grand total of 3,260). Of these, 2,020 were publicly owned (including 10 Federal utilities), 932 were rural electric cooperatives, and 243 were investor-owned utilities (Table 1). Some of these electric utilities have service territories extending beyond a single county or parish. Others just serve a municipality or part of a county. Many of the Nation's electric utilities are exclusively distribution utilities, that is, they purchase wholesale power from other utilities and distribute, on their own distribution lines, the electricity to ultimate consumers. Power Marketers do not have service territories, but can provide their services anywhere. This operating capability will become a model for many in the future.

However, the counts and responsibilities of these utilities are changing as the restructuring activities that are reshaping the electric power industry alters the traditional practices and service territory boundaries. Electric utilities are merging with others or are being acquired. And, some of these electric utilities are being directed (State government initiatives) to sell off their generating assets and focus the regulated part of the company on transmission and/or distribution (for example, in California and Massachusetts). Part of the reason for this sell-off is that there is a high concentration of the nation's total utility generation assets owned by a small ownership class of utilities. The belief is that under market competition, this concentration of capability would represent too much market power influence over charged prices. Whether this become a trend that other States follow is a question that currently has no answer. But, there are fewer than 1,000 ¹ of the 3,200 utilities in the United States engaged in power generation. These utility generating asset holdings represents 91 percent of the total industry's net summer capability in 1996.2

¹ Energy Information Administration Form EIA-860, "Annual Electric Generator Report."

² Energy Information Administration, Annual Energy Review 1996 DOE/EIA-0384(96)(Washington, DC) p. 228.

Table ES1. Comparison of Electric Trade Data by North American Electric Reliability Council Region for Years 1990, 1992, 1994, and 1996

			Percent							
NERC Region	Geographic Area	1996	1994	1992	1990	Change 1990-1996				
		Purchases by I	nvestor-Owned Util	ities						
ECAR	Indiana; Ohio; West Virginia; and portions of Kentucky, Maryland, Michigan, Pennsylvania, and Virginia	121.9	98.3	95.7	79.2	54.1				
ERCOT		33.9	27.2	28.0	27.0	25.3				
MAAC	Delaware; District of Columbia; New Jersey; and portions of Maryland, Pennsylvania, and Virginia	109.7	35.8	70.2	43.8	150.4				
MAIN	Illinois; and portions of Iowa, Michigan, Missouri, and Wisconsin	37.9	71.3	28.6	21.8	73.5				
MAPP(US)	Minnesota; North Dakota; and portions of Iowa, Montana, Nebraska, South Dakato, Wisconsin, and Wyoming	36.3	31.0	26.4	20.0	81.8				
NPCC(US)	Connecticut; Maine; Massachusetts; New Hampshire; New York; Rhode Island; and Vermont	186.3	169.1	141.9	104.1	79.0				
SERC	Alabama; Florida; Georgia; North Carolina; South Carolina; Tennessee; and portions of Kentucky, Mississippi, and Virginia	95.8	85.2	86.8	88.5	8.2				
SPP	Arkansas; Louisiana; Kansas; Oklahoma; and portions of Mississippi, Missouri, New Mexico, and Texas	67.6	52.1	49.1	37.7	79.4				
WSCC(US)	Arizona; California; Colorado; Idaho; Nevada; Oregon; Utah; Washington; and portions of Montana, Nebraska, New Mexico, South Dakato, and Wyoming	200.2	142.4	132.0	141.3	41.7				
Contiguous										
U.S. Total		889.6	712.5	658.6	563.3	57.9				
	Sales for Resale by Investor-Owned Utilities									
ECAR	Same as Above	152.8	114.6	132.0	117.6	30.0				
ERCOT		10.8	8.8	8.0	9.7	11.5				
MAAC		70.5	41.8	45.9	19.1	269.0				
MAIN		51.2	46.1	26.5	29.2	75.0				
MAPP		24.6	21.7	18.6	18.0	36.5				
NPCC		106.0	102.4	95.5	70.5	50.2				
SERC		95.8	86.5	89.3	93.5	2.5				
SPP WSCC		58.2 87.4	50.0 57.9	45.3 53.3	35.5 51.0	63.7 71.3				
Contiguous U.S. Total		657.2	529.7	514.4	444.2	48.0				

Notes: •The States of Alaska and Hawaii are not included. •NERC is the North American Electric Reliability Council. The Alaska System Coordinating Council is not included. •Totals may not equal sum of components because of independent rounding.

Changing Electric Power Industry

The electric power industry is undergoing fundamental changes reflected by its evolving structure. For many years, the industry was dominated by locally franchised, vertically integrated utilities, regulated by State regulatory agencies. This picture has changed and the pace of restructuring of the electric power industry in the United States has increased, with elec-

tricity generation markets being opened first to competition. The initial start that moved the industry toward competition stemmed from the unanticipated operational impacts of the Public Utility Regulatory Policies Act of 1978 (PURPA), which encouraged the supply of wholesale power to electric utilities from nontraditional sources (i.e., renewable energy sources). The FERC released two regulatory actions (Orders 888 and 889)³ that will alter wholesale trading practices and transmission access.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

³ Federal Energy Regulatory Commission, Promoting Wholesale Competition Through Open Access Nondiscriminatory Transmission Services by Public Utilities, Order No. 888 and 889 issued in April 1996.

Trading Highlights

A large amount of the electricity generated in the United States is traded under wholesale purchases and sales for resale contracts. The vast majority of wholesale transactions for investor-owned, Federal, and cooperative utilities involve utilities within the same NERC regional boundaries (See Table 5). Much of the historical differences between intra- and interregional wholesale power transactions result from the independent development of multiple transmission links among clusters of neighboring utilities. The criteria that justified this construction could be described as being based upon the line use for reliability support, then, capacity transactions, and later split-the-savings energy transactions. Today, competitive market transactions are having the largest impact on interregional trade. There was a 216 percent increase in interregional trade by investor-owned utilities and a 51 percent increase by cooperatives since 1990. The impact of competition has also been felt in the firm and nonfirm categories of electricity transactions. The shift is evident in the percent change from 1990 to 1996. Nonfirm purchases and sale for resale increased by 126 and 79 percent, respectively, while firm purchases rose by 14 percent and sales for resale by 20 percent (Table 6).

In 1996, there was an increase of 23 percent in purchased power and exchanges received over the prior year. This trend held for sales for resale and exchanges delivered (26 percent). This percent increase from the year earlier was the largest single year increase and represents a significant increase in wholesale trade transactions when compared to all the prior year changes. The NERC regions of ERCOT,

MAAC, NPCC, and WSCC all showed major increases. None of the contiguous NERC regions showed any declines (Table 4). Much of this change can be attributed to a shift in the electric utility industry's practices. Competition in the wholesale transaction markets had started to replace split-the-savings trading and exchange trades are disappearing.

Electricity purchases by investor-owned utilities have increased by 58 percent between 1990 and 1996. This change is illustrated in a regional comparison of purchases and sales for resale by investor-owned electric utilities (Table ES1) for 1990, 1992, 1994, and 1996. Transactions by investor-owned electric utilities represent over 51 percent of the transactions in the bulk power market (Table 2). Purchases from all sources by major investor-owned utilities totaled 369.9 billion kilowatthours of firm power for \$18.6 billion and 496.6 billion kilowatthours of nonfirm energy for \$13.6 billion in 1996 (Table 8). When miscellaneous transactions are included, these investor-owned utilities paid a total of \$33.0 billion dollars for the purchase of 889.6 billion kilowatthours.

Investor-owned utilities exchanged approximately 69 billion kilowatthours of electricity with other utilities for both receipts and deliveries (Table 10). The most exchange activity occurred in ERCOT and WSCC, with 34 and 23 billion kilowatthours each in receipts and deliveries, respectively. Trade in the two regions accounted for 82 percent of exchanges with other utilities.

Table ES2. Electricity Data, by Source

Form	Data Utilized
Form EIA-412, "Annual Report of Public Electric Utilities "	Detailed transactions for sales for resale and purchases.
Form EIA-861, "Annual Electric Utility Report "	Aggregated transactions for sales for resale, purchases, exchanges, and wheeling.
Form FE-781R, "Annual Report of International Electrical Export/Import	
Data "	Detailed transactions for exports from and imports to the United States
FERC Form 1, "Annual Report of Major Public Utilities, Licensees and	
Others "	Detailed transactions for sales for resale, purchases, exchanges, and wheeling
FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and	C
Licensees "	Detailed transactions for sales for resale, purchases, exchanges, and wheeling.
RUS Form 7, "Financial and Statistical Reports ReportsElectric	
Distribution Borrowers "	Detailed transactions for purchases.
RUS Form 12a through 12i, "Electric Power Supply Borrowers," and REA Form 12c through 12g, "Electric Distribution Borrowers with Generating	
Facilities "	Detailed transactions for purchases.

Federal utilites purchased 11.2 billion kilowatthours for \$208.5 million dollars (Table 25), but sold 196.3 billion kilowatthours for \$5.4 billion dollars. Cooper-

atives purchased 332.5 billion kilowatthours for \$13.1 billion dollars (Table 14). The exchanges reported with noninvestor-owned utilities in 1996 (Table 11), were mostly by Federal utilities, accounting for about

half of the exchanges. The next largest sector was the cooperative grouping.

Sources of Information

The publication *Electric Trade in the United States* 1996 draws information from multiple sources of data collected by different Federal agencies. The list of sources is identified in Table ES2. To assist the reader, information on compilation of the data, limitations of coverage, and quality have been provided at the end of Chapter 1 and in the Technical Notes, Glossary of Terms, and other Appendices at the end of the publication.

1. Introduction

Background

Wholesale trade in electricity plays an important role for the U.S. electric utility industry. Wholesale, or bulk power, transactions allow electric utilities to reduce power costs, increase power supply options, and improve reliability. In 1996, the wholesale trade market totaled 2.3 trillion kilowatthours, over 73 percent of total sales to ultimate consumers.

This publication, *Electric Trade in the United States* 1996 (ELECTRA), is the sixth in a series of reports on wholesale power transactions prepared by the Office of Coal, Nuclear, Electric and Alternate Fuels, Energy Information Administration (EIA). The electric trade data are published biennially. The first report presented 1986 data, and this report provides information on the electric power industry during 1996.

The electric trade data collected and presented in this report furnish important information on the wholesale structure found within the U.S. electric power industry. The patterns of interutility trade in the report support analyses of wholesale power transactions and provide input for a broader understanding of bulk power market issues that define the emerging national electric energy policies. The report includes information on the quantity of power purchased, sold, exchanged, and wheeled; the geographical locations of transactions and ownership classes involved; and the revenues and costs.

The Electric Power Industry Structure

The utilities covered in this publication include all U.S. electric utilities in the 50 States and the District of Columbia. Electric utilities fall into four basic ownership classifications: investor-owned (privately owned), publicly owned, cooperative, and power marketers. Publicly owned utilities may be Federally owned, State-owned, or municipally owned. In 1996, there were 3,195 electric utilities in the United States. Of these, 2,020 were publicly owned (including 10

Federal utilities), 932 were rural electric cooperatives, and 243 were investor-owned utilities (Table 1). Some of these electric utilities have service territories extending beyond a single county or parish. Others just serve a municipality or part of a county. Most counties in the United States have more than a single utility and some parts of the country have multiple electric utilities operating in a county. Many of the Nation's electric utilities are exclusively distribution utilities, that is, they purchase wholesale power from other utilities and distribute, on their own distribution lines, the electricity to ultimate consumers. For example, fewer than 1,0004 of the 3,195 utilities in the United States are engaged in power generation. In order to move electricity from utilities with generating capability to the distribution utilities, an extensive system of high voltage transmission lines is operated by the Nation's largest utilities. This transmission network permits the electric trade between utilities, because without it electricity could not be moved from power plants to the thousands of distribution systems and millions of consumers of electric power.

Investor-Owned Utilities

There are several basic organizational forms among investor-owned companies. The most prevalent is the single corporation. Another common form is the holding company in which a parent company is established to own one or more operating utility companies which are integrated with one another. The Public Utility Holding Company Act of 1935 requires that the utilities owned by a holding company operate as a single integrated utility system.

Most of the investor-owned utilities sell power at retail rates to several different classes of customers and at wholesale rates to investor-owned, Federal, State, and local government utilities, public utility districts, and rural electric cooperatives. A wholesale customer can be a distribution utility with little or no generating capacity of its own or another integrated utility that purchases power to supplement its own generation or for economic reasons.

⁴ Energy Information Administration Form EIA-860, "Annual Electric Generator Report."

Publicly Owned Utilities

Publicly owned electric utilities represent 62 percent of the total number of U.S. electric utilities but accounted for only 15 percent of sales to ultimate consumers in 1996. Publicly owned utilities include Federal utilities, State and other government owned utilities (irrigation districts, public power districts, and State authorities and other organizations), and municipal utilities.

Federal power plants generate more than 9 percent of the total electricity in the United States that is sold to the power grids. Federal generated energy comes primarily from hydroelectric facilities operated by the U. S. Army Corps of Engineers and the Bureau of Reclamation of the U.S. Department of Interior. Electricity is also generated by the Bureau of Indian Affairs and the International Boundary and Water Commission. Energy generated by these producers is marketed (along with any of their own generation) by the five Federal power marketing administrations: Bonneville (in the northwestern United States), Southeastern, Southwestern, Western Area, and Alaska (sold in 1998). The power marketing administrations are part of the U.S. Department of Energy and operate in all States except those in the Northeast, upper Midwest, and Hawaii. The Tennessee Valley Authority generates electricity from coal and nuclear power as well as hydropower. It is the largest Federal power producer and markets electricity in both the wholesale and retail markets. In addition, the U.S. Department of Defense sells a small quantity of power, generated by Federal nonutilities, to the power grid.

Approximately 15 percent of the electricity generated by Federal utilities is sold to retail customers which are usually large industrial customers or Federal installations. Most of the remaining energy is sold to publicly owned utilities and rural cooperatives for resale. These wholesale customers have a legal preference right to Federal electricity. Only the surplus remaining after meeting the energy requirements of preference customers is sold to the investor-owned utilities.

Municipal utilities account for 57 percent of the number of electric utilities in the United States, but produce less than 5 percent of total net generation provided by electric utilities. Municipal utilities tend to be concentrated in cities where the loads are small. They exist in every State except Hawaii, but are concentrated, predominately in the Midwest and Southeast. In general, municipal utilities tend to have lower costs than investor-owned utilities because they generally have access to bonds supported by tax based funds and do not pay certain taxes or dividends. They also have high-density service areas.

The other publicly owned utilities include State authorities, public power districts, irrigation districts, and other State organizations. State authorities are

utilities that function in a manner similar to Federal utilities. They generate or purchase electricity from other utilities and market large quantities wholesale to groups of utilities within their States at lower prices than the individual utilities would otherwise pay. The public power districts tend to be concentrated in Nebraska, Washington, Oregon, Arizona, and California. Appendix Tables B2 through B4 contain listings of the public power municipals, State authorities, and Federal utilities used in this publication.

Rural Electric Cooperatives

Most rural electric cooperative utilities are formed and owned by groups of residents in rural areas to supply power to those areas. Some cooperatives may be owned by a number of other cooperatives. (There are really three types of cooperatives: (1) distribution only; (2) distribution with power supply; and (3) generation and transmission.) Cooperatives currently operate in 46 States, and represent 29 percent of the total utilities in the country. Most distribution cooperatives resemble municipal utilities in that they often do not generate electricity, but purchase it from other utilities. The other type (generating and transmission cooperatives) are usually referred to as power supply cooperatives. These cooperatives are usually owned by the distribution cooperatives to whom they supply wholesale power. Distribution cooperatives resemble Federal utilities by supplying electricity to other utility customers from their generating capability. Cooperatives accounted for more than 8 percent of sales to ultimate consumers and almost 6 percent of net generation produced by electric utilities in 1996.

Power Marketers

Actions initiated by the Federal Energy Regulatory Commission (FERC) has changed the composition and nomenclature of the electric utility industry. FERC has modified its regulatory requirements to permit business entities to file for rate tariffs in order to buy and sell electricity at wholesale among all electric utilities.5 These new entities are called power marketers --members do not have to own or operate generation, transmission, or distribution facilities, but are considered electric utilities by the FERC. Table 1 shows a count of 65 active power marketers in 1996. These power marketers purchased over 216 billion kilowatthours and sold more than 214 billion kilowatthours (Table 2). Thus, the now active entry of marketers combined with new power generator not only constitutes a strong change to the electric utility industry, but also propels the industry on its path to market competition.

⁵ On May 19, 1986, the FERC approved the rate tariff for Citizens Energy Corp. (EL86-2-000), which became the first marketer. Only 3 more authorizations were granted before 1990.

The Edison Electric Institute (EEI) noted in its' publication, Power Marketers Yearbook 1996, that "power marketer is a regulatory classification encompassing a wide variety of businesses" and provided " a breakout of marketers based on their business activities, or those of their corporate affiliates.6 " (The classifications are identified in the footnote.) The structure proposed by EEI represents one approach to describing these new participants and the diversity of trading activities in the new competitive markets. Yet, even this structural classification does not describe the magnitude of physical and financial transactions which may or may not link actual physical transactions with risk management protection options or are just strict financial resales done to maintain a daily ba lanced trade position. Some or all of these classifications may become accepted as standard nomenclature to describe these new participants in the electric power industry. However, the classifications do help by putting into perspective what may be the primary emphasis in the types of trades made by these power marketers.

The count of power marketers shown in Table 1 differs from the list of power marketers granted approved tariffs by the Federal Energy Regulatory Commission. Table 1 shows the count of power marketers that did enter into and make trade transactions while Appendix Table B7 lists, by company, the reported aggregated totals. Within these transactions totals reported in Table 2, there is present, for power marketers, a disconnect from the data reported by the investor-owned, public, and cooperative utilities reported in the detailed tables of this publication. The detailed reporting of counter party transactions among power marketers is not collected since these companies are not obligated to report on the principal forms (Table ES2) used to produce this publication. Table 2 does identify the aggregate total of all power marketer transactions, but the estimates cover both physical and financial (commercial paper sales and resale of a product, but without taking physical possession of the product) trades.

On the whole, power marketers do not generate or actually use electricity. They purchase it and move the

ownership along to another power marketer via a resale (financial) or sell it to a party which will take physical possession for the eventual consumption of that energy. The total megawatthours of booked financial transactions (included in this is the buying and selling of electric future options) are high when compared to the original physical purchase of the generated electricity. Investor-owned utilities' purchase power and sales for resale transactions with power marketers are over one-fourth what Table 2 shows for the combined physical and financial trades made by power marketers. Yet, this number should not be considered as final, since many utilities are active traders and are using more and more risk management tools in association with their trades. EEI has estimated that of the power marketers transactions, they purchased and resold among themselves 47 and 49 percent of the reported transactions, respectively, while investorowned utilities were involved in 31 percent of the purchases and 30 percent of sales for this same total set of transactions.7

Changing Electric Power Industry

The electric power industry is undergoing fundamental changes reflected by its evolving structure. For many years, the industry was dominated by locally franchised, vertically integrated utilities, regulated by State regulatory agencies. This picture has changed and the pace of restructuring of the electric power industry in the United States has increased, with electricity generation markets being opened first to competition. The initial start that moved the industry toward competition stemmed from the unanticipated operational impacts of the Public Utility Regulatory Policies Act of 1978 (PURPA), which encouraged the supply of wholesale power to electric utilities from nontraditional sources (i.e., renewable sources).8

⁶ Electric Utility Affiliates-- any company in which an electric utility (including investor-owned utilities, foreign utilities, public power and cooperatives) has a 10-percent voting interest, or has been found to be affiliated by the FERC. Energy Consultants-- companies providing energy management, regulatory, and/or engineering services to wholesale and end-use customers or utilities. Entrepreneurs--start-up companies not otherwise engaged in energy-related businesses. Financial Intermediaries-- companies (often affiliated with large financial institutions) primarily engaged in commodity trading and risk management activities. Fuel Suppliers-- companies engaged in the production, transportation, marketing, and/or retail sales of various fuels (natural gas, oil, coal, etc.)-- predominantly natural gas marketers. Industrials-large industrial customers engaged in the sale of excess cogeneration capacity or in procuring energy for own needs. Nonutility Generators-companies engaged in the development and operation of generation projects not in a utility's rate base (cogenerators, small power producers, exempt wholesale generators etc.) Telecom Companies-- telecommunication companies not otherwise engaged in energy-related business. Edison Electric Institute, Power Marketers Yearbook 1996, Washington, DC, 1997), pg., 19.

⁷ Edison Electric Institute, *Power Marketers Yearbook 1996*, (Washington, DC, 1997), pg., 16.

⁸ PURPA's primary objective was to encourage improvements in energy efficiency through the expanded use of cogeneration and by creating a market for electricity produced from unconventional sources like renewables and waste fuels. While preserving the industry's vertically integrated structure, PURPA aimed at a modest modification by adding the obligation to look to nontraditional supplies in conjunction with utilities' existing and proposed generating capabilities. No changes, therefore, were postulated to the cost-based pricing of electricity regulation. Yet, by encouraging nonutility power generation and by making such output easily marketable on a wholesale basis, PURPA's provisions introduced several, far-reaching operational and regulatory changes in the electric utility industry. In the evolving wholesale market for electric power, PURPA's most notable contribution was to introduce competition while taking future supply options into account. For a further discussion on this subject, see Energy Information Administration The Changing Structure of the Electric Power Industry: An Update, DOE/EIA-0562(96)(Washington DC, December 1996).

Nonutility Generation in Electric Trade

While the inroads made by nonutility power generators into the generation monopoly were a positive force, the impact on utilities and prices came from increasing the generating capability in the United States from these sources. The electricity-related provisions of the Energy Policy Act of 1992 (EPACT) then became the catalyst for accelerating the pace of competition in electricity trade at the wholesale level.

More specifically, the EPACT provisions amended the Public Utility Holding Company Act of 1935, the Federal Power Act of 1935, and the PURPA provisions in the areas that govern, among other things, the future of nonutility power generation and the associated wholesale power transactions. Of the several EPACT provisions that affect electric utilities, the two designed to further industry competition are: (1) creating a new class of exempt wholesale generators (EWGs) and (2) expanding the authority of the FERC to order open transmission access under Section 211 of the Federal Power Act. The responsibility to determine the EWG status and to ensure the availability of transmission facilities in a nondiscriminatory manner was entrusted to the FERC.

Based on the above legislative mandate and regulatory rulemaking procedures, the FERC has pushed to introduce wholesale competition in electricity. It's two landmark rulings, Order No. 888 and Order No. 889,9 issued in April 1996, require all public utilities that own, control, or operate transmission facilities to file nondiscriminatory open-access tariffs that would be applied to all parties contracting for transmission service (Appendix A). Since these Orders were issued, activity to open electricity markets to competition has increased significantly at the State and Federal levels.

The growing role of nonutility generators (NUG) in electricity supply reflects the acceptance of alternative power supplies in the wholesale electric power market. The near monopoly of electric generation by regulated electric utilities has ended, as many new participants generate electricity and sell power to electric utilities, thus changing long-established institutional relationships.

Differences remain between traditional electric utilities and nonutility power generators for many reasons, including the passage of new legislation and the application of regulations designed specifically for nonutility generators. For example, a traditional definition of a utility might simply include any business entity whose principal business is generating and selling electricity. This definition would exclude industrial generators and cogenerators, the principal nonutility generators organizations producing power but which are primarily engaged in business activities other than power sales.

A more common definition of an electric utility includes three elements: a franchised service territory; the obligation to serve all customers within this exclusive area; and the regulations that constitute this compact. This definition, however, ignores utilities without retail customers such as generation and transmission companies. All generators of electricity without a service area and with a contractual obligation to serve would be considered nonutilities under this definition. Even with this definition, there are various classes of nonutility generators, some of which reflect regulatory distinctions and others, which have evolved over time and may be less precise and overlapping: independent power producers (IPP), nonutility generators (NUG),10 small power producers (SPP), qualifying facilities (QF), and industrial power producers. Despite the variety of definitions, nonutility power producers are generally considered to be the nontraditional producers of electric energy (i.e., producers that are neither traditional Federal, State, investor-owned, cooperative, nor municipal utilities).

The Federal Government and other users of electric generation data are interested in this nontraditional generation group because, as nonutility power producers increase their level of production of electric energy, the group becomes a more important segment of the U. S. electric power industry. Nonutility power producers sold over 230 billion kilowatthours in 1996 (Table 2). As one of the fastest growing segments of the electric power industry, nonutility power producers may be responsible for a significant portion of new power plant construction. This group is, therefore, of great interest to analysts of the electric power industry. Analysis of the electric utility industry is complicated by the changing structure of the industry--which now includes a significant number and wide range of nonutility participants--and by the changing mix of transactions that characterize electric trade.

Transmission Services and Energy Broker/Marketers

The Energy Policy Act of 1992 (EPACT) amended the Federal Power Act (FPA) to allow any electric utility to apply to the FERC for an order requiring another utility to provide transmission services (wheeling). Prior to EPACT, FERC could not mandate an electric utility to provide wheeling services for wholesale electric trade. This change in the law will permit operators of electric generating equipment to sell wholesale power (sales for resale) to noncontiguous

⁹ Final Order No. 888 is described in Docket Nos. RM95-8-000 and RM94-7001, Promoting Wholesale Competition through Open Access Non-discriminatory Transmission Services by Public Utilities; Recover of Stranded Costs by Public Utilities and Transmitting Utilities. Order No. 889 is found under Docket No. RM95-9-000, Open Access Same-Time Information System and Standards of Conduct.

¹⁰ No specific legislative or regulatory definition exists for the term "nonutility." Therefore, it cannot be assumed that if an entity does not qualify as a utility that it is then a nonutility.

Table 1. Number of Electric Utilities by Class of Ownership Within NERC Region, 1996

NERC Region	Power Marketers	Investor- Owned	Federal ¹	State and Other Government	Municipals	Cooperatives	U.S. Total
Number of Utilities							
ASCC	0	23	1	7	30	21	82
ECAR	3	43	0	4	222	109	381
ERCOT	15	6	0	3	63	60	147
MAAC	6	18	0	0	50	19	93
MAIN	4	18	1	0	148	46	217
MAPP	4	14	0	37	452	182	689
NPCC	12	55	0	3	123	10	203
SERC	8	19	2	4	316	189	538
SPP	2	17	1	8	289	157	474
WSCC	11	27	5	79	172	139	433
Hawaii	0	3	0	0	0	0	3
U.S. Total	65	243	10	145	1,865	932	3,260
Percent							
ASCC	0	9	10	5	2	2	3
ECAR	5	18	0	3	12	12	12
ERCOT	23	2	0	2	3	6	5
MAAC	9	7	0	0	3	2	3
MAIN	6	7	10	0	8	5	7
MAPP	6	6	0	26	24	20	21
NPCC	18	23	0	2	7	1	6
SERC	12	8	20	3	17	20	17
SPP	3	7	10	6	15	17	15
WSCC	17	11	50	54	9	15	13
Hawaii	0	1	0	0	0	0	*

¹ The Federal Government both produces electricity and sells it at wholesale. Federal producers include the U.S. Army Corps of Engineers, Bureau of Indian Affairs, Bureau of Reclamation, and the International Boundary and Water Commission. The power marketing administrations of the U.S. Department of Energy are also federally owned utilities; they include the Alaska, Bonneville, Southeastern, Southwestern, and Western Area Power Administrations. The Tennessee Valley Authority both generates and markets electricity.

utilities. The amendment to the FPA will also affect electricity marketers, a relatively new group under FERC's jurisdiction. Marketers are business entities engaged in buying and selling electricity, but with no generating or transmission facilities. Marketers take ownership of the electricity and are involved in inter-

state trade. A number of energy marketers that may be involved in interstate electricity trade have filed with FERC and have had their rates authorized. When ownership of the electricity is not taken, then those transactions are not regulated by FERC (the parties handling the transactions are called brokers).

^{*} The value of the number is less than 0.5 percent.

Notes: •NERC is the North American Electric Reliability Council. See glossary for a list of regions. •Power Marketers are classified as electric utilities. The authorization to participate in wholesale trade is given by the FERC. •Percentages may not total 100 because of independent rounding. Source: Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

Figure 1. North American Electric Reliability Council Region Map for the United States

The Interconnected Networks

The U.S. bulk power system has evolved into three major networks (power grids), which also include smaller groupings or power pools. The major networks consist of extra-high voltage connections between individual utilities designed to permit the transfer of electrical energy from one part of the network to another. These transfers are restricted, on occasion, because of a lack of contractual arrangements or because of inadequate transmission capability (See Appendix C).

The three networks are (1) the Eastern Interconnected System, consisting of the eastern two-thirds of the United States; (2) the Western Interconnected System consisting primarily of the Southwest and areas west of the Rocky Mountains; and (3) the Texas Interconnected System. The latter is not interconnected with the other two networks (except by certain direct current lines). The two other networks have limited interconnections to each other. Both the Western and Texas Interconnect are linked with different parts of Mexico. The Eastern and Western Interconnects are completely integrated with most of Canada or have links to the Quebec Province power grid. Virtually all U.S. utilities are interconnected with at least one other utility by these three major grids. The exceptions are in Alaska and Hawaii. The interconnected utilities within each power grid coordinate operations and planning, and buy and sell power among themselves for the benefit of the customers.

Overall reliability planning and coordination of the interconnected power systems are the responsibility of the North American Electric Reliability Council (NERC). The NERC was voluntarily formed in 1968 by the electric utility industry as a result of the 1965 power failure in the Northeast. The regional councils cover the 48 contiguous States, part of Alaska,11 and portions of Canada and Mexico (Figure 1) and are responsible for the overall coordination of bulk power policies that affect the reliability and adequacy of service in their areas. These councils also regularly exchange operating and planning information among their member utilities. The boundaries of the NERC regions follow the service areas of the electric utilities in the region. The service area of many electric utilities do not follow State boundaries. Hence, electric trade data are not available by State, but are presented by NERC regions, except for Hawaii

Wholesale Trade Transactions

Wholesale electricity trade has become a major contributor to systems operations in the U.S. electric utility industry. In this publication, wholesale, or bulk power, transactions are categorized and defined in accordance with FERC reporting requirements. Wholesale power transactions include purchases, sales for resale, exchanges, and wheeling (i.e., transmission services). Purchase transactions involve buying power from electric utilities and nonutility producers of electricity. Sales for resale transactions refer to power sold by one electric utility to one or more utilities for distribution to ultimate consumers. Exchanges involve trading electric energy when supply and demand conditions are mutually advantageous and reversible for the participating parties. Exchanges are often based on time-dependent excess capacity or diversity in load requirements. With exchange transactions, monetary repayment or replacement of energy may extend over several years.

¹¹ The Alaska System Coordinating Council (ASCC) is an affiliate member of NERC.

Table 2. Energy Account Balance by Class of Ownership, 1996

(Million Kilowatthours)

Item	Power Marketers	Investor- Owned	Federal ¹	State and Other Government	Municipals	Cooperatives	U.S. Total
Source of Energy							
Net Generation	44	2,272,095	309,182	196,028	145,904	176,735	3,099,989
Purchases from Utilities Purchases from	216,405	667,356	12,539	86,469	298,684	400,126	1,681,579
Nonutilities	1,382	224,571	2,143	486	1,344	474	230,400
Net Exchange ²	-20	-360	-15,505	2,497	1,328	363	-11,697
Received	1,912	70,440	34,432	10,531	13,093	26,235	156,642
Delivered	1,932	70,800	49,936	8,034	11,765	25,872	168,339
Net Wheeling ³	0	4,930	1,913	150	101	230	7,324
Received	0	305,254	69,050	9,666	25,103	8,712	417,784
Delivered	0	300,324	67,137	9,516	25,002	8,482	410,460
Disposition of Energy							
Sales to Ultimate							
Consumers	3,418	2,342,808	45,626	102,197	348,730	258,448	3,101,227
Requirements and							
Nonrequirements							
Sales for Resale	214,130	644,246	249,259	168,114	76,322	293,239	1,645,309
Energy Furnished							
Without Charge	0	3,152	230	1,234	1,417	173	6,205
Energy Used by Utility	0	5,301	1,369	5,454	1,282	480	13,886
Energy Losses ⁴	187	171,855	13,711	8,501	19,069	25,559	238,882

¹ Federal authorities use different accounting methods for reporting energy received from Federal generating assets; the energy may be reported as generation or purchases.

Notes: •Annual net generation data shown here should be used only in comparison with other Form EIA-861 data. Total annual net generation data are published by the Energy Information Administration from its Form EIA-759, ''Monthly Power Plant Report.'' •Source and disposition are the aggregation of data reported for each utility; these data are not additive due to double counting. Purchases from utilities, net exchange and net wheeling (except for imports) are included in net generation. Sales for resale are included in sales to ultimate consumers. •Imports and exports are included in purchases, sales for resale, net exchanges, and/or wheeling. •Due to the complexity of electric power transactions that involve specifics of contracts, simultaneous energy transactions, the unintended receipt and delivery of energy (inadvertent flow) and losses, uniformity in reporting the classification and quantity of each transaction among utilities may not exist. •Power Marketers are classified as electric utilities. The authorization to participate in wholesale trade is given by the FERC. •Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

Most bulk power transfers involve neighboring utilities whose systems are directly interconnected. At other times, however, bulk power transfers involve a third utility situated between two unconnected utilities that want to enter into a bulk power transaction. In that transaction, the third (intervening) utility allows its transmission lines to be used for bulk power transfers between the two other utilities. This intervening utility is providing a form of transmission service known as wheeling. Wheeling is generally defined as the movement of electricity from one system to another over the transmission facilities of an intervening system. (Technically, there is two-party wheeling: (1) seller and wheeler and (2) purchaser.) Wheeling is conducted under terms and conditions that ensure safety and reliability and that prevent the wheeling utility from being unfairly burdened with added costs.

Table 3 provides an overview of wholesale and retail transactions in the electric utility system by NERC region. The table includes data on net generation, purchases, energy losses, sales to ultimate consumers, and electric trade transactions. Electricity is purchased by all classes of electric utilities. Purchases from nonutilities accounted for over 7 percent of sales

to consumers in 1996. These purchases are made generally by utilities in whose service territories the non-utilities are located. Losses represent energy lost in transmission, distribution, and power unaccounted for, which amounted to nearly 8 percent of sales to consumers in 1996. Electricity inflows--purchases, exchanges-in, and wheeling-in--represent 73 percent of sales to consumers. Table 4 presents a historical view of electric trade flows (including net generation) and how components of electric trade changed for years 1988 through 1996.

Chapters 1 through 4 of this publication focus on purchases, sales for resale, exchanges, and wheeling of electricity (columns 4 and 5 of Table 3). Data for energy flows represent the summations of flows of energy between utilities in accordance with the provisions of their service agreements. These flows represent accounting transactions rather than metered flows. Detailed coverage of wholesale trade activities by NERC region for each class of ownership is presented in Chapters 2 through 4. The electricity transactions reported in the remaining chapters do not include transmission and distribution losses.

Reported as power exchange in account 555, "Purchased Power Transactions," of the FERC Uniform System of Accounts.

³ Reported as transmission services in account 456, "Transmission For Others," and in account 565, "Transmission By Others," of the FERC Uniform System of Accounts.

⁴ These values are not measured; however, they represent losses and unaccounted for energy. These values are calculated in order that source and disposition of energy are equivalent.

Categories of Wholesale Trade Transactions

There are two main types of bulk power transactions: coordination transactions and requirement transactions. Coordination transactions are interruptible and generally represent short term sales as contrasted to requirement transactions which usually are established for longer periods of time. Requirement transactions cover power supply contracts in which firm

service equates to the energy needs required by a designated customer base plus coverage of associated electrical losses and the electrical energy is supplied by other utilities. The duration of the sale and the type of capacity sold are key factors in determining the type and value of the transaction. The length of the sale can be 1 hour, several months, a year, or longer. Another type of transaction is an exchange in which the energy usually is returned in kind at a date agreed upon by both utilities.

Table 3. Components of Source and Disposition of Electricity by NERC Region, 1996

NERC Region	Net Generation	Energy Furnished and Used by Utility	Nonutility Purchases	Purchases, Exchange In, Wheeling In ¹	Sales for Resale, Exchange Out, Wheeling Out ²	Total Region Energy Loss	Sales to Ultimate Consumer
Energy (million kWh)							
ASCC	5,178	36	5	4,252	4,257	364	4,779
ECAR	. 528,214	1,258	15,861	267,574	292,869	33,689	483,750
ERCOT	. 218,497	315	25,220	221,729	212,683	16,227	236,131
MAAC		3,604	23,892	137,554	113,460	16,078	229,013
MAIN	. 231,315	786	517	78,449	72,968	16,424	220,042
MAPP		653	736	127,606	108,282	14,194	137,767
NPCC		794	56,207	269,310	249,748	18,656	241,366
SERC	. 740,784	2,472	31,276	436,039	442,377	48,083	715,118
SPP		1,100	6,090	198,805	181,240	21,551	277,115
WSCC	574,878	9,053	67,028	514,684	546,219	53,067	547,156
Hawaii	. 5,994	20	3,568	4	7	549	8,991
U.S. Total	3,099,989	20,092	230,400	2,256,006	2,224,109	238,882	3,101,227
Percent							
ASCC	. *	*	*	*	*	*	*
ECAR	. 17	6	7	12	13	14	16
ERCOT	. 7	2	11	10	10	7	8
MAAC	. 6	18	10	6	5	7	7
MAIN	. 7	4	*	3	3	7	7
MAPP	. 4	3	*	6	5	6	4
NPCC	. 6	4	24	12	11	8	8
SERC	. 24	12	14	19	20	20	23
SPP	. 9	5	3	9	8	9	9
WSCC	. 19	45	29	23	25	22	18
Hawaii	*	*	2	*	*	*	*

¹ Includes all trade into and within the region and purchases, exchange in, and wheeling in for all utilities operating within the region.

Source: Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

Firm sales usually involve the sale of capacity, meaning that either the associated energy will be taken by the purchaser or the purchaser will pay for the capacity during those periods when the energy is not taken. This payment is called a demand charge. The delivery is scheduled as part of the normal operating conditions of the affected electric systems. Firm capacity may be made available from the selling utility's entire pool of generating facilities or from a specific generating unit. The capacity offered in these transactions is usually for a specified period of time and negotiated in advance of the trade. The associated energy purchased through a capacity sale usually has a separate cost from the demand charge.

One of the most common types of firm power transactions involves the transfer of full or partial requirements power. Requirement contracts involve electric utilities that have either insufficient or no generating

capability to satisfy their customer load. These utilities negotiate long-term, firm power contracts in which the terms and conditions obligate the selling electric utility to provide the buying electric utility a level of service equivalent to the seller's requirement to support its retail customers. An electric utility purchasing requirement power may have contracts with more than one electric utility in order to cover their customer base.

Nonfirm sales, sometimes called energy, economy, or interruptible sales, rarely have a demand or capacity charge included in the price of the transaction. These transactions are typically for short periods and subject to curtailment or cessation of delivery by the supplier in accordance with prior agreements or under specified conditions. Electric utilities engage in these transactions in order to gain operational savings, such as avoiding the use of more expensive fuels and

² Includes all trade out of and within the region and sales for resale, exchange out, and wheeling out for all utilities operating within the region.

^{*} The value of the number is less than 0.5 percent.

Notes: •Annual net generation data shown here should be used only in comparison with other Form EIA-861 data. Total annual net generation data are published by the Energy Information Administration from its Form EIA-759, ''Monthly Power Plant Report.'' •NERC is the North American Electric Reliability Council. See glossary for a list of regions. •Table includes data from Power Marketers. •Totals may not equal sum of components because of independent rounding. Percentages may not total 100 because of independent rounding.

selling electricity generated by the spillage of excess reservoir water through a water-driven turbine-generator.

In addition to domestic wholesale transactions, U.S. utilities have engaged in international trade agreements with utilities from Canada and Mexico that cover a number of transaction options. These options include purchasing nonfirm energy from relatively inexpensive renewable resources, such as hydroelectric facilities in Canada and geothermal facilities in Mexico; acquiring additional generating capability to support the requirements for supply at U.S. electric utilities; the holding of reservoir water to be turned into electricity; and sharing the benefits of coordinated planning between the systems. Total imports from Canada and Mexico equaled 1.5 percent of total sales to ultimate consumers in the United States (Table 3 and 18). Exports represented 0.3 percent of utility net generation in the United States.

Regional Receipts and Deliveries of Wholesale Power

A large amount of the electricity generated in the United States is traded under wholesale purchases and sales for resale contracts. The vast majority of wholesale transactions for investor-owned, Federal, and cooperative utilities involve utilities within the same NERC regional boundaries. Many of the differences between intra- and interregional wholesale power transactions result from the historical development of multiple transmission links among clusters of neighboring utilities. In addition, the development of shared interconnection and coordination agreements among these groups of utilities help delineate the regional operating boundaries of electric utilities.

In 1996, there was an increase of 23 percent in purchased power and exchanges received over the prior year. This trend held for sales for resale and exchanges delivered (26 percent). This percent increase from the year earlier was the largest single year increase and represents a significant increase in wholesale trade transactions when compared to all the prior year changes. The NERC regions of ERCOT, MAAC, NPCC, and WSCC all showed major increases. None of the contiguous NERC regions showed any declines (Table 4). A shift in the electric utility industry's practices happened. Competition in the wholesale transaction markets had started to replace split-the-savings trading.

Investor-owned electric utilities have led the other classes in both intra- and interregional purchases and sales for resale. Interregional sources provided nearly 15 percent of investor-owned purchases in 1996, up from 7 percent in 1994. Cooperatives made interre-

gional purchases of over 7 percent while Federal utilities purchased dropped 83 percent (Table 5).

As shown in Table 6, both firm and nonfirm sales for resale represented just over 96 percent of investorowned utilities resale transactions. Firm purchases accounted for 42 percent of the total while nonfirm were at a higher level (56 percent). (There was very little miscellaneous sales for resale and purchased power transactions.) Utilities in NPCC followed by the WSCC region purchased the most electricity in the firm category and reverse positions for the nonfirm category. Utilities in the ECAR region sold the most in both categories in 1996. The impact of competition has also been felt in the firm and nonfirm categories of electricity transactions. The shift is evident in the percent change from 1990 to 1996. Nonfirm purchases and sale for resale increased by 126 and 79 percent, respectively, while firm purchases rose by 14 percent and sales for resale by 20 percent (Table 6).

Table 7 shows wheeling trade in the U.S. by NERC Region for the years 1988 through 1996. Utilities in the WSCC region continued to do the most wheeling. The level of which is more than double the next region (NPCC) and represented close to 40 percent of all wheeling.

National and Regional Highlights

The FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others," is used to collect annual data on electricity trade by quantity, cost, and revenue from investor-owned utilities. These data were used to construct the tables in Chapters 1 and 2 and show the quantity and value of firm and nonfirm electricity trade reported.

Purchases from all sources by major investor-owned utilities totaled 369.9 billion kilowatthours of firm power for \$18.6 billion and 496.6 billion kilowatthours of nonfirm energy for \$13.6 billion in 1996 (Table 8).

Investor-owned utilities exchanged approximately 69 billion kilowatthours of electricity with other utilities for both receipts and deliveries (Table 10). The most exchange activity occurred in ERCOT and WSCC, with 34 and 23 billion kilowatthours each in receipts and deliveries, respectively. Investor-owned electric utilities in the two regions accounted for 82 percent of exchanges with other utilities.

The exchanges reported with noninvestor-owned utilities in 1996 (Table 11), were mostly by Federal utilities, accounting for nearly half of the exchanges.

Table 4. Electric Trade in the United States by NERC Region and Hawaii, 1988 Through 1996 (Million Kilowatthours)

Year	Net Generation	Percent Change from Year Earlier	Purchases & Exchanges Received ¹	Percent Change from Year Earlier	Purchases & Exch. Rec. as Percent of Net Generation 1	Sales to Ultimate Consumers	Percent Change from Year Earlier	Sales for Resale & Exchanges Delivered ²	Percent Change from Year Earlier	Sales for Resale & Exch. Del. as Percent of Sales to Ultimate Consumers ²	
					All Utilities	s in ASCC					
1996	5,178	5.1	3,437	0.0	66.4	4,779	3.2	3,437	2.3	71.9	
1995	4,925	.2	3,438	5.5	69.8	4,631	2.2	3,359	3.3	72.5	
1994 1993	4,913 4,660	5.4 -1.6	3,257 2,582	26.1 1.6	66.3 55.4	4,533 4,374	3.6	3,251 2,480	31.1 -2.4	71.7 56.7	
1992	4,735	1.8	2,543	7.6	53.7	4,338	2.0	2,542	8.8	58.6	
1991	4,654	1	2,363	.6	50.8	4,255	.0	2,336	.2		
1990 1989	4,660 4,575	1.8 2.6	2,347 2,281	2.9 4.5	50.4 49.8	4,253 4,142	2.7 2.4	2,330 2,244	3.8 3.1	54.8 54.2	
1988	4,460	1.1	2,183	4.9	48.9	4,045	2.6	2,177	3.8		
					All Utilities						
1996 1995	528,214 509,468	3.7 3.5	223,608 192,620	16.1 14.6	42.3 37.8	483,750 477,126	1.4 3.8	233,347 190,512	22.5 13.0	48.2 39.9	
1994	492,074	5	168,139	-1.2	34.2	459,747	2.8	168,558	-9.0	36.7	
1993	494,602	2.3	170,205	7.4	34.4	447,062	4.1	185,300	2.3	41.4	
1992	483,530	9	158,417	-4.2	32.8	429,591	2	181,111	-5.3	42.2	
1991 1990	488,102 485,128	.6 5	165,313 210,322	-21.4 13.8	33.9 43.3	430,314 418,732	2.8	191,274 245,897	-22.2 9.3		
1989	487,659	.1	184,902	8.1	37.9	414,977	1.7	224,880	3.3	54.2	
1988	487,040	5.1	170,991	13.4	35.1	408,171	4.7	217,724	12.4	53.3	
	All Utilities in ERCOT										
1996	218,497	3.8	226,921	83.6	103.9	236,131	6.1	192,674	99.6	81.6	
1995	210,596	3.1	123,618	5.6	58.7	222,465	1.7	96,532	8.6	43.4	
1994	204,256	3.1	117,023 117,775	6	57.3	218,781	3.1	88,896	.8		
1993 1992	198,187 190,442	4.1 8	105,972	11.1 4	59.4 55.6	212,182 203,206	4.4 5	88,169 78,876	11.8 -2.4	38.8	
1991	192,000	1.8	106,408	12.1	55.4	204,319	1.1	80,853	17.9	39.6	
1990	188,586	1.9	94,932	2.0		202,090	3.3	68,580	1.8	33.9	
1989 1988	185,011 179,442	3.1 3.3	93,087 93,782	7 4.0	50.3 52.3	195,648 192,367	1.7 4.3	67,372 67,269	.1 1.7	34.4 35.0	
					A 11 T74:1:4			·			
1006	5.004	2.5	2.572	1.4	All Utilit		2.1	7	20.0	0.1	
1996 1995	5,994 5,851	2.5 2.1	3,572 3,522	1.4 2.3	59.6 60.2	8,991 8,806	2.1 2.5	7 11	-39.0 69.9	0.1	
1994	5,728	-1.1	3,444	10.9	60.1	8,593	3.2	6	26.9	.1	
1993	5,790	-11.7	3,106	33.4	53.6	8,325	1	5	65.5	.1	
1992 1991	6,555 6,991	-6.2 -9.8	2,328 1,605	45.1 124.8	35.5 22.9	8,332 8,154	2.2 2.3	3 5	-39.2 10.4	.0 .1	
1990	7,746	.7	714	57.9	9.2	7,968	4.2	5	38.6		
1989	7,692	2.6	452	-9.1	5.9	7,649	3.2	3	-96.3	.0	
1988	7,499	5.6	497	3.3	6.6	7,411	5.4	89	6.6	1.2	
					All Utilities	in MAAC					
1996	200,713	-1.5	141,174	41.7	70.3	229,013	0.6	93,282	63.3	40.7	
1995	203,801	-1.2	99,614	19.8	48.9	227,532	1.7	57,120	17.8		
1994	206,221 205,552	.3	83,121 79,918	4.0	40.3 38.9	223,635 220,037	1.6	48,485 47,526	2.0	21.7 21.6	
1993 1992	193,330	6.3 -2.0	82,808	-3.5 5.2		210,799	4.4 9	49,637	-4.3 9.2		
1991	197,235	2.0	78,747	6.9		212,728	2.4	45,447	3.6		
1990	193,393	3	73,631	-5.5		207,770	.2	43,847	-6.6		
1989 1988	193,889 191,874	1.0 3.4	77,882 68,904	13.0 7.3	40.2 35.9	207,325 202,705	2.3 5.8	46,930 40,141	16.9 -2.4	22.6 19.8	
1006	231,315	0.8	71,270	16.6	All Utilitie	s in MAIN 220,042	0.6	65,418	18.4	29.7	
1996 1995	229,424	3.4	61,115	9	26.6	218,728	2.1	55,271	2.8		
1994	221,770	2.1	61,661	-2.0	27.8	214,304	3.5	53,774	-6.6	25.1	
1993	217,284	8.5	62,911	20.2	28.9	207,004	3.2	57,590	54.4	27.8	
1992 1991	200,288 206,906	-3.2 2.6	52,321 54,585	-4.1 -20.1	26.1 26.4	200,571 201,815	6 4.5	37,302 44,527	-16.2 -28.4	18.6 22.1	
1990	201,653	.5	68,308	9.2		193,068	2.5	62,174	4.7		

Table 4. Electric Trade in the United States by NERC Region and Hawaii, 1988 Through 1996 (Million Kilowatthours) (Continued)

Year	Net Generation	Percent Change from Year Earlier	Purchases & Exchanges Received ¹	Percent Change from Year Earlier	Purchases & Exch. Rec. as Percent of Net Generation 1	Sales to Ultimate Consumers	Percent Change from Year Earlier	Sales for Resale & Exchanges Delivered ²	Percent Change from Year Earlier	Sales for Resale & Exch. Del. as Percent of Sales to Ultimate Consumers ²
					All Utilities	in MAIN				
1989	200,660	1.0	62,575	10.1	31.2	188,425	1.6	59,407	8.1	31.5
1988	198,666	7.3	56,841	4.1	28.6	185,430	4.9	54,957	13.3	29.6
					All Utilities	in MAPP				
1996	132,689	1.6	110,598	15.9	83.3	137,767	2.4	91,825	16.0	66.6
1995	130,637	4.8	95,413	6.0	73.0	134,495	4.3	79,179	6.4	58.9
1994 1993	124,607 124,808	2 4.0	90,020 92,441	-2.6 -18.7	72.2 74.1	128,935 124,142	3.9 5.8	74,417 82,194	-9.5 -22.0	57.7 66.2
1992	120,053	-2.4	113,672	8.1	94.7	117,283	-2.7	105,352	7.4	89.8
1991	122,991	1.9	105,175	-2.1	85.5	120,522	4.0	98,084	-3.7	81.4
1990	120,750	3.7	107,416	2.3	89.0	115,912	1.9	101,829	4.6	87.8
1989	116,410	-1.5	105,038	-1.8	90.2	113,692	.5	97,303	-4.3	85.6
1988	118,238	-3.4	106,950	9.3	90.4	113,136	8.1	101,686	.6	89.9
-					All Utilities	in NPCC				
1996	185,521	1.4	261,814	24.8	141.1	241,366	1.2	186,348	39.7	77.2
1995	183,021	-3.4	209,724	5.7	114.6	238,492	1	133,367	2.7	55.9
1994	189,546	-2.9	198,467	9.2	104.7	238,679	1.1	129,903	6.9	54.4
1993	195,140	-3.9	181,770	8.9	93.1	236,012	1.1	121,556	2.9	51.5
1992	202,978	-6.9	166,884	8.2	82.2	233,395	1	118,108	-1.7	50.6
1991	218,053	-4.3	154,206	8.8	70.7	233,643	4	120,113	1.6	51.4
1990 1989	227,866 233,624	-2.5 4.3	141,784 141,102	.5 .6	62.2 60.4	234,542 233,573	.4 2.0	118,194 122,287	-3.3 4.8	50.4 52.4
1988	223,996	5.6	140,299	.9	62.6	228,883	5.5	116,647	1.3	51.0
=					All Utilities	in SERC				
1996	740,784	5.2	430,051	8.6	58.0	715,118	4.2	406,952	11.5	56.9
1995	703,899	3.8	396,027	6.3	56.3	686,458	4.6	364,803	6.2	53.1
1994	678,423	1.6	372,527	.3	54.9	656,478	2.9	343,568	-1.5	52.3
1993	667,464	4.6	371,528	5.7	55.7	638,223	4.8	348,749	5.1	54.6
1992	637,803	1.1	351,478	5	55.1	609,139	1.2	331,739	-1.5	54.5
1991	630,562	3.1	353,214	9	56.0	601,988	2.3	336,719	7	55.9
1990 1989	611,708	1 7.2	356,296 360,938	-1.3 7.4	58.3 58.9	588,223 571,560	2.9 4.8	339,058	-4.0	57.6 61.8
1988	612,643 571,541	2.1	336,170	2.3	58.8	571,569 545,250	4.3	353,363 318,412	11.0 -2.1	58.4
-	371,341	2.1	330,170	2.3	36.6	343,230	4.5	316,412	-2.1	50.4
-					All Utilities					
1996	276,205	0.6	178,913	17.2	64.8	277,115	3.8	155,370	12.8	56.1
1995	274,475	5.6	152,607	2.7	55.6	266,912	3.8	137,801	5.6	51.6
1994 1993	260,025 256,901	1.2 5.9	148,574 141,319	5.1 9.9	57.1 55.0	257,183 249,891	2.9 6.2	130,540 126,397	3.3 9.1	50.8 50.6
1992	242,514	8	128,586	.5	53.0	235,320	-1.3	115,901	1.2	49.3
1991	244,415	o 1	127,898	6.1	52.3	238,328	-1.5 .9	114,484	4.9	48.0
1990	244,762	2.4	120,583	.0	49.3	236,253	5.9	109,113	-4.9	46.2
1989	239,032	2.4	120,646	9.4	50.5	223,134	2.2	114,760	8.5	51.4
1988	233,396	.7	110,226	4.0	47.2	218,281	3.1	105,777	-1.3	48.5
-					All Utilities	in WSCC				
1996	574,878	5.3	417,263	19.2	72.6	547,156	3.7	384,989	21.0	70.4
1995	546,208	1.6	349,960	1.7	64.1	527,641	.8	318,030	5.2	60.3
1994	537,399	1.9	344,109	9	64.0	523,696	1.8	302,363	-1.2	57.7
1993	527,428	.9	347,224	-1.1	65.8	514,212	.6	306,168	1	59.5
1992	522,863	1	351,255	-2.1	67.2	511,352	1.1	306,540	-5.1	59.9
1991	523,468	-2.2	358,894	-1.7	68.6	505,936	.4	322,943	-3.9	63.8
1990	535,242	.9	364,977	13.7	68.2	503,744	3.5	336,091	10.0	66.7
1989	530,205	3.0	321,048	12.4	60.5	486,675	3.0	305,522	12.9	62.8
1988	514,622	5.8	285,590	2	55.5	472,386	5.6	270,525	.2	57.3

Table 4. Electric Trade in the United States by NERC Region and Hawaii, 1988 Through 1996

(Million Kilowatthours) (Continued)

Year	Net Generation	Percent Change from Year Earlier	Purchases & Exchanges Received ¹	Percent Change from Year Earlier	Purchases & Exch. Rec. as Percent of Net Generation ¹	Sales to Ultimate Consumers	Percent Change from Year Earlier	Sales for Resale & Exchanges Delivered ²	Percent Change from Year Earlier	Sales for Resale & Exch. Del. as Percent of Sales to Ultimate Consumers ²
					U.S. 7	Total				
1996	3,099,989	3.3	2,068,621	22.6	66.7	3,101,227	2.9	1,813,648	26.3	58.5
1995	3,002,304	2.6	1,687,659	6.1	56.2	3,013,287	2.7	1,435,985	6.9	47.7
1994	2,924,961	.9	1,590,342	1.3	54.4	2,934,563	2.5	1,343,761	-1.6	45.8
1993	2,897,815	3.3	1,570,780	3.6	54.2	2,861,464	3.5	1,366,133	2.9	47.7
1992	2,805,092	-1.1	1,516,264	.5	54.0	2,763,324	.0	1,327,111	-2.2	48.0
1991	2,835,377	.5	1,508,408	-2.1	53.2	2,762,003	1.8	1,356,785	-4.9	49.1
1990	2,821,493	.4	1,541,310	4.8	54.6	2,712,555	2.5	1,427,118	2.4	52.6
1989	2,811,398	2.9	1,469,952	7.1	52.3	2,646,809	2.7	1,394,071	7.6	52.7
1988	2,730,774	3.8	1,372,433	4.0	50.3	2,578,062	4.9	1,295,403	2.0	50.3

Includes all transactions received from outside and within the region by all utilities operating within the region.

Table 5. Intra- and Interregional Purchases and Sales for Resale by Selected Ownership Classes, 1990, 1992, 1994, and 1996

(Million Kilowatthours)

			Intraregional			Interregional				
Type of Transaction /Ownership Class	1996	1994	1992	1990	Total Percent Difference 1990-1996	1996	1994	1992	1990	Total Percent Difference 1990-1996
Purchases										
Investor-Owned	757,356	R 636,893	598,671	521,524	45.2	132,238	75,597	59,927	41,827	216.2
Federal ¹	13,747	17,827	17,948	8,476	62.2	452	1,576	1,705	2,637	-82.9
Cooperatives	308,528	289,444	266,864	257,467	19.8	24,003	16,766	14,234	15,905	50.9
Sales for Resale ²										
Investor-Owned	547,442	467,479	452,442	373,897	46.4	109,583	62,206	61,928	70,284	55.9
Federal ¹	176,980	184,991	174,156	185,801	-4.7	16,456	13,255	12,973	11,764	39.9

¹ Federal authorities use different accounting methods for reporting energy received from Federal generating assets; the energy may be reported as

Sources: Energy Information Administration, Survey Management Division, calculated from data reported on Federal Energy Regulatory Commission (FERC) Form 1, "Annual Report of Major Electric Utilities, Licensees and Others," FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees." ees"; Form EIA-412, "Annual Report of Public Electric Utilities"; Rural Utilities System (RUS), formerly Rural Electrification Administration (REA). For years 1990 and 1992, REA Form 7, "Financial and Statistical Report," REA Forms 12a through 12i, "Electric Power Supply Borrowers," and REA Forms 12c through 12g, "Electric Distribution Borrowers with Generating Facilities." For years 1994 and 1996, substitute RUS for REA in form name."

Includes all transactions delivered out of and within the region by all utilities operating within the region.

Notes: NeRC is the North American Electric Reliability Council. See glossary for a list of regions. •Table includes data from Power Marketers. •Percentages may not total 100 because of independent rounding.

Source: Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

Detailed information for sales for resale by cooperative utilities is collected but not processed by the Rural Utilities Service, for prior years.

Revised.

Notes: •Excludes accounting adjustments to data which allows the actual linkage of dollars and quantity to the year in trade.

Table 6. Firm and Nonfirm Purchases and Sales for Resale by Investor-Owned Utilities, by NERC Region, 1990, 1992, 1994, and 1996

(Million Kilowatthours)

			Firm					Nonfirm		
NERC Region	1996	1994	1992	1990	Percent Change 1990-1996	1996	1994	1992	1990	Percent Change 1990-1996
				Purchase	es by Investo	r-Owned Util	ities			
ECAR	54,450	58,274	46,741	47,191	15.4	57,124	30,378	39,531	22,196	157.4
ERCOT	14,115	17,340	22,716	22,285	-36.7	19,715	9,574	5,141	3,399	480.0
MAAC	21,927	20,802	28,244	25,925	-15.4	86,235	47,385	38,994	14,340	501.3
MAIN	17,080	22,716	11,547	12,463	37.0	20,704	13,120	17,002	9,307	122.5
MAPP	16,833	15,373	13,652	6,193	171.8	14,180	10,103	12,701	13,744	3.2
NPCC	90,553	73,064	74,925	65,349	38.6	95,696	95,632	66,934	38,682	147.4
SERC	63,465	58,077	57,671	59,834	6.1	32,143	27,079	29,019	28,642	12.2
SPP	11,328	9,836	3,941	6,886	64.5	53,873	40,683	44,138	30,227	78.2
WSCC	80,111	86,251	83,037	78,397	2.2	116,896	52,536	46,206	59,163	97.6
Contiguous U.S. Total	369,860	361,733	342,472	324,524	14.0	496,567	326,490	299,666	219,700	126.0
-				Sales for Re	sale by Inves	stor-Owned U	tilities			
ECAR	80,710	77,159	78,719	75,359	7.1	65,332	37,339	53,251	42,054	55.4
ERCOT	8,028	5,901	6,599	8,232	-2.5	2,789	2,916	1,392	1,405	98.6
MAAC	29,819	9,994	13,978	6,372	367.9	32,028	32,141	28,411	9,186	248.7
MAIN	27,511	22,343	16,375	22,325	23.2	23,643	19,426	10,170	6,884	243.5
MAPP	9,563	7,909	9,828	6,789	40.9	9,262	8,205	8,728	11,175	-17.1
NPCC	50,322	52,985	53,816	47,578	5.8	51,615	43,311	37,964	19,337	166.9
SERC	42,640	35,234	42,960	44,051	-3.2	53,550	50,838	46,339	49,429	8.3
SPP	25,584	18,665	17,139	15,586	64.1	32,295	31,148	27,944	19,960	61.8
WSCC	30,196	27,894	29,962	27,516	9.7	57,193	29,955	23,210	23,380	144.6
Contiguous U.S. Total	304,372	258,084	269,376	253,809	19.9	327,707	255,279	237,409	182,809	79.3

Notes: Miscellaneous transactions for the Purchased Power and Sales for Resale categories have been excluded. See Chapter 2 for a discussion of miscellaneous transactions. •Includes accounting adjustments to data (no dollars associated with megawatthour adjustments). Table 8 shows actual trade booked in 1996, but Table 6 shows adjustments (to include coming from prior year obligations) that affect the overall accounts of the utility. •NERC is the North American Electric Reliability Council. The Alaska Systems Coordinating Council is not included. See Glossary for a list of regions.

"Annual Report of Nonmajor Public Utilities and Licensees."

Tables

National and regional aggregates are presented at the end of this chapter for data covering:

- Purchases, sales for resale, and exchanges by investor-owned utilities with all ownership classes (Tables 8 through 10)
- · Exchanges by noninvestor-owned utilities (Table
- Wheeling transactions of investor-owned utilities (Tables 12 and 13)
- · Regional purchases by cooperative borrowers (Table 14)
- Trading within and between regions by investorowned utilities (Tables 15 and 16)
- · Transactions of investor-owned utilities in Alaska and Hawaii (Table 17)
- · U.S. electricity trade with Canada and Mexico (Table 18).

Sources of Data, 1996

Summary information for the United States are provided in Tables 1 through 4 and are obtained from the Form EIA-861 "Annual Electric Utility Report," which is a mandatory report filed by all U.S. electric utilities. The survey represents the collection of data from the complete universe of electric utilities. All other electric utility surveys cited in this publication represent subsets from the Form EIA-861 universe. Tables 5 through 36 include detailed information developed from direct filings of different surveys by 212 of the 243 investor-owned electric utilities; 504 of the 2,020 State and municipal electric utilities; 811 of the 932 cooperative electric utilities, and 8 of the 10 Federal utilities. 12 The detailed data represent subsets of the universe data provided in Tables 1 through 4. (The requirements for filing are discussed below.) Of the total number of electric utilities identified, but not required to file a detailed data collection form with a Federal agency, most have little generating capability and usually purchase part or all of their electrical energy from one or more of the electric

Source: Federal Energy Regulatory Commission (FERC) Form 1, "Annual Report of Major Electric Utilities, Licensees and Others," and FERC Form 1-F,

¹² The two Federal utilities that do not file the Form EIA-412 do not sell wholesale power. Electricity produced by these utilities is marketed by one or more of the Federal power marketing administrations.

utilities who did file. However, some do buy from cogenerators, cooperatives, or other utilities not required to file. The summary quantity of purchases made by these utilities are included in this publication (Tables 22, 31, and 35). These utilities were identified by matching the names of filing utilities and all the utilities listed on these filings with the universe frame of Form EIA-861, "Annual Electric Utility Report." Chapters 2 through 4 provide detailed data on individual electric utilities developed from the direct filings. However, if the direct filing indicates no wholesale trade transactions, then those electric utilities were not shown in the respective tables.

Some data for this publication come from sources outside of EIA. These include: (1) the Federal Energy Regulatory Commission (FERC), (2) the Rural Utilities Service (RUS) in the Department of Agriculture, and (3) the Office of Fossil Energy (FE) in the Department of Energy (see Table ES2). These agencies manage all aspects of their respective surveys and data base maintenance including quality control, frame maintenance, formatting of survey information, survey forms development, handling of nonresponse, and data imputation.

Chapter 1 gives an overview of bulk power trade and provides national and regional electric trade data by all ownership classes. These data come from several forms, as no form was specifically designed to collect electricity trade information from all ownership classes. International trade data are from Form FE-781R, "Annual Report of International Electrical Export/Import Data," (Table 18).

Chapter 2 presents data on bulk power transactions of "Major" and "Minor" investor-owned utilities. Major investor-owned electric utilities are defined as those private utilities that have had, in the past 3 consecutive calendar years, sales or transmission services that exceeded one of the following: 1 billion kilowatthours of total annual sales, 100,000 kilowatthours of annual gross interchange-out or 500,000 kilowatthours of transmission for others (wheeling). The criteria for classification as a minor utility are: (1) total annual sales of 10 million kilowatthours or more in the previous calendar year, and (2) not being classified as a major utility.

The investor-owned utilities shown in this publication report on FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others" and FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

The FERC forms are primarily financial reporting forms. The wholesale data are collected on 4 of the approximately 75 survey schedules of the FERC Form 1. The wholesale electricity trade schedules are sales for resale, purchased power, summary of interchange, and transmission of electricity for or by others. These electricity transactions are shown by utility class of ownership in Tables 19 through 24.

The investor-owned electric utilities that fall below the filing criteria for the FERC Forms 1 and 1-F are not required to file. Appendix Table B1 lists the major and minor utilities that file FERC Forms 1 and 1-F.

Data in Chapter 3 cover wholesale electricity trade for the 504 public utilities that report wholesale transactions on Form EIA-412, "Annual Report of Public Electric Utilities," which is used to collect data on purchased power and sales for resale transactions. The public utilities report information by fiscal year; therefore, consistent totals cannot be provided for these classes of ownership. Public electric utilities are required to submit Form EIA-412 when their generation, transmission, or distribution of electricity results in 120 million kilowatthours of sales to ultimate consumers and/or 120 million kilowatthours of sales for resale. Data on exchanges and wheeling in this chapter are reported on Form EIA-861, "Annual Electric Utility Report."

Chapter 4 presents data submitted to the Rural Utilities Service (RUS) of the U.S. Department of Agriculture by cooperative borrowers. The RUS collects information from all utilities that have "borrowed" under the RUS loan guarantee programs and uses the information to verify and administer its loan programs. Appendix Table B5 lists cooperative borrowers. Data covering electricity trade for cooperative borrowers are reported for a calendar-year basis on several closely related RUS forms: RUS Form 7, "Financial and Statistical Report," RUS Forms 12a through 12i, "Electric Power Supply Borrowers," and RUS Forms 12c through 12g, "Electric Distribution Borrowers with Generating Facilities." These forms are used to collect data on purchased power. Sales for resale transactions are not available in a machinereadable format from the RUS.

Compilation of Data

The Federal Government recognizes that wholesale trade data needs to be consolidated and automated. The EIA examined the data and initiated a process with the FERC to correct deficiencies. Responsibility for correcting errors and making contact with the FERC Form 1 respondents rests with the FERC. Principal among the problems with existing wholesale trade data are: (1) inconsistencies in reporting mutual transactions by buyers and sellers, (2) lack of uniformity and standardization in reporting, (3) lack of uniformity in reporting requirements among various forms including reporting periods, and (4) multiple and sometimes overlapping reporting and aggregation of individual transactions.

Many of these errors are identified by automated intraform range, arithmetic and logic checks, and interform consistency edits (for example, crosschecking between submissions of the respondents).

Table 7. Wheeling Trade in the United States by NERC Region, 1988 Through 1996 (Million Kilowatthours)

Wheeling	1996	1995	1994	1993	1992	1991	1990	1989	1988
				All U	Utilities in EC	AR			
Wheeling Received ¹	59,827	33,128	30,861	31,191	31,803	30,293	32,841	21,098	15,121
Wheeling Delivered ²		32,893	30,630	30,994	31,618	30,161	32,753	20,994	15,036
Wheeling Net	305	236	231	197	186	132	88	104	85
*** 41 % 41					tilities in ERC				
Wheeling Received ¹		34,237	24,069	26,716	24,077	20,934	16,481	9,414	7,861
Wheeling Delivered ²		34,239	24,088	26,686	24,090	20,937	16,496	9,297	7,913
Wheeling Net	18	-1	-19	31	-13	-2	-14	117	-53
				All U	Itilities in MA	AC			
Wheeling Received 1		14,915	11,789	13,132	9,868	5,842	5,774	8,385	7,482
Wheeling Delivered ²	20,177	14,548	11,720	13,030	9,779	5,842	5,774	8,360	7,465
Wheeling Net	95	367	69	103	88	_	_	24	16
				All l	Utilities in MA	AIN			
Wheeling Received ¹	7,695	6,270	4,877	5,018	3,489	3,819	1,451	1,215	1,915
Wheeling Delivered ²	7,550	6,175	4,810	4,951	3,404	3,739	1,414	1,205	1,906
Wheeling Net	145	96	67	67	85	80	37	10	10
				All U	Utilities in MA	APP			
Wheeling Received ¹	17,744	17,816	19,038	16,781	11,661	9,484	8,477	9,208	7,804
Wheeling Delivered ²	16,457	16,596	18,417	16,130	10,847	7,935	7,656	8,197	6,705
Wheeling Net	1,287	1,220	620	651	814	1,549	821	1,012	1,098
				All U	Utilities in NP	СС			
Wheeling Received ¹	63,703	59,890	68,883	67,815	60,687	57,173	48,613	42,897	38,365
Wheeling Delivered ²	63,400	59,626	68,587	67,553	60,495	56,925	48,399	42,351	38,089
Wheeling Net		264	296	262	191	248	214	546	276
				All U	Utilities in SE	RC			
Wheeling Received ¹		30,769	25,134	27,132	27,211	28,457	29,291	22,726	12,354
Wheeling Delivered ²	35,425	28,880	23,514	25,324	25,408	27,447	28,174	21,885	11,743
Wheeling Net	1,839	1,889	1,620	1,808	1,803	1,010	1,117	841	611
				All	Utilities in SI	PP			
Wheeling Received ¹	25,982	23,502	23,545	25,528	21,749	22,150	27,091	19,591	20,089
Wheeling Delivered ²	25,870	23,406	23,448	25,419	21,639	22,078	26,985	19,924	19,956
Wheeling Net	112	96	97	109	110	72	105	-333	133
				All U	Itilities in WS	SCC			
Wheeling Received ¹		134,610	127,915	137,931	127,514	144,466	152,097	164,824	157,755
Wheeling Delivered ²		131,758	126,672	136,489	125,023	142,592	148,388	163,623	157,682
Wheeling Net	3,219	2,852	1,243	1,441	2,492	1,874	3,708	1,200	74
				Conti	guous U.S. To	otal			
Wheeling Received ¹	417,784	355,916	336,805	351,701	318,538	323,133	322,667	299,822	269,170
Wheeling Delivered ²	410,460	348,900	332,580	347,032	312,782	318,170	316,591	296,297	266,909
Wheeling Net	7,324	7,016	4,225	4,668	5,756	4,963	6,077	3,525	2,262

¹ Includes all transactions received from outside and within the region by all utilities operating within the region.

Notes: *The States of Alaska and Hawaii are not included. *Aggregate 1992 bulk power data supplied by investor-owned electric utilities were matched to original filings made to the FERC. The FERC has again required investor-owned electric utilities to refile 1992 bulk power data. These revised data are shown in Tables 5-24 and represent the reclassification of data among purchased power, exchanges, and sales for resale accounts. The difference between the data series are the result of the reclassifications and adjustments made to the data. *Table includes data from Power Marketers. *NERC is the North American Electric Reliability Council. See glossary for a list of regions.

Source: Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

The Technical Notes provide more information on data linkages, revisions, and correction procedures used in editing data on wholesale electricity trade. In

addition, the corrections to these problems also serve as the foundation for future analytical work to improve reporting on EIA forms.

² Includes all transactions delivered out of and within the region by all utilities operating within the region.

⁻Not Applicable

Limitations of Data Coverage, Reliability, and Quality

Electricity transactions have a wide range of terms and conditions designed to accommodate prevailing circumstances. Because of the lack of standardization in contract terminology, reporting of each transaction is not consistent across the industry. The lack of uniformity, combined with the complexity of the transactions, affects the accuracy of the data. This is further complicated by the accounting of simultaneous energy transactions, the receipt and delivery of energy caused by inadvertent flow, and the losses associated with transmission.

In developing the data base for ELECTRA, EIA has made a major effort to detect and correct respondent reporting errors. data processing issues, and problems with data interpretation. However, some error correction issues cannot be addressed by EIA since they involve survey design, operations decisions, and quality control procedures beyond EIA s control. A discussion of the error detection methods and the correction process used by EIA is described in the Technical Notes to this publication. The data within ELECTRA come from survey filings that are available to the public from the respective agency that is responsible for the survey form.

The major sources of incompatibility between data collection forms include: (1) different reporting years, (2) different reporting requirements, (3) different reporting of mutual transactions by purchasers and sellers, (4) lack of uniformity and standardization in the definitions of terms used in the industry, and (5) multiple reporting of individual transactions. The single greatest source of incompatibility is the different "reporting year" requirements of Form EIA-412 compared with the other forms. The annual data reported on Form EIA-412 by a public utility are based on that utility's fiscal year. The annual data reported on Form EIA-861, FERC Form 1, RUS Form 7, and RUS Form 12 are based on the calendar year.

The second largest source of incompatibility is the difference in reporting requirements among the forms. The four types of electric trade transactions and the forms used to collect them are as follows:

- Purchases--FERC Forms 1 and 1-F, Form EIA-412, RUS Form 7, RUS Form 12
- Sales for Resale--FERC Forms 1 and 1-F, Form EIA-412
- · Exchanges--FERC Forms 1 and 1-F
- · Wheeling--FERC Forms 1 and 1-F

Form EIA-861 is also used to gather information on all four types of transactions; the data, however, are submitted on energy flows rather than financial performance. EIA-861 data are at an aggregate level and do not identify buyers and sellers. These differences make it impossible to disaggregate the types of electric trade transactions across ownership classes for all

forms. This publication provides significantly more complete information on the investor-owned utilities than other ownership classes because of the greater detail collected on FERC Form 1.

Data received from FERC, RUS, and FE can be inconsistent with similar data collected by EIA. Some data elements from the survey forms used are not consistent within the same respondent filing (aggregations of detailed information within individual schedules accounts do not equal summary schedule accounts). Therefore, the detailed transaction information was used for the basis of aggregation and comparison. In other cases, megawatthours or revenue data may not sum to the totals reported to EIA. EIA attempts to resolve such inconsistencies, which often are related on how accounting adjustments (both positive and negative for dollars and megawatthours) are treated or accepted under the regulatory oversight When cross form consistency cannot be achieved, the data used in ELECTRA is as "reported."

The data on wholesale electricity trade are collected on Federal survey data forms that are accountingsystem based. These forms were designed for regulatory purposes to meet administrative and rate case needs of individual utilities as opposed to overall aggregate industry statistical and analytical purposes.

Data for the Commonwealth of Puerto Rico and the U.S. Trust Territories are excluded in this publication. Geographical location and electrical system isolation limit the usefulness of any wholesale trade data from these areas.

Average Unit Cost and Unit Revenue

This publication presents annual summations of electricity transactions (energy) with the corresponding revenue and cost information. Dividing cost or revenue by the transaction quantity gives the average cost or average revenue per unit of energy. However, it does not necessarily indicate the price specified in contracts.

Wholesale sales are transaction-specific and lose relevance when aggregated to classes of ownership and geographic regions. The price that any one utility charges another for wholesale energy comprises numerous system-specific factors. For example, the price of purchased power can consist of demand charges, energy charges, and facility charges. A demand charge is a fixed charge determined according to the maximum capacity demanded by the purchasing utility during a specified period of time. Demand charges, being fixed, are unaffected by the number of kilowatthours of energy purchased; therefore, the average charge per kilowatthour decreases as the volume of energy sales increases.

In addition to demand charges, wholesale electricity transactions are frequently subject to facility charges that include transmission, generation, and other system operating charges. These charges typically vary by ownership class, system characteristics, and region.

Furthermore, demand charges and energy charges are affected by time of delivery, quantity of energy, and reliability of supply. Typically, energy delivered during peak periods costs more than energy delivered during off-peak periods. Firm power, which can have a level of reliability similar to that given to a supplier's customers, costs more than economy energy. Economy energy is interruptible on short notice and replaces the more expensive firm power energy that is available to the purchaser.

For electric trade transactions, the average revenue or cost per unit of energy, calculated by dividing the revenue or cost by the associated energy, is not a substitute for total price. Electric trade transactions are comprised of various energy transactions of different value. Differences in average revenue or cost per unit of energy may represent a difference in the operating conditions rather than a difference in price structure. The quantity and value numbers presented represent the summation of all trade in that category for a year. Individual prices associated with a particular trade, the impact of seasonal and peak usage, and contract specific conditions cannot be separated from the aggregate. The reader is cautioned against using unit revenue or cost as a substitute for true price.

Account Adjustments

Utilities must adjust the current year data to reflect not only the corrections in accounting for physical flows but also any regulatory and court decisions. Rate case rebates, meter adjustments, and inadvertent power flow corrections are examples of these changes.

Both negative and positive adjustments are present in the revenue, cost, and quantity of trade numbers. Negative and positive numbers in the interchange tables represent a direction of flow--positive is a receipt and negative is a delivery. In the purchased power and sales for resale tables, data (either positive or negative) represent either the booking of accounting adjustments or reversal in payments and energy flows.

Transmission of power from generating facilities under joint ownership can be reported in several ways. Typically, joint owners operate with interconnected transmission networks under mutually beneficial service agreements. The actual transfer of energy across transmission systems is usually considered a nonmonetary transaction and not a wholesale transaction. When a joint owner lacks an interconnected path to the generating facility, the actual flow of energy is subject to the transmission service of the wheeling third party, accounted for as a monetary transaction, and reported as "Transmission For Others."

In some of the tables, data categorized as "Other" include power pool data, international trade transactions, and any nonutility generated electricity purchased. This information is often reported in a manner that prevents the identification of the buyer and/or seller.

Appendices

Appendix A identifies the regulatory guidance provided by FERC through its Uniform System of Accounts and selected instructions provided on FERC Form 1.

Appendix B contains the location, NERC region, and data source of each utility for the 1996 filings used in this report. The information is presented by the utility forms: (1) FERC Form 1 and 1-F (Investor-Owned); (2) Form EIA-412 (Federal, State and Other Government Utilities, and Municipalities); (3) RUS Form 7 and RUS Form 12 (Cooperatives); (4) Form EIA-861 (Wheeling and Exchanges for Noninvestor-Owned Utilities); and (5) Energy Marketing (brokering-where ownership of power is transferred) Groups under FERC jurisdictional authority.

Appendix C contains a description of the fundamentals of electric power transmission, the control and operation of electric systems, and an overview of integrating NUGs into the power grid.

Technical Notes (Appendix D) describe the linkages and revisions made to the various data collection systems used in preparing this publication. The Notes also explain data quality and correction procedures used. Copies of the collected data are available to the public. See "Obtaining Copies of the Data" in the Notes for further information.

Glossary

A glossary of terms has been included to assist non-technical as well as technical users in understanding the statistical data in this publication.

Table 8. Electricity Purchases by Investor-Owned Utilities, by NERC Region, 1996

	Demand			Firm		
Sellers by Ownership Class	Charge Only ¹ (dollars)	Demand Cost	Energy Cost	Other Cost	Total Cost	Purchases (thousand kWh)
	(donais)	(dollars)	(dollars)	(dollars)	(dollars)	(inousuna n i i i)
			Investor-Owned Util	ities in ECAR		
Investor-Owned	120,893	316,677,024	598,361,380	-27,460,718	887,577,686	32,824,870
Federal	_	_	_	_	_	_
State and Other						
Government	33,214	_	_	_	_	
Municipals	_	7,958,234	20,343,719	_	28,301,953	1,495,395
Cooperatives		1,805,370	14,692,269		16,497,639	657,342
Other ²	4,720	546,386,761	399,652,286	-789,285	945,249,762	19,471,920
Total	158,827	872,827,389	1,033,049,654	-28,250,003	1,877,627,040	54,449,527
		1	Investor-Owned Utili	ties in ERCOT		
Investor-Owned	1,084,720	73,970,672	56,697,260	1,263,578	131,931,510	2,590,549
Federal						
State and Other						
Government	_	3,153,658	9,124,177	1,088,337	13,366,172	371,740
Municipals	_	_	_	_	_	_
Cooperatives	_	_	_	_	_	_
Other ²	_	275,569,553	278,263,858	_	553,833,411	11,152,716
Total	1,084,720	352,693,883	344,085,295	2,351,915	699,131,093	14,115,005
			Investor-Owned Util	ities in MAAC		
Investor-Owned	4,261,649	269,215,682	411,239,727	676,363	681,131,772	13,925,950
Federal	_	_	_	_	_	_
State and Other						
Government	_	396,211	1,955,514	_	2,351,725	99,399
Municipals	_	1,786,213	5,766,443	_	7,552,656	244,802
Cooperatives	_	1,941,811	9,652,283		11,594,094	457,012
Other ²		45,027,054	179,794,496	330,506	225,152,056	7,199,971
Total	4,261,649	318,366,971	608,408,463	1,006,869	927,782,303	21,927,134
			Investor-Owned Util	lities in MAIN		
Investor-Owned	1,312,500	103,873,327	265,151,205	8,843	369,033,375	14,770,331
Federal	_	3,237,123	23,099,199	_	26,336,322	1,048,494
State and Other						
Government	_	_	_	_	_	_
Municipals	_	42,770	1,094,469	_	1,137,239	57,350
Cooperatives	2,209,661	884,077	2,577,905	_	3,461,982	119,450
Other ²	_	2,320,595	24,958,538	_	27,279,133	1,083,880
Total	3,522,161	110,357,892	316,881,316	8,843	427,248,051	17,079,505
_			Investor-Owned Util	ities in MAPP		
Investor-Owned	_	43,513,233	46,534,444	1,133,465	91,181,142	3,012,638
Federal	_	_	_	_	_	_
State and Other						
Government		20,162,367	8,978,704	_	29,141,071	840,643
Municipals	82,750	989,886	605,550		1,595,436	23,445
Cooperatives	1,995,851	82,410,862	50,200,045	645,959	133,256,866	4,945,045
Other ²		77,434,495	116,818,908	408,471	194,661,874	8,010,856
Total	2,078,601	224,510,843	223,137,651	2,187,895	449,836,389	16,832,627

Table 8. Electricity Purchases by Investor-Owned Utilities, by NERC Region, 1996 (Continued)

		Nonfirm		Miscella	nneous ²	Region	n Total
Sellers by Ownership Class	Energy Cost	Other Cost	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)
	(dollars)	(dollars)	(tilousanu kwii)	(donars)	(mousand kwn)	(donars)	(thousand kwii)
			Investor-O	wned Utilities in	ECAR		
Investor-Owned		14,481,159	20,103,844	302,127,013	10,086,118	1,684,515,711	63,014,833
Federal	9,701,788	_	443,138	_	_	9,701,788	443,138
State and Other	2.012.615		252.514			2.045.020	252.51
Government		_	252,514 48,914	_	-552	3,945,829 28,796,195	252,514 1,543,757
Municipals Cooperatives	,	_	544,095	_	-332	26,919,312	1,201,437
Other ³		-3,717	35,731,439	5,038,604	288,186	1,625,939,026	55,491,545
Total		14,477,442	57,123,944	307,165,617	10,373,752	3,379,817,861	121,947,223
			Investor O	wned Utilities in	FDCOT		
Investor Oronad	13,860,178	147,784	432,711	-70,176		146,954,016	3,023,260
Investor-Owned Federal	, ,	147,784	432,711 24,144	-/0,1/6	_	728,007	3,023,260
State and Other	/28,007	_	24,144	_	_	728,007	24,142
Government	4,222,825	34,035	236,407	_	_	17,623,032	608,147
Municipals		103.885	2,275,931	1,340		44.823.897	2,275,931
Cooperatives		-95,072	53,099			808,941	53,099
Other ³		185,771	16.692.443	-55	44.617	931,505,500	27.889.776
Total		376,403	19,714,735	-68,891	44,617	1,142,443,393	33,874,357
			Investor-O	wned Utilities in	MAAC		
Investor-Owned	519,859,316	149,550,261	26,774,258	40,229,959	1,577,873	1,395,032,957	42,278,081
Federal	29,337					29,337	
State and Other							
Government	919,382	_	55,524	_	_	3,271,107	154,923
Municipals	122,254,720	1,335,030	2,106,740	_	_	131,142,406	2,351,542
Cooperatives		_	177,289	5,538,905	_	19,647,689	634,301
Other ³	1,827,167,070	170,987,202	57,121,634	25,997,836	-26,208	2,249,304,164	64,295,397
Total	2,472,744,515	321,872,493	86,235,445	71,766,700	1,551,665	3,798,427,660	109,714,244
			Investor-O	wned Utilities in	MAIN		
Investor-Owned	226,079,598	6,268,910	12,352,307	_	_	602,694,383	27,122,638
Federal	-,,	_	907,240	_	_	40,496,524	1,955,734
State and Other							
Government	115,587	_	6,170	_	_	115,587	6,170
Municipals		_	39,980	_	_	2,314,823	97,330
Cooperatives	41,281,789	1,900,000	2,760,532	_	23,588	48,853,432	2,903,570
Other ³	98,020,334	_	4,637,507	-124,226	91,306	125,175,241	5,812,693
Total	380,835,094	8,168,910	20,703,736	-124,226	114,894	819,649,990	37,898,135
			Investor-O	wned Utilities in	MAPP		
Investor-Owned	56,401,591	179,195	3,047,838	216,303,805	5,316,876	364,065,733	11,377,352
Federal	, ,	15,656	3,367,041		-55,656	42,420,748	3,311,385
State and Other	, /** =	-,	- / /		,	, .,	- /
Government	32,220,769	82,701,712	4,176,156	_	_	144,063,552	5,016,799
Municipals	, ,	3,387	493,239	_	_	9,440,882	516,684
Cooperatives	, ,	9,468	2,221,922	171,617	_	171,780,712	7,166,967
Other ³		37,131	873,988	109,544	1,042	212,962,340	8,885,886
	193,287,462	82,946,549	14,180,184	216,584,966	5,262,262	944,733,967	36,275,073

Table 8. Electricity Purchases by Investor-Owned Utilities, by NERC Region, 1996 (Continued)

	Demand			Firm		
Sellers by Ownership Class	Charge Only ¹ (dollars)	Demand Cost (dollars)	Energy Cost (dollars)	Other Cost (dollars)	Total Cost (dollars)	Purchases (thousand kWh)
		(donars)	Investor-Owned Util	` ′	(donars)	
_	10.000.102	1 100 505 212			2 551 010 100	12 202 012
Investor-Owned	10,099,103	1,480,737,343	817,100,234	273,180,613	2,571,018,190	43,283,912
State and Other						
Government	12,944,171	111,591,161	184,291,829	19,538,959	315,421,949	16,815,741
Municipals		5,618,355	3,254,744		8,873,099	117,245
Cooperatives	_	52,815	_	_	52,815	558
Other ²	-5,783,837	700,222,057	1,079,343,421	13,040,972	1,792,606,450	30,335,298
Total	17,259,437	2,298,221,731	2,083,990,228	305,760,544	4,687,972,503	90,552,754
_			Investor-Owned Util	ities in SERC		
Investor-Owned	6,141,978	159,735,710	218,581,581	-1,213,541	377,103,750	11,436,748
Federal	_	_	_	_	_	_
State and Other						
Government	_	78,304,596	36,415,739	_	114,720,335	2,184,977
Municipals	492,480	237,771,983	82,191,130	958,055	320,921,168	6,172,721
Cooperatives	16,650	27,108,974	56,303,499	-1,311	83,411,162	2,878,624
Other ²	325,000	1,376,252,241	1.002,905,582	2,955	2.379.160.778	40,791,487
Total	6,976,108	1,879,173,504	1,396,397,531	-253,842	3,275,317,193	63,464,557
_			Investor-Owned Uti	ilities in SPP		
Investor-Owned	_	657,445,214	73,721,635	-1,819,643	729,347,206	9,788,779
Federal	_	_	_	_	_	_
State and Other						
Government	_	1,558,688	4,845,099	_	6,403,787	320,705
Municipals	992,250	2,745,029	1,173,322	_	3,918,351	78,450
Cooperatives	25,000	14,768,582	14,410,646	_	29,179,228	683,451
Other ²	_	5,441,316	7,575,802	_	13,017,118	456,396
Total	1,017,250	681,958,829	101,726,504	-1,819,643	781,865,690	11,327,781
_			Investor-Owned Utili	ities in WSCC		
Investor-Owned	36.838.560	309.422.113	175.597.281	73,709	485.093.103	10.386.267
Federal	88,159,629	5,740,790	28,951,876	-204,602	34,488,064	1,388,868
State and Other	00,137,027	3,740,770	20,751,070	201,002	31,100,001	1,500,000
Government	1,394,500	59,455,181	49,620,969	1,029,062	110,105,212	2,735,288
Municipals	2,388,200	41,758,248	52,049,113	-1,078,788	92,728,573	1.476.871
Cooperatives	2,366,200	121,246,097	65,684,865	-1,070,700	186,930,962	4,078,648
Other ²	14,321,461	1,525,146,162	3,046,109,326	7,648,671	4,578,904,159	60,044,712
Total	143,102,350	2,062,768,591	3,418,013,430	7,468,052	5,488,250,073	80,110,654
-			Contiguous U.	C Total		
_	50.050.403	2.414.500.250			5 222 415 52 :	1.12.026.011
Investor-Owned	59,859,403	3,414,590,318	2,662,984,747	245,842,669	6,323,417,734	142,020,044
Federal	88,159,629	8,977,913	52,051,075	-204,602	60,824,386	2,437,362
State and Other		001 0	205.000.000	21 2-0	#04 #10 #F:	
Government	14,371,885	274,621,862	295,232,031	21,656,358	591,510,251	23,368,493
Municipals	3,955,680	298,670,718	166,478,490	-120,733	465,028,475	9,666,279
Cooperatives	4,247,162	250,218,588	213,521,512	644,648	464,384,748	13,820,130
Other ²	8,867,344	4,553,800,234	6,135,422,217	20,642,290	10,709,864,741	178,547,236
Total	179,461,103	8,800,879,633	9,525,690,072	288,460,630	18,615,030,335	369,859,544

Electricity Purchases by Investor-Owned Utilities, by NERC Region, 1996 (Continued)

		Nonfirm		Miscella	aneous ²	Region	n Total
Sellers by Ownership Class	Energy	Other	Purchases	Cost	Purchases	Cost	Purchases
Ownership Class	Cost (dollars)	Cost (dollars)	(thousand kWh)	(dollars)	(thousand kWh)	(dollars)	(thousand kWh)
			Investor-O	wned Utilities in	NPCC		
Investor-Owned	574,422,752	524,206,293	33,488,665	13,903,111	565	3,693,649,449	76,773,142
Federal	—	_	_	_	_	_	_
State and Other							
Government		31,453	820,081	182,680	26,058	346,045,711	17,661,880
Municipals		333,086	1,041,596	_	_	83,662,256	1,158,84
Cooperatives		11,320,777	240,549		_	12,789,837	241,107
Other ³		122,182,535	60,105,285	8,136,256		4,946,179,770	90,434,897
Total	3,696,798,892	658,074,144	95,696,176	22,222,047	20,937	9,082,327,023	186,269,867
			Investor-O	wned Utilities in	SERC		
Investor-Owned		61,681	13,740,001	_	-3,602	738,103,864	25,173,147
Federal	16,390,608	_	812,569	_	_	16,390,608	812,569
State and Other							
Government	3,796,047	_	154,404	_	_	118,516,382	2,339,381
Municipals		170	1,150,987	_	_	346,064,451	7,323,708
Cooperatives		2,855	2,250,175	_	5,179	124,277,351	5,133,978
Other ³	316,220,962	4,448,621	14,034,770	_	187,566	2,700,155,361	55,013,823
Total	756,701,389	4,513,327	32,142,906	_	189,143	4,043,508,017	95,796,606
			Investor-0	Owned Utilities in	n SPP		
Investor-Owned	, ,	136,949	7,845,062	8,357,642	,	878,360,514	18,184,853
Federal	169,431,486	9,600	8,268,074	2,118	94	169,443,204	8,268,168
State and Other							
Government	21,780,248	3,305,851	1,375,969	59,380		31,549,266	1,699,608
Municipals	9,552,051	1,461,625	537,294	5,746	62,467	15,930,023	678,211
Cooperatives	144,256,028	22,787,500	7,300,646	2,934	1,132,568	196,250,690	9,116,665
Other ³	700,299,720	193,575,763	28,545,919	13,424,263	674,081	920,316,864	29,676,396
Total	1,185,838,250	221,277,288	53,872,964	21,852,083	2,423,156	2,211,850,561	67,623,901
			Investor-O	wned Utilities in	WSCC		
Investor-Owned	355,116,977	434,616	22,630,566	1,033,017	228,243	878,516,273	33,245,076
Federal	, -,	426,616	23,524,952	3,833,708	-, -	450,226,266	24,913,820
State and Other		-,-	- /- /	-,,		, -,	, , , , ,
Government	272,317,739	20,250	26,439,942	39,914,715	2,994,294	423,752,416	32,169,524
Municipals		515,526	4,000,407	-4,152,516	, , , ,	175,832,183	5,403,016
Cooperatives	, ,	1,000,400	2,395,079	75,238	,	222,619,978	6,473,727
Other ³		48,167,456	37,905,530	-75,068,196		5,428,605,461	97,989,076
Total		50,564,864	116,896,476	-34,364,034	,	7,579,552,577	200,194,239
	-		Con	tiguous U.S. Tota	al		
Investor-Owned	2,721,264,544	695,466,848	140,415,252	581,884,371		10,381,892,900	300,192,381
Federal		451,872	37,347,158	3,835,826	, ,	729,436,482	39,728,958
State and Other	-, - ,	- ,	,- · , · · ·	,,-	/	,,	- / /
Government	356,750,670	86,093,301	33,517,167	40,156,775	3,023,286	1,088,882,882	59,908,946
Municipals	, ,	3,752,709	11,695,088	-4,145,430	, ,	838,007,116	
Cooperatives		36,925,928	17,943,386	5,788,694	,	823,947,942	32,924,851
Other ³		539,580,762	255,648,515	-22,485,974		19,140,143,727	435,489,489
	12,240,513,929	1,362,271,420	496,566,566	605,034,262		33,002,311,049	889,593,645

Monetary settlements from contracts where electricity is not taken.

Includes other transactions involving line and substation rentals, system support charges, and special contract transactions.

Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

⁻Not Applicable

Notes: •The States of Alaska and Hawaii are not included. •NERC is the North American Electric Reliability Council. The Alaska Systems Coordinating

Council is not included. See glossary for a list of regions. •Totals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 9. Electricity Sales for Resale by Investor-Owned Utilities, by NERC Region, 1996

	Demand			Firm		
Purchasers by	Charge	Demand	Energy	Other	Total	
Ownership Class	Only1	Revenue	Revenue	Revenue	Revenue	Sales
	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(thousand kWh)
		, ,	Investor-Owned Util	ities in ECAR	` ′	
Investor Owned	556,381	436,983,128	887,941,603		1,313,262,073	50,338,284
Investor-Owned	330,361	685,213	2,146,095	-11,662,658	2,831,308	106,165
State and Other		003,213	2,140,073		2,031,300	100,103
Government	_	18.980.799	36,050,233	-3.784.151	51,246,881	2.188.568
Municipals	1,929,277	213,401,969	262,633,416	-18,126,352	457,909,033	13,644,282
Cooperatives	_	88,170,391	107,295,362	-2,361,258	193,104,495	6,330,969
Other ²	333,334	17,119,359	152,737,058	10,231	169,866,648	8,102,135
Total	2,818,992	775,340,859	1,448,803,767	-35,924,188	2,188,220,438	80,710,403
_		·	Investor-Owned Utili	ties in ERCOT		
Investor-Owned	2,574,672	78,691,608	15,346,711	36,085,551	130,123,870	2,438,089
Federal						_
State and Other						
Government	_	_	_	_	_	_
Municipals	_	6,917,484	5,320,411	9,151,256	21,389,151	675,054
Cooperatives	_	99,514,118	66,588,491	24,979,168	191,081,777	4,196,820
Other ²	_	2,358,490	16,135,316	183,635	18,677,441	717,751
Total	2,574,672	187,481,700	103,390,929	70,399,610	361,272,239	8,027,714
_			Investor-Owned Utili	ities in MAAC		
Investor-Owned	_	55,643,194	319,387,139	339,338	375,369,671	14,986,879
Federal	_	680,346	7,809,442	_	8,489,788	402,463
State and Other						
Government	_	502,272	5,439,920		5,942,192	282,667
Municipals	_	28,679,489	49,319,706	-456,714 5.040,270	77,542,481	2,091,109
Cooperatives		85,196,527	95,102,775	-5,948,270	174,351,032	3,601,810
Other ²	628,990	36,756,200	194,136,375	357,094	231,249,669	8,453,692
Total	628,990	207,458,028	671,195,357	-5,708,552	872,944,833	29,818,620
_			Investor-Owned Util	ities in MAIN		
Investor-Owned	30,000	108,897,678	267,905,735	-697,175	376,106,238	13,749,697
Federal	_	_	_	_	_	_
State and Other						
Government		_	_	_		
Municipals	53,760	103,230,481	165,158,042	-15,664,580	252,723,943	7,656,870
Cooperatives		65,675,199	39,815,875	381,604	105,872,678	2,535,308
Other ²	-1,194,972	2,178,692	59,614,015	2,720	61,795,427	3,568,740
Total	-1,111,212	279,982,050	532,493,667	-15,977,431	796,498,286	27,510,615
_			Investor-Owned Util	ities in MAPP		
Investor-Owned	808,975	41,731,087	85,621,748	-162,423	127,190,412	6,199,491
Federal	_	_	_	_	_	_
State and Other		# #AA	2.05	44 -	0.027	
Government	_	5,533	2,876	416	8,825	261
Municipals		40,296,771	49,037,379	4,721,040	94,055,190	3,066,097
Cooperatives	69,200	1,672,262	3,182,777	216,157	5,071,196	182,378
Other ²	161,245 1,039,420	909,437 84,615,090	1,566,805 139,411,585	18,791 4,793,981	2,495,033 228,820,656	115,020 9,563,247
Total						

Table 9. Electricity Sales for Resale by Investor-Owned Utilities, by NERC Region, 1996 (Continued)

Purchasers by Ownership Class	Energy	Other					
	Revenue	Revenue	Sales	Revenue	Sales	Revenue	Sales
	(dollars)	(dollars)	(thousand kWh)	(dollars)	(thousand kWh)	(dollars)	(thousand kWh)
			Investor-O	wned Utilities in	ECAR		
Investor-Owned	, ,	30,637,900	22,692,419	141,355,885	761,716	2,069,630,175	73,792,419
Federal	23,453,845	1,915,903	1,022,684	_	_	28,201,056	1,128,849
State and Other							
Government	8,799,874	1,104,760	467,455	_	_	61,151,515	2,656,023
Municipals		2,823,723	701,778	5,400	_	475,939,769	14,346,060
Cooperatives		1,788,128	1,457,608	_	637	222,830,649	7,789,214
Other ³	, ,	3,962,440	38,989,636	56,464,590	6,011,148	929,593,248	53,102,919
Total	1,356,248,253	42,232,854	65,331,580	197,825,875	6,773,501	3,787,346,412	152,815,484
•			Investor-Ov	vned Utilities in	ERCOT		
Investor-Owned	18,207,454	1,893,076	641,556	1,115	_	152,800,187	3,079,645
Federal	_	_	_	_	_	_	_
State and Other							
Government	4,912,622	49,581	168,394	_	_	4,962,203	168,394
Municipals	14,553,881	1,611,506	577,132	-7,725	_	37,546,813	1,252,186
Cooperatives	2,829,939	103,659	131,106	_	_	194,015,375	4,327,926
Other ³		471,161	1,271,287	1,156,309	580	52,070,967	1,989,618
Total	72,269,952	4,128,983	2,789,475	1,149,699	580	441,395,545	10,817,769
			Investor-O	wned Utilities in	MAAC		
Investor-Owned	238,620,814	198,398,593	14,607,012	122,974,917	5,506,297	935,363,995	35,100,188
Federal	_	_	_	_	_	8,489,788	402,463
State and Other							
Government	79,108	_	4,088	_	_	6,021,300	286,755
Municipals		214,169	758,337	_	21,701	97,210,963	2,871,147
Cooperatives		_	36,595	_	_	175,156,674	3,638,405
Other ³		12,646,460	16,622,012	82,299,755	3,145,496	686,473,670	28,221,200
Total	618,608,673	211,259,222	32,028,044	205,274,672	8,673,494	1,908,716,390	70,520,158
			Investor-O	wned Utilities in	MAIN		
Investor-Owned	197,739,370	1,415,774	11,768,946	_	1,551	575,291,382	25,520,194
Federal	13,118,068	_	762,047	_	_	13,118,068	762,047
State and Other							
Government	_	_	_	_	_	_	_
Municipals	57,645,269	2,008,500	2,077,760	_	_	312,431,472	9,734,630
Cooperatives	34,067,843	_	1,135,492	_	_	139,940,521	3,670,800
Other ³	91,389,185	344,050	7,898,876	_	_	152,333,690	11,467,616
Total	393,959,735	3,768,324	23,643,121	_	1,551	1,193,115,133	51,155,287
			Investor-O	wned Utilities in	MAPP		
Investor-Owned	73,590,298	2,088,780	4,925,794	173,395,725	5,728,200	377,074,190	16,853,485
Federal		925	75,098			941,719	75,098
State and Other	,		, -				,
Government	9,107,319	55,303	532,541	_	_	9,171,447	532,802
	, ,	354,290	898,245	-1,507	_	108,874,659	3,964,342
	14.466.686						
Municipals				_	_		2.321.390
	31,851,952	1,224,981 444,446	2,139,012 691,317	 -44,706	 -7,463	38,217,329 12,502,135	2,321,390 798,874

Table 9. Electricity Sales for Resale by Investor-Owned Utilities, by NERC Region, 1996 (Continued)

	Demand			Firm		
Purchasers by	Charge	Demand	Energy	Other	Total	
Ownership Class	Only ¹	Revenue	Revenue	Revenue	Revenue	Sales
	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(thousand kWh)
	,		Investor-Owned Util	lities in NPCC		
Investor-Owned	20,050	1,450,013,010	794,823,216	291,244,671	2,536,080,897	42,892,312
Federal	_	_	_	_	_	_
State and Other						
Government	470.006	439,137	8,663,431	— 5 004 670	9,102,568	492,971
Municipals	470,006 2,460	81,261,669 20,054,027	49,190,251	5,004,670 -2,272,316	135,456,590 54,290,889	2,731,690 755,680
Cooperatives Other ²	2,400	20,054,027 34,528,821	36,509,178 57,886,691	-2,272,316 763,578	93,179,090	755,080 3.449.211
Total	492,516	1,586,296,664	947,072,767	294,740,603	2,828,110,034	50,321,864
-			T 4 0 177	Par CERC		
-			Investor-Owned Util			
Investor-Owned	6,169,800	125,301,468 70.000	198,046,391 3,825,579	-2,136,657	321,211,202 3,895,579	9,604,046 182,074
State and Other	_	70,000	3,823,379	_	3,893,379	162,074
Government	_	1,706,921	15,655,315	363,947	17,726,183	705,943
Municipals	107,121	277,511,177	239,965,906	6,322,845	523,799,928	12,788,798
Cooperatives	28,623	557,212,314	287,667,728	22,426,189	867,306,231	15,834,431
Other ²	60,000	25,050,336	89,575,092	73,651	114,699,079	3,524,860
Total	6,365,544	986,852,216	834,736,011	27,049,975	1,848,638,202	42,640,152
-			Investor-Owned Ut	ilities in SPP		
Investor-Owned	1,992,039	43,911,987	22,815,542	7,553,066	74,280,595	2,358,024
Federal		1,094,585	1,850,425	119.163	3,064,173	81,469
State and Other		, ,	,,	.,	-,,	
Government	166,320	20,635,355	16,258,825	-1,511,677	35,382,503	948,393
Municipals	122,816	67,240,503	124,891,077	11,803,205	203,934,785	5,898,869
Cooperatives	8,671,098	172,923,584	125,834,381	88,230,659	386,988,624	11,557,278
Other ²	82,500	49,757,739	99,616,351	13,926,485	163,300,575	4,739,639
Total	11,034,773	355,563,753	391,266,601	120,120,901	866,951,255	25,583,672
-			Investor-Owned Util	ities in WSCC		
Investor-Owned	21,024,600	303,794,955	195,633,598	3,971,096	503,399,649	11,696,131
Federal	2,061,254	57,383,194	51,377,295	-54,587	108,705,902	2,404,166
State and Other						
Government	661,254	182,596,010	107,556,253	8,400,863	298,553,126	5,610,060
Municipals	462,500	107,892,808	75,386,113	1,024,397	184,303,318	3,777,721
Cooperatives	750	58,457,189	53,962,930	-7,050,553	105,369,566	2,672,694
Other ²	985,461	49,992,986	48,535,490	14,024,723	112,553,199	4,034,997
Total	25,195,819	760,117,142	532,451,679	20,315,939	1,312,884,760	30,195,769
-			Contiguous U.	.S. Total		
Investor-Owned	33,176,517	2,644,968,115	2,787,521,683	324,534,809	5,757,024,607	154,262,953
Federal	2,061,254	59,913,338	67,008,836	64,576	126,986,750	3,176,337
State and Other						
Government	827,574	224,866,027	189,626,853	3,469,398	417,962,278	10,228,863
Municipals	3,145,480	926,432,351	1,020,902,301	3,779,767	1,951,114,419	52,330,490
Cooperatives	8,772,131	1,148,875,611	815,959,497	118,601,380	2,083,436,488	47,667,368
Other ²	1,056,558	218,652,060	719,803,193	29,360,908	967,816,161	36,706,045
Total	49,039,514	5,223,707,502	5,600,822,363	479,810,838	11,304,340,703	304,372,056

Table 9. Electricity Sales for Resale by Investor-Owned Utilities, by NERC Region, 1996 (Continued)

		Nonfirm		Miscella	aneous ²	Region	Total
Purchasers by Ownership Class	Energy Revenue (dollars)	Other Revenue (dollars)	Sales (thousand kWh)	Revenue (dollars)	Sales (thousand kWh)	Revenue (dollars)	Sales (thousand kWh)
I	, ,		Investor-O	wned Utilities in	NPCC		
Investor-Owned	309,678,914	421,651,486	16,717,805	189,008,300	3,964,681	3,456,439,647	63,574,798
Federal	_	_	_	_	_	_	_
State and Other							
Government	4,179,653	1,666,039	168,447	190,000		15,138,260	661,418
Municipals	52,318,952	54,887,784	2,379,094	5,125,827		248,259,159	5,110,784
Cooperatives	1,311,662	660,942	64,779	68,609		56,334,562	820,243
Other ³	771,858,414	57,224,402	32,284,600	7,976,862	,	930,238,768	35,748,717
Total	1,139,347,595	536,090,653	51,614,725	202,369,598	3,979,371	4,706,410,396	105,915,960
-			Investor-O	wned Utilities in	SERC		
Investor-Owned	1,268,581,110	-1,153,716	28,672,171	_	3,200	1,594,808,396	38,279,417
Federal	7,330,738	5,000	276,139	_	-1,402	11,231,317	456,811
State and Other	, ,	,	,		*		· · · · · · · · · · · · · · · · · · ·
Government	3,478,170	_	127,302	_	29	21,204,353	833,274
Municipals	214,859,293	-7,528,406	5,890,309	1,371	_	731,239,307	18,679,107
Cooperatives	91,320,774	38,899,242	3,622,986	_	800	997,554,870	19,458,217
Other ³	333,109,408	12,943,097	14,961,345	-21,514,146		439,297,438	18,074,011
Total	1,918,679,493	43,165,217	53,550,252	-21,512,775	-409,567	3,795,335,681	95,780,837
-			Investor-0	Owned Utilities in	n SPP		
Investor-Owned	215,461,381	2,010,684	7,706,349	4,477	4,054	293,749,176	10,068,427
Federal	3,101,391	-488,917	102,457	_	2	5,676,647	183,928
State and Other							
Government	8,761,841	18,668	353,995	423,497		44,752,829	1,303,299
Municipals	35,124,710	5,635,048	1,609,557	2,505,901	75,819	247,323,260	7,584,245
Cooperatives	39,241,862	58,320	2,301,081	13,788,979	,	448,748,883	13,860,552
Other ³	474,622,310	1,510,704	20,222,024	6,101,946		645,618,035	25,201,230
Total	776,313,495	8,744,507	32,295,463	22,824,800	322,546	1,685,868,830	58,201,681
-			Investor-O	wned Utilities in	wscc		
Investor-Owned	365,119,139	43.120	24.272.117	420.552	24.023	890,007,060	35,992,271
Federal	22,978,000	5,120	1,279,465	-12,918,364		120,826,792	3,683,631
State and Other	22,570,000		1,277,100	12,710,501		120,020,772	2,002,021
Government	58,411,185	34,720	4,071,317	-1,516	_	357,658,769	9,681,377
Municipals	52,929,646	-31,637	3,843,103	-6,848		237,656,979	7,620,824
Cooperatives	20,453,594	473,217	1,420,294	12,751		126,309,878	4,092,988
Other ³	343,177,477	_	22,306,520	-2,433,152		454,282,985	26,341,866
Total	863,069,041	519,420	57,192,816	-14,926,577		2,186,742,463	87,412,957
-			Con	tiguous U.S. Tota			
Investor-Owned	3,270,816,416	656,985,697	132,004,169	627,160,971	15,993,722	10,345,164,208	302,260,844
Federal	70,922,836	1,432,911	3,517,890	-12,918,364	-1.400	188,485,387	6,692,827
State and Other	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,2,, 11	2,027,000	,> 10,501	2,.00	, 100,001	0,0,2,02
Government	97,729,772	2,929,071	5,893,539	611,981	940	520,060,676	16,123,342
Municipals	474,625,086	59,974,977	18,735,315	7,622,419		2,496,482,381	71,163,325
Cooperatives	249,821,294	43,208,489	12,308,953	13.870.339		2,399,108,741	59,979,735
Other ³	3,113,983,999	89,546,760	155,247,617	130,007,458	- /	4,302,410,936	200,946,051
Total	7,277,899,403	854,077,905	327,707,483	766,354,804	, ,	20,251,712,329	657,166,124
1 01111	1,211,077,703	054,011,905	321,101,703	700,554,004	23,000,303	20,231,112,329	037,100,124

Monetary settlements from contracts where electricity is not taken.

Includes other transactions involving line and substation rentals, system support charges, and special contract transactions.

Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

⁻Not Applicable

Notes: •The States of Alaska and Hawaii are not included. •NERC is the North American Electric Reliability Council. The Alaska Systems Coordinating

Council is not included. See glossary for a list of regions. •Totals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 10. Investor-Owned Utility Exchanges of Electricity with All Ownership Classes, by NERC Region, 1996

Exchange by Investor-Owned Utilities with Other Utilities	Received ² (thousand kWh)	Delivered ³ (thousand kWh)	Demand Charge (dollars)	Energy Charge (dollars)	Other Charge (dollars)	Settlement (dollars)
			Investor-Owned U	Itilities in ECAR		
Investor-Owned	753,864	716,291	_	278,423	-29,238	249,185
Federal	_	_	_	_	_	_
State and Other						
Government	_	_	_	_	_	_
Municipals	58,002	58,694	_	_	_	_
Cooperatives	127,534	160,537	_	_	-24,192	-24,192
Other ¹	38,962	61,339	_	_	_	_
Total	978,362	996,861	_	278,423	-53,430	224,993
			Investor-Owned U	tilities in ERCOT		
Investor-Owned	17,517,694	16,517,066	_	_	83,340	83,340
Federal	_	_	_	_	_	_
State and Other						
Government	1,510,767	2,284,857	_	_	_	_
Municipals	, ,	9,425	_	_	_	_
Cooperatives		226,777	_	3	62,317	62,320
Other ¹		14,541,286	_	-106,677	_	-106,677
Total		33,579,411	_	-106,674	145,657	38,983
			Investor-Owned U	Utilities in MAIN		
Investor-Owned	65,727	5,337		6,980	2,271	9,251
Federal	_	_	_	_	_	_
State and Other						
Government	_	_	_	_	_	_
Municipals	1,520	34,415	_	-634,056	-1,928	-635,984
Cooperatives	17,565	27,433	_	_	-221,415	-221,415
Other ¹	33,973	72,930	_	_	_	_
Total		140,115	_	-627,076	-221,072	-848,148
			Investor-Owned U	Itilities in MAPP		
Investor-Owned		_	_	_	_	_
Federal	72,055	33,590	_	_	102,695	102,695
State and Other						
Government	23,351	78	_	_	_	_
Municipals	_	_	_	_	_	_
Cooperatives	11,047	32,913	_	_	_	_
Other ¹	143,228	5,812	_	_	_	_
Total	249,681	72,393			102,695	102,695

Table 10. Investor-Owned Utility Exchanges of Electricity with All Ownership Classes, by NERC Region, 1996 (Continued)

Exchange by Investor-Owned Utilities with Other Utilities	Received ² (thousand kWh)	Delivered ³ (thousand kWh)	Demand Charge (dollars)	Energy Charge (dollars)	Other Charge (dollars)	Settlement (dollars)
			Investor-Owned U	tilities in NPCC		
Investor-Owned	. 634,778	188,270	_	977.123	10,705,840	11,682,963
Federal	,		_		_	_
State and Other						
Government	. 367,740	549,774	6,169,721	_	2,400,000	8,569,721
Municipals		_	_	_	_	_
Cooperatives	. —	_	_	_	_	_
Other ¹	,	16,709	_	_	1,017,392	1,017,392
Total	. 1,058,581	754,753	6,169,721	977,123	14,123,232	21,270,076
			Investor-Owned U	tilities in SERC		
Investor-Owned	. 33,299	27,202	_	_	_	_
Federal		16,785	_	_	_	_
State and Other						
Government		249,484	_	_	_	_
Municipals		2,578,714	-693,801	3,547,369	_	2,853,568
Cooperatives		2,907,350	-785,761	4,601,447	_	3,815,686
Other 1		2,711,816		-1,027,064	_	-1,027,064
Total	. 8,436,439	8,491,351	-1,479,562	7,121,752	_	5,642,190
			Investor-Owned U	Utilities in SPP		
Investor-Owned	. 72,922	85,304	1,570,000	11,514	19,399	1,600,913
Federal	. 113,414	117,819	73,875	_	_	73,875
State and Other						
Government	,	645,065	_	_	_	_
Municipals		2,328	_	_	_	_
Cooperatives		51,477	_	-19,331	_	-19,331
Other 1		1,058,730		- 5.015	-9,560	-9,560
Total	. 1,957,920	1,960,723	1,643,875	-7,817	9,839	1,645,897
			Investor-Owned Ut	tilities in WSCC		
Investor-Owned	. 3,776,421	3,807,986	1,260,000	-54,800	-23,425	1,181,775
Federal	. 16,597,879	17,468,462	3,653,393	15,396,145	-34,433,329	-15,383,791
State and Other						
Government		974,703	_	7,556,226	-629,795	6,926,431
Municipals		598,297	_	-81,584	-290,135	-371,719
Cooperatives		79,181	_		265,639	265,639
Other I		559,721	_	6,410,845	38,046	6,448,891
Total	. 22,772,109	23,488,350	4,913,393	29,226,832	-35,072,999	-932,774
			Contiguous	U.S. Total		
Investor-Owned	. 22,854,705	21,347,456	2,830,000	1,219,240	10,758,187	14,807,427
Federal		17,636,656	3,727,268	15,396,145	-34,330,634	-15,207,221
State and Other						
Government	. 3,865,546	4,703,961	6,169,721	7,556,226	1,770,205	15,496,152
Municipals		3,281,873	-693,801	2,831,729	-292,063	1,845,865
Cooperatives		3,485,668	-785,761	4,582,119	82,349	3,878,707
Other ¹		19,028,343	_	5,277,104	1,045,878	6,322,982
Total	. 69,132,606	69,483,957	11,247,427	36,862,563	-20,966,078	27,143,912

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

Notes: •The States of Alaska and Hawaii are not included. •The terms of settlement may include transferring and/or exchanging quantities of electricity with no dollar value assigned. •NERC is the North American Electric Reliability Council. The Alaska Systems Coordinating Council is not included. See glossary for a list of regions. •Totals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

Includes all transactions received from outside and within the region by all utilities operating within the region.

³ Includes all transactions delivered out of and within the region by all utilities operating within the region.

⁻Not Applicable

Table 11. Noninvestor-Owned Utility Exchanges of Electricity, by NERC Region, 1996 (Million Kilowatthours)

Exchanges with			ı	NERC Region	of Noninvesto	r-Owned Utilit	у			Contiguous
Other Utilities	ECAR	ERCOT	MAAC	MAIN	MAPP	NPCC	SERC	SPP	WSCC	U.S. Total
Federal										
Received1	_	_	_	_	_	_	22,657	858	10,917	34,432
Delivered ²	_	_	_	_	_	_	33,385	389	16,162	49,936
Net	_	_	_	_	_	_	-10,728	468	-5,245	-15,505
State and Other Government										
Received ¹	_	_	_	_	_	795	38	109	5,407	6,349
Delivered ²	_	_	_	_	_	310	46	21	2,791	3,168
Net	_	_	_	_	_	485	-8	88	2,616	3,181
Municipals										
Received ¹	33	320	474	_	25	1,633	1,163	439	9.006	13.093
Delivered ²	80	282	22	_	29	502	642	743	9,464	11,765
Net	-47	38	452	_	-5	1,130	521	-304	-457	1,328
Cooperatives										
Received ¹	349	21,473	_	133	2,216	_	53	381	1,530	26,136
Delivered ²	304	21,369	_	190	2,348	_	47	307	1,210	25,776
Net	46	104	_	-57	-133	_	6	74	320	360
Power										
Marketers										
Received1	412	946	_	_	_	181	370	_	2	1,912
Delivered ²	396	1,405	_	_	_	122	8	_	2	1,932
Net	16	-458	_	_	_	60	362	_	_	-20
Region Total										
Received1	795	22,739	474	133	2,240	2,609	24,282	1,787	26,862	81,922
Delivered ²	779	23,056	22	190	2,378	934	34,128	1,461	29,629	92,577
Net	15	-316	452	-57	-137	1,675	-9,846	326	-2,767	-10,655

¹ Includes all transactions received from outside and within the region by all utilities operating within the region.

² Includes all transactions delivered out of and within the region by all utilities operating within the region.

Notes: •The States of Alaska and Hawaii are not included. •NERC is the North American Electric Reliability Council. The Alaska System Coordinating Council is not included. See glossary for a list of regions. •Totals may not equal sum of components because of independent rounding. Source: Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

Electricity Wheeling for All Ownership Classes by Investor-Owned Utilities, Table 12. by NERC Region, 1996

Wheeling through Investor-Owned Utility				NERC Region	n of Investor-	Owned Utility				Contiguous U.S.
Service Territories	ECAR	ERCOT	MAAC	MAIN	MAPP	NPCC	SERC	SPP	WSCC	Total
Investor-Owned Wheeled Energy										
Rec. (thousand kWh) Del. (thousand kWh) Revenue	21,875,056 21,825,507	7,783,307 7,783,307	11,022,251 11,022,251	810,109 780,946	3,431,303 3,384,915	24,408,440 29,313,153	5,754,324 5,724,325	2,556,960 2,536,425	9,345,448 9,150,919	86,987,198 91,521,748
Demand (dollars) Energy (dollars) Other (dollars)	27,005,021 14,035,750 32,370,134	17,178,928 31,495 2,797,595	16,412,705 6,055,457 11,019,621	430,859 1,107,657 380,349	4,750,177 1,266,857 -1,050,918	65,928,668 15,369,650 33,183,313	7,605,098 682,727 5,548,305	7,667,054 2,552,219 290,354	19,676,781 9,574,281 1,584,749	166,655,291 50,676,093 86,123,502
Total (dollars) Federal Authorities Wheeled Energy	73,410,905	20,008,018	33,487,783	1,918,865	4,966,116	114,481,631	13,836,130	10,509,627	30,835,811	303,454,886
Rec. (thousand kWh) Del. (thousand kWh) Revenue	285,593 282,389	_	_	_	1,419,680 1,059,298	_	4,009,444 2,850,758	100,225 100,153	17,536,897 17,253,840	23,351,839 21,546,438
Demand (dollars) Energy (dollars) Other (dollars)	805,303 65,004 —				672,816 495,057 —		10,510,815 782,527 4,108,683	104,978 9,082 662,617	52,959,124 8,703,673 3,915,109	65,053,036 10,055,343 8,680,374
Total (dollars) State and Other Government Wheeled Energy	870,307	_	_	-6,035	1,167,873	_	15,402,025	776,677	65,577,906	83,788,753
Rec. (thousand kWh) Del. (thousand kWh) Revenue	986,646 970,226	181,511 181,511	_	_	1,187,682 1,133,296	2,896,410 12,600,287	391,700 376,249	2,952,184 2,946,552	21,149,227 20,648,258	29,745,360 38,856,379
Demand (dollars) Energy (dollars) Other (dollars)	728,929 -23,056 1,241,645	745,114 1,310 851,427			416,052 2,893,100 117,703	21,754,059 246,528,484 8,868,111	1,293,981 2,719 -128,692	7,874,506 56,475 340,289	31,781,534 8,812,828 779,891	64,594,175 258,271,860 12,070,374
Total (dollars) Municipals Wheeled Energy	1,947,518	1,597,851	_	_	3,426,855	277,150,654	1,168,008	8,271,270	41,374,253	334,936,409
Rec. (thousand kWh) Del. (thousand kWh) Revenue	5,305,540 5,113,465	3,192,869 3,191,311	832,784 832,784	3,073,786 3,018,790	1,856,646 2,181,648	6,921,681 6,967,167	4,441,599 4,117,907	2,595,410 2,595,410	13,145,523 12,940,460	41,365,838 40,958,942
Demand (dollars) Energy (dollars) Other (dollars)	18,775,335 2,680,262 3,512,160	3,907,772 5,829 3,311,081	4,731,867 318,756 7,920	10,256,498 240,525 127,080	5,192,606 2,124,972 530,692	12,118,332 66,138 6,128,296	26,606,630 5,456,602 -1,032,202	7,508,767 315,838 3,341	38,270,806 1,396,010 787,815	127,368,613 12,604,932 13,376,183
Total (dollars) Cooperatives Wheeled Energy Rec. (thousand kWh)	24,967,757 16,608,222	7,224,682 2,374,184	5,058,543 3,830,028	10,624,103	7,848,270 6,698,341	18,312,766 416,026	31,031,030 11,534,247	7,827,946 13,139,088	40,454,631 4,479,452	153,349,728 60,703,731
Del. (thousand kWh) Revenue Demand (dollars)	16,425,860 27,463,992	2,374,184 2,374,184 11,138,699	3,740,859 14,240,765	1,568,274	6,678,954 8,988,204	402,216 1,268,495	11,334,247 11,389,878 35,803,873	13,129,459 13,129,459 37,352,484	4,479,432 4,459,653 10,352,951	60,169,337
Energy (dollars)	1,333,548 9,617,287 38,414,827	5,211 452,741 11,596,651	14,240,765	7,685 2,500 10,171,230	3,722,346 407,135 13,117,685	423,283 1,691,778	9,501,980 8,832,496 54,138,349	2,941,189 14,764,871 55,058,544	152,244 1,431,748 11,936,943	17,664,203 35,932,061 210,366,772
Other ¹ Wheeled Energy										
Rec. (thousand kWh) . Del. (thousand kWh) Revenue	10,442,036 10,581,269	8,067,665 8,047,990	4,587,412 4,581,534	1,701,518 1,700,173	1,912,103 909,828	25,877,860 12,136,656	3,838,262 3,778,986	3,345,110 3,329,424	5,311,224 5,286,661	65,083,190 50,352,521
Demand (dollars) Energy (dollars) Other (dollars) Total (dollars)	16,017,531 7,824,785 7,388,890 31,231,206	17,481,944 73,914 3,690,084 21,245,942	3,806,324 6,399,174 7,484,312 17,689,810	3,183,138 3,124,162 990,029 7,297,329	1,485,909 1,597,787 2,426,945 5,510,641	36,888,857 11,214,144 115,713,770 163,816,771	6,598,559 2,579,769 3,004,934 12,183,262	959,248 5,203,292 25,491,628 31,654,168	7,189,943 7,734,924 4,311,143 19,236,010	93,611,453 45,751,951 170,501,735 309,865,139
Region Total Wheeled Energy Rec. (thousand kWh)	55,503.093	21,599,536	20,272,475	7,297,329	16,505,755	60,520,417	29,969,576	24,688,977	70,967,771	307,237,156
Del. (thousand kWh) Revenue Demand (dollars)	55,198,716 90,796,111	21,578,303 50,452,457	20,177,428	7,068,183 24,031,540	15,347,939 21,505,764	61,419,479	28,238,103 88,418,956	24,637,423 61,467,037	69,739,791 160,231,139	303,405,365
Energy (dollars) Other (dollars) Total (dollars)	25,916,293 54,130,116	117,759 11,102,928	12,773,387 18,511,853 70,476,901	4,480,029 1,493,923	12,100,119 2,431,557	273,178,416 164,316,773 575,453,600	19,006,324 20,333,524	11,078,095 41,553,100	36,373,960 12,810,455	395,024,382 326,684,229 1,395,761,687

 $^{1\}quad \text{Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.}$

[—]Not Applicable

Notes: •Wheeling (transmission services) is reported in account 456, "Transmission For Others," and in account 565, "Transmission By Others," of the FERC Uniform System of Accounts. •The States of Alaska and Hawaii are not included. •NERC is the North American Electric Reliability Council. The Alaska Systems Coordinating Council is not included. See glossary for a list of regions. •Totals may not equal sum of components because of independent

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 13. Electricity Wheeling by All Ownership Classes to Investor-Owned Utilities, by NERC Region, 1996

Wheeling to			1	NERC Region	n of Investor-	Owned Utility				Contiguous
Investor-Owned Utility Service Territories	ECAR	ERCOT	MAAC	MAIN	MAPP	NPCC	SERC	SPP	WSCC	U.S. Total
Investor-Owned										
Wheeled Energy				2 215 066		99,036			14,221,257	16 525 250
Rec. (thousand kWh) Del. (thousand kWh)	7,749,504	306,458	 8,117,468	2,215,066 3,269,842	2,037,787	27,184,462	943,404	2,511,583	22,129,563	16,535,359 74,250,071
Cost	1,149,304	300,436	0,117,400	3,209,642	2,037,767	27,164,402	943,404	2,311,363	22,129,303	74,230,071
Demand (dollars)	2,500,726	13,348,474	144,643	1,528,482	2,153,409	62,222,196	289,038	8,247,465	29,614,211	120,048,644
Energy (dollars)	75,727	_	_	5,380,008	435,322	20,820,174	40,055	2,193,655	8,712,430	37,657,371
Other (dollars)	19,884,970	11,963,661	5,105,976	217,673	1,584,854	93,434,832	412,397	5,772,894	8,910,739	147,287,996
Total (dollars)	22,461,423	25,312,135	5,250,619	7,126,163	4,173,585	176,477,202	741,490	16,214,014	47,237,380	304,994,011
Federal Authorities										
Wheeled Energy	2.264								0.049.966	0.051.120
Rec. (thousand kWh) Del. (thousand kWh)	2,264 6,974	_	_	_	926,452	_	_	832	9,048,866 43,505,882	9,051,130 44,440,140
Cost	0,974	_	_		920,432	_		632	43,303,662	44,440,140
Demand (dollars)	_	_	_	_	22,534	_	_	1,200,000	67,495,162	68,717,696
Energy (dollars)	4,528	_	_	_	1,038,746	_	_	51,786	30,818,571	31,913,631
Other (dollars)	483,968	_	_	7,536	_	_	39,159	69,672	21,261,376	21,861,711
Total (dollars)	488,496	_	_	7,536	1,061,280	_	39,159	1,321,458	119,575,109	122,493,038
State and Other										
Government										
Wheeled Energy Rec. (thousand kWh) .									1,088,578	1,088,578
Del. (thousand kWh)		165,277			363,540	3,499,658	136,795	31,705	8,290,361	12,487,336
Cost		103,277			303,340	3,177,030	130,773	31,703	0,270,301	12,107,330
Demand (dollars)	_	486,512	_	_	1,783,148	4,408,982	826,260	_	3,535,678	11,040,580
Energy (dollars)	_	972	_	_	_	30,096,268	_	56,239	1,051,836	31,205,315
Other (dollars)	-23,000	769,176	_	_	_	2,369,101	62,474	55,068	-8,045	3,224,774
Total (dollars)	-23,000	1,256,660	_	_	1,783,148	36,874,351	888,734	111,307	4,579,469	45,470,669
Municipals										
Wheeled Energy Rec. (thousand kWh) .	_	_	_	_	_	_	_	_	437,552	437,552
Del. (thousand kWh)	619,593	2,204,021		3,161		63,077	4,219,382	991	763,991	7,874,216
Cost	,	_,_ , , , ,		-,			.,,,			.,,
Demand (dollars)	_	1,242,628	_	_	_	144,508	118,663	160,650	1,473,189	3,139,638
Energy (dollars)	_	2,439	_	_	_	_	239,225	-15,866	876,685	1,102,483
Other (dollars)	61,432	588,800	17,010	_	_	926,506		561,200	-477,050	1,677,898
Total (dollars)	61,432	1,833,867	17,010	_	_	1,071,014	357,888	705,984	1,872,824	5,920,019
Cooperatives Wheeled Energy										
Rec. (thousand kWh) .	416,370	_	_	_	_	_	_	_	66,510	482,880
Del. (thousand kWh)	926,902	50,887	_	246,974	515,120	_	59,751	38,522	387,224	2,225,380
Cost	,-	,		- ,	,		,	,-	,	, -,
Demand (dollars)	1,174,072	41,661	_	_	277,340	2,022	177,946	749,661	1,817,473	4,240,175
Energy (dollars)	3,625	512	_	7,405	408,156	_	1,339	50,301	2,447,573	2,918,911
Other (dollars)	706,109	13,142	_		530,045	1,188,069	9,816	364,324	2,096,422	4,907,927
Total (dollars) Other ¹	1,883,806	55,315	_	7,405	1,215,541	1,190,091	189,101	1,164,286	6,361,468	12,067,013
Wheeled Energy										
Rec. (thousand kWh) .	_	_	_	264,868	_	185,622	_	534,658	19,377,106	20,362,254
Del. (thousand kWh)	8,207,502	2,548,999	_	264,824	_	6,447,477	4,145,562	552,125	19,969,435	42,135,924
Cost										
Demand (dollars)		-12,457,348	15,166,638	421,177	_	11,833,623	11,156,733	1,912,891	1,171,501	29,217,440
Energy (dollars)	27,766	8,604		414,618	383,173	3,606,544	29,062	212,707	869,820	5,552,294
Other (dollars)	400,075	1,779,525	891,781	-2,330	5,511,679	11,726,546 27,166,713	-446,766	28,204,157	5,901,468	53,966,135
Total (dollars) Region Total	440,000	-10,669,219	16,058,419	833,465	5,894,852	27,100,713	10,739,029	30,329,755	7,942,789	88,735,869
Wheeled Energy										
Rec. (thousand kWh) .	418,634	_	_	2,479,934	_	284,658	_	534,658	44,239,869	47,957,753
Del. (thousand kWh)	17,510,475	5,275,642	8,117,468	3,784,801	3,842,899	37,194,674	9,504,894	3,135,758	95,046,456	183,413,067
Cost										
Demand (dollars)	3,687,023	2,661,927	15,311,281	1,949,659	4,236,431	78,611,331	12,568,640	12,270,667	105,107,214	236,404,173
Energy (dollars)	111,646	12,527	— 6 014 767	5,802,031	2,265,397	54,522,986 109,645,054	309,681	2,548,822	44,776,915	110,350,005
Other (dollars) Total (dollars)	21,513,554 25,312,223	15,114,304 17,788,758	6,014,767 21,326,048	222,879 7,974,569	7,626,578 14,128,406	242,779,371	77,080 12,955,401	35,027,315 49,846,804	37,684,910 187,569,039	232,926,441 579,680,619
Total (donats)	23,312,223	17,700,730	21,320,040	1,717,509	1-7,120,700	2-2,117,311	12,755,701	17,070,004	107,505,059	377,000,019

 $^{1\}quad \text{Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.}$

Includes transactions with power markets, pure post, attended.—Not Applicable
Notes: •Wheeling (transmission services) is reported in account 456, "Transmission For Others," and in account 565, "Transmission By Others," of
the FERC Uniform System of Accounts. •The States of Alaska and Hawaii are not included. •NERC is the North American Electric Reliability Council. See
glossary for a list of regions. Total quantity of wheeling may not be reported. •Totals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others."

•FERC Form 1F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 14. Purchases by Cooperative Borrowers, by NERC Region, 1996

Seller by		NER	C Region of Cooperatives		
Ownership Class	ECAR	ERCOT	MAAC	MAIN	MAPP
Investor-Owned					
Purchases (thousand kWh) Cost (dollars)	3,459,119 108,629,675	3,384,867 138,951,349	2,848,717 135,696,188	552,151 17,939,281	1,816,230 41,429,392
Federal Authorities					
Purchases (thousand kWh) Cost (dollars)	5,308,130 123,635,421	230,569 4,928,671	_	41,350 919,968	4,217,334 57,616,356
State and Other					
Government Purchases (thousand kWh)	_	725,350	461,911	_	2,880,263
Cost (dollars)	_	28,281,007	3,116,770	_	95,259,492
Municipals Dynahassa (thousand lyW/h)	1 600 774	27.476			170 260
Purchases (thousand kWh) Cost (dollars)	1,600,774 34,443,452	27,476 518,622	_	91,000	170,369 3,936,127
Cooperatives		0.00		0.440.44	
Purchases (thousand kWh) Cost (dollars)	28,481,343 1,485,689,196	8,763,691 349,005,583	3,647,719 200,491,600	8,613,562 344,574,923	24,939,303 860,724,238
Other 1					
Purchases (thousand kWh) Cost (dollars)	617,845 14,403,686	1,661,132 46,939,886	416,868 20,158,842	114 10,111	2,276,483 53,414,568
Region Total					
Purchases (thousand kWh)	39,467,211	14,793,085	7,375,215	9,207,177	36,299,982
Cost (dollars)	1,766,801,430	568,625,118	359,463,400	363,535,283	1,112,380,173
		NERC Region of C	Cooperatives		Contiguous U.S.
	NPCC	SERC	SPP	WSCC	Total
Investor-Owned					
Purchases (thousand kWh)	685,702	18,846,927	8,215,883	1,620,729	41,430,325
Cost (dollars)	53,281,024	822,685,232	283,865,049	60,017,033	1,662,494,223
Federal Authorities Purchases (thousand kWh)	_	33,647,634	3,423,479	9,058,350	55,926,846
Cost (dollars)	_	1,403,177,323	60,889,387	221,424,781	1,872,591,907
State and Other Government					
Purchases (thousand kWh)	185,004	8,499,258	4,400,453	302,953	17,455,192
Cost (dollars)	3,397,005	319,132,053	103,232,009	7,662,085	560,080,421
Municipals Purchases (thousand kWh)	9,510	224,443	4,057,128	152	6,089,852
Cost (dollars)	677,169	15,015,375	37,648,359	2,184	92,332,288
Cooperatives		62.015.004	42.050.252	15 020 500	10.5 750 151
Purchases (thousand kWh) Cost (dollars)	_	63,316,834 2,947,291,726	43,068,363 1,633,959,615	15,928,599 626,365,896	196,759,414 8,448,102,777
Other 1					
Purchases (thousand kWh) Cost (dollars)	110,586 4,735,321	2,493,771 93,174,103	1,965,472 79,809,760	5,327,160 104,163,377	14,869,431 416,809,654
Region Total					
Purchases (thousand kWh) Cost (dollars)	990,802 62,090,519	127,028,867 5,600,475,812	65,130,778 2,199,404,179	32,237,943 1,019,635,356	332,531,060 13,052,411,270

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

[—]Not Applicable

Notes: •The States of Alaska and Hawaii are not included. •NERC is the North American Electric Reliability Council. The Alaska Systems Coordinating Council is not included. See glossary for a list of regions. •Totals may not equal sum of components because of independent rounding

Council is not included. See glossary for a list of regions. *Totals may not equal sum of components because of independent rounding.

Source: Rural Utilities Service, RUS Form 7, "Financial and Statistical Report," RUS Form 12a through 12i, "Electric Power Supply Borrowers," Form 12c through 12g, "Electric Distribution Borrowers with Generating Facilities."

Table 15. Receipts by Investor-Owned Utilities Within and Between NERC Regions, 1996

	Source	of Electricity from All Ow	nership Classes by NERC Regio	n
NERC Region of Investor-Owned Utilities/	ECA	3	ERCO'	Т
Type of Transaction	Energy (thousand kWh)	Cost (dollars)	Energy (thousand kWh)	Cost (dollars)
ECAR				
Firm Purchases	50,077,566	1,774,691,104	_	_
Nonfirm Purchases	51,092,368	1,064,132,206	462,742	9,574,773
Miscellaneous Purchases1	10,143,510	307,165,617	12	
Exchanges Received ²	510,343	-374,075	_	_
Wheeling By Others ³	416,370	20,611,831	_	_
RCOT	110,570	20,011,001		
Firm Purchases	_	_	14,115,005	699,131,093
Nonfirm Purchases	_	_	18,332,767	412,316,782
Miscellaneous Purchases ¹	_	_	44,617	-68,89
Exchanges Received ²	<u>_</u>		28,796,672	38,98
Wheeling By Others ³			28,790,072	17,339,969
MAAC	_	_	_	17,339,90
Firm Purchases	2 172 152	04.050.003		
Nonfirm Purchases	3,172,152	94,050,093	622 296	12 575 224
Miscellaneous Purchases ¹	4,627,065	222,436,846	622,386	12,575,320
	_	51,453	_	_
Exchanges Received ²	_	_	_	_
Wheeling By Others ³	-	_	_	_
MAIN				
Firm Purchases	532,797	15,953,984	377,524	8,146,79
Nonfirm Purchases	1,799,716	44,094,441	207,872	5,450,43
Miscellaneous Purchases ¹	_	3,000	_	_
Exchanges Received ²	100	2,333	_	_
Wheeling By Others ³	2,494	2,095,321	_	_
MAPP				
Firm Purchases	_	_	_	_
Nonfirm Purchases	6,664	220,435	26,437	794,764
Miscellaneous Purchases ¹	_	_	_	_
Exchanges Received ²	_	_	_	_
Wheeling By Others ³	_	_	_	_
NPCC				
Firm Purchases	_	_	_	_
Nonfirm Purchases	222,749	3,483,040	3,550	205,895
Miscellaneous Purchases ¹	_		_	_
Exchanges Received ²	_	_	_	_
Wheeling By Others ³	_	55,966	_	_
SERC				
Firm Purchases	8,868,947	281,447,316	21,600	478,260
Nonfirm Purchases	238,308	3,576,019	687,541	14,591,580
Miscellaneous Purchases ¹	10,400	3,370,017		
Exchanges Received ²	24,888			
Wheeling By Others ³	24,000	138,701	_	1,825
SPP	_	138,701	_	1,02.
	421.072	14.511.726		
Firm Purchases	421,972	14,511,726	1.701.000	37.248.584
Nonfirm Purchases	6,405	108,611	1,791,088	, - ,
Miscellaneous Purchases 1	-	_	35,478	373,87
Exchanges Received ²	_	_	_	
Wheeling By Others ³	_	_	_	9,533,903
VSCC				
Firm Purchases	13	307		
Nonfirm Purchases	89,751	1,350,961	1,232,752	17,968,080
Miscellaneous Purchases 1	_	_	22	_
Exchanges Received ²	_	_	23,838	_
Wheeling By Others ³	_	_	96	96
Region Total				
Firm Purchases Deliveries	63,073,447	2,180,654,530	14,514,129	707,756,144
Nonfirm Purchases Deliveries	58,083,026	1,339,402,559	23,367,135	510,726,217
Misc Purchases Deliveries ¹	10,153,910	307,220,070	80,129	304,986
Exchanges Received Deliveries ²	535,331	-371,742	28,820,510	38,98
Wheeling By Others Deliveries ³	418,864	22,901,819	96	50,700

Table 15. Receipts by Investor-Owned Utilities Within and Between NERC Regions, 1996 (Continued)

	Source of Electricity from All Ownership Classes by NERC Region						
NERC Region of Investor-Owned Utilities/	MAA	С	MAIN	[
Type of Transaction	Energy (thousand kWh)	Cost (dollars)	Energy (thousand kWh)	Cost (dollars)			
ECAR							
Firm Purchases	533,279	10,343,852	1,615,736	33,119,380			
Nonfirm Purchases	2,696,083	60,789,568	1,228,746	19,025,92			
Miscellaneous Purchases 1	229,579						
Exchanges Received ²	229,319	_	_	_			
Wheeling By Others ³	_	566 120	_	_			
	_	566,129	_	_			
ERCOT							
Firm Purchases	_	_	_	_			
Nonfirm Purchases	_	_	_	_			
Miscellaneous Purchases 1	_	_	_	_			
Exchanges Received ²	_	_	_	_			
Wheeling By Others ³	_	_	_	_			
MAAC							
Firm Purchases	11,416,230	435,537,212	43,034	1,676,153			
Nonfirm Purchases	63,857,417	2,148,479,472	6,105,635	105,170,479			
Miscellaneous Purchases ¹	1,579,665	71,590,552					
Exchanges Received ²	1,579,005 —	/1,390,332 —	<u> </u>	_			
	_		_	_			
Wheeling By Others ³	_	21,309,038	_	_			
MAIN							
Firm Purchases	475,210	14,217,826	7,748,124	233,841,58			
Nonfirm Purchases	52,092	1,649,808	11,606,254	222,160,545			
Miscellaneous Purchases ¹	_	_	114,894	-127,226			
Exchanges Received ²	_	_	118,685	-850,481			
Wheeling By Others ³	_	509,006	404,942	1,796,466			
MAPP		*	,	, ,			
Firm Purchases	_	_	565,733	23,735,052			
Nonfirm Purchases	_		837,811	20,255,74			
Miscellaneous Purchases 1			657,611				
	_	_	_	_			
Exchanges Received ²	_	_	_				
Wheeling By Others ³	_	_	_	312,799			
NPCC							
Firm Purchases	3,819,758	289,760,796	_	_			
Nonfirm Purchases	6,840,196	159,081,640	_	_			
Miscellaneous Purchases 1	_	_	_	_			
Exchanges Received ²	_	_	_	_			
Wheeling By Others ³	_	3,402,990	_	_			
SERC		-, - ,					
Firm Purchases	2,516,491	55,592,141	404,290	14,752,745			
Nonfirm Purchases	606,662	11,762,144	69,399	867,732			
Miscellaneous Purchases ¹	990		44,898	007,732			
Exchanges Received ²	226,200	-1,027,064	44,838	_			
Wheeling Decoders 3	220,200		_	_			
Wheeling By Others ³	_	150,318	_	_			
SPP			***				
Firm Purchases	_	_	311,890	12,134,329			
Nonfirm Purchases	19,484	427,639	2,986,472	51,485,212			
Miscellaneous Purchases 1	_	_	_	_			
Exchanges Received ²	_	_	2,700	16,005			
Wheeling By Others ³	_	_	_	16,842			
VSCC				,-			
Firm Purchases	381,412	16,933,536	457,280	8,275,549			
Nonfirm Purchases	49,260	1,098,240	478,727	7,837,884			
Miscellaneous Purchases ¹	800		130	-,037,00			
Exchanges Received ²	800	_	130	_			
	_	_	_	_			
Wheeling By Others ³	_	_	_	_			
Region Total	464						
Firm Purchases Deliveries	19,142,380	822,385,363	11,146,087	327,534,793			
Nonfirm Purchases Deliveries	74,121,194	2,383,288,511	23,313,044	426,803,515			
Misc Purchases Deliveries ¹	1,811,034	71,590,552	159,922	-127,226			
Exchanges Received Deliveries ²	226,200	-1,027,064	121,385	-834,476			
Wheeling By Others Deliveries ³	-,	25,937,481	404,942	2,126,107			

Table 15. Receipts by Investor-Owned Utilities Within and Between NERC Regions, 1996 (Continued)

	Source	of Electricity from All Ow	nership Classes by NERC Region)II
NERC Region of Investor-Owned Utilities/	MAP	Р	NPCC	
Type of Transaction	Energy (thousand kWh)	Cost (dollars)	Energy (thousand kWh)	Cost (dollars)
CCAR				
Firm Purchases	_	_	1,993,460	52,970,20
Nonfirm Purchases	800	13,600	82,654	3,291,84
Miscellaneous Purchases ¹	_			_
Exchanges Received ²	_	_	_	_
Wheeling By Others ³	_	_	_	2,42
RCOT				2,12
Firm Purchases	_	_	_	_
Nonfirm Purchases	_		_	_
Miscellaneous Purchases 1	_	_	_	_
	_	_	_	_
Exchanges Received ²	_	_	_	_
Wheeling By Others ³	_	_	_	_
IAAC	4 070 071	204 220 007	2.020.222	05 225 52
Firm Purchases	4,870,951	304,228,087	2,028,223	85,325,72
Nonfirm Purchases	59,974	1,227,004	2,274,337	102,929,74
Miscellaneous Purchases 1	_	_	-28,000	179,89
Exchanges Received ²	_	_	_	_
Wheeling By Others ³	_	17,010	_	_
MAIN				
Firm Purchases	3,873,907	64,669,314	_	_
Nonfirm Purchases	3,884,727	58,727,808	_	_
Miscellaneous Purchases ¹	_	_	_	_
Exchanges Received ²	_	_	_	_
Wheeling By Others ³	2,072,498	2,991,494	_	_
MAPP				
Firm Purchases	14,859,426	391,631,724	239,138	5,173,12
Nonfirm Purchases	9,038,753	193,127,546	472	7,59
Miscellaneous Purchases ¹	5,317,918	216,584,966	_	_
Exchanges Received ²	177,626	_	_	_
Wheeling By Others ³		12,752,947	_	_
IPCC		,,		
Firm Purchases	_	_	86,281,627	4,384,833,21
Nonfirm Purchases	_	_	88,501,910	4,180,889,15
Miscellaneous Purchases ¹	_	_	20,937	22,222,04
Exchanges Received ²	_	_	1,058,581	21,270,07
Wheeling By Others ³			284,658	239,320,41
EERC	_	_	284,038	239,320,41
	77.051	4 926 402	975 991	44 777 24
Firm Purchases	77,951	4,826,403	875,881	44,777,34
Nonfirm Purchases	5,345	107,990	108,138	2,595,16
	_	_	_	_
Exchanges Received ²	-	_	_	_
Wheeling By Others ³	_	_	_	_
PP Til D. I	20-2-			
Firm Purchases	307,265	6,022,091	-	_
Nonfirm Purchases	1,526,165	22,750,612	11	19
Miscellaneous Purchases 1	10,812	1,010,408	_	_
Exchanges Received ²	_	_	_	_
Wheeling By Others ³	_	70,864	_	_
VSCC				
Firm Purchases	102,365	3,513,563	350,543	14,699,46
Nonfirm Purchases	102,352	1,829,531	153,375	3,471,72
Miscellaneous Purchases 1	_	_	_	-53,31
Exchanges Received ²	_	_	_	_
Wheeling By Others ³	_	_	_	_
egion Total				
Firm Purchases Deliveries	24,091,865	774,891,182	91,768,872	4,587,779,07
Nonfirm Purchases Deliveries	14,618,116	277,784,091	91,120,897	4,293,185,41
Misc Purchases Deliveries ¹	5,328,730	217,595,374	-7,063	22,348,61
Exchanges Received Deliveries ²	177,626		1,058,581	21,270,07
Wheeling By Others Deliveries ³	- / / ,020		-,000,001	,-,0,07

Table 15. Receipts by Investor-Owned Utilities Within and Between NERC Regions, 1996 (Continued)

	Boulee	e of Electricity from All Ow						
NERC Region of Investor-Owned Utilities/	SERC	2	SPP					
Type of Transaction	Energy (thousand kWh)	Cost (dollars)	Energy (thousand kWh)	Cost (dollars)				
ECAR								
Firm Purchases	206,492	5,578,701	7,440	240,47				
Nonfirm Purchases	1,545,899	37,408,839	4,156	146,78				
Miscellaneous Purchases ¹	651	57,100,037 —						
Exchanges Received ²	468,019	599,068						
Wheeling By Others ³	,		_	- 0 114				
ERCOT	2,264	4,123,723	_	8,11:				
				1.094.72				
Firm Purchases	_	_	1 222 205	1,084,720				
Nonfirm Purchases	_	_	1,322,285	28,681,30				
Miscellaneous Purchases ¹	_	_		_				
Exchanges Received ²	_	_	4,764,057	_				
Wheeling By Others ³	_	_	_	448,789				
MAAC								
Firm Purchases	348,839	10,253,266	_	_				
Nonfirm Purchases	8,311,396	178,431,398	_	_				
Miscellaneous Purchases 1	_	-55,195	_	_				
Exchanges Received ²	_	_	_	_				
Wheeling By Others ³	_	_	_	_				
MAIN								
Firm Purchases	1,095,801	28,501,143	2,976,142	65,439,56				
Nonfirm Purchases	1,164,439	27,313,456	115,614	2,401,90				
Miscellaneous Purchases ¹	1,104,439 —	27,313, 4 30	115,014	2,401,90				
Exchanges Received ²	_	_	_	_				
Wheeling By Others ³	_	2 122	_	 500 150				
	_	2,123	_	580,159				
MAPP								
Firm Purchases				_				
Nonfirm Purchases	25,993	723,898	464,572	12,638,962				
Miscellaneous Purchases 1	_	_	_	_				
Exchanges Received ²	_	_	_	_				
Wheeling By Others ³	_	_	_	_				
NPCC								
Firm Purchases	_	_	62,400	1,431,87				
Nonfirm Purchases	_	_	105	2,205				
Miscellaneous Purchases ¹	_	_	_	_				
Exchanges Received ²	_	_	_	_				
Wheeling By Others ³	_	_	_	_				
SERC								
Firm Purchases	46,016,473	2,637,217,636	8,364	255,700				
Nonfirm Purchases	29,815,320	711,922,955	373,294	10,049,774				
Miscellaneous Purchases ¹	132,855	_	_	_				
Exchanges Received ²	8,185,351	6,669,254	_	_				
Wheeling By Others ³		12,649,247	_	15,310				
SPP		12,012,1		10,01				
Firm Purchases	8,127,820	657,989,950	1,681,041	67,266,285				
Nonfirm Purchases	8,751,979	184,478,593	37,679,767	1,089,665,553				
Miscellaneous Purchases ¹	U,731,979		1,946,427	14,895,76				
Exchanges Received ²	_	_						
Wheeling By Others ³	_	2 210 520	1,955,220	1,629,899				
	_	3,810,589	534,658	35,939,29				
VSCC			105 151	20.774.07				
Firm Purchases	- 02 500		435,461	29,764,85				
Nonfirm Purchases	82,680	1,306,258	342,490	6,290,55				
Miscellaneous Purchases 1	_	_	_	392				
Exchanges Received ²	_	_	1,284	_				
Wheeling By Others ³	_	_	_	170,533				
Region Total								
Firm Purchases Deliveries	55,795,425	3,339,540,696	5,170,848	165,483,47				
Nonfirm Purchases Deliveries	49,697,706	1,141,585,397	40,302,283	1,149,877,043				
Misc Purchases Deliveries ¹	133,506	-55,195	1,946,427	14,896,160				
Exchanges Received Deliveries ²	8,653,370	7,268,322	6,720,561	1,629,892				
Wheeling By Others Deliveries ³	2,264	20,585,682	534,658	37,162,205				
	2,201	20,505,002	334,030	57,102,200				

Table 15. Receipts by Investor-Owned Utilities Within and Between NERC Regions, 1996 (Continued)

	Source	of Electricity from All Own	nership Classes by NERC Region	on
NERC Region of Investor-Owned Utilities/	WSCO	C	Contiguous U	J.S. Total
Type of Transaction	Energy (thousand kWh)	Cost (dollars)	Energy (thousand kWh)	Cost (dollars)
ECAR				
Firm Purchases	15,554	842,151	54,449,527	1,877,785,867
Nonfirm Purchases	10,496	482,838	57,123,944	1,194,866,377
Miscellaneous Purchases ¹	_	_	10,373,752	307,165,617
Wheeling By Others ³	_	_	978,362 418,634	224,993 25,312,223
ERCOT	-	_	416,034	23,312,223
Firm Purchases	_	_	14,115,005	700,215,813
Nonfirm Purchases	59,683	1,298,384	19,714,735	442,296,471
Miscellaneous Purchases 1			44,617	-68,891
Exchanges Received ²	_	_	33,560,729	38,983
Exchanges Received ² Wheeling By Others ³	_	_		17,788,758
MAAC				
Firm Purchases	47,705	973,416	21,927,134	932,043,952
Nonfirm Purchases	377,235	23,366,738	86,235,445	2,794,617,008
Miscellaneous Purchases 1	_	_	1,551,665	71,766,700
Exchanges Received ² Wheeling By Others ³	_	_	_	21.226.049
MAIN	-	_	_	21,326,048
Firm Purchases			17,079,505	430,770,212
Nonfirm Purchases	1,868,914	26,979,860	20,699,628	388,778,253
Miscellaneous Purchases ¹	1,808,914	20,979,800	114,894	-124.226
Exchanges Received ²	_	_	118,785	-848,148
Exchanges Received ² Wheeling By Others ³	_	_	2,479,934	7,974,569
MAPP			_,,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Firm Purchases	1,165,837	31,240,258	16,830,134	451,780,160
Nonfirm Purchases	3,779,482	48,465,072	14,180,184	276,234,011
Miscellaneous Purchases I	-55,656	_	5,262,262	216,584,966
Exchanges Received ²	72,055	102,695	249,681	102,695
Wheeling By Others ³	_	1,062,660	_	14,128,406
PCC			00.152.505	4 555 005 001
Firm Purchases	127.666	11 211 000	90,163,785	4,676,025,881
Nonfirm Purchases	127,000	11,211,099	95,696,176 20,937	4,354,873,036 22,222,047
Exchanges Received ²	_	_	1.058.581	21.270.076
Wheeling By Others ³			284,658	242,779,371
ERC			201,030	212,777,371
Firm Purchases	2,064,675	84,678,579	60,854,672	3,124,026,124
Nonfirm Purchases	38,884	760,084	31,942,891	756,233,440
Miscellaneous Purchases1			189,143	
Exchanges Received ²	_	_	8,436,439	5,642,190
Exchanges Received ² Wheeling By Others ³	_	_	_	12,955,401
PP				
Firm Purchases	477,793	24,958,559	11,327,781	782,882,940
Nonfirm Purchases	1,111,593	20,950,540	53,872,964	1,407,115,538
Miscellaneous Purchases ¹ Exchanges Received ² Wheeling By Others ³	430,439	5,572,030	2,423,156 1,957,920	21,852,083 1,645,897
Wheeling Ry Others3	_	475,307	534,658	49,846,804
VSCC		413,301	334,036	+2,0+0,004
Firm Purchases	78,383,580	5,558,165,155	80,110,654	5,631,352,423
Nonfirm Purchases	114,365,089	1,941,410,957	116,896,476	1,982,564,188
Miscellaneous Purchases 1	3,186,157	-34,311,108	3,187,109	-34,364,034
Exchanges Received ²	22,746,987	-932,774	22,772,109	-932,774
Wheeling By Others ³	44,239,773	187,398,410	44,239,869	187,569,039
egion Total				40
Firm Purchases Deliveries	82,155,144	5,700,858,118	366,858,197	18,606,883,372
Nonfirm Purchases Deliveries	121,739,042	2,074,925,572	496,362,443	13,597,578,322
Misc Purchases Deliveries ¹	3,560,940	-28,739,078	23,167,535	605,034,262
Exchanges Received Deliveries ²	22,819,042	-830,079	69,132,606 47,057,753	27,143,912
Wheeling By Others Deliveries ³	44,239,773	188,936,377	47,957,753	579,680,619

Miscellaneous purchases include other transactions involving line and substation rentals, system support charges, and special contract trans-

¹ Miscellaneous purchases mende one datasections.
2 Reported as Power Exchange in account 555, "Purchased Power Transactions," of the FERC Uniform System of Accounts.
3 Reported as transmission services in account 456, "Transmission For Others," and in account 565, "Transmission By Others," of the FERC Uniform System of Accounts. Total quantity of wheeling may not be reported.

—Not Applicable
Notes: *The States of Alaska and Hawaii are not included. *NERC is the North American Electric Reliability Council. The Alaska Systems
Coordinating Council is not included. See glossary for a list of regions. *The isolated service territories of the same utility are assigned one Coordinating Council is not included. See glossary for a list of regions. •The isolated service territories of the same utility are assigned one NERC Region identification. •Totals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others."

•FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 16. Deliveries by Investor-Owned Utilities Within and Between NERC Regions, 1996

	Destina	ntion of Electricity to All Ov	viicisiiip Classes by NEKC Regi	Oli
NERC Region of Investor-Owned Utilities/	ECAI	R	ERCO	Т
Type of Transaction	Energy (thousand kWh)	Revenue (dollars)	Energy (thousand kWh)	Revenue (dollars)
ECAR				
Firm Sales	62,704,322	1,642,818,744	347,629	7,009,16
Nonfirm Sales	57,031,895	1,209,720,109	453,542	10,302,50
Miscellaneous Sales ¹	4,635,116	176,349,000	1,376,669	11,214,56
Exchanges Delivered ²	544,581			_
Wheeling For Others ³	32,789,310	103,852,901	362,430	1,263,37
RCOT	32,703,510	103,052,501	302, .30	1,200,07
Firm Sales	_	_	6,889,809	296,120,86
Nonfirm Sales	_	_	2,630,318	72,432,90
Miscellaneous Sales ¹	_	_	580	1,148,58
Exchanges Delivered ²	_	_	29,753,391	
Wheeling For Others ³	_	11,318	17,980,790	44,515,23
MAAC		11,510	17,560,750	77,515,25
Firm Sales	1,700,443	36,840,608	72,710	2,177,54
Nonfirm Sales	1,700,443 35,999			
Miscellaneous Sales ¹	,	1,348,568	173,794	4,499,82
Exchanges Delivered ²	1,386,051	30,996,045	36,315	833,18
	2 411 406	2 227 420		- 94.60
Wheeling For Others ³	3,411,406	2,237,439	36,977	84,69
MAIN	2 120 024	10.050 (1.5	224.555	500500
Firm Sales	2,129,834	48,379,616	234,556	5,267,36
Nonfirm Sales	1,226,394	19,631,794	335,767	7,029,11
Miscellaneous Sales ¹	_	_	_	_
Exchanges Delivered ²	_	_	_	_
Wheeling For Others ³	91,982	134,045	215,796	428,66
MAPP				
Firm Sales	_	_	_	_
Nonfirm Sales	7,375	136,726	48,708	815,62
Miscellaneous Sales ¹	_	_	_	_
Exchanges Delivered ²	_	_	_	_
Wheeling For Others ³	_	_	13,687	24,16
NPCC				
Firm Sales	7,445	147,627	1,500	28,50
Nonfirm Sales	196,465	5,019,563	2,172	46,93
Miscellaneous Sales ¹	_	_	_	_
Exchanges Delivered ²	_	_	_	_
Wheeling For Others ³	76,414	186,110	808	3,55
SERC				
Firm Sales	800,063	19,613,639	43,568	1,147,60
Nonfirm Sales	178,071	3,894,317	197,961	4,322,08
Miscellaneous Sales ¹	800		_	_
Exchanges Delivered ²	24,195	_	_	_
Wheeling For Others ³	1,007,255	2,257,775	238,328	577,95
SPP	1,007,200	2,257,775	250,520	577,75
Firm Sales	_	_	2,245,623	85,837,47
Nonfirm Sales	110,735	1,738,088	1,818,421	40,048,57
Miscellaneous Sales ¹			9,464	272,35
Exchanges Delivered ²		_		
Wheeling For Others ³	205,671	308,786	561,071	5,081,69
VSCC	203,071	308,780	301,071	3,001,09
Firm Sales		4,500	335,814	14,389,32
	70 106			
Nonfirm Sales	78,186	1,246,067	2,389,242	37,714,35
Miscellaneous Sales ¹	_	_		_
Exchanges Delivered ²	_	_	6,620	
Wheeling For Others ³	_	_	190,000	213,06
Region Total	ca a	4 5 45 00 : 50 :	10.171.200	
Firm Sales Receipts	67,342,107	1,747,804,734	10,171,209	411,977,83
Nonfirm Sales Receipts	58,865,120	1,242,735,232	8,049,925	177,211,92
Miscellaneous Sales Receipts 1	6,021,967	207,345,045	1,423,028	13,468,67
Exchanges Delivered Receipts ²	568,776	_	29,760,011	_
Wheeling For Others Receipts ³	37,582,038	108,988,374	19,599,887	52,192,40

Table 16. Deliveries by Investor-Owned Utilities Within and Between NERC Regions, 1996 (Continued)

	Destina	mon of electricity to All Ov	vnership Classes by NERC Regi	OII
NERC Region of Investor-Owned Utilities/	MAA	С	MAIN	1
Type of Transaction	Energy (thousand kWh)	Revenue (dollars)	Energy (thousand kWh)	Revenue (dollars)
SCAR				
Firm Sales	7,567,596	265,993,656	985,645	21,892,12
Nonfirm Sales	4,116,020	86,180,893	1,470,115	39,607,41
Miscellaneous Sales ¹	131,702	973,524		
Exchanges Delivered ²	_	_	100	_
Wheeling For Others ³	15,058,872	41,884,762	800,128	2,727,29
RCOT	-,,	, ,	,	,, .
Firm Sales	_	_	_	_
Nonfirm Sales	_	_	_	_
Miscellaneous Sales ¹	_	_	_	_
Exchanges Delivered ²	_	_	_	_
Wheeling For Others ³				
MAAC	_	_	_	_
Firm Sales	20,146,272	651,121,324	1,168,914	31,603,28
	, , ,			
Nonfirm Sales	28,924,190	758,540,454	30,119	1,030,12
Miscellaneous Sales ¹	5,499,350	134,006,107	_	_
Exchanges Delivered ²			_	_
Wheeling For Others ³	14,244,270	60,484,956	_	_
MAIN				
Firm Sales	1,525	34,058	20,683,244	635,666,64
Nonfirm Sales	5,768,989	89,290,395	12,436,971	187,606,19
Miscellaneous Sales ¹	_	_	1,551	_
Exchanges Delivered ²	_	_	140,115	_
Wheeling For Others ³	_	_	6,145,151	28,747,64
MAPP				
Firm Sales	_	_	4,159,548	70,145,21
Nonfirm Sales	_	_	2,566,721	35,812,50
Miscellaneous Sales ¹	_	_	_	_
Exchanges Delivered ²	_	_	_	_
Wheeling For Others ³	_	_	2,151,255	4,976,48
IPCC			, ,	, ,
Firm Sales	1,457,258	71,380,098	_	_
Nonfirm Sales	286,641	10,344,330	_	_
Miscellaneous Sales ¹			_	_
Exchanges Delivered ²	_	_	_	_
Wheeling For Others ³	303,446	1,115,588	_	_
ERC	303,440	1,113,300		
Firm Sales	2 915 216	82,828,387	179,308	4,572,78
	3,815,216		· · · · · · · · · · · · · · · · · · ·	
Nonfirm Sales	2,102,544	40,879,624	193,870	4,262,30
Exchanges Delivered ²	224,000	_	3,200	_
Wheeling For Others ³	234,900	2 624 807	_	- 52.50
	3,653,339	3,634,807	_	53,59
PP				
Firm Sales	_	_	1,461,630	36,707,74
Nonfirm Sales	_	_	1,378,838	23,443,37
Miscellaneous Sales ¹	_	_	_	_
Exchanges Delivered ²	_	_	1,380	_
Wheeling For Others ³	_	_	327,204	866,91
/SCC				
Firm Sales	128,332	2,716,065	_	20,70
Nonfirm Sales	254,083	4,092,768	677,023	8,880,69
Miscellaneous Sales ¹	_	_	_	_
Exchanges Delivered ²	_	_	_	_
Wheeling For Others ³	_	12	59,789	253,40
egion Total			,	, -
Firm Sales Receipts	33,116,199	1,074,073,588	28,638,289	800,608,50
				300,642,62
Miscellaneous Sales Receipts 1				
Exchanges Delivered Receipts ²		_		_
		107 120 125		37,625,33
Nonfirm Sales Receipts	41,452,467 5,631,052 234,900 33,259,927	989,328,464 134,979,631 — 107,120,125	18,753,657 4,751 141,595 9,483,527	

Table 16. Deliveries by Investor-Owned Utilities Within and Between NERC Regions, 1996 (Continued)

NERC Region of			<u>-</u>			
Investor-Owned Utilities/	MAPI	•	NPCC			
Type of Transaction	Energy (thousand kWh)	Revenue (dollars)	Energy (thousand kWh)	Revenue (dollars)		
CAR						
Firm Sales	67,200	1,357,440	215,380	3,482,279		
Nonfirm Sales	644	9,055	42,281	1,043,37		
Miscellaneous Sales ¹	_	_	_	_		
Exchanges Delivered ²	_	_	_	_		
Wheeling For Others ³	_	_	11,150	-31,10		
RCOT						
Firm Sales	_	_	_	_		
Nonfirm Sales	_	_	_	_		
Miscellaneous Sales ¹	_	_	_	_		
Exchanges Delivered ²	_	_	_	_		
Wheeling For Others ³	_	_	155,836	143,56		
IAAC						
Firm Sales	_	_	3,399,305	77,154,020		
Nonfirm Sales	101,775	2,262,124	2,663,275	59,856,69		
Miscellaneous Sales ¹				_		
Exchanges Delivered ²	_	_	_	_		
Wheeling For Others ³	_	_	1,359,037	4,039,13		
IAIN			1,557,057	1,037,13		
Firm Sales	1,331,977	46,413,322	_	_		
Nonfirm Sales	720.965	17,314,411	1,250	24,25		
Miscellaneous Sales ¹	720,903	17,314,411	1,230	24,23		
Exchanges Delivered ²	_	_	_	_		
Wheeling For Others ³	52.011	206 207	_	_		
	53,011	206,297	_	_		
IAPP	4.075.170	150 506 417				
Firm Sales	4,975,170	150,526,417				
Nonfirm Sales	4,603,218	77,749,606	68,233	752,97		
Miscellaneous Sales 1	5,720,737	173,349,295	_	_		
Exchanges Delivered ²	38,803		_	_		
Wheeling For Others ³	11,244,646	28,979,139	_	_		
PCC						
Firm Sales	_	_	48,850,867	2,756,937,09		
Nonfirm Sales	_	_	50,983,608	1,657,676,21		
Miscellaneous Sales ¹	_	_	3,979,371	202,369,59		
Exchanges Delivered ²	_	_	754,753	_		
Wheeling For Others ³	_	_	61,038,654	574,148,03		
ERC						
Firm Sales	_	_	6,170	169,70		
Nonfirm Sales	_	_	_	_		
Miscellaneous Sales ¹	16,800	_	_	_		
Exchanges Delivered ²	_	_	_	_		
Wheeling For Others ³	_	_	_	_		
PP 2						
Firm Sales	_	_	_	_		
Nonfirm Sales	158,618	3,882,031	_	_		
Miscellaneous Sales ¹			_	_		
Exchanges Delivered ²	_	_	_	_		
Wheeling For Others ³	203,582	112,558		_		
SCC	203,302	112,330	-	_		
Firm Sales	237,681	7,169,980	1,123,877	47,815,88		
Nonfirm Sales	167,475	2,526,832	148,633	2,500,88		
Miscellaneous Sales ¹	107,473	2,326,832	140,033	2,300,00		
Exchanges Delivered ²	_	434	_	_		
Wheeling For Others ³	20 750	257.400				
	38,758	257,400	180	6,97		
egion Total	6 612 020	205 467 150	52 505 500	0.005.550.00		
Firm Sales Receipts	6,612,028	205,467,159	53,595,599	2,885,558,98		
Nonfirm Sales Receipts	5,752,695	103,744,059	53,907,280	1,721,854,39		
Miscellaneous Sales Receipts ¹	5,737,537	173,349,527	3,979,371	202,369,59		
Exchanges Delivered Receipts ²	38,803	_	754,753	_		
Wheeling For Others Receipts ³	11,539,997	29,555,394	62,564,857	578,306,59		

Table 16. Deliveries by Investor-Owned Utilities Within and Between NERC Regions, 1996 (Continued)

SERC	2	SPP			
Energy (thousand kWh)	Revenue (dollars)	Energy (thousand kWh)	Revenue (dollars)		
8,397,902	234,080,548	424,729	14,405,47		
1.982.175		234.908	4,473,70		
		_	_		
0,170,020	21,143,270				
		1 127 005	67,726,05		
_	_				
_	_	159,157	3,966,029		
_	_	_	1,111		
_	_		_		
_	_	3,441,677	17,003,025		
3,212,570	71,797,184	118,406	2,879,86		
76,987	1,860,560	615	6,71		
1,751,778	39,439,340	_	_		
		_	_		
1 125 738	3 630 670	_	_		
1,120,700	3,030,070				
		3 120 470	59,626,06		
1 225 766	22 226 122				
1,255,766	22,220,132	1,917,019	54,605,765		
_	-	_	_		
_					
163,980	254,038	397,463	233,44		
_	_		9,188,44		
59,419	869,817	1,829,164	26,047,88		
_	_	_	21		
_	_	_	_		
81.001	225.731	234.922	550,350		
7	-,	- /-	,		
4 794	109 231	_	_		
	,	62 400	99,71		
11,525	1,200,000	02,100	,,,,,		
_	_	_	_		
_	_	_	_		
	. =				
			1,619,02		
41,902,925	1,216,645,959	8,955,965	691,461,032		
-430,367	-21,512,775	_	_		
8,232,256	_	_	_		
21,651,447	112,867,540	171,651	1,929,463		
286,118	18,839,756	21,438,564	727,120,442		
		, , , , , , , , , , , , , , , , , , ,	681,904,43		
			15,832,02		
11 035	1 000 184		105,935,05		
44,233	1,050,104	22,/10,/00	105,755,05		
870.020	14 221 420	121 611	23,195,046		
	, ,	,			
1,032,050		1,311,320	17,933,643		
_	_	_	_		
-	_		_		
1,562,351	4,685,506	151,566	1,978,622		
50,359,941	2,063,266,608	27,127,789	905,760,40		
46,595,919	1,313,238,523	42,323,079	1,480,498,919		
			15,833,358		
		5,768,655	_		
8,684,436	_	.), /DA D 1 1	_		
	Energy (thousand kWh) 8,397,902 1,982,175 629,846 452,180 6,176,826	(thousand kWh) (dollars) 8,397,902 234,080,548 1,982,175 47,144,045 629,846 9,288,788 452,180 — 6,176,826 21,145,296 — — — — — — — — — — 3,212,570 71,797,184 76,987 1,860,560 1,751,778 39,439,340 — — 1,235,766 22,226,132 — — 163,980 254,038 — — 59,419 869,817 — — 81,001 225,731 4,794 109,231 44,525 1,269,695 — — — — 37,587,627 1,724,218,460 41,902,925 1,216,645,959 -430,367 -21,512,775 8,232,256 — 21,651,447 112,	Energy (thousand kWh) Revenue (dollars) Energy (thousand kWh)		

Table 16. Deliveries by Investor-Owned Utilities Within and Between NERC Regions, 1996 (Continued)

	Destina	tion of Electricity to All Ov	Destination of Electricity to All Ownership Classes by NERC Region							
NERC Region of Investor-Owned Utilities/	WSC	C	Contiguous U	J.S. Total						
Type of Transaction	Energy (thousand kWh)	Revenue (dollars)	Energy (thousand kWh)	Revenue (dollars)						
ECAR										
Firm Sales	_	_	80,710,403	2,191,039,430						
Nonfirm Sales	_	_	65,331,580	1,398,481,107						
Miscellaneous Sales ¹	168	_	6,773,501	197,825,875						
Miscellaneous Sales ¹ Exchanges Delivered ²	_	_	996,861	_						
Wheeling For Others ³	_	_	55,198,716	170,842,520						
Firm Sales			8,027,714	363,846,911						
Nonfirm Sales	_	_	2,789,475	76,398,935						
Miscellaneous Sales I			2,789,473	1,149,699						
Miscellaneous Sales ¹ Exchanges Delivered ² Wheeling For Others ³	_	_	33,579,411							
Wheeling For Others ³	_	_	21,578,303	61,673,144						
MAAC			,,	- ,,						
Firm Sales	_	_	29,818,620	873,573,823						
Nonfirm Sales	21,290	462,831	32,028,044	829,867,895						
Miscellaneous Sales ¹	_	_	8,673,494	205,274,672						
Exchanges Delivered ²	_	_								
Wheeling For Others ³	_	_	20,177,428	70,476,901						
MAIN Firm Solos			27.510.615	705 207 074						
Firm Sales	_	_	27,510,615	795,387,074						
Nonfirm Sales Miscellaneous Sales ¹	_	_	23,643,121 1,551	397,728,059						
Fychanges Delivered2			1,331	_						
Exchanges Delivered ²	800	1,364	7,068,183	30,005,492						
MAPP	000	1,50	7,000,103	50,005,.52						
Firm Sales	_	_	9,563,247	229,860,076						
Nonfirm Sales	79,169	1,386,752	9,262,007	143,571,891						
Miscellaneous Sales ¹	_	_	5,720,737	173,349,512						
Miscellaneous Sales ¹	33,590	_	72,393	_						
Wheeling For Others ³	1,622,428	1,281,572	15,347,939	36,037,440						
NPCC			50 221 064	2 929 692 559						
Firm Sales Nonfirm Sales	38,914	— 981,796	50,321,864 51,614,725	2,828,602,550						
Miscellaneous Sales ¹	36,914	981,790	3,979,371	1,675,438,248 202,369,598						
Fychanges Delivered2			754,753	202,309,398						
Exchanges Delivered ² Wheeling For Others ³	157	310	61,419,479	575,453,600						
SERC			,,	2,2,322,223						
Firm Sales	_	_	42,447,515	1,834,169,612						
Nonfirm Sales	18,916	379,392	53,550,252	1,961,844,710						
Miscellaneous Sales 1	_	_	-409,567	-21,512,775						
Miscellaneous Sales ¹ Exchanges Delivered ² Wheeling For Others ³	_	_	8,491,351							
Wheeling For Others ³	1,034,665	2,797,397	27,756,685	124,118,527						
SPP	151 727	0.490.612	25 592 672	977 097 039						
Firm Sales Nonfirm Sales	151,737 714,248	9,480,613 28,210,275	25,583,672 32,295,463	877,986,028 785,058,002						
Miscallanaous Salas I	/14,248	28,210,273	322,546	22,824,800						
Fychanges Delivered ²	17,676		1,960,723	22,824,800						
Miscellaneous Sales ¹ Exchanges Delivered ² Wheeling For Others ³	578,254	703,046	24,637,423	114,098,232						
WSCC	2.3,22.	,	= 1,000 1, 100	,						
Firm Sales	27,064,521	1,228,547,650	30,195,769	1,338,080,579						
Nonfirm Sales	51,134,804	771,302,119	57,192,816	863,588,461						
Miscellaneous Sales1	24,372	-14,926,809	24,372	-14,926,577						
Exchanges Delivered ²	23,480,762		23,488,350	. 						
Wheeling For Others ³	67,737,147	202,020,569	69,739,791	209,415,554						
Region Total	27.216.250	1 220 020 262	204 170 410	11 222 546 222						
Firm Sales Receipts	27,216,258	1,238,028,263	304,179,419	11,332,546,083						
Nonfirm Sales Receipts	52,007,341 24,540	802,723,165 -14,926,809	327,707,483 25,086,585	8,131,977,308 766,354,804						
Exchanges Delivered Receipts ²	24,540 23,532,028	-14,920,009	25,086,585 69,483,957	/00,334,604						
Wheeling For Others Receipts ³	70,973,451	206,804,258	302,923,947	1,392,121,410						

Miscellaneous sales include other transactions involving line and substation rentals, system support charges, and special contract transac-

² Reported as Power Exchange in account 555, "Purchased Power Transactions," of the FERC Uniform System of Accounts.

3 Reported as transmission services in account 456, "Transmission For Others," and in account 565, "Transmission By Others," of the FERC Uniform System of Accounts. Total quantity of wheeling may not be reported.

—Not Applicable

Notes: •The States of Alaska and Hawaii are not included. •NERC is the North American Electric Reliability Council. The Alaska Systems Coordinating Council is not included. See glossary for a list of regions. •The isolated service territories of the same utility are assigned one NERC Region identification. •Totals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others."

•FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 17. Electricity Transactions by Investor-Owned Utilities in Alaska and Hawaii, 1996

	Ala	ska	Hawaii			
Type of Transaction	Energy (thousand kWh)	Cost (dollars)	Energy (thousand kWh)	Cost (dollars)		
Received						
Firm Purchases			82,536 3,113,701	7,005,413 247,560,091		
Miscellaneous Purchases ¹ Exchanges Received ² Wheeling By Other ³	_ _ _	_ _ _		_ _ _		
	Ala	ska	Hawa	ii		
	Energy (thousand kWh)	Revenue (dollars)	Energy (thousand kWh)	Revenue (dollars)		
Delivered						
Firm Sales Nonfirm Sales Miscellaneous Sales ¹	_ _ _	_ _ _	_ _ _			
Exchanges Delivered ² Wheeling For Others ³			6,648	-133,042 		

Miscellaneous purchases include other transactions involving line and substation rentals, system support charges, and special contract transactions.

Reported as Power Exchange in account 555, "Purchased Power Transactions," of the FERC Uniform System of Accounts.

Reported as transmission services in account 456, "Transmission For Others," and in account 565, "Transmission By Others," of the FERC Uniform System of Accounts. Total quantity of wheeling may not be reported.

⁻Not Applicable

Note: Applicable
Note: Totals may not equal sum of components because of independent rounding.
Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others."
•FERC Form 1F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 18. U.S. Electricity Trade with Canada and Mexico by NERC Region, 1996

Province, Country/			U.S. NERC Region			
Type of Transaction	NPCC	ECAR	ERCOT	MAPP	WSCC	Region Total
New Brunswick, Canada	·					
Imports From (thousand kWh)	2,894,544					2,894,544
Cost (dollars)	68,755,616					68,755,616
Exports To (thousand kWh)	312,726					312,726
Revenue (dollars)	665,865					665,865
Quebec, Canada						
Imports From (thousand kWh)	14,988,194					14,988,194
Cost (dollars)	324,841,148					324,841,148
Exports To (thousand kWh)	718,680					718,680
Revenue (dollars)	19,359,417					19,359,417
Ontario, Canada						
Imports From (thousand kWh)	2,665,684	2,110,820				4,776,504
Cost (dollars)	38,654,729	54,537,592				93,192,321
Exports To (thousand kWh)	494,082	209,243				703,325
Revenue (dollars)	4,314,170	3,390,900				7,705,070
Manitoba, Canada						
Imports From (thousand kWh)				11,534,423		11,534,423
Cost (dollars)				211,134,501		211,134,501
Exports To (thousand kWh)				591,143		591,143
Revenue (dollars)				3,795,879		3,795,879
Saskatchewan, Canada						
Imports From (thousand kWh)				318,015		318,015
Cost (dollars)				2,431,995		2,431,995
Exports To (thousand kWh)				57,763		57,763
Revenue (dollars)				381,885		381,885
Alberta, Canada						
Imports From (thousand kWh)						
Cost (dollars)						
Exports To (thousand kWh)				107	3,188	3,295
Revenue (dollars)				6,841	136,750	143,591
British Columbia, Canada						
Imports From (thousand kWh)					10,768,584	10,768,584
Cost (dollars)					85,141,894	85,141,894
Exports To (thousand kWh)					5,317,688	5,317,688
Revenue (dollars)					11,208,537	11,208,537
Canada						
Imports From (thousand kWh)	20,548,422	2,110,820		11,852,438	10,768,584	45,280,264
Cost (dollars)	432,051,493	54,537,592		213,566,496	85,141,894	785,297,475
Exports To (thousand kWh)	1,525,488	209,243		649,013	5,320,876	7,704,620
Revenue (dollars)	24,339,452	3,390,900		4,184,605	11,345,287	43,260,244
Mexico						
Imports From (thousand kWh)			5,566		1,257,786	1,263,152
Cost (dollars)			133,434		45,056,465	45,189,799
Exports To (thousand kWh)			2,395		1,313,230	1,315,625
Revenue (dollars)			206,100		53,834,050	54,040,150
Contiguous U.S. Total						
Imports To (thousand kWh)	20,548,422	2,110,820	5,566	11,852,438	12,026,370	46,543,416
Cost (dollars)	432,051,493	54,537,592	133,434	213,566,496	130,198,359	830,487,274
Exports From (thousand kWh)	1,525,488	209,243	2,395	649,013	6,634,106	9,020,245
Revenue (dollars)	24,339,452	3,390,900	206,100	4,184,605	65,179,337	97,300,394

⁻Not Applicable

Notes: *The values do not reflect a large portion of U.S.-Canadian electricity trade that occurs on an exchange basis; i.e., energy imported is returned in kind with no monetary consideration. This "zero-cost" of imported and exported energy distorts the price-per-kilowatthour calculation. *The States of Alaska and Hawaii are not included. *NERC is the North American Electric Reliability Council. The Alaska Systems Coordinating Council is not included. See glossary for a list of regions. *Totals may not equal sum of components because of independent rounding.

Source: Office of Fossil Energy, Form FE-781R "Annual Report of International Electrical Export/Import Data."

2. Bulk Power Transactions by Investor-Owned Utilities

Overview

This chapter presents data for individual investorowned utilities on purchased power, sales for resale, exchanges, and wheeling. Sales for resale are generally sales to other investor-owned utilities, public power municipals, and cooperatives under obligations to support wholesale requirement customers. These sales represent one of the most active parts of the electricity trade market. Purchases are generally made from other investor-owned utilities and Federal power marketing authorities. These purchases are made in order to take advantage of cheaper rates generally coming from hydroelectric generation, to supplement or replace internal power supplies, and for handling longer-term energy emergencies. Exchanges cover in-kind transfers, and wheeling (transmission for and by others) describes transmission services provided by utilities to other utilities. The tables present data for individual utilities aggregated to show trade with different classes of ownership.

Data are from the FERC Form 1, which is the only data source that identifies individual utilities involved in exchanges and wheeling.¹³

Tables

This chapter presents data on:

- Energy purchases and cost, with cost data shown for demand, energy, and other (Table 19).
- Sales for resale and revenue, with revenue data shown for demand, energy, and other (Table 20).
- Exchanges of power by ownership class, identifying quantities transferred with any monetary settlement (Table 21). Nonmonetary settlements that may have occurred are not shown. Exchanges

are transactions where electricity provided to one utility is returned in kind at a later date. In these transactions, the value of the electricity may or may not have been priced at the same level. Additional money or electricity could have been involved in the exchanges, but the details of the transactions are not collected on the FERC forms.

- Electricity purchases by investor-owned utilities not listed elsewhere (Table 22). (These utilities are not listed elsewhere because of their small size and/or their power was purchased from cooperatives.)
- Wheeling through and to service territories of investor-owned utilities (Tables 23 and 24).

In each table, the investor-owned utilities are listed by State according to their corporate mailing addresses.

Summary

Differences are present in all wholesale trade categories. Some are based on the diversity of the cost of energy coming from the individual mix of generating facilities that developed over time as the electric utility industry met local and regional changes in load. This includes development of inexpensive local natural resources. In other cases, differences can be explained because some electric utilities are requirement customers of others and lack generation capability so they cannot sell electricity.

The data indicate a great diversity in wholesale electricity trade and a complex market for electricity. The diversity represent differences in the influence of geographical location; the ability to access multiple parts of the transmission grid; the support of reliability and stability standards; and the load requirements coming from varied customer compositions of service territories.

¹³ This is not the case for other data collected on exchanges and wheeling. Only aggregated data are collected on exchanges and wheeling on Form EIA-861, "Annual Electric Utility Report" and Form EIA-412, "Annual Report of Public Electric Utilities" starting in 1989.

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996

	Alabama	Alabama	Alaska	Arizona	Arizona	Arizona	Arizona
Source of Electricity by Ownership Class	Alabama Power Co	Southern Electric Generating Co ⁵	Alaska Electric Light & Power ⁴	Ajo Improvement Co ⁸	Arizona Public Service Co	Century Power Corp ⁵	Citizens Utilities Co
Investor-Owned							
Purchases (thousand kWh)	3,166,368	_	_	_	1,893,156	_	_
Cost (dollars)	86,838,975	_	_	_	39,278,601	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	10,620,273	_	_
Energy	86,838,975	_	_	_	28,658,328	_	_
Other ²	_	_	_	_	_	_	_
Federal	110 570		250.207		100.011		
Purchases (thousand kWh)	119,670	_	260,307	_	189,211	_	_
Cost (dollars)	2,792,537	_	8,873,948	_	2,595,283	_	_
Demand Charge Only 1 Demand	_	_	_	_	_	_	_
Energy	2,792,537		8,873,948	_	2,595,283		
Other ²		_	_	_		_	_
State and Other							
Government							
Purchases (thousand kWh)	23,107	_	_	_	625,973	_	_
Cost (dollars)	608,815	_	_	_	35,153,342	_	_
Demand Charge Only ¹	_	_	_	_		_	_
Demand		_	_	_	18,783,975	_	_
Energy Other ²	608,815	_	_	_	16,369,367 —	_	_
Maniala 1							
Municipal Purchases (thousand kWh)	10,855	_	_	_	63,551	_	_
Cost (dollars)	380,908	_	_	_	1,395,929	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	380,908	_	_	_	1,395,929	_	_
Other ²	_	_	_	_		_	_
Cooperative							
Purchases (thousand kWh)	62,693	_	_	_	1,679	_	_
Cost (dollars)	3,137,996	_	_	_	25,421	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	3,137,996	_	_	_	25,421	_	_
Other ²	_	_	_	_	_	_	_
Other ³							
Purchases (thousand kWh)	1,088,180	_	_	_	1,249,513	_	_
Cost (dollars)	34,554,414	_	_	_	16,681,993	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand		_	_	_		_	_
EnergyOther ²	29,772,137 4,782,277			_	16,681,993 —		_
Fotal Purchases (thousand kWh)	4 470 972		260 207		4 022 002		
Purchases (thousand kWh)	4,470,873	_	260,307	_	4,023,083	_	_
Cost (dollars) Demand Charge Only ¹	128,313,645	_	8,873,948	_	95,130,569 —	_	_
Demand	_	_	_	_	29,404,248	_	_
Energy	123,531,368	_	8,873,948	_	65,726,321	_	_
Other ²	4,782,277	_	6,675,946 —	_		_	_
Guici	7,/04,4//	_	_	_	_	_	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Arizona	Arkansas	Arkansas	California	California	California	Colorado
Source of Electricity by Ownership Class	Tucson Electric Power Co	Arkansas Power & Light Co	Entergy Power Co	Pacific Gas & Electric Co	San Diego Gas & Electric Co	Southern California Edison Co	Public Service Co of Colorado
Investor-Owned							
Purchases (thousand kWh)	335,835	3,640,653	_	838,361	2,602,610	3,008,290	1,790,785
Cost (dollars)	4,957,081	250,254,298	_	16,000,322	97,006,716	88,805,531	57,415,933
Demand Charge Only ¹	_		_	800	— 59.042.00 <i>c</i>	16,900,000	— 20.675.029
Demand Energy	4,957,081	219,885,243 30,369,055	_	15,999,522	58,043,006 38,963,710	22,152,406 49,753,125	30,675,028 26,964,873
Other ²	_	_	_	_	_	-	-223,968
Federal	102.556	1.750.605			1 225 597	4 406 112	101.650
Purchases (thousand kWh) Cost (dollars)	102,556 1,109,400	1,759,605 36,071,071	_	_	1,235,587 12,427,449	4,486,113 81,174,821	101,659 868,072
Demand Charge Only ¹			_				
Demand	_	_	_	_	_	3,006,900	_
Energy	1,109,400	36,071,071	_	_	12,427,449	78,159,666	868,072
Other ²	_	_	_	_	_	8,255	_
State and Other Government							
Purchases (thousand kWh)	107,014	67	_	5,035,133	862,788	525,589	1,112,952
Cost (dollars)	1,525,768	2,417	_	43,224,391	15,269,173	8,415,764	54,348,392
Demand Charge Only ¹	_	_	_	_	_	900,000	_
Demand	1 525 769	_ 2.417	_	158,176	— 15 260 172	19,160	35,812,316
EnergyOther ²	1,525,768 —		_	43,066,215 —	15,269,173 —	7,496,604 —	18,536,076 —
Municipal							
Purchases (thousand kWh)	71,399	76,508	_	170,499	349,701	872,622	6,093
Cost (dollars)	1,113,956	1,469,850	_	4,391,162	7,975,358	42,105,177	196,718
Demand Charge Only ¹ Demand	_			1,365,000 40,800	2,268,090	6,346,427	109,753
Energy	1,113,956	1,469,850	_	2,985,362	5,707,268	41,032,967	86,965
Other ²	_	_	_	_	_	-5,274,217	_
Cooperative	116.074	2.740.700		470.050	120	2.501	2 270 170
Purchases (thousand kWh) Cost (dollars)	116,974 2,250,134	2,748,708 52,914,424	_	478,252 4,844,387	120 19,426	3,591 64,522	3,378,170 152,646,631
Demand Charge Only ¹			_				
Demand	_	_	_	172,224	_	_	103,664,873
Energy	2,250,134	52,914,424	_	4,672,163	19,426	53,722	48,981,758
Other ²	_	_	_	_	_	10,800	_
Other ³							
Purchases (thousand kWh)	196,541	3,588,546	_	27,804,245	5,012,261	29,676,068	2,829,470
Cost (dollars) Demand Charge Only ¹	3,884,860 144,000	92,112,805	_	1,766,853,498	175,675,969 —	2,484,752,527	173,703,611
Demand	_	_	_	520,790,705	60,608,899	667,728,889	137,493,414
Energy	3,593,628	92,113,466	_	1,245,568,735	115,067,070	1,780,084,156	35,926,034
Other ²	147,232	-661	_	494,058	_	36,939,482	284,163
Total							
Purchases (thousand kWh)	930,319	11,814,087	_	34,326,490	10,063,067	38,572,273	9,219,129
Cost (dollars)	14,841,199	432,824,865	_	1,835,313,760	308,374,091	2,705,318,342	439,179,357
Demand Charge Only ¹ Demand	144,000	— 219,885,243	_	1,365,800 521,161,905	— 120,919,995	17,800,000 699,253,782	307,755,384
Energy	14,549,967	212,940,283	_	1,312,291,997	187,454,096	1,956,580,240	131,363,778
Other ²	147,232	-661		494,058	, - ,	31,684,320	, ,

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

Source of Electricity by Ownership Class	Colorado Utilicorp United Inc	Connecticut Connecticut Light & Power Co	Connecticut Yankee Atomic Power Co ⁵	Connecticut United Illuminating Co	Delaware Delmarva Power & Light Co	District of Columbia Potomac Electric Power Co	Florida Florida Power & Light Co
Investor-Owned				,		,	
Purchases (thousand kWh)	_	6,808,970	_	348,147	2,415,285	8,963,342	1,199,112
Cost (dollars)	_	225,516,103	_	21,579,170	52,073,579	296,054,391	22,091,871
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	_		_	18,175,551 3,403,619	52,073,579	— 172,899,503	22,091,871
Other ²	_	99,695,386	_	— —	— —	123,154,888	
Federal							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy Other ²	_	_	_	_	_	_	_
State and Other							
Government							
Purchases (thousand kWh)	_	123,075	_	9,085	_	_	338,985
Cost (dollars) Demand Charge Only ¹	_	3,273,074	_	62,477	_	_	17,000,875
Demand							11,691,540
Energy	_	3,090,394	_	62,477	_	_	5,248,136
Other ²	_	182,680	_	_	_	_	61,199
Municipal							
Purchases (thousand kWh)	_	213,580	_	_	39,688	_	3,597,971
Cost (dollars)	_	16,474,325	_	_	2,076,307	_	131,659,235
Demand Charge Only 1	_	_	_	_	_	_	— 77,135,218
Demand Energy	_	16,474,325	_	_	1,223,241	_	55,251,123
Other ²	_	_	_	_	853,066	_	-727,106
Cooperative							
Purchases (thousand kWh)	_	16,076	_	_	_	_	547,656
Cost (dollars)	_	321,913	_	_	_	5,538,905	10,382,000
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy		321,913					10,378,931
Other ²	_			_	_	5,538,905	3,069
Other ³							
Purchases (thousand kWh)	_	13,816,386	_	996,189	3,740,747	7,325,617	13,067,225
Cost (dollars)	_	599,070,680	_	54,207,721	124,560,385	160,171,074	648,195,208
Demand Charge Only ¹	_	_	_	— 29 622 525	— 20 440 079	_	— 201 202 242
Demand Energy	_	527,905,594	_	28,633,525 23,618,196	30,449,978 89,172,129	— 144,896,345	381,392,342 255,014,840
Other ²	_	71,165,086	_	1,956,000	4,938,278	15,274,729	11,788,026
Total							
Purchases (thousand kWh)	_	20,978,087	_	1,353,421	6,195,720	16,288,959	18,750,949
Cost (dollars)	_	844,656,095	_	75,849,368	178,710,271	461,764,370	829,329,189
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	_	 673,612,943	_	46,809,076 27,084,292	30,449,978 142,468,949	— 317,795,848	470,219,100 347,984,901
		0/301/943			147 4hx 949		

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Florida	Florida	Florida	Georgia	Georgia	Hawaii	Hawaii
Source of	Florida	Gulf	Tampa	Georgia	Savannah	Citizens	Hawaiian
Electricity by	Power	Power	Electric	Power	Electric	Utilities	Electric
Ownership Class	Corp	Co	Co	Co	&	Co^4	Co Inc ⁴
					Power Co		
Investor-Owned Purchases (thousand kWh)	815,579	96,478	79,632	3,431,658	23,345		
Cost (dollars)	30,408,653	2,809,356	3,383,147	103,815,124	707,334		_
Demand Charge Only ¹	_			-		_	_
Demand	5,656,404	_	_	642,143	_	_	_
Energy	24,752,249	2,809,356	3,341,401	103,172,981	707,334	_	_
Other ²	_	_	41,746	_	_	_	_
Federal				.=			
Purchases (thousand kWh)	34,439	23,308	_	179,306	8,935	_	_
Cost (dollars)	318,492	542,007	_	4,213,046	208,494	_	_
Demand Charge Only ¹ Demand	_	_	_		_	_	_
Energy	318,492	542,007	_	4,213,046	208,494	_	_
Other ²	_	_	_		_	_	_
State and Other							
Government Purchases (thousand kWh)	313,636	4,695	_	1,538,155	1,725	_	_
Cost (dollars)	13,425,380	127,133	_	84,609,777	45,463	_	_
Demand Charge Only ¹	_		_	_	5,.65	_	_
Demand	6,915,056	_	_	59,683,000	_	_	_
Energy	6,510,324	127,133	_	24,926,777	45,463	_	_
Other ²	_	_	_	_	_	_	_
Municipal	225 602	2.070	47.514	52 400	711		
Purchases (thousand kWh)	325,602	2,079 63,641	47,514	52,409	711 23,676	_	_
Cost (dollars) Demand Charge Only ¹	10,605,731	05,041	2,336,565 492,480	1,148,739	23,070	_	_
Demand	_	_	109	6,809	_	_	_
Energy	10,605,731	63,641	1,843,806	1,141,930	23,676	_	_
Other ²	_	_	170	_	_	_	_
Cooperative							
Purchases (thousand kWh)	313,656	24,321	15,165	1,165,845	2,085	_	_
Cost (dollars)	2,359,169	371,793	561,950	21,271,681	52,162	_	_
Demand Charge Only ¹ Demand	_	_	_	_	_	_	_
Energy	2,359,169	371,793	559,095	21,271,681	52,162		
Other ²	_	_	2,855	_		_	_
Other ³							
Purchases (thousand kWh)	9,351,972	1,209,019	773,517	8,197,388	2,673,402	_	3,113,701
Cost (dollars)	477,085,961	39,462,389	42,717,386	171,573,073	59,903,755	_	247,560,091
Demand Charge Only ¹		- 0.014.054		_		_	_
Demand	271,465,173	8,814,954 30,647,435	24,850,773 17,866,613	— 171,573,073	339,579 59,564,176	_	 141,250,205
EnergyOther ²	205,620,788 —	— —	— 17,860,613 —	— —		_	106,309,886
Total							
Purchases (thousand kWh)	11,154,884	1,359,900	915,828	14,564,761	2,710,203	_	3,113,701
Cost (dollars)	534,203,386	43,376,319	48,999,048	386,631,440	60,940,884	_	247,560,091
Demand Charge Only ¹	_	_	492,480	_	_	_	_
Demand	284,036,633	8,814,954	24,850,882	60,331,952	339,579	_	
Energy Other ²	250,166,753	34,561,365	23,610,915	326,299,488	60,601,305	_	141,250,205
Ouici~	_	_	44,771	_	_	_	106,309,886

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Hawaii	Idaho	Idaho	Illinois	Illinois	Illinois	Illinois
Source of Electricity by Ownership Class	Maui Electric Co Ltd ⁴	Citizens Utilities Co ⁴	Idaho Power Co	Central Illinois Light Co	Central Illinois Public Service Co	Commonwealth Edison Co	Electric Energy Inc
Investor-Owned							
Purchases (thousand kWh)	_	_	1,027,143	293,550	1,334,655	5,826,135	3,746,993
Cost (dollars) Demand Charge Only ¹	_	_	21,143,451	9,127,275	24,815,777	199,104,936	59,162,543
Demand Charge Only 1	_	_	— 719,458	4,550,000	 5,166,724	30,131,701	_
Energy	_	_	20,423,993	4,577,275	19,649,053	168,973,235	59,162,543
Other ²	_	_	_	_	_	_	_
Federal							
Purchases (thousand kWh)	_	_	1,019,344	_	387,158	_	21,588
Cost (dollars) Demand Charge Only ¹	_	_	8,124,179	_	7,380,352	_	498,219
Demand	_	_	_	_	_	_	_
Energy	_	_	8,124,179	_	7,380,352	_	498,219
Other ²	_	_	_	_	_	_	_
State and Other							
Government			£1 00£				
Purchases (thousand kWh) Cost (dollars)	_		51,805 1,397,131	_	_		_
Demand Charge Only ¹	_	_		_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	_	_	1,397,131	_	_	_	_
Other ²	_	_	_	_	_	_	_
Municipal Purchases (thousand kWh)	_	_	57,367	12,413	24,435	_	_
Cost (dollars)	_	_	897,545	212,573	445,180	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand		_	_	_	2,250	_	_
Energy	_	_	897,545	212,573	442,930	_	_
Other ²	_	_	_	_	_	_	_
Cooperative Purchases (thousand kWh)	_	_	3,392	_	55,687	_	_
Cost (dollars)	_	_	52,587	_	636,253	_	_
Demand Charge Only ¹	_	_	_ ^	_		_	_
Demand	_	_		_	_	_	_
Energy Other ²	_	_	52,587	_	636,253	_	_
	_	_	_	_	_	_	_
Other ³							.=
Purchases (thousand kWh)	82,536 7,005,413	_	827,910 37,423,104	71,432 1,564,370	856,094	2,094,916 40,331,860	179,687 1,726,685
Cost (dollars) Demand Charge Only ¹	7,003,413	_	37,423,104	1,304,370	20,225,194	40,331,800	1,720,083
Demand	1,914,224	_	2,303,773	92,107	478,448	55,200	_
Energy	5,091,189	_	35,119,331	1,472,263	19,746,746	40,276,660	1,671,861
Other ²	_	_	_	_	_	_	54,824
Total							
Purchases (thousand kWh)	82,536	_	2,986,961	377,395	2,658,029	7,921,051	3,948,268
Cost (dollars)	7,005,413	_	69,037,997	10,904,218	53,502,756	239,436,796	61,387,447
Demand Charge Only ¹ Demand		_	3,023,231	4,642,107		30,186,901	_
Energy	5,091,189	_	66,014,766	6,262,111	47,855,334	209,249,895	61,332,623
Other ²	-,0,1,10,		23,01.,700	3,232,111	-	,,	54,824

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Illinois	Illinois	Indiana	Indiana	Indiana	Indiana	Indiana
Source of Electricity by Ownership Class	Illinois Power Co	Mt Carmel Public Utility Co	Alcoa Generating Corp ⁴	Commonwealth Edison of Indiana ⁵	Indiana Michigan Power Co	Indianapolis Power & Light Co	Northern Indiana Public Service Co
Investor-Owned							
Purchases (thousand kWh)	2,016,411	192,594	285,122	_	4,152,447	193,104	840,598
Cost (dollars)	33,472,125	6,889,181	5,605,778	_	103,078,761	17,917,747	15,422,572
Demand Charge Only ¹				_			
Demand Energy	5,640,026 27,832,099	3,360,785 3,528,396	5,605,778	_	25,703 103,053,058	14,412,225 3,505,522	202,000 15,220,572
Other ²	_		_	_	_	— —	-
Federal							
Purchases (thousand kWh)	526,949	_	_	_	43,526	_	_
Cost (dollars)	14,572,446	_	_	_	1,003,886	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	3,063,623	_	_	_		_	_
Energy	11,508,823	_	_	_	1,003,886	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy Other ²	_	_	_	_	_	_	_
Municipal Purchases (thousand kWh)	32,915				105		
Cost (dollars)	692,059		_		66,672	_	
Demand Charge Only ¹		_	_	_		_	_
Demand	40,520	_	_	_	_	_	_
Energy	651,539	_	_	_	66,672	_	_
Other ²	_	_	_	_	_	_	_
Cooperative							
Purchases (thousand kWh)	59,952	_	_	_	4,498	6,904	11,890
Cost (dollars)	1,351,592	_	_	_	51,967	107,883	280,211
Demand Charge Only ¹		_	_	_	_	_	
Demand	198,071	_	_	_	- 51.067	107.002	35,470
Energy Other ²	1,153,521 —	_	_	_	51,967 —	107,883	244,741 —
Other ³ Purchases (thousand kWh)	725,583				3,379,462	10,403	1,964,588
Cost (dollars)	15,118,133		_		34,485,631	339,830	37,394,890
Demand Charge Only ¹				_			—
Demand	3,000	_	_	_	_	18,703	1,063,792
Energy	15,115,133	_	_	_	34,485,631	321,127	36,331,098
Other ²	_	_	_	_	_	_	_
Total							
Purchases (thousand kWh)	3,361,810	192,594	285,122	_	7,580,038	210,411	2,817,076
Cost (dollars)	65,206,355	6,889,181	5,605,778	_	138,686,917	18,365,460	53,097,673
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	8,945,240	3,360,785	5,605,778	_	25,703	14,430,928	1,301,262
Energy	56,261,115	3,528,396	_	_	138,661,214	3,934,532	51,796,411
Other ²	_	_	_	_	_	_	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Indiana	Indiana	Iowa	Iowa	Iowa	Iowa	Iowa
Source of Electricity by Ownership Class	PSI Energy Inc	Southern Indiana Gas & Electric Co	Interstate Power Co	Iowa Electric Light & Power Co	Iowa Southern Utilities Co	Iowa- Illinois Gas & Electric Co	Midwest Power Systems Inc
investor-Owned							
Purchases (thousand kWh)	6,941,485	238,030	1,169,350	_	_	_	_
Cost (dollars)	124,764,773	3,920,966	28,655,232	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	2,616,612	381,982	13,575,000	_	_	_	_
Energy Other ²	122,148,161 —	3,513,677 25,307	13,993,084 1,087,148	_	_	_	_
adaral							
ederal Purchases (thousand kWh)	_	_	105,948	_	_	_	_
Cost (dollars)		_	1,507,161	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	_	_	1,507,161	_	_	_	_
Other ²	_	_	_	_	_	_	_
tate and Other Government							
Purchases (thousand kWh)	220,798	_	43,952	_	_	_	_
Cost (dollars)	3,593,680	_	679,784	_	_	_	_
Demand Charge Only ¹	16,607	_	_ ′	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	3,577,073	_	679,784	_	_	_	_
Other ²	_	_	_	_	_	_	_
Municipal							
Purchases (thousand kWh)	1,268	_	75,157	_	_	_	_
Cost (dollars)	33,175	_	1,236,950	_	_	_	_
Demand Charge Only ¹	_	_	35,950	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy Other ²	33,175	_	1,201,000	_	_	_	_
	_	_	_	_	_	_	_
ooperative Purchases (thousand kWh)	132,772	174,940	991,521				
Cost (dollars)	2,925,994	2,780,309	27,394,008		_		
Demand Charge Only ¹		2,760,307				_	
Demand	89,000	_	13,151,250	_	_	_	_
Energy	2,836,994	2,780,309	13,603,422	_	_	_	_
Other ²			639,336	_	_	_	_
ther ³							
Purchases (thousand kWh)	1,093,676	63,048	114,455	_	_	_	_
Cost (dollars)	24,554,948	1,593,752	2,082,416	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	168,310	_	_	_	_	_	_
Energy	24,386,638	1,593,752	2,082,416	_	_	_	_
Other ²	_	_	_	_	_	_	_
otal							
Purchases (thousand kWh)	8,389,999	476,018	2,500,383	_	_	_	_
Cost (dollars)	155,872,570	8,295,027	61,555,551	_	_	_	_
Demand Charge Only ¹	16,607	_	35,950	_	_	_	_
Demand	2,873,922	381,982	26,726,250	_	_	_	_
Energy	152,982,041	7,887,738	33,066,867	_	_	_	_
Other ²	_	25,307	1,726,484	_	_	_	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	•			• /	`	<u>′</u>	
	Kansas	Kansas	Kentucky	Kentucky	Kentucky	Kentucky	Louisiana
Source of Electricity by Ownership Class	Kansas Gas & Electric Co	Western Resources Inc	Kentucky Power Co	Kentucky Utilities Co	Louisville Gas & Electric Co	Kentucky Union Light Heat & Power Co 3,601,370 143,566,440 — 67,100,540 100,838,362 —24,372,462 — — — — — — — — — — — — — — — — — —	Catalyst Old River Hydro ⁵
Investor-Owned							
Purchases (thousand kWh) Cost (dollars)	230,166 5,295,819	101,956 2,247,407	2,609,497 69,921,845	1,638,768 33,161,161	383,041 6,125,582		_
Demand Charge Only ¹			9,634			67,100,540	_
EnergyOther ²	5,295,819 —	2,247,407 —	69,912,211 —	17,164,437 —	3,099,148 3,026,434		_
Federal			15.626	400	74.011		
Purchases (thousand kWh) Cost (dollars)	_	_	15,626 363,537	400 19,355	74,811 2,522,687	_	_
Demand Charge Only ¹	_	_		_		_	_
Demand	_	_	_	_	_	_	_
Energy Other ²	_	_	363,537 —	19,355 —	2,522,687 —	_	_
State and Other							
Government Purchases (thousand kWh)	475	596,463					
Cost (dollars)	4,988	8,211,403					_
Demand Charge Only ¹	_		_	_	_	_	_
Demand	_	-	_	_	_	_	_
Energy Other ²	4,988 —	8,211,403 —	_	_	_	_	_
Municipal							
Purchases (thousand kWh)	_	16,385	21	1,495,395	2,182	_	_
Cost (dollars)	_	2,121,309	1,951	28,301,953	29,895	_	_
Demand Charge Only ¹ Demand	_	1,382,884	_	7 059 224	_	_	_
Energy	_	738,425	1,951	7,958,234 20,343,719	29,895	_	_
Other ²	_	_		_	_	_	_
Cooperative	05.040	1.602		0.200	152.011		
Purchases (thousand kWh) Cost (dollars)	97,840 1,338,508	1,682 65,722	-23	9,200 161,882	152,811 3,119,199	_	_
Demand Charge Only ¹	— —			- 101,002		_	
Demand	_	_	_	_	_	_	_
Energy Other ²	1,338,508	65,722 —		161,882 —	3,119,199	_	_
Other ³							
Purchases (thousand kWh)	183,782	99,370	1,901,959	21,826	177,397	_	_
Cost (dollars)	4,843,415	1,873,719	26,197,546	846,071	4,829,018	_	_
Demand Charge Only ¹ Demand	_	_	_	— 229,210	_	_	_
Energy	 4,843,415	1,873,719	— 26,197,546	229,210 616,861	4,829,018	_	_
Other ²	_		_	_	-,027,010	_	_
Total							
Purchases (thousand kWh)	512,263	815,856	4,527,103	3,165,589	790,242	3,601,370	_
Cost (dollars)	11,482,730	14,519,560	96,484,856	62,490,422	16,626,381	143,566,440	_
Demand Charge Only ¹ Demand	_		9,634	— 24,184,168	_	 67,100,540	_
	11,482,730	13,136,676	96,475,222	38,306,254	13,599,947	100,838,362	_
Energy	11,404.730	15,150.070	70,473.222	30,300.23+			

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Louisiana	Louisiana	Louisiana	Louisiana	Maine	Maine	Maine
Source of Electricity by Ownership Class	Central Louisiana Electric Co Inc	Louisiana Power & Light Co	New Orleans Public Service Inc	Southwestern Electric Power Co	Bangor Hydro- Electric Co	Maine Central Maine Power Co 4,223,078 155,462,112 — 62,848,738 92,613,374 — — — — — — — — — — — — — — — — — —	Maine Electric Power Co Inc
Investor-Owned	,		,				
Purchases (thousand kWh)	10,532	2,264,962	1,627,686	34,340	1,648,935	4,223,078	1,440
Cost (dollars)	252,961	111,849,475	116,032,377	987,344	49,450,131	155,462,112	18,565
Demand Charge Only ¹	_			_	43,130	_	_
Demand Energy	252,961	86,209,768 25,639,707	104,765,589 11,266,788	943,136	12,415,792 36,991,209	— 62 949 729	18,565
Other ²		_	— —	44,208	— —		
Federal							
Purchases (thousand kWh)	_	2,338,619	456,977	_	_	_	_
Cost (dollars) Demand Charge Only ¹	_	47,951,721	9,371,819	_	_	_	_
Demand	_	_	_		_		_
Energy		47,951,721	9,371,819	_	_	_	_
Other ²		_		_	_	_	_
State and Other							
Government	2.450	2.7.7		10.524			
Purchases (thousand kWh)	3,470	3,757	17	10,736	_	_	_
Cost (dollars) Demand Charge Only ¹	838,237	696,621	616	205,042	_	_	_
Demand	_		_	_	_	_	
Energy	838,237	696,621	616	205,042	_	_	_
Other ²		_	_	_	_	_	_
Municipal							
Purchases (thousand kWh)	24,270	101,366	19,657	66,402	_		_
Cost (dollars)	654,757	1,945,728	378,632	101,108	_	17,724	_
Demand Charge Only ¹ Demand	_	_	_	_	_	_	_
Energy		1,945,728	378,632	101,108	_	17 724	_
Other ²	_	_		_	_	_	_
Cooperative							
Purchases (thousand kWh)	259,822	1,119,411	218,844	1,777,036	_	_	_
Cost (dollars) Demand Charge Only ¹	5,155,353	19,819,753	3,873,414	17,836,128	_	_	_
Demand			_	_	_	_	
Energy		19,819,753	3,873,414	17,836,128	_	_	_
Other ²		_	_	_	_	_	_
Other ³							
Purchases (thousand kWh)	2,505,020	6,954,157	1,860,711	887,634	353,070	5,198,292	2,104,164
Cost (dollars)	50,877,033	221,058,700	46,792,915	15,896,605	29,288,937	350,298,967	52,561,728
Demand Charge Only ¹ Demand	_	_	_	_	_	_	_
Energy	48,688,903	221,058,700	46,792,915	14,025,771	29,288,937	334,201,668	52,552,479
Other ²	2,188,130	_	-	1,870,834	_	16,097,299	9,249
Total							
Purchases (thousand kWh)	2,803,114	12,782,272	4,183,892	2,776,148	2,002,005	9,422,077	2,105,604
Cost (dollars)	57,778,341	403,321,998	176,449,773	35,026,227	78,739,068	505,778,803	52,580,293
Demand Charge Only 1	_	— 86,209,768	104,765,589	_	43,130	_	_
Demand	 55,590,211	317,112,230	71,684,184	— 33,111,185	12,415,792 66,280,146	— 397,068,130	 52,571,044
		211,114,430	/ 1,004,104	22,111,102	00,200,140	371,000,130	22,211,044

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Maine	Maine	Maryland	Maryland	Maryland	Maryland	Massachusetts
Source of Electricity by Ownership Class	Maine Public Service Co	Maine Yankee Atomic Power Co ⁵	Allegheny Generating Co ⁵	Baltimore Gas & Electric Co	Conowingo Power Co	Potomac Edison Co	Boston Edison Co
Investor-Owned							
Purchases (thousand kWh) Cost (dollars)	355,409 12,713,723	_	_	2,367,028 89,115,456	_	4,506,918 187,238,402	1,815,878 89,895,223
Demand Charge Only ¹ Demand	_	_	_	— 48,530,815	_	39,071,975	
EnergyOther ²	3,654,570 9,059,153	_	_	13,427,900 27,156,741	_	63,070,792 85,095,635	37,691,873 —
Federal							
Purchases (thousand kWh) Cost (dollars)		_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_		_	_	_	_
Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
EnergyOther ²	_	_	_	_	_	_	_
Municipal Purchases (thousand kWh)	480	_	_	_	_	374	_
Cost (dollars)	14,160					4,695	
Demand Charge Only ¹		_	_	_	_		_
Demand	_	_	_	_	_	_	_
Energy	14,160	_	_	_	_	4,695	_
Other ²		_	_	_	_		_
Cooperative							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹ Demand	_	_	_	_	_	_	_
Energy				_			
Other ²	=	_	=	=	_	=	_
Other ³							
Purchases (thousand kWh)	403,240	_	_	5,193,141	_	307,158	5,707,048
Cost (dollars) Demand Charge Only ¹	21,492,115	_	_	118,865,710	_	4,593,051 1,529	288,311,368
Demand	19,279	_	_	4,494,087	_	13,225	60,234,077
Energy	20,583,408	_	_	114,371,623	_	4,578,297	228,077,291
Other ²	889,428	_	_	_	_	_	_
Total							
Purchases (thousand kWh)	759,129	_	_	7,560,169	_	4,814,450	7,522,926
Cost (dollars)	34,219,998	_	_	207,981,166	_	191,836,148	378,206,591
Demand Charge Only ¹	- 10.250	_	_		_	1,529	
Demand	19,279	_	_	53,024,902	_	39,085,200	112,437,427
Energy Other ²	24,252,138	_	_	127,799,523	_	67,653,784 85,005,635	265,769,164
Ouici~	9,948,581	_	_	27,156,741	_	85,095,635	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts
Source of Electricity by Ownership Class	Cambridge Electric Light Co	Canal Electric Co	Commonwealth Electric Co	Eastern Edison Co ⁴	Fitchburg Gas & Electric Lght Co	Great Bay Power Co ⁵	Holyoke Power & Electric Co
Investor-Owned							
Purchases (thousand kWh)	668,301	_	1,954,647	2,723,815	118,978	_	959,225
Cost (dollars)	39,906,347	2,237,550	120,654,217	184,820,283	5,200,285	_	27,242,935
Demand Charge Only ¹	405,820	2,237,550	3,865,347	_	_	_	_
Demand	30,769,952	_	84,694,660	134,216,531	3,506,264	_	
EnergyOther ²	8,730,575 —	_	34,710,912 -2,616,702	50,603,752 —	1,694,021 —	_	17,612,354 9,630,581
F- 41							
Federal Purchases (thousand kWh)							
Cost (dollars)	_						
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy		_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	12,000	_	_	_	_	_	_
Demand Charge Only ¹	12,000	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
Municipal							
Purchases (thousand kWh)	_	_	_	237	_	_	_
Cost (dollars)	_	_	_	22,759	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand		_	_	16,377	_	_	_
EnergyOther ²	_	_	_	6,382	_	_	_
Other	_	_	_	_	_	_	_
Cooperative							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹ Demand	_	_	_	_	_	_	_
Energy	_						
Other ²		_	_	_	_	_	_
Other ³							
Purchases (thousand kWh)	754,969	269,888	2,521,147	_	355,758	_	_
Cost (dollars)	27,737,623	5,645,602	158,955,208	6	17,450,906	_	_
Demand Charge Only ¹			28,000	_		_	_
Demand	11,658,944	155,781	68,008,529	_	8,550,947	_	_
Energy	16,742,164	5,489,821	89,354,804	6	8,899,959	_	_
Other ²	-663,485	_	1,563,875	_	_	_	_
Total							
Purchases (thousand kWh)	1,423,270	269,888	4,475,794	2,724,052	474,736	_	959,225
Cost (dollars)	67,655,970	7,883,152	279,609,425	184,843,048	22,651,191	_	27,242,935
Demand Charge Only ¹	417,820	2,237,550	3,893,347	_	_	_	_
Demand	42,428,896	155,781	152,703,189	134,232,908	12,057,211	_	_
Energy	25,472,739	5,489,821	124,065,716	50,610,140	10,593,980	_	17,612,354
Other ²	-663,485	_	-1,052,827	_	_	_	9,630,581

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	•					<u></u>	
	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts
Source of Electricity by Ownership Class	Holyoke Water Power Co	Massachusetts Electric Co	Montaup Electric Co	New England Hydro Trans Elec Co ⁸	New England Power Co	Western Massachusetts Electric Co	Yankee Atomic Electric Co ⁸
Investor-Owned							
Purchases (thousand kWh)	956,642	16,758,972	2,193,719	_	3,728,723	1,689,393	_
Cost (dollars)	27,129,065	1,120,629,286	114,776,354	_	190,914,339	59,772,509	_
Demand Charge Only ¹	_	_	25,055	_	_	_	_
Demand	_	572,136,679	85,441,148	_	25,337,007		_
Energy Other ²	17,576,441 9,552,624	354,866,616 193,625,991	29,310,151 —	_	53,252,740 112,324,592	30,409,678 29,362,831	_
Federal							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy Other ²	_	_	_	_	_	_	_
	_	_	_	_	_	_	_
State and Other Government							
Purchases (thousand kWh)	_	_	12	_	_	32,495	_
Cost (dollars)	_	_	10,600	_	_	947,263	_
Demand Charge Only ¹ Demand	_	_	10,000	_	_	_	_
Energy	_	_	600	_	_	947,263	_
Other ²	_	_	_	_	_	_	_
Municipal							
Purchases (thousand kWh)	_	417	76,390	_	_	2,235	_
Cost (dollars)	_	42,523	6,556,153	_	_	99,620	_
Demand Charge Only I Demand	_	_	4,102,521	_	_		_
Energy	_	42,523	2,453,632	_	_	99,620	_
Other ²	_	_		_	_		_
Cooperative							
Purchases (thousand kWh)	_	_	_	_	_	3,771	_
Cost (dollars) Demand Charge Only ¹	_	_		_	_	75,510	_
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	75,510	_
Other ²	_	_	_	_	_	_	_
Other ³							
Purchases (thousand kWh)	33,738	1,666	1,371,821	_	5,185,287	2,197,238	_
Cost (dollars)	1,059,428	37,031	56,199,214	_	317,995,448	81,144,693	_
Demand Charge Only ¹	_	_	558,273	_	22 597 024	_	_
Demand Energy	1,058,662	37,031	28,566,546 27,074,395	_	22,587,024 258,263,241	— 85,619,334	_
Other ²	766	_ 57,031	— 27,074,393 —	_	37,145,183	-4,474,641	_
Total							
Purchases (thousand kWh)	990,380	16,761,055	3,641,942	_	8,914,010	3,925,132	_
Cost (dollars)	28,188,493	1,120,708,840	177,542,321	_	508,909,787	142,039,595	_
Demand Charge Only ¹	_	_	583,328	_	_	_	_
Demand	10 625 102	572,136,679	118,120,215	_	47,924,031	117 151 405	_
Energy Other ²	18,635,103 9,553,390	354,946,170 193,625,991	58,838,778	_	311,515,981 149,469,775	117,151,405 24,888,190	_
Out-01	7,555,590	173,023,991	_		147,407,773	24,000,190	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Michigan	Michigan	Michigan	Michigan	Michigan	Minnesota	Minnesota
Source of Electricity by Ownership Class	Consumers Power Co	Detroit Edison Co	Edison Sault Electric Co	Upper Peninsula Power Co	Wolverine Hydroelectric Corp ⁵	Minnesota Power & Light Co	Northern States Power Co
Investor-Owned	2.760.741	2.264.600	212 (92	744 219		144.050	1.540.000
Purchases (thousand kWh) Cost (dollars) Demand Charge Only ¹	3,769,741 89,489,848 —	3,264,600 65,875,215 120,893	313,682 13,699,220	744,318 18,621,258	_	144,058 2,026,741	1,548,809 72,487,467 —
Demand	27,344,896 62,181,958 -37,006	6,896,205 58,858,117	4,852,252 7,634,089 1,212,879	5,636,451 12,998,154 -13,347	_ _ _	4,195 2,022,546 —	3,375,453 23,563,013 45,549,001
Federal Purchases (thousand kWh)	_	_	130,475	_	_	1,912,497	252,332
Cost (dollars) Demand Charge Only ¹	_	_	1,641,557	_	_	21,439,602	4,174,439
Demand	_	_	 1,641,557	_	_	— 21,439,602	— 4,158,783
Other ²	_	_	_	_	_	_	15,656
State and Other Government							
Purchases (thousand kWh) Cost (dollars)	9,739 41,787	21,977 293,755	_	_	_	253,926 3,268,129	406,834 13,704,353
Demand Charge Only ¹			_	_	_		8,101,967
EnergyOther ²	— ^{41,787}	293,755 —	_	_	_	3,268,129	5,547,786 54,600
Municipal Purchases (thousand kWh)	-1,046	468	_	1,427	_	4,036	27,604
Cost (dollars) Demand Charge Only I		_	_	54,226	_	161,439 40,500	610,858
Demand	_	_	_	— 54,226	_	120,939	— 607,471
Other ²	_	_	_	_ 34,220	_	— —	3,387
Cooperative Purchases (thousand kWh)	_	_	8	_	_	3,044,004	766,208
Cost (dollars) Demand Charge Only ¹	_	_	749	_	_	67,998,537	25,745,239
Demand	_	_		_	_	41,119,955	16,212,838
EnergyOther ²	_	_	749 —	_	_	26,878,582 —	9,516,310 16,091
Other ³	12 606 207	1.062.210	160.020	11 200		1.500.650	6 244 510
Purchases (thousand kWh) Cost (dollars)	12,606,307 701,479,727	1,862,318 64,859,729	168,828 3,503,040	11,390 172,663	_	1,520,652 20,155,779	6,244,510 168,570,914
Demand Charge Only ¹ Demand	446,119,155	 8,821,441	780,000	_	_	2,231,222	72,055,343
EnergyOther ²	256,153,574 -793,002	52,306,957 3,731,331	2,723,040 —	172,663 —	_	17,924,557 —	96,117,253 398,318
Total							
Purchases (thousand kWh) Cost (dollars)	16,384,741 791,011,362	5,149,363 131,028,699	612,993 18,844,566	757,135 18,848,147	_	6,879,173 115,050,227	9,246,297 285,293,270
Demand Charge Only ¹	— 473,464,051	120,893	<u> </u>	_	_	40,500	
Energy	318,377,319	15,717,646 111,458,829	5,632,252 11,999,435	5,636,451 13,225,043	_	43,355,372 71,654,355	99,745,601 139,510,616
Other ²	-830,008	3,731,331	1,212,879	-13,347	_		46,037,053

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Minnesota	Mississippi	Mississippi	Mississippi	Missouri	Missouri	Missouri
Source of Electricity by Ownership Class	Otter Tail Power Co	Mississippi Power & Light Co	Mississippi Power Co	Systems Energy Resources Inc ⁵	Empire District Electric Co	Kansas City Power & Light Co	St Joseph Light & Power Co
Investor-Owned							
Purchases (thousand kWh)	68,321	3,184,985	66,145	_	919,803	734,345	148,151
Cost (dollars)	1,282,905	225,689,833	2,009,327	_	20,801,071	14,148,365	2,930,521
Demand Charge Only ¹	_			_		_	_
Demand Energy	1,282,905	203,368,496 22,321,337	10,189 1,999,138		5,559,857 15,194,720	13,348,365	2,930,521
Other ²				_	46,494	800,000	
Federal							
Purchases (thousand kWh)	237,036	1,006,980	25,315	_	_	_	_
Cost (dollars)	3,309,755	20,637,841	590,742	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	3,309,755	20,637,841	590,742	_	_	_	_
Other ²		_		_	_	_	_
State and Other Government							
Purchases (thousand kWh)	239,534	39	4,888	_	47,461	106,162	307,265
Cost (dollars)	3,283,938	1,405	128,809	_	773,874	1,856,258	6,022,091
Demand Charge Only ¹	_	_	_	_	_		_
Demand	_	_	_	_	338,688	_	1,220,000
Energy Other ²	3,283,938	1,405 —	128,809	_	435,186	1,856,258	4,802,091 —
Municipal							
Purchases (thousand kWh)	159,252	43,584	2,012	_	125,757	30,138	18,216
Cost (dollars)	2,390,566	837,623	65,653	_	1,883,637	3,334,474	237,100
Demand Charge Only ¹	_	_	_	_	_	992,250	_
Demand	_	_	_	_	1,315,440	46,705	_
Energy	2,390,566	837,623	65,653	_	568,197	853,919	237,100
Other ²	_	_	_	_	_	1,441,600	_
Cooperative Purchases (thousand kWh)	206,731	482,373	10,886		560,674	290,773	11,220
Cost (dollars)	4,824,569	8,537,561	164,172		18,409,497	31,569,919	336,610
Demand Charge Only ¹		_		_	_	_	
Demand	1,174,671	_	_	_	7,082,740	_	_
Energy	3,649,898	8,537,561	164,172	_	11,326,757	8,782,419	336,610
Other ²	_	_	_	_	_	22,787,500	_
Other ³	760 507	700 740	2 122 427		214.606	50.525	17.500
Purchases (thousand kWh)	768,587 13,286,407	722,743	2,123,427	_	314,696	59,525	17,582
Cost (dollars) Demand Charge Only ¹	13,280,407	17,107,753	48,246,268		5,456,128	1,574,657	385,433
Demand	1,681,107		4,090,615		_	_	91,686
Energy	11,605,300	17,107,753	44,152,698	_	5,440,778	1,574,657	293,747
Other ²	_	_	2,955	_	15,350	_	_
Total							
Purchases (thousand kWh)	1,679,461	5,440,704	2,232,673	_	1,968,391	1,220,943	502,434
Cost (dollars)	28,378,140	272,812,016	51,204,971	_	47,324,207	52,483,673	9,911,755
Demand Charge Only ¹	_		_	_	_	992,250	_
Demand	2,855,778	203,368,496	4,100,804	_	14,296,725	46,705	1,311,686
Energy	25,522,362	69,443,520	47,101,212	_	32,965,638	26,415,618	8,600,069
Other ²	_	_	2,955	_	61,844	25,029,100	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Missouri	Missouri	Montana	Nevada	Nevada	New Hampshire	New Hampshire
Source of Electricity by Ownership Class	Union Electric Co	UtiliCorp United Inc	Montana Power Co	Nevada Power Co	Sierra Pacific Power Co	Concord Electric Co ⁴	Connecticut Valley Electric Co ⁴
Investor-Owned							
Purchases (thousand kWh) Cost (dollars) Demand Charge Only ¹	7,906,023 149,017,017 —	2,773,707 76,692,128	662,288 10,830,103	2,427,819 59,038,411	2,509,712 65,541,214	507,338 34,800,717 —	128,899 10,536,583
Demand	40,383,872 108,633,145 —	31,764,781 47,151,169 -2,223,822		19,004,200 40,038,502 -4,291	27,876,000 37,417,430 247,784	17,259,687 8,183,978 9,357,052	7,654,596 2,417,748 464,239
Federal Purchases (thousand kWh)	521,545	37,125	949,541	313,638	28,586	_	_
Cost (dollars) Demand Charge Only ¹	11,763,876	510,122	18,127,691	4,946,381	385,564	_	_
Demand Energy Other ²	173,500 11,590,376	500,522 9,600	 18,091,493 36,198	4,614,217 332,164	385,564	_	_
State and Other	_	9,000	30,176	332,104	_	_	_
Government Purchases (thousand kWh)	_	275,444	1,746	1,574,722	46,880	_	_
Cost (dollars) Demand Charge Only ¹	_	3,527,241	29,637 —	29,326,539 — 4,370,261	1,937,445 —	_	_
Demand Energy Other ²		3,527,241 —		4,379,261 23,686,152 1,261,126	1,937,445 —		
Municipal Purchases (thousand kWh)	8,047	26,561	27,408	145,215	214,327	_	2,061
Cost (dollars) Demand Charge Only ¹	110,247	494,810	439,324	6,906,694	1,568,282	_	169,593
DemandEnergy	— 110,247	— 474,785	6,877 432,447	2,878,186 4,028,508	 1,568,282	_	32,509 137,084
Other ²	_	20,025	_	_	_	_	_
Cooperative Purchases (thousand kWh) Cost (dollars)	59,498 2,110,390	124,280 10,422,008	183,950 4,756,440	7,005 183,685	133,255 6,573,216	_	_
Demand Charge Only ¹	- 686,006	25,000 7,207,993	- - -	— —	4,593,000	_	_
EnergyOther ²	1,424,384	3,189,015	3,756,040 1,000,400	183,685 —	1,980,216 —	_	_
Other ³							*****
Purchases (thousand kWh) Cost (dollars) Demand Charge Only ¹	410,027 13,162,460	284,900 4,989,662	822,834 31,217,631	2,685,605 163,467,040 13,431,600	880,079 44,121,018	_	38,085 3,970,060
Demand	947,866 12,214,594	353,392 4,663,285	6,974,532 24,285,597	81,202,602 67,496,244	2,543,803 41,163,813	_	3,970,060
Energy Other ²	— —	-27,015	-42,498	1,336,594	413,402	_	
Total Purchases (thousand kWh)	8,905,140	3,522,017	2,647,767	7,154,004	3,812,839	507,338	169,045
Cost (dollars) Demand Charge Only 1	176,163,990	96,635,971 25,000	65,400,826	263,868,750 13,431,600	120,126,739	34,800,717 —	14,676,236
Demand Charge Only Energy Other ²	42,191,244 133,972,746	39,326,166 59,506,017 -2,221,212	6,981,409 57,377,317 1,042,100	107,464,249 140,047,308 2,925,593	35,012,803 84,452,750 661,186	17,259,687 8,183,978 9,357,052	7,687,105 6,524,892 464,239

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	New Hampshire	New Hampshire	New Hampshire	New Hampshire	New Hampshire	New Hampshire	New Hampshire
Source of Electricity by Ownership Class	Exeter & Hampton Electric Co ⁴	Granite State Electric Co ⁴	New England Trans Corp ⁸	New England Hydro-Trans Corp ⁸	North Atlantic Energy Corp ⁵	Public Service Co of NH	Unitil Power Corp
Investor-Owned							
Purchases (thousand kWh)	546,115	732,572	_	_	_	6,123,054	_
Cost (dollars)	37,756,731	47,135,648	_	_	_	241,309,225	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand	- , ,-	23,062,690	_	_	_		_
Energy Other ²		15,645,830 8,427,128	_	_	_	65,940,049 175,369,176	_
Federal							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy		_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Purchases (thousand kWh)	_	_	_	_	_	39,925	_
Cost (dollars)	_	_	_	_	_	1,271,767	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand		_	_	_	_	_	_
EnergyOther ²		_	_	_	_	1,271,767	_
Other							
Municipal							
Purchases (thousand kWh)	_	_	_	_	_	9,679	_
Cost (dollars)		_	_	_	_	725,065	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand Energy		_	_	_	_	725,065	_
Other ²		_		_	_		_
Other							
Cooperative							
Purchases (thousand kWh)	_	_	_	_	_	220,543	_
Cost (dollars)		_	_	_	_	12,343,088	_
Demand Charge Only ¹ Demand		_	_	_	_	_	_
Energy						1,022,311	
Other ²		_	_	_	_	11,320,777	_
Other ³							
Purchases (thousand kWh)	_	1,085	_	_	_	3,112,435	_
Cost (dollars)	_	27,165	_	_	_	138,011,628	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy		27,165	_	_	_	138,011,628	_
Other ²	_	_	_	_	_	_	_
Total							
Purchases (thousand kWh)	546,115	733,657	_	_	_	9,505,636	_
Cost (dollars)		47,162,813	_	_	_	393,660,773	_
Demand Charge Only ¹			_	_	_	_	_
Demand	18,887,921	23,062,690	_	_	_	_	_
Energy		15,672,995	_	_	_	206,970,820	_
Other ²	10,076,550	8,427,128	_	_	_	186,689,953	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	New Jersey	New Jersey	New Jersey	New Jersey	New Mexico	New Mexico	New York
Source of Electricity by Ownership Class	Atlantic City Electric Co	Jersey Central Power & Light Co	Public Service Electric & Gas Co	Rockland Electric Co ⁴	Public Service Co of NM	Texas- New Mexico Power Co ⁴	Central Hudson Gas & Electric Corp
Investor-Owned							
Purchases (thousand kWh) Cost (dollars) Demand Charge Only ¹	1,761,459 61,692,346 —	4,667,637 193,568,103 1,301,022	4,870,951 304,228,087 —	1,395,174 69,588,233	839,636 29,126,348 —	_ _	929,284 18,795,951
Demand	_	134,860,057 57,601,643 -194,619	48,861,651 255,366,436	22,421,022 46,076,887 1,090,324	14,040,000 15,022,820 63,528	_ _ _	956,822 17,839,129 —
Federal							
Purchases (thousand kWh)	_	_	_	_	39,299	_	_
Cost (dollars) Demand Charge Only ¹	_	_	_	_	512,586	_	_
Demand		_	_	_	_	_	_
Energy		_	_	_	450,711		
Other ²		_	_	_	61,875	_	_
State and Other							
Government Purchases (thousand kWh)					65,125		570 145
Cost (dollars)	_	_	_	_	944,574	_	578,145 13,127,490
Demand Charge Only ¹							1,350,521
Demand	_	_	_	_	_	_	32,715
Energy	_	_	_	_	937,246	_	11,744,254
Other ²		_	_	_	7,328	_	
Municipal							
Purchases (thousand kWh)	17,410	2,018,771	_	_	24,026	_	_
Cost (dollars)	1,246,516	118,618,594	_	_	462,967	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand		1,213	_	_		_	_
EnergyOther ²	764,552 481,964	118,617,381	_	_	420,977 41,990	_	_
Cooperative							
Purchases (thousand kWh)	_	_	_	_	38,475	_	_
Cost (dollars)	_	_	_	_	592,406	_	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	575,748	_	_
Other ²	_	_	_	_	16,658	_	_
Other ³	1.10.5.55=		15 -15 5 -		550 552		
Purchases (thousand kWh)	4,126,697	5,355,581	15,615,515	_	770,773	_	675,452
Cost (dollars)	278,162,307	303,833,339	338,774,829	_	14,550,124	_	19,214,476
Demand Charge Only ¹ Demand	_	4,373,724	_	_	_	_	266,430
Energy	112,109,038	296,511,261	338,666,787	_	14,562,433	_	18,661,329
Other ²	166,053,269	2,948,354	108,042	_	-12,309	_	286,717
Total							
Purchases (thousand kWh)	5,905,566	12,041,989	20,486,466	1,395,174	1,777,334	_	2,182,881
Cost (dollars)	341,101,169	616,020,036	643,002,916	69,588,233	46,189,005	_	51,137,917
Demand Charge Only ¹	_	1,301,022	_	_	_	_	1,350,521
Demand	_	139,234,994	48,861,651	22,421,022	14,040,000	_	1,255,967
Energy	145,058,047	472,730,285	594,033,223	46,076,887	31,969,935	_	48,244,712
Other ²	196,043,122	2,753,735	108,042	1,090,324	179,070	_	286,717

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	New York	New York	New York	New York	New York	New York	New York
Source of Electricity by Ownership Class	Consolidated Edison Co-NY Inc	Long Island Lighting Co	Long Sault Inc ⁶	New York State Electric & Gas	Niagara Mohawk Power Corp	Orange & Rockland Utilities Inc	Rochester Gas & Electric Corp
				Corp		inc	
Investor-Owned	5 521 224	1 110 074		170 200	126.060	1 412 611	207.770
Purchases (thousand kWh) Cost (dollars)	5,521,324 121,717,018	1,119,974 24,191,029	_	178,389 4,571,055	136,868 2.806.864	1,413,611 35,151,723	387,770 7,475,924
Demand Charge Only ¹			_	-,571,055		1,718,300	— T,473,724
Demand	_	_	_	_	99,280	13	615,789
Energy	121,170,285	24,191,029	_	4,571,055	2,707,584	33,433,410	6,860,135
Other ²	546,733	_	_	_	_	_	_
Federal							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy Other ²	_	_	_	_	_	_	_
Ouici-	_	_	_	_	_	_	_
State and Other							
Government Purchases (thousand kWh)	3,718,047	1,780,710		2,040,982	7,639,342	346,591	1,322,636
Cost (dollars)	128,341,374	48,607,283	_	25,464,924	93,363,893	6,174,605	23,881,767
Demand Charge Only ¹	-		_		7,441,650		4,140,000
Demand	49,374,030	11,604,000	_	8,737,541	35,443,361	_	5,513,020
Energy	61,370,944	37,003,283	_	14,801,159	50,478,882	6,174,605	14,228,747
Other ²	17,596,400	_	_	1,926,224	_	_	_
Municipal							
Purchases (thousand kWh)	_	_	_	17	802,914	_	_
Cost (dollars)	_	_	_	518	56,934,459	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_			_	_
Energy Other ²	_	_	_	518	56,601,373 333,086	_	_
Ouler	_	_	_	_	333,080	_	_
Cooperative							
Purchases (thousand kWh)	_	_	_	159	_	_	_
Cost (dollars) Demand Charge Only ¹	_	_	_	-3,489	_	_	_
Demand	_		_	_			_
Energy	_	_	_	-3,489	_	_	_
Other ²	_	_	_	_	_	_	_
Other ³							
Purchases (thousand kWh)	17,056,676	4,487,005	_	4,770,536	14,963,789	1,024,927	726,959
Cost (dollars)	1,013,192,294	219,615,294	_	327,991,688	1,033,541,664	32,212,036	15,026,305
Demand Charge Only ¹	-6,381,647		_		· — ·		
Demand	219,083,252	1,053,820	_	_	212,957,035	415,461	847,846
Energy	724,074,519	218,561,474	_	324,324,506	850,392,453	31,216,853	14,178,459
Other ²	76,416,170	_	_	3,667,182	-29,807,824	579,722	_
Total							
Purchases (thousand kWh)	26,296,047	7,387,689	_	6,990,083	23,542,913	2,785,129	2,437,365
Cost (dollars)	1,263,250,686	292,413,606	_	358,024,696	1,186,646,880	73,538,364	46,383,996
Demand Charge Only ¹	-6,381,647	_	_		7,441,650	1,718,300	4,140,000
Demand	268,457,282	12,657,820	_	8,737,541	248,499,676	415,474	6,976,655
EnergyOther ²	906,615,748 94,559,303	279,755,786 —	_	343,693,749 5,593,406	960,180,292 -29,474,738	70,824,868 579,722	35,267,341 —
Juici	2 4 ,227,303	_	_	5,575,400	-47,414,130	313,122	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	North Carolina	North Carolina	North Carolina	North Carolina	North Carolina	North Dakota	Ohio
Source of Electricity by Ownership Class	Carolina Power & Light Co	Cascade Power Company ⁵	Duke Power Co	Nantahala Power & Light Co	Yadkin Inc ⁴	MDU Resources Group Inc	AEP Generatir Co
nvestor-Owned							
Purchases (thousand kWh)	3,611,540	_	1,527,719	724,000	_	290,593	_
Cost (dollars)	149,183,585	_	33,017,986	31,071,270	_	7,805,309	_
Demand Charge Only ¹		_		-	_	_	_
Demand		_	610,500	18,324,567	_	2,920,244	
Energy		_	32,345,383	12,741,703	_	4,885,065	
Other ²	-130,088	_	62,103	5,000	_	_	_
ederal	122 501			200 005		44.012	
Purchases (thousand kWh)	123,591	_	_	298,005	_	-44,013	_
Cost (dollars)	2,651,515	_	_	5,073,775	_	183,778	_
Demand Charge Only 1		_	_	_	_	_	_
Demand Energy		_	_		_	192 770	_
Other ²		_	_	5,073,775	_	183,778	_
state and Other							
Government	25.522		60.515			6710	
Purchases (thousand kWh)	35,620	_	69,517	_	_	6,742	_
Cost (dollars)	883,657	_	1,490,344	_	_	92,554	_
Demand Charge Only ¹	_	_		_	_	_	_
Demand	_	_	15,000	_	_		_
Energy Other ²		_	1,475,344	_	_	92,554	_
Municipal Purchases (thousand kWh)	602,317	_	2,661,535	_	_	2,267	_
Cost (dollars)	44,471,216	_	153,752,542	_	_	37,302	_
Demand Charge Only ¹		_		_	_	_ 57,502	_
Demand		_	126,901,906	_	_	_	_
Energy		_	25,892,581	_	_	37,302	_
Other ²		_	958,055	_	_		_
Cooperative							
Purchases (thousand kWh)	5,934	_	45,370	_	_	491,400	_
Cost (dollars)	153,725	_	-1,468,578	_	_	14,915,772	_
Demand Charge Only ¹	_ ′	_	16,650	_	_		_
Demand	_	_	-2,065,000	_	_	10,220,581	_
Energy	153,725	_	581,083	_	_	4,695,191	_
Other ²	_	_	-1,311	_	_	_	_
other ³							
Purchases (thousand kWh)	2,917,979	_	965,283	_	_	_	_
Cost (dollars)	214,193,977	_	33,108,289	-451,583	_	_	_
Demand Charge Only ¹	_	_			_	_	_
Demand	53,403,330	_	60,600	_	_	_	_
Energy	160,714,015	_	33,047,689	_	_	_	_
Other ²	76,632	_	_	-451,583	_	_	_
'otal							
Purchases (thousand kWh)	7,296,981	_	5,269,424	1,022,005	_	746,989	_
Cost (dollars)	411,537,675	_	219,900,583	35,693,462	_	23,034,715	_
Demand Charge Only ¹	621,978	_	16,650	_	_	_	_
Demand	164,456,150	_	125,523,006	18,324,567	_	13,140,825	_
			, ,			9,893,890	
Energy	247,003,197	_	93,342,080	17,815,478	_	7,073,070	

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Ohio	Ohio	Ohio	Ohio	Ohio	Ohio	Ohio
Source of Electricity by Ownership Class	Cincinnati Gas & Electric Co	Cleveland Electric Illuminating Co	Columbus Southern Power Co	Dayton Power & Light Co	Indiana- Kentucky Electric Corp ⁵	Ohio Edison Co	Ohio Power Co
Investor-Owned							
Purchases (thousand kWh) Cost (dollars) Demand Charge Only ¹	2,763,066 51,493,822 —	1,278,403 106,311,329	338,979 7,564,734	625,240 12,854,195 —		2,656,821 53,330,949	1,304,978 31,286,767
Demand	1,184,083 50,309,739 —	86,942 106,224,387 —	22,267 7,542,467 —	1,255,523 11,606,412 -7,740	_ _ _	1,879,958 51,382,225 68,766	37,123 31,249,644 —
Federal Purchases (thousand kWh)	1,850	_	37,920	_	_	_	62,834
Cost (dollars)	59,825	_	872,789	_	_	_	1,456,283
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	 59,825	_	— 872,789	_	_	_	 1,456,283
EnergyOther ²	_ 39,823	_	— 872,789 —	_	_	_	1,430,283 —
State and Other Government							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	16,607	_	_	_	_	_	_
Demand Charge Only ¹	16,607	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
EnergyOther ²	_	_	_	_	_	_	_
Municipal							
Purchases (thousand kWh)	1,781	39,858	2,152	_	_	_	173
Cost (dollars) Demand Charge Only ¹	49,616	263,779	17,329	_		_	8,011
Demand		_		_			
Energy	49,616	263,779	17,329	_	_	_	8,011
Other ²				_	_	_	
Cooperative Purchases (thousand kWh)	39,652			30,750		638,012	
Cost (dollars)	1,039,426	_	-57	463,268	_	15,976,956	11,658
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	1,680,900	_
Energy	1,039,426	_	-57	463,268	_	14,296,056	11,658
Other ²	_	_	_	_	_	_	_
Other ³							
Purchases (thousand kWh)	773,950	331,553	6,958,035	444,649	_	309,262	3,194,900
Cost (dollars) Demand Charge Only ¹	15,595,433	6,934,416	160,438,755	10,641,545	_	8,763,663	31,105,813
Demand	59,830	_		412,576	_	383,700	_
EnergyOther ²	15,535,603 —	6,934,416 —	160,438,755 —	10,228,809 160		8,379,963 —	31,105,813 —
Total							
Purchases (thousand kWh)	3,580,299	1,649,814	7,337,086	1,100,639	_	3,604,095	4,562,885
Cost (dollars)	68,254,729	113,509,524	168,893,550	23,959,008	_	78,071,568	63,868,532
Demand Charge Only ¹	16,607	_	_	_	_	_	_
Demand	1,243,913	86,942	22,267	1,668,099	_	3,944,558	37,123
Energy	66,994,209	113,422,582	168,871,283	22,298,489	_	74,058,244	63,831,409
Other ²	_	_	_	-7,580	_	68,766	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Ohio	Ohio	Oklahoma	Oklahoma	Oregon	Oregon	Pennsylvania
Source of Electricity by Ownership Class	Ohio Valley Electric Corp	Toledo Edison Co	Oklahoma Gas & Electric Co	Public Service Co of Oklahoma	PacifiCorp	Portland General Electric Co	Citizens Electric Co ⁴
Investor-Owned		1	"	'	-		
Purchases (thousand kWh) Cost (dollars) Demand Charge Only ¹	10,055,053 171,033,440	942,528 13,987,055	232,015 4,320,029	39,321 1,371,362	5,091,198 91,488,217 —	2,479,911 59,015,092 19,404,000	172,326 5,973,229
Demand	_	1,485,602 12,480,930	 4,320,029	315,880 1,055,482	15,535,342 75,479,896	1,600,000 37,214,920	2,070,906 4,316,284
Other ²	171,033,440	20,523	_	_	472,979	796,172	-413,961
Federal Purchases (thousand kWh)	_	_	_	_	4,853,523	5,885,061	_
Cost (dollars)	_	_	_	_	126,880,238	8,750,374	_
Demand Charge Only ¹	_	_	_	_	78,822,190	6,012,963	_
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	48,058,048	60,603,974	_
Other ²	_	_	_	_	_	-57,866,563	_
State and Other Government							
Purchases (thousand kWh)	_	_	13,139	21,127	5,422,232	5,298,238	_
Cost (dollars)	_	_	250,836	455,128	60,244,740	70,229,247	_
Demand Charge Only ¹	_	_		_	_	_	_
Demand	_	_	_	_	152,293	_	_
Energy	_	_	250,836	455,128	33,710,965	56,323,689	_
Other ²	_	_			26,381,482	13,905,558	_
Municipal					1.000.555	220.205	
Purchases (thousand kWh)	_	_	_	_	1,268,576	238,305	_
Cost (dollars)	_	_	_	_	52,018,693	3,896,257	_
Demand Charge Only ¹ Demand	_	_	_	_	— 20 109 115	1,023,200	_
	_	_	_	_	30,108,115	2 972 057	_
Energy Other ²	_	_	_	_	21,910,578	2,873,057	_
	_	_	_	_	_	_	_
Cooperative Purchases (thousand kWh)	_	_	131,314	5,128	2,098,264	_	_
Cost (dollars)	_	_	2,895,183	108,107	50,107,785	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	477,849	_	12,816,000	_	_
Energy	_	_	2,417,334	108,107	37,291,785	_	_
Other ²	_	_	_	_	_	_	_
Other ³ Purchases (thousand kWh)		_ 21 510	2 197 047	1 710 272	6.025.020	7 004 142	
Cost (dollars)	_	-31,510 10,482,960	3,187,947 214,603,934	1,718,273 39,185,046	6,935,939 181,624,054	7,984,142 100,819,318	_
Demand Charge Only ¹	_	10,462,900	214,005,954	39,163,040	2,127	100,819,518	_
Demand	_	155,147	_	4,996,238	43,280,809	1,130,734	_
Energy	_	10,327,813	30,772,375	35,457,739	137,552,626	103,939,555	_
Other ²	_	-	183,831,559	-1,268,931	788,492	-4,250,971	_
Total							
Purchases (thousand kWh)	10,055,053	911,018	3,564,415	1,783,849	25,669,732	21,885,657	172,326
Cost (dollars)	171,033,440	24,470,015	222,069,982	41,119,643	562,363,727	242,710,288	5,973,229
Demand Charge Only ¹	_	_	_	_	78,824,317	26,440,163	_
Demand	_	1,640,749	477,849	5,312,118	101,892,559	2,730,734	2,070,906
Energy	_	22,808,743	37,760,574	37,076,456	354,003,898	260,955,195	4,316,284
Other ²	171,033,440	20,523	183,831,559	-1,268,931	27,642,953	-47,415,804	-413,961

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvar
Source of Electricity by Ownership Class	Duquesne Light Co	Metropolitan Edison Co	Pennsylvania Electric Co	Pennsylvania Power & Light Co	Pennsylvania Power Co	Philadelphia Electric Co	Pike County Light & Power
							Co ⁴
vestor-Owned							
Purchases (thousand kWh)	610,424	654,883	141,649	2,219,677	1,040,663	12,648,670	_
Cost (dollars)	12,390,499	26,383,899	8,671,214	64,270,524	15,851,354	223,413,896	_
Demand Charge Only ¹		2,104,250	856,377	_	_		_
Demand	46,140 12,344,359	6,051,128 18,228,521	4,279,353 3,535,231	 54.115.456	— 15,851,354	2,140,750 221,273,146	_
Other ²	— —	-	253	10,155,068	_		_
ederal							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	29,337	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_ 20.227	_
Energy Other ²	_	_	_	_	_	29,337	_
	_	_	_	_	_	_	_
tate and Other Government							
Purchases (thousand kWh)	_	15,882	6,397	44,648	_	87,996	_
Cost (dollars)	_	252,344	-67,335	699,587	_	2,386,511	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	169,299	166,912		_	60,000	_
Energy Other ²	_	83,045	-234,247 	699,587 —	_	2,326,511 —	_
Municipal							
Purchases (thousand kWh)	_	4,277	211	25,867	_	245,318	_
Cost (dollars)	_	85,139	9,806	1,552,315	_	7,553,729	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	1,785,000	_
Energy	_	85,139	9,806	1,552,315	_	5,768,729	_
Other ²	_	_	_	_	_	_	_
ooperative			20.008	149 101		457.012	
Purchases (thousand kWh) Cost (dollars)	_	_	29,098 312,822	148,191 2,201,868	_	457,012 11,594,094	_
Demand Charge Only ¹							
Demand	_	_	_	_	_	1,941,811	_
Energy	_	_	312,822	2,201,868	_	9,652,283	_
Other ²	_	_	_	_	_	_	_
ther ³							
Purchases (thousand kWh)	968,781	3,867,278	3,506,074	7,093,876	762	8,470,871	_
Cost (dollars) Demand Charge Only ¹	20,033,519	210,578,649	201,005,203	281,903,956	13,502	231,340,042	_
Demand Charge Only 1 Demand	_	3,112,123	1,747,149	_	_	— 849,993	
Energy	20,033,519	199,104,184	199,705,463	281,934,687	13,502	230,490,049	_
Other ²		8,362,342	-447,409	-30,731	_		_
otal							
Purchases (thousand kWh)	1,579,205	4,542,320	3,683,429	9,532,259	1,041,425	21,909,867	_
Cost (dollars)	32,424,018	237,300,031	209,931,710	350,628,250	15,864,856	476,317,609	_
Demand Charge Only ¹	_	2,104,250	856,377	_	_	-	_
Demand	46,140	9,332,550	6,193,414			6,777,554	_
Energy	32,377,878	217,500,889	203,329,075	340,503,913	15,864,856	469,540,055	_
Other ²	_	8,362,342	-447,156	10,124,337	_	_	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvania	Rhode Island	Rhode Island
Source of Electricity by Ownership Class	Safe Harbor Water Power Corp ⁵	Susquehanna Electric Co ⁵	UGI Corp	West Penn Power Co	York Haven Power Co ⁵	Blackstone Valley Electric Co ⁴	Narragansett Electric Co
Investor-Owned							
Purchases (thousand kWh)	_	_	_	2,665,878	_	1,297,250	4,699,044
Cost (dollars)	_	_	_	125,560,545	_	90,975,165	286,875,271
Demand Charge Only ¹ Demand	_	_	_	— 51,253,556	_	 67,106,993	— 133,878,643
Energy		_	_	37,816,573	_	23,868,172	94,660,653
Other ²		_	_	36,490,416	_	_	58,335,975
Federal							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	_	_	_	_	_	_	_
Other ²		=	_		_	_	_
State and Other							
Government							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars) Demand Charge Only ¹	_	_	_	_	_	_	_
Demand				_	_		_
Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
Municipal							
Purchases (thousand kWh)	_	_	_	504	_	_	_
Cost (dollars)	_	_	_	6,279	_	_	_
Demand Charge Only ¹ Demand		_	_	_	_	_	_
Energy	_	_	_	6,279	_		_
Other ²	_	_	_	_	_	_	_
Cooperative							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	_	_	_	_	_	_	_
Other ²	_	=	_		_	_	_
Other ³							
Purchases (thousand kWh)	_	_	_	1,506,493	_	1,994	1,395
Cost (dollars)	_	_	_	69,819,056	_	40,931	110,590
Demand Charge Only ¹	_	_	_	2,058	_	_	_
Demand Energy	_	_	_	44,599,073 25,217,925	_	40,931	110,590
Other ²	_	_	_		_	— 40,931 —	—
Total							
Purchases (thousand kWh)	_	_	_	4,172,875	_	1,299,244	4,700,439
Cost (dollars)	_	_	_	195,385,880	_	91,016,096	286,985,861
Demand Charge Only ¹	_	_	_	2,058	_	-	
Demand	_	_	_	95,852,629	_	67,106,993	133,878,643
Energy Other ²	_	_	_	63,040,777 36,490,416	_	23,909,103	94,771,243 58,335,975
Juici	_	_	_	50,470,410	_	_	20,232,713

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Rhode Island	Rhode Island	Rhode Island	South Carolina	South Carolina	South Carolina	South Dakota
Source of Electricity by Ownership Class	Newport Electric Corp	Ocean State Power #25	Ocean State Power Co ⁵	Lockhart Power Co	South Carolina Electric & Gas Co	South Carolina Generating Co Inc ⁵	Black Hills Corp
Investor-Owned							
Purchases (thousand kWh) Cost (dollars)	557,700 36,505,373	_	_	283,027 12,796,127	4,314,799 101,573,689	_	368,598 20,472,038
Demand Charge Only ¹		_	_	-		_	_
Demand Energy Other ²	26,474,812 10,091,133 -60,572		_ _ _	6,351,945 7,704,891 -1,260,709	102,000 101,471,689 —	_ _ _	16,210,734 4,261,304 —
Federal							
Purchases (thousand kWh)	_	_	_	_	_	_	_
Cost (dollars)	_	_	_	_	_	_	-119,444
Demand Charge Only ¹ Demand	_	_	_	_	_	_	— 85,158
Energy	_	_	_	_	_	_	
Other ²	_	_	_	_	_	_	-204,602
State and Other Government							
Purchases (thousand kWh)	_	_	_	_	9,866	_	17,976
Cost (dollars)	_	_	_	_	241,581	_	458,042
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy					241,581		458,042
Other ²	_	_	_	_	_	_	- 130,012
Municipal							
Purchases (thousand kWh)	_	_	_	_	19,644	_	_
Cost (dollars)	_	_	_	_	242,919	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_		_	_
EnergyOther ²	_	_	_	_	242,919	_	_
Other							
Cooperative					25.251		20.909
Purchases (thousand kWh) Cost (dollars)	_	_	_	_	35,251 961,772	_	29,808 433,491
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy Other ²	_	_	_	_	961,772	_	433,491
Other	_	_	_	_	_	_	_
Other ³							
Purchases (thousand kWh)	23	_	_	2,960	152,267	_	_
Cost (dollars) Demand Charge Only ¹	859	_	_	89,021	3,772,377	_	_
Demand				_			
Energy	859	_	_	67,146	3,772,377	_	_
Other ²	_	_	_	21,875	_	_	_
Total							
Purchases (thousand kWh)	557,723	_	_	285,987	4,531,827	_	416,382
Cost (dollars)	36,506,232	_	_	12,885,148	106,792,338	_	21,244,127
Demand Charge Only ¹	_	_	_		_	_	_
Demand	26,474,812	_	_	6,351,945	102,000	_	16,295,892
Energy	10,091,992	_	_	7,772,037	106,690,338	_	5,152,837
Other ²	-60,572	_	_	-1,238,834	_	_	-204,602

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	South Dakota	Tennessee	Tennessee	Texas	Texas	Texas	Texas
Source of Electricity by Ownership Class	Northwestern Public Service Co	Kingsport Power Co ⁴	Tapoco Inc ⁸	Central Power & Light Co	El Paso Electric Co	Gulf States Utilities Co	Houston Lighting & Power Co
Investor-Owned							
Purchases (thousand kWh) Cost (dollars)	48,268 898,007	1,927,778 59,513,458	_	89,466 1,996,692	643,537 18,508,826	1,232,393 21,805,614	201,943 7,741,328
Demand Charge Only ¹ Demand	_	— 27,674,474	_	_	 6,120,000	_	_
Energy	898,007	35,474,098		1,989,000	12,386,571	21,805,614	7,741,328
Other ²	_	-3,635,114	_	7,692	2,255	_	_
Federal Purchases (thousand kWh)	24,261			24,144		2,589,688	
Cost (dollars)	438,021	_		728,007	5,228	53,091,713	_
Demand Charge Only ¹		_	_		_ 5,226	_	_
Demand	_	_	_	_	_	_	_
Energy Other ²	438,021 —	_	_	728,007 —	5,228	53,091,713	_
State and Other							
Government							
Purchases (thousand kWh)	42,835	_	_	67,233	71,757	311,052	132,090
Cost (dollars) Demand Charge Only ¹	608,806	_	_	1,275,494	1,167,822	8,643,729	2,201,292
Demand	_	_	_	_	_	_	_
Energy	608,806	_	_	1,241,843	1,146,911	5,337,878	2,201,292
Other ²		_	_	33,651	20,911	3,305,851	
Municipal Purchases (thousand kWh)	32,295			51,275	17,221	113,944	2,035,627
Cost (dollars)	462,490			1,305,435	412,598	2,198,324	39,984,548
Demand Charge Only ¹		_	_	_	_	_	_
Demand		_	_	_	_	_	_
Energy	462,490	_	_	1,262,044	411,675	2,198,324	39,984,548
Other ²	_	_	_	43,391	923	_	_
Cooperative Purchases (thousand kWh)	23,956	_	_	_	78	1,259,431	34,588
Cost (dollars)	558,256	_	_	_	8,092	22,227,602	569,494
Demand Charge Only ¹		_	_	_	_	_	_
Demand		_	_	_	- 1,710	— 22 227 602	— 569,494
Energy Other ²	— —	_	_	_	6,382	22,227,602 —	
Other ³							
Purchases (thousand kWh)		_	_	2,734,970	-55	6,507,327	10,135,924
Cost (dollars) Demand Charge Only ¹	105,016	_	_	54,193,583	_	187,992,597	271,766,007
Demand					_		21,966,831
Energy	_	_	_	54,388,341	_	178,887,192	249,799,176
Other ²	105,016	_	_	-194,758	_	9,105,405	_
Total							
Purchases (thousand kWh)	171,615	1,927,778	_	2,967,088	732,538	12,013,835	12,540,172
Cost (dollars)	3,070,596	59,513,458	_	59,499,211	20,102,566	295,959,579	322,262,669
Demand Charge Only ¹	— 140,400	— 27,674,474	_	_	 6,120,000	_	21,966,831
Demand Energy	2,825,180	35,474,098	_	 59,609,235	13,946,867	283,548,323	300,295,838
	-,020,100	22,777,070			10,007	-00,010,040	200,220,000

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Texas	Texas	Texas	Texas	Texas	Vermont	Vermo
Source of	Southwestern	Southwestern	Texas	Texas-	West	Central	Citizen
		Public	Utilities	New Mexico			Utilitie
Electricity by	Electric				Texas	Vermont	
Ownership Class	Service	Service	Electric	Power	Utilities	Public	Co ⁴
	Co	Co	Co	Co	Co	Service	
						Corp	
vestor-Owned Purchases (thousand kWh)	724,763	563,804	109,553	3,352,857	31,749	3,220,016	
							_
Cost (dollars)	36,166,652	8,798,568	3,181,014	133,475,502	2,103,472	136,523,614	_
Demand Charge Only ¹			_	_	1,084,720	1,803,901	_
Demand	18,479,439	790,500	_	69,456,813	_	84,317,745	_
Energy	16,423,635	_	3,111,098	64,018,689	1,018,752	52,762,812	_
Other ²	1,263,578	8,008,068	69,916	_	_	-2,360,844	_
ederal							
Purchases (thousand kWh)	_	94	_	_	_	_	_
Cost (dollars)	_	2,118	_	_	_	_	_
Demand Charge Only ¹	_		_	_	_	_	_
Demand	_	_	_	_	_	_	_
	_	_	_	_	_	_	_
Energy	_	- 2112	_	_	_	_	_
Other ²	_	2,118	_	_	_	_	_
tate and Other Government							
Purchases (thousand kWh)	371,740	2,934	33,187	_	3,897	11,756	
` ,				_			_
Cost (dollars)	13,366,172	59,380	607,908	_	172,166	182,855	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	3,153,658	_	_	_	_	8,224	_
Energy	9,124,177	_	607,524	_	172,166	143,512	_
Other ²	1,088,337	59,380	384	_	_	31,119	_
J unicipal							
Purchases (thousand kWh)	_	288	181,229	66	7,800	11,629	_
Cost (dollars)	_	5,746	3,296,114	827	237,800	764,093	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	474,926	_
Energy	_	_	3,234,280	827	237,800	289,167	_
Other ²	_	5,746	61,834				_
		5,7.10	01,00				
ooperative Purchases (thousand kWh)	_	53	18,511	_	_	_	_
Cost (dollars)	_	2,934	239,447	_	_		
	_	4,734	437, 44 7	_	_	_	
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_		_	_	_	_
Energy	_	_	334,519	_	_	_	_
Other ²	_	2,934	-95,072	_	_	_	_
ther ³				_			
Purchases (thousand kWh)	15,260	671,262	12,071,811	2,516,077	1,423,403	161,711	_
Cost (dollars)	_	11,285,355	525,678,938	63,004,866	29,289,627	12,811,907	_
Demand Charge Only ¹	_	_	_	743,734	_	_	_
Demand	_	_	228,336,202	26,186,301	_	1,815,669	_
Energy	_	_	297,251,939	43,437,191	29,000,027	10,808,741	_
Other ²	_	11,285,355	90,797	-7,362,360	289,600	187,497	_
	-	11,200,333	20,191	1,302,300	209,000	107,497	_
otal							
Purchases (thousand kWh)	1,111,763	1,238,435	12,414,291	5,869,000	1,466,849	3,405,112	_
Cost (dollars)	49,532,824	20,154,101	533,003,421	196,481,195	31,803,065	150,282,469	_
Demand Charge Only ¹	_			743,734	1,084,720	1,803,901	_
Demand	21,633,097	790,500	228,336,202	95,643,114		86,616,564	_
Energy	25,547,812	7,500,500	304,539,360	107,456,707	30,428,745	64,004,232	_
	43,341,014	_	JU 1 ,JJ7,JUU	107,430,707	20,420,743	04,004,232	_
Other ²	2,351,915	19,363,601	127,859	-7,362,360	289,600	-2,142,228	

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Vermont	Vermont	Vermont	Vermont	Vermont	Virginia	Virginia
Source of Electricity by Ownership Class	Green Mountain Power Corp	Vermont Electric Power Co Inc	Vermont Electric Trans Co ⁶	Vermont Marble Co ⁸	Vermont Yankee Nuclear Power Corp ⁵	Appalachian Power Co	Virginia Electric Power Co
Investor-Owned							
Purchases (thousand kWh)	710,626	863,375	_	_	_	823,283	5,833,745
Cost (dollars)	30,261,493	32,029,130	_	_	_	17,673,227	158,267,332
Demand Charge Only ¹ Demand		— 19,310,833	_	_	_	— 45,541	5,520,000 50,704,326
Energy	4,519,152	11,880,528	_	_	_	17,627,686	102,043,006
Other ²	-2,958,219	837,769	_	_	_		
Federal							
Purchases (thousand kWh)	_	_	_	_	_	75,696	_
Cost (dollars) Demand Charge Only ¹	_	_	_	_	_	1,761,869	_
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	1,761,869	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Purchases (thousand kWh)	18,636	_	_	_	_	_	810
Cost (dollars)	1,301,482	_	_	_	_	_	15,747
Demand Charge Only ¹ Demand	— 868,270	_	_	_	_	_	_
Energy	433,212	_	_	_	_	_	15,747
Other ²	_	_	_	_	_	_	_ 13,747
Municipal							
Purchases (thousand kWh)	35,683	_	_	_	_	245	1,059
Cost (dollars)	1,659,018	_	_	_	_	9,363	96,326
Demand Charge Only ¹ Demand	992,022			_		_	8,757
Energy	666,996			_	_	9,363	87,569
Other ²	_	_	_	_	_		_
Cooperative							
Purchases (thousand kWh)	558	_	_	_	_		2,905,043
Cost (dollars) Demand Charge Only ¹	52,815	_	_	_	_	-110	86,332,578
Demand	52,815	_		_	_	_	29,173,974
Energy	_ 52,615	_	_	_	_	-110	57,158,604
Other ²	_	_	_	_	_	_	_
Other ³							
Purchases (thousand kWh)	1,643,824	_	_	_	_	16,348,597	12,412,513
Cost (dollars) Demand Charge Only ¹	63,641,402	_	_	_	_	313,569,535	939,473,432 325,000
Demand	11,537 14,737,740			_	_	_	631,834,875
Energy	47,950,365	_	_	_	_	313,569,535	307,313,557
Other ²	941,760	_	_	_	_		
Total							
Purchases (thousand kWh)	2,409,327	863,375	_	_	_	17,247,821	21,153,170
Cost (dollars)	96,916,210	32,029,130	_	_	_	333,013,884	1,184,185,415
Demand Charge Only ¹	11,537	_	_	_	_	_	5,845,000
Demand	45,351,407	19,310,833	_	_	_	45,541	711,721,932
Energy	53,569,725	11,880,528	_	_	_	332,968,343	466,618,483
Other ²	-2,016,459	837,769	_	_	_	_	_

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

	Washington	Washington	West Virginia	West Virginia	West Virginia	West Virginia	Wisconsin
Source of Electricity by Ownership Class	Puget Sound Power & Light Co	Washington Water Power Co	Kanawha Valley Power Co ⁵	Monongahela Power Co	UtiliCorp United Inc ⁴	Wheeling Power Co ⁴	Consolidated Water Power Co
Investor-Owned							
Purchases (thousand kWh)	2,571,156	1,744,140	_	1,377,417	_	1,865,918	1,087,654
Cost (dollars)	98,030,904	24,210,901	_	66,828,097	_	59,040,190	23,429,788
Demand Charge Only ¹	_	138,888	_	_	_	_	_
Demand	49,515,048	_	_	27,801,601	_	19,387,688	5,573,783
Energy Other ²	48,515,856 —	24,072,013 —	_	18,807,860 20,218,636	_	39,652,502 —	17,856,005 —
Federal							
Purchases (thousand kWh)	2,803,803	2,905,899	_	_	_	_	_
Cost (dollars)	61,131,966	65,439,915	_	_	_	_	_
Demand Charge Only ¹		3,324,476	_	_	_	_	_
Demand	308,732	2,340,000	_	_	_	_	_
Energy	57,202,162	59,579,907	_	_	_	_	_
Other ²	3,621,072	195,532	_	_	_	_	_
State and Other Government							
Purchases (thousand kWh)	9,066,882	2,282,712	_	_	_	_	_
Cost (dollars)	82,800,029	17,892,758	_	_	_	_	_
Demand Charge Only ¹	212,500	282,000	_	_	_	_	_
Demand	_	150,000	_	_	_	_	_
EnergyOther ²	82,587,529 —	17,460,758 —	_	_	_	_	_
Municipal							
Purchases (thousand kWh)	1,377,193	499,447	_	277	_	_	_
Cost (dollars)	46,672,377	5,378,319	_	3,477	_	_	_
Demand Charge Only ¹ Demand	_	_	_	_	_	_	_
Energy	46,156,851	5,378,319	_	3,477	_	_	_
Other ²	515,526		_	_ 5,477	_	_	_
Cooperative							
Purchases (thousand kWh)	_	630	_	_	_	_	_
Cost (dollars)	_	55,127	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	_	13,729	_	_	_	_	_
Other ²	_	41,398	_	_	_	_	_
Other ³							
Purchases (thousand kWh)	4,795,186	4,374,174	_	1,531,028	_	4,413	7,500
Cost (dollars)	137,688,106	76,933,516	_	72,471,464	_	1,392,132	121,558
Demand Charge Only ¹		_	_	1,133	_	_	_
Demand	168,221	_	_	43,562,599	_	-	_
Energy Other ²	192,259,326 -54,739,441	76,822,209 111,307	_	28,907,732 —	_	85,019 1,307,113	121,558
Total							
Total	20 614 220	11 907 002		2 000 722		1,870,331	1 005 154
Purchases (thousand kWh) Cost (dollars)	20,614,220 426,323,382	11,807,002 189,910,536	_	2,908,722	_	60,432,322	1,095,154
Demand Charge Only ¹	212,500	3,745,364	_	139,303,038 1,133	_		23,551,346
Demand	49,992,001	2,490,000	_	71,364,200	_	19,387,688	5,573,783
DCIIIana		183,326,935		47,719,069	_	39,737,521	17,977,563
Energy	426,721,724						

Table 19. Electricity Purchases by Investor-Owned Utilities, by State, 1996 (Continued)

<u>,</u>	•			· · · · · · · · · · · · · · · · · · ·	
	Wisconsin	Wisconsin	Wisconsin	Wisconsin	Wyoming
Source of Electricity by Ownership Class	Wisconsin Electric Power Co	Wisconsin Power & Light Co	Wisconsin Public Service Corp	Wisconsin River Power Co ⁵	Cheyenne Light Fuel & Power Co ⁴
	Co		Согр	C03	Power Co
Investor-Owned					
Purchases (thousand kWh)	1,062,321	1,015,448	1,591,574	_	_
Cost (dollars)	19,765,696	23,035,021	29,109,140	_	_
Demand Charge Only ¹	_	_	_	_	_
Demand	1,059,580	16,747	1,963,257	_	_
Energy	18,598,116	16,778,984	27,145,883	_	_
Other ²	108,000	6,239,290	_	_	_
Federal Purchases (thousand kWh)		498,494			
Cost (dollars)	_	6,281,631	_	_	_
Demand Charge Only ¹		0,261,031			
Demand					
Energy	_	6,281,631	_	_	
Other ²	_		_	_	_
State and Other					
Government		ć 170			
Purchases (thousand kWh)	_	6,170	-	_	-
Cost (dollars)	_	115,587	_	_	_
Demand Charge Only ¹ Demand	_	_	_	_	_
Energy	_	115,587	_		<u> </u>
Other ²	_	_	_	_	_
Municipal					
Purchases (thousand kWh)	4,755	12,765	78	_	_
Cost (dollars)	118,587	670,226	2,412	_	_
Demand Charge Only 1	_	_	_	_	_
Demand	—		-	_	_
Energy	118,587	670,226	2,412	_	_
Other ²	_	_	_	_	_
Cooperative	2.455	2 555 210	1.000		
Purchases (thousand kWh)	2,475	2,655,310	1,000	_	_
Cost (dollars)	41,262	41,160,923	22,150	_	_
Demand Charge Only ¹ Demand	_	_	-	_	_
Energy	41,262	39,260,923	22,150		
Other ²		1,900,000		_	_
Other ³					
Purchases (thousand kWh)	682,847	272,301	420,643	_	_
Cost (dollars)	16,290,003	6,008,305	8,598,413	_	_
Demand Charge Only ¹	_	_	_	_	_
Demand	499,200		244,774	_	_
Energy	15,787,803	6,190,355	8,353,639	_	_
Other ²	3,000	-182,050	_	_	_
Total	1 550 000	4 4 50 400	2.012.207		
Purchases (thousand kWh)	1,752,398	4,460,488	2,013,295	_	_
Cost (dollars)	36,215,548	77,271,693	37,732,115	_	_
Demand Charge Only 1	1 550 700	16747	2 200 021	_	_
Demand Energy	1,558,780 34,545,768	16,747 69,297,706	2,208,031	_	_
	34,343,768 111,000	7,957,240	35,524,084	_	_
Other ²	111,000	1,931,240	_	_	_

Monetary settlements from contracts where electricity is not taken.

Includes other transactions involving line and substation rentals, system support charges, and special contract transactions.

Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

FERC Form 1 respondent with purchased power transactions, but no sales for resale transactions. FERC Form 1 respondent with sales for resale transactions, but no purchased power transactions.

FERC Form 1 respondent with only wheeling.
FERC Form 1 respondent with only exchanges.
FERC Form 1 respondent with no purchased power, sales for resale, exchanges, or wheeling.

Not Applicable

Notes: •For identification purposes, the utilities are listed in the State in which the corporate office is located. •Totals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996

	Alabama	Alabama	Alaska	Arizona	Arizona	Arizona	Arizona
Purchaser of	Alabama	Southern	Alaska	Ajo	Arizona	Century	Citizens
Electricity by	Power	Electric	Electric	Improvement	Public	Power	Utilities
Ownership Class	Co	Generating	Light &	Co8	Service	Corp5	Co
		Co ⁵	Power ⁴		Со		
Investor-Owned Sales (thousand kWh)	5,040,888	5,559,212	_	_	1,789,693	_	_
Revenue (dollars)		151,543,206	_	_	63,240,463	_	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand		_	_	_	31,205,532	_	_
Energy		151,543,206	_	_	32,034,931	_	_
Other ²	_	_	_	_	_	_	_
Federal							
Sales (thousand kWh)	37,076	_	_	_	53,443	_	_
Revenue (dollars)		_	_	_	6,330,305	_	_
Demand Charge Only 1 Demand		_		_	5,004 5,349,651	_	_
Energy		_			975,650		
Other ²		_	_	_		_	_
State and Other							
Government Sales (thousand kWh)	4,205				276,917		
Revenue (dollars)	124,360				8,876,910		
Demand Charge Only ¹		_	_	_	5,004	_	_
Demand		_	_	_	4,040,929	_	_
Energy		_	_	_	4,830,977	_	_
Other ²	_	_	_	_	_	_	_
Municipal							
Sales (thousand kWh)	3,807,379	_	_	_	191,405	_	_
Revenue (dollars)		_	_	_	3,093,599	_	_
Demand Charge Only ¹ Demand		_	_	_	281,688	_	_
Energy		_			2,811,911		
Other ²		_	_	_		_	_
Cooperative							
Sales (thousand kWh)	532,364	_	_	_	263,000	_	_
Revenue (dollars)		_	_	_	3,315,555	_	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand	8,238,239	_	_	_		_	_
Energy Other ²		_	_	_	3,315,555	_	_
	-2,037,416						
Other ³							
Sales (thousand kWh)	10,361,390	_	_	_	792,776	_	_
Revenue (dollars) Demand Charge Only 1	220,542,252	_	_	_	13,703,569	_	_
Demand	_	_		_	753,121		
Energy	207,100,990	_	_	_	12,950,448	_	_
Other ²	13,441,262	_	_	_	_	_	_
Total							
Sales (thousand kWh)	19,783,302	5,559,212	_	_	3,367,234	_	_
Revenue (dollars)	608,288,707	151,543,206	_	_	98,560,401	_	_
Demand Charge Only ¹		_	_	_	10,008	_	_
Demand	56,922,453	_	_	_	41,630,921	_	_
Energy	551,864,941	151,543,206	_	_	56,919,472	_	_
Other ²	-498,687	_	_	_	_	_	_

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	Arizona	Arkansas	Arkansas	California	California	California	Colorado
Purchaser of Electricity by Ownership Class	Tucson Electric Power Co	Arkansas Power & Light Co	Entergy Power Co	Pacific Gas & Electric Co	San Diego Gas & Electric Co	Southern California Edison Co	Public Service Co of Colorado
Investor-Owned							
Sales (thousand kWh)	1,372,035	2,282,763	_	255,598	184,514	551,587	1,226,785
Revenue (dollars)	22,250,836	60,144,630	_	4,025,321	2,940,572	30,151,775	34,908,185
Demand Charge Only ¹ Demand		568,531 21,573,529	_	_	_	1,260,000 11,462,524	— 16,711,600
Energy	20,814,097	38,002,570	_	3,861,700	2,940,572	15,529,361	19,297,367
Other ²	_	_	_	163,621		1,899,890	-1,100,782
Federal	3,000			22 041	6 400	41 162	10.000
Sales (thousand kWh) Revenue (dollars)	61,678	_	_	23,041 -10,553,211	6,400 124,520	41,163 153,954	19,880 381,012
Demand Charge Only ¹	_	_	_	2,056,250		_	
Demand	_	_	_	1,872	_	_	_
Energy	61,678	_	_	307,031	124,520	153,954	381,012
Other ²	_	_	_	-12,918,364	_	_	_
State and Other Government							
Sales (thousand kWh)	706,250	_	_	341,381	10,386	243,853	39,823
Revenue (dollars)	39,583,127	166,320	_	61,521,092	251,183	31,231,224	653,658
Demand Charge Only ¹		166,320	_		_		_
Demand Energy	26,693,734 12,889,393	_	_	54,142,978 7,329,865	251,183	23,277,863 6,753,283	653,658
Other ²		_	_	48,249	_	1,200,078	
Municipal							
Sales (thousand kWh)	183,109	1,763,633	_	470,715	753	658,856	70,529
Revenue (dollars) Demand Charge Only ¹	2,850,916 —	76,104,968 122,816		24,681,658	51,307 20,000	21,434,435 262,500	2,196,279
Demand	_	21,772,335	_	16,217,786		11,346,765	923,408
Energy	2,850,916	54,209,817	_	8,314,202	31,307	9,431,992	1,389,711
Other ²	_	_	_	149,670	_	393,178	-116,840
Cooperative Sales (thousand kWh)	148,939	936,389			200	11,864	1,761,456
Revenue (dollars)	2,054,668	34,316,279	_		4,200	280,803	78,446,007
Demand Charge Only ¹		_	_	_			_
Demand	_	16,450,207	_	_	_	1,040	51,869,805
Energy	2,054,668	17,866,072	_	_	4,200	279,763	33,359,989
Other ²	_	_	_	_	_	_	-6,783,787
Other ³							
Sales (thousand kWh)	946,964	12,207,651	_	122,404	447,693	279,705	242,744
Revenue (dollars) Demand Charge Only 1	14,712,001	285,366,592		2,180,501	9,888,514 262,500	6,167,840	3,892,710
Demand	_	15,448,780	_	45,512	745,700	840,000	_
Energy	14,712,001	265,741,377	_	2,119,364	8,880,314	5,661,538	3,892,710
Other ²	_	4,176,435	_	15,625	_	-333,698	_
Total							
Sales (thousand kWh)	3,360,297	17,190,436	_	1,213,139	649,946	1,787,028	3,361,217
Revenue (dollars)	81,513,226	456,098,789	_	81,855,361	13,260,296	89,420,031	120,477,851
Demand Charge Only ¹	— 20 120 472	857,667	_	2,056,250	282,500	1,522,500	
Demand	28,130,473	75,244,851	_	70,408,148	745,700	46,928,192 37,809,891	69,504,813 58,974,447
Energy	53,382,753	375,819,836		21,932,162	12,232,096		

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

		-		-			
Purchaser of Electricity by	Colorado Utilicorp United	Connecticut Connecticut Light &	Connecticut Connecticut Yankee	Connecticut United Illuminating	Delaware Delmarva Power	District of Columbia	Florida Florida Power &
Ownership Class	Inc	Power Co	Atomic Power Co ⁵	Со	& Light Co	Electric Power Co	Light Co
Investor-Owned			1	'		,	
Sales (thousand kWh)	_	1,122,593	2,770,212	722,555	51,180	3,933,883	407,985
Revenue (dollars)	_	52,460,371	207,659,698	28,621,486	1,269,639	92,882,849	15,601,035
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	7,255,665	_	118,096	22,997
Energy Other ²	_	23,579,319 28,881,052	14,692,949 192,966,749	21,365,821 —	1,269,639 —	122,666 92,642,087	15,578,038 —
.							
Federal Sales (thousand kWh)							25,888
Revenue (dollars)						_	986,352
Demand Charge Only ¹							
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	_	986,352
Other ²	_	_	_	_	_	_	
State and Other Government							
Sales (thousand kWh)	_	39,050	_	_	_	_	7,507
Revenue (dollars)	_	2,448,976	_	_	_	_	318,655
Demand Charge Only ¹	_		_	_	_	_	_
Demand	_	_	_	_	_	_	171.948
Energy	_	1,201,133	_	_	_	_	13,436
Other ²	_	1,247,843	_	_	_	_	133,271
Municipal							
Sales (thousand kWh)	_	1,691,586	_	_	1,223,951	_	1,133,175
Revenue (dollars)	_	85,854,998	_	_	44,304,746	_	30,162,808
Demand Charge Only ¹	_	_	_	_	_	_	
Demand	_	_	_	_	10,775,264	_	8,575,655
Energy	_	36,209,229	_	_	33,378,135	_	12,057,239
Other ²	_	49,645,769	_	_	151,347	_	9,529,914
Cooperative		26.252			512.100	2.564.705	1.050.003
Sales (thousand kWh)	_	36,353	_	_	513,109	2,564,785	1,060,083
Revenue (dollars) Demand Charge Only 1	_	1,101,856	_	_	33,724,913	121,907,893	85,209,676
Demand					21,976,693	53,748,673	58,030,920
Energy	_	747,881	_		12,015,304	73,840,406	5,428,535
Other ²	_	353,975	_	_	-267,084	-5,681,186	21,750,221
Other ³							
Sales (thousand kWh)	_	1,919,703	_	1,537,868	2,400,137	3,134,421	829,505
Revenue (dollars)	_	44,912,766	_	44,223,057	61,990,553	82,812,149	26,230,262
Demand Charge Only ¹	_	_	_	_	_	626,190	_
Demand	_	_	_	263,934	_	_	_
Energy	_	34,824,234	_	43,792,645	61,990,553	_	26,230,262
Other ²	_	10,088,532	_	166,478	_	82,185,959	_
Total							
Sales (thousand kWh)	_	4,809,285	2,770,212	2,260,423	4,188,377	9,633,089	3,464,143
Revenue (dollars)	_	186,778,967	207,659,698	72,844,543	141,289,851	297,602,891	158,508,788
Demand Charge Only ¹	_	_	_		_	626,190	_
Demand	_	_	_	7,519,599	32,751,957	53,866,769	66,801,520
Energy	_	96,561,796 90,217,171	14,692,949 192,966,749	65,158,466 166,478	108,653,631 -115,737	73,963,072 169,146,860	60,293,862 31,413,406
Other ²							

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

•		·		, .	,	· · ·	
	Florida	Florida	Florida	Georgia	Georgia	Hawaii	Hawaii
Purchaser of Electricity by Ownership Class	Florida Power Corp	Gulf Power Co	Tampa Electric Co	Georgia Power Co	Savannah Electric & Power Co	Citizens Utilities Co ⁴	Hawaiian Electric Co Inc ⁴
					Co		
Investor-Owned							
Sales (thousand kWh)	191,414	1,214,780	1,325,205	1,705,354	63,724	_	_
Revenue (dollars)	10,037,349	52,258,509	32,114,925	59,030,144	1,201,507	_	_
Demand Charge Only ¹	6,169,800					_	_
Demand	_	26,803,275	5,903,278	27,400,775	_	_	_
Energy	3,867,549	27,678,058	26,125,480	31,629,369	1,201,507	_	_
Other ²	_	-2,222,824	86,167	_	_	_	_
Federal							
Sales (thousand kWh)	44,087	7,132	_	54,870	2,768	_	_
Revenue (dollars)	869,453	185,968	_	1,585,594	79,991	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	869,453	185,968	_	1,585,594	— 79,991	_	_
Other ²	- 009,433	165,906	_	1,363,394	79,991		_
Oulci							
State and Other							
Government							
Sales (thousand kWh)	_	809	_	715,350	314	_	_
Revenue (dollars)	_	21,882	_	17,991,980	9,291	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	1,534,973	_	_	_
Energy	_	21,882	_	16,236,882	9,291	_	_
Other ²	_	_	_	220,125	_	_	_
M							
Municipal	1 227 516	104 247	1 222 700	1 261 902	12.460		
Sales (thousand kWh)	1,337,516	194,247	1,333,790	1,361,893	13,469	_	_
Revenue (dollars) Demand Charge Only 1	70,735,769 107,121	7,955,402	31,033,602	45,713,078	259,783	_	_
Demand	34,335,691	3,956,344	7,131,974	19,620,328			
Energy	23,817,838	4,274,679	23,901,628	25,460,830	259,783	_	_
Other ²	12,475,119	-275,621	_	631,920	_	_	_
	,.,-,,	,					
Cooperative							
Sales (thousand kWh)	893,588	18,532	397,261	3,813,516	1,527	_	_
Revenue (dollars)	71,189,766	679,888	9,642,419	164,600,772	44,843	_	_
Demand Charge Only ¹	_	3,623	_	_	_	_	_
Demand	39,522,070	70,200	2,122,418	94,587,776	-	_	_
Energy	18,761,957	606,065	7,520,001	70,012,996	44,843	_	_
Other ²	12,905,739	_	_	_	_	_	_
Other ³							
Sales (thousand kWh)	241,128	808,244	185,130	1,397,566	51,616		
Revenue (dollars)	6,464,341	19,860,764	20,504,928	42,544,835	3,532,244		
Demand Charge Only ¹	— —					_	_
Demand	_	953,948	15,221,004	70,282	1,642,953	_	_
Energy	6,658,459	18,906,816	5,283,924	42,474,553	1,889,291	_	_
Other ²	-194,118					_	_
Total							
Sales (thousand kWh)	2,707,733	2,243,744	3,241,386	9,048,549	133,418	_	_
D (1.11)		00.062.412	93,295,874	331,466,403	5,127,659	_	_
Revenue (dollars)	159,296,678	80,962,413	93,293,674				
Demand Charge Only ¹	6,276,921	3,623	_	_		_	_
Demand Charge Only ¹ Demand	6,276,921 73,857,761	3,623 31,783,767	— 30,378,674	143,214,134		_	_
Demand Charge Only ¹	6,276,921	3,623	_	_		_ _ _	

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

•		•		, .	,	<i>'</i>	
	Hawaii	Idaho	Idaho	Illinois	Illinois	Illinois	Illinois
Purchaser of	Maui	Citizens	Idaho	Central	Central	Commonwealth	Electric
Electricity by	Electric	Utilities	Power	Illinois	Illinois	Edison	Energy
Ownership Class	Co Ltd ⁴	Co ⁴	Co	Light	Public Service	Co	Inc
•				Co	Co		
Investor-Owned Sales (thousand kWh)	_	_	3,239,956	366,792	2,523,763	8,384,204	3,118,705
Revenue (dollars)	_	_	51,178,600	7,591,079	60,065,354	133,319,237	64,127,154
Demand Charge Only ¹	_	_	201,760				
Demand	_	_	4,095,000	702,750	9,898,645	2,781,563	32,410,347
Energy	_	_	46,881,840	6,888,329	48,290,961	130,537,674	31,310,989
Other ²	_	_	_	_	1,875,748	_	405,818
Federal							
Sales (thousand kWh)	_	_	6,668	_	274,850	1,360	2,220
Revenue (dollars)	_	_	140,429	_	5,406,966	24,217	29,609
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	_	_	140,429	_	5,406,966	24,217	29,609
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	_	_	430,872	_	_	_	_
Revenue (dollars)	_	_	8,136,962	_	_	_	_
Demand Charge Only ¹	_	_		_	_	_	_
Demand	_	_	2,373,000	_	_	_	_
Energy	_	_	5,763,962	_	_	_	_
Other ²	_	_	_	_	_	_	_
Municipal							
Sales (thousand kWh)	_	_	201,127	79,566	1,273,256	1,815,643	_
Revenue (dollars)	_	_	4,534,005	1,888,662	34,319,903	73,020,964	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	930,589	492,333	12,064,903	29,515,761	_
Energy	_	_	3,603,026	1,133,164	21,874,663	43,502,579	_
Other ²	_	_	390	263,165	380,337	2,624	_
Cooperative							
Sales (thousand kWh)	_	_	78,612	_	794,652	206,100	_
Revenue (dollars)	_	_	1,862,510	_	37,772,994	3,394,243	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_		_	24,925,488		_
Energy	_	_	1,862,510	_	10,104,032	3,394,243	_
Other ²	_	_	_	_	2,743,474	_	_
Other ³						. ==0 000	
Sales (thousand kWh)	_	_	313,048	312,072	1,120,915	1,770,893	_
Revenue (dollars)	_	_	4,369,977	5,727,368	24,131,407	25,281,905	_
Demand Charge Only ¹	_	_	24,300		-1,194,972		_
Demand	_	_		8,000	1,668,839	274,533	_
Energy Other ²	_	_	4,345,677 —	5,719,368 —	23,802,540 -145,000	25,007,372 —	_
					,,,,,		
Total			4 270 202	750 400	5.007.427	10 170 000	2 120 025
Sales (thousand kWh)	_	_	4,270,283	758,430	5,987,436	12,178,200	3,120,925
Revenue (dollars)	_	_	70,222,483	15,207,109	161,696,624	235,040,566	64,156,763
Demand Charge Only 1	_	_	226,060	1 202 002	-1,194,972	22 571 957	22 410 247
Demand	_	_	7,398,589	1,203,083 13,740,861	48,557,875	32,571,857	32,410,347
EnergyOther ²	_	_	62,597,444 390		109,479,162	202,466,085	31,340,598
	_	_	390	263,165	4,854,559	2,624	405,818

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

•		•		, .	,		
	Illinois	Illinois	Indiana	Indiana	Indiana	Indiana	Indiana
Purchaser of Electricity by Ownership Class	Illinois Power Co	Mt Carmel Public Utility Co	Alcoa Generating Corp ⁴	Commonwealth Edison of Indiana ⁵	Indiana Michigan Power Co	Indianapolis Power & Light Co	Northern Indiana Public Service Co
Investor-Owned							
Sales (thousand kWh)	2,933,873 62,957,515	_	10,451 172,441	1,851,957 94,137,394	3,263,655 91,992,297	108,116 1,785,676	627,825 10,524,928
Demand Charge Only ¹		_			54,203	_	_
Demand Energy	10,262,916 52,694,599	_	— 172,441	17,859,226 76,278,168	34,448,013 49,313,591	1,785,676	352,000 10,172,928
Other ²	— —	_	— 172, 44 1	——————————————————————————————————————	8,176,490	- 1,785,070	-
Federal							
Sales (thousand kWh)	380,634	_	_	_	105,190	_	_
Revenue (dollars)	5,925,831	_	_	_	3,035,435	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	5,925,831			_	2,684,929	_	
Other ²	_	_	_	_	350,506	_	_
State and Other							
Government Sales (thousand kWh)					344,161	7,610	1,156
Revenue (dollars)			_	_	13,025,817	147,875	31,403
Demand Charge Only ¹	_	_	_	_	_		_ 51,105
Demand	_	_	_	_	8,142,659	34,072	_
Energy Other ²	_	_	_	_	4,753,411 129,747	113,803 —	14,081 17,322
Municipal							
Sales (thousand kWh)	40,474	3,542	_	_	2,314,309	_	256,386
Revenue (dollars)	2,085,828	129,755	_	_	84,698,254	_	11,976,658
Demand Charge Only ¹			_	_		_	1,929,277
Demand	105,644	59,761	_	_	55,789,897	_	3,732,948
Energy	1,980,184	54,199	_	_	29,749,660	_	8,845,339
Other ²	_	15,795	_	_	-841,303	_	-2,530,906
Cooperative	1 157 (22				002 (00	200.215	52.491
Sales (thousand kWh) Revenue (dollars)	1,157,622 49,124,390	_	_	_	992,699 28,786,663	290,215 5,430,239	53,481 6,408,381
Demand Charge Only ¹	— —	_		_			
Demand	31,755,904	_	_	_	15,023,304	707,717	4,856,608
Energy	17,368,486	_	_	_	13,825,014	4,841,785	1,551,773
Other ²	_	_	_	_	-61,655	-119,263	_
Other ³							
Sales (thousand kWh)	941,655	_	_	_	11,719,629	348,283	739,498
Revenue (dollars)	17,468,787	_	_	_	169,939,578	7,089,350	14,331,090
Demand Charge Only ¹ Demand	_	_	_	_	_	1,066,726	424,071
Energy	17,468,787				160,505,137	6,022,624	13,907,019
Other ²	_	_	_	_	9,434,441		_
Total							
Sales (thousand kWh)	5,454,258	3,542	10,451	1,851,957	18,739,643	754,224	1,678,346
Revenue (dollars)	137,562,351	129,755	172,441	94,137,394	391,478,044	14,453,140	43,272,460
Demand Charge Only ¹			_	— 17.050.226	54,203		1,929,277
Demand	42,124,464	59,761	172 441	17,859,226	113,403,873	1,808,515	9,365,627
Energy Other ²	95,437,887	54,199 15,795	172,441	76,278,168	260,831,742	12,763,888 -119,263	34,491,140 -2,513,584
Ouici~	_	15,795	_	_	17,188,226	-119,203	-2,313,384

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

				•			
	Indiana	Indiana	Iowa	Iowa	Iowa	Iowa	Iowa
Purchaser of Electricity by Ownership Class	PSI Energy Inc	Southern Indiana Gas & Electric Co	Interstate Power Co	Iowa Electric Light & Power Co	Iowa Southern Utilities Co	Iowa- Illinois Gas & Electric Co	Midwest Power Systems Inc
T O . 1							
Investor-Owned Sales (thousand kWh)	4,787,426	312,721	229,977	_	_	_	_
Revenue (dollars)	95,125,782	6,848,273	3,103,944	_	_	_	_
Demand Charge Only ¹	126,250		_	_	_	_	_
Demand Energy	3,190,293 91,809,239	5,000 6,843,273	3,103,944	_			_
Other ²	_	-	_	_	_	_	_
Federal							
Sales (thousand kWh)	30,050	_	845	_	_	_	_
Revenue (dollars)	1,306,380	_	8,460	_	_	_	_
Demand Charge Only ¹ Demand	676,000	_	_	_	_	_	_
Energy	630,380	_	8,460	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	1,498,139	_	1,541	_	_	_	_
Revenue (dollars)	31,161,323	_	34,190	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	8,741,622	_		_	_	_	_
Energy Other ²	26,134,318 -3,714,617	_	34,190 —	_	_	_	_
Municipal							
Sales (thousand kWh)	805,148	554,008	224,360	_	_	_	_
Revenue (dollars)	22,403,666	22,750,555	7,711,466	_	_	_	_
Demand Charge Only ¹	- 000 212	10.450.200		_	_	_	_
Demand Energy	8,988,213 14,070,795	10,459,299 11,537,257	2,629,803 5,081,663	_			_
Other ²	-655,342	753,999		_	_	_	_
Cooperative							
Sales (thousand kWh)	1,679,588	200,596	10,726	_	_	_	_
Revenue (dollars) Demand Charge Only ¹	51,358,183	5,151,442	1,286,590	_	_	_	_
Demand	23,458,797	2,201,780	1,060,979	_	_	_	_
Energy	28,356,703	2,949,662	225,611	_	_	_	_
Other ²	-457,317	_	_	_	_	_	_
Other ³							
Sales (thousand kWh)	1,644,197	430,156	_	_	_	_	_
Revenue (dollars)	43,981,430	6,163,316	_	_	_	_	_
Demand Charge Only ¹ Demand	166,667 2,102,913	147,500	_	_	_	_	_
Energy	33,196,724	6,015,816	_	_	_	_	_
Other ²	8,515,126	_	_	_	_	_	_
Total							
Sales (thousand kWh)	10,444,548	1,497,481	467,449	_	_	_	_
Revenue (dollars)	245,336,764	40,913,586	12,144,650	_	_	_	_
Demand Charge Only ¹ Demand	292,917 47,157,838	— 12,813,579	3,690,782	_	_	_	_
Energy	194,198,159	27,346,008	8,453,868	_	_	_	_
Other ²	3,687,850	753,999	,,				

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	Kansas	Kansas	Kentucky	Kentucky	Kentucky	Kentucky	Louisiana
Purchaser of Electricity by Ownership Class	Kansas Gas & Electric Co	Western Resources Inc	Kentucky Power Co	Kentucky Utilities Co	Louisville Gas & Electric Co	Union Light Heat & Power Co	Catalyst Old River Hydro ⁵
Investor-Owned							
Sales (thousand kWh)	784,358	131,446 3,089,576	519,011	830,986	505,040 12,148,272	_	882,003
Revenue (dollars) Demand Charge Only 1	18,229,663	3,089,376 —	13,850,755	17,314,099 26,730	12,146,272	_	56,277,910 —
Demand	4,848,851	309,000	890,790	1,848,120	4,826,000	_	_
EnergyOther ²	13,354,076 26,736	2,780,576 —	9,976,217 2,983,748	16,336,379 -897,130	7,322,272 —	_	56,277,910 —
Federal							
Sales (thousand kWh)	_	_	38,269	147,505	302,120	_	_
Revenue (dollars)	_	_	1,102,249	3,058,945	5,784,389	_	_
Demand Charge Only ¹ Demand		_	_			_	_
Energy	_	_	974,020	3,058,945	5,784,389	_	_
Other ²	_	_	128,229	_	_	_	_
State and Other Government							
Sales (thousand kWh)	3,480	496,934	26,673	_	235,105	_	_
Revenue (dollars)	89,513	11,189,258	570,408	_	4,214,255	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	- 00.512	4,125,505	407.550	_	718,080	_	_
EnergyOther ²	89,513 —	7,063,753 —	497,558 72,850	_	3,496,175 —	_	_
Municipal							
Sales (thousand kWh)	649,678	1,194,443	181,028	1,579,055	176,256	53,069	56,354
Revenue (dollars)	15,558,938	32,131,558	5,425,414	47,801,426	4,284,704	2,300,431	3,597,880
Demand Charge Only ¹ Demand	1,780,936	12,324,608	2,447,835		1,826,500	756,605	_
Energy	13,612,020	19,872,546	2,636,181	36,910,731	2,458,204	1,683,868	3,597,880
Other ²	165,982	-65,596	341,398	-12,188,211	_	-140,042	_
Cooperative	100.550	1 201 271	127.502	44.575	420 617		
Sales (thousand kWh)	108,559 4,390,985	1,301,271 38,605,866	127,593 2,985,288	44,575 893,810	429,617 9,090,776	_	_
Demand Charge Only ¹	765,898	7,860,000		- 693,610			
Demand	1,669,800	7,846,595	860,620	_	1,877,936	_	_
Energy	1,955,287	23,027,285	1,822,545	893,810	7,212,840	_	_
Other ²	_	-128,014	302,123	_	_	_	_
Other ³	1 150 055	70.240	2 707 727	1 110 240	1.040.052		
Sales (thousand kWh) Revenue (dollars)	1,159,855 19,250,756	78,248 1,613,394	2,787,727 33,206,678	1,118,248 20,140,074	1,940,952 32,331,948	_	_
Demand Charge Only ¹	19,230,736	1,013,394	33,200,078	20,140,074	32,331,946	_	_
Demand	_	12,706	_	_	_	_	_
Energy	19,250,756	1,600,688	29,794,720	20,140,074	32,331,948	_	_
Other ²	_	_	3,411,958	_	_	_	_
Total							
Sales (thousand kWh)	2,705,930	3,202,342	3,680,301	3,720,369	3,589,090	53,069	938,357
Revenue (dollars)	57,519,855	86,629,652	57,140,792	89,208,354	67,854,344	2,300,431	59,875,790
Demand Charge Only ¹	765,898	7,860,000	4 100 245	26,730	— 0.249.516	756 605	_
Demand Energy	8,299,587 48,261,652	24,618,414 54,344,848	4,199,245 45,701,241	24,927,026 77,339,939	9,248,516 58,605,828	756,605 1,683,868	
	10,201,002	J-1,J -1 ,U -1 0	70,/01,471	11,000,000	20,002,020	1,000,000	27,012,170

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	Louisiana	Louisiana	Louisiana	Louisiana	Maine	Maine	Maine
Purchaser of Electricity by Ownership Class	Central Louisiana Electric Co Inc	Louisiana Power & Light Co	New Orleans Public Service Inc	Southwestern Electric Power Co	Bangor Hydro- Electric Co	Central Maine Power Co	Maine Electric Power Co Inc
Investor-Owned Sales (thousand kWh)	151	_	_	453,922	319,530	8,547	1,981,126
Revenue (dollars)	4,477	3,265,796	_	11,451,347	7,394,002	325,523	49,192,518
Demand Charge Only ¹	_	23,188	_	1,295,320	_	_	_
Demand	_	1,975,820	_	315,880	18,744	_	_
Energy Other ²	4,477	1,266,788	_	9,840,147 —	7,184,218 191,040	322,103 3,420	49,192,518 —
Federal							
Sales (thousand kWh)	_	_	_	2,409	_	_	_
Revenue (dollars)	_	_	_	63,530	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	_	_	_	63,530	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	806	_	_	29,787	_	1,536	_
Revenue (dollars)	29,918	690,519	_	740,571	_	145,341	_
Demand Charge Only ¹			_		_		_
Demand	_	_	_	_	_	_	_
EnergyOther ²	29,918	690,519 —	_	740,571 —	_	145,341 —	_
Municipal							
Sales (thousand kWh)	367,733	_	_	696,364	197	172,840	_
Revenue (dollars)	11,238,273	_	_	20,852,242	13,568	6,569,745	_
Demand Charge Only ¹		_	_		_ 2.417		_
Demand Energy	1,526,130 77,683	_	_	6,162,235 14,690,007	3,417 8,833	1,233,507 5,323,978	_
Other ²	9,634,460	_	_	— —	1,318	12,260	_
Cooperative							
Sales (thousand kWh)	2,193	_	_	3,090,540	4,289	9,235	_
Revenue (dollars)	71,665	7,030,586	_	61,522,186	300,627	404,388	_
Demand Charge Only ¹ Demand	_	_		21,516,054	— 71,789	102,133	_
Energy	_	_	_	39,853,096	192,402	289,995	_
Other ²	71,665	7,030,586	_	153,036	36,436	12,260	_
Other ³							
Sales (thousand kWh)	250,100	1,125,497	278,061	3,088,806	45,265	2,189,217	124,478
Revenue (dollars)	4,075,475	52,763,660	12,530,841	63,076,303	11,093,883	51,789,676	3,387,775
Demand Charge Only ¹ Demand	75,600	20,234,158	4,001,482	67,500	_	_	_
Energy		26,975,851	7,441,364	62,613,847	11,093,883	51,343,968	3,378,526
Other ²	3,999,875	5,553,651	1,087,995	394,956		445,708	9,249
Total							
Sales (thousand kWh)	620,983	1,125,497	278,061	7,361,828	369,281	2,381,375	2,105,604
Revenue (dollars)	15,419,808	63,750,561	12,530,841	157,706,179	18,802,080	59,234,673	52,580,293
Demand Charge Only ¹		23,188		1,362,820			_
Demand	1,601,730	22,209,978	4,001,482	27,994,169	93,950	1,335,640	— 52 571 044
Energy Other ²	77,683 13,740,395	27,666,370 13,851,025	7,441,364 1,087,995	127,801,198 547,992	18,479,336 228,794	57,425,385 473,648	52,571,044 9,249
Juici	13,740,393	15,051,025	1,007,793	341,792	220,194	4/3,048	7,249

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	Maine	Maine	Maryland	Maryland	Maryland	Maryland	Massachusetts
Purchaser of Electricity by Ownership Class	Maine Public Service Co	Maine Yankee Atomic Power Co ⁵	Allegheny Generating Co ⁵	Baltimore Gas & Electric Co	Conowingo Power Co	Potomac Edison Co	Boston Edison Co
Investor-Owned							
Sales (thousand kWh)	79,612 1,868,290	4,736,406 173,992,714 —	83,402,000 —	2,576,547 57,051,251	_	1,196,617 58,731,362 —	1,558,061 89,262,338 —
Demand		150,746,799 23,245,915 —	 83,402,000		_ _ _	5,922,369 52,755,775 53,218	72,049,222 17,213,116 —
Federal							
Sales (thousand kWh)	_	_	_	_	_	_	_
Revenue (dollars) Demand Charge Only 1	_			_			_
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	_	_	_	_	_	_	_
Revenue (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
Municipal							
Sales (thousand kWh)	14,801	264,862	_	_	_	653,337	789,514
Revenue (dollars)	759,502	9,729,747	_	_	_	26,436,674	43,683,847
Demand Charge Only ¹			_	_	_	12.455.006	15,000
Demand Energy	260,608 498,894	8,429,823 1,299,924		_	_	13,455,906 12,392,187	30,000,342 13,668,505
Other ²	— —	— — — — — — — — — — — — — — — — — — —	_	_	_	588,581	-
Cooperative							
Sales (thousand kWh)	11,892	52,770	_	_	_	66,892	_
Revenue (dollars)	623,323	1,938,486	_	_	_	3,118,262	_
Demand Charge Only ¹ Demand	238,043	— 1,679,499	_	_	_		_
Energy	385,280	258,987	_	_	_	1,338,178	_
Other ²	_		_	_	_	67,772	_
Other ³							
Sales (thousand kWh)	155,372	_	_	5,003,487	_	337,647	1,520,902
Revenue (dollars)	3,203,110	_	_	98,825,669	_	7,359,915	58,386,920
Demand Charge Only ¹	92 696	_	_	_	_	1 209 206	— 12 001 260
Demand Energy	83,686 3,119,424	_	_	98,825,669	_	1,308,296 6,051,619	12,091,269 46,295,651
Other ²	_	_	_	_	_		_
Total							
Sales (thousand kWh)	261,677	5,054,038	_	7,580,034	_	2,254,493	3,868,477
Revenue (dollars)	6,454,225	185,660,947	83,402,000	155,876,920	_	95,646,213	191,333,105
Demand Charge Only 1		— 160 956 121	_	_	_		15,000 114,140,833
Demand Energy	5,807,925	160,856,121 24,804,826	_	155,876,920	_	72,537,759	77,177,272
Other ²	63,963	_	83,402,000	-	_	709,571	

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

		•		, ,	, ,		
	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts
Purchaser of Electricity by Ownership Class	Cambridge Electric Light Co	Canal Electric Co	Commonwealth Electric Co	Eastern Edison Co ⁴	Fitchburg Gas & Electric Lght Co	Great Bay Power Co ⁵	Holyoke Power & Electric Co
Investor-Owned							
Sales (thousand kWh)	_	3,175,902	16,715	_	_	433,884	956,642
Revenue (dollars)	_	178,583,552	420,575	_	_	12,798,893	27,129,065
Demand Charge Only ¹ Demand	_	8,279	20.215	_	_	10.840.201	_
Energy	_	92,583,065 84,664,284	29,215 391,360	_	_	10,840,201 1,958,692	17,576,441
Other ²	_	1,327,924	_	_	_	_	9,552,624
Federal							
Sales (thousand kWh)	_	_	_	_	_	_	_
Revenue (dollars) Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_						
Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	_	_	_	_	72	6,065	_
Revenue (dollars)	_	_	_	_	15,185	147,838	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	10,834	120,458	_
Energy Other ²	_	_	_	_	4,351 —	27,380 —	_
Municipal							
Sales (thousand kWh)	99,450	_	_	_	_	204,006	2,583
Revenue (dollars)	5,950,403	_	_	_	_	4,785,215	113,870
Demand Charge Only ¹ Demand	3,987,324	_	_	_	_	3,864,269	_
Energy	1,880,984	_	_	_	_	920,946	30
Other ²	82,095	_	_	_	_		113,840
Cooperative							
Sales (thousand kWh)	_	- 10.112	_	_	_	_	_
Revenue (dollars) Demand Charge Only 1	_	-19,113		_	_		_
Demand	_	_	_	_	_	_	_
Energy	_	-19,113	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
Other ³					40.000		
Sales (thousand kWh)	113,216 2,503,813	_	836,224	_	18,890	550,436 12,537,678	_
Revenue (dollars) Demand Charge Only ¹	2,505,815	_	17,729,682	_	810,708	12,557,678	_
Demand	_	_	145,286	_	_	10,052,846	_
Energy	2,436,257	_	17,584,396	_	810,708	2,484,832	_
Other ²	67,556	_	_	_	_	_	_
Γotal							
Sales (thousand kWh)	212,666	3,175,902	852,939	_	18,962	1,194,391	959,225
Revenue (dollars)	8,454,216	178,564,439	18,150,257	_	825,893	30,269,624	27,242,935
Demand Charge Only ¹ Demand	3,987,324	8,279 92,583,065	174,501	_	10,834		_
Energy	4,317,241	84,645,171	17,975,756	_	815,059	5,391,850	17,576,471
Other ²	149,651	1,327,924					9,666,464

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts
Purchaser of Electricity by Ownership Class	Holyoke Water Power Co	Massachusetts Electric Co	Montaup Electric Co	New England Hydro Trans Elec Co ⁸	New England Power Co	Western Massachusetts Electric Co	Yankee Atomic Electric Co8
Investor-Owned							
Sales (thousand kWh)	959,225	4,047	4,585,276	_	23,325,782	199,727	_
Revenue (dollars)	27,243,752	334,879	312,500,990	_	1,487,734,018	6,765,377	51,812,475
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand		68,810	227,853,539	_	726,412,519	4,513	
Energy Other ²	17,613,144 9,630,608	159,776 106,293	84,711,024 -63,573	_	481,253,855 280,067,644	4,532,100 2,228,764	51,812,475 —
Federal							
Sales (thousand kWh)	_	_	_	_	_	_	_
Revenue (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other							
Government Sales (thousand kWh)	_	_	225	_	73,866	8,488	_
Revenue (dollars)	215		-6,030		1,699,255	295,249	
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	675	_	_	_	_
EnergyOther ²	215	_		_	1,458,518 240,737	239,862 55,387	_
Municipal							
Sales (thousand kWh)	_	73	141,786	_	834,640	59,667	_
Revenue (dollars)	_	7,685	8,684,297	_	45,949,236	1,890,944	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	5,177,431	_	14,266,580	_	_
Energy	_	5,903	3,525,302	_	18,677,104	1,281,233	_
Other ²	_	1,782	-18,436	_	13,005,552	609,711	_
Cooperative Sales (thousand kWh)	_	_	_	_	6,039	8,527	_
Revenue (dollars)	_	_	_	_	399,404	254,105	_
Demand Charge Only ¹	_	_	_	_	_		_
Demand	_	_	_	_	196,663	_	_
Energy	_	_	_	_	131,561	175,430	_
Other ²	_	_	_	_	71,180	78,675	_
Other ³							
Sales (thousand kWh)	1,113,708	8,140	454,073	_	1,560,256	590,655	_
Revenue (dollars) Demand Charge Only 1	29,436,871	839,616	10,416,051	_	55,926,867	22,636,332	_
Demand	_	238,453	283,853	_	778,368	_	_
Energy	15,636,310	388,833	10,132,198	_	53,247,577	-14,955,524	_
Other ²	13,800,561	212,330		_	1,900,922	37,591,856	_
Total							
Sales (thousand kWh)	2,072,933	12,260	5,181,360	_	25,800,583	867,064	_
Revenue (dollars)	56,680,838	1,182,180	331,595,308	_	1,591,708,780	31,842,007	51,812,475
Demand Charge Only ¹ Demand	_	207.262	233 315 408	_	 7/11 65/1 130		_
	33,249,454	307,263 554,512	233,315,498 98,361,819	_	741,654,130 554,768,615	4,513 -8,726,899	51,812,475
Energy							

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

·		•		, ,	,	,	
	Michigan	Michigan	Michigan	Michigan	Michigan	Minnesota	Minnesota
Purchaser of Electricity by Ownership Class	Consumers Power Co	Detroit Edison Co	Edison Sault Electric Co	Upper Peninsula Power Co	Wolverine Hydroelectric Corp ⁵	Minnesota Power & Light Co	Northern States Power Co
Investor-Owned				40.440			
Sales (thousand kWh)	1,607,152	1,572,859	_	18,140	_	2,422,186	8,459,588
Revenue (dollars)	40,338,496	35,793,991	_	732,091	_	53,390,906	224,795,495
Demand Charge Only ¹ Demand	— 11,565,292	0.700.042	_	220 441	_	— 18,233,198	4,290,376
Energy	32,677,226	9,788,943 26,005,144		320,441 454,765		36,461,860	47,109,611
Other ²	-3,904,022	-96	_	-43,115	_	-1,304,152	173,395,508
Federal							
Sales (thousand kWh)	_	_	_	_	_	1,190	30,803
Revenue (dollars)	_	_	_	_	_	16,780	379,858
Demand Charge Only ¹	_	_	_	_	_	_ ′	_ ′
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	16,780	379,858
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	165,728	47,883				174,255	93,935
Revenue (dollars)	4,139,887	939,094				2,481,399	2.350.271
Demand Charge Only ¹	- ,137,007				_		2,330,271
Demand	1,305,684	38,682			_		
Energy	2,834,203	844,308	_	_	_	2,481,399	2,350,271
Other ²	_	56,104	_	_	_		_
Municipal							
Sales (thousand kWh)	458,812	519,665	_	84,977	_	695,859	906,494
Revenue (dollars)	15,987,089	16,624,541	_	3,287,720	_	19,664,507	22,852,632
Demand Charge Only ¹	_	_	_	53,760	_	_	_
Demand	5,358,441	5,871,417	_	1,160,945	_	10,580,857	5,195,962
Energy	14,526,129	13,094,850	_	2,229,206	_	9,883,590	17,615,712
Other ²	-3,897,481	-2,341,726	_	-156,191	_	-799,940	40,958
Cooperative	51 005	050 255	155.010	40.555		250,000	105 500
Sales (thousand kWh)	71,005	878,355	166,818	40,777	_	260,880	185,798
Revenue (dollars) Demand Charge Only 1	2,610,720	34,400,317	4,392,384	1,564,817	_	5,505,883	3,254,654
Demand	1,214,888	17,675,150	487,751	471.081	_	73,000	235,000
Energy	2,113,207	20,014,593	3,493,581	1,116,325	_	5,432,883	3,019,654
Other ²	-717,375	-3,289,426	411,052	-22,589		— —	
Other ³							
Sales (thousand kWh)	733,516	106,352	_	_	_	294,162	110,683
Revenue (dollars)	18,602,587	1,692,277	_	_	_	4,356,399	1,332,126
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	3,958,269	247,764	_	_	_	498,097	62,400
Energy	13,810,788	1,444,513	_	_	_	3,965,370	1,269,726
Other ²	833,530	_	_	_	_	-107,068	_
Total							
Sales (thousand kWh)	3,036,213	3,125,114	166,818	143,894	_	3,848,532	9,787,301
Revenue (dollars)	81,678,779	89,450,220	4,392,384	5,584,628	_	85,415,874	254,965,036
Demand Charge Only ¹	_	_	_	53,760	_	_	_
Demand	23,402,574	33,621,956	487,751	1,952,467	_	29,385,152	9,783,738
Energy	65,961,553	61,403,408	3,493,581	3,800,296	_	58,241,882	71,744,832
Other ²	-7,685,348	-5,575,144	411,052	-221,895		-2,211,160	173,436,466

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	Minnesota	Mississippi	Mississippi	Mississippi	Missouri	Missouri	Missouri
Purchaser of Electricity by Ownership Class	Otter Tail Power Co	Mississippi Power & Light Co	Mississippi Power Co	Systems Energy Resources Inc ⁵	Empire District Electric Co	Kansas City Power & Light Co	St Joseph Light & Power Co
Investor-Owned							
Sales (thousand kWh)	311,469 5,050,739	_ _ _	180,553 3,291,403	8,301,980 671,537,092	184,384 3,686,654	2,146,068 35,791,876	58,432 1,063,000
Demand	5,050,739	_ _ _	-12,318 3,303,721 -	671,537,092 —	1,991,832 1,667,972 26,850	66,008 33,962,011 1,763,857	
Federal Sales (thousand kWh)	10,017	_	6,441	_	_	_	_
Revenue (dollars)	120,621	_	204,497				
Demand Charge Only ¹		_		_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	120,621	_	204,497	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	143,128	_	890	_	18.707	15,863	2,355
Revenue (dollars)	2,210,627	_	24,063	_	389,606	317,230	47,077
Demand Charge Only ¹		_		_			
Demand	_	_	_	_	_	_	_
EnergyOther ²	2,210,627 —	_	24,063	_	389,606 —	317,230	47,077 —
Municipal							
Sales (thousand kWh)	60,413	_	73,339	_	247,695	966,689	700
Revenue (dollars)	1,091,726	791,449	2,064,995	_	8,914,168	22,947,561	24,600
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	104,720	_	-1,569	_	2,991,105	1,318,650	
Energy	999,113	701 440	1,466,071	_	5,923,063	16,006,261	24,600
Other ²	-12,107	791,449	600,493	_	_	5,622,650	_
Cooperative Sales (thousand kWh)	82,546	_	2,433,956	_	14,979	617,134	9,765
Revenue (dollars)	1,311,120	6,686,728	93,252,998	_	580,417	9,302,731	179,156
Demand Charge Only ¹				_			
Demand	_	_	400,000	_	310,253	807,820	_
Energy	1,311,120		53,152,124	_	270,164	8,494,911	179,156
Other ²	_	6,686,728	39,700,874	_	_	_	_
Other ³ Sales (thousand kWh)	29,091	1,888,950	732,907		16,379	426,277	7,904
Revenue (dollars)	452,992	81,562,940	23,005,128		505,347	7,083,564	133,067
Demand Charge Only ¹				_			
Demand	_	8,806,019	3,744,502	_	_	_	_
Energy	452,992	70,364,316	19,260,626	_	505,347	7,083,564	133,067
Other ²	_	2,392,605		_			_
Total							
Sales (thousand kWh)	636,664	1,888,950	3,428,086	8,301,980	482,144	4,172,031	79,156
Revenue (dollars)	10,237,825	89,041,117	121,843,084	671,537,092	14,076,192	75,442,962	1,446,900
Demand Charge Only ¹		- 0000010	4 120 615	_			_
Demand	104,720	8,806,019	4,130,615	— 671 527 002	5,293,190	2,192,478	1 446 000
Energy Other ²	10,145,212	70,364,316 9,870,782	77,411,102	671,537,092	8,756,152	65,863,977	1,446,900
Ouler	-12,107	9,870,782	40,301,367	_	26,850	7,386,507	_

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

		-		-			
	Missouri	Missouri	Montana	Nevada	Nevada	New Hampshire	New Hampshire
Purchaser of Electricity by	Union Electric	UtiliCorp United	Montana Power	Nevada Power	Sierra Pacific	Concord Electric	Connecticut Valley
Ownership Class	Со	Inc	Co	Со	Power Co	Co ⁴	Electric Co ⁴
Investor-Owned			·				
Sales (thousand kWh)	2,727,860	312,873	1,893,912	67,658	91,368	_	_
Revenue (dollars)	73,500,260	7,328,650	48,910,501	1,343,595	1,816,623	_	_
Demand Charge Only ¹ Demand	— 21,776,522	727,000	111,388 25,539,048	_	— 144,726	_	_
Energy	51,723,738	6,288,609	23,225,594	1,343,595	1,659,520	_	_
Other ²	_	313,041	34,471		12,377	_	_
Federal							
Sales (thousand kWh)	102,983	43,685	444,459	700	43,420	_	_
Revenue (dollars)	1,731,445	857,930	8,398,722	23,370	1,526,199	_	_
Demand Charge Only ¹ Demand	_	_	_	_	501,671	_	_
Energy	1,731,445	820,676	8,398,722	23,370	1,079,115		_
Other ²		37,254	_	_	-54,587	_	_
State and Other							
Government Sales (thousand kWh)	_	15.768	7,470	341.830	104,860	_	_
Revenue (dollars)	_	376,775	87,150	6,509,604	4,873,690	_	_
Demand Charge Only ¹	_					_	_
Demand	_			775,079	2,023,843	_	_
Energy Other ²	_	358,107 18,668	87,150 —	5,825,423 -90,898	2,834,883 14,964	_	_
Municipal							
Sales (thousand kWh)	1,536,117	425,780	620,814	71,378	382,405	_	_
Revenue (dollars)	51,780,919	14,749,538	37,235,600	2,393,609	5,987,221	_	_
Demand Charge Only ¹	2 000 022					_	_
Demand Energy	3,088,032 48,692,887	5,283,080 10,670,152	22,287,475 14,948,125	1,045,025 1,375,429	1,085,892 5,518,960	_	_
Other ²	46,092,667 —	-1,203,694	— —	-26,845	-617,631	_	_
Cooperative							
Sales (thousand kWh)	832,957	316,172	493,015	118,678	150,788	_	_
Revenue (dollars)	28,278,455	8,850,740	18,102,256	4,435,439	1,508,250	_	_
Demand Charge Only ¹ Demand	31,101	2,651,468	4,977,555	1,295,239	_	_	_
Energy	28,247,354	6,079,804	13,124,701	3,406,966	1,508,163	_	_
Other ²		119,468		-266,766	87	_	_
Other ³							
Sales (thousand kWh)	3,594,462	344,475	529,430	74,814	50,191	_	_
Revenue (dollars)	61,213,871	6,719,136	7,376,104	1,490,287	886,108	_	_
Demand Charge Only ¹ Demand	30,000	176,400	171,261	_	_	_	_
Energy	61,183,871	6,073,275	6,970,459	1,026,638	886,108	_	_
Other ²	_	469,461	234,384	463,649	_	_	_
Total							
Sales (thousand kWh)	8,794,379	1,458,753	3,989,100	675,058	823,032	_	_
Davianna (dallana)	216,504,950	38,882,769	120,110,333	16,195,904	16,598,091	_	_
Revenue (dollars)			282,649	_	_	_	_
Demand Charge Only ¹	— 24 925 655	— 8 837 048			3 756 122		
	24,925,655 191,579,295	8,837,948 30,290,623	52,804,078 66,754,751	3,115,343 13,001,421	3,756,132 13,486,749	_	_

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	New Hampshire	New Hampshire	New Hampshire	New Hampshire	New Hampshire	New Hampshire	New Hampshire
Purchaser of Electricity by Ownership Class	Exeter & Hampton Electric Co ⁴	Granite State Electric Co ⁴	New England Trans Corp ⁸	New England Hydro-Trans Corp ⁸	North Atlantic Energy Corp ⁵	Public Service Co of NH	Unitil Power Corp
Investor-Owned							
Sales (thousand kWh)	_	_	_	_	3,542,137	987,084	_
Revenue (dollars)		_	_	_	159,548,793	40,557,131	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand		_	_	_		67,230	_
Energy Other ²		_	_	_	15,013,395 144,535,398	19,216,469 21,273,432	_
E. dl							
Federal Sales (thousand kWh)	_	_	_	_	_	_	_
Revenue (dollars)		_	_	_		_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	_	_	_	_	_	14,924	_
Revenue (dollars)		_	_	_	_	458,855	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand		_	_	_	_	_	_
Energy	_	_	_	_	_	396,224	_
Other ²	_	_	_	_	_	62,631	_
Municipal							
Sales (thousand kWh)	_	_	_	_	_	217,194	_
Revenue (dollars)	_	_	_	_	_	10,862,009	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand		_	_	_	_	1,972,383	_
Energy		_	_	_	_	7,998,180	_
Other ²	_	_	_	_	_	891,446	_
Cooperative							
Sales (thousand kWh)		_	_	_	_	596,470	_
Revenue (dollars)		_	_	_	_	47,904,760	_
Demand Charge Only ¹ Demand		_	_	_	_	— 16,011,028	_
Energy		_	_	_	_	34,106,728	_
Other ²		_	_	_		-2,212,996	
Other ³							
Sales (thousand kWh)		_	_			5,319,320	_
Revenue (dollars)		_	_	_	_	201,693,051	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	201,511,696	_
Other ²	_	_	_	_	_	181,355	_
Total							
Sales (thousand kWh)	_	_	_	_	3,542,137	7,134,992	_
Revenue (dollars)		_	_	_	159,548,793	301,475,806	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand	_	_	_	_	_	18,050,641	_
Energy Other ²		_	_	_	15,013,395	263,229,297	_
					144,535,398	20,195,868	

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

		-		-			
	New Jersey	New Jersey	New Jersey	New Jersey	New Mexico	New Mexico	New York
Purchaser of Electricity by Ownership Class	Atlantic City Electric Co	Jersey Central Power & Light Co	Public Service Electric & Gas Co	Rockland Electric Co ⁴	Public Service Co of NM	Texas- New Mexico Power Co ⁴	Central Hudson Gas & Electric Corp
Investor-Owned							
Sales (thousand kWh)	208,961	5,382	_	_	3,095,674	_	84,208
Revenue (dollars)	5,802,405	369,508	_	_	79,928,634	_	2,519,628
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	29,134,781	_	22,885
Energy Other ²	5,658,760 143,645	369,508 —	_	_	50,555,126 238,727	_	2,496,743 —
Federal							
Sales (thousand kWh)	_	_	_	_	15,755	_	_
Revenue (dollars)	_	_	_	_	424,273	_	_
Demand Charge Only ¹	_	_	_	_	^	_	_
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	424,273	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	_	_	_	_	98,707	_	200
Revenue (dollars)	_	_	_	_	1,097,611	_	15,309
Demand Charge Only ¹	_	_	_	_		_	_
Demand	_	_	_	_	_	_	9,509
Energy	_	_	_	_	1,097,501	_	5,800
Other ²	_	_	_	_	110	_	_
Municipal							
Sales (thousand kWh)	291,031	_	_	_	272,731	_	_
Revenue (dollars)	6,769,936	_	_	_	9,915,731	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	5,855,325	_	_
Energy	6,713,291	_	_	_	3,276,005	_	_
Other ²	56,645	_	_	_	784,401	_	_
Cooperative					145 600		
Sales (thousand kWh)	_		_	_	145,698	_	_
Revenue (dollars) Demand Charge Only ¹	_	690	_	_	2,271,582	_	_
Demand	_	_	_	_	_	_	_
Energy	_	690		_	2,260,406	_	
Other ²	_	_	_	_	11,176	_	
Other ³							
Sales (thousand kWh)	1,317,991	998,250	2,806,056	_	946,655	_	474,442
Revenue (dollars)	35,886,561	34,873,783	79,684,467	_	27,691,046	_	12,363,679
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	1,863,421	14,602,981	_	11,810,291	_	_
Energy	34,775,508	33,010,362	53,101,338	_	15,880,755	_	12,363,679
Other ²	1,111,053	_	11,980,148	_	_	_	_
Total							
Sales (thousand kWh)	1,817,983	1,003,632	2,806,056	_	4,575,220	_	558,850
Revenue (dollars)	48,458,902	35,243,981	79,684,467	_	121,328,877	_	14,898,616
Demand Charge Only ¹	_			_		_	_
Demand		1,863,421	14,602,981	_	46,800,397	_	32,394
Energy Other ²	47,147,559	33,380,560	53,101,338	_	73,494,066	_	14,866,222
	1,311,343		11,980,148	_	1,034,414	_	_

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	New York	New York	New York	New York	New York	New York	New York
Purchaser of Electricity by Ownership Class	Consolidated Edison Co-NY Inc	Long Island Lighting Co	Long Sault Inc ⁶	New York State Electric & Gas Corp	Niagara Mohawk Power Corp	Orange & Rockland Utilities Inc	Rochester Gas & Electric Corp
Investor-Owned							
Sales (thousand kWh) Revenue (dollars)	627,379 14,049,814	52,847 2,102,934	_		709,468 17,934,127	1,493,477 71,469,282	279,500 5,645,227
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	2,350		_	_	90,225	23,250,938	142,746
Energy Other ²	14,045,259 2,205	2,102,934 —	_	_	17,843,902 —	48,217,684 660	5,502,481 —
Federal							
Sales (thousand kWh)	_	_	_	_	_	_	_
Revenue (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
EnergyOther ²	_	_	_	_	_	_	_
	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	2,375	_	_	_	301,763	_	184,646
Revenue (dollars)	270,870	_	_	_	5,492,676	_	3,425,485
Demand Charge Only ¹	_	_	_	_		_	-
Demand		_	_	_	269,951	_	27,710
Energy Other ²	57,050 213,820	_	_	_	5,222,725 —	_	3,397,775 —
Municipal							
Sales (thousand kWh)	_	13,377	_	_	51,876	_	_
Revenue (dollars)	_	505,542	_	_	1,648,241	_	_
Demand Charge Only ¹	_	_	_	_	446,400	_	_
Demand	_	_	_	_	154,098	_	_
Energy	_	505,542	_	_	1,047,743	_	_
Other ²	_	_	_	_	_	_	_
Cooperative Sales (thousand kWh)	_	_	_	_	_	_	_
Revenue (dollars)	_			_			
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
Other ³							
Sales (thousand kWh)	3,287,600	461,136	_	7,913,461	4,368,171	153,039	511,597
Revenue (dollars)	42,376,602	18,318,343	_	162,232,579	88,316,126	2,987,483	7,701,342
Demand Charge Only ¹	206.818	_	_	- 50 140		_	100.072
Demand Energy	206,818	18,318,343	_	50,149 162,182,430	1,128,270 87,187,856	2,904,947	100,073 7,601,269
Other ²	42,150,202 19,582	— —	_	102,182,430	— 67,167,630 —	82,536	
Total							
Sales (thousand kWh)	3,917,354	527,360	_	7,913,461	5,431,278	1,646,516	975,743
Revenue (dollars)	56,697,286	20,926,819	_	162,232,579	113,391,170	74,456,765	16,772,054
Demand Charge Only ¹		_	_	_	446,400		_
Demand	209,168		_	50,149	1,642,544	23,250,938	270,529
Energy	56,252,511	20,926,819	_	162,182,430	111,302,226	51,122,631	16,501,525
Other ²	235,607	_	_	_	_	83,196	_

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	North Carolina	North Carolina	North Carolina	North Carolina	North Carolina	North Dakota	Ohio
Purchaser of Electricity by Ownership Class	Carolina Power & Light Co	Cascade Power Company ⁵	Duke Power Co	Nantahala Power & Light Co	Yadkin Inc ⁴	MDU Resources Group Inc	AEP Generating Co
Investor-Owned							
Sales (thousand kWh)	3,557,251	_	1,956,314	298,005	_	266,855	8,466,054
Revenue (dollars)	69,523,702	_	108,933,207	5,253,789	_	4,361,701	225,767,206
Demand Charge Only ¹ Demand		_	61,808,568	_	_	_	40.412.072
Energy	69,324,461	_	48,278,355	5,253,789	_	4,361,701	40,413,072 185,354,134
Other ²		_	-1,153,716	_	_	-,301,701	-
Federal							
Sales (thousand kWh)	182,074	_	_	90,893	_	6,025	_
Revenue (dollars)		_	_	2,228,359	_	69,151	_
Demand Charge Only ¹		_	_	_	_	_	_
Demand	70,000	_	_		_	- 60 151	_
Energy Other ²		_	_	2,223,359 5,000	_	69,151	
State and Other							
Government	20.166		42.296			20.202	
Sales (thousand kWh)	38,166 961,648		43,286 1,193,738	_		29,203 493,429	_
Demand Charge Only ¹		_		_	_	— 1 73, 1 27	_
Demand		_	_	_	_	_	_
Energy		_	1,193,738	_	_	493,429	_
Other ²	_	_	_	_	_	_	_
Municipal							
Sales (thousand kWh)	4,684,254	_	2,349,542	34,698	_	13,606	_
Revenue (dollars)		_	113,100,458	1,357,051	_	210,339	_
Demand Charge Only 1 Demand		_		966,607	_	_	_
Energy	142,067,002		67,454,570	341,059	_	210,339	
Other ²		_	-4,989,186	49,385	_	_	_
Cooperative							
Sales (thousand kWh)	4,875,491	_	1,757,632	22,722	_	58,816	_
Revenue (dollars)		_	115,592,310	888,010	_	1,118,156	_
Demand Charge Only ¹		_	25,000		_	_	_
Demand	170,667,404	_	91,977,678	636,045	_		_
Energy Other ²		_	23,589,632	216,187 35,778	_	1,118,156	_
Other ³ Sales (thousand kWh)	46,080		720,592	28,625		30	
Revenue (dollars)			21,964,486	1,147,360		755	
Demand Charge Only ¹		_			_		_
Demand	_	_	1,200,000	792,077	_	_	_
Energy	11,813,374	_	18,223,100	281,632	_	755	_
Other ²	-24,359,554	_	2,541,386	73,651	_	_	_
Total							
Sales (thousand kWh)	13,383,316	_	6,827,366	474,943	_	374,535	8,466,054
Revenue (dollars)	527,059,988	_	360,784,199	10,874,569	_	6,253,531	225,767,206
Demand Charge Only ¹	_	_	25,000	_	_	_	_
Demand		_	205,621,320	2,394,729	_		40,413,072
Energy		_	158,739,395	8,316,026	_	6,253,531	185,354,134
Other ²	-35,452,358	_	-3,601,516	163,814	_	_	_

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	Ohio	Ohio	Ohio	Ohio	Ohio	Ohio	Ohio
Purchaser of Electricity by Ownership Class	Cincinnati Gas & Electric Co	Cleveland Electric Illuminating Co	Columbus Southern Power Co	Dayton Power & Light Co	Indiana- Kentucky Electric Corp ⁵	Ohio Edison Co	Ohio Power Co
Investor-Owned							
Sales (thousand kWh)	7,833,780 220,714,907 126,250	755,217 12,435,645 —	1,245,426 33,092,963 47,285	577,739 12,277,753	9,682,683 158,983,092	4,424,140 165,604,726	4,589,479 128,573,042 78,963
Demand	72,333,941 172,311,112 -24,056,396	1,890 12,433,755 —	2,663,359 23,302,972 7,079,347	5,000 12,170,751 102,002	41,737,040 117,246,052 —	94,441,578 68,519,807 2,643,341	5,117,180 111,562,772 11,814,127
Federal Sales (thousand kWh)	76,115	_	91,629	_	_	_	152,442
Revenue (dollars) Demand Charge Only ¹	1,524,928	_	2,637,916	_	_	_	4,401,022
Demand Energy	9,213 1,515,715	_		_	_	_	 3,893,056
Other ²	-	_	304,494	_	_	_	507,966
State and Other Government							
Sales (thousand kWh)	_	_	60,790	36,471	_	_	104,476
Revenue (dollars) Demand Charge Only ¹	_		1,360,067	579,958 —	_	_	2,267,335
Demand	_	_			_	_	
EnergyOther ²	_	_	1,187,454 172,613	579,958 —	_	_	1,979,577 287,758
Municipal Sales (thousand kWh)	929 725	23,522	692 244	790 222		154.725	1 172 226
Revenue (dollars) Demand Charge Only ¹	838,725 23,562,799	561,889	683,344 21,395,308	780,222 17,755,253	_	154,725 5,137,794	1,173,336 34,737,431
Demand	5,392,157	713,731	6,958,996	4,811,204	_	1,845,611	13,098,665
Energy Other ²	19,624,733 -1,454,091	-294,172 142,330	13,676,041 760,271	9,575,212 3,368,837	_	3,143,023 149,160	20,371,026 1,267,740
Cooperative							
Sales (thousand kWh) Revenue (dollars)	176,150 3,638,137	_	294,651 7,127,306	_	_	_	1,172,069 24,483,754
Demand Charge Only ¹	_	_		_	_	_	_
Demand	67,750	_	2,059,906	_	_	_	3,435,479
EnergyOther ²	3,570,387 —	_	4,351,006 716,394	_	_	_	19,853,708 1,194,567
Other ³							
Sales (thousand kWh) Revenue (dollars)	720,585 15,602,264	1,376,523 32,374,316	2,427,238 27,881,948	656,294 13,116,848	_	2,480,843 41,757,363	13,901,100 332,239,562
Demand Charge Only ¹	166,667	_	_	_	_	_	_
Demand	108,941	85,828		16,128	_	727,281	
Energy Other ²	15,348,280 -21,624	32,288,488	19,757,699 8,124,249	13,099,920 800	_	41,030,082 —	318,695,346 13,544,216
Total	0.645.255	2.155.252	4 000 050	2.050.705	0.602.602	7.050.700	21 002 002
Sales (thousand kWh) Revenue (dollars)	9,645,355 265,043,035	2,155,262 45,371,850	4,803,078 93,495,508	2,050,726 43,729,812	9,682,683 158,983,092	7,059,708 212,499,883	21,092,902 526,702,146
Demand Charge Only ¹	292,917	_	47,285	_	_	_	78,963
Demand Energy	77,912,002 212,370,227	801,449 44,428,071	11,682,261 64,608,594	4,832,332 35,425,841	41,737,040 117,246,052	97,014,470 112,692,912	21,651,324 476,355,485
							4 / U. 3.3.3.483

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

· ·		-		-			
	Ohio	Ohio	Oklahoma	Oklahoma	Oregon	Oregon	Pennsylvania
Purchaser of Electricity by	Ohio Valley	Toledo Edison	Oklahoma Gas &	Public Service	PacifiCorp	Portland General	Citizens Electric
Ownership Class	Electric	Co	Electric	Co of		Electric	Co ⁴
Ownership Class	Corp	Co	Co	Oklahoma		Co	Co
	Согр		Co	Oktanoma		Co	
Investor-Owned Sales (thousand kWh)	5,342,601	1,602,535	288,128	43,783	12,006,353	3,372,147	_
Revenue (dollars)	88,128,059	112,202,196	6,177,982	1,632,830	344,981,357	60,855,557	
Demand Charge Only ¹	-	112,202,170	0,177,762	105,000	25,000	22,452	
Demand	21,554,449	2,452		341,667	152,567,188	16,993,600	
Energy	66,573,610	112,199,744	6,177,982	1,141,955	191,640,222	43,596,427	_
Other ²	_	_		44,208	748,947	243,078	_
Federal							
Sales (thousand kWh)	_	_	41,492	81,469	2,125,683	528,089	_
Revenue (dollars)	_	_	1,165,410	3,064,173	74,195,675	27,743,921	_
Demand Charge Only ¹	_	_			_		_
Demand	_	_	_	1,094,585	34,830,000	16,500,000	_
Energy	_	_	1,691,581	1,850,425	40,767,834	11,243,861	_
Other ²	_	_	-526,171	119,163	-1,402,159	60	_
State and Other							
Government			222 605	20.256	2 222 400	727 020	
Sales (thousand kWh)	_	_	322,695	38,256	3,222,499	737,830	_
Revenue (dollars)	_	_	8,738,132	5,088,337	82,219,331	10,985,648	_
Demand Charge Only ¹	_	_	2 254 220	3,176,683	26.756.547	338,000	_
Demand Energy	_	_	2,254,320 8,605,172	908,392	55,740,539	10,619,568	_
Other ²	_	_	-2,121,360	1,003,262	-277,755	28,080	_
Municipal							
Sales (thousand kWh)	_	473,712	167,622	38,284	2,150,970	1,483,713	_
Revenue (dollars)	_	20,133,278	4,731,996	1,194,634	76,607,114	27,799,092	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	5,914,477	1,535,113	329,961	35,444,250	7,684,075	_
Energy	_	14,141,865	4,569,873	864,673	40,626,922	20,739,515	_
Other ²	_	76,936	-1,372,990	_	535,942	-624,498	_
Cooperative							
Sales (thousand kWh)	_	905	1,153,315	70,680	837,392	36,730	_
Revenue (dollars)	_	36,050	29,079,081	1,963,419	11,572,184	575,075	_
Demand Charge Only ¹	_					750	_
Demand	_	19,549	9,871,999	822,173	313,550	 574 225	_
Energy Other ²	_	16,501	28,604,728 -9,397,646	1,141,246	11,258,634	574,325	_
			2,027,010				
Other ³		050 515	## C 2 : 2	1 21 4 22 =	0.212.122	4 50 5 0=0	
Sales (thousand kWh)	_	252,611	576,243	1,214,897	9,312,189	4,526,370	_
Revenue (dollars)	_	4,269,859	10,248,035	26,341,213	149,226,989	67,859,929	_
Demand Charge Only ¹	_		_	_	21,000	242,500	_
Demand	_	26,604	10.249.025	— 26 172 722	5,980,350	— 67.455.015	_
Energy	_	4,243,255	10,248,035	26,173,728	143,466,068	67,455,815	_
Other ²	_	_	_	167,485	-240,429	161,614	_
Total							
Sales (thousand kWh)	5,342,601	2,329,763	2,549,495	1,487,369	29,655,086	10,684,879	_
Revenue (dollars)	88,128,059	136,641,383	60,140,636	39,284,606	738,802,650	195,819,222	_
Demand Charge Only ¹	_	_	_	105,000	46,000	603,702	_
	21,554,449	5,963,082	13,661,432	5,765,069	255,891,885	41,177,675	_
Demand							
Energy	66,573,610	130,601,365	59,897,371	32,080,419	483,500,219	154,229,511	_

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvar
Purchaser of Electricity by Ownership Class	Duquesne Light Co	Metropolitan Edison Co	Pennsylvania Electric Co	Pennsylvania Power & Light Co	Pennsylvania Power Co	Philadelphia Electric Co	Pike County Light & Power Co ⁴
nvestor-Owned							
Sales (thousand kWh)	3,136,240	4,689	101,071	9,428,431	653,781	14,712,025	_
Revenue (dollars)	56,312,850	261,058	5,100,639	347,163,162	24,545,016	364,814,829	_
Demand Charge Only 1					— 15.260.150		_
Demand	15,221,193 41,091,657	79,142 164,995	2,220,956 3,066,431	2,070,925 146,074,579	15,368,158 9,192,261	50,675,939 313,684,064	_
EnergyOther ²	41,091,037 —	16,921	-186,748	199,017,658	-15,403	454,826	_
deral							
Sales (thousand kWh)	_	_	_	_	_	402,463	_
Revenue (dollars)	_	_	_	_	_	8,489,788	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	680,346	_
Energy	_	_	_	_	_	7,809,442	_
Other ²	_	_	_	_	_	_	_
ate and Other							
Government Sales (thousand kWh)	_	_	_	_	_	286,755	_
Revenue (dollars)	_	_	_	_	_	6,021,300	_
Demand Charge Only ¹	_	_	_	_	_		_
Demand	_	_	_	_	_	502,272	_
Energy	_	_	_	_	_	5,519,028	_
Other ²	_	_	_	_	_	_	_
Iunicipal							
Sales (thousand kWh)	12,808	95,793	376,264	755,539	130,509	128,569	_
Revenue (dollars)	857,283	1,456,172	12,156,031	29,822,917	5,650,189	2,701,161	_
Demand Charge Only ¹	—					—	_
Demand	471,607	355,969	5,431,171	11,698,656	2,112,378	418,429	_
Energy	384,240	1,100,203	7,175,397	18,124,261	3,537,811	2,282,732	_
Other ²	1,436	_	-450,537	_	_	_	_
ooperative			270 (22	20.201		252 607	
Sales (thousand kWh) Revenue (dollars)	_	324	278,623 13,234,083	29,281 1,200,454	_	252,607 5,088,317	_
Demand Charge Only ¹	_	324	13,234,063	1,200,434	_	3,066,317	_
Demand			8,562,969	494,739		413,453	
Energy	_	324	4,671,114	705,715	_	4,674,864	
Other ²	_	_	_		_	_	_
her ³							
Sales (thousand kWh)	173,966	672,326	2,371,073	4,125,983	321,547	5,385,497	_
Revenue (dollars)	1,978,999	20,103,060	52,158,638	84,051,986	5,332,975	135,836,153	_
Demand Charge Only ¹	_	_	_	_	_	2,800	_
Demand	_	648,687	7,551,666	_	78,419	12,089,445	_
Energy	1,978,999	19,459,668	44,706,614	84,171,551	5,254,556	123,743,908	_
Other ²	_	-5,295	-99,642	-119,565	_	_	_
otal							
Sales (thousand kWh)	3,323,014	772,808	3,127,031	14,339,234	1,105,837	21,167,916	_
Revenue (dollars)	59,149,132	21,820,614	82,649,391	462,238,519	35,528,180	522,951,548	_
Demand Charge Only ¹	_	_	_	_	_	2,800	_
Demand	15,692,800	1,083,798	23,766,762	14,264,320	17,558,955	64,779,884	_
Energy	43,454,896	20,725,190	59,619,556	249,076,106	17,984,628	457,714,038	_
Other ²	1,436	11,626	-736,927	198,898,093	-15,403	454,826	_

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

•		-					
	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvania	Pennsylvania	Rhode Island	Rhode Island
Purchaser of Electricity by Ownership Class	Safe Harbor Water Power Corp ⁵	Susquehanna Electric Co ⁵	UGI Corp	West Penn Power Co	York Haven Power Co ⁵	Blackstone Valley Electric Co ⁴	Narragansett Electric Co
Investor-Owned							
Sales (thousand kWh)	1,577,873	2,382,152	_	2,623,891	117,994	_	586
Revenue (dollars)	30,332,830	24,333,922	_	109,543,904	6,744,613	_	75,375
Demand Charge Only ¹ Demand	_	479 126	_	— 9.422.027	_	_	_
Energy	_	478,136 23,801,447	_	8,422,927 84,893,737	6,744,613	_	67,787
Other ²	30,332,830	54,339	_	16,227,240	-	_	7,588
Federal							
Sales (thousand kWh)	_	_	_	_	_	_	_
Revenue (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹ Demand	_	_	_	_	_	_	_
Energy	_		_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other							
Government Sales (thousand kWh)							
Revenue (dollars)	_		_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	_	_	_	_
EnergyOther ²	_	_	_	_	_	_	_
Municipal							
Sales (thousand kWh)	_	_	_	286,931	_	_	_
Revenue (dollars)	_	_	_	11,039,867	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	5,487,323	_	_	_
Energy	_	_	_	5,481,498	_	_	_
Other ²	_	_	_	71,046	_	_	_
Cooperative Sales (thousand kWh)	_	_	_	244,723	_	_	_
Revenue (dollars)	_	_		7,372,782	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	_	_	_	2,585,094	_	_	_
Energy	_	_	_	4,718,798	_	_	_
Other ²	_	_	_	68,890	_	_	_
Other ³							
Sales (thousand kWh)	_	_	_	501,216	_	_	_
Revenue (dollars) Demand Charge Only ¹	_	_	_	10,862,978	_	_	_
Demand	_	_	_	2,404,110	_	_	_
Energy	_	_		8,448,637	_		_
Other ²	_	_	_	10,231	_	_	_
Total		2 202 152	_	3,656,761	117,994	_	586
Sales (thousand kWh)	1,577,873	2,382,152		446			
Sales (thousand kWh) Revenue (dollars)	1,577,873 30,332,830	24,333,922	_	138,819,531	6,744,613	_	75,375
Sales (thousand kWh)		24,333,922 —	_	_	6,744,613 —	_	75,375 —
Sales (thousand kWh) Revenue (dollars)			_ _ _		6,744,613 — — 6,744,613	_ _ _	75,375 — — 67,787

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

•		•		, ,	,	ŕ	
	Rhode Island	Rhode Island	Rhode Island	South Carolina	South Carolina	South Carolina	South Dakota
Purchaser of Electricity by Ownership Class	Newport Electric Corp	Ocean State Power #25	Ocean State Power Co ⁵	Lockhart Power Co	South Carolina Electric & Gas Co	South Carolina Generating Co Inc ⁵	Black Hills Corp
Investor-Owned							
Sales (thousand kWh)	_	_	1,933,490	_	196,119	4,037,199	176,850
Revenue (dollars)	_	_	97,108,785	_	5,101,504	95,343,567	2,006,863
Demand Charge Only ¹	_	_		_		_	_
Demand Energy	_	_	74,221,834 18,956,711	_	256,500 4,845,004	95,343,567	2,006,863
Other ²	_	_	3,930,240	_	-	— —	
Federal							
Sales (thousand kWh)	_	_	_	_	_	_	_
Revenue (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other							
Government					22.545		
Sales (thousand kWh) Revenue (dollars)	_	_	_	_	22,747 548,185	_	_
Demand Charge Only ¹							_
Demand	_	_	_	_	_	_	_
Energy Other ²	_	_	_	_	548,185	_	_
Municipal				127.506	997.222		101.766
Sales (thousand kWh) Revenue (dollars)	_		_	137,586 6,446,052	887,322 34,396,010		181,766 8,188,628
Demand Charge Only ¹	_	_	_	-	——————————————————————————————————————	_	
Demand	_	_	_	4,111,857	18,269,596	_	4,261,440
Energy	_	_	_	2,484,465	16,566,604	_	4,025,900
Other ²	_	_	_	-150,270	-440,190	_	-98,712
Cooperative					40.4.075		
Sales (thousand kWh) Revenue (dollars)	_	_	_	_	424,275 13,242,091	_	_
Demand Charge Only ¹	_	_	_	_		_	_
Demand	_	_	_	_	4,689,127	_	_
Energy	_	_	_	_	8,625,201	_	_
Other ²	_	_	_	_	-72,237	_	_
Other ³							
Sales (thousand kWh)	_	_	_	_	387,764	_	72,250
Revenue (dollars) Demand Charge Only ¹					9,883,866		977,860
Demand							
Energy	_	_	_	_	9,883,866	_	977,860
Other ²	_	_	_	_	_	_	_
Total							
Sales (thousand kWh)	_	_	1,933,490	137,586	1,918,227	4,037,199	430,866
Revenue (dollars)	_	_	97,108,785	6,446,052	63,171,656	95,343,567	11,173,351
Demand Charge Only ¹	_	_	 74,221,834	— 4,111,857		_	 4,261,440
	_	_	1+,221,034				
Demand Energy	_	_	18,956,711	2,484,465	40,468,860	95,343,567	7,010,623

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	South Dakota	Tennessee	Tennessee	Texas	Texas	Texas	Texas
Purchaser of Electricity by Ownership Class	Northwestern Public Service Co	Kingsport Power Co ⁴	Tapoco Inc ⁸	Central Power & Light Co	El Paso Electric Co	Gulf States Utilities Co	Houston Lighting & Power Co
Investor-Owned							
Sales (thousand kWh)	31,318	_	_	323,895	721,851	3,320	321,394
Revenue (dollars)	428,949	_	_	9,486,043	16,043,530	56,341	21,995,047
Demand Charge Only ¹	_	_	_	_	<u> </u>	_	2,574,672
Demand Energy					5,400,000 7,714,017	56,341	12,103,270 7,317,105
Other ²		_	_	1,893,076	2,929,513		- -
Federal							
Sales (thousand kWh)	2,980	_	_	_	_	_	_
Revenue (dollars)	34,227	_	_	_	_	_	_
Demand Charge Only 1	_	_	_	_	_	_	_
Demand Energy		_	_	_	_	_	_
Other ²		_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	5,557	_	_	14,771	684,319	296,668	66,409
Revenue (dollars)	85,509	_	_	510,201	45,816,675	15,680,792	2,037,875
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	5,533	_	_	_	34,542,000	11,078,847	_
Energy Other ²		_	_	460,620 49,581	4,184,709 7,089,966	4,601,945 —	2,037,875 —
Municipal							
Sales (thousand kWh)	17,435	_	_	161,091	37,450	177,679	362,605
Revenue (dollars)	448,140	_	_	6,502,373	342,344	7,924,525	9,195,704
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand		_	_	1,473,442	_	3,436,141	_
Energy		_	_	3,415,229	342,315	4,488,384	9,195,704
Other ²	6,067	_	_	1,613,702	29	_	_
Cooperative Sales (thousand kWh)	18,031	_	_	809,530	40,592	456,206	82,425
Revenue (dollars)	224,535	_	_	36,721,455	1,797,937	18,893,328	1,621,042
Demand Charge Only ¹	_	_	_	_	_	_	
Demand	_	_	_	23,795,958	_	7,580,553	_
Energy	224,535	_	_	12,792,510	1,323,232	11,312,775	1,621,042
Other ²	_	_	_	132,987	474,705	_	_
Other ³	12			720,000	1 027 240	1.060.402	125 205
Sales (thousand kWh)	13	_	_	720,000	1,027,340	1,869,403	435,305
Revenue (dollars) Demand Charge Only 1	89,773	_	_	18,944,305	43,116,131	54,400,578	9,986,498
Demand	330	_	_	2,324,437		936,594	_
Energy	140	_	_	16,164,098	3,659,023	52,491,790	9,986,498
Other ²	89,303	_	_	455,770	11,766,636	972,194	_
Total							
Sales (thousand kWh)	75,334	_	_	2,029,287	2,511,552	2,803,276	1,268,138
Revenue (dollars)	1,311,133	_	_	72,164,377	107,116,617	96,955,564	44,836,166
Demand Charge Only ¹		_	_				2,574,672
Demand	237,963	_	_	27,593,837	67,632,472	23,032,135	12,103,270
Energy	977,384	_	_	40,425,424	17,223,296	72,951,235	30,158,224
Other ²	95,786	_	_	4,145,116	22,260,849	972,194	_

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

•		•		, .	,	,	
	Texas	Texas	Texas	Texas	Texas	Vermont	Vermont
Purchaser of Electricity by Ownership Class	Southwestern Electric Service Co	Southwestern Public Service Co	Texas Utilities Electric Co	Texas- New Mexico Power Co	West Texas Utilities Co	Central Vermont Public Service	Citizens Utilities Co ⁴
	Co	Co	Co	Co	Co	Corp	
			<u> </u>			<u> </u>	
Investor-Owned Sales (thousand kWh)	4,630	881,231	2,284,263	_	145,463	795,092	_
Revenue (dollars) Demand Charge Only ¹	206,135	45,059,025 —	115,513,983	_	5,598,979	30,231,290 11,771	_
Demand	101,661	11,762,400	64,240,942	_	2,245,735	15,691,543	_
Energy	126,313	27,174,355	15,165,651	_	3,352,129	13,875,380	_
Other ²	-21,839	6,122,270	36,107,390	_	1,115	652,596	_
Federal							
Sales (thousand kWh) Revenue (dollars)	_	_	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_		
Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	_	1,445	87,214	_	_	20,892	_
Revenue (dollars)	_	24,911	2,414,127	_	_	528,126	_
Demand Charge Only ¹	_			_	_		_
Demand	_	_	_	_	_	_	_
Energy	_	24,911	2,414,127	_	_	513,059	_
Other ²	_	_	_	_	_	15,067	_
Municipal Sales (thousand kWh)		525 494	629 452		100.027	202 922	
	_	525,484 17,140,055	628,453 18,337,304	_	100,037 3,511,432	203,833 5,844,039	_
Revenue (dollars) Demand Charge Only ¹	_	17,140,033	16,557,504	_	3,311,432	3,844,039 8,606	_
Demand	_	4,695,672	4,321,383		1,122,659	1,150,547	
Energy	_	6,072,490	4,866,861	_	2,396,498	4,652,737	_
Other ²	_	6,371,893	9,149,060	_	-7,725	32,149	_
Cooperative							
Sales (thousand kWh)	_	5,209,313	1,426,060	4,944	2,004,967	16,818	_
Revenue (dollars)	_	189,959,710	81,067,095	267,908	74,337,875	424,975	_
Demand Charge Only 1	_	45,200		- 122 122	— 25.617.675	- 07.020	_
Demand	_	80,900,428	49,978,453	122,132	25,617,575	87,929	_
Energy Other ²	_	11,471,947 97,542,135	6,162,661 24,925,981	121,917 23,859	48,720,300 —	337,046	_
Other ³							
Sales (thousand kWh)	1,067	153,596	672,722	_	160,524	335,283	_
Revenue (dollars)	47,947	5,361,091	17,604,232	15,004	5,472,981	17,075,574	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	22,990	_	_	_	11,063	8,958,288	_
Energy	29,092	2,925,613	17,604,232		4,117,452	8,059,749	_
Other ²	-4,135	2,435,478	_	15,004	1,344,466	57,537	_
Total	E (07	6 771 060	£ 000 710	4.044	2 410 001	1 271 010	
Sales (thousand kWh)	5,697 254,082	6,771,069	5,098,712	4,944	2,410,991	1,371,918	_
Sales (thousand kWh) Revenue (dollars)	5,697 254,082	257,544,792	5,098,712 234,936,741	4,944 282,912	2,410,991 88,921,267	54,104,004	_
Sales (thousand kWh)	254,082 —	257,544,792 45,200	234,936,741	282,912	88,921,267 —	54,104,004 20,377	_ _ _
Sales (thousand kWh) Revenue (dollars)		257,544,792				54,104,004	_ _ _ _

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	Vermont	Vermont	Vermont	Vermont	Vermont	Virginia	Virginia
Purchaser of Electricity by Ownership Class	Green Mountain Power Corp	Vermont Electric Power Co Inc	Vermont Electric Trans Co ⁶	Vermont Marble Co ⁸	Vermont Yankee Nuclear Power Corp ⁵	Appalachian Power Co	Virginia Electric Power Co
Investor-Owned Sales (thousand kWh)	477,388	499,228			3,798,790	4,984,709	4,243,434
Revenue (dollars)	13,925,921	16,545,334		_	181,715,081	145,346,053	94,129,696
Demand Charge Only ¹	_	_	_	_	_	96,700	_
Demand	4,603,570	7,909,789	_	_	_	41,921,814	2,815,931
EnergyOther ²	9,322,351 —	8,627,680 7,865	_	_	181,715,081	88,754,289 14,573,250	91,313,765 —
Federal							
Sales (thousand kWh)	_	_	_	_	_	185,529	5,582
Revenue (dollars)	_	_	_	_	_	5,349,792	124,138
Demand Charge Only ¹ Demand	_	_	_	_	_	_	_
Energy	_	_	_	_	_	4,725,084	124,138
Other ²	_	_	_	_	_	624,708	_
State and Other							
Government Sales (thousand kWh)	7,316	_	_	_	_	127,831	_
Revenue (dollars)	180,571	_	_	_	_	2,770,197	_
Demand Charge Only ¹		_	_	_	_		_
Demand		_	_	_	_		_
Energy Other ²	180,571 —	_	_	_	_	2,415,261 354,936	_
Municipal							
Sales (thousand kWh)	34,049	314,636	_	_	_	2,164,749	1,260,685
Revenue (dollars)	1,985,011	13,503,355	_	_	_	71,504,611	49,569,896
Demand Charge Only ¹ Demand	 824,779	9,936,561	_	_	_	— 33,411,329	
Energy	1,150,369	2,853,767				36,617,601	24,542,895
Other ²	9,863	713,027	_	_	_	1,475,681	-3,871,824
Cooperative	20.220	40.511				046.006	2 22 6 955
Sales (thousand kWh) Revenue (dollars)	28,339 1,021,310	49,511 1,980,441				846,086 23,281,247	3,226,855 143,052,779
Demand Charge Only ¹	2,460	-	_	_	_		
Demand	202,460	1,464,483	_	_	_	8,739,938	86,270,437
Energy	815,562	399,081	_	_	_	12,982,957	66,243,997
Other ²	828	116,877	_	_	_	1,558,352	-9,461,655
Other ³							
Sales (thousand kWh)	154,743	_	_	_	_	8,163,745	2,283,564
Revenue (dollars) Demand Charge Only ¹	3,553,765					84,547,612	56,163,177 60,000
Demand	103,410	_	_	_	_	3,446,532	1,425,570
Energy	3,450,355	_	_	_	_	64,516,746	54,677,607
Other ²	_	_	_	_	_	16,584,334	_
Total							
Sales (thousand kWh)	701,835	863,375	_	_	3,798,790	16,472,649	11,020,120
Revenue (dollars)	20,666,578	32,029,130	_	_	181,715,081	332,799,512	343,039,686
	2,460	_	_	_	_	96,700	60,000
Demand Charge Only ¹		10 210 922					
Demand Energy	5,734,219 14,919,208	19,310,833 11,880,528	_	_	_	87,519,613 210,011,938	119,410,763 236,902,402

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

	Washington	Washington	West Virginia	West Virginia	West Virginia	West Virginia	Wisconsin
Purchaser of Electricity by Ownership Class	Puget Sound Power & Light Co	Washington Water Power Co	Kanawha Valley Power Co ⁵	Monongahela Power Co	UtiliCorp United Inc ⁴	Wheeling Power Co ⁴	Consolidated Water Power Co
Investor-Owned							
Sales (thousand kWh)	2,439,569	3,286,354	_	2,532,666	_	_	439
Revenue (dollars)	33,272,104	92,899,775	_	108,059,092	_	_	2,904
Demand Charge Only ¹ Demand	_	19,404,000	_	4 042 255	_	_	_
Energy	33,272,104	9,104,217 64,379,401	_	4,942,255 60,982,725	_	_	2,904
Other ²		12,157	_	42,134,112	_	_	
Federal							
Sales (thousand kWh)	365,830	6,100	_	_	_	_	_
Revenue (dollars)	10,378,608	95,238	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_	_	_
Demand	200,000	_	_	_	_	_	_
Energy	10,178,608	95,238	_	_	_	_	_
Other ²	_	_	_	_	_	_	_
State and Other Government							
Sales (thousand kWh)	301,039	2,133,341	_	_	_	_	_
Revenue (dollars)	3,958,763	51,592,921	_	_	_	_	_
Demand Charge Only ¹	_	318,250	_	_	_	_	_
Demand	4,037	7,966,000	_	_	_	_	_
Energy Other ²	3,954,726	43,150,618	_	_	_	_	_
Other 2	_	158,053	_	_	_	_	_
Municipal							
Sales (thousand kWh)	379,942	263,161	_	72,404	_	_	_
Revenue (dollars) Demand Charge Only ¹	4,543,411	5,204,026	_	2,946,501	_	_	_
Demand	71,590	180,000 457,500		1,418,524	_		_
Energy	4,462,997	4,566,526	_	1,741,673	_		
Other ²	8,824	-,500,520	_	-213,696	_	_	_
Coomenstive							
Cooperative Sales (thousand kWh)	_	6,024	_	53,196	_	_	_
Revenue (dollars)	_	83,412	_	2,264,908	_	_	_
Demand Charge Only ¹	_		_		_	_	_
Demand	_	_	_	1,185,812	_	_	_
Energy	_	83,412	_	1,326,340	_	_	_
Other ²	_	_	_	-247,244	_	_	_
Other ³							
Sales (thousand kWh)	1,202,171	5,479,679	_	221,046	_	_	_
Revenue (dollars)	20,694,611	80,687,801	_	4,790,281	_	_	_
Demand Charge Only ¹	_	263,900	_		_	_	_
Demand	1,272,640	854,900	_	969,977	_	_	_
Energy Other ²	19,275,094	79,553,095	_	3,820,304	_	_	_
Outc1~	146,877	15,906	_	_	_	_	_
Total	4 500 551	11 174 650		2.070.212			100
Sales (thousand kWh)	4,688,551	11,174,659	_	2,879,312	_	_	439
Revenue (dollars) Demand Charge Only ¹	72,847,497	230,563,173 20,166,150	_	118,060,782	_	_	2,904
Demand Charge Only 1		18,382,617	_	 8,516,568	_		_
Demand							
Demand	1,548,267 71,143,529	191,828,290		67,871,042	_	_	2,904

Table 20. Electricity Sales for Resale by Investor-Owned Utilities, by State, 1996 (Continued)

•	·		, .	` ′	
	Wisconsin	Wisconsin	Wisconsin	Wisconsin	Wyoming
Purchaser of Electricity by Ownership Class	Wisconsin Electric Power Co	Wisconsin Power & Light Co	Wisconsin Public Service Corp	Wisconsin River Power Co ⁵	Cheyenne Light Fuel & Power Co ⁴
Investor-Owned	907.556	1 922 249	CO0 451	226,023	
Sales (thousand kWh)	897,556	1,833,248	608,451	- ,	-
Revenue (dollars)	23,176,207	34,915,073	14,909,350	5,111,906	_
Demand Charge Only ¹ Demand		1,214,960	30,000 5,596,441	_	_
Energy	17,271,125	32,409,974	12,016,594	5,111,906	_
Other ²	-11,638	1,290,139	-2,733,685		_
Federal					
Sales (thousand kWh)	_	_	_	_	_
Revenue (dollars)	_	_	_	_	_
Demand Charge Only ¹	_	_	_	_	_
Demand	_	_	_	_	_
Energy	_	_	_	_	_
Other ²	_	_	_	_	_
State and Other					
Government Sales (thousand kWh)					
Revenue (dollars)	_	_	_	_	_
Demand Charge Only ¹					
Demand					
Energy	_	_	_	_	_
Other ²	_	_	_	_	_
Municipal					
Sales (thousand kWh)	1,348,669	2,298,731	1,240,463	_	_
Revenue (dollars)	42,423,202	70,377,832	32,910,554	_	_
Demand Charge Only ¹		_	_	_	_
Demand	15,240,440	28,220,093	13,282,569	_	_
Energy	28,109,867	48,216,910	26,803,519	_	_
Other ²	-927,105	-6,059,171	-7,175,534	_	_
Cooperative					
Sales (thousand kWh)	26,191	575,673	36,543	_	_
Revenue (dollars)	887,034	18,013,716	897,952	_	_
Demand Charge Only ¹				_	_
Demand	333,835	7,894,453	263,337	_	_
Energy	533,528	12,385,023	727,807	_	_
Other ²	19,671	-2,265,760	-93,192	_	_
Other ³	120.005	2.5.5.522	1.5.581		
Sales (thousand kWh)	120,995	3,567,722	16,651	_	_
Revenue (dollars)	3,074,265	14,602,063	294,328	_	_
Demand Charge Only ¹				_	_
Demand	172,800	10,083	14,437	_	-
Energy Other ²	2,696,465 205,000	14,787,355 -195,375	279,891 —	_	_
Total					
Sales (thousand kWh)	2,393,411	8,275,374	1,902,108	226,023	_
Revenue (dollars)	69,560,708	137,908,684	49,012,184	5,111,906	_
Demand Charge Only ¹			30,000		_
Demand	21,663,795	37,339,589	19,156,784	_	_
Energy	48,610,985	107,799,262	39,827,811	5,111,906	_
Other ²	-714,072	-7,230,167	-10,002,411		_
	, 2	.,200,101	,00=,		

Monetary settlements from contracts where electricity is not taken.

Includes other transactions involving line and substation rentals, system support charges, and special contract transactions.

Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

FERC Form 1 respondent with purchased power transactions, but no sales for resale transactions.

FERC Form 1 respondent with sales for resale transactions, but no purchased power transactions.

FERC Form 1 respondent with only wheeling.
FERC Form 1 respondent with only exchanges.
FERC Form 1 respondent with no purchased power, sales for resale, exchanges, or wheeling.

Not Applicable

Notes: •For identification purposes, the utilities are listed in the State in which the corporate office is located. •Totals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 21. Electricity Exchanges by Investor-Owned Utilities, by State, 1996

State /		Investor-Owned			Federal		State and Other Government	
Utility	Received (thousand kWh)	Delivered (thousand kWh)	Settlement (dollars)	Received (thousand kWh)	Delivered (thousand kWh)	Settlement (dollars)	Received (thousand kWh)	
Alabama				1.511				
Alabama Power CoArizona	_	_	_	1,641	53	_	_	
Arizona Public Service Co	_	_	_	_	250	_	12,68	
Tucson Electric Power Co	138,607	122,874	1,260,000	_	_	_		
Arkansas								
Entergy Arkansas Inc California	_	_	_	_	_	_	_	
Pacific Gas & Electric Co	412,240	418,178	-68,060	1,373,305	1,995,540	15,396,145	204,86	
San Diego Gas & Electric Co	22,333	20,514		306,604	233,869	2,356,915	3,08	
Southern California Edison Co	49,705	158,553	_	106,535	116,707	_	_	
Colorado Public Service Co of Colorado				-101,099	13,665		360	
Connecticut	_	_	_	-101,099	13,003	_	300	
Citizens Utilities Co	92,199	33,849	977,123	_	_	_	_	
United Illuminating Co	329,370	_	10,705,840	_	_	_	_	
Florida Florida Power & Light Co								
Georgia	_	_	_	_	_	_	_	
Georgia Power Co	_	_	_	_	_	_	_	
Savannah Electric & Power Co	_	_	_	_	_	_	_	
Hawaii Maui Electric Co Ltd								
Idaho	_	_	_	_	_	_	_	
Idaho Power Co	138,125	122,991	_	434,858	471,581	_	6,870	
Illinois								
Central Illinois Light Co Central Illinois Pub Serv Co		13 113	2,187 84	_	_	_	_	
Commonwealth Edison Co				_	_	_	_	
Indiana	00,000							
Alcoa Generating Corp		12,301	_	_	_	_	_	
Indianapolis Power & Light Co		226	_	_	_	_	_	
PSI Energy Inc Kansas	000	_	_	_	_	_	_	
Western Resources Inc	2,587	_	19,399	_	_	_	_	
Kentucky		100						
Kentucky Utilities Co	_	100	_	_	_	_	_	
Maine Public Service Co	_	_	_	_	_	_	_	
Maryland								
Potomac Edison Co	340,400	327,413	275,019	_	_	_	_	
Massachusetts New England Power Co	213,209	154,421	_	_	_	_	_	
Michigan	213,207	134,421						
Detroit Edison Co		39,489	_	_	_	_	_	
Upper Peninsula Power Co	_	_	_	_	_	_	_	
Northern States Power Co	_	_	_	31,848	_	_	23,35	
Missouri				- ,			- ,	
Empire District Electric Co	_	_	_	1,280	1,860	_	_	
Kansas City Power & Light Co UtiliCorp United Inc	40,000	54,969	11,514	_	1,456	_	_	
Montana	40,000	34,707	11,514		1,430			
Montana Power Co	660,849	678,144	9,157	1,239,078	1,629,889	-1,989,002	_	
New Mexico	67.462	70.670		7.154	6 202		0.020	
Public Service Co of NM New York	67,463	78,678	_	7,154	6,203	_	8,828	
Central Hudson Gas & Elec Corp	_	_	_	_	_	_	_	
Consolidated Edison Co-NY Inc	_	_	_	_	_	_	210,244	
New York State Elec & Gas Corp North Carolina	_	_	_	_	_	_	157,496	
North Carolina Duke Power Co	8,411	3,007	_	558	1,614	_	_	
North Dakota	0,.11	2,007		230	2,011			
MDU Resources Group Inc	_	_	_	40,207	33,590	102,695	_	
Ohio Cincinnati Gas & Electric Co	_	_	_	_	_	_	_	
Cleveland Electric Illum Co	9,340	16,548	-129,744	_	_	_	_	
Dayton Power & Light Co	55	1,208	-29,238	_	_	_	_	
Ohio Edison Co	29,632		_	_	_	_	_	
Ohio Power Co Toledo Edison Co	48,859 1,413	1,617 4,244	 7,429	_	_	_	_	
1 Olego Eulson Co	1,413	4,444	1,429	_	_	_	_	

Table 21. Electricity Exchanges by Investor-Owned Utilities, by State, 1996 (Continued)

State /	State and Government			Municipal	Cooperative		
Utility	Delivered (thousand kWh)	Settlement (dollars)	Received (thousand kWh)	Delivered (thousand kWh)	Settlement (dollars)	Received (thousand kWh)	Delivered (thousand kWh)
Alabama Alabama Power Co							
Arizona	_	_	_	_	_	_	_
Arizona Public Service Co	23,204	_	_	_	_	_	_
Tucson Electric Power Co	_ ′	_	_	_	_	_	_
Arkansas							
Entergy Arkansas Inc	_	_	_	_	_	_	_
California		7 556 226	65,204	60 147	01 504		
Pacific Gas & Electric Co San Diego Gas & Electric Co	3,374	7,556,226	05,204	69,147	-81,584	_	
Southern California Edison Co			125,661	208,385		_	_
Colorado			120,001	200,505			
Public Service Co of Colorado	5,798	_	_	_	_	_	_
Connecticut							
Citizens Utilities Co	_	_	_	_	_	_	_
United Illuminating Co Florida	_	_	_	_	_	_	_
Florida Power & Light Co	_	_	_	_	_	4,455	75
Georgia						1,155	75
Georgia Power Co	_	_	_	_	_	_	_
Savannah Electric & Power Co	_	_	_	_	_	_	_
Hawaii							
Maui Electric Co Ltd	_	_	_	_	_	_	_
Idaho Idaho Power Co	8,115	_	126,000	126,000	_	_	
Illinois	0,113		120,000	120,000			
Central Illinois Light Co	_	_	20	_	440	_	_
Central Illinois Pub Serv Co	_	_	20	125	-2,368	17,565	27,433
Commonwealth Edison Co	_	_	_	_	_	_	_
Indiana							
Alcoa Generating Corp Indianapolis Power & Light Co		_	_		_	1	_
PSI Energy Inc			_			3,033	9,174
Kansas						-,	-,
Western Resources Inc	_	_	_	_	_	_	_
Kentucky							
Kentucky Utilities Co	_	_	_	_	_	_	_
Maine Public Service Co	_	_	_	_	_	_	_
Maryland							
Potomac Edison Co	_	_	_	_	_	_	_
Massachusetts							
New England Power Co	_	_	_	_	_	_	_
Detroit Edison Co	_	_	_	_	_	_	_
Upper Peninsula Power Co	_	_	1,480	34,290	-634,056	_	_
Minnesota							
Northern States Power Co	78	_	_	_	_	11,047	32,913
Missouri Empire District Electric Co	_	_	_	_	_	_	
Kansas City Power & Light Co	_		_	_		_	2,228
UtiliCorp United Inc	_	_	_	2,328	_	49,114	49,249
Montana							
Montana Power Co	_	_	_	_	_	_	_
New Mexico Public Service Co of NM	11,731		10,702	15,224		16,038	11,923
New York	11,/31	_	10,702	13,224	_	10,036	11,92.
Central Hudson Gas & Elec Corp	_	_	_	_	_	_	_
Consolidated Edison Co-NY Inc	314,349	5,841,876	_	_	_	_	_
New York State Elec & Gas Corp	235,425	2,727,845	_	_	_	_	_
North Carolina Duke Power Co			2,879,972	2,578,714	2,853,568	3,432,913	2,906,593
North Dakota	_	_	2,819,912	2,376,714	2,833,308	3,432,913	2,900,39.
MDU Resources Group Inc	_	_	_	_	_	_	_
Ohio							
Cincinnati Gas & Electric Co	_	_	35,149	37,052	_	124,500	151,363
Cleveland Electric Illum Co	_	_	_	_	_	_	_
Dayton Power & Light Co Ohio Edison Co	_	_	_	_	_	_	_
Ohio Power Co	_		22,853	21,642	_	_	_

Table 21. Electricity Exchanges by Investor-Owned Utilities, by State, 1996 (Continued)

St. 4. 1	Cooperative		Other ¹	Total				
State / Utility	Settlement (dollars)	Received (thousand kWh)	Delivered (thousand kWh)	Settlement (dollars)	Received (thousand kWh)	Delivered (thousand kWh)	Settlement (dollars)	
Alabama Alabama Power Co			'		1.641	52		
Arizona	_	_	_	_	1,641	53	_	
Arizona Public Service Co	_	_	_	_	12,687	23,454	_	
Tucson Electric Power Co	_	_	_	_	138,607	122,874	1,260,000	
Arkansas Entergy Arkansas Inc		216,830	204,530					
California	_	210,630	204,330	_	_	_	_	
Pacific Gas & Electric Co		393,740	151,125	6,410,845	2,449,349	2,633,990	29,213,572	
San Diego Gas & Electric Co		_	_	_	332,017	257,757	2,356,915	
Southern California Edison Co	_	_	_	_	281,901	483,645	_	
Public Service Co of Colorado	_	_	_	_	-100,733	19,463	_	
Connecticut								
Citizens Utilities Co	_	21,295	_	1,017,392	92,199 350,665	33,849	977,123 11,723,232	
Florida	_	21,293	_	1,017,392	330,003	_	11,723,232	
Florida Power & Light Co	_	_	_	_	4,455	758	_	
Georgia		206 507	1 267 605		206 507	1 267 605		
Georgia Power Co Savannah Electric & Power Co		296,597 522,837	1,267,685 522,580		296,597 522,837	1,267,685 522,580		
Hawaii		322,637	322,380		322,637	322,380		
Maui Electric Co Ltd	_	4,111	6,648	-133,042	4,111	6,648	-133,042	
Idaho Idaho Power Co					705 952	720 607		
Illinois	_	_	_	_	705,853	728,687	_	
Central Illinois Light Co		_	_	_	133	13	2,627	
Central Illinois Pub Serv Co	, -	_	_	_	17,698	27,671	-223,699	
Commonwealth Edison Co Indiana	_	_	_	_	60,000	_	_	
Alcoa Generating Corp	_	_	_	_	9,949	12,301	_	
Indianapolis Power & Light Co		36	_	_	649	226	_	
PSI Energy Inc	-24,192	_	_	_	3,693	9,174	-24,192	
Kansas Western Resources Inc	_	_	_	_	2,587	_	19,399	
Kentucky								
Kentucky Utilities Co Maine	_	_	38,550	_	_	100	_	
Maine Public Service Co	_	741	_	_	741	_	_	
Maryland								
Potomac Edison Co	_	_	_	_	340,400	327,413	275,019	
New England Power Co	_	_	_	_	213,209	154,421	_	
Michigan					.,			
Detroit Edison Co		_		_		39,489	-	
Upper Peninsula Power Co	_	_	1,730	_	1,480	34,290	-634,056	
Northern States Power Co	_	143,228	5,812	_	209,474	38,803	_	
Missouri								
Empire District Electric Co	-28,964	_	_	_	1,280	1,860 2,228	-28,964	
UtiliCorp United Inc		859,506	854,200	300	89,188	108,070	21,447	
Montana								
Montana Power Co New Mexico	_	3	27	_	1,899,927	2,308,033	-1,979,845	
Public Service Co of NM	_	-13,775	-24,216	_	112,202	126,138	_	
New York		,	,		,	,		
Central Hudson Gas & Elec Corp	_	34,027	16,709	_		- 214 240	— 5 941 976	
Consolidated Edison Co-NY Inc New York State Elec & Gas Corp	_	_	_	_	210,244 157,496	314,349 235,425	5,841,876 2,727,845	
North Carolina					107,150	200,120	2,727,013	
Duke Power Co	3,815,686	772,837	686,651	_	7,020,834	6,099,077	6,669,254	
North Dakota MDU Resources Group Inc		_	_	_	40,207	33,590	102,695	
Ohio			_ _		40,207	33,390	102,093	
Cincinnati Gas & Electric Co	_	16,981	1,185	_	176,630	189,600	-	
Cleveland Electric Illum Co	_	_	_	_	9,340	16,548	-129,744 -20,238	
Dayton Power & Light Co	_		_	_	55 29,632	1,208	-29,238 	
Ohio Edison Co					27,002			
Ohio Edison Co Ohio Power Co	_	_	_	_	71,712	23,259	_	

Table 21. Electricity Exchanges by Investor-Owned Utilities, by State, 1996 (Continued)

State /		Investor-Owned			Federal		State and Other Government
Utility	Received (thousand kWh)	Delivered (thousand kWh)	Settlement (dollars)	Received (thousand kWh)	Delivered (thousand kWh)	Settlement (dollars)	Received (thousand kWh)
Oklahoma		'			ļ.		
Public Service Co of Oklahoma	30,335	30,335	_	112,134	114,503	_	646,134
Oregon	,	,		,	,		*
PacifiCorp	649,862	509,258	124,801	12,666,633	12,508,408	-32,080,684	315,271
Portland General Electric Co	419,480	495,471	-1,125	313,452	301,826	217,008	54,492
Pennsylvania							
Duquesne Light Co	92,289	101,378	_	_	_	_	_
West Penn Power Co	143,019	136,599	132,192	_	_	_	_
South Dakota							
Black Hills Corp	9,286	25,987	-120,348	10,586	10,935	_	_
Texas							
Central Power & Light Co	2,375	9,751	_	_	_	_	22,288
El Paso Electric Co	17,954	29,017	_	_	_	_	2,808
Houston Lighting & Power Co	4,688,103	9,773,279	_	_	_	_	1,182,602
Texas Utilities Electric Co	12,824,841	6,724,285	83,340	_	_	_	305,877
West Texas Utilities Co	2,375	9,751	_	_	_	_	_
Virginia							
Virginia Electric & Power Co	24,888	24,195	_	21,266	15,118	_	243,864
Washington							
Puget Sound Power & Light Co	519,509	523,183	-34,355	81,859	20,977	799,287	390,597
Washington Water Power Co	671,008	625,138	11,705	158,914	158,612	27,594	73,831
West Virginia							
Monongahela Power Co	77,600	75,168	-6,473	_	_	_	_
Wisconsin							
Consolidated Water Power Co	294	_	_	_	_	_	_
Wisconsin Electric Power Co	800	800	_	_	_	_	_
Wisconsin Power & Light Co	_	353	_	_	_	_	_
Wisconsin Public Service Corp	4,407	4,058	6,980	_	_	_	_

Table 21. Electricity Exchanges by Investor-Owned Utilities, by State, 1996 (Continued)

State /	State and Government			Municipal	Cooperative		
Utility	Delivered (thousand kWh)	Settlement (dollars)	Received (thousand kWh)	Delivered (thousand kWh)	Settlement (dollars)	Received (thousand kWh)	Delivered (thousand kWh)
Oklahoma	l						
Public Service Co of Oklahoma	645,065	_	_	_	_	_	_
Oregon	,						
PacifiCorp	355,758	-226,385	11,757	9,858	66,428	117,507	67,258
Portland General Electric Co	92,082	1,992	30,018	34,467	_	_	_
Pennsylvania	. ,	,		,			
Duquesne Light Co	_	_	_	_	_	_	_
West Penn Power Co	_	_	_	_	_	_	_
South Dakota							
Black Hills Corp	_	_	_	_	_	_	_
Texas							
Central Power & Light Co	25,605	_	_	_	_	77,210	81,411
El Paso Electric Co	12,492	_	_	_	_	_	_
Houston Lighting & Power Co	408,067	_	3,183	9,425	_	_	145,366
Texas Utilities Electric Co	1,851,185	_	_	_	_	_	_
West Texas Utilities Co	_	_	_	_	_	_	_
Virginia							
Virginia Electric & Power Co	249,484	_	_	_	_	_	_
Washington							
Puget Sound Power & Light Co	388,100	-403,832	135,216	135,216	-371,547	_	_
Washington Water Power Co	74,049	-1,570	1,584	_	20,434	_	_
West Virginia							
Monongahela Power Co	_	_	_	_	_	_	_
Wisconsin							
Consolidated Water Power Co	_	_	_	_	_	_	_
Wisconsin Electric Power Co	_	_	_	_	_	_	_
Wisconsin Power & Light Co	_	_	_	_	_	_	_
Wisconsin Public Service Corp	_	_	_	_	_	_	_

Table 21. Electricity Exchanges by Investor-Owned Utilities, by State, 1996 (Continued)

			/ •	/ (,		
State /	Cooperative		Other ¹			Total	
Utility	Settlement (dollars)	Received (thousand kWh)	Delivered (thousand kWh)	Settlement (dollars)	Received (thousand kWh)	Delivered (thousand kWh)	Settlement (dollars)
Oklahoma			l				
Public Service Co of Oklahoma	_	_	_	_	788,603	789,903	_
Oregon							
PacifiCorp	265,639	90,733	224,239	-33,368	13,851,763	13,674,779	-31,883,56
Portland General Electric Co	_	_	751	_	817,442	923,846	217,87
Pennsylvania							
Duquesne Light Co	_	21,945	21,604	_	110,582	120,273	_
West Penn Power Co	_	_	_	_	143,019	136,599	132,19
South Dakota							
Black Hills Corp	_	_	_	_	19,872	36,922	-120,34
Texas							
Central Power & Light Co	62,320	_	_	_	101,873	116,767	62,32
El Paso Electric Co	_	_	_	_	20,762	41,509	_
Houston Lighting & Power Co	_	5,626,887	1,163,152	_	11,500,775	11,499,289	_
Texas Utilities Electric Co	_	8,824,988	13,378,134	_	21,955,706	21,953,604	83,34
West Texas Utilities Co	_	_	_	_	2,375	9,751	_
Virginia							
Virginia Electric & Power Co	_	226,200	234,900	-1,027,064	516,218	523,697	-1,027,06
Washington							
Puget Sound Power & Light Co	_	_	_	_	1,127,181	1,067,476	-10,44
Washington Water Power Co	_	213,731	207,795	_	1,116,132	1,065,594	58,16
West Virginia							
Monongahela Power Co	_	_	_	_	77,600	75,168	-6,47
Wisconsin							
Consolidated Water Power Co	_	_	_	_	294	_	_
Wisconsin Electric Power Co	_	_	_	_	800	800	_
Wisconsin Power & Light Co	_	33,973	71,200	_	33,973	71,553	_
Wisconsin Public Service Corp					4,407	4,058	6,98

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

⁻Not Applicable

Notes: •The terms of settlement may include transferring and/or exchanging quantities of electricity with no dollar value assigned. •For identification purposes, the utilities are listed in the State in which the corporate office is located. •Totals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 22. Electricity Purchases by Investor-Owned Utilities Not Reported to the Federal Energy Regulatory Commission, by State, 1996

Regulatory Commissions	Purchases (Thousand Kilowatthours)								
State / Utility	Investor- Owned	Federal	State and Other Government	Municipal	Cooperative	Other ¹	Total		
Alaska Haines Light & Power Co Inc Napakiak Ircinaq Power Co	— 634	=	=	312		312	624 634		
Arizona Ajo Improvement Co Morenci Water & Electric Co	=		=	=	— 28,136	9,360	9,360 28,136		
Hawaii Hawaii Electric Light Co Inc	_	_	_	_	_	371,657	371,657		
Montana Champion International Corp	2,288	_	_	_	_	_	2,288		
Rhode Island Block Island Power Co	_	_	_	_	_	10	10		
Utah Panaca Power & Light Co	_	_	6,218	_	_	_	6,218		
Washington Modern Electric Water Company	216,474	_	_	_	_	_	216,474		
Wisconsin Westfield Milling & El Lgt Co	10,384	_	_	_	_	_	10,384		

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities. —Not Applicable

Notes: •For identification purposes, the utilities are listed in the State in which the corporate office is located. •Totals may not equal sum of components because of independent rounding.

Source: • Energy Information Administration Form EIA-861, "Annual Electric Utility Report," and McGraw-Hill's "Electrical World Directory of Electric Utilities," with verification done by the Survey Management Division.

Table 23. Electricity Wheeling by Investor-Owned Utilities, by State, 1996

	-						
	Investor-C	Owned	Feder	al	State and Governi		Municipal
State / Utility	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²
Alabama							
Alabama Power Co	156,330	1,055,073	527,407	6,069,066	_	_	253,372
Arizona Arizona Public Service Co	999,503	4,006,888	31,289	259,512	564,138	3,591,974	17,177
Tucson Electric Power Co	820,168	1,489,393	_ 51,207		220,877	216,026	
Arkansas							
Entergy Arkansas Inc	115,713	966,858	524	1,903	_	_	_
California Pacific Gas & Electric Co	82,776	143,187	3,679,252	15,931,421	15.975.471	19,372,164	2,481,263
San Diego Gas & Electric Co		1,542,350	_	93,800	380	152,280	
Southern California Edison Co	1,816,122	9,469,381	1,009,979	4,430,829	4,766,907	5,539,717	7,911,508
Colorado		2 104 401	227 120	2 2 6 2 4 2 4	20.750	200 702	
Public Service Co of Colorado	_	2,184,401	327,130	3,262,434	38,758	288,702	_
Citizens Utilities Co	104,489	809,500	_	_	_	_	47,187
Connecticut Light & Power Co	1,377,348	11,229,827	_	_	144,439	408,875	1,132,958
United Illuminating Co	_	_	_	_	_	_	_
Delaware Delmarva Power & Light Co	2,308,503	330,709					
Florida	2,308,303	330,709					
Florida Power & Light Co		51,741	_	_	313,557	1,091,286	2,672,442
Florida Power Corp	24,393	371,037	190,971	756,190			440,672
Gulf Power Co Tampa Electric Co		127,464	55,655	250,915	6,481	1,722	16,949
Georgia	_	_	_	_	_	_	_
Georgia Power Co	_	_	1,704,416	468,607	_	_	_
Savannah Electric & Power Co	_	_	_	_	_	_	_
Hawaii Maui Electric Co Ltd							
Idaho	_	_	_	_	_	_	_
Idaho Power Co	1,720,246	3,517,645	2,093,977	7,144,555	96	240	137,466
Illinois							
Central Illinois Light Co	_ 2.480	- 2 604	_	_	_	_	227 124
Central Illinois Pub Serv Co Commonwealth Edison Co		3,604 381,302	_			_	327,126 273,445
Illinois Power Co		76,908	_	_	_	_	603,731
Mt Carmel Public Utility Co	_		_	_	_	_	_
Indiana							
Alcoa Generating Corp Commonwealth Edison Co IN Inc		294,112	_			_	
Indiana Michigan Power Co	1,714,605	7,012,195	_	_	91,185	313,059	306,506
Northern Indiana Pub Serv Co	77,580	150,566	_	_	81,271	32,673	_ ′
PSI Energy Inc	2,737,205	5,704,478	_	_	409,791	247,309	
Southern Indiana Gas & Elec CoIowa	_	_	_	_	_	_	1,044
Interstate Power Co	26,154	77,070	334,004	_	197,616	365,886	346,305
IES Utilities Inc	15,655	51,610	_	_		<u> </u>	96,691
MidAmerican Energy Co	1,257,130	1,335,144	542,831	803,981	_	_	825,180
Kansas Gas & Electric Co	231,095	2,130,349	_	_	384,836	476,791	258,581
Western Resources Inc	25,291	39,620	_	_	384,836	476,791	344,989
Kentucky							
Kentucky Power Co		2,570,291			33,064	113,529	106,375
Kentucky Utilities Co Louisville Gas & Electric Co	280 14,528	700 21,826	275,828	497,287	_	_	_
Louisiana	14,326	21,020					
Central Louisiana Elec Co Inc	_	110,293	_	_	800,957	1,660,622	1,325,980
Southwestern Electric Power Co	29,456	48,187	_	_	928	1,777	10,854
Maine Bangor Hydro-Electric Co	_	_	_	_	_	_	_
Central Maine Power Co	3,219,954	1,735,248	_	_	_	_	_
Maine Electric Power Co Inc	2,894,805	2,731,228	_	_	_	_	1,747
Maine Public Service Co	172,424	1,517,228	_	_	_	_	104,981
Maryland Baltimore Gas & Electric Co	_	140,719	_	_	_	_	_
Potomac Edison Co	2,781,932	7,392,296	_	_	_	_	117,782
Massachusetts							
Boston Edison Co	3,020,164	5,199,020	_	_	118,226	338,758	775,332 14,611
Cambridge Electric Light Co							

Table 23. Electricity Wheeling by Investor-Owned Utilities, by State, 1996 (Continued)

	Municipal	Coopera	itive	Other ¹	1	Total	
State / Utility	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)
Alabama	242.002	2 107 429	0.507.170	412.000	1 110 774	2 457 256	19 002 064
Alabama Power Co	342,983	2,107,438	9,507,178	412,809	1,118,764	3,457,356	18,093,064
Arizona Public Service Co	145,332	47,802	1,231,146	401,824	997,046	2,061,733	10,231,898
Tucson Electric Power Co	_	721,451	926,175	27,353	111,501	1,789,849	2,743,095
Entergy Arkansas Inc	356,391	30,064	430,344	115,807	15,293,608	262,108	17,049,104
California	14 492 650			1.017.612	2 645 992	22 226 274	EO ETE 010
Pacific Gas & Electric Co	14,482,659 3,512	_	_	1,017,612	2,645,882	23,236,374 359,865	52,575,313 1,791,942
Southern California Edison Co	19,960,129	39,958	201,125	294,179	1,289,516	15,838,653	40,890,697
Colorado Public Service Co of Colorado	7,698	1,352,173	1,811,121	_	241,602	1,718,061	7,795,958
Connecticut	7,070	1,332,173	1,011,121		241,002	1,710,001	1,175,750
Citizens Utilities Co	372,394	1,665	22,046	91,033 2,121,124	257,870	244,374	1,461,810
Connecticut Light & Power Co United Illuminating Co	4,305,983	_	_	39,888	5,870,288 449,950	4,775,869 39,888	21,814,973 449,950
Delaware							
Delmarva Power & Light Co	_	1,076,778	3,551,400	210,704	983,745	3,595,985	4,865,854
Florida Power & Light Co	7,743,673	3,404,049	8,958,450	228,141	703,598	6,627,640	18,548,748
Florida Power Corp	4,613,073	16,373	9,293,090	56,682	2,327,308	729,091	17,360,698
Gulf Power Co Tampa Electric Co	107,645	316,644	1,261,041	83,574 1,213,239	380,392 3,272,235	533,343 1,213,239	2,129,179 3,272,235
Georgia				, -,	-, - ,		
Georgia Power Co Savannah Electric & Power Co	_	_	_	30,329	112,020	1,704,416 30,329	468,607 112,020
Hawaii				30,329	112,020	30,329	112,020
Maui Electric Co Ltd	_	_	_	_	_	_	_
Idaho Idaho Power Co	1,116,685	_	_	8,147	15,451	3,959,932	11,794,576
Illinois	, ,,,,,,						
Central Illinois Light Co Central Illinois Pub Serv Co	5,201,129	23,419 1,225,910	68,988 10,094,557	127,400 4,200	1,136,001 6,420	150,819 1,559,716	1,204,989 15,305,710
Commonwealth Edison Co	1,627,331		-	965,578	1,525,499	1,425,868	3,534,132
Illinois Power Co	2,664,202	_	_	262,679	972,479	927,984	3,713,589
Mt Carmel Public Utility Co	_	_	_	_	_	_	_
Alcoa Generating Corp	_	_	_	_	_	_	
Commonwealth Edison Co IN IncIndiana Michigan Power Co	1,070,270	— 174,101	 1,597,017	600,258	2,039,570	2,886,655	294,112 12,032,111
Northern Indiana Pub Serv Co	-	1,053,287	433,531	74,138	181,575	1,286,276	798,345
PSI Energy Inc		3,226,761	4,638,047	241,221	409,701	6,614,978	10,999,535
Southern Indiana Gas & Elec Co Iowa	157	39,174	78,098	42,677	61,954	82,895	140,209
Interstate Power Co	1,419,838	545,251	1,646,100	-	410,533	1,449,330	3,919,427
IES Utilities Inc	82,800 1,596,154	88,471 1,313,448	121,050 986,206	25,834 205,574	503,178 1,199,944	226,651 4,144,163	758,638 5,921,429
Kansas			,				
Kansas Gas & Electric Co	423,384	458,032	2,936,681	201,509 201,509	294,233	1,534,053	6,261,438
Western Resources Inc Kentucky	285,785	827,252	5,193,827	201,309	294,233	1,783,877	6,290,256
Kentucky Power Co	308,981	116,609	583,849	221,432	754,962	1,113,793	4,331,612
Kentucky Utilities Co Louisville Gas & Electric Co	_	1,561,339 251,529	4,656,824 282,249	48,263 265,899	111,195 379,931	1,885,710 531,956	5,266,006 684,006
Louisiana		231,323	202,219	203,033	377,731	331,730	004,000
Central Louisiana Elec Co Inc Southwestern Electric Power Co	3,349,180	1,136,161	6,033,538	— 625.275	2,845	3,263,098	11,156,478
Maine	105,820	2,244,378	6,276,292	625,275	1,445,815	2,910,891	7,877,891
Bangor Hydro-Electric Co	_	_	_			_	
Central Maine Power Co		_	_	344,367 123,038	1,688,430 558,468	3,564,321 3,019,590	3,423,678 3,349,006
Maine Public Service Co	391,080	_	_		—	277,405	1,908,308
Maryland Reltimore Goe & Flectric Co					5,601,817		5 740 500
Baltimore Gas & Electric Co Potomac Edison Co	843,429	_	_	1,530,280	3,257,144	4,429,994	5,742,536 11,492,869
Massachusetts							
Boston Edison Co	2,123,657 174,187	_	_	1,693,582 18,749	4,254,578 262,646	5,607,304 33,360	11,916,013 436,833
Camorage Electric Light Co	1/4,10/			10,749	202,040	33,300	430,83.

Table 23. Electricity Wheeling by Investor-Owned Utilities, by State, 1996 (Continued)

·	. •						
	Investor-O	wned	Federa	al	State and Governm		Municipal
State / Utility	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²
Massachusetts							
Commonwealth Electric Co	_	821,585	_	_	_	_	_
Fitchburg Gas & Elec Light Co	_	_	_	_	_	_	_
Holyoke Water Power Co	192	90,969	_	_	_	_	_
Montaup Electric Co	90,307	140,357	_	_	56,680	248,874	81,965
New England Hydro-Tran Elec Co	1 (52 000		_	_		— 550.252	2 240 177
New England Power Co Western Massachusetts Elec Co	1,653,000 320,286	11,797,920 1,904,520	_	_	164,171 33,881	552,353 279,828	3,249,177 265,756
Michigan	320,280	1,904,320			33,001	219,020	203,730
Consumers Power Co	197,428	637,890	_	_	_	_	31,222
Detroit Edison Co	100,465	863,256	_	_	_	_	7,449
Minnesota							
Minnesota Power & Light Co			_	_			95,526
Northern States Power Co Otter Tail Power Co	2,122,560 4,611	3,463,119 23,218	_	_	990,066	3,060,969	828,532 7,102
Mississippi	4,011	23,218	_	_	_	_	7,102
Mississippi Power Co	1,248	1,350,185	113,702	1,195,607	_	_	_
Missouri			•	•			
Empire District Electric Co	520,201	420,855	_	_	_	_	
Kansas City Power & Light Co	1,007,395	2,377,393	_	_	673	677	611,429
St Joseph Light & Power Co Union Electric Co	199,831 5,400	103,465 17,192		-6,035			295,541
UtiliCorp United Inc	33,221	124,329	8,406	6,571	29,002	43,786	43,521
Montana	,	,	-,	-,-	.,	-,	- /-
Montana Power Co	180,631	444,097	1,137,635	6,207,153	_	_	_
Nevada							
Nevada Power Co	8,987	21,813	- (70,000	— 5 011 471	492,196	2,114,860	23,571
Sierra Pacific Power Co New Hampshire	79,953	130,547	678,899	5,011,471	2,417	4,158	_
Concord Electric Co	_	_	_	_	_	_	_
Connecticut Valley Elec Co Inc	_	_	_	_	_	_	19,901
Exeter & Hampton Electric Co	_	_	_	_	_	_	_
Great Bay Power Corp	_	_	_	_	_	_	_
New England Elec Transm 'n Corp	_	_	_	_	_	_	_
New England Hydro-Trans Corp North Atlantic Energy Corp	_	2,603,573	_	_	_	_	_
Public Service Co of NH	266,340	5,907,607	_	_	7,299	17,536	90,342
UNITIL Power Corp			_	_	_ ′	_ ^	
New Jersey							
Atlantic City Electric Co		1 415 022	_	_	_	_	21,703
Jersey Central Power&Light Co Public Service Electric&Gas Co	683,537 2,957,766	1,415,033 6,404,608	_	_	_	_	316,054 123,681
Rockland Electric Co	2,937,700	0,404,008 —			_		
New Mexico							
Public Service Co of NM	1,160,054	2,819,130	841,764	2,720,938	706,382	772,759	1,082,230
New York	1 414 201	5 06 5 60				201.106	
Central Hudson Gas & Elec Corp	1,414,201	786,769	_	_	9,690,330	281,186 239,322,113	_
Consolidated Edison Co-NY Inc Long Island Lighting Co	4,951,076	9,583,897	_	_	846,253	6,553,549	_
Long Sault Inc	_	_	_	_	- 010,233		157,394
New York State Elec & Gas Corp	18,928	1,848,732	_	_	790,469	6,818,784	_
Niagara Mohawk Power Corp	662,173	37,162,424	_	_	278,207	21,247,175	9,628
Orange & Rockland Utils Inc	_	_	_	_	155,743	109,017	_
Rochester Gas & Electric Corp North Carolina	_	_	_	_	72,182	433,547	_
Carolina Power & Light Co	_	455,942	509,981	936,845	_	_	199,446
Duke Power Co	945,362	5,892,550	448,762	2,665,157	_	_	150,123
North Dakota							
MDU Resources Group Inc	_	_	499,298	313,979	_	_	_
Ohio Cincinnati Gas & Electric Co	231,304	-142,613					300,109
Cleveland Electric Illum Co	134,804	15,227	_	_	_		5,956
Columbus Southern Power Co	1,519,063	5,965,415	_	_	79,078	271,801	372,187
	38	-106,468	_	_	_ '	_ ^	688,463
Dayton Power & Light Co	50						
Dayton Power & Light Co Ohio Edison Co	_	94,808	_	_		_	1,934,912
Dayton Power & Light Co	2,533,081 256,674			_	131,867	— 453,348	1,934,912 435,235

Table 23. Electricity Wheeling by Investor-Owned Utilities, by State, 1996 (Continued)

	Municipal	Coopera	tive	Other 1		Total		
State / Utility	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	
Massachusetts					126 272		057.05	
Commonwealth Electric Co Fitchburg Gas & Elec Light Co	_	_	_	_	136,372	_	957,95	
Holyoke Water Power Co	_	_	_	_	420	192	91,389	
Montaup Electric Co	349,278	_	_	901,720	2,008,999	1,130,672	2,747,50	
New England Hydro-Tran Elec Co New England Power Co	6,429,260	_		89,190	43,721,989 11,995,230	5,155,538	43,721,989 30,774,763	
Western Massachusetts Elec Co	1,008,148	_	_	497,547	1,659,348	1,117,470	4,851,84	
Michigan	121.027	5 500	5 0.420	150 500	2 0 50 000	40.4.020	2015 411	
Consumers Power Co Detroit Edison Co	131,027 28,833	5,590	78,420	170,598 400	2,068,080 2,832	404,838 108,314	2,915,41° 894,92	
Minnesota	20,033	_	_	400	2,832	100,514	094,92	
Minnesota Power & Light Co	998,066	1,523,723	2,056,780	28,480	990,430	1,647,729	4,045,27	
Northern States Power Co	3,678,109	2,710,195	8,090,894	231,579	2,073,914	6,882,932	20,367,00	
Otter Tail Power Co	63,238	_	_	1,420,646	177,970	1,432,359	264,42	
Mississippi Power Co	_	_	_	_	239,200	114,950	2,784,99	
Missouri								
Empire District Electric Co Kansas City Power & Light Co	1,557,892	507,267 8,979	1,714,506 55,177	291,796 163,450	347,103 267,548	1,319,264 1,791,926	2,482,464 4,258,687	
St Joseph Light & Power Co		_ 6,979		70,053	109,429	269,884	212,89	
Union Electric Co	707,005	371,256	_	128,953	361,216	801,150	1,079,37	
UtiliCorp United Inc	386,824	664,762	2,138,049	33,213	60,786	812,125	2,760,34	
Montana Montana Power Co	_	575	41,944	_	_	1,318,841	6,693,19	
Nevada		575	,,			1,510,011	0,070,17	
Nevada Power Co	38,332			34,911	249,172	559,665	2,424,17	
Sierra Pacific Power Co New Hampshire	_	431,570	196,731	11,770	568,755	1,204,609	5,911,66	
Concord Electric Co	_	_	_	175,223	26,081	175,223	26,08	
Connecticut Valley Elec Co Inc	1,511	14,576	23,264	_ ′	<u> </u>	34,477	24,77	
Exeter & Hampton Electric Co	_	_	_	_		_	— 51.55°	
Stream Say Power Corp		_	_		54,557 10,062,202	_	54,55° 10,062,20°	
New England Hydro-Trans Corp	_	_	_	_	33,608,657	_	33,608,65	
North Atlantic Energy Corp		_	100 150	1 160 064	— 5 707 910	1 522 045	2,603,57	
Public Service Co of NHUNITIL Power Corp	34,144	_	188,159	1,169,064	5,707,819 —	1,533,045	11,855,26	
New Jersey								
Atlantic City Electric Co	56,657					21,703	56,65	
Jersey Central Power&Light Co Public Service Electric&Gas Co	2,513,793 326,676	120,021	891,060	752,611 168,396	1,362,140 744,647	1,872,223 3,249,843	6,182,026 7,475,93	
Rockland Electric Co		_	_	_	_			
New Mexico								
Public Service Co of NM New York	1,772,047	191,808	4,067,157	439,275	3,275,716	4,421,513	15,427,74	
Central Hudson Gas & Elec Corp	_	_	_	120,369	189,759	1,534,570	1,257,71	
Consolidated Edison Co-NY Inc	_	_	_	16,313,678	6,357,660	30,955,084	255,263,67	
Long Sault Inc		_	_	1,967,427	 1,145,464	846,253 2,124,821	6,553,549 1,289,020	
New York State Elec & Gas Corp	— —			2,470	868,419	811,867	9,535,93	
Niagara Mohawk Power Corp	66,138	_	_	1,295,222	33,021,753	2,245,230	91,497,49	
Orange & Rockland Utils Inc	_	_	_	_	_	155,743	109,01	
Rochester Gas & Electric Corp North Carolina	_	_	_	_	_	72,182	433,54	
Carolina Power & Light Co	8,854,374	1,787,454	2,883,164	235,021	155,524	2,731,902	13,285,849	
Duke Power Co	9,369,282	48,881	12,268,001	1,410,563	3,522,700	3,003,691	33,717,69	
North Dakota MDU Resources Group Inc	_	602,260	111,649	14,541	120,175	1,116,099	545,80	
Ohio		552,200	111,04)	17,571	120,173	1,110,079	5 75,00.	
Cincinnati Gas & Electric Co	967,831	290,740	620,649	189,820	273,212	1,011,973	1,719,079	
Cleveland Electric Illum Co Columbus Southern Power Co	4,863,381 1,226,129		3,065,166	536,947 523,842	962,527 1,767,261	677,707 3,892,113	5,765,25 12,295,77	
Dayton Power & Light Co	2,788,462	1,194,288	2,325,831		240	1,882,789	5,008,06	
Ohio Edison Co	7,621,706	_	_		3,057	1,934,912	7,719,57	
Ohio Power Co	1,300,632	6,936,783	17,240,432	909,124	5,672,524	10,946,116 256,674	30,644,159 405,159	
Ohio Valley Electric Corp								

Table 23. Electricity Wheeling by Investor-Owned Utilities, by State, 1996 (Continued)

	Investor-O	wned	Federa	al	State and Governm		Municipal
State / Utility	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²
Oklahoma							
Oklahoma Gas & Electric Co	137,055	213,996	89,383	761,320	941,908	3,614,352	_
Public Service Co of Oklahoma	75,427	416,717	_	_	78	254,808	_
Oregon							
PacifiCorp	1,313,194	2,260,580	5,452,264	11,001,270	1,326,342	5,528,097	377,22
Portland General Electric Co	1,430	254,474	_	335,229	_	_	40
Pennsylvania							
Duquesne Light Co	_	_	_	_	_	_	_
Metropolitan Edison Co	315,333	7,693,150	_	_	_	_	57,86
Pennsylvania Electric Co	3,514,767	13,043,584	_	_	_	_	285,86
Pennsylvania Power & Light Co	1,242,345	4,459,980	_	_	_	_	27,61
Pennsylvania Power Co		42,800	_	_	_	_	42,70
PECO Energy Co	_		_	_	_	_	
West Penn Power Co	3,749,153	9,643,169	_	_	_	_	158,57
South Carolina	3,747,133	7,043,107					130,37
South Carolina Electric&Gas Co	19,411	47,216	31,750	357,370	71,662	75,000	
South Dakota	19,411	47,210	31,730	337,370	71,002	73,000	
Black Hills Corp					8,240	31,907	13,20
Northwestern Public Service Co	_	_	43,547	49,913	0,240	31,907	3,91
Texas	_	_	43,347	49,913	_	_	3,91
Central Power & Light Co		990,943				91.824	
El Paso Electric Co	168.859	189.887	210,956	738.346	135.168	1.237.000	_
	170,909	1,431,855	210,936 775	2,815	408,966	, ,	_
Entergy Gulf States Inc	,	, ,	113	2,013	408,900	1,741,666	_
Houston Lighting & Power Co	2,932,747	7,017,951	_	_	_	137,653	_
Southwestern Electric Serv Co	- 0.206	20.007	_	_	_	_	_
Southwestern Public Service Co	9,396	38,007	_	_			5 005 45
Texas Utilities Electric Co	2,863,466	5,356,969	_	_	181,511	678,107	3,035,47
Texas-New Mexico Power Co	1,987,094	6,296,854	_	_	_		_
West Texas Utilities Co	_	345,301	_	_	_	690,267	_
Vermont							
Central Vermont Pub Serv Corp	5,428	1,089,092	_	_	_	_	166,90
Green Mountain Power Corp	41,980	552,568	_	_	_		238,49
Vermont Electric Power Co Inc	3,662,717	12,818,440	_	_	_	341,813	680,00
Vermont Electric Trans Co Inc	5,574,011	4,151,127	_	_	285,540	197,246	124,65
Virginia							
Appalachian Power Co	3,089,629	12,263,093	9,765	373,020	160,390	609,006	515,40
Virginia Electric & Power Co	4,572,008	4,484,922	1,410,688	2,702,268	_	_	724,20
Washington							
Puget Sound Power & Light Co	364,935	816,299	522,461	1,564,410	1,579,493	2,482,446	648,61
Washington Water Power Co	269,135	1,545,739	1,576,117	6,876,538	183,047	41,923	452,86
West Virginia							
Monongahela Power Co	2,063,051	13,701,000	_	_	_	_	87,30
Wheeling Power Co	_	1,147,359	_	_	_	_	_
Wisconsin							
Northern States Power Co	_	_	_	_	_	_	_
Northwestern Wisconsin Elec Co	_	_	_	_	_	_	_
Superior Water Light&Power Co	5,277	15,955	_	_	_	_	_
Wisconsin Electric Power Co	312,050	391,458	_	_	_	_	1,497,75
Wisconsin Power & Light Co	120,577	453,998	_	_	_	_	
Wisconsin Public Service Corp	121,183	289,166					76,18

Table 23. Electricity Wheeling by Investor-Owned Utilities, by State, 1996 (Continued)

	Municipal	Coopera	tive	Other ¹		Total	
State / Utility	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)	Wheeled Energy (thousand kWh) ²	Revenue (dollars)
Oklahoma							
Oklahoma Gas & Electric Co	_	342,463	1,043,224	436,263	681,303	1,947,072	6,314,195
Public Service Co of Oklahoma	_	185,037	888,700	627,276	4,333,385	887,818	5,893,610
Oregon							
PacifiCorp	1,490,436	302,934	2,097,807	71,577	238,624	8,843,539	22,616,814
Portland General Electric Co	187,800	_	_	840	1,050	2,670	778,553
Pennsylvania							
Duquesne Light Co	_	_	_	1,005,783	2,579,597	1,005,783	2,579,597
Metropolitan Edison Co	223,405	278,526	2,276,238	368,169	659,420	1,019,894	10,852,213
Pennsylvania Electric Co	1,797,801	2,354,703	7,522,067	632,093	2,175,956	6,787,429	24,539,408
Pennsylvania Power & Light Co	140,211	_	_ '	2,028,614	3,835,678	3,298,573	8,435,869
Pennsylvania Power Co	222,411	_	_	_	3,679	42,701	268,890
PECO Energy Co	_	_	_	426,825	2,326,407	426,825	2,326,407
West Penn Power Co	1,136,498	_	_	2,063,296	4,393,634	5,971,025	15,173,301
South Carolina				, ,			
South Carolina Electric&Gas Co	_	_	_	8,445	20,415	131,268	500,001
South Dakota				-, -	-, -	- ,	,
Black Hills Corp	390,918	2,663,156	1,286,193	_	_	2,684,602	1.709.018
Northwestern Public Service Co	10,065	798	2,624	16.850	34,497	65,111	97,099
Texas	10,000	,,,,	2,02 .	10,000	5.,.,,	00,111	,,,,,,,
Central Power & Light Co	1,998,589	_	410,185	895,724	281.145	895,724	3,772,686
El Paso Electric Co	_	16.828	69,618	_	_	531.811	2,234,851
Entergy Gulf States Inc	596,540	6,701,149	27,410,879	171.047	614.858	7,452,846	31,798,613
Houston Lighting & Power Co	683,641		169,967	1,790,874	1,399,545	4,723,621	9,408,757
Southwestern Electric Serv Co		100,250	230,348			100,250	230.348
Southwestern Public Service Co	168		4,884	243,598	728,535	253,050	771.594
Texas Utilities Electric Co	3,695,535	2,267,707	10.738,578	2,946,243	16.314.901	11.294.402	36.784.090
Texas-New Mexico Power Co	3,073,333	6,227	7.077	242.448	207.754	2,235,769	6.511.685
West Texas Utilities Co	703,355		40,496	224,949	1,897,133	224,949	3,676,552
Vermont	103,333		40,490	224,949	1,097,133	224,949	3,070,332
Central Vermont Pub Serv Corp	554,612	108.076	598,036			280,404	2,241,740
Green Mountain Power Corp	424,718	89,070	143,023		-222,420	369,548	897.889
Vermont Electric Power Co Inc	1,932,234	202,639	717,250	_	-222,420	4,545,363	15,809,737
Vermont Electric Trans Co Inc	86,112	202,039	717,230	2,619,452	1,277,696	8,603,662	5,712,181
Virginia	00,112	_	_	2,019,432	1,277,090	6,003,002	3,712,101
Appalachian Power Co	1,353,891	306.674	2,740,270	974.878	3,822,918	5.056.740	21.162.198
Virginia Electric & Power Co	1,555,691	3,854,175	9,967,425	186,789	331,106	10,747,864	17,485,721
Washington	_	3,034,173	9,907,423	100,709	331,100	10,747,604	17,465,721
0	618,837			1,262,191	3,331,037	4,377,694	8,813,029
Puget Sound Power & Light Co	240,246	2,209	7,926	1,741,550	6,270,658	4,224,918	14,983,030
2	240,246	2,209	7,926	1,741,550	0,270,038	4,224,918	14,985,030
West Virginia	(25.461	(1.505	74.444	1 125 101	2 417 042	2 247 122	16 017 040
Monongahela Power Co	625,461	61,585	74,444	1,135,191	2,417,043	3,347,133	16,817,948
Wheeling Power Co	_	_	_	_	_	_	1,147,359
Wisconsin							
Northern States Power Co	_	- 16 222		_	_	- 16 222	
Northwestern Wisconsin Elec Co	_	16,322	64,072	_	_	16,322	64,072
Superior Water Light&Power Co	_	12,970	38,310			18,247	54,265
Wisconsin Electric Power Co		3,558	7,685	65,983	3,062,988	1,879,348	3,462,131
Wisconsin Power & Light Co	87,198	_	_	139,451	213,824	260,028	755,020
Wisconsin Public Service Corp	337,238	_	_	7,274	18,902	204,643	645,306

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

² Value presented is the greater of the received or delivered quantity.

⁻Not Applicable

Notes: Wheeling (transmission services) is reported in account 456, "Transmission For Others," and in account 565, "Transmission By Others," of the FERC Uniform System of Accounts. For identification purposes, the utilities are listed in the State in which the corporate office is located. Totals may not equal sum of components because of independent rounding.

tals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

Table 24. Electricity Wheeling to Investor-Owned Utilities, by State, 1996

	Investor-C	wned	Feder	al	State and Government		Municipal
State / Utility	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²
Alabama							
Alabama Power Co	12,262	35,881	_	_	_	_	_
Arizona Arizona Public Service Co	49,931	234,130	2,255,995	2,379,324	4,678,236	1,177,444	1,112
Tucson Electric Power Co	1,337,350	1,829,129	326,120	817,534	57,070		124
Arkansas	,,	,, -	,	,			
Entergy Arkansas Inc	_	_	_	69,672	_	_	_
Entergy Power Inc	_	4,273,199	_	1,248,666	_	_	_
California Pacific Gas & Electric Co	8,822,672	822,588	8,822,672	382,486	669,074	127,554	10,268
San Diego Gas & Electric Co	23,158	11,629,860		57,070	503	609	263
Southern California Edison Co	5,041,184	6,219,700	6,145	114,354	84,944	279,495	363,326
Colorado							
Public Service Co of Colorado Connecticut	_	_	220,049	4,531,624	206,382	440,631	63,695
Citizens Utilities Co	103,927	653,572	1,100,811	3,394,584	_	_	2,178
Connecticut Light & Power Co		20,868,678				_	26,058
United Illuminating Co	592,540	9,612,306	_	_	9,085	183,687	_
Florida							
Florida Power & Light Co	1,839	4,097	_	500	_	_	4,219,382
Florida Power Corp Tampa Electric Co	99,836	289,038	_				
Georgia	77,030	207,030					
Georgia Power Co	_	_	_	_	_	_	_
Hawaii							
Maui Electric Co Ltd	_	_	_	_	_	_	_
Idaho Power Co	429,757	976,836	654,797	1,132,219	1,400	1,050	397
Illinois	429,737	970,830	034,797	1,132,219	1,400	1,030	391
Central Illinois Light Co	_	_	_	_	_	_	_
Central Illinois Pub Serv Co	_	_	_	_	_	_	_
Commonwealth Edison Co	_	2,389,671	_	_	_	_	_
Illinois Power Co	_	_	_	_	_	_	_
Indiana							
Alcoa Generating Corp	_	_	_	_	_	_	_
Indiana Michigan Power Co	296,497	623,885	_	_	_	_	_
Northern Indiana Pub Serv Co	1 012 552	209,872	- 2.106	- 0.105	_		- 50.565
PSI Energy Inc	1,012,553	2,560,747 7,707	3,106	8,105	_	-23,000	59,565
Iowa		7,707					
Interstate Power Co	_	2,182,698	_	_	_	_	_
IES Utilities Inc	23,741	_	_	_	_	_	_
MidAmerican Energy Co	_	_	_	_	_	_	_
Kansas Gas & Electric Co	954,616	-828,348					
Western Resources Inc	707,587	3,004,250	_	_	_	_	991
Kentucky	,						
Kentucky Power Co	105,386	226,685			_	_	_
Kentucky Utilities Co Louisville Gas & Electric Co	_	245 976	3,036	4,728	_	_	_
Louisiana	_	345,876	_	471,739	_	_	_
Central Louisiana Elec Co Inc	_	_	_	_	_	_	_
Southwestern Electric Power Co	_	4,989,353	_	_	_	55,068	_
Maine							
Bangor Hydro-Electric Co		1,838,736	_	_	_	_	_
Central Maine Power Co	787,914	2,659,056 840,928	_	_	_	_	_
Maryland	707,214	510,720					
Baltimore Gas & Electric Co	_	319,316	_	_	_	_	_
Potomac Edison Co	1,595,024	1,714,954	_	_	_	_	181,202
Massachusetts Poston Edison Co							
Boston Edison Co	610,072	5,705,675	_	_	_	_	_
Canal Electric Co		4,120,027	_	_	_	_	_
Commonwealth Electric Co	1,771,757	3,701,502	_	_	_	_	_
Fitchburg Gas & Elec Light Co	150,456	253,381	_	_	_	2,185	_
Holyoke Water Power Co	104.706	211,944	_	_	_	_	_
Massachusetts Electric Co	104,706	361,847	_	_	_	_	_

Table 24. Electricity Wheeling to Investor-Owned Utilities, by State, 1996 (Continued)

	Municipal	Coopera	tive	Other 1		Total		
State / Utility	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	
Alabama		<i>c</i> 1	1 220	72	1.025	12 206	20.04	
Alabama Power Co	_	61	1,339	73	1,825	12,396	39,045	
Arizona Public Service Co	175,371	_	_	802	_	6,986,076	3,966,269	
Tucson Electric Power Co	217	_	_	_	_	1,720,664	2,646,880	
Arkansas			102 524				252.20	
Entergy Arkansas Inc	22.746	_	193,624		1 591 004	 524.659	263,296	
Entergy Power Inc	-23,746	_	507,000	534,658	1,581,094	534,658	7,586,213	
Pacific Gas & Electric Co	187,160	_	_	19,377,106	6,143,646	37,701,792	7,663,434	
San Diego Gas & Electric Co	584,285	_	_	_	13,361	23,924	12,285,185	
Southern California Edison Co	546,167	_	_	_	_	5,495,599	7,159,716	
Colorado Dublio Sarvino Co of Colorado	204 721	66.510	1 106 991			556 626	0.202.055	
Public Service Co of Colorado	204,721	66,510	4,106,881	_	_	556,636	9,283,857	
Citizens Utilities Co	13,225	_	_	_	608,601	1,206,916	4,669,982	
Connecticut Light & Power Co	663,432	_	_	469,906	4,608,857	495,964	26,140,967	
United Illuminating Co	_	_	_	_	1,780,410	601,625	11,576,403	
Florida	272 001			4.004.052	10 522 710	0.215.272	10.012.105	
Florida Power & Light Co Florida Power Corp	273,881 84,007	_	_	4,094,052	10,533,719	8,315,273	10,812,197 84,007	
Tampa Electric Co			_			99,836	289,038	
Georgia						,		
Georgia Power Co	_	_	_	_	_	_	_	
Hawaii								
Maui Electric Co Ltd	_	_	_	_	_	_	_	
Idaho Power Co	1,687	420	630	338	638	1,087,109	2,113,060	
Illinois	1,007	.20	020	550	050	1,007,105	2,113,000	
Central Illinois Light Co	_	_	_	_	_	_	_	
Central Illinois Pub Serv Co	_	_	_	_	_	_	_	
Commonwealth Edison Co	_	7,405	7,405	_	506,778	7,405	2,896,449	
Illinois Power Co	_			_	_		7,405	
Indiana								
Alcoa Generating Corp	_	_	_	_	_	_	_	
Indiana Michigan Power Co	_	_	_	_	-46,297,834	296,497	-45,673,949	
Northern Indiana Pub Serv Co	61,432	303,106		_	1,825	1 279 220	211,697 3,132,562	
PSI Energy Inc Southern Indiana Gas & Elec Co	- 61,432	303,100	323,278	_	_	1,378,330	7,707	
Iowa							7,707	
Interstate Power Co	_	_	449,684	_	285,263	_	2,917,645	
IES Utilities Inc	_	47,930	312,799	_	1,188,147	71,671	1,500,946	
MidAmerican Energy Co	_	_	27,861	_	363,032	_	390,893	
Kansas Gas & Electric Co	_	_	_	1,800	5,500	956,416	-822,848	
Western Resources Inc	7,880	_	_			708,578	3,012,130	
Kentucky								
Kentucky Power Co	_		96,159	_	-3,364,812	105,386	-3,041,968	
Kentucky Utilities Co	_	416,370	1,159,668	_		419,406	1,164,396	
Louisville Gas & Electric Co	_	_	41,925	_	11,416	_	870,956	
Central Louisiana Elec Co Inc	_	_	_	6,604	21,320	6,604	21,320	
Southwestern Electric Power Co	561,200	_	32,463	_ ′	2,858,135	_ ′	8,496,219	
Maine								
Bangor Hydro-Electric Co Central Maine Power Co	42.020	_	_	1.650	1,606,192	2,333,362	3,444,928	
Maine Public Service Co	43,929	_	_	1,650 280,603	614,201 961,531	1,068,517	3,317,186 1,802,459	
Maryland				200,003	,01,001	1,000,017	1,002,100	
Baltimore Gas & Electric Co	_	_	_	_	742,378	_	1,061,694	
Potomac Edison Co	_	_	_	2,653,768	3,960	4,429,994	1,718,914	
Massachusetts Boston Edison Co					773,556		773,556	
Cambridge Electric Light Co	_	_	_	605,228	471,115	1,215,300	6,176,790	
Canal Electric Co	_	_	_				4,120,027	
Commonwealth Electric Co	_	_	_	327,758	292,408	2,099,515	3,993,910	
Fitchburg Gas & Elec Light Co	_	_	_	260,101	550,495	410,557	806,061	
Holyoke Water Power Co Massachusetts Electric Co	_	_	_	_	_	104,706	211,944 361,847	
					_			

Table 24. Electricity Wheeling to Investor-Owned Utilities, by State, 1996 (Continued)

	Investor-C	wned	Federa	al	State and Governm		Municipal
State / Utility	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²
Massachusetts							
Montaup Electric Co	_	456,824	_	_	_	_	_
New England Power Co		27,221,418	_	_	_	_	_
Western Massachusetts Elec Co	_	5,149,459	_	_	_	_	_
Minnesota							
Minnesota Power & Light Co				_		1 702 140	_
Northern States Power Co Otter Tail Power Co		813,958	270,554	_	363,540	1,783,148	_
Missouri	_	1,176,929	_	_	_	_	_
Empire District Electric Co	651,633	1,132,965	_	_	60	120	_
Kansas City Power & Light Co		583,266	_	_	_	_ 120	_
St Joseph Light & Power Co		3,853	_	_	_	_	_
Union Electric Co		580,159	_	7,536	_	_	_
UtiliCorp United Inc	76,489	2,238,460	832	3,120	31,645	56,119	_
Montana							
Montana Power Co	1,023,948	1,615,048	542,169	3,787,225	_	_	_
Nevada	12.720	co. co.o.	c1 227	125.050	1.550		4.100
Nevada Power Co	,	62,628	61,237	136,069	1,650	5,560	4,100
New Hampshire	472,646	2,090,734	11,010	32,920	_	_	5,228
Concord Electric Co	_	_	_	_	_	_	_
Exeter & Hampton Electric Co			_				_
Granite State Electric Co		19,774	_	_	_	_	_
Great Bay Power Corp			_	_	_	_	_
North Atlantic Energy Corp		2,603,573	_	_	_	_	_
Public Service Co of NH		13,848,094	_	_	_	_	_
UNITIL Power Corp	1,327,674	4,940,034	_	_	_	_	_
New Jersey							
Atlantic City Electric Co		_	_	_	_	_	_
Jersey Central Power&Light Co			_	_	_	_	_
Public Service Electric&Gas Co		2,572,105	_	_	_	_	_
Rockland Electric Co	_	_	_	_	_	_	_
New Mexico Public Service Co of NM	451,109		574,726		14,764		
New York	431,109	_	374,720	_	14,704	_	_
Central Hudson Gas & Elec Corp	26,322	2,364,988	_	_	663,655	2,206,061	_
Long Island Lighting Co		16,462,775	_	_	2,758,906	27,706,906	_
Long Sault Inc		_	_	_	_	_	_
New York State Elec & Gas Corp	10,737,977	17,531,230	_	_	_	1,889,901	_
Niagara Mohawk Power Corp		_	_	_	59,134	436,701	_
Orange & Rockland Utils Inc		2,693,664	_	_	_	479,200	_
Rochester Gas & Electric Corp	_	12,546,955	_	_	_	3,485,104	_
North Carolina	702 175	100 555		20.650		22.706	
Carolina Power & Light Co Duke Power Co		190,555	_	38,659	110 745	33,796	_
North Dakota	_	_	_	_	118,745	826,260	_
MDU Resources Group Inc	_	_	400,327	400,251	_	_	_
Ohio			100,327	100,231			
Cincinnati Gas & Electric Co	153,393	173,779	832	3,924	_	_	_
Cleveland Electric Illum Co		18,042	_	_	_	_	_
Columbus Southern Power Co		541,273	_	_	_	_	_
Dayton Power & Light Co	_		_	_	_	_	_
Ohio Power Co		2,154,771	_	_	_	_	_
Toledo Edison Co	51,339	57,685	_	_	_	_	_
Oklahoma							
Public Service Co of Oklahoma	_	40,112	_	_	_	_	_
Oregon PacifiCorp	2,407,817	19 220 977	10,352,060	34 441 000	2,394,969	601,712	286.647
PacifiCorp Portland General Electric Co		18,338,877 2,500,603	6,427,760	34,441,900 26,622,071	1,200	3,420	28,411
Pennsylvania	1,173,477	2,300,003	0,427,700	20,022,071	1,200	3,420	20,411
Duquesne Light Co	_	5,411,140	_	_	_	_	_
Metropolitan Edison Co		82,602	_	_	_	_	_
Pennsylvania Electric Co		2,201,192	_	_	_	_	_
Pennsylvania Power & Light Co	6,342,469	75,404	_	_	_	_	_
West Penn Power Co	2,149,516	7,306,124	_	_	_	_	244,381
Rhode Island Narragansett Electric Co		1,255,554					

Table 24. Electricity Wheeling to Investor-Owned Utilities, by State, 1996 (Continued)

	Municipal	Coopera	ntive	Other		Total		
State / Utility	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	
Massachusetts	155.505				555 coo		1 100 01	
Montaup Electric Co	177,587	_	1 027 204	460.015	555,600	4.265.052	1,190,01	
New England Power Co	05 407	_	1,027,294	469,915	1,795,308	4,365,953	30,044,020	
Western Massachusetts Elec Co	85,487	_	_	185,622	1,080,417	185,622	6,315,36	
Minnesota		7,930	145 551			7.020	145,55	
Minnesota Power & Light Co Northern States Power Co	_	456,674	145,551 274,279	_	4.037.920	7,930 3,104,814	6,909,30	
Otter Tail Power Co	_	430,074	214,219	_	4,037,920	3,104,614	1,176,92	
Missouri							1,170,92	
Empire District Electric Co	_	_	_	650	2,092	652,343	1,135,17	
Kansas City Power & Light Co	160,650	_	_	_		- 032,515	743,91	
St Joseph Light & Power Co	_	1,932	15,600	_	_	3,637	19,45	
Union Electric Co	_	239,569	_	_	_	424,664	587,69	
UtiliCorp United Inc	_	32,497	415,599	21,823	13,470	163,286	2,726,768	
Montana		- ,	- ,	,	-,	,	,, ,,,,,,	
Montana Power Co	_	10,433	34,959	_	280	1,576,550	5,437,512	
Nevada		,						
Nevada Power Co	21,800	_	_	_	_	79,716	226,057	
Sierra Pacific Power Co	13,655	15,125	7,562	3,553	_	507,562	2,144,87	
New Hampshire								
Concord Electric Co	_	_	_	_	_	_	_	
Exeter & Hampton Electric Co	_	_	_	_	_	_	_	
Granite State Electric Co	_	_	_	_	_	2,582	19,774	
Great Bay Power Corp	_	_	_	_	_	_	_	
North Atlantic Energy Corp	_	_					2,603,573	
Public Service Co of NH	_	_	155,974	282,208	2,537,487	282,208	16,541,555	
UNITIL Power Corp	_	_	_	629,622	644,849	1,957,296	5,584,883	
New Jersey								
Atlantic City Electric Co	_	_	_	_		_		
Jersey Central Power&Light Co		_	_	_	11,885,955	_	11,885,955	
Public Service Electric&Gas Co	17,010	_	_	_	-5,338	_	2,583,777	
Rockland Electric Co	_	_	_	_	_	_	_	
New Mexico Public Service Co of NM		21.450				1 072 059		
New York	_	31,459	_	_	_	1,072,058	_	
Central Hudson Gas & Elec Corp				3,300	-185,457	693,277	4,385,592	
Long Island Lighting Co	_	_	_	790,205	2,302,601	3,549,111	46,472,282	
Long Sault Inc				790,203	2,302,001	3,349,111	40,472,202	
New York State Elec & Gas Corp	_	_	_	_	354,769	10,737,977	19,775,900	
Niagara Mohawk Power Corp	595	_	_	1,547,592	1,281,738	1,606,726	1,719,034	
Orange & Rockland Utils Inc	_	_	_			1,139,029	3,172,864	
Rochester Gas & Electric Corp	_	_	_	_	_	_	16,032,059	
North Carolina							, ,	
Carolina Power & Light Co	_	_	_	_	588	792,175	263,598	
Duke Power Co	_	53,493	177,946	_	_	172,238	1,004,206	
North Dakota								
MDU Resources Group Inc	_	2,039	3,453	_	20,490	402,366	424,194	
Ohio								
Cincinnati Gas & Electric Co	_	207,579	42,747	212	848	362,016	221,298	
Cleveland Electric Illum Co	_	_	_	_	_	15,988	18,042	
Columbus Southern Power Co	_	_	_	_	30,591,120	248,669	31,132,393	
Dayton Power & Light Co	_	_	_	_	_	_	_	
Ohio Power Co	_	_	_	_	12,532,044	422,897	14,686,815	
Toledo Edison Co	_	_	_	8,134	27,766	59,473	85,451	
Oklahoma					4 655 105		4.515.00	
Public Service Co of Oklahoma	_	_	_	_	4,677,187	_	4,717,299	
Oregon	120.014	264.625	2 170 550	506.053	021.760	16 202 070	56 271 00	
PacifiCorp	-120,814	264,625	2,178,559	586,852	931,760	16,292,970	56,371,994	
Portland General Electric Co	221,027	_	765	_	1,115,454	7,652,648	30,463,340	
Pennsylvania							5 411 140	
Duquesne Light Co	_	_	_	_	3,435,424	_	5,411,140 3,518,026	
Pennsylvania Electric Co	_	_	_	_	J, 4 JJ,424	1,774,999	2,201,192	
	_	_	_	_	_	6,342,469	75,404	
	_	_						
Pennsylvania Power & Light Co	_	_	_	3 577 128	5 330			
	_	_	_	3,577,128	5,330	5,971,025	7,311,454	

Table 24. Electricity Wheeling to Investor-Owned Utilities, by State, 1996 (Continued)

	Investor-C	wned	Feder	al	State and Governs		Municipal
State / Utility	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²
South Dakota						•	
Black Hills Corp	_	_	_	_	_	_	_
Northwestern Public Service Co	_	_	255,571	661,029	_	_	_
Texas			,-	,,,,,,,			
Central Power & Light Co	_	5,846,567	_	_	_	350,513	_
El Paso Electric Co	334,243	708,705	_	_	139,357	1,898,628	_
Entergy Gulf States Inc	_ ′		_	_	_ ′		_
Houston Lighting & Power Co	201,943	60,587	_	_	132,090	59,421	2,015,886
Southwestern Electric Serv Co	_ ′	1,896,471	_	_	_ ′	187,836	
Southwestern Public Service Co	119,553	776,904	_	_	_	_ ′	_
Texas Utilities Electric Co	104,496	11,391,416	_	_	33,187	240,227	188,135
Texas-New Mexico Power Co	168,874	6,303,233	_	_	_	418,663	_
West Texas Utilities Co	_	_	_	_	_	_	_
Vermont							
Central Vermont Pub Serv Corp	2,442,974	14,286,149	_	_	8,878	211,512	_
Green Mountain Power Corp	1,158,782	4,269,059	_	_	_	273,094	34,841
Virginia							
Appalachian Power Co	515,399	1,108,883	_	_	_	_	_
Virginia Electric & Power Co	37,292	221,919	_	_	18,050	28,678	_
Washington							
Puget Sound Power & Light Co	4,004	-1,459,463	10,842,841	32,680,343	1,370	-8,215	420
Washington Water Power Co	354,883	1,481,866	1,320,604	9,065,386	39,442	51,581	_
West Virginia							
Monongahela Power Co	1,182,843	_	_	_	_	_	134,445
Wisconsin							
Consolidated Water Power Co	3,723	9,956	_	_	_	_	_
Madison Gas & Electric Co	127,990	464,511	_	_	_	_	_
Wisconsin Electric Power Co	700,451	-285,162	_	_	_	_	3,161
Wisconsin Power & Light Co	2,215,066	3,926,337	_	_	_	_	_
Wisconsin Public Service Corp	89,542	40,691	_	_	_	_	_

Table 24. Electricity Wheeling to Investor-Owned Utilities, by State, 1996 (Continued)

	Municipal	Municipal Cooperative		Other ¹		Total	l
State / Utility	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)	Wheeled Energy (thousand kWh) ²	Cost (dollars)
South Dakota							
Black Hills Corp	_	_	_	_	_	_	_
Northwestern Public Service Co	_	547	1,914	_	_	256,118	662,943
Texas							
Central Power & Light Co	140,110	_	214	_	65,103	_	6,402,507
El Paso Electric Co	_	_	_	_	_	473,600	2,607,333
Entergy Gulf States Inc	_	_	_	_	13,421,949	_	13,421,949
Houston Lighting & Power Co	29,117	33,313	99,474	221,009	31,979	2,604,241	280,578
Southwestern Electric Serv Co	101,725	_	52,840	_	_	_	2,238,872
Southwestern Public Service Co	_	4,093	_	2,162	6,061	125,808	782,965
Texas Utilities Electric Co	1,114,225	17,574	-110,141	59,279	-12,480,723	402,671	155,004
Texas-New Mexico Power Co	448,690	_	12,928	2,268,711	51,886	2,437,585	7,235,400
West Texas Utilities Co	_	_	_	_	1,662,536	_	1,662,536
Vermont							
Central Vermont Pub Serv Corp	1,576	_	6,823	_	_	2,451,852	14,506,060
Green Mountain Power Corp	85,183	_	_	593,767	4,532,035	1,787,390	9,159,371
Virginia							
Appalachian Power Co	_	6,269	18,029	_	6,925,468	521,668	8,052,380
Virginia Electric & Power Co	_	6,197	9,816	51,437	202,897	112,976	463,310
Washington							
Puget Sound Power & Light Co	37,548	_	_	784	-262,350	10,849,419	30,987,863
Washington Water Power Co		_	32,112	_	^	1,714,929	10,630,945
West Virginia							
Monongahela Power Co	_	_	_	1,968,260	2,935	3,285,548	2,935
Wisconsin							
Consolidated Water Power Co	_	_	_	_	_	3,723	9,956
Madison Gas & Electric Co	_	_	_	_	_	127,990	464,511
Wisconsin Electric Power Co	_	_	_	_	_	703,612	-285,162
Wisconsin Power & Light Co	_	_	_	264,868	326,687	2,479,934	4,253,024
Wisconsin Public Service Corp	_	_	_		_ '	89,542	40,691

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

Notes: •Wheeling (transmission services) is reported in account 456, "Transmission For Others," and in account 565, "Transmission By Others," of the FERC Uniform System of Accounts. •For identification purposes, the utilities are listed in the State in which the corporate office is located. •Totals may not equal sum of components because of independent rounding.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others." •FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees."

² Value presented is the greater of the received or delivered quantity.

⁻Not Applicable

3. Bulk Power Transactions by Federal and Other Publicly Owned Utilities

Overview

This chapter presents electricity trade data for publicly owned utilities that report on Form EIA-412, "Annual Report of Public Electric Utilities." These data are separated into three types of public ownership: Federal, State and Other Government Utilities, and Municipalities. Summary totals by calendar year (except for Federal) cannot be provided because filings by utilities were based on different fiscal years and ending months.

Individual transactions by public utilities with other utilities by class of ownership are identified for purchased power and sales for resale data. Form EIA-412 collects only aggregate information (on a sample basis) on exchanges and wheeling in the "Energy Account Balance" schedule. Summary data from Form EIA-861, "Annual Electric Utility Report," are used to provide complete coverage for the public utilities because it is collected from all electric utilities. However, Form EIA-861 does not identify individual transaction partners.

Tables

This chapter presents cost, revenue, and quantity data on purchased power and sales for resale for the following types of public utilities.

- Federal utilities (Tables 25 and 26)
- State and other government utilities (Tables 27 and 28)
- Municipalities (Tables 29 and 30)
- Electricity purchases by publicly owned utilities not listed elsewhere (Table 31).

Tables 25 through 30 provide information on the total cost and revenue associated with the total quantity of purchased power and sales for resale. Other utilities which do not report on the Form EIA-412 because of their small size are shown in Table 31. Table 32 pro-

vides information on exchanges and wheeling for public electric utilities. In 1990, Form EIA-412 was updated to collect data on the different categories of power and energy and the associated value of electric utility trade. However, the value of the categories were not subdivided into Demand, Energy, and Other for revenues and costs.

The public utilities are listed by State according to the mailing addresses of their administrative offices. The fiscal-year ending date for each public utility is also included in the tables. Federal utilities are listed by major project, office, or administrative reporting level.

Summary

Federal power authorities dominate electric trade by publicly owned utilities. However, regional differences among the Federal authorities exist because of legal authority given and restrictions placed in the Federal laws that guide their activities. Many of these differences are due to Federal flood prevention and irrigation requirements at hydroelectric projects or the limitations of corresponding transmission system operated by the power marketing authorities.

State power agencies and other public authorities purchase large amounts of electricity for resale to their wholesale customers. Some of these organizations have been set up to acquire power for special in-State or regional projects, such as water transfer for irrigation and/or public consumption. In other cases, States have established power-brokering agencies to purchase bulk power for redistribution to member municipalities and cooperatives at lower costs.

Municipalities purchase far more power than they sell for resale. Their purchases are almost always redistributed to the ultimate consumers of electricity. Those municipal utilities involved in sales for resale usually have large generating capability, frequently including hydroelectric facilities and/or jointly owned thermal generators.

Table 25. Electricity Purchases by Federal Utilities, Fiscal Year Ending September 30, 1996

			Sc	ource of Electricity	y		
State /	Investor-	Owned	Federal		State and Other Government		Municipal
Utility	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)
Colorado Western Area Power Admin	3,221,531	94,792,019	16,407	156,000	169,051	2,122,967	659,548
Georgia Southeastern Power Admin	57,984	1,039,955	_	_	_	_	_
Illinois U S Army Corps of Engineers	_	_	_	_	_	_	_
Montana USBIA-Mission Valley Power	84,764	1,316,856	232,187	6,775,290	_	_	_
Oklahoma Southwestern Power Admin	100,219	2,897,288	_	_	_	_	_
Oregon Bonneville Power Admin ¹	_	_	_	_	_	_	_
Tennessee Tennessee Valley Authority	_	_	3,112,385	23,965,968	_	_	_
U.S. Total	3,464,498	100,046,118	3,360,979	30,897,258	169,051	2,122,967	659,548

Table 25. Electricity Purchases by Federal Utilities, Fiscal Year Ending September 30, 1996 (Continued)

			So	ource of Electricity	7			
State /	Municipal	Cooper	rative	Othe	r ²	Total		
Utility	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	
Colorado Western Area Power Admin	30,249,595	1,721,607	23,317,819	300,936	17,367,042	6,089,080	168,005,442	
Georgia Southeastern Power Admin	_	52,772	871,204	80,995	1,186,249	191,751	3,097,408	
Illinois U S Army Corps of Engineers	_	_	_	_	_	_	_	
Montana USBIA-Mission Valley Power	_	_	_	1,329	34,909	318,280	8,127,055	
Oklahoma Southwestern Power Admin	_	_	_	1,802	_	102,021	2,897,288	
Oregon Bonneville Power Admin ¹	_	_	_	1,057,390		2,569,446		
Tennessee Tennessee Valley Authority	_	_	_	1,817,012	2,290,818	4,929,397	26,256,786	
U.S. Total	30,249,595	1,774,379	24,189,023	3,259,464	20,953,403	14,199,975	208,458,364	

¹ Bonneville Power Administration did not report utility purchases by class of ownership for 1996. Total purchases from utilities equaled 1,512,056 thousand kWh's.

Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

Notes: •Federal authorities use different accounting methods for reporting energy received from Federal generating assets; the energy may be reported as generation or purchases. •For identification purposes, the public utilities are listed in the State in which the administrative office is located. •Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities."

⁻Not Applicable

Table 26. Electricity Sales for Resale by Federal Utilities, Fiscal Year Ending September 30, 1996

			Pur	chaser of Electrici	ty		
State /	Investor-	Owned	Fede	eral	State and Govern	Municipal	
Utility	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)
Colorado Western Area Power Admin	5,899,312	79,287,013	_	_	12,380,804	227,833,212	10,137,656
Georgia Southeastern Power Admin	37,459	352,446	2,926,500	23,963,968	322,537	6,046,978	1,620,778
Illinois U S Army Corps of Engineers	138,458	1,751,000	_	_	_	_	_
Montana USBIA-Mission Valley Power	_	_	_	_	_	_	_
Oklahoma Southwestern Power Admin	_	_	21,485	557,483	105,707	1,791,290	1,142,761
Oregon Bonneville Power Admin	1,955,941	_	_	_	815,409	_	2,530
Tennessee Tennessee Valley Authority	_	_	_	_	_	_	82,019,358
U.S. Total	8,031,170	81,390,459	2,947,985	24,521,451	13,624,457	235,671,480	94,923,083

Table 26. Electricity Sales for Resale by Federal Utilities, Fiscal Year Ending September 30, 1996 (Continued)

			Pur	chaser of Electrici	ty			
g	Municipal	Cooper	ative	Othe	r1	Total		
State / Utility	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	
Colorado Western Area Power Admin	158,670,234	9,460,102	160,636,711	656,178	8,511,944	38,534,052	634,939,114	
Georgia Southeastern Power Admin	45,385,004	3,794,941	88,705,276	_	_	8,702,215	164,453,672	
Illinois U S Army Corps of Engineers	_	_	_	_	_	138,458	1,751,000	
Montana USBIA-Mission Valley Power	_	_	_	_	_	_	_	
Oklahoma Southwestern Power Admin	23,212,044	2,595,246	55,812,384	166,235	4,325,486	4,031,434	85,698,687	
Oregon Bonneville Power Admin	_	113,293	_	55,472,171	1,104,363,895	58,359,344	1,104,363,895	
Tennessee Tennessee Valley Authority	3,377,591,727	4,090,776	17,598,387	469,743	19,616,893	86,579,877	3,414,807,007	
U.S. Total	3,604,859,009	20,054,358	322,752,758	56,764,327	1,136,818,218	196,345,380	5,406,013,375	

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities. -Not Applicable

Notes: *For identification purposes, the public utilities are listed in the State in which the administrative office is located. *Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities."

Table 27. Electricity Purchases by State and Other Government Utilities, Fiscal Year 1996

			Source of El	ectricity		
State / Utility /	Investor-C	wned	Feder	al	Munici	pal
Fiscal Year Ending Date	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Arizona						
Arizona Power Authority/Jun 30						
Firm Power		_	792,112	18,134,664	_	_
Total Power Electrical Dist No2 Pinal Cnty/Dec 31	. —	_	792,112	18,134,664	_	_
Firm Power	_	_	_	_	_	_
Total Power		_	_	_	_	_
Navajo Tribal Utility Auth/Dec 31						
Firm Power		17,675,320	120,626	2,582,004	_	_
Total Power	. 456,245	17,675,320	120,626	2,582,004	_	_
Salt River Proj Ag I & P Dist/Apr 30 Firm Power	. 34,855	18,664,309	2,425,628	88,777,858		
Nonfirm Power		9,218,316	647,181	6,209,274	171,022	2,119,74
Total Power		27,882,625	3,072,809	94,987,132	171,022	2,119,74
Tohono O 'Odham Utility Auth/Dec 31		.,,.	-,,	,,,,,,,	. ,-	, .,.
Firm Power		4,416,699	13,000	122,201	_	_
Total Power	. 94,000	4,416,699	13,000	122,201	_	_
California California Dant Wtn Bassynson/Jun 20						
California Dept-Wtr Resources/Jun 30 Nonfirm Power	. 632,213	10,306,497	139,409	2,132,897	146,958	434,08
Total Power		10,306,497	139,409	2,132,897	146,958	434,08
Imperial Irrigation District/Dec 31	,	,,	,	_,,_,	, ,	,
Firm Power	. 536,991	44,624,111	157,059	3,941,605	2,025	1,389,15
Nonfirm Power		2,982,683	13,585	216,058	_	_
Total Power	. 732,426	47,606,794	170,644	4,157,663	2,025	1,389,15
Merced Irrigation District/Dec 31						
Nonfirm Power Total Power					_	
Modesto Irrigation District/Dec 31						
Firm Power	. 32,290	1,401,541	48,411	985,594	_	_
Nonfirm Power		1,152,324	319,614	3,113,396	646,749	18,113,63
Other Power		_	_	_	_	_
Total Power	. 68,176	2,553,865	368,025	4,098,990	646,749	18,113,63
MSR Public Power Agency/Dec 31 Firm Power			534,170	28,057,168		
Nonfirm Power		_	334,170	20,037,100	212,163	2,620,80
Total Power		_	534,170	28,057,168	212,163	2,620,80
Northern California Power Agny/Jun 30				, ,	, in the second	
Nonfirm Power		8,204,454	58,610	1,641,285	174,694	2,306,16
Total Power	. 381,267	8,204,454	58,610	1,641,285	174,694	2,306,16
Sacramento Municipal Util Dist/Dec 31	410.200	06 504 002	2.069.292	10 226 022		
Firm Power Nonfirm Power		96,594,992 9,068,830	2,068,283 1,295,294	48,336,822 17,040,388	122,398	2,024,19
Total Power		105,663,822	3,363,577	65,377,210	122,398	2,024,19
Southern California P P A/Jun 30	. ,,,,,,,,	100,000,022	3,505,577	00,077,210	122,570	2,02.,17
Nonfirm Power	. —	_	110,000	1,858,000	_	_
Total Power	. —	_	110,000	1,858,000	_	_
Colorado						
Arkansas River Power Authority/Dec 31			07.902	2.012.547		
Firm Power		37,560	97,893 13,061	2,013,547 207,152	119,193	3,786,17
Total Power	,	37,560	110,954	2,220,699	119,193	3,786,17
Platte River Power Authority/Dec 31	-,	,	,	_,,,	,	-,,
Firm Power	. —	_	730,399	13,435,695	_	_
Nonfirm Power	,	27,209	6,220	85,985	_	_
Total Power	. 1,559	27,209	736,619	13,521,680	_	_
Georgia Crisp County Power Comm/Dec 31						
Nonfirm Power	. 10,691	409,324	31.119	1.122.089	_	_
Total Power		409,324	31,119	1,122,089	_	_
Municipal Electric Authority/Dec 31	,	,	,/	,,-0>		
Firm Power		18,690,000	_	_	_	_
Total Power	. 1,097,533	18,690,000	_	_	_	_
Indiana						
Indiana Municipal Power Agency/Dec 31 Firm Power	. 2,067,473	54 465 220			557,122	23,892,56
Nonfirm Power		54,465,320 2,797,264	_	_	3,928	23,892,36
		4,171,404			2,240	32,13

Table 27. Electricity Purchases by State and Other Government Utilities, Fiscal Year 1996 (Continued)

			Source of E	lectricity		
State / Utility / Fiscal Year Ending Date	Coopera	ntive	Other	1	Tota	1
Fiscal Teal Ending Date	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Arizona		'			1	
Arizona Power Authority/Jun 30						
Firm Power		_	223,951	3,259,126	1,016,063	21,393,790
Total Power	_	_	223,951	3,259,126	1,016,063	21,393,790
Electrical Dist No2 Pinal Cnty/Dec 31 Firm Power	_	_	190,098	5,934,271	190,098	5,934,271
Total Power		_	190,098	5,934,271	190,098	5,934,271
Navajo Tribal Utility Auth/Dec 31			1,0,0,0	5,55 .,271	1,0,0,0	5,751,271
Firm Power		_	_	_	576,871	20,257,324
Total Power	_	_	_	_	576,871	20,257,324
Salt River Proj Ag I & P Dist/Apr 30	199,375	10 272 220	152 200	2.415.107	2 912 249	120 120 602
Firm Power Nonfirm Power		19,272,239 1,053,385	152,390 1,043,457	2,415,197 10,536,253	2,812,248 2,752,981	129,129,603 29,136,976
Total Power		20,325,624	1,195,847	12,951,450	5,565,229	158,266,579
Tohono O 'Odham Utility Auth/Dec 31	,	-,,-	, , .	, , , , , ,	-,,	, ,
Firm Power		_	_	_	107,000	4,538,900
Total Power	_	_	_	_	107,000	4,538,900
California California Dept-Wtr Resources/Jun 30						
Nonfirm Power	_	_	645,266	4,445,276	1,563,846	17,318,756
Total Power			645,266	4,445,276	1,563,846	17,318,756
Imperial Irrigation District/Dec 31				, -,	, ,-	.,,.
Firm Power		_	885,712	35,632,660	1,581,787	85,587,531
Nonfirm Power		_	102,174	1,189,169	311,194	4,387,910
Total Power	_	_	987,886	36,821,829	1,892,981	89,975,441
Merced Irrigation District/Dec 31 Nonfirm Power	_	_	34,889	784,645	34,889	784,645
Total Power		_	34,889	784,645	34,889	784,645
Modesto Irrigation District/Dec 31			,,,,,,	,	,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Firm Power		_	916,552	54,928,867	997,253	57,316,002
Nonfirm Power		_	187,729	13,131,082	1,189,363	35,510,438
Other Power		_	1,104,281	 68,059,949	615 2,187,231	92,826,440
MSR Public Power Agency/Dec 31	_	_	1,104,201	00,039,949	2,107,231	92,820,440
Firm Power	_	_	_	_	534,170	28,057,168
Nonfirm Power		_	265,864	3,211,388	478,027	5,832,195
Total Power	_	_	265,864	3,211,388	1,012,197	33,889,363
Northern California Power Agny/Jun 30	42	£0.5	262,000	4.020.494	979 533	16 101 069
Nonfirm Power Total Power		585 585	263,908 263,908	4,039,484 4,039,484	878,522 878,522	16,191,968 16,191,968
Sacramento Municipal Util Dist/Dec 31	73	303	203,700	4,032,404	070,322	10,171,700
Firm Power	_	_	1,137,154	19,127,734	3,615,646	164,059,548
Nonfirm Power		_	877,665	19,115,563	2,876,632	47,248,972
Total Power	_	_	2,014,819	38,243,297	6,492,278	211,308,520
Southern California P P A/Jun 30 Nonfirm Power				93,000	110,000	1,951,000
Total Power		_	_	93,000	110,000	1,951,000
Colorado				75,000	110,000	1,751,000
Arkansas River Power Authority/Dec 31						
Firm Power		_	_		97,893	2,013,547
Nonfirm Power	73,341	2,241,589	3,650	51,222	211,453	6,323,699
Total Power	73,341	2,241,589	3,650	51,222	309,346	8,337,246
Firm Power	_	_	_	_	730,399	13,435,695
Nonfirm Power		436,316	122,928	2,108,918	162,006	2,658,428
Total Power	31,299	436,316	122,928	2,108,918	892,405	16,094,123
Georgia						
Crisp County Power Comm/Dec 31 Nonfirm Power			263,980	10,351,237	305,790	11,882,650
Total Power		_	263,980	10,351,237	305,790	11,882,650
Municipal Electric Authority/Dec 31			203,700	10,551,257	303,170	11,002,000
Firm Power		_	9,037	436,000	1,106,570	19,126,000
Total Power	_	_	9,037	436,000	1,106,570	19,126,000
Indiana						
Indiana Municipal Power Agency/Dec 31 Firm Power	_	_	_	_	2,624,595	78,357,884
Nonfirm Power	169,080	2,054,920	90,578	1,491,110	461,164	6,383,093
	169,080	2,054,920	90,578	1,491,110	3,085,759	84,740,977

Table 27. Electricity Purchases by State and Other Government Utilities, Fiscal Year 1996 (Continued)

			Source of E	lectricity		
State / Utility /	Investor-C	wned	Feder	al al	Munici	oal
Fiscal Year Ending Date	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Kansas						
Kansas Municipal Energy Agency/Dec 31					• • • • • • •	
Firm Power	_	_	31,946	523,786	249,988	8,843,760
Total Power Louisiana	_	_	31,946	523,786	249,988	8,843,760
Louisiana Energy & Power Auth/Dec 31						
Firm Power	_	_	63,542	1,143,726	102,423	6,674,870
Nonfirm Power	1,826	29,076	_	_	63,587	1,418,15
Total Power	1,826	29,076	63,542	1,143,726	166,010	8,093,02
Massachusetts Mun Wholes Elec Co/Dec 31						
Firm Power	1,604	168,972	_	_	30,886	1,714,923
Nonfirm Power	107,300	2,520,076	_	_	6,077	198,949
Total Power	108,904	2,689,048	_	_	36,963	1,913,872
Michigan						
Michigan Public Power Agency/Dec 31	200 207	12.160.014			200 241	12 646 155
Firm Power	389,207 10	12,160,914 260	_	_	388,241 1,602	12,646,157 37,548
Total Power	389,217	12,161,174			389,843	12,683,705
Michigan South Central Pwr Agy/Jun 30	303,217	12,101,17			507,015	12,000,700
Firm Power	125,429	3,127,677	_	_	11,987	604,876
Nonfirm Power	97,313	1,943,424	_	_	5,721	133,326
Total Power	222,742	5,071,101	_	_	17,708	738,202
Minnesota Minnesota Municipal Power Agny						
Firm Power	_	_	_	_	101,699	6,342,846
Nonfirm Power	_	_	_	_		- 0,5 .2,6
Total Power	_	_	_	_	101,699	6,342,846
Southern Minnesota Mun P Agny/Dec 31						
Firm Power	64,342	1,036,477			223,112	8,730,962
Nonfirm Power Total Power	84,692 149,034	1,187,416 2,223,893	15,411 15,411	235,059 235,059	22,659 245,771	4,399,351 13,130,313
Nebraska	149,034	2,223,693	13,411	233,039	243,771	13,130,313
Cornhusker Public Power Dist/Dec 31						
Firm Power	_	_	_	_	_	_
Total Power	_	_	_	_	_	_
Dawson County Public Pwr Dist/Dec 31						
Firm Power Total Power	_	_	_	_	_	_
Loup River Public Power Dist/Dec 31	_	_	_	_	_	_
Firm Power	_	_	_	_	_	_
Total Power	_	_	_	_	_	_
Municipal Energy Agency of NE/Mar 31						
Firm Power		-	156,345	3,422,588	171,621	6,324,974
Nonfirm Power Total Power	62,319 62,319	862,984 862,984	156,345	3,422,588	10,920 182,541	150,345 6,475,319
Nebraska Public Power District/Dec 31	02,319	002,904	130,343	3,422,366	162,341	0,473,313
Firm Power	_	_	724,997	18,023,354	12,606	1,454,532
Nonfirm Power	235,173	3,816,785	42,726	795,180	63,614	860,359
Total Power	235,173	3,816,785	767,723	18,818,534	76,220	2,314,891
Norris Public Power District/Dec 31						
Firm Power Total Power	_	_	_	_	_	_
Omaha Public Power District/Dec 31	_	_	_	_	_	_
Firm Power	_	_	407,408	5,720,309	_	417,600
Total Power	_	_	407,408	5,720,309	_	417,600
Southern Nebraska Rural P P D/Dec 31						
Firm Power	_	_	_	_	_	_
Total Power	_	_	_	_	_	_
Colorado River Comm of Nevada/Jun 30						
Firm Power	225,206	3,520,612	1,494,152	19,055,118	_	_
Nonfirm Power					_	_
Total Power	225,206	3,520,612	1,494,152	19,055,118	_	_
Overton Power District No 5/Dec 31	120 102	2 222 112				
Firm Power	120,103 5,177	3,255,113 82,547	_	_	_	_
Nonfirm Power					_	

Table 27. Electricity Purchases by State and Other Government Utilities, Fiscal Year 1996 (Continued)

			Source of El	ectricity		
State / Utility /	Coopera	tive	Other	1	Total	
Fiscal Year Ending Date	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Kansas					<u> </u>	
Kansas Municipal Energy Agency/Dec 31						
Firm Power	11,572	713,485	_	_	293,506	10,081,031
Total Power	11,572	713,485	_	_	293,506	10,081,031
Louisiana						
Louisiana Energy & Power Auth/Dec 31 Firm Power					165,965	7,818,596
Nonfirm Power	7,910	151,120	310,525	6,309,599	383,848	7,907,946
Total Power	7,910	151,120	310,525	6,309,599	549,813	15,726,542
Massachusetts						
Mun Wholes Elec Co/Dec 31						
Firm Power		_	620,580	27,412,278	653,070	29,296,173
Nonfirm Power		_	155,659	10,982,515	269,036	13,701,540
Total Power	_	_	776,239	38,394,793	922,106	42,997,713
Michigan Public Power Agency/Dec 31						
Firm Power	_	_	_	_	777,448	24,807,071
Nonfirm Power		_	984,950	6,624,408	986,562	6,662,216
Total Power	_	_	984,950	6,624,408	1,764,010	31,469,287
Michigan South Central Pwr Agy/Jun 30						
Firm Power		_	139,434	2,703,936	276,850	6,436,489
Nonfirm Power		_	139,434	2,703,936	103,034 379,884	2,076,750 8,513,239
Minnesota	_	_	139,434	2,703,930	379,004	0,313,239
Minnesota Municipal Power Agny						
Firm Power	250,669	10,394,179	_	180,000	352,368	16,917,025
Nonfirm Power	442,276	6,180,036	_	_	442,276	6,180,036
Total Power	692,945	16,574,215	_	180,000	794,644	23,097,061
Southern Minnesota Mun P Agny/Dec 31			0.704	105012	205150	0.054.051
Firm Power Nonfirm Power		1 216 152	8,706 59,449	186,912 913,848	296,160	9,954,351 7,951,827
Total Power		1,216,153 1,216,153	68,155	1,100,760	258,621 554,781	17,906,178
Nebraska	70,410	1,210,133	00,133	1,100,700	334,701	17,500,170
Cornhusker Public Power Dist/Dec 31						
Firm Power	232,669	7,717,464	_	_	232,669	7,717,464
Total Power	232,669	7,717,464	_	_	232,669	7,717,464
Dawson County Public Pwr Dist/Dec 31	202.045	10.510.500			202.045	10.510.503
Firm Power	293,947	10,540,583	_	_	293,947	10,540,583
Total Power Loup River Public Power Dist/Dec 31	293,947	10,540,583	_	_	293,947	10,540,583
Firm Power	_	_	1,136,487	34,940,117	1,136,487	34,940,117
Total Power		_	1,136,487	34,940,117	1,136,487	34,940,117
Municipal Energy Agency of NE/Mar 31						
Firm Power		1,940,460	47,150	1,396,113	443,489	13,084,135
Nonfirm Power		1,284,986	322,634	4,603,056	495,867	6,901,371
Total Power	168,367	3,225,446	369,784	5,999,169	939,356	19,985,506
Nebraska Public Power District/Dec 31 Firm Power	_	_	11,306,704	275,515,629	12,044,307	294,993,515
Nonfirm Power	114,967	2,152,122	54,790	1,066,983	511,270	8,691,429
Total Power		2,152,122	11,361,494	276,582,612	12,555,577	303,684,944
Norris Public Power District/Dec 31						
Firm Power	_	_	479,215	14,977,844	479,215	14,977,844
Total Power	_	_	479,215	14,977,844	479,215	14,977,844
Omaha Public Power District/Dec 31		242.200	2.566	70.404	400.074	6 550 512
Firm Power Total Power	_	343,200 343,200	2,566 2,566	78,404 78,404	409,974 409,974	6,559,513 6,559,513
Southern Nebraska Rural P P D/Dec 31	_	343,200	2,300	70,404	409,974	0,339,313
Firm Power	485,203	16,840,017	_	_	485,203	16,840,017
Total Power		16,840,017	_	_	485,203	16,840,017
Nevada						
Colorado River Comm of Nevada/Jun 30						
Firm Power	_	_	105.640		1,719,358	22,575,730
Nonfirm Power		_	125,648	1,991,668	125,648	1,991,668
Overton Power District No 5/Dec 31	_	_	125,648	1,991,668	1,845,006	24,567,398
Firm Power	_	_	116,241	1,742,912	236,344	4,998,025
Nonfirm Power	_	_	18,360	265,014	23,537	347,561
	_		134,601	2,007,926	259,881	5,345,586

Table 27. Electricity Purchases by State and Other Government Utilities, Fiscal Year 1996 (Continued)

			Source of E	lectricity		
State / Utility /	Investor-C	wned	Feder	al	Munici	pal
Fiscal Year Ending Date	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
New York						
Power Authority of State of NY/Dec 31		53,000				
Firm Power Nonfirm Power		17,108,000	_	_	_	_
Total Power		17,161,000	_	_	_	_
North Carolina	,	., . ,				
New River Light & Power Co/Dec 31						
Firm Power		_	_	_	_	_
Total Power Oklahoma	. —	_	_	_	_	_
Grand River Dam Authority/Dec 31						
Nonfirm Power	. 114,923	2,655,639	_	_	875	42,43
Other Power		_	_	_	29,337	2, .3
Total Power		2,655,639	_	_	30,212	42,43
Oklahoma Municipal Power Auth/Dec 31						
Firm Power		17,156,001		-	1,662	1,851,45
Nonfirm Power		— 17.156.001	27,363	466,423	39,427	605,92
Total Power Oregon	. 751,868	17,156,001	27,363	466,423	41,089	2,457,37
Central Lincoln Peoples Utl Dt/Dec 31						
Firm Power	. —	_	1,281,200	36,372,492	_	_
Nonfirm Power		_		_	_	_
Total Power	. —	_	1,281,200	36,372,492	_	_
Clatskanie Peoples Util Dist/Dec 31						
Firm Power			853,532	22,930,649	_	_
Nonfirm Power Total Power		402,922 402,922	853,532	22,930,649	_	_
Columbia River Peoples Ut Dist/Dec 31	. 20	402,922	633,332	22,930,049	_	_
Firm Power	_	_	296,272	7.441.705	_	_
Total Power		_	296,272	7,441,705	_	_
Emerald People 's Utility Dist/Dec 31						
Firm Power			360,822	9,424,012	_	_
Nonfirm Power	,	265,072	_		_	_
Total Power	. 19,635	265,072	360,822	9,424,012	_	_
Northern Wasco County P U D/Dec 31 Firm Power			266,227	7,740,646		
Total Power		_	266,227	7,740,646	_	_
Tillamook Peoples Utility Dist/Dec 31			200,227	7,7 10,010		
Firm Power	. —	_	337,811	9,385,850	_	_
Nonfirm Power		_	_	_	60,514	1,071,88
Total Power	. —	_	337,811	9,385,850	60,514	1,071,88
South Carolina						
South Carolina Pub Serv Auth/Dec 31 Firm Power	53,542	1,369,635	267,774	4,761,899	121,547	4.342.08
Nonfirm Power		2,142,426		4,701,699 —	3,611	45,20
Other Power			_	_	_ 5,011	5,20
Total Power		3,512,061	267,774	4,761,899	125,158	4,387,29
South Dakota						
Heartland Consumers Power Dist/Dec 31						
Firm Power		_	— 25.400		_	250,25
Nonfirm Power		_	25,499	377,202 377,202	_	250.25
Total Power Missouri Basin Mun Power Agny/Dec 31	. —	_	25,499	311,202	_	250,25
Firm Power	. —	_	_	_	1,997,174	42,359,35
Nonfirm Power	. —	904,547	17,483	256,010	_	_
Total Power	. —	904,547	17,483	256,010	1,997,174	42,359,35
Texas						
Lower Colorado River Authority/Jun 30	221.015	4.061.651			125,000	0.567.05
Nonfirm Power	,	4,861,671	_	_	125,900	2,567,35
Total Power Sam Rayburn Mun Pwr Agny/Sep 30	. 231,915	4,861,671	_	_	125,900	2,567,35
Nonfirm Power	. —	_	_	_	_	_
Total Power		_	_	_	_	_
Utah						
Utah Associated Mun Power Sys/Mar 31		_				
Firm Power		7,742,309	420,695	8,695,169		
Nonfirm Power	. 91,457	977,309	61,143	783,225	1,735	28,87

Table 27. Electricity Purchases by State and Other Government Utilities, Fiscal Year 1996 (Continued)

		Source of Electricity							
State / Utility / Fiscal Year Ending Date	Coopera	itive	Other	·1	Total	l			
riscai Teai Eiluing Date	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
New York			-		<u> </u>				
Power Authority of State of NY/Dec 31									
Firm Power	_	_	3,403,395	72,750,000	3,403,395	72,803,000			
Nonfirm Power	_	_	1,545,451	28,383,000	2,514,974	45,491,000			
Total Power North Carolina	_	_	4,948,846	101,133,000	5,918,369	118,294,000			
New River Light & Power Co/Dec 31									
Firm Power	185,530	9,011,888	_	_	185,530	9,011,888			
Total Power	185,530	9,011,888	_	_	185,530	9,011,888			
Oklahoma									
Grand River Dam Authority/Dec 31 Nonfirm Power	337,749	6 149 920	282.409	5,522,728	735,956	14,369,634			
Other Power	13,293	6,148,829	14,474	<i>3,322,12</i> 6	126,832	— —			
Total Power	351,042	6,148,829	296,883	5,522,728	862,788	14,369,634			
Oklahoma Municipal Power Auth/Dec 31									
Firm Power	61,510	4,084,764	202,593	6,551,340	1,017,633	29,643,559			
Nonfirm Power			10,607	323,179	77,397	1,395,527			
Total Power Oregon	61,510	4,084,764	213,200	6,874,519	1,095,030	31,039,086			
Central Lincoln Peoples Utl Dt/Dec 31									
Firm Power	_	_	_	_	1,281,200	36,372,492			
Nonfirm Power	69	2,222	22,006	64,450	22,075	66,672			
Total Power	69	2,222	22,006	64,450	1,303,275	36,439,164			
Clatskanie Peoples Util Dist/Dec 31					052 522	22 020 646			
Firm Power Nonfirm Power	_	_	_	_	853,532 26	22,930,649 402,922			
Total Power	_	_	_	_	853,558	23,333,571			
Columbia River Peoples Ut Dist/Dec 31					033,330	23,333,371			
Firm Power	_	_	_	_	296,272	7,441,705			
Total Power	_	_	_	_	296,272	7,441,705			
Emerald People 's Utility Dist/Dec 31					260.022	0.424.010			
Firm Power Nonfirm Power	_	_	26,360	457,364	360,822 45,995	9,424,012 722,436			
Total Power			26,360	457,364	406,817	10,146,448			
Northern Wasco County P U D/Dec 31			20,500	107,001	100,017	10,110,110			
Firm Power	_	_	_	_	266,227	7,740,646			
Total Power	_	_	_	_	266,227	7,740,646			
Tillamook Peoples Utility Dist/Dec 31					227 011	0.205.050			
Firm Power Nonfirm Power			40,118	379,130	337,811 100,632	9,385,850 1,451,012			
Total Power	_	_	40,118	379,130	438,443	10,836,862			
South Carolina			.0,110	577,130	150,115	10,000,000			
South Carolina Pub Serv Auth/Dec 31									
Firm Power			101,577	2,447,485	544,440	12,921,108			
Nonfirm Power	16,325	421,234	101,430	1,472,711	226,047	4,081,575			
Other Power Total Power	16,325	421,234	20,564 223,571	3,920,196	39,467 809,954	17,002,683			
South Dakota	10,323	721,237	223,371	3,720,170	007,754	17,002,000			
Heartland Consumers Power Dist/Dec 31									
Firm Power	54,499	955,572	31,777	481,402	86,276	1,687,224			
Nonfirm Power			3,184	30,669	28,683	407,871			
Total Power Missouri Basin Mun Power Agny/Dec 31	54,499	955,572	34,961	512,071	114,959	2,095,095			
Firm Power	_	_	_	_	1,997,174	42,359,351			
Nonfirm Power	_	_	75,985	1,762,923	93,468	2,923,480			
Total Power	_	_	75,985	1,762,923	2,090,642	45,282,831			
Texas									
Lower Colorado River Authority/Jun 30	6.076	104.160	200.022	2 221 525	505 714	0.054.730			
Nonfirm Power Total Power	6,976 6,976	104,169 104,169	200,923 200,923	2,321,535 2,321,535	565,714 565,714	9,854,730 9,854,730			
Sam Rayburn Mun Pwr Agny/Sep 30	0,770	104,109	200,923	2,321,333	303,714	2,034,730			
Nonfirm Power	44,469	5,187,914	_	_	44,469	5,187,914			
Total Power	44,469	5,187,914	_	_	44,469	5,187,914			
Utah									
Utah Associated Mun Power Sys/Mar 31					724 600	16 427 476			
Firm Power Nonfirm Power	101,222	1,388,881	40,941	534,484	734,699 296,498	16,437,478 3,712,771			
			TU, / TI						

Table 27. Electricity Purchases by State and Other Government Utilities, Fiscal Year 1996 (Continued)

			Source of E	lectricity		
State / Utility /	Investor-C	wned	Feder	al	Municip	oal
Fiscal Year Ending Date	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Utah						
Utah Municipal Power Agency/Jun 30						
Firm Power		1,789,776	358,174	6,916,991	-	_
Nonfirm Power Total Power		510,366	39,576	526,840	15 15	13: 13:
Vermont	93,220	2,300,142	397,750	7,443,831	13	13.
Vermont Public Pwr Supply Auth/Dec 31						
Firm Power	59,654	1,741,826	_	_	87	24,67
Nonfirm Power		26,528	_	_	5,664	236,85
Total Power	60,720	1,768,354	_	_	5,751	261,52
Virginia Virginia Tach Electric Service (lun 20						
Virginia Tech Electric Service/Jun 30 Firm Power						
Total Power						
Washington	••					
PUD No 1 of Benton County/Dec 31						
Firm Power		_	1,461,322	45,307,526	_	_
Nonfirm Power		252,321	525	5,739	_	_
Total Power	19,920	252,321	1,461,847	45,313,265	_	_
PUD No 1 of Chelan County/Dec 31 Firm Power	123.620	1,477,202	12,485	434,932	1,074	18,60
Nonfirm Power		1,477,202	12,463	434,932		
Other Power		_	156,970	_	_	_
Total Power		1,477,202	169,455	434,932	1,074	18,60
PUD No 1 of Clallam County/Dec 31						
Firm Power		-	538,484	14,993,620	_	_
Nonfirm Power		94,229			_	_
PUD No 1 of Clark County/Dec 31	4,416	94,229	538,484	14,993,620	_	_
Firm Power	2,209,035	59,203,305	1,554,836	48,070,912	_	_
Total Power		59,203,305	1,554,836	48,070,912	_	_
PUD No 1 of Cowlitz County/Dec 31	,,	,,	, ,	-,,-		
Firm Power		_	3,023,494	71,171,934	_	_
Nonfirm Power		1,262,970			_	_
Total Power	78,917	1,262,970	3,023,494	71,171,934	_	_
PUD No 1 of Douglas County/Dec 31 Nonfirm Power	24,025	5,865	24,468	117,521	_	_
Other Power						
Total Power		5,865	24,468	117,521	_	_
PUD No 1 of Franklin County/Dec 31						
Firm Power		_	675,922	18,835,891	_	_
Other Power		_	- 675 022		_	_
PUD No 1 of Grays Harbor Cnty/Dec 31	—	_	675,922	18,835,891	_	_
Firm Power	_	_	225,760	9,097,376	_	_
Nonfirm Power		1,941,102	105,690	4,371,700	_	_
Total Power	251,980	1,941,102	331,450	13,469,076	_	_
PUD No 1 of Klickitat County/Dec 31						
Firm Power		_	304,000	8,097,039	_	_
Total Power	—	_	304,000	8,097,039	_	_
PUD No 1 of Lewis County/Dec 31			791,890	19,262,604		
Firm Power		_	791,890	19,262,604	_	
PUD No 1 of Okanogan County/Dec 31	•		771,070	17,202,004		
Firm Power	12,078	229,540	359,833	9,108,199	_	_
Nonfirm Power		_	_	_	_	_
Total Power	12,078	229,540	359,833	9,108,199	_	_
PUD No 1 of Pend Oreille Cnty/Dec 31			247 724	6 506 904		
Firm Power Nonfirm Power		— 468,394	247,724 34,946	6,596,804 248,105		894,33
Total Power		468,394	282,670	6,844,909	246,291	894,33 894,33
PUD No 1 of Snohomish County/Dec 31	50,200	700,394	202,070	0,077,709	270,271	0,7,33
Nonfirm Power		14,420,455	3,176,586	99,352,964	1,120,212	26,918,10
Total Power		14,420,455	3,176,586	99,352,964	1,120,212	26,918,10
PUD No 1 of Whatcom County/Dec 31				,		
Firm Power		_	177,465	4,624,287	_	_
Total Power	—	_	177,465	4,624,287	_	_

Table 27. Electricity Purchases by State and Other Government Utilities, Fiscal Year 1996 (Continued)

			Source of El	ectricity		
State / Utility /	Coopera	ative	Other ¹	1	Total	
Fiscal Year Ending Date	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Utah		,	'		•	
Utah Municipal Power Agency/Jun 30 Firm Power	_	_	_	_	393,310	8,706,76
Nonfirm Power	800	10,858	_	_	98,475	1,048,19
Total Power	800	10,858	_	_	491,785	9,754,96
Vermont						
Vermont Public Pwr Supply Auth/Dec 31 Firm Power			2,438	1,868,261	62,179	3,634,75
Nonfirm Power	_	_	9,377	137,740	16,107	401,119
Total Power	_	_	11,815	2,006,001	78,286	4,035,87
Virginia			,	,,.	,	,,.
Virginia Tech Electric Service/Jun 30						
Firm Power	_	_	229,514	7,774,451	229,514	7,774,45
Total Power	_	_	229,514	7,774,451	229,514	7,774,45
Washington PUD No 1 of Benton County/Dec 31					1.451.000	45 205 52
Firm Power	_	_	70.640	752 000	1,461,322	45,307,520
Nonfirm Power Total Power			78,640 78,640	752,888 752,888	99,085 1,560,407	1,010,945 46,318,474
PUD No 1 of Chelan County/Dec 31	_ _	_ _	70,040	132,000	1,500,407	70,510,47
Firm Power	_	_	493,913	5,931,819	631,092	7,862,560
Nonfirm Power	_	_	21,828	64,450	21,828	64,450
Other Power	_	_	1,267,455	_	1,424,425	_
Total Power	_	_	1,783,196	5,996,269	2,077,345	7,927,010
PUD No 1 of Clallam County/Dec 31 Firm Power					520 101	14 002 62
Nonfirm Power	_	_	17,744	254.950	538,484 22,160	14,993,620 349,179
Total Power			17,744	254,950	560,644	15,342,79
PUD No 1 of Clark County/Dec 31			17,7-1-1	254,750	300,011	13,512,77
Firm Power	_	_	107,864	2,278,020	3,871,735	109,552,23
Total Power	_	_	107,864	2,278,020	3,871,735	109,552,23
PUD No 1 of Cowlitz County/Dec 31					2.022.404	51 151 00
Firm Power	_	_	463,461	5,390,560	3,023,494 542,378	71,171,934 6,653,530
Total Power			463,461	5,390,560	3,565,872	77,825,46
PUD No 1 of Douglas County/Dec 31			103,101	3,370,300	3,363,672	77,023,10
Nonfirm Power	_	_	219,773	1,217,715	268,266	1,341,10
Other Power	_	_	4,230	_	5,495	_
Total Power	_	_	224,003	1,217,715	273,761	1,341,10
PUD No 1 of Franklin County/Dec 31					675 000	10.025.00
Firm Power Other Power	_	_	30,899	_	675,922 30,899	18,835,89
Total Power			30,899		706,821	18,835,89
PUD No 1 of Grays Harbor Cnty/Dec 31			,			,,
Firm Power	_	_	_	_	225,760	9,097,370
Nonfirm Power	_	_	123,612	1,436,326	481,282	7,749,12
Total Power	_	_	123,612	1,436,326	707,042	16,846,50
PUD No 1 of Klickitat County/Dec 31 Firm Power					304,000	8,097,039
Total Power			_		304,000	8,097,03
PUD No 1 of Lewis County/Dec 31					,	-,,
Firm Power	_	_	3,412	622,684	795,302	19,885,28
Total Power	_	_	3,412	622,684	795,302	19,885,28
PUD No 1 of Okanogan County/Dec 31					271.011	0.227.72
Firm Power Nonfirm Power	_	_	293,727	2,525,690	371,911 293,727	9,337,739 2,525,690
Total Power	_	_	293,727	2,525,690	665,638	11,863,429
PUD No 1 of Pend Oreille Cnty/Dec 31			2/3,/2/	2,323,070	005,050	11,005,42
Firm Power	_	_	_	_	247,724	6,596,80
Nonfirm Power	_	_	4,342	12,922	315,839	1,623,760
Total Power	_	_	4,342	12,922	563,563	8,220,56
PUD No 1 of Snohomish County/Dec 31			2 260 510	42 402 207	7 ((0.250	102.004.01
Nonfirm Power Total Power			2,369,519 2,369,519	42,403,385 42,403,385	7,669,359 7,669,359	183,094,912 183,094,912
PUD No 1 of Whatcom County/Dec 31		_ _	2,309,319	72,703,303	7,009,559	105,054,91.
Firm Power	_	_	_	_	177,465	4,624,28
Total Power	_	_	_	_	177,465	4,624,28

Table 27. Electricity Purchases by State and Other Government Utilities, Fiscal Year 1996 (Continued)

			Source of E	lectricity		
State / Utility /	Investor-0	Owned	Feder	al	Munic	ipal
Fiscal Year Ending Date	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Washington						
PUD No 2 of Grant County/Dec 31						
Firm Power	_	_	212,075	5,941,018	_	_
Nonfirm Power	12,040	142,040	117,625	2,152,894	759	5,635
Total Power	12,040	142,040	329,700	8,093,912	759	5,635
PUD No 2 of Pacific County/Dec 31						
Firm Power	_	_	268,798	8,378,833	_	_
Nonfirm Power	_	_	_	_	_	_
Total Power	_	_	268,798	8,378,833	_	_
PUD No 3 of Mason County/Dec 31						
Firm Power	_	_	603,375	17,628,304	_	_
Total Power	_	_	603,375	17,628,304	_	_
Vera Irrigation District #15/Dec 31						
Firm Power	_	_	194,304	5,659,447	_	_
Nonfirm Power	_	_	_	_	_	_
Total Power	_	_	194,304	5,659,447	_	_
Wyoming						
Wyoming Municipal Pwr Agcy/Dec 31						
Firm Power	_	_	56,991	1,638,628	_	_
Total Power	_	_	56,991	1,638,628	_	_

Table 27. Electricity Purchases by State and Other Government Utilities, Fiscal Year 1996 (Continued)

State / Utility / Fiscal Year Ending Date	Source of Electricity					
	Cooperative		Other ¹		Total	
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Washington						
PUD No 2 of Grant County/Dec 31						
Firm Power		_			212,075	5,941,018
Nonfirm Power	1,098	43,636	189,915	3,821,825	321,437	6,166,030
Total Power	1,098	43,636	189,915	3,821,825	533,512	12,107,048
PUD No 2 of Pacific County/Dec 31						
Firm Power	_	_	_	_	268,798	8,378,833
Nonfirm Power	_	_	13,250	201,181	13,250	201,181
Total Power	_	_	13,250	201,181	282,048	8,580,014
PUD No 3 of Mason County/Dec 31						
Firm Power	_	_	_	_	603,375	17,628,304
Total Power	_	_	_	_	603,375	17,628,304
Vera Irrigation District #15/Dec 31						
Firm Power	_	_	_	_	194,304	5,659,447
Nonfirm Power	_	_	4,022	116,150	4,022	116,150
Total Power	_	_	4,022	116,150	198,326	5,775,597
Wyoming						
Wyoming Municipal Pwr Agcy/Dec 31						
Firm Power	_	_	_	_	56,991	1,638,628
Total Power	_	_	_	_	56,991	1,638,628

¹ Includes transactions with State and other government utilities, power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

Source: Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities," except where footnoted.

Notes: •For identification purposes, the public utilities are listed in the State in which the administrative office is located. •Totals may not equal sum of components because of independent rounding.

Table 28. Electricity Sales for Resale by State and Other Government Utilities, Fiscal Year 1996

			Purchaser of	Electricity		
State / Utility /	Investor-0	Owned	Feder	al	Munici	pal
Fiscal Year Ending Date	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)
Alaska						
Alaska Energy Authority/Jun 30						
Nonfirm Power		_	_	_	216,237	8,962,066
Total Power	—	_	_	_	216,237	8,962,066
Arizona Power Authority/Jun 30						
Firm Power	—	_	45,360	577,402	26,856	547,010
Total Power	—	_	45,360	577,402	26,856	547,010
Salt River Proj Ag I & P Dist/Apr 30						
Firm Power	, ,	55,855,817	37,317	1,383,218	139,340	4,811,53
Nonfirm Power Total Power	, ,	14,882,899 70,738,716	905 38,222	18,738 1,401,956	201,693 341,033	2,576,81° 7,388,34°
California	2,077,170	70,736,710	36,222	1,401,930	341,033	7,300,34
California Dept-Wtr Resources/Jun 30						
Firm Power	135,345	9,272,308	_	_	486,389	7,085,99
Nonfirm Power	, ,	18,783,796	11,040	206,864	459,332	5,068,529
Total Power	1,400,413	28,056,104	11,040	206,864	945,721	12,154,52
Imperial Irrigation District/Dec 31 Firm Power	12 200	526 672				
Nonfirm Power	,	526,672 462,863			7,340	169,570
Total Power		989,535			7,340	169,570
Kings River Conservation Dist/Jun 30	51,175	,0,,000			7,5.0	10,0,0,
Nonfirm Power	—	_	_	_	_	_
Total Power	—	_	_	_	_	_
Merced Irrigation District/Dec 31						
Nonfirm Power		4,143,050	_	_	_	_
Total Power	489,862	4,143,050	_	_	_	_
Modesto Irrigation District/Dec 31 Firm Power	16,098	326,661				
Nonfirm Power		1,008,123	- 60	2,295	21,628	270,909
Total Power		1,334,784	60	2,295	21,628	270,90
MSR Public Power Agency/Dec 31	,-	, ,		,	,	,
Firm Power		_	_	_	790,913	48,247,57
Nonfirm Power		1,881,458	2,373	50,220	1,266	9,542
Total Power	144,612	1,881,458	2,373	50,220	792,179	48,257,111
Northern California Power Agny/Jun 30 Nonfirm Power	46,209	455,215	1,558	19,766	2,951,433	174,119,22
Total Power		455,215	1,558	19,766	2,951,433	174,119,22
Oakdale & South San Joaquin/Dec 31	0,207	.55,215	1,000	1,,,,,,,,	2,501,100	17.,117,22
Nonfirm Power	601,533	6,375,945	_	_	_	_
Total Power	601,533	6,375,945	_	_	_	_
Oroville-Wyandotte Irrig Dist/Dec 31						
Nonfirm Power		9,383,191	_	_	_	_
Total Power Placer County Water Agency/Dec 31	597,980	9,383,191	_	_	_	_
Nonfirm Power	1,449,203	8,168,637	_	_	_	_
Total Power		8,168,637	_	_	_	_
Sacramento Municipal Util Dist/Dec 31	-,,	2,222,22				
Nonfirm Power	88,393	1,058,161	1,405	17,537	32,245	410,01
Total Power	88,393	1,058,161	1,405	17,537	32,245	410,01
Southern California P P A/Jun 30					1 720 072	151 266 000
Nonfirm Power Total Power		_	_	_	1,730,853 1,730,853	151,266,000 151,266,000
Yuba County Water Agency/Jun 30	—	_	_	_	1,730,633	131,200,000
Nonfirm Power	2,077,215	12,760,520	_	_	_	_
Total Power		12,760,520	_	_	_	_
Colorado						
Arkansas River Power Authority/Dec 31						
Firm Power		_	_	_	104,911	3,690,923
Nonfirm Power Total Power		_	_	_	181,298	6,083,860
Platte River Power Authority/Dec 31	—	_	_	_	286,209	9,774,789
Firm Power	875,681	49,938,528	_	_	2,132,722	73,998,80
Nonfirm Power		6,248,265	1,445	21,010	30	49.
Total Power		56,186,793	1,445	21,010	2,132,752	73,999,29

Table 28. Electricity Sales for Resale by State and Other Government Utilities, Fiscal Year 1996 (Continued)

			Purchaser of	f Electricity		
State / Utility /	Coopera	ntive	Othe	er1	Tota	1
Fiscal Year Ending Date	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)
Alaska						
Alaska Energy Authority/Jun 30	112 575	17 124 942			650.912	26,086,908
Nonfirm Power		17,124,842 17,124,842	_	_	659,812 659,812	26,086,908
Arizona	413,373	17,121,012			037,012	20,000,700
Arizona Power Authority/Jun 30						
Firm Power		_	1,109,296	21,472,440	1,181,512	22,596,852
Total PowerSalt River Proj Ag I & P Dist/Apr 30	—	_	1,109,296	21,472,440	1,181,512	22,596,852
Firm Power	—	_	367,216	7,946,898	2,150,500	69,997,464
Nonfirm Power		365,000	755,295	10,186,970	2,052,021	28,030,424
Total Power	23,579	365,000	1,122,511	18,133,868	4,202,521	98,027,888
California						
California Dept-Wtr Resources/Jun 30 Firm Power			1,249,609	20,182,964	1,871,343	36,541,270
Nonfirm Power			706,475	7,123,312	2,441,915	31,182,501
Total Power		_	1,956,084	27,306,276	4,313,258	67,723,771
Imperial Irrigation District/Dec 31						
Firm Power		_			12,380	526,672
Nonfirm Power		_	34,249	671,354	60,679	1,303,793
Total Power Kings River Conservation Dist/Jun 30	—	_	34,249	671,354	73,059	1,830,465
Nonfirm Power	—	_	784,873	15,020,987	784,873	15,020,987
Total Power		_	784,873	15,020,987	784,873	15,020,987
Merced Irrigation District/Dec 31						
Nonfirm Power		_	_	_	489,862	4,143,050
Total Power	—	_	_	_	489,862	4,143,050
Modesto Irrigation District/Dec 31 Firm Power	_	_	_	_	16,098	326,661
Nonfirm Power		_	385,395	5,252,856	461,999	6,534,183
Total Power		_	385,395	5,252,856	478,097	6,860,844
MSR Public Power Agency/Dec 31						
Firm Power		- 7.040	806,046	48,692,375	1,596,959	96,939,946
Nonfirm Power		7,840 7,840	329,084 1,135,130	3,883,470 52,575,845	478,055 2,075,014	5,832,530 102,772,476
Northern California Power Agny/Jun 30	720	7,040	1,133,130	32,373,643	2,073,014	102,772,470
Nonfirm Power	41,998	1,849,000	72,283	1,128,856	3,113,481	177,572,061
Total Power	41,998	1,849,000	72,283	1,128,856	3,113,481	177,572,061
Oakdale & South San Joaquin/Dec 31					501 500	5 25 5 0 4 5
Nonfirm Power Total Power		_	_	_	601,533 601,533	6,375,945 6,375,945
Oroville-Wyandotte Irrig Dist/Dec 31	—	_	_	_	001,333	0,373,943
Nonfirm Power	—	_	_	_	597,980	9,383,191
Total Power	—	_	_	_	597,980	9,383,191
Placer County Water Agency/Dec 31					1 440 202	0.150.505
Nonfirm Power Total Power		_	_	_	1,449,203 1,449,203	8,168,637 8,168,637
Sacramento Municipal Util Dist/Dec 31	—	_	_	_	1,449,203	0,100,037
Nonfirm Power	—	_	5,403	39,609	127,446	1,525,318
Total Power		_	5,403	39,609	127,446	1,525,318
Southern California P P A/Jun 30						
Nonfirm Power		_	307,949	34,316,000	2,038,802	185,582,000
Total Power Yuba County Water Agency/Jun 30	—	_	307,949	34,316,000	2,038,802	185,582,000
Nonfirm Power	—	_	_	_	2,077,215	12,760,520
Total Power		_	_	_	2,077,215	12,760,520
Colorado						
Arkansas River Power Authority/Dec 31					10101:	2 -00 -
Firm Power Nonfirm Power		_	_	_	104,911 181,298	3,690,923 6,083,866
Total Power		_	_	_	286,209	9,774,789
Platte River Power Authority/Dec 31					200,207	>,,,,,
Firm Power		_	_	_	3,008,403	123,937,329
Nonfirm Power		2,127,150	276,154	3,632,663	906,131	12,029,583
Total Power	199,101	2,127,150	276,154	3,632,663	3,914,534	135,966,912

Table 28. Electricity Sales for Resale by State and Other Government Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility /	Investor-C	Owned	Fede	ral	Munici	pal			
Fiscal Year Ending Date	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)			
Georgia									
Municipal Electric Authority/Dec 31									
Firm Power		89,459,000	_	7,635,000					
Nonfirm Power Total Power		3,818,000 93,277,000	_	7,635,000	249,407 249,407	5,217,000 5,217,000			
Indiana	1,000,004	93,277,000	_	7,033,000	249,407	3,217,000			
Indiana Municipal Power Agency/Dec 31 Firm Power					4,504,310	167,809,545			
Nonfirm Power		3,581,709	_	_	-	—			
Total Power	-,	3,581,709	_	_	4,504,310	167,809,545			
Kansas									
Kansas Municipal Energy Agency/Dec 31									
Firm Power		523,786	_	_	165,723	6,382,675			
Total Power	31,946	523,786	_	_	165,723	6,382,675			
Lafayette Public Power Auth/Oct 31									
Nonfirm Power	_	_	_	_	1,359,281	42,578,369			
Total Power		_	_	_	1,359,281	42,578,369			
Louisiana Energy & Power Auth/Dec 31					1,555,201	.2,5 , 0,5 0			
Firm Power	_	_	_	_	1,235,982	50,774,953			
Nonfirm Power		845	_	_	82,679	1,986,233			
Total Power	25	845	_	_	1,318,661	52,761,186			
Massachusetts									
Mun Wholes Elec Co/Dec 31	24 642	2 250 974			2 540 050	221 570 200			
Firm Power Total Power		2,359,874 2,359,874	_	_	2,549,950 2,549,950	231,570,209 231,570,209			
Michigan	34,043	2,337,674			2,547,750	231,370,207			
Michigan Public Power Agency/Dec 31 Firm Power	64,848	1,347,523	_	_	2,558,123	89,301,743			
Nonfirm Power		393,211	_	_					
Total Power		1,740,734	_	_	2,558,123	89,301,743			
Michigan South Central Pwr Agy/Jun 30									
Firm Power		_	_	_	483,476	25,985,888			
Total Power	_	_	_	_	483,476	25,985,888			
Minnesota									
Minnesota Municipal Power Agny Firm Power					756,407	27,043,711			
Nonfirm Power									
Total Power		_	_	_	756,407	27,043,711			
Northern Municipal Power Agny/Dec 31									
Firm Power	_	_	_	_	446,082	13,132,916			
Nonfirm Power		_	_	_	-	_			
Total Power	_	_	_	_	446,082	13,132,916			
Southern Minnesota Mun P Agny/Dec 31 Firm Power	9,315	159,028			2,220,239	112,208,918			
Nonfirm Power	. ,	1,079,400	3,656	46,608	2,279	28,580			
Total Power		1,238,428	3,656	46,608	2,222,518	112,237,498			
Nebraska									
Central Nebraska Pub P&I Dist/Dec 31									
Nonfirm Power		_	_	_	_	_			
Total Power	_	_	_	_	_	_			
Cornhusker Public Power Dist/Dec 31 Nonfirm Power					3,598	48,321			
Total Power					3,598	48,321			
Dawson County Public Pwr Dist/Dec 31					-,	,			
Firm Power	_	_	_	_	6,163	244,959			
Total Power	_	_	_	_	6,163	244,959			
Loup River Public Power Dist/Dec 31					A				
Firm Power		_	_	_	93,709	3,224,362			
Nonfirm Power Total Power		_	_	_	93,709	3,224,362			
Municipal Energy Agency of NE/Mar 31	_	_	_	_	73,109	3,224,302			
Firm Power	_	_	101,361	2,347,413	845,630	26,653,262			
Nonfirm Power		_	_	_	121,213	2,135,599			
Total Power		_	101,361	2,347,413	966,843	28,788,861			

Table 28. Electricity Sales for Resale by State and Other Government Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility /	Coopera	ntive	Othe	er1	Tota	1			
Fiscal Year Ending Date	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)			
Georgia	·								
Municipal Electric Authority/Dec 31									
Firm Power			8,162,088	384,020,000	9,677,183	481,114,000			
Nonfirm Power Total Power	12,887 12,887	251,000 251,000	154,526 8,316,614	6,939,000	587,729	16,225,000			
Indiana	12,007	231,000	8,310,014	390,959,000	10,264,912	497,339,000			
Indiana Municipal Power Agency/Dec 31									
Firm Power	_	_	_	_	4,504,310	167,809,545			
Nonfirm Power	_	_	_	_	220,496	3,581,709			
Total Power	_	_	_	_	4,724,806	171,391,254			
Kansas									
Kansas Municipal Energy Agency/Dec 31 Firm Power			95.837	3,174,570	293,506	10,081,031			
Total Power	_	_	95,837	3,174,570	293,506	10,081,03			
Louisiana			75,657	3,174,370	275,500	10,001,03			
Lafayette Public Power Auth/Oct 31									
Nonfirm Power	_	_	_	_	1,359,281	42,578,369			
Total Power	_	_	_	_	1,359,281	42,578,369			
Louisiana Energy & Power Auth/Dec 31									
Firm Power	_	_	30,802	1,354,753	1,266,784	52,129,706			
Nonfirm Power	_	_	317	9,569	83,021	1,996,647			
Massachusetts	_	_	31,119	1,364,322	1,349,805	54,126,353			
Mun Wholes Elec Co/Dec 31									
Firm Power	_	_	_	40,000	2,584,593	233,970,083			
Total Power	_	_	_	40,000	2,584,593	233,970,083			
Michigan									
Michigan Public Power Agency/Dec 31									
Firm Power	541,602	13,646,894	— . <u> </u>		3,164,573	104,296,160			
Nonfirm Power	- 541.602		17,419	177,366	39,298	570,577			
Total Power	541,602	13,646,894	17,419	177,366	3,203,871	104,866,737			
Firm Power	_	_	_	_	483,476	25,985,888			
Total Power	_	_	_	_	483,476	25,985,888			
Minnesota						-,,			
Minnesota Municipal Power Agny									
Firm Power	—		_	_	756,407	27,043,711			
Nonfirm Power	14,195	344,957	_	_	14,195	344,957			
Total Power	14,195	344,957	_	_	770,602	27,388,668			
Northern Municipal Power Agny/Dec 31 Firm Power	_	_	_	_	446,082	13,132,916			
Nonfirm Power	363,600	25,652,295			363,600	25,652,295			
Total Power	363,600	25,652,295	_	_	809,682	38,785,211			
Southern Minnesota Mun P Agny/Dec 31	,	.,,			,	,,			
Firm Power	_	_	240	32,879	2,229,794	112,400,825			
Nonfirm Power	123,008	1,734,511	73,761	1,102,967	278,424	3,992,066			
Total Power	123,008	1,734,511	74,001	1,135,846	2,508,218	116,392,891			
Nebraska Central Nebraska Pub P&I Dist/Dec 31									
Nonfirm Power	_	_	440,025	11,604,205	440,025	11,604,205			
Total Power		_	440,025	11,604,205	440,025	11,604,205			
Cornhusker Public Power Dist/Dec 31			110,023	11,001,203	110,023	11,001,200			
Nonfirm Power	_	_	_	_	3,598	48,321			
Total Power	_	_	_	_	3,598	48,321			
Dawson County Public Pwr Dist/Dec 31						****			
Firm Power	_	_	_	_	6,163	244,959			
Total Power	_	_	_	_	6,163	244,959			
Loup River Public Power Dist/Dec 31 Firm Power	232,669	7,695,358	_	_	326,378	10,919,720			
Nonfirm Power			136,906	4.371.960	136,906	4,371,960			
Total Power	232,669	7,695,358	136,906	4,371,960	463,284	15,291,680			
Municipal Energy Agency of NE/Mar 31	,/	.,,	,- 00	.,,. 00	,	,-,-,-,oo			
Firm Power	_	_	_	_	946,991	29,000,675			
Nonfirm Power	_	_	5,830	120,883	127,043	2,256,482			
Total Power	_	_	5,830	120,883	1,074,034	31,257,157			

Table 28. Electricity Sales for Resale by State and Other Government Utilities, Fiscal Year 1996 (Continued)

State / Utility / Fiscal Year Ending Date Nebraska Nebraska Public Power District/Dec 31 Firm Power Nonfirm Power Total Power District/Dec 31 Firm Power Nonfirm Power Nonfirm Power Nonfirm Power Total Power Omaha Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Nonfirm Power Total Power Noter District/Dec 31 Firm Power Noter District/Dec 31 Firm Power Total Power Overton Power District No 5/Dec 31 Firm Power Total Power Total Power Total Power Total Power Total Power	3,169,695 5,757 5,757 548,940 548,940	92,409,900 92,409,900 92,409,900 1,792,927 1,792,927 7,927,385 7,927,385	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh) 1,484,686 113,449 1,598,135 14,103 1,840 15,943 43,290 - 43,290 - 38,111 38,111	Paal Revenue (dollars) 53,803,22: 1,762,55i 55,565,77: 536,01 37,74' 573,75: 2,281,13: - 2,281,13:
Nebraska Nebraska Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Nonfirm Power Total Power Nonfirm Power Nonfirm Power Total Power Nonfirm Power Total Power Total Power Omaha Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Overton Power Total Power	Resale (thousand kWh) 3,169,695 3,169,695 5,757 548,940 548,940	92,409,900 92,409,900 	Resale		Resale (thousand kWh) 1,484,686 113,449 1,598,135 14,103 1,840 15,943 43,290 - 43,290 38,111	53,803,22 1,762,55 55,565,77 536,01 37,74 573,75 2,281,13
Nebraska Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Norris Public Power District/Dec 31 Firm Power Total Power Omaha Public Power District/Dec 31 Firm Power Total Power Nonfirm Power Total Power Nonfirm Power Total Power Total Power Total Power Total Power Overton Power Total Power	3,169,695 5,757 5,757 548,940 548,940	92,409,900 — — — 1,792,927 — 1,792,927 7,927,385			113,449 1,598,135 14,103 1,840 15,943 - 43,290 - 43,290 38,111	1,762,55 55,565,77 536,01 37,74 573,75 2,281,13
Firm Power Nonfirm Power Total Power Norris Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Omaha Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Total Power Total Power Total Power Total Power Oolorado River Comm of Nevada/Jun 30 Firm Power Total Power	3,169,695 5,757 5,757 548,940 548,940	92,409,900 — — — 1,792,927 — 1,792,927 7,927,385			113,449 1,598,135 14,103 1,840 15,943 - 43,290 - 43,290 38,111	1,762,55 55,565,77 536,01 37,74 573,75 2,281,13
Nonfirm Power Total Power Norris Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Omaha Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Total Power Total Power Total Power Nevada Colorado River Comm of Nevada/Jun 30 Firm Power Total Power	3,169,695 5,757 5,757 548,940 548,940	92,409,900 — — — 1,792,927 — 1,792,927 7,927,385			113,449 1,598,135 14,103 1,840 15,943 - 43,290 - 43,290 38,111	1,762,55 55,565,77 536,01 37,74 573,75 2,281,13
Total Power Norris Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Omaha Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Total Power Total Power Nevada Colorado River Comm of Nevada/Jun 30 Firm Power Total Power	3,169,695 5,757 5,757 548,940 548,940	1,792,927 1,792,927 7,927,385			1,598,135 14,103 1,840 15,943 — 43,290 — 43,290 38,111	55,565,77 536,01 37,74 573,75 2,281,13 2,281,13
Norris Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Omaha Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Olorado River Comm of Nevada/Jun 30 Firm Power Total Power	5,757 5,757 548,940 548,940	1,792,927 1,792,927 7,927,385			14,103 1,840 15,943 - 43,290 - 43,290	536,01 37,74 573,75 2,281,13
Firm Power Nonfirm Power Total Power Omaha Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Total Power Nevada Colorado River Comm of Nevada/Jun 30 Firm Power Total Power	5,757 5,757 548,940 548,940	1,792,927 7,927,385	= = = = = = = = = = = = = = = = = = = =	= = = = = = = = = = = = = = = = = = = =	1,840 15,943 — 43,290 — 43,290 38,111	37,74 573,75 2,281,13 — 2,281,13
Total Power Omaha Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Nevada Colorado River Comm of Nevada/Jun 30 Firm Power Total Power Overton Power District No 5/Dec 31 Firm Power Total Power Total Power	5,757 5,757 548,940 548,940 —	1,792,927 7,927,385	= = = = = = = = = = = = = = = = = = = =	= = = = = = = = = = = = = = = = = = = =	$ \begin{array}{r} 15,943 \\ -43,290 \\ -43,290 \end{array} $ 38,111	573,75 2,281,13 — 2,281,13
Omaha Public Power District/Dec 31 Firm Power Nonfirm Power Total Power Nevada Colorado River Comm of Nevada/Jun 30 Firm Power Total Power Overton Power District No 5/Dec 31 Firm Power Total Power Total Power	5,757 5,757 548,940 548,940 —	1,792,927 7,927,385	= = =	= = =	$-\frac{43,290}{43,290}$ $38,111$	2,281,13 — 2,281,13
Firm Power Nonfirm Power Total Power Total Power Colorado River Comm of Nevada/Jun 30 Firm Power Total Power Overton Power District No 5/Dec 31 Firm Power Total Power Total Power	5,757 548,940 548,940 —	1,792,927 7,927,385	=======================================	= =	43,290	2,281,13
Nonfirm Power	5,757 548,940 548,940 —	1,792,927 7,927,385	=	=	43,290	2,281,13
Total Power	5,757 548,940 548,940 —	7,927,385	=	= =	38,111	
Nevada Colorado River Comm of Nevada/Jun 30 Firm Power Total Power Overton Power District No 5/Dec 31 Firm Power Total Power	548,940 548,940 —	7,927,385	=	Ξ	38,111	
Colorado River Comm of Nevada/Jun 30 Firm Power Total Power Overton Power District No 5/Dec 31 Firm Power Total Power	548,940 — —	, ,	=			697 36
Total Power	548,940 — —	, ,	_	_		697 36
Overton Power District No 5/Dec 31 Firm Power Total Power	=	7,927,385 — —	_	_	20 111	
Firm Power	_	=			36,111	697,36
Total Power	_	_				
		_	_	_	_	_
	16.008.575		_	_	_	_
Power Authority of State of NY/Dec 31	16.008.575					
Firm Power		359,836,000	_	_	5,225,760	91.134.00
Nonfirm Power		53,561,000	_	_	325,325	2,450,00
Total Power		413,397,000	_	_	5,551,085	93,584,00
Oklahoma						
Grand River Dam Authority/Dec 31						
Firm Power		-	_	_	2,370,646	74,206,95
Nonfirm Power	,	988,475	_	_	87,340	1,893,18
Total Power Oklahoma Municipal Power Auth/Dec 31	51,125	988,475	_	_	2,457,986	76,100,13
Firm Power	_	_	_	_	1,763,199	76,360,09
Nonfirm Power		_	_	_		
Total Power		_	_	_	1,763,199	76,360,09
Oregon						
Northern Wasco County P U D/Dec 31						
Nonfirm Power		_	_	_	_	_
Total Power	_	_	_	_	_	_
South Carolina South Carolina Pub Serv Auth/Dec 31						
Firm Power	_	_	4,376	791,531	375,697	21,720,23
Nonfirm Power		2,948,556	_	_	4,521	112,42
Other Power	,		_	_	_	_ ′
Total Power	127,025	2,948,556	4,376	791,531	380,218	21,832,65
South Dakota						
Heartland Consumers Power Dist/Dec 31					221 402	10.762.42
Firm Power		125 696	125 299	1,547,504	331,482	10,763,42
Nonfirm Power Total Power		125,686 125,686	135,388 135,388	1,547,504	331,482	10,763,42
Missouri Basin Mun Power Agny/Dec 31	0,403	123,000	155,500	1,547,504	331,402	10,703,42
Firm Power	_	_	_	_	1,232,620	50,278,28
Nonfirm Power	352,567	4,581,058	422	6,330	23,176	305,19
Total Power	352,567	4,581,058	422	6,330	1,255,796	50,583,48
Texas						
Lower Colorado River Authority/Jun 30					2 410 527	1.40.220.22
Firm Power		_	_	_	3,419,527 3,419,527	142,329,23
Total Power	_	_	_	_	3,417,341	142,329,23
Firm Power	_	_	_	_	348,792	26,528,49
Nonfirm Power		_	_	_	_	
Total Power		_	_	_	348,792	26,528,49
Toledo Bend Project Joint Oper/Aug 31						
Nonfirm Power		320,552	_	_	_	_
Total Power	15,858	320,552	_	_	_	_
Jtah Utah Associated Mun Power Sys/Mar 21						
Utah Associated Mun Power Sys/Mar 31 Nonfirm Power	44,668	1,251,006	_	_	1,499,087	51,037,35

Table 28. Electricity Sales for Resale by State and Other Government Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility /	Coopera	ative	Othe	r1	Tota	1			
Fiscal Year Ending Date	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)			
Nebraska									
Nebraska Public Power District/Dec 31									
Firm Power	_	_	_	_	4,654,381	146,213,122			
Nonfirm Power		_	_	_	113,449 4,767,830	1,762,550 147,975,672			
Norris Public Power District/Dec 31	_	_	_	_	4,707,630	147,973,072			
Firm Power	_	_	_	_	14,103	536,01			
Nonfirm Power		_	_	_	1,840	37,74			
Total Power	_	_	_	_	15,943	573,758			
Omaha Public Power District/Dec 31			16014	500 125	c# 0 c1	4.050.404			
Firm Power Nonfirm Power	_	_	16,214 108,334	798,437 1,603,108	65,261 108,334	4,872,499 1,603,108			
Total Power		_	124,548	2,401,545	173,595	6,475,60			
Nevada			124,540	2,401,343	175,575	0,475,007			
Colorado River Comm of Nevada/Jun 30									
Firm Power	138,890	2,200,457	198,481	2,502,215	924,422	13,327,425			
Total Power	138,890	2,200,457	198,481	2,502,215	924,422	13,327,425			
Overton Power District No 5/Dec 31	10.751	454.500			10.564	15150			
Firm Power Total Power	12,764 12,764	454,790 454,790	_	_	12,764 12,764	454,790 454,790			
New York	12,704	434,790	_	_	12,704	434,790			
Power Authority of State of NY/Dec 31									
Firm Power	563,581	8,162,000	786,287	14,861,000	22,584,203	473,993,000			
Nonfirm Power	73,409	365,000	1,719,359	42,968,000	4,970,976	99,344,000			
Total Power	636,990	8,527,000	2,505,646	57,829,000	27,555,179	573,337,000			
Oklahoma									
Grand River Dam Authority/Dec 31 Firm Power	1,736,648	65,289,782	8,365	212,665	4,115,659	139,709,398			
Nonfirm Power	91,570	2,257,195	265,115	6,879,291	4,113,039	12,018,142			
Total Power		67,546,977	273,480	7,091,956	4,610,809	151,727,540			
Oklahoma Municipal Power Auth/Dec 31	1,020,210	07,010,577	275,100	7,071,700	1,010,000	101,727,010			
Firm Power	_	_	_	_	1,763,199	76,360,095			
Nonfirm Power	_	_	79,419	1,587,930	79,419	1,587,930			
Total Power	_	_	79,419	1,587,930	1,842,618	77,948,025			
Oregon Northern Wasco County P U D/Dec 31									
Nonfirm Power	_	_	41.431	1.924.744	41,431	1.924.744			
Total Power	_	_	41,431	1,924,744	41,431	1,924,744			
South Carolina			,	, ,	,				
South Carolina Pub Serv Auth/Dec 31									
Firm Power	8,122,932	314,404,298	213,150	5,400,402	8,716,155	342,316,469			
Nonfirm Power	,	3,275,274	318,049	7,199,490	617,373	13,535,740			
Other Power		317,679,572	2,370 533,569	12,599,892	2,370 9,335,898	355,852,209			
South Dakota	0,270,710	317,077,372	333,307	12,377,672	7,333,070	333,032,20			
Heartland Consumers Power Dist/Dec 31									
Firm Power	_	_	_	_	331,482	10,763,428			
Nonfirm Power		2,475	9,382	123,278	153,463	1,798,943			
Total Power	210	2,475	9,382	123,278	484,945	12,562,371			
Missouri Basin Mun Power Agny/Dec 31					1,232,620	50 279 295			
Firm Power Nonfirm Power	269,989	3,747,469	108,716	2,878,378	754,870	50,278,287 11,518,429			
Total Power	269,989	3,747,469	108,716	2,878,378	1,987,490	61,796,716			
Texas	20,,,0,	2,7 , ,	100,710	2,070,070	1,507,150	01,770,710			
Lower Colorado River Authority/Jun 30									
Firm Power	_	_	_	_	3,419,527	142,329,238			
Total Power	_	_	_	_	3,419,527	142,329,238			
Sam Rayburn Mun Pwr Agny/Sep 30 Firm Power					348,792	26,528,499			
Nonfirm Power	_	_	204,238	4,821,673	204,238	4,821,673			
Total Power		_	204,238	4,821,673	553,030	31,350,172			
Toledo Bend Project Joint Oper/Aug 31			20.,230	.,021,073	222,020	- 1,000,172			
Nonfirm Power	_	_	15,859	320,553	31,717	641,105			
Total Power	_	_	15,859	320,553	31,717	641,105			
Utah									
Utah Associated Mun Power Sys/Mar 31			20.501	(12.011	1 564 246	50.001.57			
Nonfirm Power	_	_	20,591	613,211	1,564,346	52,901,574			

Table 28. Electricity Sales for Resale by State and Other Government Utilities, Fiscal Year 1996 (Continued)

		Purchaser of Electricity							
State / Utility /	Investor-Owned		Fe	deral	Municipal				
Fiscal Year Ending Date	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)			
Utah									
Utah Associated Mun Power Sys/Mar 31									
Other Power	. —	_	_	_	_	_			
Total Power	. 44,668	1,251,006	_	_	1,499,087	51,037,35			
Utah Municipal Power Agency/Jun 30									
Firm Power		_	_	_	791,109	31,881,02			
Nonfirm Power	, , , , , , , , , , , , , , , , , , , ,	157,956	33	- ,	31,412	375,64			
Total Power	. 11,757	157,956	33	3 4,662	822,521	32,256,66			
Vermont									
Vermont Public Pwr Supply Auth/Dec 31					400				
Firm Power		_	_	_	100,649	6,646,32			
Nonfirm Power		_	_	_					
Total Power	. —	_	_	_	100,649	6,646,32			
Washington									
PUD No 1 of Benton County/Dec 31									
Nonfirm Power		208,140	_	_	_	_			
Total Power	. 12,160	208,140	_	_	_	_			
PUD No 1 of Chelan County/Dec 31			_						
Firm Power		3,409,651	30	0 720	_	_			
Nonfirm Power		80,275,331	_		60,750	802,14			
Total Power	. 8,448,269	83,684,982	3	0 720	60,750	802,14			
PUD No 1 of Cowlitz County/Dec 31									
Nonfirm Power	,	590,174	_	_	_	_			
Total Power	. 9,327	590,174	_	_	_	_			
PUD No 1 of Douglas County/Dec 31									
Nonfirm Power		26,372,592	_	_	22,929	327,12			
Total Power	. 4,081,590	26,372,592	_	_	22,929	327,12			
PUD No 1 of Grays Harbor Cnty/Dec 31	11.064	140.053							
Nonfirm Power	,	148,073	_	_	_	_			
Total Power	. 11,964	148,073	_	_	_	_			
PUD No 1 of Pend Oreille Cnty/Dec 31	2 205	45.010			107.400	02512			
Nonfirm Power		47,819	_	_	107,499	826,13			
Total Power	. 3,285	47,819	_	_	107,499	826,13			
PUD No 1 of Snohomish County/Dec 31	612.002	0.244.705			7.C.C.10	000.60			
Nonfirm Power		9,344,705	_	_	56,648	889,60			
Total Power	. 612,992	9,344,705	_	_	56,648	889,60			
PUD No 2 of Grant County/Dec 31	7 (41 700	21 206 607	2.52	20.205	1 205 226	6,000,04			
Nonfirm Power		31,396,687	2,52		1,305,236	6,080,94			
Total Power	. 5,641,799	31,396,687	2,52	5 28,205	1,305,236	6,080,94			
PUD No 3 of Mason County/Dec 31									
Nonfirm Power		_	_	_	_	_			
Total Power	. –	_	_	_	_	_			
Washington Pub Pwr Supply Sys/Jun 30									
Firm Power		_		4 381,636,001	_	_			
Nonfirm Power		_	, ,	, ,	_	_			
Other Power		_	1,831,10		_	_			
Total Power	. –	_	7,775,50	7 381,636,001	_	_			
Wyoming Mynicinal Pyr Accy/Dec 21									
Wyoming Municipal Pwr Agcy/Dec 31					105.000	£ 01 € 51			
Firm Power		_	_	_	195,269	5,816,51			
Nonfirm Power		_	_	_	105.260				
Total Power	. –	_	_	_	195,269	5,816,51			

Table 28. Electricity Sales for Resale by State and Other Government Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility /	Coopera	tive	Other	1	Tota	I			
Fiscal Year Ending Date	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)	Sales for Resale (thousand kWh)	Revenue (dollars)			
Utah									
Utah Associated Mun Power Sys/Mar 31									
Other Power	_	_	74,879	_	74,879	_			
Total Power	_	_	95,470	613,211	1,639,225	52,901,574			
Utah Municipal Power Agency/Jun 30									
Firm Power	_	_	_	_	791,109	31,881,020			
Nonfirm Power	34	459	732	16,099	44,268	554,824			
Total Power	34	459	732	16,099	835,377	32,435,844			
Vermont									
Vermont Public Pwr Supply Auth/Dec 31									
Firm Power	2,548	447,100	_	1,784,988	103,197	8,878,410			
Nonfirm Power	_	_	415	10,171	415	10,171			
Total Power	2,548	447,100	415	1,795,159	103,612	8,888,581			
Washington	,	,		, ,	,	, ,			
PUD No 1 of Benton County/Dec 31									
Nonfirm Power	_	_	50	1,350	12,210	209,490			
Total Power	_	_	50	1,350	12,210	209,490			
PUD No 1 of Chelan County/Dec 31				-,	,	,			
Firm Power	_	_	918,798	9,998,876	1,326,160	13,409,247			
Nonfirm Power	_	_	1,850,686	17,164,895	9,952,373	98,242,366			
Total Power	_	_	2,769,484	27,163,771	11,278,533	111,651,613			
PUD No 1 of Cowlitz County/Dec 31			2,700,101	27,103,771	11,270,333	111,051,015			
Nonfirm Power	_	_	1,912	63,902	11,239	654.076			
Total Power	_	_	1,912	63,902	11,239	654,076			
PUD No 1 of Douglas County/Dec 31			1,712	03,702	11,237	054,070			
Nonfirm Power	_	_	412,961	2,105,974	4,517,480	28,805,694			
Total Power			412,961	2,105,974	4,517,480	28,805,694			
PUD No 1 of Grays Harbor Cnty/Dec 31			412,901	2,103,974	4,317,400	28,803,094			
Nonfirm Power			32	2,430	11,996	150,503			
Total Power	_	_	32		,				
PUD No 1 of Pend Oreille Cnty/Dec 31	_	_	32	2,430	11,996	150,503			
•					110 704	972.059			
Nonfirm Power	_	_	_	_	110,784	873,958			
Total Power	_	_	_	_	110,784	873,958			
PUD No 1 of Snohomish County/Dec 31	22.4	2.252	620.702	0.004.762	1 200 566	10 221 410			
Nonfirm Power	224	2,352	620,702	8,984,762	1,290,566	19,221,419			
Total Power	224	2,352	620,702	8,984,762	1,290,566	19,221,419			
PUD No 2 of Grant County/Dec 31			1 500 500	0.246.150	0.402.050	46.550.014			
Nonfirm Power	_	_	1,532,508	9,246,178	8,482,068	46,752,016			
Total Power	_	_	1,532,508	9,246,178	8,482,068	46,752,016			
PUD No 3 of Mason County/Dec 31									
Nonfirm Power	_	_	3,579	106,068	3,579	106,068			
Total Power	_	_	3,579	106,068	3,579	106,068			
Washington Pub Pwr Supply Sys/Jun 30									
Firm Power	_	_	4,695	2,754,203	4,695	2,754,203			
Nonfirm Power	_	_	38,646	835,205	5,983,050	382,471,206			
Other Power	_	_	_	_	1,831,103	_			
Total Power	_	_	43,341	3,589,408	7,818,848	385,225,409			
Wyoming									
Wyoming Municipal Pwr Agcy/Dec 31									
Firm Power	_	_	_	_	195,269	5,816,518			
Nonfirm Power	11,578	139,527	_	_	11,578	139,527			
Total Power	11,578	139,527	_	_	206,847	5,956,045			

¹ Includes transactions with State and other government utilities, power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

⁻Not Applicable

Notes: •For identification purposes, the public utilities are listed in the State in which the administrative office is located. •Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities," except where footnoted.

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996

			Source of E	lectricity		
State / Utility / Fiscal Year Ending Date	Investor-C	Owned	Feder	al	State and Governm	
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Alabama						
Alabama Municipal Elec Auth/Sep 30 Firm Power	2,395,460	72,105,612	_	_	_	_
Nonfirm Power		72,103,012	_	_	56,232	802,935
Total Power		72,105,612	_	_	56,232	802,935
Albertville Municipal Utils Bd/Jun 30	,,	. ,,.			, .	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Firm Power	_	_	485,045	18,724,645	_	_
Total Power	_	_	485,045	18,724,645	_	_
Andalusia City of/Sep 30						
Nonfirm Power		_	_	_	_	_
Total Power	_	_	_	_	_	_
Athens City of/Dec 31 Firm Power			798,708	35,371,316		
Total Power		_	798,708	35,371,316	_	_
Bessemer City of/Jun 30			770,700	33,371,310		
Firm Power	_	_	320,104	14,641,345	_	_
Total Power	_	_	320,104	14,641,345	_	_
Cullman Power Board/Jun 30						
Firm Power		_	343,100	15,344,655	_	_
Total Power	_	_	343,100	15,344,655	_	_
Decatur City of/Jun 30			1 560 525	59 227 450		
Firm Power Total Power			1,568,525 1,568,525	58,327,450 58,327,450	_	
Dothan City of/Sep 30			1,300,323	30,327,430		
Firm Power	_	_	96,433	3,295,774	_	_
Total Power		_	96,433	3,295,774	_	_
Florence City of/Jun 30						
Firm Power		_	1,183,380	53,168,698	_	_
Total Power	_	_	1,183,380	53,168,698	_	_
Foley City of (Riviera Utils/Dec 31			26.540	1 221 250		
Firm Power Total Power		_	36,540 36,540	1,321,259 1,321,259	_	_
Fort Payne Improvement Auth/Jun 30	_	_	30,340	1,321,239	_	_
Firm Power	_	_	356,684	16,094,610	_	_
Total Power		_	356,684	16,094,610	_	_
Guntersville Electric Board/Jun 30			,	-, ,		
Firm Power		_	251,916	10,853,032	_	_
Total Power	_	_	251,916	10,853,032	_	_
Huntsville City of/Sep 30			4 20 5 20 1	106050310		
Firm Power		_	4,295,381	186,878,348	_	_
Total Power Opelika City of/Sep 30	_	_	4,295,381	186,878,348	_	_
Firm Power	_	_	35,870	1,314,810	_	_
Total Power		_	35,870	1,314,810	_	_
Scottsboro City of/Jun 30			,	-,,		
Firm Power	_	_	395,731	15,754,882	_	_
Total Power	_	_	395,731	15,754,882	_	_
Sheffield Utilities/Jun 30						
Firm Power		_	458,495	20,355,241	_	_
Total Power	_	_	458,495	20,355,241	_	_
Sylacauga Utilities Board/Sep 30 Firm Power						
Total Power		_	_	_	_	
Alaska						
Anchorage City of/Dec 31						
Nonfirm Power	_	_	74,683	1,423,342	90,333	3,372,054
Total Power	_	_	74,683	1,423,342	90,333	3,372,054
Fairbanks City of/Dec 31						
Nonfirm Power		_	_	_	_	93,591
Total Power	_	_	_	_	_	93,591
Ketchikan City of/Dec 31					64,090	4 204 066
Firm Power Total Power		_	_	_	64,090	4,204,066 4,204,066
Arizona	_	_	_	_	07,070	7,207,000
Mesa City of/Jun 30						
Firm Power	_	_	_	_	_	_
Total Power		_	_	_	_	_
Arkansas						
Benton City of/Dec 31						
Firm Power		_	_	_	_	_
Total Power	_	_	_	_	_	_

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

			Source of I	Electricity		
State / Utility / Fiscal Year Ending Date	Cooper	ative	Othe	r1	Tota	1
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Alabama Alabama Municipal Elec Auth/Sep 30						
Firm Power	_	_	_	_	2,395,460	72,105,612
Nonfirm Power		_	183,032	2,553,863	239,264	3,356,798
Total Power	_	_	183,032	2,553,863	2,634,724	75,462,410
Firm Power	_	_	_	_	485,045	18,724,645
Total Power		_	_	_	485,045	18,724,645
Andalusia City of/Sep 30	227 021	11 402 022			227.021	11 402 02
Nonfirm Power Total Power		11,492,822 11,492,822			337,831 337,831	11,492,822 11,492,822
Athens City of/Dec 31	337,031	11,422,022			337,031	11,472,022
Firm Power		_	_	_	798,708	35,371,310
Total Power	_	_	_	_	798,708	35,371,310
Bessemer City of/Jun 30 Firm Power	_	_	_	_	320,104	14,641,345
Total Power		_	_	_	320,104	14,641,345
Cullman Power Board/Jun 30						
Firm Power Total Power		_	_	_	343,100 343,100	15,344,655 15,344,655
Decatur City of/Jun 30	_	_	_	_	343,100	15,544,05.
Firm Power	_	_	_	_	1,568,525	58,327,450
Total Power	_	_	_	_	1,568,525	58,327,450
Dothan City of/Sep 30 Firm Power	_	_	994,245	37,379,585	1,090,678	40,675,359
Total Power		_	994,245	37,379,585	1,090,678	40,675,359
Florence City of/Jun 30						
Firm Power		_	_	_	1,183,380	53,168,698
Total Power Foley City of (Riviera Utils/Dec 31	_	_	_	_	1,183,380	53,168,698
Firm Power	_	_	581,821	25,617,938	618,361	26,939,197
Total Power	_	_	581,821	25,617,938	618,361	26,939,197
Fort Payne Improvement Auth/Jun 30 Firm Power					356,684	16,094,610
Total Power		_	_		356,684	16,094,610
Guntersville Electric Board/Jun 30					,	
Firm Power		_	_	_	251,916	10,853,032
Total Power	_	_	_	_	251,916	10,853,032
Firm Power	_	_	_	_	4,295,381	186,878,348
Total Power		_	_	_	4,295,381	186,878,348
Opelika City of/Sep 30			200 001	12 220 702	245.761	12 642 500
Firm Power Total Power		_	309,891 309,891	12,328,782 12,328,782	345,761 345,761	13,643,592 13,643,592
Scottsboro City of/Jun 30			505,051	12,020,702	3.0,701	15,0.5,57
Firm Power		_	_	_	395,731	15,754,882
Total Power	_	_	_	_	395,731	15,754,882
Firm Power	_	_	_	_	458,495	20,355,24
Total Power		_	_	_	458,495	20,355,24
Sylacauga Utilities Board/Sep 30			155 454	5 2 - 2 - 2 - 5	155 464	
Firm Power Total Power		_	157,464 157,464	5,634,215 5,634,215	157,464 157,464	5,634,215 5,634,215
Alaska			137,404	3,034,213	137,404	3,034,21
Anchorage City of/Dec 31						
Nonfirm Power		3,907	_	_	165,112	4,799,303
Total Power	96	3,907	_	_	165,112	4,799,303
Nonfirm Power	43,474	1,618,859	12,198	253,633	55,672	1,966,083
Total Power		1,618,859	12,198	253,633	55,672	1,966,083
Ketchikan City of/Dec 31			1 246	102 206	65 126	4 206 27
Firm Power Total Power		_	1,346 1,346	102,306 102,306	65,436 65,436	4,306,372 4,306,372
Arizona			-,	,	22,122	.,,
Mesa City of/Jun 30						
Firm Power		_	355,977 355,977	14,166,318 14,166,318	355,977 355,977	14,166,318 14,166,318
Arkansas	_	_	333,711	14,100,318	333,711	14,100,510
Benton City of/Dec 31						
Firm Power		_	187,449	8,631,369	187,449	8,631,369
Total Power	_	_	187,449	8,631,369	187,449	8,631,36

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-C	Owned	Fede	ral	State and Govern				
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Arkansas									
Bentonville City of/Dec 31 Firm Power	220,157	7,494,223	51,121	767,322	_	_			
Total Power		7,494,223	51,121	767,322	_	_			
Clarksville Light & Water Co/Sep 30									
Firm Power	_	_	24,216	723,460	_	_			
Total Power Conway Corp/Dec 31	_	_	24,216	723,460	_	_			
Firm Power	312,196	11,225,568	_	_	_	_			
Total Power		11,225,568	_	_	_	_			
Hope City of/Dec 31									
Firm Power		18,174,224	_	_	_	_			
Total Power Jonesboro City of/Dec 31	536,736	18,174,224	_	_	_	_			
Firm Power	_	171,000	96,000	2,726,400	_	_			
Nonfirm Power	231,048	3,583,045	154,916	805,563	3,750	77,256			
Total Power	231,048	3,754,045	250,916	3,531,963	3,750	77,256			
North Little Rock City of/Dec 31 Nonfirm Power	910.000	31,312,778							
Total Power		31,312,778		_	_				
Osceola City of/Dec 31	,10,000	51,512,770							
Firm Power		5,438,338	_	_	_	_			
Total Power	218,870	5,438,338	_	_	_	_			
Paragould Light & Water Comm/Dec 31 Firm Power			149,901	2,511,252	223,703	5,965,786			
Nonfirm Power			— 14 <i>9</i> ,901						
Total Power		_	149,901	2,511,252	223,703	5,965,786			
Siloam Springs City of/Dec 31									
Firm Power		_	_	_	213,724	6,960,585			
Total Power West Memphis City of/Dec 31	_	_	_	_	213,724	6,960,585			
Firm Power	192,369	12,534,188	_	_	_	_			
Total Power	192,369	12,534,188	_	_	_	_			
California									
Alameda City of/Jun 30 Firm Power			53,342	1,466,245	394,628	26,790,666			
Nonfirm Power				1,400,243 —					
Total Power		_	53,342	1,466,245	394,628	26,790,666			
Anaheim City of/Jun 30	01.645	5 F20 052		710.000					
Firm Power Nonfirm Power		6,739,853 3,524,543	56,163	718,800 480,075	 55,250	628,220			
Total Power		10,264,396	56,163	1,198,875	55,250	628,220			
Azusa City of/Jun 30	,	,,		-,-,-,-,-		,			
Firm Power		1,363,582	_	_	238,997	9,134,667			
Nonfirm Power		472,542	31,200	553,800		- 0.124.667			
Total Power Burbank City of/Jun 30	47,879	1,836,124	31,200	553,800	238,997	9,134,667			
Firm Power	21,957	2,159,153	169,555	4,412,257	73,781	5,704,436			
Nonfirm Power	29,598	385,619	160,214	4,335,738	11,514	146,816			
Total Power	51,555	2,544,772	329,769	8,747,995	85,295	5,851,252			
Colton City of/Jun 30 Firm Power	61,483	3,489,610	4,237	147,845	195,272	8,453,147			
Nonfirm Power	17,347	647,909		— 147,643 —		- - -			
Total Power	78,830	4,137,519	4,237	147,845	195,272	8,453,147			
Glendale City of/Jun 30									
Firm Power	141 401	4.075.000	383,068	7,763,000					
Nonfirm Power	141,481 141,481	4,075,000 4,075,000	670 383,738	8,000 7,771,000	245,324 245,324	11,159,000 11,159,000			
Lassen Municipal Utility Dist/Jun 30	141,401	4,075,000	303,730	7,771,000	243,324	11,132,000			
Firm Power		2,898,623	36,755	961,971	_	_			
Nonfirm Power	23,415	599,695	9,726	112,374	50,982	305,642			
Total Power Lodi City of/Jun 30	30,934	3,498,318	46,481	1,074,345	50,982	305,642			
Firm Power	_	_	49,431	1,144,723	326,245	25,021,001			
Total Power	_	_	49,431	1,144,723	326,245	25,021,001			
Los Angeles City of/Jun 30									
Firm Power	921,012	63,820,124	1 900 612	— 20.771.467	1,121,093	93,538,717			
Nonfirm Power Other Power		16,515,402	1,899,612	39,771,467 —	173,583	51,275,171			
Total Power	1,819,082	80,335,526	1,899,612	39,771,467	1,294,676	144,813,888			
See notes and feetnotes at and of table		-	·	·	·				

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

			Source of E	lectricity		
State / Utility / Fiscal Year Ending Date	Cooper	ative	Other	1	Total	ļ.
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Arkansas			·			
Bentonville City of/Dec 31 Firm Power					271,278	8,261,545
Total Power			_	_	271,278	8,261,545
Clarksville Light & Water Co/Sep 30					271,270	0,201,343
Firm Power	194,220	5,810,124	_	_	218,436	6,533,584
Total Power	194,220	5,810,124	_	_	218,436	6,533,584
Conway Corp/Dec 31						
Firm Power		_	_	_	312,196	11,225,568
Total Power	_	_	_	_	312,196	11,225,568
Hope City of/Dec 31 Firm Power	_	_	_	_	536,736	18,174,224
Total Power		_			536,736	18,174,224
Jonesboro City of/Dec 31					,	,,
Firm Power	_	_	13,255	341,218	109,255	3,238,618
Nonfirm Power		273,142	331,873	5,312,087	741,399	10,051,093
Total Power	19,812	273,142	345,128	5,653,305	850,654	13,289,711
North Little Rock City of/Dec 31					010.000	21 212 770
Nonfirm Power		_	_	_	910,000 910,000	31,312,778 31,312,778
Osceola City of/Dec 31	_	_	_	_	910,000	31,312,776
Firm Power	_	_	_	_	218,870	5,438,338
Total Power		_	_	_	218,870	5,438,338
Paragould Light & Water Comm/Dec 31						
Firm Power					373,604	8,477,038
Nonfirm Power		79,304	80,250	1,593,360	82,838	1,672,664
Total Power	2,588	79,304	80,250	1,593,360	456,442	10,149,702
Siloam Springs City of/Dec 31 Firm Power	_	_	_	_	213,724	6,960,585
Total Power		_		_	213,724	6,960,585
West Memphis City of/Dec 31					213,721	0,200,202
Firm Power	_	_	_	_	192,369	12,534,188
Total Power	_	_	_	_	192,369	12,534,188
California						
Alameda City of/Jun 30					447,970	29 256 011
Firm Power Nonfirm Power		_		571,583	447,970	28,256,911 571,583
Total Power		_		571,583	447,970	28,828,494
Anaheim City of/Jun 30					, ,	,,
Firm Power	50,061	7,583,836	1,018,452	79,902,652	1,160,160	94,945,141
Nonfirm Power		1,820,895	229,478	26,440,282	812,950	32,894,015
Total Power	179,421	9,404,731	1,247,930	106,342,934	1,973,110	127,839,156
Azusa City of/Jun 30				1 401 000	268.246	11 000 120
Firm Power Nonfirm Power		_	91,339	1,481,880 1,388,100	141,169	11,980,129 2,414,442
Total Power		_	91,339	2,869,980	409,415	14,394,571
Burbank City of/Jun 30			, -,,	_,,,,,,,,,	,	- 1,000 1,000
Firm Power	2,246	37,742	440,887	26,882,496	708,426	39,196,084
Nonfirm Power		529,837	30,798	376,718	269,743	5,774,728
Total Power	39,865	567,579	471,685	27,259,214	978,169	44,970,812
Colton City of/Jun 30			204	1 767 505	261 276	12.050.107
Firm Power Nonfirm Power		_	384 108,138	1,767,585 1,239,067	261,376 125,485	13,858,187 1,886,976
Total Power			108,522	3,006,652	386,861	15,745,163
Glendale City of/Jun 30			100,522	2,000,022	200,001	10,7 10,100
Firm Power	_	_	_	_	383,068	7,763,000
Nonfirm Power		270,000	262,735	15,174,000	670,242	30,686,000
Total Power	20,032	270,000	262,735	15,174,000	1,053,310	38,449,000
Lassen Municipal Utility Dist/Jun 30					44 274	2 960 504
Firm Power Nonfirm Power		_	37,459	435,782	44,274 121,582	3,860,594 1,453,493
Total Power		_	37,459	435,782	165,856	5,314,087
Lodi City of/Jun 30			37,137	.55,752	100,000	2,214,007
Firm Power	_	_	_	_	375,676	26,165,724
Total Power		_	_	_	375,676	26,165,724
Los Angeles City of/Jun 30						4 # # # # # # # # # # # # # # # # # # #
Firm Power		16.022.075	7 126 742	427 110 201	2,042,105	157,358,841
Nonfirm Power Other Power		16,932,075	7,136,743 490,957	427,110,381	10,546,072 490,957	551,604,496
Total Power		16,932,075	7,627,700	427,110,381	13,079,134	708,963,337
	.50,001	- 5,752,075	.,02.,.00	,110,501	,0//,101	, , , , , , , , , , , , , , , ,

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-	Owned	Feder	al	State and Government				
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
California									
Palo Alto City of/Jun 30 Firm Power			683,116	13,808,000	393,231	10,048,000			
Nonfirm Power		_		- 15,808,000					
Total Power		_	683,116	13,808,000	393,231	10,048,000			
Pasadena City of/Jun 30									
Firm Power Nonfirm Power		— 832,485	222,344 58,047	3,471,433 513,781	73,966 55,162	5,698,524 5,552,885			
Total Power		832,485	280,391	3,985,214	129,128	11,251,409			
Redding City of/Jun 30	02,230	002,100	200,051	5,505,211	127,120	11,201,10			
Firm Power		20,055,954	432,628	10,704,704	65,700	3,455,990			
Nonfirm Power		507,715	8,444	103,692	167,341	3,790,952			
Total Power Riverside City of/Jun 30	622,880	20,563,669	441,072	10,808,396	233,041	7,246,942			
Firm Power	170,017	11,467,531	39,785	1,734,335	102,902	8,392,020			
Nonfirm Power		1,688,591	66,355	616,635	168,440	1,731,266			
Total Power	301,580	13,156,122	106,140	2,350,970	271,342	10,123,286			
Roseville City of/Jun 30			261 452	7.007.012	221 125	20.022.622			
Nonfirm Power Total Power		_	361,473 361,473	7,997,842 7,997,842	321,127 321,127	20,922,689 20,922,689			
San Francisco City & County of/Jun 30	—		301,473	7,997,642	321,127	20,922,009			
Firm Power	141	12,143,539	_	_	_	_			
Nonfirm Power		147,193	44,181	480,004	206,627	3,935,333			
Total Power	8,787	12,290,732	44,181	480,004	206,627	3,935,333			
Santa Clara City of/Jun 30 Firm Power	153,754	13,908,004	153,300	8,051,800	_	_			
Nonfirm Power		1,060,028	166,132	1,607,989	114.351	1,265,738			
Other Power	—	_	_	_	978,666	_			
Total Power	255,045	14,968,032	319,432	9,659,789	1,093,017	1,265,738			
Turlock Irrigation Dist/Dec 31 Firm Power	35,596	3,632,993	17,766	356,925	181,844	20,647,330			
Nonfirm Power		1,456,924	23,239	295,208	13,252	186,847			
Total Power		5,089,917	41,005	652,133	195,096	20,834,177			
Vernon City of/Jun 30									
Firm Power		3,353,835	28,645	478,054	351,240	7,889,784			
Nonfirm Power Total Power		208,336 3,562,171	99,079 127,724	1,075,117 1,553,171	215,183 566,423	2,438,331 10,328,115			
Colorado	150,074	3,302,171	127,724	1,555,171	300,423	10,320,113			
Colorado Springs City of/Dec 31									
Firm Power		_	376,041	7,674,473	-	_			
Nonfirm Power Total Power		2,497,364 2,497,364	122,441 498,482	1,736,167 9,410,640	1,190 1,190	30,198 30,198			
Fort Collins City of/Dec 31	110,204	2,497,304	490,402	9,410,040	1,190	30,196			
Firm Power	—	_	_	_	1,042,109	36,631,507			
Total Power	—	_	_	_	1,042,109	36,631,507			
Fort Morgan City of/Dec 31			76.026	2 024 215					
Firm Power Nonfirm Power		_	76,926 —	2,024,315	115,184	2.624.977			
Total Power		_	76,926	2,024,315	115,184	2,624,977			
Longmont City of/Dec 31									
Firm Power		_	_	_	535,939	18,789,239			
Total Power Loveland City of/Dec 31	—	_	_	_	535,939	18,789,239			
Firm Power	—	_	_	_	450,971	15,230,634			
Total Power		_	_	_	450,971	15,230,634			
Connecticut									
Mun Electric Engy Coop/Dec 31	1,123,454	58,263,459							
Firm Power Nonfirm Power		22,393,603	_	_	— 89.046	1,235,539			
Total Power	,	80,657,062	_	_	89,046	1,235,539			
Groton City of/Jun 30					*				
Firm Power		_	_	_	_	_			
Total Power Norwich City of/Jun 30	—	_	_	_	_	_			
Firm Power	—	_	_	_	_	_			
Total Power		_	_	_	_	_			
Wallingford Town of/Jun 30									
Firm Power		_	_	_	_	_			
Total Power	—	_	_	_	_	_			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Cooperative		Othe	r1	Tota	I		
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
California Palo Alto City of/Jun 30								
Firm Power	_	_	_	_	1,076,347	23,856,000		
Nonfirm Power		_	25,460	636,000	25,460	636,000		
Total Power		_	25,460	636,000	1,101,807	24,492,000		
Pasadena City of/Jun 30								
Firm Power			500,469	37,022,600	796,779	46,192,55		
Nonfirm Power		248,898	78,391	3,214,156	272,848	10,362,203		
Total Power Redding City of/Jun 30	. 19,012	248,898	578,860	40,236,756	1,069,627	56,554,762		
Firm Power	_	_	_	_	1,087,211	34,216,64		
Nonfirm Power		_	19.845	280,477	229,627	4,682,83		
Total Power		_	19,845	280,477	1,316,838	38,899,48		
Riverside City of/Jun 30								
Firm Power		10,930,510	614,533	45,963,169	997,033	78,487,565		
Nonfirm Power		1,169,866	4,490	57,662	463,755	5,264,020		
Total Power	. 162,703	12,100,376	619,023	46,020,831	1,460,788	83,751,58		
Roseville City of/Jun 30 Nonfirm Power					682,600	28,920,53		
Total Power					682,600	28,920,53		
San Francisco City & County of/Jun 30					002,000	20,720,33		
Firm Power	. –	_	_	_	141	12,143,539		
Nonfirm Power	_	_	4,410	73,107	263,864	4,635,63		
Total Power	. –	_	4,410	73,107	264,005	16,779,176		
Santa Clara City of/Jun 30								
Firm Power		_		_	307,054	21,959,804		
Nonfirm Power		_	137,424 34,720	1,188,966	519,198	5,122,72		
Other Power		_	172,144		1,013,386 1,839,638	27,082,525		
Turlock Irrigation Dist/Dec 31			1/2,177	1,100,700	1,037,030	27,002,32.		
Firm Power	_	_	430,980	21,475,004	666,186	46,112,252		
Nonfirm Power	. –	_	8,477	6,974,602	162,803	8,913,58		
Total Power	. —	_	439,457	28,449,606	828,989	55,025,833		
Vernon City of/Jun 30								
Firm Power		_	81,617	6,620,216	598,077	18,341,889		
Nonfirm Power Total Power		_	147,509 229,126	1,653,119 8,273,335	476,090 1,074,167	5,374,903 23,716,792		
Colorado			229,120	6,273,333	1,074,107	23,710,792		
Colorado Springs City of/Dec 31								
Firm Power	. 268,544	5,449,452	_	_	644,585	13,123,925		
Nonfirm Power		1,461,674	58,316	839,554	388,183	6,564,957		
Total Power	. 356,516	6,911,126	58,316	839,554	1,032,768	19,688,882		
Fort Collins City of/Dec 31					1.042.100	26 621 500		
Firm Power Total Power		_	_	_	1,042,109 1,042,109	36,631,50° 36,631,50°		
Fort Morgan City of/Dec 31	. —	_	_	_	1,042,109	30,031,30		
Firm Power	_	_	_	_	76,926	2.024.315		
Nonfirm Power		_	_	_	115,184	2,624,97		
Total Power		_	_	_	192,110	4,649,292		
Longmont City of/Dec 31								
Firm Power		_	_	_	535,939	18,789,239		
Total Power	. –	_	_	_	535,939	18,789,239		
Loveland City of/Dec 31					450.071	15 220 62		
Firm Power Total Power					450,971 450,971	15,230,634 15,230,634		
Connecticut					430,771	13,230,03		
Mun Electric Engy Coop/Dec 31								
Firm Power	. –	_	2,210	2,108,194	1,125,664	60,371,653		
Nonfirm Power		_	198,812	4,281,604	907,539	27,910,74		
Total Power	. —	_	201,022	6,389,798	2,033,203	88,282,399		
Groton City of/Jun 30			(46.750	25.764.271	(46.750	25.764.27		
Firm Power Total Power		_	646,759 646,759	35,764,371 35,764,371	646,759 646,759	35,764,37 35,764,37		
Norwich City of/Jun 30	. —	_	040,739	55,704,571	040,739	33,104,37		
Firm Power	_	_	321,035	18,036,905	321,035	18,036,905		
Total Power		_	321,035	18,036,905	321,035	18,036,905		
Wallingford Town of/Jun 30			,	, , , , , , , , , , , , , , , , , , , ,	, -	, , ,		
Firm Power		_	595,947	25,002,692	595,947	25,002,692		
Total Power		_	595,947	25,002,692	595,947	25,002,692		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-C	Owned	Fede	ral	State and Govern				
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Delaware									
Dover City of/Jun 30	276.926	10 211 020							
Nonfirm Power Total Power		10,211,939 10,211,939	_	_	_	_			
Milford City of/Sep 30	. 270,620	10,211,939	_		_	_			
Firm Power	. 116,421	4,889,165	_	_	_	_			
Nonfirm Power		_	_	_	_	_			
Total Power	. 116,421	4,889,165	_	_	_	_			
Newark City of/Dec 31									
Firm Power		10,902,000	_	_	_	_			
Nonfirm Power Total Power		10,902,000	_	_	_	_			
Florida	. 255,002	10,902,000	_	_	_	_			
Bartow City of/Sep 30									
Firm Power	. 282,506	14,694,422	_	_	_	_			
Total Power	. 282,506	14,694,422	_	_	_	_			
Florida Municipal Power Agency/Sep 30									
Firm Power	,	32,405,427	_	_	_	_			
Nonfirm Power			_	_	_	_			
Total Power	. 817,457	32,405,427	_	_	_	_			
Nonfirm Power	. 11,961	357,213	_	_	_	_			
Total Power	,	357,213	_	_		_			
Gainesville Regional Utilities/Sep 30	, , , , , , , , , , , , , , , , , , , ,	,							
Nonfirm Power	. 117,567	3,061,553	_	_	_	_			
Total Power	. 117,567	3,061,553	_	_	_	_			
Homestead City of/Sep 30									
Firm Power		2,809,780	_	_	_	_			
Total Power		864,783 3,674,563	_	_	_	_			
Jacksonville Beach City/Sep 30	. 75,440	3,074,303	_	_	_	_			
Firm Power	. —	_	_	_	_	_			
Nonfirm Power		_	_	_	_	_			
Total Power	. –	_	_	_	_	_			
Jacksonville Elec Auth/Sep 30									
Firm Power			_	_					
Nonfirm Power Total Power		1,112,464	_	_	228,166 228,166	3,967,394 3,967,394			
Key West City of/Sep 30	. 40,015	1,112,464	_	_	228,100	3,907,39			
Firm Power	. 413,069	15,498,426	_	_	_	_			
Nonfirm Power		157,547	_	_	_	_			
Total Power		15,655,973	_	_	_	_			
Kissimmee Utility Auth/Sep 30									
Firm Power		3,013,424	_	_	_	_			
Nonfirm Power		457,459	_	_	_	_			
Total PowerLake Worth City of/Sep 30	. 33,721	3,470,883	_	_	_	_			
Firm Power	_	_	_	_	_	_			
Nonfirm Power		835,827	_	_	_	_			
Total Power		835,827	_	_	_	_			
Lakeland City of/Sep 30									
Firm Power		_	_	_	_	_			
Nonfirm Power	. , ,	1,025,447	_	_	_	_			
Total Power	. 54,574	1,025,447	_	_	_	_			
Leesburg City of/Sep 30 Firm Power									
Total Power									
New Smyrna Beach Utils Comm/Sep 30									
Firm Power	. 251,842	9,276,257	_	_	_	_			
Nonfirm Power		336,976	_	_	_	_			
Total Power	. 260,416	9,613,233	_	_	_	_			
Ocala City of/Sep 30									
Firm Power Total Power		_	_	_	_	_			
Orlando Utilities Comm/Sep 30	. –	_	_	_	_	_			
Nonfirm Power	. 402,885	8,546,743	_	_	_	_			
Total Power		8,546,743	_	_	_	_			
Quincy City of/Sep 30	,	-,,							
Firm Power	. 110,833	4,962,683	47,168	1,234,053	_	_			
Total Power	. 110,833	4,962,683	47,168	1,234,053					

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

			Source of I	Electricity		
State / Utility / Fiscal Year Ending Date	Cooper	rative	Othe	r1	Tota	1
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Delaware						
Dover City of/Jun 30			67.121	1 406 770	242.047	11 (10 71)
Nonfirm Power Total Power			67,121 67,121	1,406,779 1,406,779	343,947 343,947	11,618,718 11,618,718
Milford City of/Sep 30			07,121	1,400,779	343,947	11,010,710
Firm Power	_	_	_	_	116,421	4,889,165
Nonfirm Power		_	44,783	1,377,009	44,783	1,377,009
Total Power	_	_	44,783	1,377,009	161,204	6,266,174
Newark City of/Dec 31 Firm Power					253,662	10,902,000
Nonfirm Power			90,475	2,784,000	90,475	2,784,000
Total Power		_	90,475	2,784,000	344,137	13,686,000
Florida						
Bartow City of/Sep 30					***	
Firm Power	_	_	_	_	282,506	14,694,422
Total PowerFlorida Municipal Power Agency/Sep 30	_	_	_	_	282,506	14,694,422
Firm Power	_	_	933,853	32,124,203	1,751,310	64,529,630
Nonfirm Power		289,488	44,642	1,396,462	59,690	1,685,950
Total Power	15,048	289,488	978,495	33,520,665	1,811,000	66,215,580
Fort Pierce Utilities Au/Sep 30	1.022	15.540	261.660	15 240 002	251.551	15.504.04
Nonfirm Power Total Power		17,740 17,740	361,668 361,668	15,349,993 15,349,993	374,651 374,651	15,724,946 15,724,946
Gainesville Regional Utilities/Sep 30	1,022	17,740	301,006	13,349,993	374,031	13,724,940
Nonfirm Power	5,692	122,381	83,518	1,953,931	206,777	5,137,865
Total Power		122,381	83,518	1,953,931	206,777	5,137,865
Homestead City of/Sep 30						
Firm Power			158,429	6,521,246	194,553	9,331,020
Nonfirm Power Total Power		121,212 121,212	18,613 177,042	588,749 7,109,995	62,169 256,722	1,574,744 10,905,770
Jacksonville Beach City/Sep 30	0,234	121,212	177,042	7,109,993	230,722	10,903,770
Firm Power	_	_	630,000	27,797,055	630,000	27,797,055
Nonfirm Power		_	_	2,792,431	_	2,792,43
Total Power	_	_	630,000	30,589,486	630,000	30,589,48
Jacksonville Elec Auth/Sep 30 Firm Power			1,306,593	50,572,366	1,306,593	50,572,366
Nonfirm Power		7,155,293	739,364	14,853,808	1,362,611	27,088,959
Total Power		7,155,293	2,045,957	65,426,174	2,669,204	77,661,325
Key West City of/Sep 30	,	, ,	· · ·	, ,		
Firm Power			129,299	6,032,516	542,368	21,530,942
Nonfirm Power		2,243,058	68,980	2,064,357	78,859	4,464,962
Total Power Kissimmee Utility Auth/Sep 30	3,436	2,243,058	198,279	8,096,873	621,227	25,995,904
Firm Power	_	_	467	870,616	15,437	3,884,040
Nonfirm Power		27,857	464,943	16,037,855	484,863	16,523,17
Total Power	1,169	27,857	465,410	16,908,471	500,300	20,407,21
Lake Worth City of/Sep 30			.=		.== .==	
Firm Power		449,482	175,625 13,780	4,554,756 344,567	175,625 65,179	4,554,750 1,629,870
Nonfirm Power Total Power		449,482	189,405	4,899,323	240.804	6,184,63
Lakeland City of/Sep 30	21,732	112,102	107,103	1,077,323	210,004	3,101,03.
Firm Power	_	_	95,626	2,223,851	95,626	2,223,85
Nonfirm Power		449	317,836	8,084,872	372,436	9,110,76
Total Power	26	449	413,462	10,308,723	468,062	11,334,619
Leesburg City of/Sep 30 Firm Power			424,000	16,792,678	424,000	16,792,67
Total Power			424,000	16,792,678	424,000	16,792,673
New Smyrna Beach Utils Comm/Sep 30			121,000	10,7,2,070	.2.,000	10,7,2,07
Firm Power		_	5,127	392,032	256,969	9,668,289
Nonfirm Power		7,588	44,976	3,446,425	53,757	3,790,98
Total Power	207	7,588	50,103	3,838,457	310,726	13,459,27
Ocala City of/Sep 30 Firm Power	_	_	1,071,766	47,508,982	1,071,766	47,508,983
Total Power		_	1,071,766	47,508,982	1,071,766	47,508,98
Orlando Utilities Comm/Sep 30			1,0,1,,00	.,,500,,702	-,0.1,.00	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Nonfirm Power		107,143	269,080	5,638,300	677,559	14,292,186
Total Power	5,594	107,143	269,080	5,638,300	677,559	14,292,186
Quincy City of/Sep 30					150 001	6 106 72
Firm Power Total Power		_	_	_	158,001 158,001	6,196,736 6,196,736
10tdl 1 0wcl	_	_	_	_	130,001	0,170,/30

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Investor-C	Owned	Fede	eral	State and Other Government			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Florida								
Reedy Creek Improvement Dist/Sep 30 Firm Power	359,656	13,059,876	_	_	_	_		
Nonfirm Power		1,869,393	_	_	_	_		
Total Power	424,961	14,929,269	_	_	_	_		
St Cloud City of/Sep 30		4 429 710						
Firm Power		4,438,710 4,438,710		_	_			
Tallahassee City of/Sep 30		.,.50,,710						
Nonfirm Power		1,012,394	_	_	14,954	271,067		
Total Power	46,822	1,012,394	_	_	14,954	271,067		
Vero Beach City of/Sep 30 Firm Power								
Nonfirm Power		757,471			_			
Total Power		757,471	_	_	_	_		
Georgia								
Albany Water Gas & Light/Jun 30			110 647	2.720.910	977 200	42 240 711		
Firm Power Total Power		_	110,647 110,647	2,720,819 2,720,819	867,288 867,288	43,240,711 43,240,711		
Calhoun City of/Jun 30			110,047	2,720,017	007,200	43,240,711		
Firm Power		_	_	_	344,131	16,407,086		
Total Power	—	_	_	_	344,131	16,407,086		
Cartersville City of/Jun 30 Nonfirm Power			31,640	777,600	479,145	20,775,800		
Total Power			31,640	777,600	479,145	20,775,800		
College Park City of/Jun 30			51,0.0	777,000	.,,,,,,,	20,775,000		
Firm Power		_	_	_	11,689	14,777,159		
Total Power	—	_	_	_	11,689	14,777,159		
Covington City of/Dec 31 Firm Power			14.673	408,131	225,505	12,071,278		
Total Power		_	14,673	408,131	225,505	12,071,278		
Dalton City of/Nov 30			,,,,,		- ,	,,		
Firm Power		16,765,000	73,371	1,829,000	_	_		
Total Power Douglas City of/Jun 30	538,905	16,765,000	73,371	1,829,000	_	_		
Firm Power	_	_	19,070	462,403	234,056	11,914,974		
Total Power		_	19,070	462,403	234,056	11,914,974		
East Point City of/Jun 30								
Firm Power		_	62,503	1,527,134	251,015	15,000,179		
Total Power Fitzgerald Wtr Lgt & Bnd/Dec 31	—	_	62,503	1,527,134	251,015	15,000,179		
Firm Power	—	_	16,285	422,302	197,027	10,263,953		
Total Power	—	_	16,285	422,302	197,027	10,263,953		
Griffin City of/Jun 30			22.421	021.714	201.040	16 505 070		
Firm Power Total Power		_	33,431 33,431	821,514 821,514	291,949 291,949	16,525,372 16,525,372		
La Grange City of/Jun 30			33,431	021,314	291,949	10,323,372		
Nonfirm Power		_	_	_	496,111	22,287,771		
Total Power	—	_	_	_	496,111	22,287,771		
Lawrenceville City of/Aug 31 Firm Power					239,875	12,790,837		
Total Power			_	_	239,875	12,790,837		
Marietta City of/Jun 30						,,,,,,,,		
Firm Power		_	66,656	1,650,220	893,865	50,872,073		
Total Power	—	_	66,656	1,650,220	893,865	50,872,073		
Moultrie City of/Sep 30 Firm Power	_	_	28,926	701,363	_	_		
Nonfirm Power		_			153,847	8,684,554		
Total Power		_	28,926	701,363	153,847	8,684,554		
Thomasville City of/Dec 31			42.152	1 104 712	444 151	21.965.050		
Firm Power Total Power		_	43,153 43,153	1,104,712 1,104,712	444,151 444,151	21,865,958 21,865,958		
Idaho		_	73,133	1,104,/12	777,131	21,000,900		
Idaho Falls City of/Sep 30								
Firm Power		_	533,556	15,997,985	_	_		
Total Power	—	_	533,556	15,997,985	_	_		
Batavia City of/Dec 31								
Firm Power	265,718	11,577,263	_	_	_	_		
Total Power	265,718	11,577,263	_	_	_	_		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Coopera	ative	Oth	er1	Tota	1			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Florida									
Reedy Creek Improvement Dist/Sep 30 Firm Power			280,000	15,543,944	639,656	28,603,820			
Nonfirm Power		1,540,827	54,382	928,278	204,565	4,338,498			
Total Power		1,540,827	334,382	16,472,222	844,221	32,942,318			
St Cloud City of/Sep 30									
Firm Power Total Power		_	286,692	8,832,526	286,692	13,271,236			
Tallahassee City of/Sep 30	_	_	286,692	8,832,526	286,692	13,271,236			
Nonfirm Power	125,891	3,304,688	982,649	35,161,124	1,170,316	39,749,273			
Total Power	125,891	3,304,688	982,649	35,161,124	1,170,316	39,749,273			
Vero Beach City of/Sep 30			254 502	12.076.791	254 502	12.076.701			
Firm Power Nonfirm Power		31,557	254,592 6,239	13,976,781 244,329	254,592 37,695	13,976,781 1,033,357			
Total Power		31,557	260,831	14,221,110	292,287	15,010,138			
Georgia	,	· ·	,		,	, ,			
Albany Water Gas & Light/Jun 30 Firm Power		_	_	_	977,935	45,961,530			
Total Power	_	_	_	_	977,935	45,961,530			
Calhoun City of/Jun 30 Firm Power					344,131	16,407,086			
Total Power			_	_	344,131	16,407,086			
Cartersville City of/Jun 30					,	,,			
Nonfirm Power		_	_	_	510,785	21,553,400			
Total Power College Park City of/Jun 30	_	_	_	_	510,785	21,553,400			
Firm Power	_	_	_	_	11,689	14,777,159			
Total Power		_	_	_	11,689	14,777,159			
Covington City of/Dec 31									
Firm Power		_	_	_	240,178	12,479,409			
Total Power Dalton City of/Nov 30	_	_	_	_	240,178	12,479,409			
Firm Power	_	_	_	_	612,276	18,594,000			
Total Power		_	_	_	612,276	18,594,000			
Douglas City of/Jun 30					252.126	10 277 277			
Firm Power Total Power					253,126 253,126	12,377,377 12,377,377			
East Point City of/Jun 30					233,120	12,577,577			
Firm Power		_	_	_	313,518	16,527,313			
Total Power	_	_	_	_	313,518	16,527,313			
Fitzgerald Wtr Lgt & Bnd/Dec 31 Firm Power	_	_	_	_	213,312	10,686,255			
Total Power		_	_	_	213,312	10,686,255			
Griffin City of/Jun 30									
Firm Power		_	_	_	325,380	17,346,886			
Total PowerLa Grange City of/Jun 30	_	_	_	_	325,380	17,346,886			
Nonfirm Power	_	_	_	_	496,111	22,287,771			
Total Power	_	_	_	_	496,111	22,287,771			
Lawrenceville City of/Aug 31					220.975	12 700 925			
Firm Power Total Power		_	_	_	239,875 239,875	12,790,837 12,790,837			
Marietta City of/Jun 30					257,075	12,7,0,007			
Firm Power		_	_	_	960,521	52,522,293			
Total Power	_	_	_	_	960,521	52,522,293			
Moultrie City of/Sep 30 Firm Power	_	_	_	_	28,926	701,363			
Nonfirm Power		_	_	_	153,847	8,684,554			
Total Power	_	_	_	_	182,773	9,385,917			
Thomasville City of/Dec 31					407 204	22.070.670			
Firm Power Total Power		_	_	_	487,304 487,304	22,970,670 22,970,670			
Idaho					107,504	22,770,070			
Idaho Falls City of/Sep 30									
Firm Power		_	_	_	533,556 533,556	15,997,985			
Total Power	_	_	_	_	533,556	15,997,985			
Batavia City of/Dec 31									
Firm Power		_	_	_	265,718	11,577,263			
Total Power	_	_	_	_	265,718	11,577,263			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-Owned		Fede	eral	State and Government				
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Illinois									
Geneva City of/Apr 30 Firm Power	201,449	6,641,861							
Total Power		6,641,861				_			
Illinois Municipal Elec Agency/Apr 30	,	2,012,002							
Firm Power		36,255,927	_	_	_	_			
Nonfirm Power		475,436	_	_	_	_			
Total Power	1,097,045	36,731,363	_	_	_	_			
Naperville City of/Apr 30 Firm Power	830,989	35,585,836	_	_	_	_			
Nonfirm Power			_		_	_			
Total Power		35,585,836	_	_	_	_			
Rochelle Municipal Utilities/Apr 30									
Firm Power		5,631,039	_	_	_	_			
Total Power	180,862	5,631,039	_	_	_	_			
Springfield City of/Feb 28 Firm Power	58,000	727,275							
Nonfirm Power		22,909	_			_			
Total Power		750,184	_	_	_	_			
St Charles City of/Apr 30	/2,000	750,10							
Firm Power	422,735	17,846,823	_	_	_	_			
Total Power	422,735	17,846,823	_	_	_	_			
Indiana									
Anderson City of/Dec 31					706 622	27 270 00			
Firm Power Total Power		_	_	_	706,623 706,623	27,379,08 27,379,08			
Auburn City of/Dec 31	—	_	_	_	700,023	21,319,06			
Nonfirm Power	483,840	17,580,586	_	_	_	_			
Total Power		17,580,586	_	_	_	_			
Bluffton City of/Dec 31									
Firm Power		_	_	_	_	_			
Total Power	—	_	_	_	_	_			
Crawfordsville Elec Lgt&Pwr Co/Dec 31 Firm Power					388,226	12 652 92			
Total Power		_		_	388,226	13,652,83 13,652,83			
Frankfort City of/Dec 31	—				366,220	13,032,63			
Firm Power	—	_	_	_	341,190	12,094,05			
Total Power		_	_	_	341,190	12,094,05			
Greenfield City of/Dec 31									
Firm Power		_	_	_	197,388	7,166,53			
Total Power	—	_	_	_	197,388	7,166,53			
Jasper City of/Dec 31 Firm Power	237,444	9.010.068							
Total Power		9,010,068	_		_				
Lebanon City of/Dec 31	237,111	,,010,000							
Firm Power	—	_	_	_	148,032	5,793,87			
Total Power	—	_	_	_	148,032	5,793,87			
Logansport City of/Dec 31									
Firm Power		_	_	_	_	_			
Total Power	—	_	_	_	_	_			
Mishawaka City of/Dec 31 Firm Power									
Total Power									
Peru City of/Dec 31									
Firm Power	—	_	_	_	222,505	5,707,62			
Total Power	—	_	_	_	222,505	5,707,62			
Richmond City of/Dec 31									
Firm Power		_	_	_	354,759	14,718,16			
Total Power Scottsburg City of/Dec 31	—	_	_	_	354,759	14,718,16			
Firm Power	_	_	_	_	184,320	6,580,21			
Total Power		_	_	_	184,320	6,580,21			
Washington City of/Dec 31					101,520	5,500,21			
Firm Power		_	_	_	169,331	6,262,77			
Total Power		_	_	_	169,331	6,262,77			
Iowa									
Ames City of/Jun 30	100.050	1 000 0:0							
Nonfirm Power		1,823,313	_	_	_	_			
Total Power	123,070	1,823,313	_	_	_				

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Cooperative		Other	1	Tota	1			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Illinois									
Geneva City of/Apr 30 Firm Power			22,484	790,000	223,933	7,431,86			
Total Power			22,484	790,000	223,933	7,431,86			
Illinois Municipal Elec Agency/Apr 30			22,101	770,000	223,733	7,131,00			
Firm Power		_	_	_	1,067,253	36,255,927			
Nonfirm Power	_	_	85,648	1,573,489	115,440	2,048,92			
Total Power	_	_	85,648	1,573,489	1,182,693	38,304,85			
Naperville City of/Apr 30					020.000	25 505 02			
Firm Power		_	16,376	254 206	830,989 16,376	35,585,830			
Nonfirm Power Total Power	_	_	16,376	354,206 354,206	847,365	354,200 35,940,042			
Rochelle Municipal Utilities/Apr 30	_	_	10,570	334,200	047,505	33,940,04.			
Firm Power	_	_	_	_	180,862	5,631,039			
Total Power	_	_	_	_	180,862	5,631,039			
Springfield City of/Feb 28									
Firm Power	_	_	_	_	58,000	727,27			
Nonfirm Power	_	_	_	_	14,500	22,909			
Total Power	_	_	_	_	72,500	750,184			
St Charles City of/Apr 30 Firm Power					422,735	17,846,823			
Total Power	_	_	_	_	422,735	17,846,823			
Indiana					422,733	17,040,02.			
Anderson City of/Dec 31									
Firm Power	_	_	_	_	706,623	27,379,089			
Total Power	_	_	_	_	706,623	27,379,089			
Auburn City of/Dec 31									
Nonfirm Power	_	_	_	_	483,840	17,580,586			
Total Power	_	_	_	_	483,840	17,580,586			
Bluffton City of/Dec 31 Firm Power			181,898	6,895,892	181,898	6,895,892			
Total Power			181,898	6,895,892	181,898	6,895,892			
Crawfordsville Elec Lgt&Pwr Co/Dec 31			101,090	0,093,092	101,090	0,093,092			
Firm Power	_	_	_	_	388,226	13,652,837			
Total Power	_	_	_	_	388,226	13,652,83			
Frankfort City of/Dec 31									
Firm Power	_	_	_	_	341,190	12,094,059			
Total Power	_	_	_	_	341,190	12,094,059			
Greenfield City of/Dec 31 Firm Power					197,388	7,166,539			
Total Power	_	_	_		197,388	7,166,539			
Jasper City of/Dec 31					177,500	7,100,55			
Firm Power	_	_	_	_	237,444	9,010,068			
Total Power	_	_	_	_	237,444	9,010,068			
Lebanon City of/Dec 31									
Firm Power	_	_	_	_	148,032	5,793,87			
Total Power	_	_	_	_	148,032	5,793,87			
Logansport City of/Dec 31 Firm Power			193,890	5,990,936	193,890	5,990,930			
Total Power		_	193,890	5,990,936	193,890	5,990,930			
Mishawaka City of/Dec 31			173,070	3,770,730	173,070	3,770,730			
Firm Power	_	_	522,156	21,380,231	522,156	21,380,23			
Total Power	_	_	522,156	21,380,231	522,156	21,380,23			
Peru City of/Dec 31									
Firm Power	_	_	_	_	222,505	5,707,625			
Total Power	_	_	_	_	222,505	5,707,625			
Richmond City of/Dec 31					254.750	1471016			
Firm Power Total Power	_	_	_	_	354,759 354,759	14,718,160			
Scottsburg City of/Dec 31	_	_	_	_	334,139	14,718,160			
Firm Power	_	_	_	_	184,320	6,580,212			
Total Power	_	_	_	_	184,320	6,580,212			
Washington City of/Dec 31									
Firm Power	_	_	_	_	169,331	6,262,770			
Total Power	_	_	_	_	169,331	6,262,770			
Iowa									
Ames City of/Jun 30					122.070	1 000 010			
Nonfirm Power Total Power	_	_	_	_	123,070 123,070	1,823,313 1,823,313			
10tai 10wci	_	_	_	_	143,070	1,023,313			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

			Source of E	lectricity		
State / Utility / Fiscal Year Ending Date	Investor-0	Owned	Feder	al	State and Other Government	
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Iowa Codor Follo City of/Dog 21						
Cedar Falls City of/Dec 31 Nonfirm Power	113,512	1,227,608	_	_	_	_
Total Power		1,227,608		_	_	_
Muscatine City of/Dec 31		-,,				
Nonfirm Power	20,809	305,832	1,172	17,406	19,558	268,252
Total Power	20,809	305,832	1,172	17,406	19,558	268,252
Pella City of/Dec 31						
Firm Power		— 494,749	_	_	_	_
Total Power		494,749	_	_		_
Kansas	22,771	777,777				
Chanute City of/Dec 31						
Firm Power	207,250	7,385,282	3,205	72,709	_	_
Total Power	207,250	7,385,282	3,205	72,709	_	_
Coffeyville City of/Dec 31			5 400	126,002		
Firm Power Nonfirm Power		2,822,509	5,498	136,093	_	_
Total Power		2,822,509	5,498	136,093	_	_
Garden City City of/Dec 31	131,313	2,022,307	5,170	130,073		
Firm Power	—	_	_	_	_	_
Total Power	—	_	_	_	_	_
Kansas City City of/Dec 31						
Firm Power		— 5 472 471	112,885	2,523,984	_	_
Nonfirm Power Other Power	,	5,472,471	_	_	_	_
Total Power		5,472,471	112,885	2,523,984	_	
McPherson City of/Dec 31	223,120	3,172,171	112,003	2,323,701		
Firm Power	581,864	13,331,461	_	_	_	_
Total Power	581,864	13,331,461	_	_	_	_
Winfield City of/Dec 31	26.466	1 000 001			05.000	2 252 400
Firm Power	,	1,093,934	- 5 200	115.057	95,838	3,373,409
Nonfirm Power		1,093,934	5,290 5,290	115,057 115,057	95,838	3,373,409
Kentucky	30,400	1,075,754	3,270	113,037	75,030	3,373,407
Bardstown City of						
Firm Power		5,107,852	_	_	_	_
Total Power	167,135	5,107,852	_	_	_	_
Bowling Green City of/Jun 30 Firm Power			751,316	32,951,978		
Total Power			751,316	32,951,978		
Frankfort City of/Jun 30	••••		751,510	32,731,770		
Firm Power	686,952	21,221,108	_	_	_	_
Total Power	686,952	21,221,108	_	_	_	_
Henderson City Utility Comm/May 31						
Firm Power		_	18,610	394,272	_	_
Nonfirm Power Total Power		_	18,610	394,272	_	_
Hopkinsville City of/Jun 30	••••		10,010	371,272		
Firm Power	—	_	453,275	18,503,067	_	_
Total Power		_	453,275	18,503,067	_	_
Madisonville Municipal Utils/ Jun 30	***					
Firm Power	,	9,170,780	_	_	_	_
Total Power	288,121	9,170,780	_	_	_	_
Firm Power	_	_	252,447	11,336,862	_	_
Total Power		_	252,447	11,336,862	_	_
Owensboro City of/May 31			- ,	,,		
Nonfirm Power		500,561	_	_	_	_
Total Power	33,349	500,561	_	_	_	_
Paducah City of/Jun 30			E0E 000	26 140 427		
Firm Power Total Power		_	585,889 585,889	26,140,425 26,140,425	_	_
Louisiana	—	_	303,009	20,140,423	_	_
Alexandria City of/Apr 30						
Firm Power	—	_	35,694	776,939	_	_
Nonfirm Power		6,982,303			371,106	14,686,597
Total Power	311,624	6,982,303	35,694	776,939	371,106	14,686,597

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Coopera	ntive	Other ¹		Total				
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Iowa									
Cedar Falls City of/Dec 31 Nonfirm Power			1	64	113,513	1,227,672			
Total Power			1	64	113,513	1,227,672			
Muscatine City of/Dec 31			•	0.	110,010	1,227,072			
Nonfirm Power	3,836	50,394	3,200	40,541	48,575	682,425			
Total Power	3,836	50,394	3,200	40,541	48,575	682,425			
Pella City of/Dec 31									
Firm Power		_		840,000	- 01.005	840,000			
Nonfirm Power		_	68,914	1,064,727	91,885	1,559,470			
Total Power	_	_	68,914	1,904,727	91,885	2,399,476			
Chanute City of/Dec 31									
Firm Power	_	_	_	_	210,455	7,457,991			
Total Power		_	_	_	210,455	7,457,991			
Coffeyville City of/Dec 31									
Firm Power		_	_	_	5,498	136,093			
Nonfirm Power		_	_	_	131,343	2,822,509			
Total Power	_	_	_	_	136,841	2,958,602			
Garden City City of/Dec 31	104 021	9,589,023			104 021	0.590.023			
Firm Power Total Power		9,589,023	_	_	184,821 184,821	9,589,023 9,589,023			
Kansas City City of/Dec 31	104,021	9,369,023	_	_	104,021	9,369,023			
Firm Power	_	_	_	_	112,885	2,523,984			
Nonfirm Power		_	37,926	732,736	261,052	6,205,207			
Other Power		_	1,154	_ ′	1,154				
Total Power	_	_	39,080	732,736	375,091	8,729,191			
McPherson City of/Dec 31									
Firm Power		_	_	_	581,864	13,331,461			
Total Power	_	_	_	_	581,864	13,331,461			
Winfield City of/Dec 31 Firm Power					132,304	4,467,343			
Nonfirm Power					5,290	115,057			
Total Power		_	_	_	137,594	4,582,400			
Kentucky					,				
Bardstown City of									
Firm Power		_	_	_	167,135	5,107,852			
Total Power	_	_	_	_	167,135	5,107,852			
Bowling Green City of/Jun 30 Firm Power					751 216	22.051.079			
Total Power				_	751,316 751,316	32,951,978 32,951,978			
Frankfort City of/Jun 30					751,510	32,731,770			
Firm Power	_	_	_	_	686,952	21,221,108			
Total Power		_	_	_	686,952	21,221,108			
Henderson City Utility Comm/May 31									
Firm Power			_	_	18,610	394,272			
Nonfirm Power		293,644	_	_	9,886	293,644			
Total Power	9,886	293,644	_	_	28,496	687,916			
Hopkinsville City of/Jun 30 Firm Power	_	_	_	_	453,275	18,503,067			
Total Power				_	453,275	18,503,067			
Madisonville Municipal Utils/ Jun 30					100,270	10,505,007			
Firm Power	_	_	_	_	288,121	9,170,780			
Total Power	_	_	_	_	288,121	9,170,780			
Murray City of/Jun 30									
Firm Power		_	_	_	252,447	11,336,862			
Total Power	_	_	_	_	252,447	11,336,862			
Owensboro City of/May 31 Nonfirm Power	_	_	_	_	33,349	500,561			
Total Power		_	_	_	33,349	500,561			
Paducah City of/Jun 30					33,347	500,501			
Firm Power	_	_	_	_	585,889	26,140,425			
Total Power		_	_	_	585,889	26,140,425			
Louisiana									
Alexandria City of/Apr 30									
Firm Power		_	_	_	35,694	776,939			
Nonfirm Power		_	_	_	682,730	21,668,900			
Total Power	-	_	_	_	718,424	22,445,839			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-0	Owned	Fed	eral	State and Governr				
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Louisiana									
Lafayette City of/Oct 31 Nonfirm Power	172,515	4,814,545	31,278	644,779	1,359,281	41,103,976			
Total Power		4,814,545	31,278	644,779	1,359,281	41,103,976			
Morgan City City of/Dec 31	172,010	1,011,010	31,270	0.1,777	1,557,201	11,100,27			
Firm Power	_	_	_	_	174,465	7,556,735			
Total Power	_	_	_	_	174,465	7,556,735			
Natchitoches City of/May 31									
Firm Power Total Power		_	_	_	_	_			
Ruston City of/Sep 30									
Nonfirm Power	_	_	103,607	3,108,210	_	_			
Total Power	_	_	103,607	3,108,210	_	_			
Terrebonne Parish Consol Gov 't/Dec 31					.=				
Nonfirm Power		_	_	_	176,405	3,543,147			
Total Power Maryland	_	_	_	_	176,405	3,543,147			
Hagerstown City of/Jun 30									
Firm Power	_	_	_	_	_	_			
Total Power		_	_	_	_	_			
Massachusetts									
Braintree Town of/Dec 31									
Firm Power		7,823,685	_	_	_	_			
Total Power Chicopee City of/Dec 31	166,600	7,823,685	_	_	_	_			
Firm Power	42,289	1,767,362	_	_	39,127	542,516			
Nonfirm Power		7,920	_	_					
Total Power	42,625	1,775,282	_	_	39,127	542,516			
Concord Town of/Dec 31									
Firm Power		8,677,014	_	_	11,366	224,084			
Total Power	154,073	8,677,014	_	_	11,366	224,084			
Nonfirm Power	19,659	747,000	_	_	201,486	18,590,000			
Total Power		747,000	_	_	201,486	18,590,000			
Hingham City of/Dec 31	,	,			,				
Firm Power		1,024,072	_	_	79,452	7,451,976			
Nonfirm Power			_	_	2,555	64,698			
Total Power	20,654	1,024,072	_	_	82,007	7,516,674			
Firm Power	160,103	8,564,854	_	_	93,891	7,509,238			
Nonfirm Power	,	_	_	_	_	_			
Total Power	160,103	8,564,854	_	_	93,891	7,509,238			
Hudson Town of/Dec 31									
Firm Power		4,438,175	_	_	176,114	17,446,436			
Nonfirm Power Total Power		4,438,175	_	_	— 176,114	— 17,446,436			
Littleton Town of/Dec 31	131,072	4,430,173	_	_	170,114	17,440,430			
Firm Power	11,967	720,132	_	_	27,293	2,028,187			
Nonfirm Power	_	_	_	_	_	_			
Total Power	11,967	720,132	_	_	27,293	2,028,187			
Mansfield Town of/Dec 31					120.025	12.704.204			
Firm Power	_	_	_	_	129,035 129,035	12,704,286 12,704,286			
Middleborough Town of/Dec 31	_	_	_	_	129,033	12,704,200			
Nonfirm Power	79,725	4,407,188	_	_	106,151	6,654,098			
Total Power		4,407,188	_	_	106,151	6,654,098			
North Attleborough Town of/Dec 31									
Firm Power		5,699,916	_	_	36,710	3,338,980			
Nonfirm Power		1,130	_	_	11,592	294,140			
Total Power Norwood City of/Jun 30	77,167	5,701,046	_	_	48,302	3,633,120			
Nonfirm Power	301,569	20,190,600	_	_	17,360	250,255			
Total Power		20,190,600	_	_	17,360	250,255			
Peabody City of/Dec 31									
Firm Power		2,244,618	_	_	203,251	19,339,323			
Nonfirm Power		7,892	_	_					
Total Power	46,831	2,252,510	_	_	203,251	19,339,323			
Firm Power	287,323	15,984,334	_	_	163,593	17,328,584			
Nonfirm Power	,	1,914	_	_	_				
Total Power		15,986,248			163,593	17,328,584			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

			Source of El	ectricity		
State / Utility / Fiscal Year Ending Date	Coopera	ative	Other	1	Total	l
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Louisiana						
Lafayette City of/Oct 31 Nonfirm Power	29,024	549,487			1,592,098	47,112,787
Total Power	29,024	549,487			1,592,098	47,112,787
Morgan City City of/Dec 31	. , .	,			,,	., ,
Firm Power	_	_	_	_	174,465	7,556,735
Total Power	_	_	_	_	174,465	7,556,735
Natchitoches City of/May 31 Firm Power			229,256	7.854.000	229,256	7,854,000
Total Power			229,256	7,854,000	229,256	7,854,000
Ruston City of/Sep 30			.,	.,,	.,	.,,
Nonfirm Power	_	_	_	_	103,607	3,108,210
Total Power	_	_	_	_	103,607	3,108,210
Terrebonne Parish Consol Gov 't/Dec 31 Nonfirm Power					176,405	3,543,147
Total Power		_		_	176,405	3,543,147
Maryland					170,403	3,343,147
Hagerstown City of/Jun 30						
Firm Power	_	_	366,113	14,922,449	366,113	14,922,449
Total Power	_	_	366,113	14,922,449	366,113	14,922,449
Massachusetts Braintree Town of/Dec 31						
Firm Power	_	_	5,472	833.092	172,072	8,656,777
Total Power	_		5,472	833,092	172,072	8,656,777
Chicopee City of/Dec 31			-,	******	,	2,02 2,1 1
Firm Power	_	_	20,826	7,768,505	102,242	10,078,383
Nonfirm Power	_	_	265,989	6,884,524	266,325	6,892,444
Total Power	_	_	286,815	14,653,029	368,567	16,970,827
Firm Power	_	_	_	_	165,439	8,901,098
Total Power	_	_	_	_	165,439	8,901,098
Danvers Town of/Dec 31						-,,
Nonfirm Power	_	_	94,810	3,650,000	315,955	22,987,000
Total Power	_	_	94,810	3,650,000	315,955	22,987,000
Hingham City of/Dec 31 Firm Power			3,936	452.002	104,042	8,929,130
Nonfirm Power			3,930	453,082	2,555	64,698
Total Power	_	_	3,936	453,082	106,597	8,993,828
Holyoke City of/Dec 31			-,,	,	,	0,,,,,,,
Firm Power	_	_	27,950	1,154,769	281,944	17,228,861
Nonfirm Power	_	_	2,109	136,635	2,109	136,635
Total Power	_	_	30,059	1,291,404	284,053	17,365,496
Firm Power	_	_	9,702	977,668	316,888	22,862,279
Nonfirm Power	_	_	420	11,115	420	11,115
Total Power	_	_	10,122	988,783	317,308	22,873,394
Littleton Town of/Dec 31						
Firm Power	_	_	70,422	3,734,560	109,682	6,482,879
Nonfirm Power Total Power	_	_	55,247 125,669	3,997,086 7,731,646	55,247 164,929	3,997,086 10,479,965
Mansfield Town of/Dec 31	_	_	123,009	7,731,040	104,929	10,479,903
Firm Power	_	_	_	_	129,035	12,704,286
Total Power	_	_	_	_	129,035	12,704,286
Middleborough Town of/Dec 31						
Nonfirm Power	_	_	_	917,008	185,876	11,978,294
Total Power North Attleborough Town of/Dec 31	_	_	_	917,008	185,876	11,978,294
Firm Power	_	_	10,669	1,369,060	124,546	10,407,956
Nonfirm Power	_	_		_	11,592	295,270
Total Power	_	_	10,669	1,369,060	136,138	10,703,226
Norwood City of/Jun 30						
Nonfirm Power	_	_	_	_	318,929	20,440,855
Total Power Peabody City of/Dec 31	_	_	_	_	318,929	20,440,855
Firm Power	_	_	_	_	250,008	21,583,941
Nonfirm Power	_	_	15,536	1,208,849	15,610	1,216,741
Total Power	_	_	15,536	1,208,849	265,618	22,800,682
Reading Town of/Dec 31						
Firm Power	_	_	45,974	3,892,433	496,890	37,205,351
Nonfirm Power	_	_	130,932	4,405,618	130,949	4,407,532
Total Power	_	_	176,906	8,298,051	627,839	41,612,883

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-C	Owned	Fede	ral	State and Other Government				
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Massachusetts									
Shrewsbury Town of/Dec 31	192.660	0.000.170			42.622	2 704 962			
Firm Power Nonfirm Power		9,969,170 1,075,238	_	_	42,632 7,662	3,704,862 137,827			
Total Power		11,044,408			50,294	3,842,689			
Taunton City of/Dec 31	. 200,031	11,044,400			30,274	3,042,007			
Nonfirm Power	. 252,332	6,796,988	_	_	41,331	474,490			
Total Power	. , ,	6,796,988	_	_	41,331	474,490			
Wakefield Town of/Dec 31									
Firm Power	. 24,069	1,676,893	_	_	145,225	10,943,310			
Nonfirm Power		_	_	_	_	_			
Total Power	. 24,069	1,676,893	_	_	145,225	10,943,310			
Wellesley Town of/Dec 31	101.000	11.002.150			15.000	200.655			
Firm Power		11,092,460	_	_	15,000	309,657			
Nonfirm Power Total Power		11,092,460	_	_	15,000	309,657			
Westfield City of/Dec 31	. 161,000	11,092,400	_	_	13,000	309,037			
Firm Power	. 16,000	4.850.638	_	_	70,000	15,471,374			
Nonfirm Power		81,530	_	_					
Total Power		4,932,168	_	_	70,000	15,471,374			
Michigan	,				,	, ,			
Bay City City of/Jun 30									
Firm Power		10,600,391	_	_	_	_			
Total Power	. 315,654	10,600,391	_	_	_	_			
Coldwater Board of Public Util/Jun 30									
Nonfirm Power		_	_	_	185,289	9,593,951			
Total Power	. —	_	_	_	185,289	9,593,951			
Detroit City of/Jun 30 Nonfirm Power	. 385,006	1,207,196							
Total Power		1,207,196	_	_	_	_			
Grand Haven City of/Jun 30	. 363,000	1,207,190							
Nonfirm Power	. —	_	_	_	55,937	1,247,364			
Total Power		_	_	_	55,937	1,247,364			
Hillsdale Board of Public Wks/Jun 30					,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Nonfirm Power	. —	_	_	_	155,356	7,203,564			
Total Power	. —	_	_	_	155,356	7,203,564			
Holland City of/Jun 30									
Firm Power		6,353,455	_	_	335,534	12,786,821			
Total Power	. 240,483	6,353,455	_	_	335,534	12,786,821			
Lansing City of/Jun 30					1 141 206	12 750 200			
Firm Power		_	_	_	1,141,206 33,668	43,750,289 887,914			
Other Power					2,855				
Total Power		_	_	_	1,177,729	44,638,203			
Marquette City of/Jun 30	•				1,111,122	,050,205			
Nonfirm Power	. 41,778	634,900	_	_	_	_			
Total Power		634,900	_	_	_	_			
Sturgis City of/Sep 30									
Firm Power		_	_	_	_	_			
Nonfirm Power		_	_	_	_	_			
Total Power	. —	_	_	_	_	_			
Traverse City City of/Jun 30									
Firm Power		_	_	_	163,203	5,658,279			
Nonfirm Power		_	_	_	65,150	1,722,692			
Total Power	. –	_	_	_	228,353	7,380,971			
Wyandotte Municipal Serv Comm/Sep 30 Firm Power	. 77,798	1,648,073							
Total Power		1,648,073							
Zeeland City of/Jun 30	. 11,170	1,040,073							
Firm Power	. —	_	_	_	200,718	6,540,175			
Total Power		_	_	_	200,718	6,540,175			
Minnesota					,-	,,			
Alexandria City of/Dec 31									
Firm Power		_	_	_	113,971	4,301,809			
Total Power	. —	_	_	_	113,971	4,301,809			
Anoka City of/Dec 31									
Firm Power		- 40.5	_	_	239,917	8,498,914			
Nonfirm Power		40,744	_	_		9 400 01 4			
Total Power	. —	40,744	_	_	239,917	8,498,914			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Coope	rative	Other	1	Tota	I			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Massachusetts									
Shrewsbury Town of/Dec 31 Firm Power					226,292	13,674,032			
Nonfirm Power	_	_	_	_	32,633	1,213,065			
Total Power	_	_	_	_	258,925	14,887,097			
Taunton City of/Dec 31									
Nonfirm Power	_	_	261,110	11,320,723	554,773	18,592,201			
Total Power	_	_	261,110	11,320,723	554,773	18,592,201			
Firm Power	_	_	_	_	169,294	12,620,203			
Nonfirm Power	_	_	484	44,227	484	44,227			
Total Power	_	_	484	44,227	169,778	12,664,430			
Wellesley Town of/Dec 31					106 000	11 402 115			
Firm Power Nonfirm Power			1,000	49,208	196,000 1,000	11,402,117 49,208			
Total Power	_	_	1,000	49,208	197,000	11,451,325			
Westfield City of/Dec 31			-,	,	,	,,			
Firm Power	_	_	_	_	86,000	20,322,012			
Nonfirm Power	_	_	_	843,857	5,000	925,387			
Total Power	_	_	_	843,857	91,000	21,247,399			
Bay City City of/Jun 30									
Firm Power	_	_	_	_	315,654	10,600,391			
Total Power	_	_	_	_	315,654	10,600,391			
Coldwater Board of Public Util/Jun 30					105 200	0.502.051			
Nonfirm Power Total Power	_	_	_	_	185,289 185,289	9,593,951 9,593,951			
Detroit City of/Jun 30	_	_	_	_	103,209	9,393,931			
Nonfirm Power	_	_	_	_	385,006	1,207,196			
Total Power	_	_	_	_	385,006	1,207,196			
Grand Haven City of/Jun 30					55.005	1017061			
Nonfirm Power	_	_	_	_	55,937 55,937	1,247,364 1,247,364			
Hillsdale Board of Public Wks/Jun 30	_	_	_	_	33,931	1,247,304			
Nonfirm Power	_	_	_	_	155,356	7,203,564			
Total Power	_	_	_	_	155,356	7,203,564			
Holland City of/Jun 30					576.017	10 140 27			
Firm Power Total Power	_	_	_	_	576,017 576,017	19,140,276 19,140,276			
Lansing City of/Jun 30					370,017	19,140,270			
Firm Power	_	_	_	_	1,141,206	43,750,289			
Nonfirm Power	_	_	_	_	33,668	887,914			
Other Power	_	_	_	_	2,855				
Total Power	_	_	_	_	1,177,729	44,638,203			
Nonfirm Power	_	_	700	9,531	42,478	644,431			
Total Power	_	_	700	9,531	42,478	644,431			
Sturgis City of/Sep 30									
Firm Power	_	_	212,144	7,793,571	212,144	7,793,571			
Nonfirm Power	_	_	3,149	97,849	3,149	97,849			
Traverse City City of/Jun 30	_	_	215,293	7,891,420	215,293	7,891,420			
Firm Power	_	_	_	_	163,203	5,658,279			
Nonfirm Power	_	_	_	_	65,150	1,722,692			
Total Power	_	_	_	_	228,353	7,380,971			
Wyandotte Municipal Serv Comm/Sep 30					77 700	1 649 073			
Firm Power Total Power	_	_	_	_	77,798 77,798	1,648,073 1,648,073			
Zeeland City of/Jun 30					77,770	2,010,070			
Firm Power	_	_	_	_	200,718	6,540,175			
Total Power	_	_	_	_	200,718	6,540,175			
Minnesota Alexandria City of/Dec 31									
Firm Power	_	_	_	_	113,971	4,301,809			
Total Power	_	_	_	_	113,971	4,301,809			
Anoka City of/Dec 31									
Firm Power	_	_			239,917	8,498,914			
Nonfirm Power Total Power	_	_	9	527 527	9 239,926	41,271 8,540,185			
1 Old! FUWC!	_	_	9	321	239,920	0,340,183			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

Source of Electricity							
Investor-0	Owned	Feder	al	State and Other Government			
Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
				277, 272	12 572 629		
	_	_	_		13,573,628 13,573,628		
. —	_	_	_	210,212	13,373,020		
160 337	5 565 996	_	_	_	_		
		_	_	_	_		
	_	_	_	200,210	7,032,710		
. —	_	_	_	200,210	7,032,710		
				147 107	7 600 252		
	_	_	_		7,609,352 7,609,352		
. –	_	_	_	147,137	7,009,332		
_	_	_	_	_	_		
	685,483	117	2,369	547	10,906		
		117		547	10,906		
,	*		,		,		
. –	_	133,104	1,704,005	242,761	8,229,126		
. —	_	133,104	1,704,005	242,761	8,229,126		
	_			_	_		
. —	_	244,611	3,440,569	_	_		
	3 060 421	_		_			
	, ,	_	_	_	_		
110,000	5,000,121						
. —	_	_	_	306,970	14,594,552		
. —	_	_	_	306,970	14,594,552		
	_	_	_		45,073,340		
	_	_	_		7,599		
. –	_	_	_	919,963	45,080,939		
_	_	_	_	155 696	5,910,034		
	168.736	_	_				
		_	_	155,696	5,910,034		
	*			, in the second			
	_	32,112	440,907	_	_		
	_	—		_	_		
. —	_	32,112	440,907	_	_		
		(2,600	921 104	105 250	4 000 550		
	_				4,809,558 4,809,558		
_	_	02,009	021,104	125,550	4,009,550		
. —	_	_	_	_	_		
. —	_	_	_	_	_		
	_		21,959,503	_	_		
. —	_	501,365	21,959,503	_	_		
	_	_	_	_	_		
. —	_	_	_	_	_		
_	_	_	_	_	_		
	_	_	_	_	_		
	953,582	43,650	985,680	5,132	502,352		
		- 42.550					
. 36,720	953,582	43,650	985,680	5,132	502,352		
		250 611	11 025 047				
	_			_	_		
· -		230,044	11,055,007	_			
. —	_	367.251	15.794.924	_	_		
_		367,251	15,794,924				
	Purchases (thousand kWh)	(thousand kWh) (dollars)	Investor-Owned Feder	Investor-Owned Federal Purchases (thousand kWh) Cost (dollars) Purchases (thousand kWh) Cost (dollars) Cost Cost (doll	Investor-Owned Federal State and Governome Purchases (thousand kWh) Cost (housand k		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

			Source of	Electricity		
State / Utility / Fiscal Year Ending Date	Coopera	ntive	Oth	er1	Tota	1
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Minnesota						
Austin City of/Dec 31 Firm Power					276,272	13,573,628
Total Power				_	276,272	13,573,628
Brainerd Public Utilities/Dec 31					2.0,2.2	15,575,020
Firm Power	. –	_	_	_	160,337	5,565,996
Total Power	. –	_	_	_	160,337	5,565,996
Chaska City of/Dec 31 Firm Power					200.210	7.022.710
Total Power			_		200,210 200,210	7,032,710 7,032,710
Fairmont Public Utilities Comm/Dec 31	•				200,210	7,032,710
Firm Power	. —	_	_	_	147,137	7,609,352
Total Power	—	_	_	_	147,137	7,609,352
Hutchinson Utilities Comm/Dec 31						
Firm Power		631,880	_	- 65.200	8,806	631,880
Nonfirm Power Total Power		1,485,020 2,116,900	3 3	65,289 65,289	145,947 154,753	2,249,06° 2,880,94°
Marshall City of/Dec 31	100,023	2,110,900	3	05,209	134,733	2,000,94
Firm Power	—	_	_	_	375,865	9,933,131
Total Power		_	_	_	375,865	9,933,131
Moorhead City of/Dec 31						
Firm Power		_	_	_	244,611	3,440,569
Total Power New Ulm Public Utilities Comm/Dec 31	. –	_	_	_	244,611	3,440,569
Firm Power	. —	_	_	200,000	_	200,000
Nonfirm Power		_	19,500	260,577	165,506	3,320,998
Total Power	. –	_	19,500	460,577	165,506	3,520,998
Owatonna City of/Dec 31						
Firm Power		_	_	_	306,970	14,594,552
Total Power	. —	_	_	_	306,970	14,594,552
Firm Power	_	_	_	_	919,403	45,073,340
Nonfirm Power		_	_	_	560	7,599
Total Power	—	_	_	_	919,963	45,080,939
Shakopee Public Utilities Comm/Dec 31						
Firm Power		498,506	_	_	155,696	5,910,034
Nonfirm Power Total Power	,	498,506			10,517 166,213	667,242 6,577,276
Willmar Municipal Utils Comm/Dec 31	10,517	170,500			100,213	0,577,270
Firm Power	88,317	3,137,686	_	48,989	120,429	3,627,582
Nonfirm Power		1,417,043	_	_	79,682	1,417,043
Total Power	167,999	4,554,729	_	48,989	200,111	5,044,625
Worthington City of/Dec 31 Firm Power					187,959	5,630,662
Total Power				_	187,959	5,630,662
Mississippi					107,757	2,020,002
Clarksdale City of/Sep 30						
Firm Power		_	197,487	6,047,215	197,487	6,047,215
Total Power	. –	_	197,487	6,047,215	197,487	6,047,215
Columbus City of/Jun 30 Firm Power					501,365	21,959,503
Total Power				_	501,365	21,959,503
Greenwood Utilities Comm/Sep 30					,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Firm Power	. –	_	309,103	8,399,475	309,103	8,399,475
Total Power	. –	_	309,103	8,399,475	309,103	8,399,475
Holly Springs City of/Jun 30	225 500	10.015.102			225 500	10.015.103
Firm Power Total Power		10,015,192 10,015,192	_		225,588 225,588	10,015,192 10,015,192
Municipal Energy Agncy of MS/Sep 30	223,300	10,015,172			223,300	10,013,172
Firm Power		4,178,793	245,871	8,449,527	463,133	15,069,934
Nonfirm Power		_	409,369	11,075,953	409,369	11,075,953
Total Power	131,760	4,178,793	655,240	19,525,480	872,502	26,145,887
New Albany City of/Jun 30					250 611	11 025 00
Firm Power Total Power		_	_	_	258,644 258,644	11,835,86° 11,835,86°
Starkville City of/Jun 30	. –	_	_	_	230,074	11,055,00
Firm Power	—	_	_	_	367,251	15,794,924
Total Power	. —	_	_	_	367,251	15,794,924

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-0	Owned	Fede	ral	State and Other Government				
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Mississippi									
Tupelo City of/Jun 30 Firm Power	_	_	688,691	30,725,082	_	_			
Total Power		_	688,691	30,725,082	_	_			
Missouri			,						
Carthage City of/Jun 30									
Firm Power		_	13,512	275,313	_	_			
Nonfirm Power Other Power		_	_	_		_			
Total Power		_	13,512	275,313	24				
Columbia City of/Sep 30	••		13,312	273,313	21				
Firm Power	258,145	8,239,595	_	_	_	_			
Nonfirm Power		_	_	_	_	_			
Total Power	258,145	8,239,595	_	_	_	_			
Hannibal City of/Jun 30	221,328	8,625,499							
Firm Power Total Power		8,625,499		_		_			
Independence City of/Jun 30	221,320	0,023,499			_				
Firm Power	849,645	20,852,779	_	_	_	_			
Nonfirm Power		359,580	_	_	_	_			
Total Power	863,658	21,212,359	_	_	_	_			
Kennett City of/Jun 30			20.520	615.110					
Firm Power Total Power		_	29,539 29,539	617,112 617,112	_	_			
Kirkwood City of/Mar 31	—	_	29,339	017,112	_	_			
Firm Power	193,946	7,310,445	_	_	_	_			
Total Power		7,310,445	_	_	_	_			
Lebanon City of/Oct 31									
Firm Power		_	_	_	_	_			
Total Power	—	_	_	_	_	_			
Marshall City of/Sep 30 Firm Power	104,006	1,843,014							
Total Power		1,843,014			_				
Monett City of/Mar 31	101,000	1,015,011							
Firm Power	170,016	5,812,849	_	_	_	_			
Total Power	170,016	5,812,849	_	_	_	_			
Poplar Bluff City of/Dec 31			120 471	2 000 242	165.205	4.750.471			
Firm Power Total Power		_	120,471 120,471	2,009,242 2,009,242	165,285 165,285	4,750,471 4,750,471			
Rolla City of/Sep 30			120,471	2,007,242	103,203	4,730,471			
Firm Power	263,592	9,953,778	_	_	_	_			
Total Power	263,592	9,953,778	_	_	_	_			
Sikeston City of/May 31									
Firm Power		250.017	174,414 2,282	2,807,201	_	_			
Nonfirm Power Total Power		259,017 259,017	176,696	46,371 2,853,572	_	_			
Springfield City of/Sep 30	10,302	257,017	170,020	2,033,372					
Firm Power	—	_	60,000	1,706,000	398,460	10,210,000			
Nonfirm Power		_	46,788	245,000	300	5,000			
Total Power	—	_	106,788	1,951,000	398,760	10,215,000			
West Plains City of/Dec 31			16.750	(52.022					
Firm Power Total Power			16,750 16,750	652,032 652,032					
Nebraska	–		10,750	032,032					
Beatrice City of/Jul 31									
Firm Power	—	_	_	_	181,868	6,855,099			
Total Power	—	_	_	_	181,868	6,855,099			
Fremont City of/Jul 31			20.471	506 715	72.562	1.017.716			
Nonfirm Power Total Power		_	30,471 30,471	596,715 596,715	73,563 73,563	1,017,719 1,017,719			
Grand Island City of/Jul 31	—	_	30,471	390,713	75,505	1,017,713			
Firm Power	—	_	41,831	584,322	_	_			
Nonfirm Power		13,668			88,094	1,434,360			
Total Power	516	13,668	41,831	584,322	88,094	1,434,360			
Hastings City of/Dec 31			40.152	004.053	10 127	204 45			
Nonfirm Power Total Power		_	49,152	904,852	18,135	284,476			
Lincoln Electric System/Dec 31	—	_	49,152	904,852	18,135	284,476			
Firm Power	—	_	132,040	3,900,092	1,725,780	42,753,350			
Nonfirm Power		834,171	40,037	618,127	2,920	42,311			
Total Power	69,999	834,171	172,077	4,518,219	1,728,700	42,795,661			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Cooper	ative	Othe	r1	Tota	1			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Mississippi Type of City of Jun 20									
Tupelo City of/Jun 30 Firm Power	_	_	_	_	688,691	30,725,082			
Total Power		_	_	_	688,691	30,725,082			
Missouri									
Carthage City of/Jun 30			211 577	6 700 200	225.000	7.065.613			
Firm Power Nonfirm Power		_	211,577 805	6,790,300 19,915	225,089 805	7,065,613 19,915			
Other Power		_	92		4,445				
Total Power		_	212,474	6,810,215	230,339	7,085,528			
Columbia City of/Sep 30									
Firm Power			511,099	20,135,701	769,244	28,375,296			
Nonfirm Power Total Power		569,103 569,103	2,186 513,285	157,655 20,293,356	32,985 802,229	726,758 29,102,054			
Hannibal City of/Jun 30	30,799	309,103	313,283	20,293,330	802,229	29,102,034			
Firm Power	—	_	_	_	221,328	8,625,499			
Total Power		_	_	_	221,328	8,625,499			
Independence City of/Jun 30					212 21-	00.070.55			
Firm Power Nonfirm Power		— 34,410	_	_	849,645 15,058	20,852,779 393,990			
Total Power		34,410	_	_	864,703	21,246,769			
Kennett City of/Jun 30	1,013	31,110			001,703	21,210,709			
Firm Power	—	_	26,368	614,424	55,907	1,231,536			
Total Power	—	_	26,368	614,424	55,907	1,231,536			
Kirkwood City of/Mar 31 Firm Power					102.046	7 210 445			
Total Power		_	_		193,946 193,946	7,310,445 7,310,445			
Lebanon City of/Oct 31					173,740	7,510,445			
Firm Power	214,809	7,868,444	_	_	214,809	7,868,444			
Total Power	214,809	7,868,444	_	_	214,809	7,868,444			
Marshall City of/Sep 30					104.006	1 042 014			
Firm Power		_	_	_	104,006 104,006	1,843,014 1,843,014			
Monett City of/Mar 31	—	_	_	_	104,000	1,043,014			
Firm Power	—	_	_	_	170,016	5,812,849			
Total Power	—	_	_	_	170,016	5,812,849			
Poplar Bluff City of/Dec 31	2.51.4	05.050	25.520	506111	217.200	5 201 50			
Firm Power Total Power		95,970 95,970	25,738 25,738	536,111 536,111	315,208 315,208	7,391,794 7,391,794			
Rolla City of/Sep 30	3,714	93,970	25,756	330,111	313,206	7,391,794			
Firm Power	—	_	_	_	263,592	9,953,778			
Total Power	—	_	_	_	263,592	9,953,778			
Sikeston City of/May 31					154 414	2 007 201			
Firm Power Nonfirm Power		35,714	16,100	307,531	174,414 39.067	2,807,201 648,633			
Total Power		35,714	16,100	307,531	213,481	3,455,834			
Springfield City of/Sep 30		,	,	,	=,	-,,			
Firm Power		_	_	_	458,460	11,916,000			
Nonfirm Power	,	493,000	1,750	49,000	79,059	792,000			
Total Power West Plains City of/Dec 31	30,221	493,000	1,750	49,000	537,519	12,708,000			
Firm Power	_	_	150,746	5,603,769	167,496	6,255,801			
Total Power		_	150,746	5,603,769	167,496	6,255,801			
Nebraska									
Beatrice City of/Jul 31					101.0-0				
Firm Power		_	_	_	181,868 181,868	6,855,099 6,855,099			
Fremont City of/Jul 31	—	_	_	_	101,000	0,833,095			
Nonfirm Power	—	_	_	_	104,034	1,614,434			
Total Power		_	_	_	104,034	1,614,434			
Grand Island City of/Jul 31									
Firm Power		_		- 91 260	41,831	584,322			
Nonfirm Power Total Power		_	1,700 1,700	81,260 81,260	90,310 132,141	1,529,288 2,113,610			
Hastings City of/Dec 31		_	1,700	81,200	132,141	2,113,010			
Nonfirm Power	—	_	3,595	53,925	70,882	1,243,253			
Total Power	—	_	3,595	53,925	70,882	1,243,253			
Lincoln Electric System/Dec 31				101.000	1.055.000	46.554			
Firm Power		1 200 140		101,203	1,857,820	46,754,645			
Nonfirm Power Total Power	,	1,200,140 1,200,140	740 740	10,305 111,508	175,362 2,033,182	2,705,054 49,459,699			
10ttl 1 0 tt 01	01,000	1,200,140	740	111,500	2,033,102	T2, T22, U2			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

			Source of	Electricity		
State / Utility / Fiscal Year Ending Date	Investor-C	wned	Fed	eral	State and Government	
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Nebraska						
North Platte City of/Jul 31 Firm Power	. —	_	_	_	285,004	10,563,831
Total Power		_	_	_	285,004	10,563,831
New Jersey						
Madison Borough/Dec 31 Nonfirm Power	. 126,672	6,892,689	_	_	_	_
Total Power		6,892,689	_	_	_	_
Vineland City of/Jun 30						
Firm Power Nonfirm Power		_	_	_	17,618	436,585
Total Power				_	17,618	436,585
New Mexico						
Farmington City of/Jun 30 Firm Power	. 10,568	731,737	85,709	1,758,844		
Nonfirm Power		337,110	21,261	325,490	_	_
Total Power		1,068,847	106,970	2,084,334	_	_
Gallup City of/Jun 30	150 151	0.005.045	10.020	210.405		
Firm Power		8,337,267 8,337,267	18,838 18,838	318,485 318,485	_	_
Los Alamos County/Jun 30	. 1/2,1/4	0,337,207	10,030	310,403		
Firm Power		_	104,095	2,443,047	_	_
Nonfirm Power Total Power		596,617 596,617	18,000 122,095	243,000 2,686,047	1,402 1,402	19,511 19,511
New York	. 54,167	390,017	122,093	2,080,047	1,402	19,511
Fairport Village of/May 31						
Firm Power		_	_	_	397,573	7,340,587
Total Power Freeport Village of Inc/Feb 28	. —	_	_	_	397,573	7,340,587
Nonfirm Power	. 4,743	366,337	_	_	234,657	5,358,340
Total Power	. 4,743	366,337	_	_	234,657	5,358,340
Jamestown City of/Dec 31 Firm Power					448,158	6,137,250
Total Power		_		_	448,158	6,137,250
Lake Placid Village Inc/Jul 31						
Nonfirm Power		_	_	_	142,492	2,357,092
Total Power	. —	_	_	_	142,492	2,357,092
Firm Power	. 27,492	862,037	_	_	142,659	1,300,452
Nonfirm Power		143,562	_	_		
Total Power Plattsburgh City of/Dec 31	. 27,492	1,005,599	_	_	142,659	1,300,452
Firm Power	. –	_	_	_	542,572	5,691,433
Total Power	. —	_	_	_	542,572	5,691,433
Rockville Centre Village of/May 31 Nonfirm Power	. 1,215	53,410			329,330	8,060,580
Total Power		53,410		_	329,330	8,060,580
Solvay Village of/May 31						
Firm Power		_	_	_	254,878 254,878	3,246,600 3,246,600
North Carolina	. —	_	_	_	234,676	3,240,000
Albemarle City of/Jun 30						
Firm Power		_	_	_	_	_
Total Power Concord City of/Jun 30	. —	_	_	_	_	_
Nonfirm Power	. 462,531	18,800,942	5,416	302,888	_	_
Total Power	. 462,531	18,800,942	5,416	302,888	_	_
Elizabeth City City of/Jun 30 Firm Power			1,566	107,288		
Total Power			1,566	107,288		
Fayetteville Public Works Comm/Jun 30						
Firm Power Nonfirm Power		56,648,557 18,917,391	4,103	217,459	_	_
Total Power		75,565,948	4,103	217,459	_	_
Forest City Town of/Jun 30	, ,	, ,				
Firm Power		6,251,653	1,803	103,347	_	_
Total Power	. 148,797	6,251,653	1,803	103,347	_	_
Firm Power		_	10,494	590,759	_	_
Total Power	. —	_	10,494	590,759	_	_

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Cooper	ative	Other ¹		Total			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Nebraska								
North Platte City of/Jul 31 Firm Power	_	_	_	_	285,004	10,563,831		
Total Power		_	_	_	285,004	10,563,831		
New Jersey								
Madison Borough/Dec 31					126 672	6 902 690		
Nonfirm Power		_	_	_	126,672 126,672	6,892,689 6,892,689		
Vineland City of/Jun 30					120,072	0,072,007		
Firm Power		_	100,863	14,212,708	100,863	14,212,708		
Nonfirm Power		_			17,618	436,585		
Total Power New Mexico	_	_	100,863	14,212,708	118,481	14,649,293		
Farmington City of/Jun 30								
Firm Power		_	_	_	96,277	2,490,581		
Nonfirm Power		_	_	_	43,851	662,600		
Total Power	_	_	_	_	140,128	3,153,181		
Firm Power	_	_	_	_	191,012	8,655,752		
Total Power		_	_	_	191,012	8,655,752		
Los Alamos County/Jun 30								
Firm Power			61,605	2,117,209	165,700	4,560,256		
Nonfirm Power		4,737 4,737	1,917 63,522	24,887 2,142,096	55,807 221,507	888,752 5,449,008		
New York	301	7,737	03,322	2,142,070	221,307	3,442,000		
Fairport Village of/May 31								
Firm Power		_	_	_	397,573	7,340,587		
Total Power Freeport Village of Inc/Feb 28	_	_	_	_	397,573	7,340,587		
Nonfirm Power	_	_	_	_	239,400	5,724,677		
Total Power		_	_	_	239,400	5,724,677		
Jamestown City of/Dec 31								
Firm Power		_	_	_	448,158	6,137,250		
Total PowerLake Placid Village Inc/Jul 31	_	_	_	_	448,158	6,137,250		
Nonfirm Power	_	_	_	_	142,492	2,357,092		
Total Power	_	_	_	_	142,492	2,357,092		
Massena Town of/Dec 31					170 151	2 162 496		
Firm Power Nonfirm Power		_	_	_	170,151	2,162,489 143,562		
Total Power		_	_	_	170,151	2,306,051		
Plattsburgh City of/Dec 31								
Firm Power		_	_	_	542,572	5,691,433		
Total Power	_	_	_	_	542,572	5,691,433		
Nonfirm Power	_	_	_	_	330,545	8,113,990		
Total Power	_	_	_	_	330,545	8,113,990		
Solvay Village of/May 31					254.070	2.246.600		
Firm Power Total Power			_	_	254,878 254,878	3,246,600 3,246,600		
North Carolina					254,676	3,210,000		
Albemarle City of/Jun 30								
Firm Power		_	284,535	17,129,494	284,535	17,129,494		
Total Power Concord City of/Jun 30	_	_	284,535	17,129,494	284,535	17,129,494		
Nonfirm Power	_	_	_	_	467,947	19,103,830		
Total Power		_	_	_	467,947	19,103,830		
Elizabeth City City of/Jun 30				40 44 - 400				
Firm Power Total Power		_	269,015 269,015	19,617,288	270,581 270,581	19,724,576 19,724,576		
Favetteville Public Works Comm/Jun 30	_	_	209,015	19,617,288	270,361	17,724,370		
Firm Power	_	_	_	_	1,342,756	56,866,016		
Nonfirm Power	_	_	_	_	618,404	18,917,391		
Total Power	_	_	_	_	1,961,160	75,783,407		
Forest City Town of/Jun 30 Firm Power	_	_	_	_	150,600	6,355,000		
Total Power		_	_	_	150,600	6,355,000		
Gastonia City of/Jun 30					,			
Firm Power	_	_	649,409	35,945,283	659,903	36,536,042		
Total Power	_	_	649,409	35,945,283	659,903	36,536,042		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Investor-C	Owned	Feder	ral	State and Other Government			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
North Carolina								
Greenville Utilities Comm/Jun 30 Firm Power	_	_	9,000	329,241	_	_		
Total Power			9,000	329,241	_	_		
High Point Town of/Jun 30			,,000	327,211				
Firm Power	_	_	_	_	_	_		
Total Power	_	_	_	_	_	_		
Kinston City of/Jun 30				50.250				
Firm Power		_	1,113 1,113	60,358 60,358	_	_		
Laurinburg City of	_	_	1,113	00,338	_	_		
Firm Power	_	_	309	17,084	_	_		
Total Power		_	309	17,084	_	_		
Lexington City of/Jun 30								
Firm Power		_	_	_	_	_		
Total Power	_	_	_	_	_	_		
Lumberton City of/Jun 30 Firm Power	_	_	676	35,718	_	_		
Total Power		_	676	35,718	_	_		
Monroe City of/Jun 30				,				
Firm Power		_	_	_	_	_		
Total Power	_	_	_	_	_	_		
Morganton City of/Jun 30			22.977	526 995				
Firm Power		_	22,877 22,877	526,885 526,885	_	_		
New Bern City of/Jun 30	_		22,677	320,883	_	_		
Firm Power	_	_	910	48,049	_	_		
Total Power		_	910	48,049	_	_		
North Carolina Eastern M P A/Dec 31								
Firm Power		99,880,000	_	_	199,447	15,148,000		
Total Power North Carolina Mun Power Agny/Dec 31	2,059,797	99,880,000	_	_	199,447	15,148,000		
Firm Power	820,959	59,745,000	_	_	_	_		
Total Power		59,745,000	_	_	_	_		
Rocky Mount City of/Jun 30	,	,,						
Firm Power		_	_	101,286	_	_		
Total Power	_	_	_	101,286	_	_		
Shelby City of/Jun 30 Firm Power			3,872	217,936				
Total Power			3,872	217,936	_			
Statesville City of/Jun 30			3,072	217,550				
Firm Power	_	_	6,378	359,042	_	_		
Total Power	_	_	6,378	359,042	_	_		
Tarboro Town of/Jun 30								
Firm Power Total Power		_	_	_	_	_		
Washington City of/Dec 31	_		_		_	_		
Firm Power	_	_	2,042	107,871	_	_		
Total Power	_	_	2,042	107,871	_	_		
Wilson City of/Jun 30								
Firm Power		_	_	_	_	_		
Total Power Ohio	_	_	_	_	_	_		
American Mun Power-Ohio Inc/Dec 31								
Firm Power	3,303,224	105,489,519	_	_	297,263	3,719,491		
Nonfirm Power		_	_	_	_	_		
Total Power	3,303,224	105,489,519	_	_	297,263	3,719,491		
Bowling Green City of/Dec 31								
Firm Power Total Power		_	_	_	_	_		
Bryan City of/Dec 31								
Nonfirm Power		12,519,916	_	_	_	_		
Total Power	395,428	12,519,916	_	_	_	_		
Celina City of/Dec 31	1.00	£ 205 5: :						
Firm Power		5,285,716 5,285,716	_	_	_	_		
Cleveland City of/Dec 31	101,021	5,285,716	_	_	_	_		
Nonfirm Power	344,132	12,271,579	_	_	210,426	3,995,240		
Total Power		12,271,579	_	_	210,426	3,995,240		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Coope	erative	Other	1	Tot	al		
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
North Carolina Granyilla Utilities Comm/lun 20								
Greenville Utilities Comm/Jun 30 Firm Power	_	_	1,320,000	91,235,902	1,329,000	91,565,143		
Total Power		_	1,320,000	91,235,902	1,329,000	91,565,143		
High Point Town of/Jun 30								
Firm Power		_	914,222	53,801,438	914,222	53,801,438		
Total Power	_	_	914,222	53,801,438	914,222	53,801,438		
Firm Power	_	_	461,542	28,604,920	462,655	28,665,278		
Total Power		_	461,542	28,604,920	462,655	28,665,278		
Laurinburg City of								
Firm Power		_	123,913	8,717,221	124,222	8,734,305		
Total Power Lexington City of/Jun 30	_	_	123,913	8,717,221	124,222	8,734,305		
Firm Power	_	_	482,171	29,123,157	482,171	29,123,157		
Total Power		_	482,171	29,123,157	482,171	29,123,157		
Lumberton City of/Jun 30								
Firm Power		_	279,244	19,706,057	279,920	19,741,775		
Total Power	_	_	279,244	19,706,057	279,920	19,741,775		
Firm Power	_	_	479,054	22,954,776	479,054	22,954,776		
Total Power		_	479,054	22,954,776	479,054	22,954,776		
Morganton City of/Jun 30								
Firm Power		_	290,939	15,729,383	313,816	16,256,268		
Total Power	_	_	290,939	15,729,383	313,816	16,256,268		
New Bern City of/Jun 30 Firm Power	_	_	410.269	29,668,580	411,179	29,716,629		
Total Power		_	410,269	29,668,580	411,179	29,716,629		
North Carolina Eastern M P A/Dec 31								
Firm Power		_	_	_	2,259,244	115,028,000		
Total Power	_	_	_	_	2,259,244	115,028,000		
North Carolina Mun Power Agny/Dec 31 Firm Power	_	_	_	_	820,959	59,745,000		
Total Power		_	_	_	820,959	59,745,000		
Rocky Mount City of/Jun 30								
Firm Power		_	828,273	54,685,279	828,273	54,786,565		
Total Power	_	_	828,273	54,685,279	828,273	54,786,565		
Firm Power	_	_	181,149	10,188,260	185,021	10,406,196		
Total Power		_	181,149	10,188,260	185,021	10,406,196		
Statesville City of/Jun 30								
Firm Power		_	401,976	22,380,190	408,354	22,739,232		
Total Power	_	_	401,976	22,380,190	408,354	22,739,232		
Firm Power	_	_	258,566	18,257,473	258,566	18,257,473		
Total Power	_	_	258,566	18,257,473	258,566	18,257,473		
Washington City of/Dec 31								
Firm Power		_	264,818	17,413,127 17,413,127	266,860	17,520,998		
Total Power	_	_	264,818	17,415,127	266,860	17,520,998		
Firm Power	_	_	1,141,298	73,918,676	1,141,298	73,918,676		
Total Power	_	_	1,141,298	73,918,676	1,141,298	73,918,676		
Ohio								
American Mun Power-Ohio Inc/Dec 31 Firm Power			850,259	20,888,900	4,450,746	130,097,910		
Nonfirm Power			10,979	181,719	10,979	181,719		
Total Power		_	861,238	21,070,619	4,461,725	130,279,629		
Bowling Green City of/Dec 31								
Firm Power		_	340,425	15,131,399	340,425	15,131,399		
Total Power Bryan City of/Dec 31	_	_	340,425	15,131,399	340,425	15,131,399		
Nonfirm Power	_	_	80,708	1.814.456	476,136	14,334,372		
Total Power		_	80,708	1,814,456	476,136	14,334,372		
Celina City of/Dec 31			•					
Firm Power		_	8,399	171,248	170,220	5,456,964		
Total Power	_	_	8,399	171,248	170,220	5,456,964		
Nonfirm Power	255,238	7,124,274	673,679	21,212,229	1,483,475	44,603,322		
Total Power		7,124,274		21,212,229	1,483,475	44,603,322		
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Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Investor-C	Owned	Fede	ral	State and Other Government			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Ohio Columbus City of/Dec 31								
Firm Power		_	_	_	_	_		
Nonfirm Power		33,194	_	_	_	_		
Total Power	88	33,194	_	_	_	_		
Cuyahoga Falls City of/Dec 31								
Firm Power Total Power		_	_	_	_	_		
Dover City of/Dec 31								
Firm Power	53,713	1,645,941	_	_	12,516	239,429		
Nonfirm Power		_	_	_	_	_		
Total Power	53,713	1,645,941	_	_	12,516	239,429		
Hamilton City of/Dec 31	72.070	2 279 062			27.974	750 530		
Firm Power Nonfirm Power		2,278,963 17,120	_	_	37,874	750,528		
Total Power		2,296,083	_	_	37,874	750,528		
Napoleon City of/Dec 31	7-1,030	2,270,003			37,074	750,520		
Firm Power	—	_	_	_	_	_		
Total Power	—	_	_	_	_	_		
Niles City of/Dec 31								
Nonfirm Power		_	_	_	_	_		
Total Power		_	_	_	_	_		
Orrville City of/Dec 31 Firm Power	_	_	_	_	_	_		
Total Power		_	_	_	_	_		
Painesville City of/Dec 31								
Firm Power		_	_	_	_	_		
Total Power	—	_	_	_	_	_		
Piqua City of/Dec 31						****		
Firm Power		_	_	_	16,344	381,504		
Total Power St Marys City of/Dec 31	—	_	_	_	16,344	381,504		
Firm Power	_	_	_	_	_	_		
Nonfirm Power		_	_	_	_	_		
Total Power		_	_	_	_	_		
Wadsworth City of/Dec 31								
Firm Power		_	_	_	_	_		
Total Power	—	_	_	_	_	_		
Wapakoneta City of/Dec 31 Nonfirm Power	168,350	4.949.843	_	_	_	_		
Total Power	,	4,949,843	_	_	_	_		
Westerville City of/Dec 31	100,000	.,, .,,						
Firm Power	—	_	_	_	11,217	235,288		
Total Power		_	_	_	11,217	235,288		
Oklahoma								
Altus City of/Jun 30 Firm Power					179,278	7,490,344		
Total Power			_	_	179,278	7,490,344		
Claremore City of/Jun 30	•••••				177,270	7,170,511		
Firm Power	—	_	_	_	240,420	8,145,417		
Total Power	—	_	_	_	240,420	8,145,417		
Duncan City of/Jun 30								
Firm Power		_	59,019	1,431,701	87,802	3,842,220		
Total Power Edmond City of/Jun 30	—	_	59,019	1,431,701	87,802	3,842,220		
Firm Power	_	_	_	_	562,002	23,682,507		
Total Power			_	_	562,002	23,682,507		
Miami City of/Jun 30					,	,,_,		
Firm Power	—	_	_	_	156,561	5,338,115		
Total Power	—	_	_	_	156,561	5,338,115		
Ponca City City of/Jun 30					226.440	12,000,150		
Firm Power Total Power		_	_	_	336,448 336,448	13,909,159 13,909,159		
Stillwater Utilities Authority/Jun 30	—	_	_	_	330,448	13,707,139		
Firm Power		_	_	_	398,180	12,458,880		
Other Power		_	_	_	533,000			
Total Power	–	_	_	_	931,180	12,458,880		
Oregon								
Ashland City of/Jun 30	152.050	4 500 007						
Firm Power Total Power		4,523,887 4 523 887	_	_	_	_		
Total I UWCI	153,058	4,523,887	_	_	_	_		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Coope	rative	Othe	r1	Tot	al			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Ohio									
Columbus City of/Dec 31 Firm Power	_	_	736,394	19,818,437	736,394	19,818,437			
Nonfirm Power		_	_	_	88	33,194			
Total Power	—	_	736,394	19,818,437	736,482	19,851,631			
Cuyahoga Falls City of/Dec 31			259.004	14 651 700	250.004	14 651 702			
Firm Power Total Power			358,004 358,004	14,651,782 14,651,782	358,004 358,004	14,651,782 14,651,782			
Dover City of/Dec 31			330,004	14,031,702	330,004	14,031,702			
Firm Power		_	68,071	2,661,981	134,300	4,547,351			
Nonfirm Power		_	1,008	21,662	1,008	21,662			
Total Power	—	_	69,079	2,683,643	135,308	4,569,013			
Firm Power	154,903	3,161,525	_	1,426,820	265,855	7,617,836			
Nonfirm Power		_	13,800	212,342	14,760	229,462			
Total Power	154,903	3,161,525	13,800	1,639,162	280,615	7,847,298			
Napoleon City of/Dec 31 Firm Power	_	_	159,069	7,242,951	159,069	7,242,951			
Total Power		_	159,069	7,242,951	159,069	7,242,951			
Niles City of/Dec 31			10,000	.,2.2,551	200,000	,,2.2,,551			
Nonfirm Power		_	291,867	12,140,000	291,867	12,140,000			
Total Power	—	_	291,867	12,140,000	291,867	12,140,000			
Orrville City of/Dec 31 Firm Power	_	_	33,058	1,278,698	33,058	1,278,698			
Total Power			33,058	1,278,698	33,058	1,278,698			
Painesville City of/Dec 31			,	, ,		, ,			
Firm Power		_	69,541	1,954,311	69,541	1,954,311			
Total Power Piqua City of/Dec 31	—	_	69,541	1,954,311	69,541	1,954,311			
Firm Power	_	_	245,418	6,056,066	261,762	6,437,570			
Total Power		_	245,418	6,056,066	261,762	6,437,570			
St Marys City of/Dec 31									
Firm Power		_	146,170	3,667,429	146,170	3,667,429			
Nonfirm Power Total Power		_	146,170	2,493 3,669,922	146,170	2,493 3,669,922			
Wadsworth City of/Dec 31			140,170	3,009,922	140,170	3,009,922			
Firm Power		_	247,061	9,653,243	247,061	9,653,243			
Total Power	—	_	247,061	9,653,243	247,061	9,653,243			
Wapakoneta City of/Dec 31 Nonfirm Power			6,413	145,286	174,763	5,095,129			
Total Power			6,413	145,286	174,763	5,095,129			
Westerville City of/Dec 31			-,	-,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,,			
Firm Power		_	381,450	11,531,722	392,667	11,767,010			
Total Power Oklahoma	—	_	381,450	11,531,722	392,667	11,767,010			
Altus City of/Jun 30									
Firm Power	—	_	_	_	179,278	7,490,344			
Total Power	—	_	_	_	179,278	7,490,344			
Claremore City of/Jun 30 Firm Power					240,420	8,145,417			
Total Power		_	_	_	240,420	8,145,417			
Duncan City of/Jun 30					270,720	3,173,717			
Firm Power		_	_	_	146,821	5,273,921			
Total Power	—	_	_	_	146,821	5,273,921			
Edmond City of/Jun 30 Firm Power					562,002	23,682,507			
Total Power					562,002	23,682,507			
Miami City of/Jun 30					,,,,,	-,,			
Firm Power		_	_	_	156,561	5,338,115			
Total Power Ponca City City of/Jun 30	—	_	_	_	156,561	5,338,115			
Firm Power		_	_	_	336,448	13,909,159			
Total Power		_	_	_	336,448	13,909,159			
Stillwater Utilities Authority/Jun 30									
Firm Power		_	_	_	398,180	12,458,880			
Other Power		_	_	_	533,000 931,180	12,458,880			
Oregon		_	_	_	751,100	12,730,000			
Ashland City of/Jun 30									
Firm Power		_	_	_	153,058	4,523,887			
Total Power	—	_	_	_	153,058	4,523,887			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-C	Owned	Fede	eral	State and Governm				
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Oregon									
Eugene City of/Dec 31									
Firm Power		10,986,969	672,926	20,236,746					
Nonfirm Power		3,121,478	_	_	242,888	1,326,536			
Other Power									
Total Power	654,976	14,108,447	672,926	20,236,746	242,888	1,326,536			
Forest Grove City of/Jun 30			192 762	4 671 240					
Firm Power		_	182,763	4,671,340	41,100	1,527,871			
Total Power		_	182,763	4,671,340	41,100	1,527,871			
McMinnville City of/Jun 30	. –	_	162,703	4,071,340	41,100	1,327,671			
Firm Power			635,880	18,905,360	41.367	306,332			
Total Power			635,880	18,905,360	41,367	306,332			
Springfield City of/Dec 31	—		033,000	10,905,500	41,507	300,332			
Firm Power	258,850	5,728,114	349,117	11,305,521	_	_			
Nonfirm Power		2,127,436	65,639	613,460	15,879	133,962			
Total Power		7,855,550	414,756	11,918,981	15,879	133,962			
Pennsylvania	420,044	1,055,550	+1+,730	11,910,901	13,079	133,902			
Chambersburg Borough of/Dec 31									
Firm Power		_	_	_	_	_			
Total Power									
Ephrata Borough of/Dec 31									
Firm Power	128,774	4,792,387	_	_	_	_			
Nonfirm Power		-							
Total Power		4,792,387	_	_	_	_			
Lansdale Borough of/Dec 31	120,774	7,772,307							
Firm Power	126.673	4,565,824	_	_	_	_			
Total Power	. ,	4,565,824							
South Carolina	120,073	4,505,024							
Camden City of/Jun 30									
Firm Power	175,311	8,558,315	_	_	_	_			
Total Power	,	8,558,315							
Easley Combined Utility System/Mar 31	173,311	0,550,515							
Firm Power	_	_	19,511	470,709	_	_			
Total Power			19,511	470,709					
Gaffney City of/Mar 31	—		17,511	470,707					
Firm Power	_	_	15,821	381,677	_	_			
Total Power		_	15,821	381,677	_	_			
Greenwood Commissioners-Pub Wk/Dec			13,021	301,077					
31									
Firm Power		_	23,277	606,000	_	_			
Nonfirm Power		10,518,000							
Total Power	,	10,518,000	23,277	606,000	_	_			
Greer Comm of Public Works/Dec 31	230,713	10,510,000	23,211	000,000					
Firm Power	_	_	19.087	496,576	_	_			
Total Power		_	19,087	496,576	_	_			
Newberry City of/Jun 30			17,007	470,570					
Firm Power	_	_	_	_	_	_			
Nonfirm Power		_	2,093	121,198	_	_			
Total Power			2,093	121,198					
Orangeburg City of/Sep 30	•		2,075	121,170					
Firm Power	784,639	29,767,701	25,631	813,135	_	_			
Total Power		29,767,701	25,631	813,135					
Piedmont Municipal Power Agny/Dec 31	701,039	25,707,701	25,051	013,133					
Firm Power	1,033,921	23,108,000	_	_	_	_			
Nonfirm Power		23,100,000							
Total Power		23,108,000	_	_	_	_			
Rock Hill City of/Dec 31	1,033,521	23,100,000							
Firm Power	_	_	38,610	1,004,520	_	_			
Total Power		_	38,610	1,004,520	_	_			
Seneca City of/Jun 30	. –	_	30,010	1,004,520	_	_			
Firm Power	144,485	6,527,242	1,766	99,432	_	_			
Nonfirm Power					_	_			
Total Power		6,527,242	1,766	99,432	_	_			
South Dakota	111,103	0,327,272	1,700)),-13L					
Brookings City of/Dec 31									
Firm Power	_	_	104,596	1,498,145	98,864	3,916,489			
Total Power			104,596	1,498,145	98,864	3,916,489			
1 0 11 0 11 0 1 1 1 1 1 1 1 1 1 1 1 1 1	. –	_	107,590	1,770,143	70,004	3,710,407			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Cooper	rative	Othe	r ¹	Tota	1			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
Oregon Eugene City of/Dec 31									
Firm Power	_	_	77,599	1,581,401	1,230,688	32,805,116			
Nonfirm Power		_	331,949	3,373,382	749,650	7,821,396			
Other Power		_	1,400	_	1,400	_			
Total Power	_	_	410,948	4,954,783	1,981,738	40,626,512			
Forest Grove City of/Jun 30					102.762	4 671 246			
Firm Power		_	6,713		182,763 47,813	4,671,340 2,315,243			
Total Power			6,713	787,372	230,576	6,986,583			
McMinnville City of/Jun 30			0,715	707,572	250,570	0,,,,,,,,			
Firm Power	_	_	8,560	25,187	685,807	19,236,879			
Total Power	_	_	8,560	25,187	685,807	19,236,879			
Springfield City of/Dec 31			10.440	25215	c10.415	17.000.000			
Firm Power		_	10,448	36,315	618,415	17,069,950			
Nonfirm Power Total Power		_	27,827 38,275	312,294 348,609	276,539 894,954	3,187,152 20,257,102			
Pennsylvania	_	_	30,413	340,009	074,734	20,237,102			
Chambersburg Borough of/Dec 31									
Firm Power	_	_	260,092	10,246,507	260,092	10,246,507			
Total Power	_	_	260,092	10,246,507	260,092	10,246,507			
Ephrata Borough of/Dec 31									
Firm Power			_	_	128,774	4,792,387			
Nonfirm Power		39,671	_	_	6,585	39,671			
Total Power Lansdale Borough of/Dec 31	6,585	39,671	_	_	135,359	4,832,058			
Firm Power	_	_	_	_	126,673	4,565,824			
Total Power			_	_	126,673	4,565,824			
South Carolina					,	1,0 00,00			
Camden City of/Jun 30									
Firm Power	_	_	_	_	175,311	8,558,315			
Total Power	_	_	_	_	175,311	8,558,315			
Easley Combined Utility System/Mar 31			215 202	11 100 474	224.004	11 670 100			
Firm Power		_	215,383	11,199,474	234,894	11,670,183			
Total Power	_	_	215,383	11,199,474	234,894	11,670,183			
Firm Power	_	_	179,797	8,259,964	195,618	8,641,641			
Total Power		_	179,797	8,259,964	195,618	8,641,641			
Greenwood Commissioners-Pub Wk/Dec									
31									
Firm Power		_	_	_	23,277	606,000			
Nonfirm Power		_	_	_	236,715	10,518,000			
Total Power Greer Comm of Public Works/Dec 31	_	_	_	_	259,992	11,124,000			
Firm Power	_	_	170,397	9,497,721	189,484	9,994,297			
Total Power		_	170,397	9,497,721	189,484	9,994,297			
Newberry City of/Jun 30			,	.,,.	,	.,.,,.,			
Firm Power		_	149,537	8,283,124	149,537	8,283,124			
Nonfirm Power		_		-	2,093	121,198			
Total Power	_	_	149,537	8,283,124	151,630	8,404,322			
Orangeburg City of/Sep 30					910 270	20 500 027			
Firm Power Total Power	_	_	_	_	810,270 810,270	30,580,836 30,580,836			
Piedmont Municipal Power Agny/Dec 31	_	_	_	_	810,270	30,360,630			
Firm Power	_	_	144,304	8,521,000	1,178,225	31,629,000			
Nonfirm Power		21,000	_	_	738	21,000			
Total Power		21,000	144,304	8,521,000	1,178,963	31,650,000			
Rock Hill City of/Dec 31									
Firm Power		_	517,607	29,426,400	556,217	30,430,920			
Total Power	_	_	517,607	29,426,400	556,217	30,430,920			
Seneca City of/Jun 30 Firm Power					146,251	6 626 674			
Nonfirm Power		_	3,594	119,433	3,594	6,626,674 119,433			
Total Power		_	3,594	119,433	149,845	6,746,107			
South Dakota			5,574	117,133	17,013	0,, 10,107			
Brookings City of/Dec 31									
Firm Power		_	_	_	203,460	5,414,634			
Total Power					203,460	5,414,634			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity								
State / Utility / Fiscal Year Ending Date	Investor	-Owned	Fede	eral	State and Govern				
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)			
South Dakota									
Pierre City of/Dec 31 Firm Power	_	_	111,463	1,753,456	65,460	2,552,742			
Total Power		_	111,463	1,753,456	65,460	2,552,742			
Watertown Municipal Utilities/Dec 31									
Firm Power Total Power		_	127,068 127,068	1,842,855 1,842,855	134,471 134,471	5,191,709 5,191,709			
Tennessee	_	_	127,000	1,042,033	134,471	3,191,709			
Alcoa Utilities/Jun 30									
Firm Power		_	510,266	22,454,177	_	_			
Total Power Athens Utility Board/Jun 30	_	_	510,266	22,454,177	_	_			
Firm Power	_	_	591,868	22,861,926	_	_			
Total Power	_	_	591,868	22,861,926	_	_			
Benton County/Jun 30 Firm Power			239,459	10,091,363					
Total Power		_	239,459	10,091,363	_	_			
Bolivar City of/Jun 30				, ,					
Firm Power		_	244,041	11,035,381	_	_			
Total Power Bristol City of/Jun 30	_	_	244,041	11,035,381	_	_			
Firm Power	_	_	914,989	38,475,266	_	_			
Total Power	_	_	914,989	38,475,266	_	_			
Carroll County/Jun 30 Firm Power			421.687	19 512 620					
Total Power		_	421,687	18,512,630 18,512,630	_	_			
Chattanooga City of/Jun 30			,	,					
Firm Power		_	6,006,121	251,683,672	_	_			
Total Power	_	_	6,006,121	251,683,672	_	_			
Firm Power	_	_	1,019,076	44,819,777	_	_			
Nonfirm Power		_		_	_	_			
Total Power	_	_	1,019,076	44,819,777	_	_			
Firm Power	_	_	993,123	41,910,937	_	_			
Total Power		_	993,123	41,910,937	_	_			
Clinton City of/Jun 30			721 000	21 200 025					
Firm Power Total Power		_	721,889 721,889	31,390,935 31,390,935	_	_			
Columbia City of/Jun 30			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,					
Firm Power		_	551,220	24,552,997	_	_			
Total Power Cookeville City of/Jun 30	_	_	551,220	24,552,997	_	_			
Firm Power	_	_	520,989	23,485,066	_	_			
Total Power	_	_	520,989	23,485,066	_	_			
Covington City of/Jun 30 Firm Power			239,006	10,316,384					
Total Power			239,006	10,316,384					
Dickson City of/Jun 30									
Firm Power		_	699,723	30,486,863	_	_			
Total Power	_	_	699,723	30,486,863	_	_			
Firm Power	_	_	658,158	25,076,321	_	_			
Total Power	_	_	658,158	25,076,321	_	_			
Elizabethton City of/Jun 30 Firm Power	_	_	546,840	24,152,107	_	_			
Total Power		_	546,840	24,152,107	_	_			
Erwin Town of/Jun 30									
Firm Power		_	235,047 235,047	9,750,487	_	_			
Total PowerFayetteville City of/Jun 30	_	_	235,047	9,750,487	_	_			
Firm Power		_	399,606	17,823,568	_	_			
Total Power	_	_	399,606	17,823,568	_	_			
Gallatin City of/Jun 30 Firm Power			528,460	21,402,207	_	_			
Total Power		_	528,460	21,402,207	_	_			
Greeneville City of/Jun 30									
Firm Power		_	1,034,527	42,291,799	_	_			
Total Power	_	_	1,034,527	42,291,799	_	_			

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Cooperative		Othe	r1	Tota	I		
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
South Dakota								
Pierre City of/Dec 31 Firm Power	_	_	_	_	176,923	4,306,198		
Total Power		_	_	_	176,923	4,306,198		
Watertown Municipal Utilities/Dec 31								
Firm Power Total Power		_	_	_	261,539 261,539	7,034,564 7,034,564		
Tennessee	_	_	_	_	201,339	7,034,304		
Alcoa Utilities/Jun 30								
Firm Power		_	_	_	510,266	22,454,177		
Total Power	_	_	_	_	510,266	22,454,17		
Firm Power	_	_	_	_	591,868	22,861,926		
Total Power		_	_	_	591,868	22,861,920		
Benton County/Jun 30								
Firm Power		_	_	_	239,459	10,091,363		
Total Power Bolivar City of/Jun 30	_	_	_	_	239,459	10,091,363		
Firm Power	_	_	_	_	244,041	11,035,381		
Total Power		_	_	_	244,041	11,035,381		
Bristol City of/Jun 30					014 000	29 475 26		
Firm Power Total Power		_	_	_	914,989 914,989	38,475,266 38,475,266		
Carroll County/Jun 30					714,707	30,173,200		
Firm Power		_	_	_	421,687	18,512,630		
Total Power	_	_	_	_	421,687	18,512,630		
Chattanooga City of/Jun 30 Firm Power	_	_	_	_	6,006,121	251,683,672		
Total Power		_		_	6,006,121	251,683,672		
Clarksville City of/Jun 30					, ,	, ,		
Firm Power		_	_		1,019,076	44,819,777		
Nonfirm Power		_	_	55,170 55,170		55,170		
Cleveland City of/Jun 30	_	_	_	33,170	1,019,070	44,874,947		
Firm Power	_	_	_	_	993,123	41,910,937		
Total Power	_	_	_	_	993,123	41,910,937		
Clinton City of/Jun 30 Firm Power					721,889	31,390,935		
Total Power		_	_		721,889	31,390,935		
Columbia City of/Jun 30					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- ,,		
Firm Power		_	_	_	551,220	24,552,997		
Total Power	_	_	_	_	551,220	24,552,997		
Cookeville City of/Jun 30 Firm Power	_	_	_	_	520,989	23,485,066		
Total Power		_	_	_	520,989	23,485,066		
Covington City of/Jun 30								
Firm Power Total Power		_	_	_	239,006	10,316,384 10,316,384		
Dickson City of/Jun 30	_	_	_	_	239,006	10,310,382		
Firm Power	_	_	_	_	699,723	30,486,863		
Total Power	_	_	_	_	699,723	30,486,863		
Dyersburg City of/Jun 30 Firm Power					650 150	25 076 22		
Total Power		_	_	_	658,158 658,158	25,076,321 25,076,321		
Elizabethton City of/Jun 30					050,150	23,070,32		
Firm Power		_	_	_	546,840	24,152,107		
Total Power Erwin Town of/Jun 30	_	_	_	_	546,840	24,152,107		
Firm Power	_	_	_	_	235,047	9,750,487		
Total Power		_	_	_	235,047	9,750,48		
Fayetteville City of/Jun 30								
Firm Power		_	_	_	399,606	17,823,568		
Total Power	_	_	_	_	399,606	17,823,568		
Firm Power	_	_	_	_	528,460	21,402,207		
Total Power		_	_	_	528,460	21,402,207		
Greeneville City of/Jun 30					1 004 50=	40 201 500		
Firm Power Total Power		_	_	_	1,034,527 1,034,527	42,291,799 42,291,799		
10al 10wci	_	_	_	_	1,034,347	74,471,795		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Investor	-Owned	Fede	Federal		State and Other Government		
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Fennessee Harriman City of/Jun 30								
Firm Power	_	_	287,725	11,572,957	_	_		
Total Power		_	287,725	11,572,957	_	_		
Humboldt City of/Jun 30								
Firm Power		_	249,241	10,772,123	_	_		
Total Power	_	_	249,241	10,772,123	_	_		
Firm Power	_	_	1,386,580	57,133,124	_	_		
Total Power	_	_	1,386,580	57,133,124	_	_		
Johnson City City of/Jun 30			1.701.100	5 0 50 5 0 2 0				
Firm Power		_	1,791,100 1,791,100	78,695,028 78,695,028	_	_		
Knoxville Utilities Board/Jun 30	_	_	1,791,100	78,093,028	_	_		
Firm Power	_	_	5,430,553	230,351,901	_	_		
Nonfirm Power		_	_		_	_		
Total Power	_	_	5,430,553	230,351,901	_	_		
Lawrenceburg City of/Jun 30 Firm Power	_	_	523,421	21,714,305	_	_		
Total Power		_	523,421	21,714,305	_	_		
LaFollette City of/Jun 30			,					
Firm Power		_	403,864	18,159,630	_	_		
Total Power Lebanon City of/Jun 30	_	_	403,864	18,159,630	_	_		
Firm Power	_	_	397,579	17,582,564	_	_		
Total Power		_	397,579	17,582,564	_	_		
Lenoir City City of/Jun 30								
Firm Power		_	1,219,208 1,219,208	54,246,091	_	_		
Lewisburg City of/Jun 30	_	_	1,219,208	54,246,091	_	_		
Firm Power	_	_	303,914	13,034,186	_	_		
Total Power		_	303,914	13,034,186	_	_		
Lexington City of/Jun 30								
Firm Power		_	437,822	19,354,439	_	_		
Total Power Loudon Utilities Board/Jun 30	_	_	437,822	19,354,439	_	_		
Firm Power	_	_	328,023	13,847,633	_	_		
Total Power	_	_	328,023	13,847,633	_	_		
Maryville Utilities/Jun 30			617.022	25 652 692				
Firm Power			617,923 617,923	25,653,682 25,653,682				
McMinnville Electric System/Jun 30			017,723	23,033,002				
Firm Power		_	248,364	10,874,868	_	_		
Total Power	_	_	248,364	10,874,868	_	_		
Memphis City of/Jun 30 Firm Power			13,193,562	574,567,539				
Total Power			13,193,562	574,567,539				
Milan City of/Jun 30			-,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Firm Power		_	253,333	11,510,171	_	_		
Total Power	_	_	253,333	11,510,171	_	_		
Morristown City of/Jun 30 Firm Power	_	_	747,717	31,795,396	_	_		
Total Power		_	747,717	31,795,396	_	_		
Murfreesboro City of/Jun 30								
Firm Power		_	1,015,144	44,390,603	_	_		
Total Power Nashville Electric Service/Jun 30	_	_	1,015,144	44,390,603	_	_		
Firm Power	_	_	11,702,685	499,317,262	_	_		
Total Power		_	11,702,685	499,317,262	_	_		
Newport City of/Jun 30			.== 0.00					
Firm Power		_	475,028	19,741,350	_	_		
Total Power Oak Ridge City of/Jun 30	_	_	475,028	19,741,350	_	_		
Firm Power	_	_	522,551	22,873,859	_	_		
Total Power		_	522,551	22,873,859	_	_		
Paris City of/Jun 30			400 543	20.006.047				
Firm Power		_	480,542 480,542	20,906,847 20,906,847	_	_		
10001 10001	_	_	700,542	20,700,047	_	_		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Cooperative		Other	-1	Total			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Fennessee Harriman City of/Jun 30								
Firm Power	_	_	_	_	287,725	11,572,957		
Total Power		_	_	_	287,725	11,572,957		
Humboldt City of/Jun 30								
Firm Power		_	_	_	249,241	10,772,123		
Total Power	_	_	_	_	249,241	10,772,123		
Firm Power	_	_	_	_	1,386,580	57,133,124		
Total Power		_	_	_	1,386,580	57,133,124		
Johnson City City of/Jun 30								
Firm Power		_	_	_	1,791,100	78,695,028		
Total Power	_	_	_	_	1,791,100	78,695,028		
Knoxville Utilities Board/Jun 30 Firm Power	_	_	_	_	5,430,553	230,351,901		
Nonfirm Power			18,649	417,380	18,649	417,380		
Total Power		_	18,649	417,380	5,449,202	230,769,281		
Lawrenceburg City of/Jun 30			,	,				
Firm Power		_	_	_	523,421	21,714,305		
Total Power	_	_	_	_	523,421	21,714,305		
LaFollette City of/Jun 30					102 961	19 150 620		
Firm Power Total Power		_	_	_	403,864 403,864	18,159,630 18,159,630		
Lebanon City of/Jun 30					403,004	10,137,030		
Firm Power	_	_	_	_	397,579	17,582,564		
Total Power	_	_	_	_	397,579	17,582,564		
Lenoir City City of/Jun 30								
Firm Power		_	_	_	1,219,208	54,246,091		
Total Power Lewisburg City of/Jun 30	_	_	_	_	1,219,208	54,246,091		
Firm Power	_	_	_	_	303,914	13,034,186		
Total Power		_	_	_	303,914	13,034,186		
Lexington City of/Jun 30					,	-,,		
Firm Power		_	_	_	437,822	19,354,439		
Total Power	_	_	_	_	437,822	19,354,439		
Loudon Utilities Board/Jun 30 Firm Power					328,023	13,847,633		
Total Power					328,023	13,847,633		
Maryville Utilities/Jun 30					320,023	13,017,032		
Firm Power	_	_	_	_	617,923	25,653,682		
Total Power	_	_	_	_	617,923	25,653,682		
McMinnville Electric System/Jun 30					240.264	10.074.066		
Firm Power		_	_	_	248,364 248,364	10,874,868 10,874,868		
Memphis City of/Jun 30	_	_	_	_	246,304	10,674,606		
Firm Power	_	_	_	_	13,193,562	574,567,539		
Total Power		_	_	_	13,193,562	574,567,539		
Milan City of/Jun 30								
Firm Power		_	_	_	253,333	11,510,171		
Total Power Morristown City of/Jun 30	_	_	_	_	253,333	11,510,171		
Firm Power	_	_	_	_	747,717	31,795,396		
Total Power		_	_	_	747,717	31,795,396		
Murfreesboro City of/Jun 30					,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Firm Power	_	_	_	_	1,015,144	44,390,603		
Total Power	_	_	_	_	1,015,144	44,390,603		
Nashville Electric Service/Jun 30 Firm Power					11 702 695	499,317,262		
Total Power		_	_	_	11,702,685 11,702,685	499,317,262		
Newport City of/Jun 30					11,702,003	477,317,202		
Firm Power	_	_	_	_	475,028	19,741,350		
Total Power	_	_	_	_	475,028	19,741,350		
Oak Ridge City of/Jun 30								
Firm Power		_	_	_	522,551	22,873,859		
Total Power Paris City of/Jun 30	_	_	_	_	522,551	22,873,859		
Firm Power	_	_	_	_	480,542	20,906,847		
Total Power			_	_	480,542	20,906,847		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Investor-	Owned	Federal		State and Other Government			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Fennessee Pulaski City of/Jun 30								
Firm Power	_	_	464,469	19,058,330	_	_		
Total Power		_	464,469	19,058,330	_	_		
Ripley City of/Jun 30								
Firm Power		_	258,217	11,735,852	_	_		
Total Power	_	_	258,217	11,735,852	_	_		
Rockwood City of/Jun 30 Firm Power	_	_	332,030	14.261.964	_	_		
Total Power		_	332,030	14,261,964	_	_		
Shelbyville City of/Jun 30								
Firm Power		_	352,838	16,010,338	_	_		
Total Power	_	_	352,838	16,010,338	_	_		
Springfield City of/Jun 30 Firm Power	_	_	241,188	10,468,033	_	_		
Total Power		_	241,188	10,468,033	_			
Tullahoma Board of Pub Utils/Jun 30			,	-,,				
Firm Power		_	296,162	13,272,661	_	_		
Total Power	_	_	296,162	13,272,661	_	_		
Union City City of/Jun 30 Firm Power			380,057	14,404,321				
Total Power			380,057	14,404,321				
Weakley County Mun Elec Sys/Jun 30			300,027	1 1, 10 1,021				
Firm Power		_	519,581	23,083,891	_	_		
Total Power	_	_	519,581	23,083,891	_	_		
Texas								
Austin City of/Sep 30 Nonfirm Power	115.488	2,571,258	_	_	40,648	1,817,70		
Total Power		2,571,258	_	_	40,648	1,817,70		
Brenham City of/Sep 30	, in the second	, ,			,	, ,		
Firm Power		_	_	_	286,284	11,141,798		
Total Power	_	_	_	_	286,284	11,141,798		
Brownsville Public Utils Board/Sep 30 Firm Power	88,431	3,591,559						
Nonfirm Power	,	3,304,466	_	_	16,641	392,800		
Total Power		6,896,025	_	_	16,641	392,800		
Bryan City of/Sep 30								
Firm Power		_	_	_	_	_		
Nonfirm Power Total Power		_	_	_	_	_		
College Station City of/Sep 30								
Firm Power	418,784	12,392,131	_	_	_	_		
Total Power	418,784	12,392,131	_	_	_	_		
Denton City of/Sep 30								
Firm Power		_	_	_	_	_		
Floresville City of/Dec 31	_	_	_	_	_	_		
Firm Power	_	_	_	_	_	_		
Total Power	_	_	_	_	_	_		
Garland City of/Sep 30								
Firm Power		_	_	_	_	_		
Total Power	_	_	_	_	_	_		
Firm Power	_	_	_	_	218,536	9,307,929		
Total Power		_	_	_	218,536	9,307,929		
Greenville Electric Util Sys/Sep 30								
Firm Power		_	_	_	_	_		
Nonfirm Power Total Power		_	_	_	_	_		
Jasper City of/Sep 30	_	_	_	_	_	_		
Firm Power	_	_	_	_	141,744	10,493,73		
Total Power	_	_	_	_	141,744	10,493,73		
Kerrville Public Utility Board/Sep 30					400.000	10 505 414		
Firm Power Total Power		_	_	_	408,990 408,990	17,575,418 17,575,418		
Lubbock City of/Sep 30	_	_	_	_	400,770	17,575,410		
Firm Power	376,844	11,567,159	_	_	_	_		
Nonfirm Power	128,801	3,446,007	_	_	_	_		
Total Power	505,645	15,013,166	_	_	_	_		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Cooper	rative	Othe	r1	Total	I		
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Tennessee Pulaski City of/Jun 30								
Firm Power	_	_	_	_	464,469	19,058,330		
Total Power		_	_	_	464,469	19,058,330		
Ripley City of/Jun 30								
Firm Power		_	_	_	258,217	11,735,852		
Total Power Rockwood City of/Jun 30	_	_	_	_	258,217	11,735,852		
Firm Power	_	_	_	_	332,030	14,261,964		
Total Power	_	_	_	_	332,030	14,261,964		
Shelbyville City of/Jun 30								
Firm Power		_	_	_	352,838	16,010,338		
Total Power	_	_	_	_	352,838	16,010,338		
Firm Power	_	_	_	_	241,188	10,468,033		
Total Power		_	_	_	241,188	10,468,033		
Tullahoma Board of Pub Utils/Jun 30								
Firm Power		_	_	_	296,162	13,272,661		
Union City City of/Jun 30	_	_	_	_	296,162	13,272,661		
Firm Power	_	_	_	_	380.057	14,404,321		
Total Power		_	_	_	380,057	14,404,321		
Weakley County Mun Elec Sys/Jun 30								
Firm Power		_	_	_	519,581	23,083,891		
Total Power Texas	_	_	_	_	519,581	23,083,891		
Austin City of/Sep 30								
Nonfirm Power	10,219	169,769	225,067	9,974,910	391,422	14,533,638		
Total Power	10,219	169,769	225,067	9,974,910	391,422	14,533,638		
Brenham City of/Sep 30					206 204	11 141 700		
Firm Power		_		_	286,284 286,284	11,141,798 11,141,798		
Brownsville Public Utils Board/Sep 30					200,204	11,141,770		
Firm Power	_	_	_	_	88,431	3,591,559		
Nonfirm Power		6,932	20,255	460,345	178,910	4,164,543		
Total Power	380	6,932	20,255	460,345	267,341	7,756,102		
Bryan City of/Sep 30 Firm Power	_	_	226,722	33,743,135	226,722	33,743,135		
Nonfirm Power		_	670,665	9,905,188	670,665	9,905,188		
Total Power	_	_	897,387	43,648,323	897,387	43,648,323		
College Station City of/Sep 30			107.014	5 05 5 005	525 500	15 150 015		
Firm Power Total Power		_	107,014 107,014	5,057,886 5,057,886	525,798 525,798	17,450,017 17,450,017		
Denton City of/Sep 30	_	_	107,014	3,037,880	323,196	17,430,017		
Firm Power	_	_	762,344	34,384,263	762,344	34,384,263		
Total Power	_	_	762,344	34,384,263	762,344	34,384,263		
Floresville City of/Dec 31			105.264	7.670.060	105 264	7 (70 000		
Firm Power Total Power		_	195,364 195,364	7,670,969 7,670,969	195,364 195,364	7,670,969 7,670,969		
Garland City of/Sep 30			173,301	7,070,707	175,501	7,070,202		
Firm Power		_	_	63,936,817	_	63,936,817		
Total Power	_	_	_	63,936,817	_	63,936,817		
Georgetown City of/Sep 30					218,536	9,307,929		
Firm Power		_	_	_	218,536	9,307,929		
Greenville Electric Util Sys/Sep 30					210,000	>,501,525		
Firm Power		_	238,266	15,003,000	238,266	15,003,000		
Nonfirm Power	,	1,377,000			184,875	1,377,000		
Total Power	184,875	1,377,000	238,266	15,003,000	423,141	16,380,000		
Firm Power	_	_	_	_	141,744	10,493,731		
Total Power		_	_	_	141,744	10,493,731		
Kerrville Public Utility Board/Sep 30								
Firm Power		_	_	_	408,990	17,575,418		
Total Power Lubbock City of/Sep 30	_	_	_	_	408,990	17,575,418		
Firm Power	_	_	_	_	376,844	11,567,159		
Nonfirm Power		_	_	_	128,801	3,446,007		
Total Power	_	_	_	_	505,645	15,013,166		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Investor-C	Owned	Fede	eral	State and Other Government			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Texas New Braunfels City of/Jul 31								
Firm Power	_	_	_	_	867,670	32,988,650		
Total Power		_	_	_	867,670	32,988,650		
San Antonio Public Service Bd/Jan 31								
Firm Power		44,973	_	_		_		
Nonfirm Power		10,653,102 10,698,075	_	_	5,663 5,663	186,139 186,139		
San Marcos City of/Sep 30	392,012	10,096,073	_	_	3,003	100,13		
Firm Power	. –	_	_	_	371,132	15,070,809		
Total Power	—	_	_	_	371,132	15,070,809		
Seguin City of/Sep 30					220 415	0.210.04		
Firm Power		_	_	_	230,417	9,210,046		
Total Power Texas Municipal Power Agency/Sep 30	. –	_	_	_	230,417	9,210,04		
Nonfirm Power	—	_	_	_	_	_		
Total Power		_	_	_	_	_		
Weatherford Mun Utility System/Sep 30								
Firm Power		_	_	_	_	_		
Total Power	. –	_	_	_	_	_		
Bountiful City City of/Jun 30								
Firm Power	—	_	136,705	2,490,492	_	_		
Nonfirm Power		448,783	_		28,425	1,020,154		
Total Power	15,962	448,783	136,705	2,490,492	28,425	1,020,154		
Logan City of/Jun 30								
Firm Power		_	92,826	1,831,636	163,407	6,065,523		
Total Power		_	92,826	1,831,636	32,841 196,248	975,119 7,040,642		
Murray City of/Jun 30	•		72,020	1,051,050	170,210	7,010,012		
Firm Power	. —	_	_	_	_	_		
Nonfirm Power		_	_	_	188,397	6,683,85		
Total Power	—	_	_	_	188,397	6,683,85		
Provo City Corp/Jun 30					612.071	24 626 726		
Firm Power			_		612,071 612,071	24,626,725 24,626,725		
St George City of/Jun 30	•				012,071	24,020,72		
Nonfirm Power	. –	_	_	_	372,171	14,088,892		
Total Power	. –	_	_	_	372,171	14,088,892		
Vermont								
Burlington City of/Dec 31 Firm Power	161,543	5,900,814						
Total Power		5,900,814			_			
Virginia	101,5 15	3,,,00,01.						
Bedford City of/Jun 30								
Firm Power		_	891	63,425	_	_		
Total Power	. –	_	891	63,425	_	_		
Bristo Utilities Board/Jun 30 Firm Power			593,012	23,129,822				
Total Power			593,012	23,129,822	_			
Danville City of/Jun 30			5,5,012	20,127,022				
Firm Power		6,298,406	4,157	295,982	_	_		
Nonfirm Power			_		_	_		
Total Power	279,450	6,298,406	4,157	295,982	_	_		
Harrisonburg City of/Jun 30 Firm Power	587,289	24,078,790	1,939	138,549				
Total Power		24,078,790	1,939	138,549	_			
Manassas City of/Jun 30	507,207	2.,070,770	1,,,,,	150,5 .>				
Firm Power		_	_	_	_	_		
Total Power	. –	_	_	_	_	_		
Martinsville City of/Jun 30			1 107	04500				
Firm Power Total Power		_	1,187 1,187	84,566 84,566	_	_		
Radford City of/Jun 30	. –	_	1,10/	04,300	_	_		
Firm Power	—	_	965	68,710	_	_		
Total Power		_	965	68,710	_	_		
Salem City of/Jun 30								
Firm Power		_	1,633	116,279	_	_		
Total Power	—	_	1,633	116,279	_	_		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

			Source of I	Electricity		
State / Utility / Fiscal Year Ending Date	Coopera	ative	Othe	r1	Tota	1
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Texas New Braunfels City of/Jul 31						
Firm Power	_	_	_	_	867,670	32,988,650
Total Power	_	_	_	_	867,670	32,988,650
San Antonio Public Service Bd/Jan 31 Firm Power						44,973
Nonfirm Power		28,713	39,616	1,028,059	438,107	11,896,013
Total Power		28,713	39,616	1,028,059	438,107	11,940,986
San Marcos City of/Sep 30					271 122	15 070 000
Firm Power Total Power		_	_	_	371,132 371,132	15,070,809 15,070,809
Seguin City of/Sep 30	_	_	_	_	3/1,132	13,070,603
Firm Power	_	_	_	_	230,417	9,210,046
Total Power	_	_	_	_	230,417	9,210,046
Texas Municipal Power Agency/Sep 30 Nonfirm Power	_	_	101,690	957,000	101,690	957,000
Total Power			101,690	957,000	101,690	957,000
Weatherford Mun Utility System/Sep 30						
Firm Power	49,356	2,905,550	203,595	5,045,996	252,951	7,951,546
Total Power	49,356	2,905,550	203,595	5,045,996	252,951	7,951,546
Bountiful City City of/Jun 30						
Firm Power		_	_	_	136,705	2,490,492
Nonfirm Power		_	_	_	44,387	1,468,937
Total Power Logan City of/Jun 30	_	_	_	_	181,092	3,959,429
Firm Power	_	_	_	_	256,233	7.897.159
Nonfirm Power	_	_	_	_	32,841	975,119
Total Power	_	_	_	_	289,074	8,872,278
Murray City of/Jun 30 Firm Power	_	_	131,451	2,655,661	131,451	2,655,661
Nonfirm Power		_	_		188,397	6,683,851
Total Power	_	_	131,451	2,655,661	319,848	9,339,512
Provo City Corp/Jun 30					(12.071	24 626 725
Firm Power Total Power		_	_	_	612,071 612,071	24,626,725 24,626,725
St George City of/Jun 30					012,071	21,020,720
Nonfirm Power		_	16,724	313,966	388,895	14,402,858
Total Power	_	_	16,724	313,966	388,895	14,402,858
Vermont Burlington City of/Dec 31						
Firm Power	_	_	_	_	161,543	5,900,814
Total Power	_	_	_	_	161,543	5,900,814
Virginia Bedford City of/Jun 30						
Firm Power	128,272	5,295,077	71,842	1,621,597	201,005	6.980.099
Total Power	128,272	5,295,077	71,842	1,621,597	201,005	6,980,099
Bristo Utilities Board/Jun 30					502.012	22 120 92
Firm Power Total Power	_	_	_	_	593,012 593,012	23,129,822 23,129,822
Danville City of/Jun 30					373,012	23,127,022
Firm Power		_	632,287	23,259,479	915,894	29,853,867
Nonfirm Power		179,862	- 622 207	666,576	-015.004	846,438
Total Power	_	179,862	632,287	23,926,055	915,894	30,700,305
Firm Power	_	_	_	_	589,228	24,217,339
Total Power		_	_	_	589,228	24,217,339
Manassas City of/Jun 30			215 417	12 564 901	215 417	12 564 901
Firm Power Total Power		_	315,417 315,417	12,564,891 12,564,891	315,417 315,417	12,564,891 12,564,891
Martinsville City of/Jun 30				,,	,	,,
Firm Power		_	404,640	17,700,891	405,827	17,785,457
Total PowerRadford City of/Jun 30	_	_	404,640	17,700,891	405,827	17,785,457
Firm Power	_	_	365,431	12,719,997	366,396	12,788,707
Total Power		_	365,431	12,719,997	366,396	12,788,707
Salem City of/Jun 30			270 402	10.005.600	272.025	12.041.011
Firm Power Total Power	_	_	370,403 370,403	12,925,632 12,925,632	372,036 372,036	13,041,911 13,041,911
10tdl 1 0wc1	_	_	370,403	12,723,032	372,030	13,041,911

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Investor-C	Owned	Fede	ral	State and Other Government			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Washington Controllic City of Dec 21								
Centralia City of/Dec 31 Firm Power	_	_	201,974	5,374,722	_	_		
Total Power		_	201,974	5,374,722	_	_		
Ellensburg City of/Dec 31			,	-,,,-=				
Firm Power	. —	_	184,000	5,251,658	_	_		
Total Power	. —	_	184,000	5,251,658	_	_		
Port Angeles City of/Dec 31								
Firm Power		_	619,142	16,408,594	_	_		
Nonfirm Power Total Power		_	619,142	16,408,594	_	_		
Richland City of/Dec 31	. –	_	019,142	10,408,394	_	_		
Firm Power	. —	_	660,131	18,675,242	_	_		
Nonfirm Power		197,395	_	_	_	_		
Total Power		197,395	660,131	18,675,242	_	_		
Seattle City of/Dec 31								
Firm Power		_	528,318	22,294,356	_	_		
Nonfirm Power		156,000	229,734	8,584,493	505,350	3,016,49		
Total Power	. –	156,000	758,052	30,878,849	505,350	3,016,49		
Tacoma City of/Dec 31	126 204	1.917.425	1 642 051	41 100 200	429,399	2,224,94		
Nonfirm Power Total Power		1,917,425	1,642,851 1,642,851	41,109,389 41,109,389	429,399	2,224,94		
Visconsin	. 130,264	1,917,423	1,042,631	41,109,369	429,399	2,224,94		
Badger Power Marketing Auth/Dec 31								
Firm Power	. 284,000	9,452,600	_	_	_	_		
Total Power	. 284,000	9,452,600	_	_	_	_		
Jefferson City of/Dec 31								
Firm Power		_	_	_	_	_		
Total Power	. —	_	_	_	_	_		
Kaukauna City of/Dec 31								
Firm Power		_	_	_	_	_		
Manitowoc Public Utilities/Dec 31	. –	_	_	_	_	_		
Firm Power	. 114,235	2,929,032	_	_	_	_		
Nonfirm Power		4,022,594	_	_	_	_		
Total Power		6,951,626	_	_	_	_		
Marshfield City of/Dec 31								
Firm Power		8,904,173	_	_	_	_		
Nonfirm Power		_	_	_	_	_		
Total Power	. 334,229	8,904,173	_	_	_	_		
Menasha City of/Dec 31								
Firm Power		_	_	_	_	_		
Total Power New London Electric&Water Util/Dec 31	. —	_	_	_	_	_		
Firm Power	_	_	_	_	_	_		
Total Power		_	_	_	_	_		
Oconomowoc City of/Dec 31	•							
Firm Power	. —	_	_	_	_	_		
Total Power	. —	_	_	_	_	_		
Plymouth City of/Dec 31								
Firm Power		5,586,298	_	_	_	_		
Total Power	. 175,723	5,586,298	_	_	_	_		
Reedsburg Utility Comm/Dec 31	101 150	6041.640						
Firm Power Total Power	,	6,241,548	_	_	_	_		
Shawano Municipal Utilities/Dec31	. 191,150	6,241,548	_	_	_	_		
Firm Power	_	_	_	_	_	_		
Total Power		_	_	_	_	_		
Sheboygan Falls City of/Dec 31								
Firm Power	. 213,254	6,370,269	_	_	_	_		
Total Power		6,370,269	_	_	_	_		
Sturgeon Bay City of/Dec 31								
Firm Power		_	_	_	_	_		
Total Power	. —	_	_	_	_	_		
Sun Prairie Water & Light Comm/Dec 31								
Firm Power		_	_	_	_	_		
Total Power Wisconsin Public Power Inc Sys/Dec 31	. —	_	_	_	_	_		
Firm Power	. 1,766,335	57,794,350	_		_			
Nonfirm Power	, ,	8,256,879	4,215	78,091	6,493	75,88		
Total Power	,	66,051,229	4,215	78,091	6,493	75,88		
* V ·· V*	2,515,000	00,001,227	1,213	70,071	0,173	, 5,00		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

			Source of El	ectricity		
State / Utility / Fiscal Year Ending Date	Cooper	ative	Other	I	Total	l
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Washington						
Centralia City of/Dec 31 Firm Power	_	_	_	_	201,974	5,374,722
Total Power		_	_	_	201,974	5,374,722
Ellensburg City of/Dec 31					. ,.	
Firm Power		_	_	_	184,000	5,251,658
Total Power	_	_	_	_	184,000	5,251,658
Port Angeles City of/Dec 31 Firm Power	_	_	10.919	37,961	630,061	16,446,555
Nonfirm Power		_	17,580	408,454	17,580	408,454
Total Power	_	_	28,499	446,415	647,641	16,855,009
Richland City of/Dec 31						
Firm Power		_	- 27 400		660,131	18,675,242
Nonfirm Power Total Power			27,490 27,490	182,116 182,116	40,840 700,971	379,511 19,054,753
Seattle City of/Dec 31			27,470	102,110	700,771	17,054,755
Firm Power	_	_	_	_	528,318	22,294,356
Nonfirm Power		_	1,086,399	39,745,121	1,821,483	51,502,113
Total Power	_	_	1,086,399	39,745,121	2,349,801	73,796,469
Tacoma City of/Dec 31 Nonfirm Power			600,990	4,300,751	2,809,524	49,552,506
Total Power			600,990	4,300,751	2,809,524	49,552,506
Wisconsin			000,220	1,500,751	2,007,021	.,,552,500
Badger Power Marketing Auth/Dec 31						
Firm Power		_	_	_	284,000	9,452,600
Total Power	_	_	_	_	284,000	9,452,600
Firm Power	_	_	154,175	5,026,778	154,175	5,026,778
Total Power		_	154,175	5,026,778	154,175	5,026,778
Kaukauna City of/Dec 31						
Firm Power	_	_	596,690	17,508,330	596,690	17,508,330
Total Power	_	_	596,690	17,508,330	596,690	17,508,330
Manitowoc Public Utilities/Dec 31 Firm Power	_	_	_	_	114,235	2,929,032
Nonfirm Power	_	_	_	_	205,589	4,022,594
Total Power	_	_	_	_	319,824	6,951,626
Marshfield City of/Dec 31						
Firm PowerNonfirm Power		_	3,802	— 38,419	334,229	8,904,173 38,419
Total Power			3,802	38,419	3,802 338,031	8,942,592
Menasha City of/Dec 31			5,002	30,.17	220,031	0,7 .2,572
Firm Power	_	_	685,000	17,235,798	685,000	17,235,798
Total Power	_	_	685,000	17,235,798	685,000	17,235,798
New London Electric&Water Util/Dec 31 Firm Power			172,252	5,886,602	172,252	5.886.602
Total Power	_		172,252	5,886,602	172,252	5,886,602
Oconomowoc City of/Dec 31			172,232	3,000,002	172,232	5,000,002
Firm Power	_	_	178,403	5,928,222	178,403	5,928,222
Total Power	_	_	178,403	5,928,222	178,403	5,928,222
Plymouth City of/Dec 31					175 702	5 596 209
Firm Power Total Power		_		_	175,723 175,723	5,586,298 5,586,298
Reedsburg Utility Comm/Dec 31					173,723	3,300,270
Firm Power	_	_	_	_	191,150	6,241,548
Total Power	_	_	_	_	191,150	6,241,548
Shawano Municipal Utilities/Dec31			204.012	7.226.620	204.012	7.226.620
Firm Power	_	_	204,912 204,912	7,336,638 7,336,638	204,912 204,912	7,336,638 7,336,638
Sheboygan Falls City of/Dec 31			204,912	7,550,058	204,912	7,550,050
Firm Power	_	_	_	_	213,254	6,370,269
Total Power	_	_	_	_	213,254	6,370,269
Sturgeon Bay City of/Dec 31			124.450	4.511.240	124.450	4.511.040
Firm Power	_	_	134,468 134,468	4,511,248 4,511,248	134,468 134,468	4,511,248
Sun Prairie Water & Light Comm/Dec 31	_	_	134,406	4,311,246	134,406	4,511,248
Firm Power	_	_	170,959	5,849,206	170,959	5,849,206
Total Power	_	_	170,959	5,849,206	170,959	5,849,206
Wisconsin Public Power Inc Sys/Dec 31			1.053	2 1 40 12 5	1.760.000	60.042.45
Firm Power Nonfirm Power	— 75,636	— 797,783	1,953 3 223,534	3,149,126	1,768,288 886,603	60,943,476 12,369,580
Total Power		797,78. 797,78.		3,160,945 6,310,071	2,654,891	73,313,056
1 0 m l 1 0 m	75,030	171,10.	223,707	0,510,071	2,037,071	, 5,515,050

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Investor-Owned		Federal		State and Other Government			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Wisconsin	'	•		'	'			
Wisconsin Rapids W W & L Comm/Dec								
31								
Firm Power	75,741	2,377,178	_	_	_	_		
Total Power	75,741	2,377,178	_	_	_	_		
Wyoming								
Gillette City of/Jun 30								
Firm Power	175,501	8,460,760	5,497	85,924	_	_		
Nonfirm Power	_	_	_	_	8,803	272,885		
Total Power	175,501	8,460,760	5,497	85,924	8,803	272,885		

Table 29. Electricity Purchases by Municipal Utilities, Fiscal Year 1996 (Continued)

	Source of Electricity							
State / Utility / Fiscal Year Ending Date	Cooperative		Other ¹		Total			
	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)		
Wisconsin								
Wisconsin Rapids W W & L Comm/Dec 31								
Firm Power	_	_	_	_	75,741	2,377,178		
Total Power	_	_	_	_	75,741	2,377,178		
Wyoming Gillette City of/Jun 30								
Firm Power	_	_	_	_	180,998	8,546,684		
Nonfirm Power	_	_	469	66,034	9,272	338,919		
Total Power	_	_	469	66,034	190,270	8,885,603		

¹ Includes transactions with municipal utilities, power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

Source: Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities," except where footnoted.

⁻Not Applicable

Notes: •For identification purposes, the municipal utilities are listed in the State in which the municipality is located. •Totals may not equal sum of components because of independent rounding.

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996

	Purchaser of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-	Owned	Fede	eral	State and Government				
ristal Teal Enting Date	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)			
Alabama					'				
Alabama Municipal Elec Auth/Sep 30									
Firm Power		_			_				
Sylacauga Utilities Board/Sep 30	. —	_	_	_	_	_			
Firm Power	. —	_	31,180	1,057,426	_	_			
Total Power	. –	_	31,180	1,057,426	_	_			
Troy City of	****			-1-000					
Firm Power		9,165,000	19,068	645,000	_	_			
Total Power Alaska	. 258,848	9,165,000	19,068	645,000	_	_			
Anchorage City of/Dec 31									
Nonfirm Power	. —	_	_	_	_	_			
Total Power	. —	_	_	_	_	_			
Arizona									
Mesa City of/Jun 30 Nonfirm Power									
Total Power		_	_	_	_	_			
Arkansas	•								
Jonesboro City of/Dec 31									
Firm Power		_	_	_	_	_			
Nonfirm Power		266,925	_	_	_	_			
Total Power	. 15,135	266,925	_	_	_	_			
Paragould Light & Water Comm/Dec 31 Nonfirm Power	_	_	_	_	_	_			
Total Power		_	_	_	_	_			
California									
Anaheim City of/Jun 30									
Nonfirm Power		5,276,896	_	_	572	4,86			
Total Power	. 353,454	5,276,896	_	_	572	4,862			
Firm Power	. 143,381	3,369,455	_	_	_	_			
Nonfirm Power		_	_	_	_	_			
Total Power	. 143,381	3,369,455	_	_	_	_			
Burbank City of/Jun 30									
Firm Power Nonfirm Power		10,200	_	_	_	_			
Total Power		10,200			_				
Colton City of/Jun 30	. 020	10,200							
Nonfirm Power	. 151,702	2,914,945	_	_	6,199	58,77			
Total Power	. 151,702	2,914,945	_	_	6,199	58,77			
Glendale City of/Jun 30	10.900	665,000							
Firm Power Nonfirm Power		665,000 6,000	_	_	1,840	18,00			
Total Power		671,000			1,840	18,000			
Los Angeles City of/Jun 30		0.12,000			-,	,			
Firm Power		_	_	_	_	_			
Nonfirm Power		10,083,074	8,875	126,381	125,695	1,813,45			
Total Power	. 592,680	10,083,074	8,875	126,381	125,695	1,813,45			
Nonfirm Power	. 157,755	6,219,442	_	_	120,550	4.859.36			
Total Power	,	6,219,442	_	_	120,550	4,859,36			
Pasadena City of/Jun 30	,	, ,			,				
Nonfirm Power		45,275	140	43,062	66	85			
Total Power	. 4,400	45,275	140	43,062	66	85:			
Redding City of/Jun 30 Nonfirm Power	. 340,166	12,094,625	300,924	10,853,756	8,137	88,410			
Other Power									
Total Power		12,094,625	300,924	10,853,756	8,137	88,41			
Riverside City of/Jun 30									
Nonfirm Power		611,962	_	_	_	_			
Total Power	. 37,330	611,962	_	_	_	_			
San Francisco City & County of/Jun 30 Firm Power	_	_	_	_	493,481	17,263,29			
Nonfirm Power		1,560	6,729	60,473	347,753	3,672,76			
Total Power		1,560	6,729	60,473	841,234	20,936,06			
Santa Clara City of/Jun 30									
Firm Power		-	-	-	12,915	45,000			
Nonfirm Power		674,113	10 10	120	232,845	2,692,24			
Total Power	. 55,426	674,113	10	120	245,760	2,737,24			

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity							
State / Utility /	Cooper	ative	Othe	r1	Tota	1		
Fiscal Year Ending Date	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)		
Alabama					·			
Alabama Municipal Elec Auth/Sep 30 Firm Power	_	_	2,634,724	102,755,624	2,634,724	102,755,624		
Total Power			2,634,724	102,755,624	2,634,724	102,755,624		
Sylacauga Utilities Board/Sep 30			_,,	,,	_,	,,		
Firm Power	_	_	157,464	5,634,215	188,644	6,691,641		
Total Power Troy City of	_	_	157,464	5,634,215	188,644	6,691,641		
Firm Power	_	_	_	_	277,916	9,810,000		
Total Power	_	_	_	_	277,916	9,810,000		
Alaska								
Anchorage City of/Dec 31	20.272	702 552	12 100	252 622	40.571	077.10		
Nonfirm Power Total Power	28,373 28,373	723,553 723,553	12,198 12,198	253,633 253,633	40,571 40,571	977,186 977,186		
Arizona	26,373	125,555	12,196	255,055	40,571	977,100		
Mesa City of/Jun 30								
Nonfirm Power	_	_	53	878	53	878		
Total Power	_	_	53	878	53	878		
Arkansas Jonesboro City of/Dec 31								
Firm Power	_	_	66.837	1,717,928	66,837	1,717,928		
Nonfirm Power	11,224	214,875	702,184	13,228,334	728,543	13,710,134		
Total Power	11,224	214,875	769,021	14,946,262	795,380	15,428,062		
Paragould Light & Water Comm/Dec 31			10.000	202.067	10.000	202.065		
Nonfirm Power Total Power	_	_	18,800 18,800	293,067 293,067	18,800 18,800	293,067 293,067		
California			10,000	293,007	10,000	293,007		
Anaheim City of/Jun 30								
Nonfirm Power	_	_	325	3,412	354,351	5,285,170		
Total Power	_	_	325	3,412	354,351	5,285,170		
Azusa City of/Jun 30 Firm Power	_	_	_	_	143,381	3,369,455		
Nonfirm Power			34,770	521,550	34,770	521,550		
Total Power	_	_	34,770	521,550	178,151	3,891,005		
Burbank City of/Jun 30								
Firm Power	_	_	- 2741	243,583	- 2.261	243,583		
Nonfirm Power Total Power	_	_	2,741 2,741	39,470 283,053	3,361 3,361	49,670 293,253		
Colton City of/Jun 30	_	_	2,741	263,033	3,301	293,233		
Nonfirm Power	_	_	155	1,542	158,056	2,975,260		
Total Power	_	_	155	1,542	158,056	2,975,260		
Glendale City of/Jun 30					10,800	665,000		
Firm Power	_	_	29,071	368,000	31,246	392,000		
Total Power	_	_	29,071	368,000	42,046	1,057,000		
Los Angeles City of/Jun 30								
Firm Power				4,429,074		4,429,074		
Nonfirm Power Total Power	28,955 28,955	410,472 410,472	716,358 716,358	3,731,723 8,160,797	1,472,563 1,472,563	16,165,106 20,594,180		
Metropolitan Water Dist/Jun 30	26,933	410,472	710,336	0,100,797	1,472,303	20,394,100		
Nonfirm Power	_	_	_	_	278,305	11,078,806		
Total Power	_	_	_	_	278,305	11,078,806		
Pasadena City of/Jun 30			20.411	400.505	44.017	577 700		
Nonfirm Power	_	_	39,411 39,411	488,597 488,597	44,017 44,017	577,789 577,789		
Redding City of/Jun 30			39,411	400,397	44,017	311,165		
Nonfirm Power	27	396	192	2,747	649,446	23,039,934		
Other Power	_	_	-		1,955	_		
Total Power	27	396	192	2,747	651,401	23,039,934		
Riverside City of/Jun 30 Nonfirm Power	_	_	_	_	37,330	611,962		
Total Power	_	_	_	_	37,330	611,962		
San Francisco City & County of/Jun 30					,	,-		
Firm Power	_	_	256,768	7,929,551	750,249	25,192,844		
Nonfirm Power	_	_	569,448	11,912,923 19,842,474	924,190	15,647,725		
Total Power	_	_	826,216	19,842,474	1,674,439	40,840,569		
Firm Power	_	_	_	_	12,915	45,000		
Nonfirm Power	_	_	15,940	179,433	304,221	3,545,909		
Total Power	_	_	15,940	179,433	317,136	3,590,909		

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

		Purchaser of Electricity							
State / Utility / Fiscal Year Ending Date	Investor-	Owned		Federal	State and Govern				
riscai reai Eliuliig Date	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWl	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)			
California									
Turlock Irrigation Dist/Dec 31 Firm Power		87				23,27			
Nonfirm Power		601,337	_	1,650 1,650	102,047	1,005,46			
Total Power		601,424		165 1,650		1,028,73			
Colorado									
Colorado Springs City of/Dec 31									
Firm Power		406.564	_	- 2260	_	_			
Nonfirm Power Total Power		406,564 406,564		280 3,360 280 3,360		_			
Connecticut	22,090	400,304	•	200 3,300	_	_			
Mun Electric Engy Coop/Dec 31									
Firm Power	—	_	_	_	_	_			
Nonfirm Power		_	_	_	_	_			
Total Power	—	_	_	_	_	_			
Groton City of/Jun 30	£ 700	407 100							
Firm Power Total Power		407,199 407,199	_	_	_	_			
Delaware	5,720	407,199							
Dover City of/Dec 31									
Nonfirm Power		1,159,542	_	_	_	_			
Total Power	32,354	1,159,542	_	_	_	_			
Florida Florida Municipal Power Agency/Sep 30									
Firm Power	—	_	_	_	_	_			
Nonfirm Power	· ·	2,702,378	_	_	_	_			
Total Power	230,431	2,702,378	_	_	_	_			
Fort Pierce Utilities Au/Sep 30 Nonfirm Power	792	21 022							
Other Power		21,033							
Total Power		21,033	_	_	_				
Gainesville Regional Utilities/Sep 30		,							
Firm Power		_	_	_	_	_			
Nonfirm Power		1,700,400	_	_	_	_			
Total Power	67,552	1,700,400	_	_	_	_			
Homestead City of/Sep 30 Firm Power	_	_	_	_	_	_			
Nonfirm Power		14,311	_	_	_	_			
Total Power		14,311	_	_	_	_			
Jacksonville Elec Auth/Sep 30									
Firm Power		139,951,855	_		—				
Nonfirm Power	· ·	2,275,415		201 5,046		109,05			
Total Power Key West City of/Sep 30	3,398,893	142,227,270	•	201 5,046	3,410	109,05			
Firm Power	_	_	_	_	_	_			
Nonfirm Power		8,862	_	_	_	_			
Total Power	216	8,862	_	_	_	_			
Lake Worth City of/Sep 30									
Firm Power			_	_	_	_			
Nonfirm Power	· ·	157,974	_	_	_	_			
Total Power Lakeland City of/Sep 30	5,471	157,974	_	_	_	_			
Nonfirm Power	21,434	725,745	_	_	_	_			
Total Power		725,745	_	_	_	_			
New Smyrna Beach Utils Comm/Sep 30									
Nonfirm Power		_	_	_	_	_			
Total Power	—	_	_	_	_	_			
Orlando Utilities Comm/Sep 30 Firm Power	249,830	8.012.461	_	_		_			
Nonfirm Power		2,499,452	_	_	_	_			
Total Power	· ·	10,511,913	_	_	_	_			
Reedy Creek Improvement Dist/Sep 30	,	, , -							
Nonfirm Power		15,729	_	_	_	_			
Total Power	517	15,729	_	_	_	_			
St Cloud City of/Sep 30		600 210							
Firm Power Total Power		600,210 600,210	_	_	_	_			
10th 10wo1		000,210	_	_	_ _	_			

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility / Fiscal Year Ending Date	Cooper	rative	Otho	_{er} 1	Tota	ıl			
Fiscal Pear Linning Date	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)			
California Turlock Irrigation Dist/Dec 31									
Firm Power	_	_	14	294,715	14	318,073			
Nonfirm Power		_	28,193	459,678	173,212	2,068,133			
Total Power	_	_	28,207	754,393	173,226	2,386,206			
Colorado Springs City of/Dec 31									
Firm Power Nonfirm Power		_	150,600	5,140,081 42,504	150,600 26,354	5,140,081 452,428			
Total Power		_	3,384 153,984	5,182,585	20,334 176,954	5,592,509			
Connecticut				-,,		-,,,-			
Mun Electric Engy Coop/Dec 31 Firm Power	_	_	1,762,860	91,927,396	1,762,860	91,927,396			
Nonfirm Power		_	379,670	15,200,056	379,670	15,200,056			
Total Power	<u> </u>	_	2,142,530	107,127,452	2,142,530	107,127,452			
Groton City of/Jun 30 Firm Power					5 720	407 100			
Total Power		_	_	_	5,728 5,728	407,199 407,199			
Delaware					3,720	107,177			
Dover City of/Dec 31									
Nonfirm Power		_	1,404	64,717	33,758	1,224,259			
Total Power	_	_	1,404	64,717	33,758	1,224,259			
Florida Municipal Power Agency/Sep 30									
Firm Power		_	2,883,824	147,929,622	2,883,824	147,929,622			
Nonfirm Power		_	264,305	20,437,341	494,736	23,139,719			
Total Power	_	_	3,148,129	168,366,963	3,378,560	171,069,341			
Fort Pierce Utilities Au/Sep 30 Nonfirm Power	211	5,276	595	15,494	1,598	41,803			
Other Power		_ 5,2.0	1,250		1,250	,,,,,			
Total Power	211	5,276	1,845	15,494	2,848	41,803			
Gainesville Regional Utilities/Sep 30	40.555	2 502 040	217.250	0.500.055	255.014	11 401 114			
Firm Power Nonfirm Power		2,683,048 224,363	217,359 44,105	8,798,066 1,413,722	265,914 119,458	11,481,114 3,338,485			
Total Power		2,907,411	261,464	10,211,788	385,372	14,819,599			
Homestead City of/Sep 30		=,, ,,,,,,		,,		- 1,0-2,0-2			
Firm Power			576	129,034	576	129,034			
Nonfirm Power		2,279	780	39,716	1,109	56,306			
Total Power	40	2,279	1,356	168,750	1,685	185,340			
Firm Power	5,788	2,358,041	_	308,816	3,322,589	142,618,712			
Nonfirm Power		2,165,603	84,284	2,479,848	255,224	7,034,966			
Total Power	91,025	4,523,644	84,284	2,788,664	3,577,813	149,653,678			
Key West City of/Sep 30 Firm Power	_	432,000	_	_	_	432.000			
Nonfirm Power		248	36	885	262	9,995			
Total Power		432,248	36	885	262	441,995			
Lake Worth City of/Sep 30			500	500.002	500	7 00 000			
Firm Power Nonfirm Power	715	21,908	608 1,965	709,993 56,265	608 8,151	709,993 236,147			
Total Power		21,908	2,573	766,258	8,759	946,140			
Lakeland City of/Sep 30		,	_,-,	,	-,,-,	,			
Nonfirm Power		_	9,250	986,336	30,684	1,712,081			
Total Power	_	_	9,250	986,336	30,684	1,712,081			
New Smyrna Beach Utils Comm/Sep 30 Nonfirm Power	_	_	685	1,889	685	1,889			
Total Power		_	685	1,889	685	1,889			
Orlando Utilities Comm/Sep 30									
Firm Power		5,382,464	1,449,104	51,367,033	1,768,195	64,761,958			
Nonfirm Power Total Power		5,382,464	356,353 1,805,457	9,260,482 60,627,515	435,742 2,203,937	11,759,934 76,521,892			
Reedy Creek Improvement Dist/Sep 30	09,201	3,302,404	1,005,457	00,027,313	2,203,937	10,321,092			
Nonfirm Power		36,804	1,278	37,701	3,098	90,234			
Total Power	1,303	36,804	1,278	37,701	3,098	90,234			
St Cloud City of/Sep 30						600 210			
Firm Power		_	_	_	_	600,210 600,210			
10th 10wo	_	_				000,210			

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-0	Owned	Fede	eral	State and Governr				
Tiscui Teur Bluing Suc	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)			
Florida									
Tallahassee City of/Sep 30 Nonfirm Power	88,041	2,546,238							
Total Power		2,546,238			_				
Vero Beach City of/Sep 30	00,011	2,010,230							
Firm Power		_	_	_	_	_			
Nonfirm Power		332,989	_	_	_	_			
Total Power	10,511	332,989	_	_	_	_			
Georgia Dalton City of/Nov 30									
Firm Power	31,408	292,000	_	_	_	_			
Total Power		292,000	_	_	_	_			
Idaho									
Idaho Falls City of/Sep 30	-0 -0-								
Nonfirm Power		2,343,597	148,340	5,113,190	_	_			
Total Power	60,605	2,343,597	148,340	5,113,190	_	_			
Illinois Municipal Elec Agency/Apr 30									
Firm Power	_	_	_	_	_	_			
Nonfirm Power		_	_	_	_	_			
Total Power	_	_	_	_	_	_			
Springfield City of/Jun 30									
Firm Power		1,424,227	_	_	_	_			
Total Power	,	1,424,227	_	_	_				
Indiana	75,005	1,424,227							
Crawfordsville Elec Lgt&Pwr Co/Dec 31									
Firm Power	_	_	_	_	11,090	2,090,74			
Total Power	_	_	_	_	11,090	2,090,74			
Iowa									
Cedar Falls City of/Dec 31 Nonfirm Power	4,055	76,327	_	_	_	_			
Total Power		76,327	_	_	_	_			
Muscatine City of/Dec 31	.,	,							
Firm Power		1,714,784	_	_	_	_			
Nonfirm Power		3,650,510	593	7,847	62,527	966,53			
Total Power	349,883	5,365,294	593	7,847	62,527	966,53			
Pella City of/Dec 31 Firm Power									
Nonfirm Power		494,750	_	_	_	_			
Total Power		494,750	_	_	_	_			
Kansas	,	,,,,,							
Kansas City City of/Dec 31									
Firm Power			_	_		_			
Nonfirm Power		217,894 217,894	_	_	250,005	7,061,09 7,061,09			
Total Power	10,870	217,894	_	_	250,005	7,061,09			
Firm Power	11,924	2,002,456	_	_	_	_			
Total Power	11,924	2,002,456	_	_	_	_			
Winfield City of/Dec 31									
Firm Power	_	_	_	_	_	_			
Total Power	_	_	_	_	_	_			
Kentucky Henderson City Utility Comm/May 31									
Nonfirm Power	_	_	_	_	_	_			
Total Power	_	_	_	_	_	_			
Owensboro City of/May 31									
Firm Power		32,782,386	_	_	_	_			
Total Power	1,431,089	32,782,386	_	_	_	_			
Louisiana Lafayetta City of/Oct 31									
Lafayette City of/Oct 31 Firm Power	_	_	_	_	123,802	6,077,84			
Nonfirm Power		263,554	_	_	4,023	93,79			
Total Power		263,554	_	_	127,825	6,171,64			
Terrebonne Parish Consol Gov 't/Dec 31	,	, -							
Nonfirm Power	_	_	_	_	721	45,55			
Total Power	_	_	_	_	721	45,55			

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility / Fiscal Year Ending Date	Cooper	ative	Othe	r1	Tota	1			
riscar rear Ending Sac	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)			
Florida									
Tallahassee City of/Sep 30	0.274	272.254	20.212	0.62.600	106 607	2 602 101			
Nonfirm Power Total Power		273,254 273,254	29,212 29,212	862,699 862,699	126,627 126,627	3,682,191 3,682,191			
Vero Beach City of/Sep 30	9,374	273,234	29,212	002,099	120,027	3,062,191			
Firm Power	_	_	670	207,502	670	207,502			
Nonfirm Power	2,446	79,533	79,253	1,344,016	92,210	1,756,538			
Total Power	2,446	79,533	79,923	1,551,518	92,880	1,964,040			
Georgia									
Dalton City of/Nov 30 Firm Power					31,408	292,000			
Total Power					31,408	292,000			
Idaho					31,.00	2,2,000			
Idaho Falls City of/Sep 30									
Nonfirm Power	_	_	_	_	208,945	7,456,787			
Total Power	_	_	_	_	208,945	7,456,787			
Illinois Illinois Municipal Elec Agency/Apr 30									
Firm Power	_	_	1,528,654	70,660,067	1,528,654	70,660,067			
Nonfirm Power		_	30,909	901,613	30,909	901,613			
Total Power	_	_	1,559,563	71,561,680	1,559,563	71,561,680			
Springfield City of/Jun 30									
Firm Power	_	_	42,158	1,526,734	42,158	1,526,734			
Nonfirm Power Total Power	_	_	130,986 173,144	2,169,234 3,695,968	223,991 266,149	3,593,461 5,120,195			
Indiana			173,144	3,093,900	200,149	3,120,193			
Crawfordsville Elec Lgt&Pwr Co/Dec 31									
Firm Power	_	_	_	_	11,090	2,090,749			
Total Power	_	_	_	_	11,090	2,090,749			
Iowa									
Cedar Falls City of/Dec 31 Nonfirm Power					4,055	76,327			
Total Power		_		_	4,055	76,327			
Muscatine City of/Dec 31					,	,			
Firm Power	630	173,925	68,914	1,904,727	179,624	3,793,436			
Nonfirm Power		592,118	1,470	19,900	345,212	5,236,913			
Total Power Pella City of/Dec 31	41,449	766,043	70,384	1,924,627	524,836	9,030,349			
Firm Power	_	_	_	840,000	_	840,000			
Nonfirm Power		_	68,914	1,064,727	91,885	1,559,477			
Total Power		_	68,914	1,904,727	91,885	2,399,477			
Kansas									
Kansas City City of/Dec 31			64	42.226	64	42.22			
Firm Power Nonfirm Power		_	64 153,023	43,226 4,614,921	64 413,898	43,226 11,893,910			
Total Power		_	153,023	4,658,147	413,962	11,937,136			
McPherson City of/Dec 31			,	1,000,0	,	,,,,			
Firm Power		_	24,110	964,624	36,034	2,967,080			
Total Power	_	_	24,110	964,624	36,034	2,967,080			
Winfield City of/Dec 31 Firm Power			5,178	243,099	5,178	243,099			
Total Power	_	_	5,178	243,099	5,178 5,178	243,099			
Kentucky			5,170	2.5,0,,	3,170	2.5,0,,			
Henderson City Utility Comm/May 31									
Nonfirm Power		15,482,422	_	_	1,525,698	15,482,422			
Total Power	1,525,698	15,482,422	_	_	1,525,698	15,482,422			
Owensboro City of/May 31 Firm Power	_		_	_	1,431,089	32,782,386			
Total Power	_	_	_	_	1,431,089	32,782,386			
Louisiana					, ,	,=,000			
Lafayette City of/Oct 31									
Firm Power		_	232,481	7,695,719	356,283	13,773,568			
Nonfirm Power Total Power		_	2,259	66,805	17,769	424,152			
Terrebonne Parish Consol Gov 't/Dec 31	_	_	234,740	7,762,524	374,052	14,197,720			
Nonfirm Power	_	_	_	_	721	45,551			
Total Power	_	_	_	_	721	45,551			

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-C	wned	Fede	eral	State and Governm				
Them Year Enting 2 and	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)			
Massachusetts									
Braintree Town of/Dec 31 Firm Power	47,530	2,849,986	_	_	_	_			
Total Power		2,849,986							
Chicopee City of/Dec 31	,	, ,							
Firm Power		_	_	_	_	_			
Total Power Danvers Town of/Dec 31	—	_	_	_	_	_			
Nonfirm Power	—	_	_	_	872	28,000			
Total Power	—	_	_	_	872	28,000			
Hingham City of/Dec 31					4	4 242			
Firm Power Nonfirm Power		17,258	_	_	_ 4	4,242			
Total Power		17,258	_	_	4	4,242			
Holyoke City of/Dec 31						,			
Nonfirm Power		40,050	_	_	5,193	127,471			
Total Power Littleton Town of/Dec 31	1,479	40,050	_	_	5,193	127,471			
Nonfirm Power	—	_	_	_	395	9,537			
Total Power		_	_	_	395	9,537			
Mansfield Town of/Dec 31									
Firm Power Total Power		_	_	_	396 396	38,782 38,782			
North Attleborough Town of/Dec 31	—	_	_	_	390	30,702			
Firm Power		_	_	_	66	8,869			
Total Power	—	_	_	_	66	8,869			
Reading Town of/Dec 31	102	10.167							
Nonfirm Power Total Power		19,167 19,167	_	_	_	_			
Taunton City of/Dec 31	1/2	15,107							
Nonfirm Power		290,900	_	_	_	_			
Total Power	8,293	290,900	_	_	_	_			
Westfield City of/Dec 31 Firm Power					6,804	554,029			
Total Power		_	_	_	6,804	554,029			
Michigan					.,	,. ,. ,			
Grand Haven City of/Jun 30									
Firm Power Total Power		_	_	_	82,892 82,892	1,995,930 1,995,930			
Lansing City of/Jun 30	—	_	_	_	62,692	1,993,930			
Firm Power	—	_	_	_	266,675	9,270,036			
Total Power	—	_	_	_	266,675	9,270,036			
Marquette City of/Jun 30 Firm Power									
Nonfirm Power		77,417	_	_	_	_			
Total Power		77,417	_	_	_	_			
Traverse City City of/Jun 30									
Nonfirm Power Total Power		_	_	_	3,628	79,933 79,933			
Minnesota	—	_	_	_	3,628	79,933			
Austin City of/Dec 31									
Nonfirm Power		_	_	_	136,404	3,150,466			
Total Power	—	_	_	_	136,404	3,150,466			
Fairmont Public Utilities Comm/Dec 31 Nonfirm Power	_	_	_	_	1,018	35,742			
Total Power		_	_	_	1,018	35,742			
Hutchinson Utilities Comm/Dec 31					,	**			
Firm Power			_	_	-				
Nonfirm Power Total Power	,	240,694 240,694	_	_	1,686 1,686	25,693 25,693			
Rochester Public Utilities/Dec 31	13,719	240,094	_	_	1,000	25,093			
Firm Power	—	_	_	_	425	4,395,194			
Nonfirm Power		4,550	_	_	85,066	1,961,524			
Total Power	175	4,550	_	_	85,491	6,356,718			
Western Minnesota Mun P Agny/Dec 31 Firm Power	—	_	_	_	1,997,174	42,359,351			
Total Power			_	_	1,997,174	42,359,351			

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility /	Coope	rative	Othe	er1	Tota	ıl			
Fiscal Year Ending Date	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)			
Massachusetts					·				
Braintree Town of/Dec 31			7,491	680,807	55,021	2 520 702			
Firm Power Total Power		_	7,491	680,807	55,021	3,530,793 3,530,793			
Chicopee City of/Dec 31			7,.21	000,007	55,021	3,030,733			
Firm Power		_	262	11,764	262	11,764			
Total Power	_	_	262	11,764	262	11,764			
Nonfirm Power		_	_	_	872 872	28,000			
Total Power Hingham City of/Dec 31	_	_	_	_	8/2	28,000			
Firm Power	_	_	_	_	4	4,242			
Nonfirm Power		_	_	_	168	17,258			
Total Power	_	_	_	_	172	21,500			
Holyoke City of/Dec 31 Nonfirm Power	_	_	_	_	6,672	167,521			
Total Power		_	_	_	6,672	167,521			
Littleton Town of/Dec 31									
Nonfirm Power		_	_	_	395	9,537			
Total Power	_	_	_	_	395	9,537			
Firm Power	_	_	_	_	396	38,782			
Total Power		_	_	_	396	38,782			
North Attleborough Town of/Dec 31									
Firm Power Total Power		_	_	_	66 66	8,869 8,869			
Reading Town of/Dec 31	_	_	_	_	00	0,009			
Nonfirm Power	_	_	501	48,133	693	67,300			
Total Power	_	_	501	48,133	693	67,300			
Taunton City of/Dec 31			15 222	2 222 667	22.615	2 622 567			
Nonfirm Power Total Power		_	15,322 15,322	2,332,667 2,332,667	23,615 23,615	2,623,567 2,623,567			
Westfield City of/Dec 31			13,322	2,332,007	23,013	2,023,307			
Firm Power		_	_	_	6,804	554,029			
Total Power	_	_	_	_	6,804	554,029			
Michigan Grand Haven City of/Jun 30									
Firm Power	_	_	_	_	82,892	1,995,930			
Total Power	_	_	_	_	82,892	1,995,930			
Lansing City of/Jun 30	5 200	205.001			271 004	0.575.117			
Firm Power		305,081 305,081			271,884 271,884	9,575,117 9,575,117			
Marquette City of/Jun 30	3,207	303,001			271,004	7,373,117			
Firm Power		571,448	_	_	12,289	571,448			
Nonfirm Power			_	_	1,790	77,417			
Total Power Traverse City City of/Jun 30	12,289	571,448	_	_	14,079	648,865			
Nonfirm Power	_	_	_	_	3,628	79,933			
Total Power		_	_	_	3,628	79,933			
Minnesota									
Austin City of/Dec 31					126 404	2 150 466			
Nonfirm Power					136,404 136,404	3,150,466 3,150,466			
Fairmont Public Utilities Comm/Dec 31					130,404	3,130,400			
Nonfirm Power	_	_	_	_	1,018	35,742			
Total Power	_	_	_	_	1,018	35,742			
Hutchinson Utilities Comm/Dec 31 Firm Power		44,000				44,000			
Nonfirm Power	2,113	35,686	_	_	17,718	302,073			
Total Power		79,686	_	_	17,718	346,073			
Rochester Public Utilities/Dec 31						,			
Firm Power			_	_	425 191,358	4,395,194 4,526,719			
Total Power		2,560,645	_	_	191,338	4,526,719 8,921,913			
Western Minnesota Mun P Agny/Dec 31	100,117	2,500,045			171,705	5,721,713			
Firm Power	_	_	_	_	1,997,174	42,359,351			
Total Power	_	_	_	_	1,997,174	42,359,351			

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility / Fiscal Year Ending Date	Investor-	Owned	Fed	eral	State and Governr				
Took Took Daving Dave	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)			
Minnesota Worthington City of/Dec 31									
Firm Power	_	_	_	_	_	_			
Total Power	_	_	_	_	_	_			
Mississippi Clarksdale City of/Sep 30									
Firm Power	_	_	_	_	_	_			
Total Power		_	_	_	_	_			
Greenwood Utilities Comm/Sep 30									
Nonfirm Power		_	_	_	_	_			
Total Power Municipal Energy Agncy of MS/Sep 30	_	_	_	_	_	_			
Firm Power	_	_	_	_	113,878	3,482,83			
Total Power	_	_	_	_	113,878	3,482,83			
Missouri Carthage City of/Jun 30									
Nonfirm Power	_	_	_	_	_	_			
Total Power		_	_	_	_				
Columbia City of/Sep 30									
Nonfirm Power		_	_	_	_	_			
Total Power	_	_	_	_	_	_			
Firm Power	_	1.113.750	_	_	_	_			
Nonfirm Power		497,636	_	_	_	_			
Total Power	27,731	1,611,386	_	_	_	_			
Poplar Bluff City of/Dec 31									
Nonfirm Power		_	_	_	_	_			
Sikeston City of/May 31									
Firm Power	_	_	_	_	_	_			
Nonfirm Power		25,060	_	_	13,298	226,07			
Total Power	2,370	25,060	_	_	13,298	226,07			
Springfield City of/Jun 30 Firm Power	_	_	_	_	_	_			
Nonfirm Power		22,000	_	_	875	42,00			
Total Power	50	22,000	_	_	875	42,000			
Nebraska									
Beatrice City of/Jul 31 Firm Power					181,868	6,855,099			
Total Power					181,868	6,855,09			
Fremont City of/Jul 31					,				
Nonfirm Power		_	_	_	10,844	216,94			
Total Power	_	_	_	_	10,844	216,94			
Nonfirm Power	_	_	_	_	39,404	507,58			
Total Power		_	_	_	39,404	507,58			
Hastings City of/Dec 31									
Nonfirm Power		_	_	_	128,043	1,168,92			
Total Power Lincoln Electric System/Dec 31	_	_	_	_	128,043	1,168,92			
Firm Power	_	_	_	_	_	_			
Nonfirm Power		1,289,679	3,219	41,139	5,903	87,929			
Total Power	77,356	1,289,679	3,219	41,139	5,903	87,929			
New Mexico Farmington City of/Jun 30									
Nonfirm Power	4,338	49,795	_	_	250	2,500			
Total Power		49,795	_	_	250	2,50			
Los Alamos County/Jun 30	. ==:		==						
Nonfirm Power		74,380	72 72	1,245	3,363	44,16			
Total Power New York	4,771	74,380	12	1,245	3,363	44,162			
Freeport Village of Inc/Feb 28									
Nonfirm Power		24,634	_	_	_	_			
Total Power	283	24,634	_	_	_	_			
Jamestown City of/Dec 31 Nonfirm Power	57,445	1,172,992	_	_	_	_			
Total Power		1,172,992	_	_	_	_			
	57,175	1,1,2,7,7							

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity								
State / Utility /	Cooper	ative	Othe	_r 1	Tota	1			
Fiscal Year Ending Date	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)			
Minnesota	,								
Worthington City of/Dec 31 Firm Power	_	_	3,333	142,026	3,333	142,026			
Total Power	_	_	3,333	142,026	3,333	142,026			
Mississippi									
Clarksdale City of/Sep 30			46 122	2 105 122	46,132	2,185,133			
Firm Power Total Power		_	46,132 46,132	2,185,133 2,185,133	46,132 46,132	2,185,133			
Greenwood Utilities Comm/Sep 30			10,132	2,103,133	10,132	2,103,133			
Nonfirm Power		_	28,945	1,635,339	28,945	1,635,339			
Total Power	_	_	28,945	1,635,339	28,945	1,635,339			
Municipal Energy Agncy of MS/Sep 30 Firm Power	_	_	758,624	24,709,010	872,502	28,191,845			
Total Power		_	758,624	24,709,010	872,502	28,191,845			
Missouri									
Carthage City of/Jun 30 Nonfirm Power	_	_	1,546	52,955	1,546	52,955			
Total Power	_	_	1,546	52,955	1,546	52,955 52,955			
Columbia City of/Sep 30			-,	,	-,	,			
Nonfirm Power		_	1,939	77,211	1,939	77,211			
Total Power	_	_	1,939	77,211	1,939	77,211			
Independence City of/Jun 30 Firm Power	_	_	_	_	_	1,113,750			
Nonfirm Power	1,217	20,328	_	_	28,948	517,964			
Total Power	1,217	20,328	_	_	28,948	1,631,714			
Poplar Bluff City of/Dec 31			7 000	110.152	7 000	110.150			
Nonfirm Power		_	5,890 5,890	118,153 118,153	5,890 5,890	118,153 118,153			
Sikeston City of/May 31	_	_	3,690	110,133	3,690	110,133			
Firm Power	_	_	1,356,786	40,460,385	1,356,786	40,460,385			
Nonfirm Power		363,551	36,003	639,865	75,158	1,254,551			
Total Power	23,487	363,551	1,392,789	41,100,250	1,431,944	41,714,936			
Springfield City of/Jun 30 Firm Power	_	_	162,438	4,253,000	162,438	4,253,000			
Nonfirm Power	10,069	339,000	18,956	446,000	29,950	849,000			
Total Power	10,069	339,000	181,394	4,699,000	192,388	5,102,000			
Nebraska									
Beatrice City of/Jul 31 Firm Power	_	_	_	_	181,868	6,855,099			
Total Power	_	_	_	_	181,868	6,855,099			
Fremont City of/Jul 31					,,,,,,	.,,			
Nonfirm Power		_	_	_	10,844	216,945			
Total Power	_	_	_	_	10,844	216,945			
Nonfirm Power	_	_	_	_	39,404	507,586			
Total Power		_	_	_	39,404	507,586			
Hastings City of/Dec 31									
Nonfirm Power		_	17,722	213,867	145,765	1,382,790			
Total PowerLincoln Electric System/Dec 31	_	_	17,722	213,867	145,765	1,382,790			
Firm Power	_	_	68,555	2,087,838	68,555	2,087,838			
Nonfirm Power	553,755	7,081,071	8,497	99,849	648,730	8,599,667			
Total Power	553,755	7,081,071	77,052	2,187,687	717,285	10,687,505			
New Mexico Farmington City of/Jun 30									
Nonfirm Power	480	7,040	21,370	1,117,029	26,438	1,176,364			
Total Power	480	7,040	21,370	1,117,029	26,438	1,176,364			
Los Alamos County/Jun 30			0.5						
Nonfirm Power Total Power	85 85	1,342	86	10,985	8,377 9,377	132,114			
New York	85	1,342	86	10,985	8,377	132,114			
Freeport Village of Inc/Feb 28									
Nonfirm Power	_	_	_	_	283	24,634			
Total Power	_	_	_	_	283	24,634			
Jamestown City of/Dec 31 Nonfirm Power	_	_	_	_	57,445	1,172,992			
Total Power	_	_	_	_	57,445	1,172,992			

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity							
State / Utility / Fiscal Year Ending Date	Investor-0	Owned	Fed	leral	State and Governi			
riscar rear Entring Date	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)		
New York								
Rockville Centre Village of/May 31	140	9.462						
Nonfirm Power		8,462 8,462	_	_	_	_		
North Carolina	140	0,402	_	_	_	_		
Greenville Utilities Comm/Jun 30								
Firm Power	_	_	_	_	_	_		
Total Power		_	_	_	_	_		
New Bern City of/Jun 30								
Firm Power	_	_	_	_	_	_		
Total Power		_	_	_	_	_		
North Carolina Eastern M P A/Dec 31								
Firm Power	416,617	38,416,000	_	_	_	_		
Total Power	416,617	38,416,000	_	_	_	_		
North Carolina Mun Power Agny/Dec 31								
Firm Power	2,279,545	132,422,902	_	_	_	_		
Nonfirm Power		179,144	_	_	3,611	45,204		
Total Power	2,299,189	132,602,046	_	_	3,611	45,204		
Rocky Mount City of/Jun 30								
Firm Power		_	_	_	_	_		
Total Power	_	_	_	_	_	_		
Wilson City of/Jun 30								
Firm Power Total Power		_	_	_	_	_		
Ohio	_	_	_	_	_	_		
American Mun Power-Ohio Inc/Dec 31								
Firm Power	_	_	_	_	_	_		
Total Power		_	_	_	_	_		
Bowling Green City of/Jun 30								
Firm Power	_	_	_	_	_	_		
Total Power		_	_	_	_	_		
Bryan City of/Dec 31								
Nonfirm Power	_	_	_	_	_	_		
Total Power	_	_	_	_	_	_		
Hamilton City of/Dec 31								
Firm Power	_	_	_	_	_	_		
Nonfirm Power	_	_	_	_	_	_		
Total Power	_	_	_	_	_	_		
Orrville City of/Dec 31								
Firm Power		_	_	_	_	_		
Nonfirm Power		_	_	_	_	_		
Total Power	_	_	_	_	_	_		
Piqua City of/Dec 31 Nonfirm Power								
Total Power		_	_	_	_	_		
St Marys City of/Dec 31	_	_	_	_	_	_		
Firm Power	_	_	_	_	_	_		
Total Power		_	_	_	_			
Oregon								
Eugene City of/Dec 31								
Nonfirm Power	65,582	1,636,242	70	1,510	68,948	1,199,152		
Total Power		1,636,242	70			1,199,152		
South Carolina								
Piedmont Municipal Power Agny/Dec 31								
Firm Power	1,407,108	46,827,000	_	_	_	_		
Nonfirm Power	_	_	_	_	400	5,000		
Total Power	1,407,108	46,827,000	_	_	400	5,000		
South Dakota								
Pierre City of/Dec 31						2.2		
Firm Power		_	_	_	14,923	313,633		
Total Power	_	_	_	_	14,923	313,633		
Texas Auctin City of/Dec 31								
Austin City of/Dec 31 Firm Power								
Nonfirm Power		3,584,084	_	_	22,157			
Total Power		3,584,084	_	_	22,157	586,738		
Brownsville Public Utils Board/Sep 30	200,575	3,304,004	_	_	22,137	300,730		
	19,741	94,363	_	_	_	_		
Nonfirm Power								

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

	Purchaser of Electricity							
State / Utility /	Coope	rative	Othe	er1	Tota	1		
Fiscal Year Ending Date	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)		
New York					'			
Rockville Centre Village of/May 31 Nonfirm Power	_	_	_	_	140	8,462		
Total Power		_	_	_	140	8,462		
North Carolina						-,		
Greenville Utilities Comm/Jun 30								
Firm Power		_	37,000	2,870,661	37,000	2,870,661		
Total Power	_	_	37,000	2,870,661	37,000	2,870,661		
New Bern City of/Jun 30			222	17.045	222	17.046		
Firm Power Total Power			223 223	17,945 17,945	223 223	17,945 17,945		
North Carolina Eastern M P A/Dec 31			223	17,743	223	17,545		
Firm Power	_	_	6,291,403	422,811,000	6,708,020	461,227,000		
Total Power		_	6,291,403	422,811,000	6,708,020	461,227,000		
North Carolina Mun Power Agny/Dec 31								
Firm Power			4,221,890	238,604,275	6,501,435	371,027,177		
Nonfirm Power		12,581	127,952	1,798,548	152,142	2,035,477		
Total Power	935	12,581	4,349,842	240,402,823	6,653,577	373,062,654		
Rocky Mount City of/Jun 30			20,087	1 215 557	20,087	1 215 557		
Firm Power		_	20,087	1,315,557 1,315,557	20,087	1,315,557 1,315,557		
Wilson City of/Jun 30			20,087	1,313,337	20,007	1,515,557		
Firm Power	_	_	64,185	4,882,896	64,185	4.882.896		
Total Power		_	64,185	4,882,896	64,185	4,882,896		
Ohio								
American Mun Power-Ohio Inc/Dec 31								
Firm Power		_	4,984,129	172,542,459	4,984,129	172,542,459		
Total Power	_	_	4,984,129	172,542,459	4,984,129	172,542,459		
Bowling Green City of/Jun 30			2.007	140.002	2.007	1.40.002		
Firm Power		_	2,907	149,993	2,907	149,993		
Total Power	_	_	2,907	149,993	2,907	149,993		
Nonfirm Power	_	_	1,264	19,300	1,264	19,300		
Total Power		_	1,264	19,300	1,264	19,300		
Hamilton City of/Dec 31			, -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, -	.,		
Firm Power		_	159,903	3,834,483	159,903	3,834,483		
Nonfirm Power		_	794	26,087	794	26,087		
Total Power	_	_	160,697	3,860,570	160,697	3,860,570		
Orrville City of/Dec 31			22 525	729.025	22 525	720 025		
Firm Power Nonfirm Power		_	33,535 5,560	728,035 269,423	33,535 5,560	728,035 269,423		
Total Power		_	39,095	997,458	39,095	997,458		
Piqua City of/Dec 31			37,073	<i>771</i> , 4 30	37,073	<i>771</i> , 4 30		
Nonfirm Power	_	_	38	2,761	38	2,761		
Total Power		_	38	2,761	38	2,761		
St Marys City of/Dec 31								
Firm Power		_	8,917	237,456	8,917	237,456		
Total Power	_	_	8,917	237,456	8,917	237,456		
Oregon Eugene City of/Dec 31								
Nonfirm Power	57	687	30,916	548,019	165,573	3,385,610		
Total Power	57	687	30,916	548,019	165,573	3,385,610		
South Carolina	37	007	30,910	340,019	103,373	3,365,010		
Piedmont Municipal Power Agny/Dec 31								
Firm Power	_	_	1,696,090	94,076,000	3,103,198	140,903,000		
Nonfirm Power		_			400	5,000		
Total Power	_	_	1,696,090	94,076,000	3,103,598	140,908,000		
South Dakota								
Pierre City of/Dec 31					14.022	212 (22		
Firm Power		_	_	_	14,923 14,923	313,633 313,633		
Total Power Texas	_	_	_	_	14,923	313,033		
Austin City of/Dec 31								
Firm Power	_	_	203,595	4,458,378	203,595	4,458,378		
Nonfirm Power		3,400,552	738,786	22,472,200	1,138,833	30,043,574		
Total Power		3,400,552	942,381	26,930,578	1,342,428	34,501,952		
Brownsville Public Utils Board/Sep 30								
Nonfirm Power		_	16,056	39,189	35,797	133,552		
Total Power	_	_	16,056	39,189	35,797	133,552		

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

			Purchaser of	f Electricity			
State / Utility /	Investor-	Owned	Fed	eral	State and Other Government		
Fiscal Year Ending Date	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	
Texas	'				<u> </u>		
Bryan City of/Dec 31							
Firm Power	_	_	_	_	_	_	
Nonfirm Power	_	_	_	_	_	_	
Total Power	_	_	_	_	_	_	
Denton City of/Sep 30							
Firm Power	_	_	_	_	_	_	
Total Power	_	_	_	_	_	_	
Garland City of/Sep 30							
Firm Power	_	_	_	_	_	_	
Total Power	_	_	_	_	_	_	
Greenville Electric Util Sys/Sep 30							
Nonfirm Power	_	_	_	_	_	_	
Total Power	_	_	_	_	_	_	
San Antonio Public Service Bd/Jan 31							
Nonfirm Power	117,827	2,206,085	_	_	40,707	893,36	
Total Power	117,827	2,206,085	_	_	40,707	893,36	
Texas Municipal Power Agency/Sep 30							
Firm Power	_	_	_	_	_	_	
Total Power	_	_	_	_	_	_	
Utah							
Intermountain Power Agency/Jun 30							
Firm Power	269,272	20,328,700	_	_	_	_	
Nonfirm Power	11,450	75,184	_	_	_	_	
Total Power	280,722	20,403,884	_	_	_	_	
Provo City Corp/Jun 30	,	,,,					
Firm Power	_	_	_	_	612,071	13,097,16	
Total Power	_	_	_	_	612,071	13,097,16	
Vermont					012,071	15,077,10	
Burlington City of/Jun 30							
Firm Power	18.371	3,576,081	_	_	952	52.64	
Nonfirm Power	5,174	124,545	_	_			
Total Power	23,545	3,700,626			952	52,64	
Washington	23,343	3,700,020			732	32,04	
Tacoma City of/Dec 31							
Nonfirm Power	114.186	1,219,712	342,699	16,609,586	10.023	63.82	
Total Power	114,186	1,219,712	342,699	16,609,586	10,023	63,82	
Wisconsin	114,100	1,219,712	342,099	10,009,360	10,023	03,62	
Badger Power Marketing Auth/Dec 31							
Firm Power	_	_	_	_	_		
Total Power	_	_	_	_	_	_	
Manitowoc Public Utilities/Dec 31	_	_	_	_	_	_	
Nonfirm Power	98	3,657					
Total Power	98 98	3,657	_	_	_	_	
Wisconsin Public Power Inc Sys/Dec 31	98	3,037	_	_	_	_	
Firm Power	- 16.025	2710714					
Nonfirm Power	16,035	2,710,714	15	197	1,158	22,25	
Total Power	16,035	2,710,714	15	197	1,158	22,25	

Table 30. Electricity Sales for Resale by Municipal Utilities, Fiscal Year 1996 (Continued)

			Purchaser of	Electricity		
State / Utility /	Cooper	rative	Othe	er ¹	Tota	al
Fiscal Year Ending Date	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)	Sales For Resale (thousand kWh)	Revenue (dollars)
Texas	'		'		,	
Bryan City of/Dec 31						
Firm Power	_	_	293,450	15,012,205	293,450	15,012,205
Nonfirm Power	_	_	223,135	6,335,014	223,135	6,335,014
Total Power	_	_	516,585	21,347,219	516,585	21,347,219
Denton City of/Sep 30			, , , , , , , , , , , , , , , , , , ,		,	, ,
Firm Power	_	_	97,368	2,912,522	97,368	2,912,522
Total Power	_	_	97,368	2,912,522	97,368	2,912,522
Garland City of/Sep 30			, , , , , , , , , , , , , , , , , , ,	, ,	,	, ,
Firm Power	_	_	_	4,190,518	_	4.190.518
Total Power	_	_	_	4,190,518	_	4,190,518
Greenville Electric Util Sys/Sep 30				.,,		.,-, ,,
Nonfirm Power	_	_	19,882	7,942,800	19,882	7,942,800
Total Power	_	_	19,882	7,942,800	19,882	7,942,800
San Antonio Public Service Bd/Jan 31			,	.,,	,	.,, .=,
Nonfirm Power	87,122	1,807,504	425,940	13,189,277	671,596	18,096,233
Total Power	87,122	1,807,504	425,940	13,189,277	671,596	18,096,233
Texas Municipal Power Agency/Sep 30	**,-==	-,,	,.	,,	4.2,4.4	,
Firm Power	_	_	2,587,905	163,661,000	2,587,905	163,661,000
Total Power	_	_	2,587,905	163,661,000	2,587,905	163,661,000
Utah			2,507,505	100,001,000	2,507,705	105,001,000
Intermountain Power Agency/Jun 30						
Firm Power	_	_	9.491.710	623,233,800	9,760,982	643,562,500
Nonfirm Power	_	_	650	3,575	12,100	78,759
Total Power	_	_	9,492,360	623,237,375	9,773,082	643,641,259
Provo City Corp/Jun 30			,,., 2 ,500	020,201,010	2,775,002	0.0,0.1,20
Firm Power	_	_	_	_	612,071	13,097,168
Total Power	_	_	_	_	612,071	13,097,168
Vermont					012,071	15,077,100
Burlington City of/Jun 30						
Firm Power	116	11.999	_	_	19.439	3,640,729
Nonfirm Power	_		83,586	1,763,294	88,760	1,887,839
Total Power	116	11,999	83,586	1,763,294	108,199	5,528,568
Washington	110	11,,,,,	05,500	1,703,27	100,177	5,520,500
Tacoma City of/Dec 31						
Nonfirm Power	_	_	76,311	1,358,149	543,219	19,251,273
Total Power			76,311	1,358,149	543,219	19,251,273
Wisconsin			70,311	1,550,147	343,217	17,231,273
Badger Power Marketing Auth/Dec 31						
Firm Power	_	_	282,000	10,467,121	282,000	10,467,121
Total Power			282,000	10,467,121	282,000	10,467,121
Manitowoc Public Utilities/Dec 31			202,000	10,407,121	202,000	10,407,121
Nonfirm Power					98	3,657
Total Power		_		_	98	3,657
Wisconsin Public Power Inc Sys/Dec 31	_	_	_	_	70	3,037
Firm Power			3,301,682	109,712,881	3,301,682	109,712,881
Nonfirm Power	2,032	55,657	45,585	595,395	64,825	3,384,215
Total Power	2,032	55,657	45,585 3,347,267	110,308,276	3,366,507	3,384,215 113,097,096
TOTAL FUNCI	2,032	33,037	3,341,401	110,300,270	3,300,307	113,097,090

¹ Includes transactions with municipal utilities, power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

Source: Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities."

[—]Not Applicable

Notes: •For identification purposes, the municipal utilities are listed in the State in which the municipality is located. •Totals may not equal sum of components because of independent rounding.

Table 31. Electricity Purchases by Publicly Owned Utilities Not Reported on Form EIA-412, by State, 1996

	Source of Electricity (Purchases in thousand kWh)								
State / Utility	Investor- Owned	Federal	State and Other Government	Municipal	Cooperative	Other ¹	Total		
Alabama									
Brundidge City of	_	_	_	_	32,160	_	32,160		
Courtland City of	_	21,091	_	_		_	21,091		
Elba City of	_		_	_	54,648	_	54,648		
Hartselle City of	_	148,624	_	_	_	_	148,624		
Muscle Shoals City of/Jun 30 Opp City of	_	224,340	_	_	80,200	_	224,340 80,200		
Tuskegee City of/Sep 30	_	169,104		_		_	169,104		
Alaska									
Arctic Utilities Inc	_	_	_	_	_	1,951	1,951		
Unalaska City of		_		_	_	365	365		
Colorado Granada Town of	_	_	_	2,969	_	_	2,969		
Florida									
Moore Haven City of	_	_	_	_	15,550	_	15,550		
Georgia									
Doerun City of	_	_	7,301	_	_	_	7,301		
Oxford City of	_	_	12,790	_	_	_	12,790		
Idaho									
Albion City of	_	3,491	_	_	_	_	3,491		
Bonners Ferry City of	_	48,041	_	_	_	_	48,041		
Burley City of	_	149,687	_	_	_	_	149,687		
Declo City of	_	3,261	_	_	_	_	3,261		
East End Mutual Elec Co Ltd	_	20,071	_	_	_	_	20,071		
Heyburn City of	_	109,111	_	_	_	_	109,111		
Minidoka City of	_		_	_	_	890	890		
Plummer Electric Dept	_	33,420	_	_	_	_	33,420		
Rupert City of	_	79,495 21,781	_	_	_	_	79,495 21,781		
		,					,		
Illinois Fairfield City of	_	_	_	_	77,138	_	77,138		
McLeansboro City of	_	_	_	_	21,947	_	21,947		
Red Bud City of	_	_	_	_	38,429	_	38,429		
•					ŕ		,		
Indiana Cannelton Utilities	_	_	_	18,830	_	_	18,830		
Troy City of	_	_	_	11,141	_	_	11,141		
Iowa									
Aplington City of	5,911	_	_	_	_	_	5,911		
Bancroft City of	_	_	_	_	11,119	_	11,119		
Bloomfield City of	_	_	_	_	28,252	_	28,252		
Brooklyn City of	_	_	_	_	11,984	_	11,984		
Cascade City of	_	_	_	_	14,524	_	14,524		
Corwith City of	_	_	_	_	2,527	_	2,527		
	_	_	_	_	5,648 13,025	_	5,648 13,025		
Dayton City of					4,390		4,390		
Durant City of	_	_							
Durant City of Earlville City of		_	_	_		_	7.771		
Durant City of			_	_ _ _	7,771 4,960	_			
Durant City of Earlville City of Ellsworth City of Farnhamville City of Forest City City of	_ _ _ _		_ _ _ _	_ _ _	7,771 4,960 67,696		4,960 67,696		
Durant City of	_ _ _ _	_ _ _ _	_ _ _ _	_ _ _ _	7,771 4,960 67,696 7,429	=	7,771 4,960 67,696 7,429		
Durant City of	_ _ _ _ _	_ _ _ _	_ _ _ _		7,771 4,960 67,696 7,429 28,931	_ _ _ _	4,960 67,696 7,429 28,931		
Durant City of Earlville City of Ellsworth City of Farnhamville City of Forest City City of Gowrie Municipal Utilities Greenfield City of Grundy Center City of		_ _ _ _ _	 		7,771 4,960 67,696 7,429 28,931 28,103	_ _ _ _	4,960 67,696 7,429 28,931 28,103		
Durant City of					7,771 4,960 67,696 7,429 28,931 28,103 11,485		4,960 67,696 7,429 28,931 28,103 11,485		
Durant City of Earlville City of Ellsworth City of Farnhamville City of Forest City City of Gowrie Municipal Utilities Greenfield City of Grundy Center City of Keosauqua City of Lake Mills City of					7,771 4,960 67,696 7,429 28,931 28,103 11,485 34,046		4,960 67,696 7,429 28,931 28,103 11,485 34,046		
Durant City of Earlville City of Ellsworth City of Farnhamville City of Forest City City of Gowrie Municipal Utilities Greenfield City of Grundy Center City of Keosauqua City of Lake Mills City of Lamoni City of					7,771 4,960 67,696 7,429 28,931 28,103 11,485 34,046 19,274		4,960 67,696 7,429 28,931 28,103 11,485 34,046 19,274		
Durant City of Earlville City of Earlville City of Flamhamville City of Forest City City of Gowrie Municipal Utilities Greenfield City of Grundy Center City of Keosauqua City of Lake Mills City of Lamoni City of Larchwood City of					7,771 4,960 67,696 7,429 28,931 28,103 11,485 34,046 19,274 4,960		4,960 67,696 7,429 28,931 28,103 11,485 34,046 19,274 4,960		
Durant City of Earlville City of Ellsworth City of Farnhamville City of Forest City City of Gowrie Municipal Utilities Greenfield City of Grundy Center City of Keosauqua City of Lake Mills City of Lamoni City of					7,771 4,960 67,696 7,429 28,931 28,103 11,485 34,046 19,274		4,960 67,696		

Table 31. Electricity Purchases by Publicly Owned Utilities Not Reported on Form EIA-412, by State, 1996 (Continued)

	Source of Electricity (Purchases in thousand kWh)								
State / Utility	Investor- Owned	Federal	State and Other Government	Municipal	Cooperative	Other ¹	Total		
Iowa									
Panora Mun Electric Util	9,959	_	_	_	_	_	9,959		
Paton City of	_	_	_	_	2,165	_	2,165		
Renwick City of	_	_	_	_	3,921	_	3,921		
Stanton City of Stratford City of	_	_	_	_	7,421 4,727	_	7,421 4,727		
Stuart Municipal Utility	_			_	12,988		12,988		
Sumner City of	_	_	_	_	15,411	_	15,411		
Tennant City of	_	_	_	342	_	_	342		
Webster City City of	_	_	_	_	135,988	_	135,988		
West Bend City of	_	_	_	_	12,729	_	12,729		
Westfield Town of	_	_	_	_	793	_	793		
Wilton City of	_	_	_	_	21,918	_	21,918		
Winterset City of	_	_	_	1,595	44,800	_	44,800 1,595		
Woolstock City of	_	_	_	1,393	_	_	1,393		
Kansas									
Belleville City of	_	18,990	_	_	_	_	18,990		
Dighton City of	_	_	_	_	10,192	_	10,192		
Herndon City of	_	_	_	_	1,234	_	1,234		
Iuka City of	_	_	_	1,645		_	1,645		
Johnson City of	_	_	_	_	11,756	_	11,756		
Kiowa City of Lakin City of		_		_	10,753 10,555		10,753 10,555		
Meade City of	_	_	_	_	10,154		10,154		
Norton City of	_	_	_	_	28,657	_	28,657		
Radium City of	_	_	_	_	598	_	598		
Kentucky									
Franklin City of/Jun 30	_	210,942	_	_	_	_	210,942		
Glasgow City of/Jun 30	_	683,424	_	_	_	_	683,424		
Mayfield City of/Jun 30	_	152,632	_	_	_	_	152,632		
Russellville City of	_	138,024	_	_	_	_	138,024		
Louisiana Welsh Town of	_	_	30,802	_	_	_	30,802		
Massachusetts									
Chester Mun Elec Light Dept	_	_	2,394	2,394	_	_	4,788		
Russell Municipal Light Dept	_	_	_	_	_	4,318	4,318		
Michigan									
Escanaba Munic Elec Util	24,465	_	_	_	_	_	24,465		
Newberry Water & Light Board	_	_	_	_	18,526	_	18,526		
Minnesota									
Alpha City of	_	_	_	_	954	_	954		
Alvarado City of	_	_	_	_	4,142	_	4,142		
Bigelow City of	_	_	_	2,150	_	_	2,150		
Caledonia City of	_	_	_	_	19,184	_	19,184		
Ceylon City of	_	_	_	_	2,816	_	2,816		
Dakota Elec Assoc	_	_	_	1,994	1,253,549	_	1,253,549 1,994		
Dunnell Village of	_				1,302		1,302		
Grove City City of	_	_	_	7,299		_	7,299		
Harmony City of	_	_	_		7,978	_	7,978		
Lanesboro Public Utility Comm	_	_	_	_	6,503	_	6,503		
Mabel City of	_	_	_	_	4,577	_	4,577		
Nashwauk City of	_	_	_	_	6,794	_	6,794		
Determine City of		_	_	_	1,498	_	1,498		
Peterson City of					(1107)				
Round Lake City of	_	_	_	2.181	9,182	_	9,182 2,181		
	_ _ _	_ _ _			- 9,182 - 12,811	_ _ _	2,181 12,811		

Table 31. Electricity Purchases by Publicly Owned Utilities Not Reported on Form EIA-412, by State, 1996 (Continued)

0 /				ource of Electricit nases in thousand			
State / Utility	Investor- Owned	Federal	State and Other Government	Municipal	Cooperative	Other ¹	Total
Mississippi							
Aberdeen City of/Jun 30	_	192,617	_	_	_	_	192,617
Amory City ofLouisville Electric System/Jun 30	_	136,423 177,081	_	_	_	_	136,423 177,081
Oxford City of	_	170,899		_	_		170,899
Philadelphia City of	_	142,650	_	_	_	_	142,650
West Point City of/Jun 30	_	206,046	_	_	_	_	206,046
Missouri							
Albany City of	_	_	_	_	8,658	8,658	17,316
Ava City of	_	_	_	_	35,924		35,924
Bethany City of	_	_	_	_	32,426	_	32,426
Butler City of	_	_	_	_	38,056	_	38,056
Cabool City of	_	_	_	_	34,864	_	34,864
Cameron City of	_	_		_	49,695 92,009	_	49,695 92,009
Crane City of				_	15,159		15,159
Cuba City of	_	_	_	_	51,877	_	51,877
Easton City of	_	_	_	_	1,693	_	1,693
Fayette City of	_	_	_	_	19,048	_	19,048
Gallatin City of	_	_	_	_	8,527	8,528	17,055
Houston City of	_	_	_	_	31,117	_	31,117
Hunnewell City ofLa Plata City of	_	_	_	_	895 20,409	_	895 20,409
Macon City of	_	_		_	85,627	_	85,627
Mansfield City of	_	_	_	_	22,659	_	22,659
Meadville City of	_	_	_	_	2,728	_	2,728
Memphis City of	_	_	_	17,719	_ ′	_	17,719
Milan City of	_	_	_	_	33,518	_	33,518
Monroe City City of	_	_	_	_	56,564	_	56,564
Mountain View City of	_	_	_	_	35,817	_	35,817
Newburg City of Palmyra City of	_	_	_	_	4,318 41,395	_	4,318 41,395
Paris City of	_	_		_	11,964	_	11,964
Pattonsburg City of	_	_	_	_	2,584	_	2,584
Richland City of	_	_	_	_	18,587	_	18,587
Rockport City of	_	_	_	_	14,852	_	14,852
Salem City of	_	_	_	_	55,649	_	55,649
Seymour City of	_	_	_	_	22,400	_	22,400
Shelbina City of	_	_	_	_	38,496	_	38,496 34,802
St Robert City of				_	34,802 10,635	_	10,635
Steelville City of	_		_	_	21,009	_	21,009
Sullivan City of	_	_	_	_	94,859	_	94,859
Vandalia City of	_	_	_	_	9,138	9,138	18,276
Waynesville City of	_	_	_	_	33,521	_	33,521
Willow Springs City of	_	_	_	_	27,176	_	27,176
Winona City of	_	_	_	_	10,510	_	10,510
Montana							
Troy City of	_	15,358	_	_	_	_	15,358
Nebraska							
Bartley Village of	_	_	2,090	_	_	_	2,090
Campbell Village of	_	_	_	_	3,066	_	3,066
Decatur Village of	_	_	4,571	_	_	_	4,571
Emerson City of	_	_	6,324	— 647	_	_	6,324 647
Endicott Village of	_	_		1,530	_	_	1,530
Reynolds Village of	_	_	_	715	_	_	715
St Paul City of	_	_	17,918		_	_	17,918
Stratton City of	_	_	4,076	_	_	_	4,076
Stromsburg City of	_	_	11,129	_	_	_	11,129
Talmage Village of	_	_	_	2,318	_	_	2,318
Trenton City of	_	_	5,913	_	_	_	5,913
Village of Holbrook	_	_	1,923	_	_	_	1,923

Table 31. Electricity Purchases by Publicly Owned Utilities Not Reported on Form EIA-412, by State, 1996 (Continued)

	Source of Electricity (Purchases in thousand kWh)								
State / Utility	Investor- Owned	Federal	State and Other Government	Municipal	Cooperative	Other ¹	Total		
Nevada									
Caliente City of	_	_	13,190 6,450	_	_	_	13,190 6,450		
New Jersey									
Milltown Borough of Park Ridge Elec Dept Borough	33,965 64,030	_		_	_	_	33,965 64,030		
New Mexico Springer Town of	_	_	_	_	5,186	_	5,186		
North Carolina									
Fountain Town of Oak City Town of	_	_	_	4,490 	 4,850	_	4,490 4,850		
Ohio									
Woodsfield City of	_	_	_	_	22,000	_	22,000		
Oklahoma Anadarko Public Works Auth	_	_	_	_	60,280	_	60,280		
Braman Town of	_	_	_	1,813		_	1,813		
Burlington City of	_	_	_	_	1,397	_	1,397		
Cordell City of	_	_	_	_	24,484	_	24,484		
Fort Supply Town of	_	_	_	_	2,562	_	2,562		
Lindsay City of	_	_	_	_	26,338	_	26,338		
Mooreland City of	_	_	_	_	6,750	_	6,750		
Oregon Bandon City of		58,785					58,785		
Cascade Locks City of	_	20,552	_	_	_	_	20,552		
Drain Electric Dept	_	23,850	_	_	_	_	23,850		
Monmouth City of	_	66,531	_	_	_	_	66,531		
South Carolina Bennettsville City of	100,937	_	_	_	_	_	100,937		
South Dakota									
Elk Point City of	_	_	_	_	14,644	_	14,644		
Onida City of	_	_	_	_	6,314	_	6,314		
Tennessee Brownsville City of/Sep 30	_	202,729	_	_	_	_	202,729		
Dayton City of		216,323					216,323		
Etowah City of/Jun 30	_	157,125	_	_	_	_	157,125		
Sweetwater City of/Jun 30	_	208,836	_	_	_	_	208,836		
Winchester City of	_	155,997	_	_	_	_	155,997		
Texas									
Electra City of	_	_	_	_	25,919	_	25,919		
Garrison City of	_	_	_	_	9,400	_	9,400		
	_	_	_	_	45,963	_	45,963		
Hemphill City of		_	_	_	19,772 6,957	_	19,772 6,957		
San Augustine City of	_	_			23,990		23,990		
Sanger City of	_	_		_	32,184		32,184		
Seymour City of		_	_	_	29,033	_	29,033		
Timpson City of	_	_	_	_	12,098	_	12,098		
Waelder Utilities	_	_	11,558	_		_	11,558		
Weimar Utilities	_	_	33,673	_		_	33,673 28,888		
,					20,000		20,000		
Virginia Culpeper Town of	_	63,005	63,005	_	_	_	126,010		
Washington									
Alder Mutual Lgt Co	_	3,286	_	_	_	_	3,286		
Blaine City of		65,131					65,131		

Table 31. Electricity Purchases by Publicly Owned Utilities Not Reported on Form EIA-412, by State, 1996 (Continued)

State /	Source of Electricity (Purchases in thousand kWh)								
Utility	Investor- Owned	Federal	State and Other Government	Municipal	Cooperative	Other ¹	Total		
Washington									
Washington Chewelah Light Dept		24,345					24.345		
Coulee Dam Light Dept	_	24,343	_	_	_	20,606	20,606		
Eatonville Town of		21,577				20,000	21,577		
Elmhurst Mutual Power & Lgt		252,459					252,459		
McCleary Light & Power		35,826					35.826		
Milton City of		64,254					64,254		
Ohop Mutual Light Co		60,607					60,607		
Parkland Light & Water Co	_	105,070	_	_	_	_	105,070		
Peninsula Light Company	_	481,297	_	_	_	_	481,297		
PUD No 1 Asotin County	_		_	_	_	292	292		
Steilacoom Town of	_	40,738	_	_	_	_	40,738		
Wisconsin									
Arcadia City of	_	_	_	_	64,340	_	64,340		
Argyle City of	_	_	_	_	8,520	_	8,520		
Cashton Village of	_	_	_	_	6,893	_	6,893		
Cumberland City of	_	_	_	_	33,594	_	33,594		
Elroy City of	_	_	_	_	19,040	_	19,040		
Fennimore City of	_	_	_	_	31,232	_	31,232		
La Farge Municipal Electric Co	_	_	_	3,014	3,014	_	6,028		
New Lisbon City of	_	_	_	_	25,701	_	25,701		
Viola City of	_	_	_	_	4,390	_	4,390		
Wyoming									
Basin Town of	_	_	_	_	9,681	_	9,681		
Midvale Irrigation District	_	_	_	_	233	_	233		

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

⁻Not Applicable

Notes: *For identification purposes, the municipalities are listed in the State in which the municipality is located. *Totals may not equal sum of components because of independent rounding.

Source: *Energy Information Administration Form EIA-861, "Annual Electric Utility Report," except where footnoted.

Table 32. Electricity Exchanges and Wheeling by Publicly Owned Utilities, 1996 (Thousand Kilowatthours)

Public Authority /	Exch	anges	Wheeling		
State / Utility	Received	Delivered	Received	Delivered	
ederal					
Alaska Alaska Power Administration	_	_	372,960	372,960	
Colorado Western Area Power Admin	507,000	1,096,000	5,997,000	5,997,000	
Georgia Southeastern Power Admin	719	_	515,208	515,208	
Oklahoma Southwestern Power Admin	857,512	389,465	<u> </u>	_	
Oregon Bonneville Power Admin	10,410,118	15,065,775	58,611,622	56,799,260	
Tennessee Valley Authority	22,656,445	33,385,182	3,552,775	3,452,530	
ate and Other Government					
Alaska			222.665	222.665	
Alaska Energy Authority	-	-	333,665	333,665	
California Dept-Wtr Resources	5,267,738 86,941	2,713,496 41,104	_	_	
Colorado Platte River Power Authority Georgia	23,004	11,128	_	_	
Municipal Electric Authority	_	_	790,799	747,305	
Massachusetts Mun Whls Elec Co	795,490	310,060	_	_	
Grand River Dam Authorityouth Carolina	109,026	21,197	11,745	11,745	
South Carolina Pub Serv Auth	38,184	45,798	439,088	496,367	
Utah Associated Mun Power Sys	28,945	25,210	_	_	
unicipal					
Arkansas Jonesboro City of	_	142,516	_	_	
California Anaheim City of	1,751	33,100	_	_	
Lassen Municipal Utility Dist	— 714,989	 185,704	153,636 21,315,941	153,636 21,272,237	
Riverside City of	75,515 —	60,072	 145,693	— 142,836	
Turlock Irrigation District	3,929	941	13,821	1,979	
Colorado Springs City of	1,985 —	1,229	47,650 8,176	47,650 8,165	
Connecticut Connecticut Mun Elec Engy Coop	134,872	11,732	_	_	
South Norwalk City of	_	89	_	_	
Jacksonville Electric Auth	_	_	884,743 202,432	884,743 201,730	
Ocala City ofowa	-	_	48,736	48,736	
Ames City of	154 3,581	227 4,989	_	_	
Muscatine City of	_		9,607	1,136	
Pella City of	5,666 —	6,759 392	_	_	
Coffeyville City of	136,648	136,857	_	_	
Kansas City City of	_	13,893	_	_	

Table 32. Electricity Exchanges and Wheeling by Publicly Owned Utilities, 1996 (Thousand Kilowatthours) (Continued)

Public Authority / State / Utility		inges	Wheeling		
State / Utility	Received	Delivered	Received	Delivered	
unicipal					
Louisiana					
Lafayette City of	9,497	9,512	_	_	
Massachusetts					
Ashburnham Town of	11,349	3,935	_	_	
Boylston Town of	6,969	3,793	_	_	
Braintree Town of	107,485	42,918	_	_	
Danvers Town of	1,325 87,995	-967 38,909	_	_	
Georgetown City of	10,430	3,744			
Groton City of	9,336	8,314	_	_	
Hingham City of	69,080	21,981	_	_	
Holyoke City of	23,011	23,826	2,788	_	
Hudson Town of	35,888	14,908	_	_	
Ipswich Town of	35,994	3,851	_	_	
Littleton Town of	17,462	11,760	_	_	
Mansfield Town of	54,347	23,264	_	_	
Marblehead City of	43,890	13,772	_	_	
Middleton City of	18,115 11,269	5,061	_	_	
North Attleborough Town of	90,376	22,667	_	_	
Paxton Town of	7,011	3,845	_	_	
Peabody City of	223,305	62,460	_	_	
Princeton Town of	1,177	72	_	_	
Reading Town of	160,645	72,142	_	_	
Shrewsbury Town of	49,194	20,877	_	_	
South Hadley Town of	9,496	6,985	_	_	
Sterling Town of	8,757	4,275	_	_	
Taunton City of Templeton Town of	271,664 17,300	12,054 7,787	_	_	
West Boylston Town of	17,300	7,767	16,999	8,139	
Westfield City of	101,736	38,518		- 0,13	
Maryland	,	,			
Easton Utilities Comm	185,967	1,914	_	_	
Michigan					
Holland City of	6,354	2,410	_	_	
Lansing City of	2,855	3,340	_	_	
Minnesota		20			
Grand Marais City of	 156	20 263	_	_	
Missouri	130	203	_		
Columbia City of	_	_	189,014	186,656	
Independence City of	2,298	2,210	_	_	
Sikeston City of	186,037	244,871	_	_	
Springfield City of	104,915	193,424	_	_	
North Carolina					
Fayetteville Public Works Comm	548,173	19,782	_	_	
Nebraska	40	42			
Grand Island City of	40	42	— 5 520		
Hastings City of	15 252	— 16 725	5,538 109,070	5,538 109,070	
Lincoln Electric System	15,253	16,735	2,025	1,942	
New Jersev			2,023	1,542	
Vineland City of	288,039	19,950	_	_	
New Mexico	-,	- y			
Farmington City of	1,512	6,860	422,250	413,829	
Los Alamos County	48,769	21,881	_	_	
Ohio					
American Mun Power-Ohio Inc	_	_	39,840	39,840	
Cleveland City of	10.000	63,527	_	_	
Hamilton City of	18,066	4,185	1 022	1,923	
New Knoxville Village of Orrville City of	1,016	— 864	1,923	1,923	
Painesville City of	3,987	2,158	_	_	
		4.130		_	

Table 32. Electricity Exchanges and Wheeling by Publicly Owned Utilities, 1996

(Thousand Kilowatthours) (Continued)

Public Authority /	Exch	anges	Wheeling		
State / Utility	Received	Delivered	Received	Delivered	
Municipal					
Oregon					
Eugene City of	52,482	39,033	_	_	
South Carolina					
Piedmont Municipal Power Agny	614,652	622,028	_	_	
Texas					
Austin City of	37,078	38,236	22,181	10,894	
Bryan City of	161,865	167,352	_	_	
San Antonio City of	120,869	76,618	_	_	
Utah					
Blanding City of	_	_	1,050	1,050	
Ephraim City of	662	662	_	_	
Virgina					
Danville City of	_	_	21,582	21,582	
Vermont					
Barton Village Inc	6,235	5,802	_	_	
Burlington City of	125	125	_	_	
Morrisville Village of	6,670	13,674	_	_	
Washington					
Seattle City of	8,004,559	9,098,308	43,462	43,462	
Tacoma City of	100,206	15,949	1,394,880	1,394,880	

⁻Not Applicable

Source: Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

4. Bulk Power Transactions by Cooperative Utilities

Overview

This chapter presents electric trade data for cooperative utilities, most of which are participants in the U. S. Department of Agriculture's Rural Utilities Service (RUS) Cooperative Borrowers program. The data are separated and presented for the Power Supply Borrowers and Distribution Borrowers. Power Supply Borrowers generate and purchase electricity for wholesale transactions with other electric utilities, while most Distribution Borrowers do not own generators and provide only distribution services to the final consumer. Cooperative borrowers are required to provide RUS with financial and operational data to support the RUS loan management program. The cooperative borrowers represent nearly all the cooperatives in the country.¹⁴

There are many types of cooperative associations, but five basic principles or features distinguish cooperatives from other types of private enterprise businesses.

- Ownership is held by member-users.
- Control is on the basis of one vote per member, or on volume provided.
- · Operations have an at-cost (nonprofit) objective.
- · Dividends on member capital are limited.
- Education is necessary for understanding and support.¹⁵

Cooperative entities are recognized by State statutes, which differ by State. Cooperatives can use a variety of generic labels depending on State statutes: mutuals and cooperatives (Washington, Idaho, and Nevada); cooperatives, rural electric membership corporations (North Carolina); rural electric systems, electric power associations (Mississippi), etc. In addition, many cooperatives are incorporated. Federal legislation further defines cooperative activities. Cooperatives are organized for a variety of reasons including insurance, agricultural, telephone, water, and electrical services.

There were about 35 electric cooperatives which predated the establishment of the Rural Electrification Administration (REA), the predecessor of RUS, in 1935. A number of these cooperatives were formed as mutual associations. Many of these early efforts, however, were not successful. It was the establishment of the REA and other activities starting in 1935 that initiated the major development phase of cooperative electrification. This chapter focuses on purchases by cooperative borrowers because, at this time, RUS computerizes only individual utility transactions with other utilities for purchased power. Therefore, data on sales for resale are not presented in this chapter. Because RUS does not collect information on exchanges and wheeling, data from the Form EIA-861, "Annual Electric Utility Report," were used to provide aggregate data totals for the cooperative borrowers. Form EIA-861 is a mandatory form filed annually by all electric utilities in the United States on a calendar-year basis.

Tables

This chapter presents data on each of the cooperative utilities, most of which are RUS electric borrowers. These cooperatives purchased electricity from other cooperatives, investor-owned, Federally owned, municipal utilities, and State authorities. Electricity purchases by power supply cooperatives are presented in Table 33 and by distribution cooperatives in Table 34. Cooperatives not listed elsewhere are presented in Table 35. Table 36 provides data on exchanges and transmission service transactions of the cooperative borrowers.

The tables present aggregate data on total quantity and value of each cooperative's electric utility trade. The reported quantities cannot be broken into firm and interruptible trade classifications. Nor is information available on demand, energy, and other revenues and costs. For ease of identification, the cooperative borrowers are listed by State according to the mailing address of the administrative office. This listing does not necessarily reflect the electrical geographics of a cooperative's electrical system.

¹⁴ There have been fewer than 50 RUS borrowers that have paid off their loans. Those utilities are not required to file the RUS forms.

¹⁵ Information paraphrased and quoted from Agricultural Cooperative Service, U. S. Department of Agriculture, "Cooperative Principles and Legal Foundations," Cooperative Information Report 1, Section 1 (March 1982), p. 3.

Highlights

While power supply cooperatives operate generation facilities to meet the needs of both bulk power requirements of their membership and supply the endusing customer, no cooperatives were among the top 50 of all utilities for generation and count of end-use customers. In part, this reflects the historical mission of cooperative utilities to serve low-population areas. Yet, these cooperative utilities do provide service to large areas of the United States.

Summary

Power supply cooperatives, although small in total numbers, play an important role in the wholesale power resale market. Their large purchases and wideranging redistribution capability have put them in a highly visible position in the cooperative sector of the electric power industry. The amount of electricity a large power supply cooperative purchases is far greater than that of a typical distribution cooperative.

Many of these power suppliers are wholly owned by distribution cooperatives and supply only those cooperatives as wholesale customers. Others are distribution cooperatives with excess generating capability. But as a group, power supply cooperatives continue to purchase more electric power from a wider range of sources.

Regional differences in establishment of cooperatives primarily resulted from the historical development of the electric utility industry. Differences in the volume and type of trade can be related to geographical concentration and the proximity of other utilities and transmission facilities. For instance, some large interconnected transmission systems cross cooperative service territories affording the cooperative multiple sources of power. In contrast, cooperatives that are geographically isolated may only be able to buy from a single source.

Most distribution cooperatives sell power to the ultimate consumers who reside in their service territories. Cooperative service territories generally have a lower density of customers and many miles of distribution lines. Although distribution cooperatives do buy power from nearby investor-owned utilities and government authorities, the large majority of distribution cooperatives purchase most of their supply from power supply cooperatives.

Table 33. Electricity Purchases by the Power Supply Segment of Cooperative Borrowers, by State, 1996

			Sc	urce of Electricity	7		
State /	Inves Owr		Fede	ral	State and Govern		Municipal
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)
Alahama							
Alabama Alabama Electric Coop Inc	713,798	23,805,612	367,657	10,254,872	73	1,739	4,912
Alaska Alaska Electric G & T Coop Inc .	_	_	_	_	_	_	_
Arizona Arizona Electric Pwr Coop Inc	_	_	_	_	_	_	_
Arkansas Arkansas Electric Coop Corp	_	_	_	_	_	_	_
Colorado Tri-State G & T Assn Inc	60,384	1,153,120	2,372,777	46,614,143	31,834	350,895	_
Florida Seminole Electric Coop Inc	1,378,801	126,973,682	_	_	_	_	190,590
Georgia Oglethorpe Power Corp	4,168,854	170,179,896	_	_	168,071	3,244,290	14,492
Illinois Southern Illinois Power Coop	_	19,210	41,350	919,968	_	_	_
Indiana Hoosier Energy R E C Inc	334,334	8,827,118	_	_	_	_	_
Iowa							
Central Iowa Power Coop	_		78,275	1,054,675	_	_	630
Corn Belt Power Coop L & O Power Coop	_	52,400	139,078 74,183	1,855,278 989,238	_	_	_
Northwest Iowa Power Coop	_	_	296,997	3,902,937	_	_	_
Kansas Kansas Electric Power Coop Inc Sunflower Electric Power Corp	607,569 31,543	20,237,011 1,375,605	382,433 —	10,159,965	— 125,183		— 7,74
Kentucky							
Big Rivers Electric Corp East Kentucky Power Coop Inc	55,756 617,370	1,191,737 13,852,315	210,594 4,138,876	5,848,368 76,987,336	_	_	1,582,730
Louisiana Cajun Electric Power Coop Inc	279,655	6,359,833	256,433	3,888,611	_	_	_
Michigan Wolverine Pwr Supply Coop Inc	1,120,958	40,485,802	_	_	_	_	_
Minnesota							
Coop Power Assn	186,122 161,540	3,262,423 3,918,810	553,469 106,175	7,583,994 1,621,057	260,664 -224,013	3,639,625 -4,088,633	962 144,413
Mississippi South Mississippi El Pwr Assn	19,550	509,865	274,648	8,777,245	_	_	_
Missouri Associated Electric Coop Inc	2,748,899	99,382,282	1,695,744	29,958,143	2,447,213	33,707,467	4,049,291
Central Electric Power Coop M & A Electric Power Coop	_	_	_	_	_	_	_
N W Electric Power Coop Inc	_	_	_	_	_	_	_
Northeast Missouri El Pwr Coop . Sho-Me Power Electric Coop	_	_	_	_	_	_	_
Montana Upper Missouri G&T El Coop Inc	_	_	327,229	4,649,229	_	_	_

Table 33. Electricity Purchases by the Power Supply Segment of Cooperative Borrowers, by State, 1996 (Continued)

			S	ource of Electricity	у		
State /	Municipal	Coope	rative	Othe	r ¹	Tot	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Alabassa							
Alabama Alabama Electric Coop Inc	198,393	874,800	23,207,867	735,117	13,730,799	2,696,357	71,199,282
Alaska Alaska Electric G & T Coop Inc .	_	905,824	36,765,267	_	_	905,824	36,765,267
Arizona Arizona Electric Pwr Coop Inc	_	_	_	2,108,022	46,005,909	2,108,022	46,005,909
Arkansas Arkansas Electric Coop Corp	_	_	_	3,101,923	47,342,728	3,101,923	47,342,728
Colorado Tri-State G & T Assn Inc	_	1,376,433	45,506,389	2,409,837	47,013,810	6,251,265	140,638,357
Florida Seminole Electric Coop Inc	13,394,819	192,572	4,520,615	600,443	52,785,984	2,362,406	197,675,100
Georgia							
Oglethorpe Power Corp	446,389	1,601,275	40,236,165	654,239	14,982,038	6,606,931	229,088,778
Illinois Southern Illinois Power Coop	91,000	331	17,135	_	_	41,681	1,047,313
Indiana Hoosier Energy R E C Inc	_	144,695	6,717,959	24,472	453,544	503,501	15,998,621
Iowa	11.020	1 100	61.125	261	15.040	00.260	1 142 770
Central Iowa Power Coop Corn Belt Power Coop	11,929 —	1,100 5,159	61,135 113,337	264 3	15,040 55	80,269 144,240	1,142,779 2,021,070
L & O Power Coop Northwest Iowa Power Coop	_	99,026 424,455	3,686,352 16,482,182	— 193	2,930	173,209 721,645	4,675,590 20,388,049
Kansas							
Kansas Electric Power Coop Inc Sunflower Electric Power Corp		36,320 224	411,415 4,164	3,775	4,324,738 53,695	1,026,322 168,467	35,133,129 3,919,072
Kentucky							
Big Rivers Electric Corp East Kentucky Power Coop Inc	33,548,515	63,021 72,812	1,580,808 1,228,916	51,169 245,851	1,088,962 3,974,184	1,963,270 5,074,909	43,258,390 96,042,751
Louisiana Cajun Electric Power Coop Inc	_	44,263	940,229	237,884	6,480,117	818,235	17,668,790
Michigan Wolverine Pwr Supply Coop Inc	_	_	_	198,762	4,876,343	1,319,720	45,362,145
Minnesota							
Coop Power Assn	25,818 3,493,979	756,652 314,362	19,114,213 6,783,293	25,042 1,076,837	386,777 15,475,975	1,782,911 1,579,314	34,012,850 27,204,481
Mississippi South Mississippi El Pwr Assn	_	1,077,613	28,623,451	330,623	7,998,731	1,702,434	45,909,292
Missouri							
Associated Electric Coop Inc Central Electric Power Coop	37,361,224	175,167 2,268,825	3,704,004 69,784,469	363,392	7,428,354	11,479,706 2,268,825	211,541,474 69,784,469
M & A Electric Power Coop	_	1,234,540	36,890,405	_	_	1,234,540	36,890,405
N W Electric Power Coop Inc Northeast Missouri El Pwr Coop .	_	1,229,547 1,127,584	35,343,117 30,381,463	_	_	1,229,547	35,343,117
Sho-Me Power Electric Coop	_	2,914,820	30,381,463 88,600,249	_	_	1,127,584 2,914,820	30,381,463 88,600,249
Montana Upper Missouri G&T El Coop Inc	_	722,032	29,478,233	_	_	1,049,261	34,127,462

Table 33. Electricity Purchases by the Power Supply Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	ource of Electricit	у		
State /	Inves		Fed	eral	State an Gover		Municipal
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)
Nebraska Nebraska Electric G&T Coop Inc	_	_	_	_	2,734,746	93,911,386	_
New Mexico Plains Elec Gen&Trans Coop Inc	445,765	6,866,173	646,724	12,664,064	2,729	53,047	85
North Carolina North Carolina El Member Corp	9,554,865	381,691,636	_	_	305	6,127	_
North Dakota Basin Electric Power Coop Central Power Elec Coop Inc Minnkota Power Coop Inc Square Butte Electric Coop	3,505 — 1,166,388 —	59,755 — 27,030,657 —	6,581 346,080 662,519	5,815,626 4,595,783 8,722,752	2,993 — 34,219	85,601 — 687,612	 6,126
Ohio Buckeye Power Inc	446,030	12,664,587	_	_	_	_	_
Oklahoma KAMO Electric Coop Inc Western Farmers Elec Coop Inc	45,068 118,124	1,502,398 2,143,971	— 761,360	— 11,214,780	1,458,250 10,610	53,161,253 221,318	
Pennsylvania Allegheny Electric Coop Inc	283,932	13,485,197	_	_	461,911	3,116,770	_
South Carolina Central Electric Pwr Coop Inc Saluda River Electric Coop Inc	103,840 1,474,258	5,507,606 55,684,957	321,491	6,890,790 —	8,330,809	315,879,897	
South Dakota East River Elec Power Coop Inc	_	78,430	774,810	10,087,798	_	_	_
Texas Brazos Electric Power Coop Inc Northeast Texas Elec Coop Inc Sam Rayburn G&T Elec Coop Inc South Texas Electric Coop Inc Tex-La Electric Coop-Texas Inc	1,074,280 711,573 3,030 67,852 756,730	43,290,213 25,222,119 89,575 1,530,891 30,095,346	54,265 327,509 — 79,852 96,452	1,333,799 5,313,868 — 1,849,998 1,744,874	103,833 — — — — — — —	4,757,950 — — 2,092,564 —	
Wisconsin Dairyland Power Coop	233,243	4,810,852	568,335	8,184,922	74,647	1,109,502	18,183

Table 33. Electricity Purchases by the Power Supply Segment of Cooperative Borrowers, by State, 1996 (Continued)

			Se	ource of Electricit	у		
State /	Municipal	Coope	erative	Othe	er1	Tot	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Nebraska Nebraska Electric G&T Coop Inc	_	_	_	_	_	2,734,746	93,911,386
New Mexico Plains Elec Gen&Trans Coop Inc	1,342	480	7,040	3,695	121,810	1,099,478	19,713,476
North Carolina North Carolina El Member Corp	_	1,379	30,721	_	_	9,556,549	381,728,484
North Dakota Basin Electric Power Coop Central Power Elec Coop Inc Minnkota Power Coop Inc Square Butte Electric Coop	 	216,233 839,427 45,015 22,432	4,938,618 28,226,189 519,068 188,008	209,343 	2,867,806 — 37,367,431	438,655 1,185,507 3,071,817 22,432	13,767,406 32,821,972 74,433,281 188,008
Ohio Buckeye Power Inc	_	_	_	_	_	446,030	12,664,587
Oklahoma KAMO Electric Coop Inc Western Farmers Elec Coop Inc	_	1,967,483 —	60,650,444 —	9 57,341	1,882 1,104,259	3,470,810 947,435	115,315,977 14,684,328
Pennsylvania Allegheny Electric Coop Inc	_	_	_	245,813	8,236,145	991,656	24,838,112
South Carolina Central Electric Pwr Coop Inc Saluda River Electric Coop Inc	_		— 944,661	— 480	 105,800	8,756,140 1,489,358	328,278,293 56,735,418
South Dakota East River Elec Power Coop Inc	_	969,102	36,196,412	_	_	1,743,912	46,362,640
Texas Brazos Electric Power Coop Inc Northeast Texas Elec Coop Inc Sam Rayburn G&T Elec Coop	_	1,523,560 392,186	49,965,279 11,315,545	1,612,681	45,471,146	4,368,619 1,431,268	144,818,387 41,851,532
Inc South Texas Electric Coop Inc Tex-La Electric Coop-Texas Inc	518,622 —	663,239 1,468,253 270,362	29,686,073 44,202,628 11,016,470	339,588 56,125 -7,674	7,552,938 1,408,849 1,891	1,005,857 1,816,773 1,115,870	37,328,586 51,603,552 42,858,581
Wisconsin Dairyland Power Coop	286,576	2,169,424	30,595,372	10,464	307,831	3,074,296	45,295,055

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

Source: Rural Utilities Service, RUS Form 7, "Financial and Statistical Report," RUS Form 12a through 12i, "Electric Power Supply Borrowers," Form 12c through 12g, "Electric Distribution Borrowers with Generating Facilities."

⁻Not Applicable

Notes: The Department of Agriculture under the Rural Electrification Act is authorized to provide Federal commitments for long-term financing and to guarantee non-Federal long-term loans to utilities supplying power to rural America. The utilities that received guarantees for their loans are referred to as borrowers by the Rural Utilities Service (formerly, the Rural Electrification Administration). Nonborrowing cooperatives and other utilities that do not borrow from the RUS are not required to file the RUS-12 forms. Power supply borrowers generate electricity and sell power to other utilities. For identification purposes, the Cooperative Borrowers are listed in the State in which the administrative office is located. Totals may not equal sum of components because of independent rounding.

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996

			So	urce of Electricit	у		
State /	Inves Owr		Fede	eral	State and Govern		Municipal
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)
Alabama							
Arab Electric Coop Inc	_	_	301,331	13,711,571	_	_	_
Baldwin County El Member Corp			_		_	_	_
Black Warrior Elec Member Corp Central Alabama Electric Coop	319,496	11,556,208	31,668	1,153,931	_	_	_
Cherokee Electric Coop			424,430	17,419,259			_
Clarke-Washington E M C	_	_	_ ′	_	_	_	_
Coosa Valley Electric Coop Inc	_	_	_	_	_	_	_
Covington Electric Coop Inc	_	_	— 776,811	34,152,685			_
Dixie Electric Coop	_	_	— — — — — — — — — — — — — — — — — — —		_	_	_
Franklin Electric Coop	_	_	246,338	10,559,654	_	_	_
Joe Wheeler Elec Member Corp	_	_	906,684	39,988,909	_	_	_
National Chemical Corp	_	_	328,428 467,197	15,021,587 18,908,577	_	_	_
Pea River Electric Coop	_	_			_	_	_
Pioneer Electric Coop İnc	_	_	_	_	_	_	_
Sand Mountain Electric Coop	_	_	506,007	22,918,917	_	_	_
South Alabama Elec Coop Inc	_	_	_	_	_	_	_
Southern Pine Elec Coop Inc	_	_	_	_	_	_	_
Tombigbee Electric Coop Inc	112,600	4,078,682	11,166	404,601	_	_	_
Wiregrass Electric Coop Inc	_	_	_		_	_	_
laska							
Copper Valley Elec Assn Inc	_	_	_	_	38,453	2,460,972	
Golden Valley Elec Assn Inc	_	_	_	_	_	_	7,8
Homer Electric Assn Inc	_	_	_	_	103,738	6,639,208	_
rizona							
Duncan Valley Elec Coop Inc	_	_	_	_	_	_	_
Mohave Electric Coop Inc	1,135	91,242	2,892	112,867	_	_	_
Navopache Electric Coop Inc	_	_	_	_	_	_	_
Sulphur Springs Valley E C Inc Trico Electric Coop Inc	_	_	_	_	_	_	_
•							
rkansas Arkansas Valley Elec Coop Corp	666,063	20,147,278					
Ashley Chicot Elec Coop Inc		20,147,276	_	_	_		_
C & L Electric Coop Corp	_	_	_	_	_	_	_
Carroll Electric Coop Corp	_	_	_	_	_	_	_
Clay County Electric Coop Corp	_	_	_	_	_	_	_
Craighead Electric Coop Corp	_	_	_	_	_	_	_
First Electric Coop Corp	_	_	_	_	_	_	_
Mississippi Cnty Elec Coop Inc	_	_	_	_	_	_	_
North Arkansas Elec Coop Inc	7,219	333,170	_	_	_	_	_
Ouachita Electric Coop Corp Ozarks Electric Coop Corp	_	_	_	_	_	_	_
Petit Jean Electric Coop Corp	_					_	
Rich Mountain Elec Coop Inc	_	_	_	_	_	_	_
South Central Ark El Coop Inc	_	_	_	_	_	_	_
Southwest Arkansas E C C	_	_	_	_	_	_	_
Alifornia Anza Electric Coop Inc	_	_	_	_	_	_	_
Plumas-Sierra Rural Elec Coop	7	723	63,594	1,255,668	58,133	1,867,684	_
Surprise Valley Electric Corp	_ ′		122,942	3,090,846	_		_
colorado							
Delta Montrose Electric Assn	_	_	_	_	_	_	_
Empire Electric Assn Inc	110 202	4 602 192	7.710	150 052	_	_	_
Grand Valley Rrl Pwr Line Inc	110,203	4,693,183	7,710	158,953	_	_	_

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	ource of Electricity	7		
State /	Municipal	Cooper	rative	Othe	r1	Tot	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
labama							
Arab Electric Coop Inc	—	_	_	_	_	301,331	13,711,57
Baldwin County El Member Corp		746,031	31,710,145	_	_	746,031	31,710,14
Black Warrior Elec Member Corp				_	_	351,164	12,710,13
Central Alabama Electric Coop	–	438,148	17,818,385	_	_	438,148 424,430	17,818,38 17,419,25
Clarke-Washington E M C		240,848	9,581,282			240,848	9,581,2
Coosa Valley Electric Coop Inc		177,680	7,252,777	_	_	177,680	7,252,7
Covington Electric Coop Inc		328,865	13,900,489	_	_	328,865	13,900,4
Cullman Electric Coop Inc		_	_	_	_	776,811	34,152,68
Dixie Electric Coop		245,360	9,701,740	_	_	245,360	9,701,74
Franklin Electric Coop		_	_	_	_	246,338	10,559,65
Joe Wheeler Elec Member Corp National Chemical Corp		_	_	_	_	906,684 328,428	39,988,90 15,021,50
North Alabama Electric Coop		_				467,197	18,908,5
Pea River Electric Coop		243,773	11,298,591	_	_	243,773	11,298,59
Pioneer Electric Coop Inc		158,958	6,164,006	_	_	158,958	6,164,0
Sand Mountain Electric Coop		_	_	_	_	506,007	22,918,9
South Alabama Elec Coop Inc		212,918	8,582,297	_	_	212,918	8,582,29
Southern Pine Elec Coop Inc		1,110,999	33,093,360	_	_	1,110,999	33,093,30
Tallapoosa River Elec Coop Inc Tombigbee Electric Coop Inc		267,614 —	10,873,973	_	_	267,614 123,766	10,873,9° 4,483,2°
Wiregrass Electric Coop Inc		258,061	11,245,934			258,061	11,245,9
	••••	230,001	11,243,734			250,001	11,213,75
Alaska Copper Valley Elec Assn Inc	_	_	_	_	_	38,453	2,460,9
Golden Valley Elec Assn Inc		299,513	9,491,391	1,437	39,379	308,801	9,790,6
Homer Electric Assn Inc		456,906	19,681,637	_	3	456,906 103,738	19,681,6 6,639,2
	—	_	_	_	_	103,738	0,039,20
Arizona		1 701 767	61.500.005			1 701 767	61.500.0
Duncan Valley Elec Coop Inc		1,721,767 584,117	61,523,835 27,842,633	_	_	1,721,767 588,144	61,523,8 28,046,7
Navopache Electric Coop Inc		286,735	17,108,280			286,735	17,108,2
Sulphur Springs Valley E C Inc		481,732	24,055,675		_	481,732	24,055,6
Trico Electric Coop Inc		303,920	15,133,847	_	_	303,920	15,133,8
arkansas							
Arkansas Valley Elec Coop Corp		192,797	8,129,540	_	_	858,860	28,276,8
Ashley Chicot Elec Coop Inc		74,319	2,960,024	_	_	74,319	2,960,0
C & L Electric Coop Corp		280,414	11,479,849	_	_	280,414	11,479,8
Carroll Electric Coop Corp		1,054,912 173,801	40,679,816 6,755,550		_	1,054,912 173,801	40,679,8 6,755,5
Craighead Electric Coop Corp		364,432	14,832,752			364,432	14,832,7
Farmers Electric Coop Corp			-	72,999	3,396,323	72,999	3,396,3
First Electric Coop Corp		1,257,358	49,092,502	_	_	1,257,358	49,092,5
Mississippi Cnty Elec Coop Inc		2,684,916	69,911,396	_	_	2,684,916	69,911,3
North Arkansas Elec Coop Inc		485,079	18,835,489	_	_	492,298	19,168,6
Ouachita Electric Coop Corp		197,334	7,473,414	_	_	197,334	7,473,4
Ozarks Electric Coop Corp Petit Jean Electric Coop Corp		790,213	31,644,033	_	_	790,213	31,644,0
Rich Mountain Elec Coop Inc		230,677 101,251	9,238,252 4,084,795	_	_	230,677 101,251	9,238,2 4,084,7
South Central Ark El Coop Inc		218,913	7,621,431			218,913	7,621,4
Southwest Arkansas E C C		511,005	18,474,696	_	_	511,005	18,474,6
Woodruff Electric Coop Corp		316,454	11,653,715	_	_	316,454	11,653,7
California							
Anza Electric Coop Inc		37,570	1,862,067	_	_	37,570	1,862,0
Plumas-Sierra Rural Elec Coop		_	_	268	6,020	122,002	3,130,0
Surprise Valley Electric Corp	—	_	_	_	_	122,942	3,090,8
Colorado		452.205	17 0 47 77 1			452.205	17.047.5
Delta Montrose Electric Assn Empire Electric Assn Inc		453,205 386,388	17,847,771 12,583,118	_	_	453,205 386,388	17,847,7 12,583,1

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

State / Cooperative Borrower		tor-	Fede	ral	State on	od Othor	34 1	
	Investor- Owned		Federal		State and Other Government		Municipal	
•	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	
Colorado								
Highline Electric Assn	_	_	_	_	_	_	_	
Holy Cross Electric Assn Inc	235,422	19,254,185	44,275	807,493	_	_	_	
K C Electric Assn		_	_	_	_	_	_	
La Plata Electric Assn Inc Morgan County Rural Elec Assn		_	_	_	_	_	_	
Mountain Parks Electric Inc						_	_	
Mountain View Elec Assn Inc		_	_	_	_	_	_	
Poudre Valley R E A Inc	_	_	_	_	_	_	_	
San Isabel Electric Assn Inc		_	_	_	_	_	_	
San Luis Valley R E C Inc		_	_	_	_	_	_	
San Miguel Power Assn Inc Sangre De Cristo Elec Assn Inc		_	_	_	_	_	_	
Southeast Colorado Power Assn		_		_	_	_	_	
United Power Inc		22,827	_	_	_	_	_	
White River Electric Assn Inc		_	_	_	_	_	_	
Y-W Electric Assn Inc			_		_	_	1	
Yampa Valley Electric Assn Inc	401,910	15,856,595	26,232	458,672	_	_	_	
Delaware Delaware Electric Coop Inc	_	_	_	_	_	_	_	
Florida								
Central Florida Elec Coop Inc		_	10,856	306,594	_	_	_	
Choctawhatche Elec Coop Inc		_	_	_	_	_	1,94	
Escambia River Elec Coop Inc								
Glades Electric Coop Inc		_	_	_	_	_	_	
Gulf Coast Electric Coop Inc		_	_	_	_	_	_	
Peace River Electric Coop Inc		_	_	_	_	_	_	
Sumter Electric Coop Inc		_			_	_	_	
Suwannee Valley Elec Coop Inc			22,001 64,841	629,897 1,816,435			12,50	
Tri-County Electric Coop Inc			24,681	695,263				
West Florida El Coop Assn Inc		_		_	_	_	_	
Withlacoochee River Elec Coop	_	_	_	_	_	_	_	
Georgia			17.017	166 669				
Altamaha Electric Member Corp Amicalola Electric Member Corp		_	17,017 18,023	466,668 495,024	_	_	_	
Blue Ridge Mountain E M C		_	399,392	17,748,987	_	_	_	
Canoochee Electric Member Corp		_	_	397,309	_	_	_	
Carroll Electric Member Corp		1,169	27,624	729,885	_	_	_	
Central Georgia El Member Corp		_	20,751 4,987	564,711	_	_	_	
Coastal Electric Member Corp Colquitt Electric Members Corp		_	60,861	131,778 1,657,056	_	_	_	
Coweta-Fayette El Member Corp		_	21,107	557,686	_	_	_	
Excelsior Electric Member Corp		_	14,412	380,787	_	_	_	
Flint Electric Membership Corp		_	88,244	2,401,805	_	_	_	
Grady County Elec Member Corp		_	16,408	450,339	_	_	_	
GreyStone Power Corp Habersham Electric Member Corp		_	48,548 16,100	1,321,148 437,827	_	_	_	
Hart Electric Member Corp		_	30,660	810,086	_	_	_	
Irwin Electric Membership Corp		_	13,550	361,135	_	_	_	
Jackson Electric Member Corp	_	_	77,753	2,054,472	_	_	_	
Jefferson Electric Member Corp		_	21,646	594,230	_	_	_	
Lamar Electric Membership Corp		_	10,962	289,624	_	_	_	
Little Ocmulgee El Member Corp		_	12,811 9,850	338,476 260,261	_	_	_	
North Georgia Elec Member Corp		_	2,271,205	94,497,781	_	_	_	
Ocmulgee Electric Member Corp		_	13,436	355,009	_	_	_	
Oconee Electric Member Corp	_	_	12,551	341,625	_	_	_	
Okefenoke Rural El Member Corp		_	15,399	406,865 139,627	_	_	_	
Pataula Electric Member Corp	_		5,285					

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	urce of Electricity	y		
State /	Municipal	Cooper	rative	Othe	r1	Tota	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Colorado							
Highline Electric Assn	_	266,551	11,984,213	1	16	266,552	11,984,229
Holy Cross Electric Assn Inc	_	_	_	482,511	5,468,035	762,208	25,529,713
K C Electric Assn	_	177,732	7,070,584	_	_	177,732	7,070,584
La Plata Electric Assn Inc	_	654,591 187,749	24,814,790	_	_	654,591	24,814,790
Morgan County Rural Elec Assn Mountain Parks Electric Inc	_	212,067	7,515,931 7,805,037	_	_	187,749 212,067	7,515,931 7,805,037
Mountain View Elec Assn Inc	_	397,397	16,201,510	_	_	397,397	16,201,510
Poudre Valley R E A Inc	_	630,458	22,875,362	_	_	630,458	22,875,362
San Isabel Electric Assn Inc	_	260,560	9,593,562	13	1,511	260,573	9,595,073
San Luis Valley R E C Inc	_	212,368	7,845,094	_	_	212,368	7,845,094
San Miguel Power Assn Inc	_	137,074	5,455,746	_	_	137,074	5,455,746
Sangre De Cristo Elec Assn Inc Southeast Colorado Power Assn	_	75,123 151,100	3,078,419 5,992,915	_	_	75,123 151,100	3,078,419 5,992,915
United Power Inc		591,164	22,997,698			591,475	23,020,525
White River Electric Assn Inc	_	103,046	3,745,607	_	_	103,046	3,745,607
Y-W Electric Assn Inc	155	287,677	12,381,795	_	_	287,687	12,381,950
Yampa Valley Electric Assn Inc	_	_	_	_	_	428,142	16,315,267
Delaware Delaware Electric Coop Inc	_	717,678	37,726,843	_	_	717,678	37,726,843
Florida							
Central Florida Elec Coop Inc	_	326,691	16,619,089	_	69,482	337,547	16,995,165
Choctawhatche Elec Coop Inc		460,561	19,948,545	_	_	460,561	19,948,545
Clay Electric Coop Inc	131,198	2,119,888	106,395,751	_	_	2,121,829	106,526,949
Escambia River Elec Coop Inc	_	144,844 266,416	6,057,217 13,072,633	_	_	144,844 266,416	6,057,217 13,072,633
Gulf Coast Electric Coop Inc		220,934	9,154,257			220,934	9,154,257
Peace River Electric Coop Inc	_	317,583	17,066,815	_	_	317,583	17,066,815
Sumter Electric Coop Inc	_	1,315,460	68,403,582	_	_	1,315,460	68,403,582
Suwannee Valley Elec Coop Inc		254,799	12,928,718	_	_	276,800	13,558,615
Talquin Electric Coop Inc	844,576	719,303	37,343,631	_	_	796,652	40,004,642
Tri-County Electric Coop Inc	_	160,040 327,069	7,625,836 14,082,154	_	_	184,721 327,069	8,321,099 14,082,154
Withlacoochee River Elec Coop	_	2,467,240	127,349,291	_	_	2,467,240	127,349,291
Georgia							
Altamaha Electric Member Corp	_	355,193	14,801,929	_	_	372,210	15,268,597
Amicalola Electric Member Corp	_	339,428	16,612,462	_	_	357,451	17,107,486
Blue Ridge Mountain E M C	_	_	13,066,317		_	399,392	17,748,987 13,463,626
Carroll Electric Member Corp	_	598,561	27,695,139	_	_	626,196	28,426,193
Central Georgia El Member Corp	_	464,632	23,583,604	_	_	485,383	24,148,315
Coastal Electric Member Corp	_	185,440	8,962,043	_	_	190,427	9,093,821
Colquitt Electric Members Corp	_	781,029	37,009,949	_	_	841,890	38,667,005
Coweta-Fayette El Member Corp Excelsior Electric Member Corp	_	767,062 253,568	42,201,094 12,614,112	_	_	788,169 267,980	42,758,780 12,994,899
Flint Electric Membership Corp	_	1,021,276	50,237,966		_	1,109,520	52,639,771
Grady County Elec Member Corp	_	206,787	11,012,121	_	_	223,195	11,462,460
GreyStone Power Corp	_	1,117,802	59,106,153	83	2,069	1,166,433	60,429,370
Habersham Electric Member Corp	_	305,728	14,894,998	_	_	321,828	15,332,825
Hart Electric Member Corp Irwin Electric Membership Corp	_	378,786	19,099,196	_	_	409,446	19,909,282
Jackson Electric Member Corp	_	141,307 2,485,902	6,976,404 125,598,374	_	_	154,857 2,563,655	7,337,539 127,652,846
Jefferson Electric Member Corp	_	394,736	21,545,801	_	_	416,382	22,140,031
Lamar Electric Membership Corp	_	206,591	10,853,391	_	_	217,553	11,143,015
Little Ocmulgee El Member Corp	_	114,247	5,623,749	_	_	127,058	5,962,225
Middle Georgia El Member Corp	_	87,257	3,896,083			97,107	4,156,344
North Georgia Elec Member Corp Ocmulgee Electric Member Corp	_	126,633	6,286,839	_ 5	404	2,271,210 140,069	94,498,185 6,641,848
Oconee Electric Member Corp	_	219,514	9,829,239	_	_	232,065	10,170,864
Okefenoke Rural El Member Corp	_	371,050	19,010,526	_	_	386,449	19,417,391
OKCICHOKE Kurai Er Wichiber Corp							
Pataula Electric Member Corp	_	64,462 185,932	2,853,504 9,213,709	_	_	69,747 202,646	2,993,131 9,656,188

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

F						1	
State /	Inves Owi		Fede	ral	State and Govern		Municipal
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)
Georgia Rayle Electric Membership Corp	_	_	16,372	447,481	_		_
Satilla Rural Elec Member Corp	_	_	49,586	1,310,149	_	_	_
Sawnee Electric Members Corp	_	_	31,200	824,342	_	_	_
Slash Pine Elec Member Corp	_	_	7,536	206,407	_	_	_
Sumter Electric Member Corp	_	_	18,405	486,049	_	_	_
Three Notch Elec Member Corp			19,128	526,914	_	_	_
Tri-County Elec Member Corp	149	14,006	10,149	268,062	_	_	_
Tri-State Electric Member Corp Upson County Elec Member Corp	_	_	215,009 7,228	9,437,467 196,523	_	_	_
Washington Elec Member Corp	_	_	22,425	610,753			
Washington Lice Member Corp			22,123	010,733			
daho							
Clearwater Power Co	_	_	-	_	179,002	4,577,209	_
Idaho Cnty L&P Coop Assn Inc	_	_	43,659	1,145,757	_	_	_
Kootenai Electric Coop Inc Lost River Electric Coop Inc	_	_	293,940 52,312	7,355,259 1,467,352	_	_	_
Northern Lights Inc	_	_	211.842	5,226,205	_	_	_
Raft River Rural Elec Coop Inc	_	_	193,495	4,891,213			
Salmon River Electric Coop Inc	_	_	279,875	7,328,605	_	_	_
•			,	.,,			
llinois							
Adams Electrical Coop	_	_	_	_	_	_	_
Clay Electric Coop Inc	_	_	_	_	_	_	_
Clinton County Elec Coop Inc	_	_	_	_	_	_	_
Eastern Illini Electric Coop	_	_					
Egyptian Electric Coop Assn	_	_	_			_	_
Farmers Mutual Electric Co	_	_	_	_	_	_	_
Illinois Rural Electric Co	_	_	_	_	_	_	_
Jo-Carroll Electric Coop Inc	_	_	_	_	_	_	_
M J M Electric Coop Inc	_	_	_	_	_	_	_
McDonough Power Coop	_	_	_	_	_	_	_
Menard Electric Coop	_	_	_	_	_	_	_
Monroe County Elec Coop Inc	_	_	_	_	_	_	_
Rural Electric Conven Coop Southeastern IL Elec Coop Inc		_				_	
Southern Illinois Elec Coop	_	_	_		_	_	_
Southwestern Electric Coop Inc	_	_	_	_	_	_	_
Spoon River Electric Coop Inc	_	_	_	_	_	_	_
Wayne-White Counties Elec Coop	_	_	_	_	_	_	_
Western Illinois Elec Coop	_	_	_	_	_	_	_
Indiana							
Indiana Daviess Martin County R E M C	_	_	_	_	_	_	_
Decatur County Rural E M C	_	_	_	_	_	_	_
Dubois Rural Electric Coop Inc	_	_	_	_	_	_	_
Fulton County Rural E M C	82,279	3,451,776	_	_	_	_	_
Harrison County Rural E M C	_	_	_	_	_	_	_
Jackson County Rural E M C	375,712	14,573,247	_	_	_	_	_
Jasper County Rural E M C	_	_	_	_	_	_	_
Jay County Rural E M C	_	_	_	_	_	_	_
Johnson County Rural E M C	_	_	_	_	_	_	_
Knox County Rural E M C	_	_	_	_	_	_	_
Lagrange County Rural E M C	_	_	_	_	_	_	
Marshall County Rural E M C	_	_	_	_	_	_	_
Newton County Rural E M C	_	_	_	_	_	_	_
Northeastern Rural E M C	_	_	_	_	_	_	_
Orange County Rural E M C	_	_	_	_	_	_	_
Parke County Rural E M C	_	_	_	_	_	_	_
Rush County Rural E M C	_	_	_	_	_	_	_
Shelby County Rural E M C	_	_	_	_	_	_	_
South Central Indiana REMC	_	_	_	_	_	_	_
Southeastern Indiana R E M C	_	_	_	_	_	_	_

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	ource of Electricit	у		
State /	Municipal	Cooper	rative	Othe	er1	Tot	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Georgia							
Rayle Electric Membership Corp	_	175,622	8,555,655	_	_	191,994	9,003,136
Satilla Rural Elec Member Corp	_	612,694	31,046,970	_	_	662,280	32,357,119
Sawnee Electric Members Corp	_	1,297,788	71,335,008	_	_	1,328,988	72,159,350
Slash Pine Elec Member Corp	_	104,922	4,952,242	_	_	112,458	5,158,649
Sumter Electric Member Corp	_	247,608	11,825,258	_	_	266,013 192,391	12,311,307
Three Notch Elec Member Corp	_	173,263 211,876	8,057,805 11,050,380	_	_	222,174	8,584,719 11,332,448
Tri-State Electric Member Corp						215,009	9,437,467
Upson County Elec Member Corp	_	93,766	5,151,613	_	_	100,994	5,348,136
Washington Elec Member Corp	_	304,597	12,860,680	_	_	327,022	13,471,433
Idaho							
Clearwater Power Co	_	_	_			179,002	4,577,209
Idaho Cnty L&P Coop Assn Inc		_	_	2,253	43,016	45,912	1,188,773 7,355,259
Kootenai Electric Coop Inc Lost River Electric Coop Inc		11,054		_	_	293,940 63,366	1,760,625
Northern Lights Inc		16,417	545,836	_	304,905	228,259	6,076,946
Raft River Rural Elec Coop Inc		12,855	184,987	_	_	206,350	5,076,200
Salmon River Electric Coop Inc	_	_		_	_	279,875	7,328,605
Illinois							
Adams Electrical Coop	_	101,735	7,244,988	_	_	101,735	7,244,988
Clay Electric Coop Inc		36,658	2,678,724	_	_	36,658	2,678,724
Clinton County Elec Coop Inc		109,022	6,596,729	_	_	109,022	6,596,729
Coles-Moultrie Electric Coop		164,644	9,703,614	_	_	164,644	9,703,614
Eastern Illini Electric Coop Egyptian Electric Coop Assn		206,830 245,136	13,058,382 10,117,894	_	_	206,830 245,136	13,058,382 10,117,894
Farmers Mutual Electric Co		17,074	1,366,884	_	_	17,074	1,366,884
Illinois Rural Electric Co		120,047	8,392,970	_	_	120,047	8,392,970
Jo-Carroll Electric Coop Inc		78,869	2,993,771	_	_	78,869	2,993,771
M J M Electric Coop Inc		105,769	7,541,109	_	_	105,769	7,541,109
McDonough Power Coop		70,916	4,890,574	_	_	70,916	4,890,574
Menard Electric Coop		160,827	9,596,929	_	1,621	160,827	9,598,550
Monroe County Elec Coop Inc		76,315	5,307,661	_	_	76,315	5,307,66
Rural Electric Conven Coop		86,242	5,983,138	_	_	86,242	5,983,138
Southeastern IL Elec Coop Inc		592,974	23,461,887	_	_	592,974	23,461,887
Southern Illinois Elec Coop Southwestern Electric Coop Inc		173,864 300,680	7,090,373 20,120,045	_	_	173,864 300,680	7,090,373 20,120,045
Spoon River Electric Coop Inc		52,267	3,571,022	_		52,267	3,571,022
Wayne-White Counties Elec Coop	_	323,431	17,549,699	_	_	323,431	17,549,699
Western Illinois Elec Coop	_	39,269	2,855,032	_	_	39,269	2,855,032
Indiana							
Daviess Martin County R E M C	_	132,597	5,044,023	_	_	132,597	5,044,023
Decatur County Rural E M C	_	236,943	8,328,417	_	_	236,943	8,328,417
Dubois Rural Electric Coop Inc	_	216,173	8,207,023	_	-68 008	216,173	8,207,023 3,383,678
Fulton County Rural E M C Harrison County Rural E M C	_	376,653	14,653,020	_	-68,098 	82,279 376,653	14,653,020
Jackson County Rural E M C						375,712	14,573,247
Jasper County Rural E M C	_	118,152	4,807,644	_	_	118,152	4,807,644
Jay County Rural E M C	_	99,016	3,896,684	_	_	99,016	3,896,684
Johnson County Rural E M C		228,258	8,939,974	_	_	228,258	8,939,974
Kankakee Valley Rural E M C		194,328	8,136,736	_	_	194,328	8,136,736
Knox County Rural E M C		213,517	7,970,721	_		213,517	7,970,721
Lagrange County Rural E M C	_	89,384	3,642,475	_	-138,734	89,384	3,503,741
Marshall County Rural E M C Newton County Rural E M C		80,056	3,442,873	_	_	80,056	3,442,873
Northeastern Rural E M C		25,488 410,111	1,062,004 15,613,828	_		25,488 410,111	1,062,004 15,613,828
Orange County Rural E M C		92,223	3,635,355	_	_	92,223	3,635,355
Parke County Rural E M C		177,137	7,058,822	_	_	177,137	7,058,822
Rush County Rural E M C		80,818	3,049,240	_	_	80,818	3,049,240
Shelby County Rural E M C	_	152,596	5,900,945	_	_	152,596	5,900,945
South Central Indiana REMC	_	424,561	16,841,329	_	186,256	424,561	17,027,585
	_	363,401	14,252,927			363,401	14,252,927

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

<u> </u>			S	ource of Electric	ity		
State /	Inves Owr		Fed	eral	State an Gover		Municipa
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)
ndiana Southern Indiana R E C Inc							
Sullivan County Rural E M C	_	_		_		_	_
Tipmont Rural Elec Member Corp	_	_	_	_	_	_	_
United Rural Elec Member Corp	_	_	_	_	_	_	_
Utilities Dist-Western IN REMC	_	_	_	_	_	_	_
Wabash County Rural E M C	_	_	_	_	_	_	_
White County Rural E M C	_	_	_	_	_	_	_
·							
Adams County Coop Electric Co							
Allamakee-Clayton El Coop Inc	_	_	_	_	_	_	_
Butler County Rural Elec Coop		_	_	_	_	_	_
Calhoun County Elec Coop Assn	_	_	_	_	_	_	_
Cedar Valley Electric Coop	_	_	_	_	_	_	_
Chariton Valley Elec Coop Inc	_	_	_	_	_	_	_
Clarke Electric Coop Inc	_	_	_	_	_	_	_
East-Central Iowa Rrl El Coop	_	_	_	_	_	_	_
Eastern Iowa Light&Power Coop Farmers Electric Coop Inc		_	_	_	_	_	_
Franklin Rural Electric Coop	_	_	_	_		_	_
Glidden Rural Electric Coop	_	_		_		_	_
Grundy County Rural Elec Coop	_	_	_	_	_	_	_
Guthrie County Rural E C A	_	_	_	_	_	_	_
Hancock County Rural Elec Coop	_	_	_	_	_	_	_
Harrison County Rrl Elec Coop	_	_	_	_	_	_	_
Hawkeye Tri-County El Coop Inc	_	_	_	_	_	_	_
Humboldt County R E C	_	_	_	_	_	_	_
Ida County Rural Electric Coop	_	_	_	_	_	_	_
Iowa Lakes Electric Coop Linn County Rural E C A	_	_	_	_	_	_	_
Lyon Rural Electric Coop	_	_	_	_	_	_	_
Maquoketa Valley Rrl Elec Coop	_	_		_		_	_
Marshall County Rrl Elec Coop	_	_	_	_	_	_	_
Midland Power Coop	_	_	_	_	_	_	_
Monona County Rural Elec Coop	_	_	_	_	_	_	_
Nyman Electric Coop Inc	_	_	_	_	_	_	_
Osceola Electric Coop Inc	_	_	_	_	_	_	_
Pella Coop Elec Assn	_	_	_	_	_	_	_
Plymouth Electric Coop Assn	_	_	_	_	_	_	_
S E Iowa Coop Electric Assn	_	_	_	_	_	_	_
Sac County Rural Electric Coop							
South Crawford Rural Elec Corp	_	_		_			_
Southern Iowa Elec Coop Inc	_	_	_	_	_	_	_
T I P Rural Electric Coop	_	_	_	_	_	_	_
Winnebago Rural Elec Coop Assn	_	_	_	_	_	_	_
Woodbury County Rural E C A	_	_	_	_	_	_	_
Wright County Rural Elec Coop	_	_	_	_	_	_	_
ansas							
Ark Valley Elec Coop Assn Inc	_	_	_	_	_	_	_
Brown-Atchison E C A Inc	_	_	_	_	_	_	_
Butler Rural El Coop Assn Inc	_	_	_	_	_	_	_
C & W Rural Elec Coop Assn Inc	_	_	_	_	_	_	_
Caney Valley El Coop Assn Inc	_	_	_	_	_	_	_
CMS Electric Coop Inc	_	_	_	_	_	_	_
D S & O Rural E C A Inc	17.620	616 271	_	_	_	_	_
Doniphan Elec Coop Assn Inc	17,629	616,371	_	_	_	_	_
Jewell-Mitchell Coop Elec Inc	_	_	_	_	_	_	_
Kaw Valley Electric Coop Inc	112,153	3,892,089	_	_	_	_	
Lane-Scott Electric Coop Inc	-		_	_	_	_	_
Leavenworth-Jefferson E C Inc	_						

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			Sc	ource of Electricit	ty		
State /	Municipal	Cooper	rative	Oth	er1	Tot	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Indiana							
Southern Indiana R E C Inc	_	133,936 129,816 287,056	5,151,866 4,995,655 11,889,279	_	_	133,936 129,816 287,056	5,151,866 4,995,655 11,889,279
United Rural Elec Member Corp Utilities Dist-Western IN REMC Wabash County Rural E M C	_	402,320 274,943 133,671	14,844,311 10,731,362 5,150,603	_	_ _	402,320 274,943 133,671	14,844,311 10,731,362 5,150,603
White County Rural E M C	_	105,847 178,556	4,177,040 6,864,029	_	_	105,847 178,556	4,177,040 6,864,029
Iowa		20.012	1.250.710			20.012	1.050.510
Adams County Coop Electric Co		29,013 124,691 111,075	1,368,718 5,096,613 5,124,635		_ _ 	29,013 124,691 111,078	1,368,718 5,096,613 5,124,858
Calhoun County Elec Coop Assn		30,245 6,553 75,139	1,435,546 2,462,654 2,521,592		_ _ _	30,245 6,553 75,139	1,435,546 2,462,654 2,521,592
Clarke Electric Coop Inc East-Central Iowa Rrl El Coop Eastern Iowa Light&Power Coop		57,295 155,562 360,338	2,798,452 7,384,867 20,071,486			57,295 155,562 360,338	2,798,452 7,384,867 20,071,486
Farmers Electric Coop Inc Franklin Rural Electric Coop Glidden Rural Electric Coop		107,561 40,325 39,165	4,777,824 1,884,748 1,796,453			107,561 40,325 39,165	4,777,824 1,884,748 1,796,453
Grundy County Rural Elec Coop Guthrie County Rural E C A Hancock County Rural Elec Coop		49,047 78,282 47,131	2,315,291 3,623,473 2,211,922			49,047 78,282 47,131	2,315,291 3,623,473 2,211,922
Harrison County Rrl Elec Coop Hawkeye Tri-County El Coop Inc Humboldt County R E C		52,060 126,325 45,628	1,897,946 5,005,505 2,013,523		_ _ _	52,060 126,325 45,628	1,897,946 5,005,505 2,013,523
Ida County Rural Electric Coop		37,478 266,480 201,931	1,349,870 11,213,183 10,428,935	_		37,478 266,480 201,931	1,349,870 11,213,183 10,428,935
Lyon Rural Electric Coop	_ _ _	60,513 234,473 74,704 215,639	1,938,750 11,921,822 3,720,370 9,553,081			60,513 234,473 74,704 215,639	1,938,750 11,921,822 3,720,370 9,553,081
Monona County Rural Elec Coop Nyman Electric Coop Inc Osceola Electric Coop Inc	_	39,431 23,912 28,538	1,567,004 1,121,676 903,215	_	_	39,431 23,912 28,538	1,567,004 1,121,676 903,215
Pella Coop Elec Assn Plymouth Electric Coop Assn Rideta Electric Coop Inc	_	43,035 75,295 38,150	2,137,897 2,644,548 1,735,720		_ _	43,035 75,295 38,150	2,137,897 2,644,548 1,735,720
S E Iowa Coop Electric Assn Sac County Rural Electric Coop South Crawford Rural Elec Corp		181,920 21,590 74,421	5,772,518 987,804 2,512,649	_ 1 	55 	181,921 21,590 74,421	5,772,573 987,804 2,512,649
Southern Iowa Elec Coop IncT I P Rural Electric Coop		101,448 106,583 38,042	3,107,989 5,195,779 1,450,705		_ _ _	101,448 106,583 38,042	3,107,989 5,195,779 1,450,705
Woodbury County Rural E C A Wright County Rural Elec Coop	_	55,705 101,892	1,951,309 3,806,460	_	_	55,705 101,892	1,951,309 3,806,460
Kansas Ark Valley Elec Coop Assn Inc	_	76,576	4,106,976	31	740	76,607	4,107,716
Brown-Atchison E C A Inc Butler Rural El Coop Assn Inc	_	95,413		38,080 7	2,082,881 1,118	38,080 95,420	2,082,881 5,202,290
C & W Rural Elec Coop Assn Inc		40,689 53,842 103,390	2,144,294 2,936,566 4,740,521	_		40,689 53,842 103,390	2,144,294 2,936,566 4,740,521
D S & O Rural E C A Inc Doniphan Elec Coop Assn Inc Flint Hills Rural E C A Inc		98,237 — 68,659	5,591,530 — 3,910,683			98,237 17,629 68,659	5,591,530 616,371 3,910,683
Jewell-Mitchell Coop Elec Inc Kaw Valley Electric Coop Inc Lane-Scott Electric Coop Inc	_	49,544 — 64,557	2,649,108 — 4,108,234		_	49,544 112,153 64,557	2,649,108 3,892,089 4,108,234
Leavenworth-Jefferson E C Inc	_	76,784	4,700,587	_	_	76,784	4,700,587

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

<u> </u>	Source of Electricity										
State /	Inves Owr		Fede	ral		nd Other rnment	Municipal				
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)				
**											
Kansas Lyon-Coffey Electric Coop Inc	_	_	_	_	_	_	_				
N C K Electric Coop Inc	_	_	_	_	_	_	_				
Nemaha-Marshall E C A Inc	45,894	1,553,235	_	_	_	_	_				
Ninnescah Rural E C A Inc Northwest Kansas E C A Inc	_	_	_	_	_	_	_				
Norton-Decatur Coop El Co Inc	_				_						
P R & W Electric Coop Assn Inc	_	_	_	_	_	_	_				
Pioneer Electric Coop Inc	_	_	_	_	_	_	_				
Radiant Electric Coop Inc Sedgwick Cnty El Coop Assn Inc	_	_	_	_	_	_	_				
Sekan Electric Coop Assn Inc	_	_	_	_	_	_	_				
Smoky Hill Elec Coop Assn Inc	_	_	_	_	_	_	_				
Sumner-Cowley Elec Coop Inc	_	_	_	_	_	_	_				
Twin Valley Electric Coop Inc	_	_	_	_	_	_	_				
United Electric Coop Inc Victory Electric Coop Assn Inc	_	_	_	_	_	_	_				
Western Coop Electric Assn Inc		_	_	_	_		_				
Wheatland Electric Coop Inc	_	_	_	_	_	_	_				
Vontueler											
Kentucky Big Sandy Rural Elec Coop Corp	_	_	_	_	_	_	_				
Blue Grass Rural El Coop Corp	_	_	_	_	_	_	_				
Clark Rural Electric Coop Corp	_	_	_	_	_	_	_				
Cumberland Valley Rural E C C	_	_	_	_	_	_	_				
Farmers Rural Elec Coop CorpFleming-Mason Rural E C C	_	_	_	_	_	_	_				
Fox Creek Rural Elec Coop Corp		_		_							
Grayson Rural Elec Coop Corp	_	_	_	_	_	_	_				
Green River Electric Corp	_	_	_	_	_	_	_				
Harrison County Rural E C C	_	_	_	_	_	_	_				
Henderson-Union Elec Coop Corp Hickman-Fulton Counties RECC		_		5,619,538							
Inter County Rural E C C	_	_			_	_	_				
Jackson County Rural E C C	_	_	_	_	_	_	_				
Jackson Purchase El Coop Corp	_	_	_	_	_	_	_				
Licking Valley Rural E C C Meade County Rural E C C	_	_	_	_	_	_	_				
Nolin Rural Electric Coop Corp		_		_							
Owen Electric Coop Inc	_	_	_	_	_	_	_				
Pennyrile Rural Elec Coop Corp	_	_	919,276	41,696,138	_	_	_				
Salt River Electric Coop Corp	_	_	_	_	_	_	_				
Shelby Rural Elec Coop CorpSouth Kentucky Rural E C C	_	_		_							
Taylor County Rural E C C	_	_	_	_	_	_					
Warren Rural Elec Coop Corp	_	_	1,238,104	52,193,002	_	_	_				
West Kentucky Rural E C C	_	_	822,948	35,055,298	_	_	_				
Louisiana											
Claiborne Electric Coop Inc	_	_	_	_	_	_	_				
Concordia Electric Coop Inc	_	_	_	_	_	_	_				
Dixie Electric Membership Corp	_	_	_	_	_	_	_				
Jefferson Davis Elec Coop Inc Northeast Louisiana Power Coop	_	_	_	_	_	_	_				
Pointe Coupee Elec Member Corp	_	_	_	_	_	_	_				
South Louisiana Elec Coop Assn	_	_	_	_	_	_	_				
Southwest Louisiana E M C	_	_	_	_	_	_	_				
Teche Electric Coop Inc	_	_	_	_	_	_	_				
Valley Electric Member Corp Washington-St Tammany E C Inc	_	_		_	_	_	_				
De lite											
Maine											
Eastern Maine Electric Coop	29,328	1,409,884	_	_	_	_	_				
Fox Islands Electric Coop Inc	9,236 2,379	405,920 174,701		_		_					
5 Island Electric Coop inc	2,319	1,7,701	-	_	_	_					

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	urce of Electricity	y		
State /	Municipal	Cooper	rative	Othe	r ¹	Tot	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Kansas							
Lyon-Coffey Electric Coop Inc	_	92,584	4,839,431	_	229	92,584	4,839,660
N C K Electric Coop Inc	_	33,418	1,838,410	_	_	33,418	1,838,410
Nemaha-Marshall E C A Inc	_	_		_	_	45,894	1,553,235
Ninnescah Rural E C A Inc Northwest Kansas E C A Inc	_	66,552 29,736	3,237,911 1,901,298	2	54	66,554 29,736	3,237,965 1,901,298
Norton-Decatur Coop El Co Inc	_	105,516	5,379,545	14	170	105,530	5,379,715
P R & W Electric Coop Assn Inc	_	36,026	2,130,426	_	_	36,026	2,130,426
Pioneer Electric Coop Inc	_	305,845	16,329,242	61	726	305,906	16,329,968
Radiant Electric Coop Inc	_	44,611	2,366,514	_	_	44,611	2,366,514
Sedgwick Cnty El Coop Assn Inc		77,187	4,626,668	3	87	77,190	4,626,755
Sekan Electric Coop Assn Inc	_	53,790	2,895,851	_	_	53,790	2,895,851
Smoky Hill Elec Coop Assn Inc Sumner-Cowley Elec Coop Inc	_	37,791 63,296	1,960,035 3,504,847	_	_	37,791 63,296	1,960,035 3,504,847
Twin Valley Electric Coop Inc	_	26,248	1,527,050	_	_	26,248	1,527,050
United Electric Coop Inc	_	62,356	3,380,653	567	14,564	62,923	3,395,217
Victory Electric Coop Assn Inc	_	117,783	5,709,371	4	94	117,787	5,709,465
Western Coop Electric Assn Inc	_	118,481	7,120,740	_	_	118,481	7,120,740
Wheatland Electric Coop Inc	_	662,985	35,887,469	28	312	663,013	35,887,781
Kentucky							
Big Sandy Rural Elec Coop Corp	_	252,046	8,385,103	_	_	252,046	8,385,103
Blue Grass Rural El Coop Corp	_	499,549 323,310	16,565,441 10,831,006	_	_	499,549 323,310	16,565,441 10,831,006
Cumberland Valley Rural E C C	_	447,894	14,778,764			447.894	14,778,764
Farmers Rural Elec Coop Corp	_	353,150	11,643,457	_	_	353,150	11,643,457
Fleming-Mason Rural E C C	_	613,647	17,371,954	_	_	613,647	17,371,954
Fox Creek Rural Elec Coop Corp	_	159,720	5,437,551	_	_	159,720	5,437,551
Grayson Rural Elec Coop Corp	_	206,250	6,953,630		- 94 240	206,250	6,953,630
Green River Electric Corp Harrison County Rural E C C	_	4,436,934 207,788	131,759,318 6,000,315	-1,968	-84,349	4,434,966 207,788	131,674,969 6,000,315
Henderson-Union Elec Coop Corp		2,719,371	81,710,450		-35,076	2,719,371	81,675,374
Hickman-Fulton Counties RECC	_		_	_	-3,959	128,491	5,615,579
Inter County Rural E C C	_	315,813	10,827,682	_		315,813	10,827,682
Jackson County Rural E C C	_	773,645	25,880,650	_	_	773,645	25,880,650
Jackson Purchase El Coop Corp	_	572,452	24,404,144	_	_	572,452	24,404,144
Licking Valley Rural E C C Meade County Rural E C C	_	225,850 317,204	7,671,400	743	_	225,850 317,947	7,671,400 13,241,313
Nolin Rural Electric Coop Corp	_	551,432	13,241,313 18,287,638			551,432	18,287,638
Owen Electric Coop Inc	_	1,264,151	37,464,023	_	_	1,264,151	37,464,023
Pennyrile Rural Elec Coop Corp	_			_	_	919,276	41,696,138
Salt River Electric Coop Corp	_	640,326	21,452,372	_	_	640,326	21,452,372
Shelby Rural Elec Coop Corp	_	333,011	10,403,370	_	_	333,011	10,403,370
South Kentucky Rural E C C	_	813,983 339,528	27,828,896 11,492,917	_	_	813,983 339,528	27,828,896 11,492,917
Warren Rural Elec Coop Corp	_					1,238,104	52,193,002
West Kentucky Rural E C C	_	_	_	_	_	822,948	35,055,298
Louisiana							
Claiborne Electric Coop Inc	_	413,168	19,301,977	_	_	413,168	19,301,977
Concordia Electric Coop Inc	_	161,265	7,729,741	_	_	161,265	7,729,741
Dixie Electric Membership Corp	_	1,210,709	60,143,520	_	_	1,210,709	60,143,520
Jefferson Davis Elec Coop Inc Northeast Louisiana Power Coop	_	188,924 214,910	9,089,519 10,881,883	_	_	188,924 214,910	9,089,519 10,881,883
Pointe Coupee Elec Member Corp	_	194,340	8,511,841	_	_	194,340	8,511,841
South Louisiana Elec Coop Assn	_	422,335	19,417,943	_	_	422,335	19,417,943
Southwest Louisiana E M C	_	1,499,056	70,415,811	_	_	1,499,056	70,415,811
Teche Electric Coop Inc	_	179,665	8,606,029	_	-2,088	179,665	8,603,941
Valley Electric Member Corp Washington-St Tammany E C Inc	_	489,784 660,511	24,771,261 32,526,168	_	_	489,784 660,511	24,771,261 32,526,168
į ,		500,511	32,320,100			550,511	52,520,100
Maine Eastern Maine Electric Coop	_	_	_	76,428	3,914,702	105,756	5,324,586
Fox Islands Electric Coop Inc	_	_	_	70,420	5,514,702	9,236	405,920

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

Choptank Electric Coop Inc.	Naryland Cooperative Borrower Purchases (thousand kWh) (dollars) Purchases (thousand kWh) (dollars) Purchases (thousand kWh) (dollars) (do	Purchases (thousand
Purchases (thousand (bollars) Purchases (thousand (bollars) Purchases (thousand (bollars) Purchases (thousand (bollars) Purchases (thousand kWh) Purchases (thousand kWh) Purchases (bollars) Purchases (bol	Purchases (thousand kWh)	(thousand kWh)
Choptank Electric Coop Inc.	Choptank Electric Coop Inc	
Choptank Electric Coop Inc.	Choptank Electric Coop Inc.	12,45 —
Michigan Ager-Delta Coop Electric Assn. 43,828 1,555,280 12,45	Michigan Algar-Delta Coop Electric Assn	12,45
Alger-Delia Coop Electric Assn	Alger-Delta Coop Electric Assn.	12,45 — —
Cloverland Electric Coop	Cloverland Electric Coop	_
Fruil Belt Electric Coop	Fruit Belt Electric Coop	_
0 & A Electric Coop	O & A Electric Coop. —	
Ontonagen County Ř E A. 23,752 898,410	Ontonagon County Ř E A	_
Southeastern Michigan REC Inc	Southeastern Michigan REC Inc. 32,987 1,290,522	_
Top O Michigan Electric Co	Top O Michigan Electric Coo	5,59
Tri-County Electric Coop	Tri-County Electric Coop	_
Wissesting Section S	Winnesota —	_
Minnesota Agralite Coop	Minnesota Agralite Coop	_
Agralite Coop	Agralite Coop — <	_
Arrowhead Electric Coop Inc.	Arrowhead Electric Coop Inc	
Beltrain Electric Coop Inc.	Beltrami Electric Coop Înc	_
Blue Earth-Nicollet-Faribault	Blue Earth-Nicollet-Faribault	_
Brown County Rural Elec Assn	Brown County Rural Elec Assn	_
Clearwater-Polk Elec Coop Inc	Clearwater-Polk Elec Coop Inc	_
Coop L & P Assn of Lake County	Coop L & P Assn of Lake County — <td< td=""><td>_</td></td<>	_
Crow Wing Coop Power&Light Co.	Crow Wing Coop Power&Light Co. — <td< td=""><td>_</td></td<>	_
Dairyland Electric Coop Inc.	Dairyland Electric Coop Inc. —	_
East Central Electric Assn.	East Central Electric Assn	_
Federated Rural Electric Assn	Federated Rural Electric Assn	_
Freeborn-Mower Electric Coop	Freeborn-Mower Electric Coop	
Goodhue County Coop Elec Assn	Goodhue County Coop Elec Assn	
Itasca-Mantrap Co-op Elec Assn	Itasca-Mantrap Co-op Elec Assn	_
Lake Region Coop Elec Assn	Lake Region Coop Elec Assn — — — — Lyon-Lincoln Electric Coop Inc — — — — McLeod Coop Power Assn — — — — Meeker Coop Light & Power Assn — — — — Mille Lacs Electric Coop — — — — — Minnesota Valley Coop L&P Assn — — 57,148 813,781 — — Minnesota Valley Electric Coop — — — — — —	_
McLeod Coop Dower Assn — <td>McLeod Coop Power Assn</td> <td>_</td>	McLeod Coop Power Assn	_
Mecker Coop Light & Power Assn	Meeker Coop Light & Power Assn — — — — — Mille Lacs Electric Coop — — — — — — Minnesota Valley Coop L&P Assn — — 57,148 813,781 — — Minnesota Valley Electric Coop — — — — — —	_
Mille Lacs Électric Coop. — — — — Minnesota Valley Coop L&P Assn. — <td>Mille Lacs Électric Coop</td> <td>_</td>	Mille Lacs Électric Coop	_
Minnesota Valley Coop L&P Assn	Minnesota Valley Coop L&P Assn — — 57,148 813,781 — — Minnesota Valley Electric Coop — — — — — —	_
Minnesota Valley Electric Coop	Minnesota Valley Electric Coop	_
Nobles Coop Electric	Willinesota variey Leictite Coop	_
North Itasca Electric Coop Inc	Nobles Coon Electric — — — — — — — —	_
North Star Electric Coop İnc		_
Northern Electric Coop Ins	North Star Electric Coop Inc	_
People 's Coop Power Assn	Northern Electric Coop Assn — — — — — — — — — —	_
Red Lake Electric Coop Inc —		_
Red River Valley Coop Pwr Assn — <		_
Redwood Electric Coop.		_
Renville-Sibley Coop Pwr Assn		_
Roseau Electric Coop Inc		_
Runestone Electric Assn		
South Central Electric Assn — — — — Stearns Coop Electric Assn — — — — Steele-Waseca Coop Electric — — — — Todd-Wadena Electric Coop — — — — Traverse Electric Coop Inc — — — — Tri-County Electric Coop Inc — — — — Wild Rice Electric Coop Inc — — — — Wright-Hennepin Coop Elec Assn — — — — Mississippi Central Electric Power Assn — 589,258 25,225,767 — —		_
Steele-Waseca Coop Electric — — — — Todd-Wadena Electric Coop — — — — Traverse Electric Coop Inc — — — — Tri-County Electric Coop — — — — Wild Rice Electric Coop Inc — — — — Wright-Hennepin Coop Elec Assn — — — — Mississippi — 589,258 25,225,767 — —	South Central Electric Assn — — — — — — — —	_
Todd-Wadena Electric Coop	I .	_
Traverse Electric Coop Inc — — — — — Tri-County Electric Coop — — — — — Wild Rice Electric Coop Inc — — — — — Wright-Hennepin Coop Elec Assn — — — — — Mississippi — — 589,258 25,225,767 — — —		_
Tri-County Electric Coop — — — — — Wild Rice Electric Coop Inc — — — — — — Wright-Hennepin Coop Elec Assn — — — — — — — Mississippi — — 589,258 25,225,767 — — —		_
Wild Rice Electric Coop Inc —		_
Wright-Hennepin Coop Elec Assn — — — — — — Mississippi Central Electric Power Assn — — 589,258 25,225,767 — — —		_
Central Electric Power Assn		_
Central Electric Power Assn		
		_

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			30	Source of Electricity				
State /	Municipal	Cooper	ative	Othe	_r 1	Tota	al	
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	
Maryland								
Choptank Electric Coop Inc	_	661,271	34,355,493	_	_	661,271	34,355,49	
Southern Maryland El Coop Inc	_	_	_	_	2,262,250	2,564,785	124,473,24	
Michigan								
Alger-Delta Coop Electric Assn	575,898	_	_	_	_	56,282	2,131,17	
Cherryland Electric Coop Inc	_	240,836	13,103,451	_	_	240,836	13,103,45	
Cloverland Electric Coop	_			_	-9,126	208,953	4,866,71	
Fruit Belt Electric Coop O & A Electric Coop	_	355,949 263,087	12,846,853 14,362,511	_	_	355,949 263,087	12,846,85 14,362,51	
Ontonagon County R E A	_		14,302,311 —	_	_	23,752	898,41	
Southeastern Michigan REC Inc	319,039	12,186	441,773	_	_	50,763	2,051,33	
Thumb Electric Coop-Michigan	_	_	_	_	17,848	122,504	5,017,32	
Top O 'Michigan Electric Co	_	458,275	24,820,577	_	_	458,275	24,820,57	
Tri-County Electric Coop	_	228,778 66,428	12,742,255 3,708,791	_	-400	228,778 66,428	12,742,25 3,708,39	
Western Whenigan Electric Coop		00,420	3,700,771		400	00,420	3,700,37	
Minnesota								
Agralite Coop	_	126,110	3,235,926	32	2,058	126,142	3,237,98	
Arrowhead Electric Coop Inc	_	50,602 378,510	1,683,430 11,225,494	_	_	50,602 378,510	1,683,43 11,225,49	
Beltrami Electric Coop Inc	_	221,384	8,323,352	6	414	221,390	8,323,76	
Brown County Rural Elec Assn	_	103,097	3,228,650	_	_	103,097	3,228,65	
Carlton County Coop Power Assn	_	138,321	4,789,764	_	_	138,321	4,789,76	
Clearwater-Polk Elec Coop Inc	_	65,726	2,121,848	_	_	65,726	2,121,84	
Coop L & P Assn of Lake County	_	72,364	2,388,081	_	_	72,364	2,388,08	
Crow Wing Coop Power&Light Co Dairyland Electric Coop Inc		343,532 160,016	12,469,509 6,159,020	_	_	343,532 160,016	12,469,50 6,159,02	
East Central Electric Assn	3,852	634,105	24,012,285	_	_	634,109	24,016,13	
Federated Rural Electric Assn		130,016	3,655,793	_	_	130,016	3,655,79	
Freeborn-Mower Electric Coop	_	129,571	4,683,756	_	_	129,571	4,683,75	
Goodhue County Coop Elec Assn	_	78,271 114,141	3,348,844	_	_	78,271 137,020	3,348,84	
Itasca-Mantrap Co-op Elec Assn Kandiyohi Coop Elec Power Assn	_	128,131	3,908,496 4,296,483	_	_	128,131	4,348,32 4,296,48	
Lake Region Coop Elec Assn	_	31,110	10,499,289	1	40	31,111	10,499,32	
Lyon-Lincoln Electric Coop Inc	_	76,727	2,790,483	_	_	76,727	2,790,48	
McLeod Coop Power Assn	_	128,073	4,742,271	_	_	128,073	4,742,27	
Meeker Coop Light & Power Assn	_	131,564 133,077	4,268,217 4,732,319	_	_	131,564 133,077	4,268,21 4,732,31	
Minnesota Valley Coop L&P Assn		97,121	3,923,081	_		154,269	4,732,3	
Minnesota Valley Electric Coop	_	327,568	12,858,922	_	-102,084	327,568	12,756,83	
Nobles Coop Electric	_	109,098	2,918,858	_	_	109,098	2,918,85	
North Itasca Electric Coop Inc	_	37,698	1,394,164	_		37,698	1,394,10	
North Star Electric Coop Inc Northern Electric Coop Assn	_	100,078 242,645	2,835,734 8,266,035	_	8	100,078 242,645	2,835,74 8,266,03	
P K M Electric Coop Inc	_	242,645 110.497	3,288,017	_	_	242,645 110,497	3,288,0	
People 's Coop Power Assn	_	210,379	8,164,097	- 8	512	210,387	8,164,60	
Red Lake Electric Coop Inc	_	116,287	3,687,564	_	_	116,287	3,687,50	
Red River Valley Coop Pwr Assn	_	126,950	4,017,385	_		126,950	4,017,38	
Redwood Electric Coop	_	58,521 86,828	1,631,468	25	1,755	58,546 86,828	1,633,22	
Roseau Electric Coop Inc	_	154,410	2,619,998 4,185,026	6	500	154,416	2,619,99 4,185,52	
Runestone Electric Assn	_	176,242	5,481,505	_	_	176,242	5,481,50	
South Central Electric Assn	_	94,843	2,612,124	_	_	94,843	2,612,12	
Stearns Coop Electric Assn	_	334,056	11,808,494	8	485	334,064	11,808,97	
Steele-Waseca Coop Electric Coop	_	151,446 141,868	5,553,391	28	2,415	151,474	5,555,80	
Todd-Wadena Electric Coop Traverse Electric Coop Inc	_	69,100	4,398,619 2,283,680	_	_	141,868 69,100	4,398,63 2,283,68	
Tri-County Electric Coop		253,799	9,624,966		1,827	253,827	9,626,79	
Wild Rice Electric Coop Inc	_	203,643	6,345,485	_		203,643	6,345,48	
Wright-Hennepin Coop Elec Assn	_	513,570	18,640,167	_	_	513,570	18,640,16	
Mississippi								
Central Electric Power Assn	_	_	_	_	_	589,258	25,225,76	
Coahoma Electric Power Assn	_	111,780	4,936,525		_	111,780	4,936,52	

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			Sc	ource of Electricit	У		1
State /	Inves Owi		Fede	eral		nd Other rnment	Municipa
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)
Mississippi							
Coast Electric Power Assn	_	_	_	_	_	_	_
Dixie Electric Power Assn		_	_	_	_	_	_
East Mississippi Elec Pwr Assn		12,558,079	230,138	9,541,937	_	_	_
Magnolia Electric Power Assn		_			_	_	_
Monroe County Elec Power Assn North East Mississippi E P A		_	177,348 387,995	7,811,723 16,727,557	_	_	_
Northcentral Mississippi E P A			648,958	28,417,251	_	_	_
Singing River Elec Power Assn		_	_		_	_	_
Southern Pine Elec Power Assn	_	_	_	_	_	_	_
Southwest Mississippi E P A		_			_	_	_
Tallahatchie Valley E P A		_	621,469 240,707	26,144,759	_	_	_
Tishomingo County E P A Tombigbee Electric Power Assn		_	989,894	11,147,851 43,406,004	_	_	
Twin County Electric Pwr Assn		_	—		_	_	_
Yazoo Valley Elec Power Assn		_	_	_	_	_	_
Missouri							
Atchison-Holt Electric Coop		_	_	_	_	_	_
Barton County Elec Coop Inc			_		_	_	_
Black River Electric Coop		_	_	_	_	_	_
Boone Electric Coop	_	_	_	_	_	_	_
Callaway Electric Coop		_	_	_	_	_	_
Central Missouri Elec Coop Inc			_	_	_	_	_
Citizens Electric Corp		27,542,584	_	_	_	_	_
Crawford Electric Coop Inc			_		_	_	_
CO-MO Electric Coop Inc		_	_	_	_	_	_
Farmers ' Electric Coop Inc	_	_	_	_	_	_	_
Gascosage Electric Coop	_	_	_	_	_	_	_
Grundy Electric Coop Inc		_	_	_	_	_	_
Howard Electric Coop Howell-Oregon Elec Coop Inc		_	_	_	_	_	_
Intercounty Electric Coop Assn			_		_	_	_
Laclede Electric Coop Inc		_	_	_	_	_	_
Lewis County Rural E C A	_	_	_	_	_	_	_
Macon Electric Coop		_	_	_	_	_	_
Missouri Rural Electric Coop		_	_	_	_	_	_
New-Mac Electric Coop Inc Nodaway Worth Elec Coop Inc		_	_	_	_	_	_
North Central MO Elec Coop Inc			_		_	_	_
Northwest Missouri El Coop Inc		_	_	_	_	_	_
Osage Valley Elec Coop Assn	_	_	_	_	_	_	_
Ozark Border Electric Coop		_	_	_	_	_	_
Ozark Electric Coop Inc		_	_	_	_	_	_
Pemiscot-Dunklin Elec Coop Inc							
Ralls County Electric Coop		1,732	_	_	_	_	_
Sac-Osage Electric Coop Inc			_	_	_	_	_
Southwest Electric Coop Inc	_	_	_	_	_	_	_
SE-MA-NO Electric Coop		_	_	_	_	_	_
Three Rivers Electric Coop		_	_	_	_	_	_
Tri-County Electric Coop Assn		_	_	_	_	_	_
West Central Electric Coop Inc			_		_	_	_
White River Valley El Coop Inc		_	_	_	_	_	
•							
Montana							
Beartooth Electric Coop Inc		_	_	_	_	_	_
Big Horn County Elec Coop Inc		_	_	_	_	_	
Fergus Electric Coop Inc	_	_	_	_	_	_	_
Goldenwest Electric Coop Inc	_	_	_	_	_	_	_
Hill County Electric Coop Inc	_	_	_	_	_	_	_

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	ource of Electrici	ty		
State /	Municipal	Cooper	ative	Oth	er ¹	Tota	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Mississippi							
Coast Electric Power Assn	_	1,045,075	46,644,603	_	_	1,045,075	46,644,603
Dixie Electric Power Assn		638,820	28,396,146	_	_	638,820	28,396,146
East Mississippi Elec Pwr Assn				_	_	556,211	22,100,016
Magnolia Electric Power Assn		463,652	20,101,767	_	_	463,652 177,348	20,101,767 7,811,723
North East Mississippi E P A		_				387,995	16,727,557
Northcentral Mississippi E P A		_	_	_	_	648,958	28,417,251
Singing River Elec Power Assn		1,036,249	46,268,501	_	_	1,036,249	46,268,501
Southern Pine Elec Power Assn		1,474,607	61,231,682	_	_	1,474,607	61,231,682
Southwest Mississippi E P A		403,981	17,360,575	_	_	403,981	17,360,575
Tallahatchie Valley E P A		_	_	_	_	621,469	26,144,759
Tishomingo County E P A Tombigbee Electric Power Assn		_	_	_	_	240,707 989,894	11,147,851 43,406,004
Twin County Electric Pwr Assn		252,551	10,993,062			252,551	10,993,062
Yazoo Valley Elec Power Assn		233,543	8,455,742	_	_	233,543	8,455,742
Missouri		10.005	1.750.400			10.005	1.550.400
Atchison-Holt Electric Coop		48,997	1,750,488	_	_	48,997	1,750,488
Barry Electric Coop Barton County Elec Coop Inc		150,785 95,107	5,886,131 3,692,524			150,785 95,107	5,886,131 3,692,524
Black River Electric Coop		372,041	12,087,620	_	_	372,041	12,087,620
Boone Electric Coop		381,826	12,999,350	_	_	381,826	12,999,350
Callaway Electric Coop	_	159,566	5,210,255	_	_	159,566	5,210,255
Central Missouri Elec Coop Inc		210,676	6,145,961	_	_	210,676	6,145,961
Citizens Electric Corp		102 145		_	_	775,955	27,542,584
Consolidated Electric Coop Crawford Electric Coop Inc		193,145 228,385	5,832,513 7,928,046	_	_	193,145 228,385	5,832,513 7,928,046
CO-MO Electric Coop Inc		300,074	10,181,799			300,074	10,181,799
Farmers ' Electric Coop Inc		244,099	7,602,514	_	_	244,099	7,602,514
Gascosage Electric Coop		107,014	4,043,353	_	_	107,014	4,043,353
Grundy Electric Coop Inc		131,393	4,302,442	_	_	131,393	4,302,442
Howard Electric Coop		34,894	1,121,596	395	25,700	34,894 311,069	1,121,596
Howell-Oregon Elec Coop Inc Intercounty Electric Coop Assn		310,674 436,991	10,521,764 15,267,049		23,700	436,991	10,547,464 15,267,049
Laclede Electric Coop Inc		481,157	16,809,493	_	_	481,157	16,809,493
Lewis County Rural E C A		82,290	2,824,988	_	_	82,290	2,824,988
Macon Electric Coop		239,790	6,887,874	_	_	239,790	6,887,874
Missouri Rural Electric Coop		279,055	8,449,991	_	_	279,055	8,449,991
New-Mac Electric Coop Inc		205,312	8,284,631	_	_	205,312	8,284,631
Nodaway Worth Elec Coop Inc North Central MO Elec Coop Inc		51,251 154,629	1,845,816 4,523,043	_	_	51,251 154,629	1,845,816 4,523,043
Northwest Missouri El Coop Inc		77,621	2,651,587	_	_	77,621	2,651,587
Osage Valley Elec Coop Assn		203,454	8,590,270	_	_	203,454	8,590,270
Ozark Border Electric Coop		510,142	16,679,065	_	_	510,142	16,679,065
Ozark Electric Coop Inc		368,446	15,287,337	_	_	368,446	15,287,337
Pemiscot-Dunklin Elec Coop Inc		114,509	3,600,396	_	_	114,509 333,881	3,600,396
Platte-Clay Electric Coop Inc		333,881 64,456	12,115,695 2,244,290			64,485	12,115,695 2,246,022
Sac-Osage Electric Coop Inc		110,695	4,519,906	_	_	110,695	4,519,906
Southwest Electric Coop Inc		407,025	16,862,027	_	_	407,025	16,862,027
SE-MA-NO Electric Coop		73,854	2,544,163	_	_	73,854	2,544,163
Three Rivers Electric Coop		310,401	10,146,470	_	_	310,401	10,146,470
Tri-County Electric Coop Assn		106,044 248,627	3,419,484 8,403,592	_	_	106,044 248,627	3,419,484 8,403,592
West Central Electric Coop Inc	_	173,872	6,417,521	_	_	173,872	6,417,521
White River Valley El Coop Inc	3,945	554,187	21,448,925	_	_	554,282	21,452,870
Montana Beartooth Electric Coop Inc	_	55,662	1,660,496	_	_	55,662	1,660,496
Big Flat Electric Coop Inc	_	60,790	1,539,547	_	_	60,790	1,539,547
Big Horn County Elec Coop Inc	_	60,136	1,815,260	_	-4,188	60,136	1,811,072
Fergus Electric Coop Inc		91,584	2,599,527	_	_	91,584	2,599,527
Goldenwest Electric Coop Inc Hill County Electric Coop Inc		15,321 55,864	550,344 1,503,761	_	_	15,321 55,864	550,344 1,503,761

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			Sc	ource of Electricit	У		
State /	Inves Owi		Fede	eral	State an Govern		Municipal
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)
Montana							
Lincoln Electric Coop Inc	6,627	102,471	111,788	3,079,804	_	_	_
Lower Yellowstone R E A Inc	_	_	_	_	_	_	_
Marias River Electric Coop Inc	_	_	_	_	_	_	_
McCone Electric Coop Inc		_	_	_	_	_	_
Missoula Electric Coop Inc		_	169,786	4,552,935	_	_	_
Northern Electric Coop Inc	_	_	_ ^		_	_	_
Park Electric Coop Inc		_		_	_	_	_
Ravalli County Elec Coop Inc		_	113,410	3,018,376	_	_	_
Southeast Electric Coop Inc		_	_	_	_	_	_
Sun River Electric Coop Inc		_	_	_	_	_	_
Tongue River Electric Coop Inc	_	_	_	_	_	_	_
Valley Electric Coop Inc					_	_	_
Vigilante Electric Coop Inc		64,945	125,841	3,310,925	_	_	_
Yellowstone Vlly Elec Coop Inc	160,775	4,786,885	26,976	819,589	_	_	_
Nebraska							
Midwest Electric Member Corp	_	_	_	_	_	_	_
Panhandle Rural El Member Assn	_	_	_	_	_	_	
Nevada							
Mt Wheeler Power Inc	_	73,941	_	_	_	_	_
Wells Rural Electric Co	_	16,225	703,492	18,922,186	_	_	_
New Hampshire	620 100	40.702.010					
New Hampshire Elec Coop Inc	638,180	49,702,810	_	_	_	_	_
New Jersey							
Sussex Rural Electric Coop Inc	_	_	_	_	_	_	_
N N .							
New Mexico Central New Mexico El Coop Inc							
Central Valley Elec Coop Inc	482,661	16,577,898					
Columbus Electric Coop Inc			_	_	_	_	_
Continental Divide El Coop Inc		_	_	_	_	_	_
Farmers ' Electric Coop Inc		6,939,614	21,523	354,020	_	_	_
Jemez Mountains Elec Coop Inc		_	_	_	_	_	_
Kit Carson Electric Coop Inc Lea County Electric Coop Inc		28,636,617					
Mora-San Miguel Elec Coop Inc		20,030,017	_		_	_	
Northern Rio Arriba E C Inc		_	_	_	_	_	_
Otero County Electric Coop Inc	_	_	_	_	_	_	_
Roosevelt County Elec Coop Inc		5,020,047	_	354,020	_	_	_
Sierra Electric Coop Inc	_	_	_	_	_	_	_
Socorro Electric Coop Inc							
Springer Electric Coop Inc							
New York							
Delaware County Elec Coop Inc	_	_	_	_	48,267	854,167	_
Oneida-Madison Elec Coop Inc Otsego Electric Coop Inc		_	_	_	18,682 46,109	365,463 962,776	_
Steuben Rural Elec Coop Inc					62,697	1,071,731	_
•					. ,	, . ,	
North Carolina							
Albemarle Electric Member Corp	_	_	11,066	204,054	_	_	_
Blue Ridge Elec Member Corp Brunswick Electric Member Corp		_	14,498 16,497	377,189	_	_	_
Cape Hatteras Elec Member Corp		_	10,49/ —	241,745	_	_	_
Carteret-Craven El Member Corp		_	12,574	184,249	_	_	_
Central Electric Member Corp		_	5,815	85,212	_	_	_
Crescent Electric Member Corp		_	33,178	863,187	_	_	_
Davidson Electric Member Corp	_	_	_	_	_	_	_

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	urce of Electricit	y		
State /	Municipal	Cooper	ative	Othe	r1	Tot	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Montana							
Lincoln Electric Coop Inc	_	_	_	2,149	7,328	120,564	3,189,603
Lower Yellowstone R E A Inc	_	78,294	2,911,877			78,294	2,911,877
Marias River Electric Coop Inc	_	84,684	2,279,829	_	_	84,684	2,279,829
McCone Electric Coop Inc	_	69,457 30,117	2,373,575 809,231	_	_	69,457 30,117	2,373,575 809,231
Missoula Electric Coop Inc			- 609,231			169,786	4,552,935
Northern Electric Coop Inc	_	31,384	747,652	_	_	31,384	747,652
Park Electric Coop Inc	_	57,832	1,737,050	_	_	57,832	1,737,050
Ravalli County Elec Coop Inc	_	90.541	2 000 027	_	_	113,410	3,018,376
Sheridan Electric Coop Inc		89,541 24,692	3,000,937 875,473	_	-6,338	89,541 24,692	3,000,937 869,135
Sun River Electric Coop Inc		85,592	2,322,240		-9,093	85,592	2,313,147
Tongue River Electric Coop Inc	_	92,036	2,519,735	_		92,036	2,519,735
Valley Electric Coop Inc	_	24,588	701,875	_		24,588	701,875
Vigilante Electric Coop Inc	_	_	— -181,451	_	-5,233	130,259 187,751	3,370,637
Tellowstolle Vily Elec Coop life	_	_	-161,431	_	_	107,731	5,425,023
Nebraska							
Midwest Electric Member Corp Panhandle Rural El Member Assn	8,212	114,245 95,527	5,677,555 4,016,228	_	_	114,245 95,578	5,677,555 4,024,440
Nevada							
Mt Wheeler Power Inc	_	340,621 —	16,155,683 —	84,752 —	1,764,819 180,165	425,373 703,492	17,994,443 19,118,576
New Hampshire							
New Hampshire Elec Coop Inc	_	_	_	-865	-473,034	637,315	49,229,776
New Jersey Sussex Rural Electric Coop Inc	_	118,708	7,014,201	_	_	118,708	7,014,201
New Mexico							
Central New Mexico El Coop Inc	_	128,257	7,523,605	_	_	128,257	7,523,605
Central Valley Elec Coop Inc	_	305.542	13,159,543	_	_	482,661 305,542	16,577,898 13,159,543
Continental Divide El Coop Inc	_	354,105	18,384,012	_	_	354,105	18,384,012
Farmers ' Electric Coop Inc	_			_	_	210,818	7,293,634
Jemez Mountains Elec Coop Inc		252,507	15,078,377	_	_	252,507	15,078,377
Kit Carson Electric Coop Inc Lea County Electric Coop Inc	_	236,452	13,463,041	_	_	236,452 825,869	13,463,041 28,636,617
Mora-San Miguel Elec Coop Inc	_	54,012	3,321,987	_	_	54,012	3,321,987
Northern Rio Arriba E C Inc	_	27,334	1,604,878	_	_	27,334	1,604,878
Otero County Electric Coop Inc	_	111,442	6,660,098	_	_	111,442	6,660,098
Roosevelt County Elec Coop Inc		40.224	2 219 602	_	_	143,794	5,374,067
Sierra Electric Coop Inc	_	40,224 148,295	2,218,693 8,434,902	_	_	40,224 148,295	2,218,693 8,434,902
Southwestern Electric Coop Inc		459,888	16,738,581	_	_	459,888	16,738,581
Springer Electric Coop Inc	_	50,527	2,795,101	_	_	50,527	2,795,101
New York							
Delaware County Elec Coop Inc	_	_	_	_		48,267	854,167
Oneida-Madison Elec Coop Inc Otsego Electric Coop Inc	_	_	_	_	2,880	18,682 46,109	368,343 962,776
Steuben Rural Elec Coop Inc	=	_	_	_	_	62,697	1,071,731
North Carolina							
Albemarle Electric Member Corp	_	118,497	6,471,308	_		129,563	6,675,362
Blue Ridge Elec Member Corp	_	983,421	40,557,476	654	20,739	998,573	40,955,404
Brunswick Electric Member Corp Cape Hatteras Elec Member Corp	_	710,394 87,219	43,389,463 4,349,005	_	_	726,891 87,219	43,631,208 4,349,005
Carteret-Craven El Member Corp		423,443	25,924,663	_	_	436,017	26,108,912
Central Electric Member Corp	_	204,755	12,297,807	_	_	210,570	12,383,019
Crescent Electric Member Corp	_	885,556 572,615	44,203,079 28,209,483	_	-504,858	918,734 572,615	44,561,408 28,209,483
Davidson Electric Member Corp	_						

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	ource of Electricit	у		
State /	Inves		Fede	eral		nd Other rnment	Municipa
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)
North Carolina Edgecombe-Martin County E M C	_	_	17,733	326,975	_	_	_
Four County Elec Member Corp	_		19,703	288,718	_	_	_
French Broad Elec Member Corp	407,778	17,197,744	12,739	421,867	_	_	_
Halifax Electric Member Corp	_	_	24,336	199,274	_	_	_
Harkers Island El Member Corp	_	_	43	2,163	_	_	_
Haywood Electric Member Corp	_	_	5,431	167,781	_	_	_
Lumbee River Elec Member Corp Pee Dee Electric Member Corp	_	_	17,502 14,728	256,463 224,864	_	_	_
Piedmont Electric Member Corp			5,097	74,690	_	_	
Randolph Electric Member Corp	_	_	16,934	248,141	_	_	_
Roanoke Electric Member Corp	_	_	23,593	435,022	_	_	_
Rutherford Elec Member Corp	_	_	46,434	1,208,160	_	_	_
South River Elec Member Corp	_	_	28,719	420,835	_	_	_
Surry-Yadkin Elec Member Corp	_	_			_	_	_
Tri-County Elec Member Corp	_	_	13,511 14,531	237,050 212,928	_	_	_
Union Electric Membership Corp		_	22,168	576,728	_	_	
1 1			,	2.2,2			
orth Dakota							
Baker Electric Coop Inc		_	_	_	_	_	_
Capital Electric Coop Inc			13,335	199,865	_	_	
Cass County Electric Coop Inc	_	_			_	_	_
Cavalier Rural Elec Coop Inc	_	_	_	_	_	_	_
James Valley Electric Coop Inc	71	2,495	_	_	_	_	_
KEM Electric Coop Inc	_	_	35,736	530,551	_	_	_
McKenzie Electric Coop Inc	_	_	_	_	_	_	_
McLean Electric Coop Inc	_	_	20 174	424.095	_	_	_
Mor-Gran-Sou Electric Coop Inc	_	_	29,174	434,985	_	_	_
Nodak Electric Coop Inc		_	_	_	_	_	_
North Central Elec Coop Inc	_	_	_	_	_	_	_
Oliver-Mercer Elec Coop Inc	_	_	19,652	276,749	_	_	_
R S R Electric Coop Inc	_	_	_	_	_	_	_
Sheyenne Valley Elec Coop Inc	_	_	_	_	_	_	_
Slope Electric Coop Inc	_	_	_	_	_	_	_
Tri-County Electric Coop Inc	_	_	_	_	_	_	_
West Plains Electric Coop Inc		_	_	_	_	_	_
West Flams Electre Coop inc							
Ohio Adams Rural Electric Coop Inc							
Buckeye Rural Elec Coop Inc			_	_			
Butler Rural Electric Coop Inc	_	_	_	_	_	_	_
Carroll Electric Coop Inc	_	_	_	_	_	_	_
Darke Rural Electric Coop Inc	_	_	_	_	_	_	_
Firelands Electric Coop Inc	_	_	_	_	_	_	_
Frontier Power Co	_	_	_	_	_	_	_
Guernsey-Muskingum El Coop Inc Hancock-Wood Electric Coop Inc	_	_	_	_	_	_	_
Holmes-Wayne Electric Coop Inc			_	_	_	_	_
Logan Cnty Coop P&L Assn Inc	_	_	_	_	_	_	_
Lorain-Medina R E C Inc	_	_	_	_	_	_	_
Marion Rural Electric Coop Inc	_	_	_	_	_	_	_
Midwest Electric Inc	_	_	_	_	_	_	_
Morrow Electric Coop Inc	_	_	_	_	_	_	_
North Central Elec Coop Inc	_	_	_	_	_	_	_
North Western Elec Coop Inc	_	_	_	_	_	_	_
Pioneer Rural Elec Coop Inc	_	_	_	_	_	_	_
South Central Power Co	_	_	_	_	_	_	_
United Rural Electric Coop Inc	_	_	_	_	_	_	_
Washington Electric Coop Inc	_					_	

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			Sc	ource of Electrici	ty		
State /	Municipal	Cooper	rative	Oth	er1	Tot	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
North Carolina							
Edgecombe-Martin County E M C	_	185,671	8,711,393	_	27,778	203,404	9,066,14
Four County Elec Member Corp	_	655,195	30,703,467	_	_	674,898	30,992,18
French Broad Elec Member Corp Halifax Electric Member Corp	_	99,280	 5,506,572	_	_	420,517 123,616	17,619,61 5,705,84
Harkers Island El Member Corp	_	15,972	888,915	_	_	16,015	891,0
Haywood Electric Member Corp	_	194,554	9,285,230	_	_	199,985	9,453,0
Lumbee River Elec Member Corp	_	675,795	40,856,921	_	_	693,297	41,113,3
Pee Dee Electric Member Corp	_	286,065	16,390,428	_	_	300,793	16,615,2
Piedmont Electric Member Corp	_	336,423 405,781	16,421,289 23,243,024	_	_	341,520 422,715	16,495,9 23,491,1
Roanoke Electric Member Corp		191,116	9,925,470			214,709	10,360,4
Rutherford Elec Member Corp	_	882,754	41,348,743	_	_	929,188	42,556,9
South River Elec Member Corp	_	523,336	32,868,860	_	_	552,055	33,289,6
Surry-Yadkin Elec Member Corp	_	287,171	14,767,846	_	_	287,171	14,767,8
Tri-County Elec Member Corp	_	246,298 387,606	13,564,465 23,283,949	_	_	259,809 402,137	13,801,5 23,496,8
Union Electric Membership Corp	_	587,491	31,942,270	_	_	609,659	32,518,9
orth Dakota							
Baker Electric Coop Inc	_	172,266	5,998,653	_	_	172,266	5,998,6
Burke-Divide Electric Coop Inc	_	62,307	1,963,761	_	_	62,307	1,963,7
Capital Electric Coop Inc	_	128,010 550,901	4,880,546 14,213,178	_	1	141,345 550,901	5,080,4 14,213,1
Cavalier Rural Elec Coop Inc	_	41,070	1,433,847	_		41,070	1,433,8
James Valley Electric Coop Inc	_	78,429	3,117,917	_	_	78,500	3,120,4
KEM Electric Coop Inc	_	27,289	1,079,431	_	10,406	63,025	1,620,3
McKenzie Electric Coop Inc	_	265,797	9,348,027	_		265,797	9,348,0
McLean Electric Coop Inc	_	55,340 86,181	2,061,367 3,462,653	81 19	1,470 1,903	55,421 115,374	2,062,8 3,899,5
Mountrail-Williams Elec Coop	_	163,043	5,029,473			163,043	5,029,4
Nodak Electric Coop Inc	_	560,989	17,400,259	_	_	560,989	17,400,2
North Central Elec Coop Inc	_	175,238	6,335,766	_	_	175,238	6,335,7
Oliver-Mercer Elec Coop Inc	_	175,511	7,143,246	_	_	195,163	7,419,9
R S R Electric Coop Inc	_	165,247 79,643	5,809,847 2,529,285	_	_	165,247 79,643	5,809,8 2,529,2
Slope Electric Coop Inc		63,894	2,202,310	_		63,894	2,202,3
Tri-County Electric Coop Inc	_	139,149	4,985,646	_	_	139,149	4,985,6
Verendrye Electric Coop Inc	_	317,565	10,636,456	_	_	317,565	10,636,4
West Plains Electric Coop Inc	_	222,874	8,528,209	_	_	222,874	8,528,2
Ohio Adams Rural Electric Coop Inc	_	77,920	2,814,863	_	_	77,920	2,814,8
Buckeye Rural Elec Coop Inc	_	216,498	8,202,043	_	_	216,498	8,202,0
Butler Rural Electric Coop Inc	_	181,273	6,966,679	_	_	181,273	6,966,6
Carroll Electric Coop Inc	_	138,265	4,834,585	_	_	138,265	4,834,5
Darke Rural Electric Coop Inc	_	102,765	3,771,332	_	_	102,765	3,771,3
Firelands Electric Coop Inc		117,400 106,941	3,845,492 3,716,107			117,400 106,941	3,845,4 3,716,1
Guernsey-Muskingum El Coop Inc		160,783	5,696,686	_	_	160,783	5,696,6
Hancock-Wood Electric Coop Inc	_	297,378	9,422,811	_	_	297,378	9,422,8
Holmes-Wayne Electric Coop Inc	_	254,050	8,563,677	_	_	254,050	8,563,6
Logan Cnty Coop P&L Assn Inc	_	91,538	3,182,835	_	_	91,538	3,182,8
Lorain-Medina R E C Inc Marion Rural Electric Coop Inc	_	203,231 59,125	6,856,100 2,128,106	_	_	203,231 59,125	6,856,1 2,128,1
Midwest Electric Inc	_	184,601	6,366,112	_	_	184,601	6,366,1
Morrow Electric Coop Inc	_	221,361	7,767,336	_	_	221,361	7,767,3
North Central Elec Coop Inc	_	264,419	8,213,814	_	_	264,419	8,213,8
North Western Elec Coop Inc	_	87,274	2,986,138	_	6,300	87,274	2,992,4
Pioneer Rural Elec Coop Inc	_	462,595 1 570 715	14,751,915	_	_	462,595 1 570 715	14,751,9
Union Rural Electric Coop Inc	_	1,570,715 423,031	555,580,862 13,295,191	_	_	1,570,715 423,031	555,580,8 13,295,1
United Rural Electric Coop Inc	_	58,603	2,026,780	_	_	58,603	2,026,7
Washington Electric Coop Inc	_	85,221	2,953,814	_	_	85,221	2,953,8

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	ource of Electricity	y		
State /	Inves Owr		Fede	eral	State and Govern		Municipa
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchase (thousan kWh)
klahoma							
Alfalfa Electric Coop Inc	_	_	_	_	_	_	_
Caddo Electric Coop Inc		_	_	_	_	_	_
Canadian Valley Elec Coop Inc		_	_	_	_	_	_
Central Rural Electric Coop		_	_	_	_	_	_
Choctaw Electric Coop Inc	_	_	_	_	_	_	_
Cimarron Electric Coop		_	_	_	_	_	_
Cookson Hills Elec Coop Inc		_	_	_	_	_	_
Cotton Electric Coop Inc East Central Okla El Coop Inc		_	_	_	_	_	_
Harmon Electric Assn Inc		_					
Indian Electric Coop Inc		_		_	_	_	
Kay Electric Coop		_	_	_	_	_	_
Kiwash Electric Coop Inc		_	_	_	_	_	_
Lake Region Electric Coop Inc		88	_	_	_	_	_
Northeast Oklahoma El Coop Inc		2,299,602	_	_	359,197	13,939,553	_
Northfork Electric Coop Inc		_	_	_	_	_	_
Northwestern Electric Coop Inc		_	_	_	_	_	_
Red River Valley Rrl Elec Assn		_	_	_	_	_	_
Rural Electric Coop Inc		_	_	_	_	_	_
Southeastern Electric Coop Inc		_	_	_	_	_	_
Fri-County Electric Coop Inc		_	_	_	_	_	_
Verdigris Valley Elec Coop Inc		_	_	_	_	_	
vertigits valley Elec Coop file	_	_	_	_	_	_	_
regon			125 704	2 572 754			
Blachly-Lane Cnty Coop El Assn Columbia Basin Elec Coop Inc		_	125,794 105,858	3,572,754 2,668,051	_	_	
Columbia Power Coop Assn Inc		_	103,838	2,008,031	28,262	727,649	
Consumers Power Inc		1,426	299,136	9,043,378		- 727,049 	_
Coos-Curry Electric Coop Inc			257,904	6,550,604	_	_	_
Douglas Electric Coop Inc		_	145,064	3,659,671	_	_	_
Harney Electric Coop Inc	_	_	209,437	4,614,171	_	_	_
Lane Electric Coop Inc		_	188,052	5,321,876	_	_	_
Midstate Electric Coop Inc		_	295,805	7,926,024	_	_	_
Umatilla Electric Coop Assn		_	583,917	15,273,516	_	_	_
Wasco Electric Coop Inc		_	86,481	2,340,518	_	_	_
West Oregon Electric Coop Inc	_	_	71,566	1,952,490	_	_	_
nnsylvania							
Adams Electric Coop Inc		_	_	_	_	_	_
Bedford Rural Elec Coop Inc		_	_	_	_	_	_
Central Electric Coop Inc		_	_	_	_	_	_
Northwestern Rural E C A Inc		_	_	_	_	_	_
Somerset Rural Elec Coop Inc		_		_			
Southwest Central R E C Corp		_		_	_	_	
Sullivan County R E C Inc		_	_	_	_	_	_
Tri-County Rural Elec Coop Inc		_	_	_	_	_	_
United Electric Coop Inc	_	_	_	_	_	_	_
Valley Rural Electric Coop Inc	_	_	_	_	_	_	_
Warren Electric Coop Inc	_	_	_	_	_	_	_
uth Carolina							
Aiken Electric Coop Inc	_	_	_	_	_	_	_
Berkeley Electric Coop Inc	_	_	_	_	_	_	_
Black River Electric Coop Inc	_	_	_	_	_	_	_
Blue Ridge Electric Coop Inc		_	36,442	948,138	_	_	_
Broad River Electric Coop Inc		_	10,477	272,576	_	_	_
Coastal Electric Coop Inc	_	_	_	_	_	_	_
Edisto Electric Coop Inc		_	_	_	_	_	_
Fairfield Flectric Coop Inc			_				_
Fairfield Electric Coop Inc Horry Electric Coop Inc Laurens Electric Coop Inc	_	_		— 708,768	_	_	_

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	ource of Electricity	y		
State /	Municipal	Cooper	rative	Othe	r ¹	Total	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Oklahoma							
Alfalfa Electric Coop Inc	_	154,780	6,117,548	_	_	154,780	6,117,548
Caddo Electric Coop Inc	_	258,522	10,685,073	_	_	258,522	10,685,073
Canadian Valley Elec Coop Inc	_	337,575	13,454,319	_	_	337,575	13,454,319
Central Rural Electric Coop	_	282,694	10,930,673	_	_	282,694	10,930,673
Choctaw Electric Coop Inc	_	264,189 190,135	9,730,383 7,646,880	_	_	264,189 190,135	9,730,383 7,646,880
Cookson Hills Elec Coop Inc		224,009	9,031,501			224,009	9,031,501
Cotton Electric Coop Inc	_	446,773	16,955,924	_	_	446,773	16,955,924
East Central Okla El Coop Inc	_	402,482	16,205,502	_	_	402,482	16,205,502
Harmon Electric Assn Inc	_	54,205	1,934,167	_	_	54,205	1,934,167
Indian Electric Coop Inc	_	304,982	12,257,667	_	_	304,982	12,257,667
Kay Electric Coop	_	110,153	4,414,435	_	_	110,153	4,414,435
Kiwash Electric Coop Inc Lake Region Electric Coop Inc	_	78,767 265,384	3,213,677 11,181,193	_	_	78,767 265,384	3,213,677 11,181,281
Northeast Oklahoma El Coop Inc	_	15,525	592,721		_	440,114	16,831,876
Northfork Electric Coop Inc	_	80,179	3,178,352	_	_	80,179	3,178,352
Northwestern Electric Coop Inc	_	183,601	7,227,975	_	_	183,601	7,227,975
Red River Valley Rrl Elec Assn	_	214,545	8,056,939	_	_	214,545	8,056,939
Rural Electric Coop Inc	_	222,093	8,419,675	_	_	222,093	8,419,675
Southeastern Electric Coop Inc	_	151,501	6,068,730	_	_	151,501	6,068,730
Southwest Rural Elec Assn Inc Tri-County Electric Coop Inc	_	101,547 285,987	4,111,866 10,679,572	_	_	101,547 285,987	4,111,866 10,679,572
Verdigris Valley Elec Coop Inc	_	393,014	16,314,721	_		393,014	16,314,721
Oregon							
Blachly-Lane Cnty Coop El Assn	687	21,322	557,956	_	28,999	147,173	4,160,396
Columbia Basin Elec Coop Inc	_	_	_	_	_	105,858	2,668,051
Columbia Power Coop Assn Inc	_	72,099	1,078,001	_	_	28,262 371,259	727,649 10,122,805
Coos-Curry Electric Coop Inc	_	55,139	1,244,128	11,453	33,389	324,496	7,828,121
Douglas Electric Coop Inc	_		-			145,064	3,659,671
Harney Electric Coop Inc	_	_	_	_	_	209,437	4,614,171
Lane Electric Coop Inc	_	32,330	691,565	9,289	25,844	229,671	6,039,285
Midstate Electric Coop Inc	_	_	_	_	_	295,805	7,926,024
Umatilla Electric Coop Assn	_	102,396	375,347	_	_	686,313	15,648,863
Wasco Electric Coop Inc	_	_	_	_	_	86,481 71,566	2,340,518 1,952,490
						71,000	1,702,170
Pennsylvania Adams Electric Coop Inc	_	367,719	21,549,987	_	_	367,719	21,549,987
Bedford Rural Elec Coop Inc	_	120,178	6,878,269	_	_	120,178	6,878,269
Central Electric Coop Inc	_	215,914	12,496,048	_	-46,557	215,914	12,449,491
Claverack Rural Elec Coop Inc	_		11.000.020	171,055	9,689,328	171,055	9,689,328
Northwestern Rural E C A Inc	_	213,990 174,889	11,866,820	_	_	213,990 174,889	11,866,820 9,862,190
Somerset Rural Elec Coop IncSouthwest Central R E C Corp		282,590	9,862,190 16,938,020			282,590	16,938,020
Sullivan County R E C Inc	_	46,937	2,772,093	_	17,676	46,937	2,789,769
Tri-County Rural Elec Coop Inc	_	142,011	8,049,041	_	_	142,011	8,049,041
United Electric Coop Inc	_	138,206	7,763,055	_	_	138,206	7,763,055
Valley Rural Electric Coop Inc Warren Electric Coop Inc	_	215,454 50,364	12,459,957 2,789,662	_	_	215,454 50,364	12,459,957 2,789,662
		20,201	_,. 0,,002			20,201	_,, 0,,002
South Carolina Aiken Electric Coop Inc	_	710,397	28,425,954	_	_	710,397	28,425,954
Berkeley Electric Coop Inc	_	1,108,278	46,373,393	_	_	1,108,278	46,373,393
Black River Electric Coop Inc	_	504,360	20,965,535	_	_	504,360	20,965,535
Blue Ridge Electric Coop Inc	_	685,279	38,322,702	_	_	721,721	39,270,840
Broad River Electric Coop Inc	_	230,982	13,174,110	_	_	241,459	13,446,686
Coastal Electric Coop Inc	_	138,479	5,857,097	_	_	138,479	5,857,097
Edisto Electric Coop Inc	_	259,783	10,953,636	_	_	259,783	10,953,636
Horry Electric Coop Inc	_	538,046 595,186	20,647,758 26,382,322	_	_	538,046 595,186	20,647,758 26,382,322
Laurens Electric Coop Inc		580,949	32,916,784	_	_	608,191	33,625,552
Little River Electric Coop Inc	_	143,789	8,105,194	_	_	154,290	8,385,323

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

	Source of Electricity									
State /		estor- rned	Fede	ral		d Other nment	Municipal			
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)			
South Carolina										
Lynches River Elec Coop Inc	_	_	_	_	_	_	_			
Marlboro Electric Coop Inc	_	_	_	_	_	_	_			
Mid-Carolina Electric Coop Inc		_	_	_	_	_	_			
Newberry Electric Coop Inc		_	_	_	_	_	_			
Palmetto Electric Coop Inc		_	_	_	_	_	_			
Pee Dee Electric Coop Inc		_	_	_	_	_	_			
Tri-County Electric Coop Inc		_					_			
York Electric Coop Inc		_	16,831	437,896	_	_	_			
South Dakota										
Black Hills Electric Coop Inc	_	_	_	_	_	_	_			
Bon Homme Yankton El Assn Inc	_	_	_	_	_	_	_			
Butte Electric Coop Inc		_	_	_	_	_	_			
Charles Mix Electric Assn Inc		_	_	_	_	_	_			
Cherry-Todd Electric Coop Inc		_	_	_	_	_	_			
Clay-Union Electric Corp		_	_	_	_	_	_			
Codington-Clark Elec Coop Inc		_	_	_	_	_	_			
Dakota Energy Coop Inc		_	_	_	_	_	_			
Douglas Electric Coop Inc		_	_	_	_	_	_			
FEM Electric Assn Inc		_			_	_	_			
Grand Electric Coop Inc		_	38,510	559,083	_	_	_			
H-D Electric Coop Inc Intercounty Electric Assn Inc		_	_	_	_	_	_			
Kingsbury Electric Coop Inc		_					_			
Lake Region Electric Assn Inc		_	_	_	_	_	_			
LaCreek Electric Assn Inc.		_	_	_	_	_	_			
Lincoln-Union Electric Co	_	_	_	_	_	_	_			
McCook Electric Coop Inc		_	_	_	_	_	_			
Moreau-Grand Electric Coop Inc		_		_	_	_	_			
Northern Electric Coop Inc		_	7,697	110,335	_	_	_			
Oahe Electric Coop Inc		_	66,053	1,003,516	_	_	_			
Rosebud Electric Coop Inc Sioux Valley Empire E A Inc		_	00,033	1,003,310	_	_	_			
Spink Electric Coop Inc		_								
Tri-County Electric Assn Inc		_	_	_	_	_	_			
Turner-Hutchinson El Coop Inc		_	_	_	_	_	_			
Union County Electric Coop Inc		_	_	_	_	_	_			
West Central Electric Coop Inc		_	_	_	_	_	_			
West River Electric Assn Inc	_	_	_	_	_	_	_			
Whetstone Valley Elec Coop Inc	_	_	_	_	_	_	_			
Tennessee Appalachian Electric Coop			832,284	35,618,114	_		_			
Caney Fork Electric Coop Inc		_	561,947	24,698,741						
Chickasaw Electric Coop Inc	_	_	328,787	15,677,871	_	_	_			
Cumberland Elec Member Corp	_	_	1,700,365	72,366,439	_	_	_			
Duck River Elec Member Corp	_	_	1,249,835	54,780,723	_	_	_			
Forked Deer Electric Coop Inc	_	_	205,748	8,874,297	_	_	_			
Fort Loudoun Electric Coop		_	438,081	19,720,517	_	_	_			
Gibson Electric Members Corp		_	760,525	33,984,250	_	_	_			
Holston Electric Coop Inc		_	698,733	28,075,653	_	_	_			
Meriwether Lewis Electric Coop	_	_	727,980	31,696,961 132,984,686	_	_	_			
Middle Tennessee E M C		_	3,177,115 553,140	22,446,891	_	_	_			
Pickwick Electric Coop			398,373	17,831,998	_		_			
Plateau Electric Coop		_	271,169	12,423,331	_	_	_			
Powell Valley Electric Coop		_	471,346	20,181,296	_	_	_			
Sequachee Valley Electric Coop		_	721,444	31,068,936	_	_	_			
	_	_	890,741	39,328,774	_	_	_			
Southwest Tennessee E M C										
Southwest Tennessee E M C Tennessee Valley Electric Coop	_	_	351,422	15,845,915	_	_	_			
Southwest Tennessee E M C	_	_	351,422 1,064,256 865,986	15,845,915 46,050,277 38,038,819	_	_	_			

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			Sc	ource of Electrici	ty		
State /	Municipal	Cooper	ative	Oth	er1	Tot	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
South Carolina							
Lynches River Elec Coop Inc	_	266,372	10,787,399	_	_	266,372	10,787,399
Marlboro Electric Coop Inc	_	646,625	19,423,285	_	_	646,625	19,423,285
Mid-Carolina Electric Coop Inc	_	705,880	29,390,248	_	_	705,880	29,390,248
Newberry Electric Coop Inc	_	202,028 973,720	7,856,541	_	_	202,028 973,720	7,856,541
Palmetto Electric Coop Inc	_	734,493	41,922,874 28,007,492	_		734,493	41,922,874 28,007,492
Santee Electric Coop Inc	_	914,962	36,205,866	_		914,962	36,205,866
Tri-County Electric Coop Inc		251,370	10,464,672	_	_	251,370	10,464,672
York Electric Coop Inc	_	440,063	24,552,916	_	-39,943	456,894	24,950,869
South Dakota							
Black Hills Electric Coop Inc	_	96,525 74,514	3,005,178	_	_	96,525 74,514	3,005,178
Bon Homme Yankton El Assn Inc	_	74,514 68 530	2,662,755	_	_	74,514 68 530	2,662,755
Butte Electric Coop Inc	_	68,539 44,679	2,244,496 1,710,395		1,623	68,539 44,679	2,244,496 1,712,018
Charles Mix Electric Assn Inc	_	43,664	1,536,876	_		43,664	1,536,876
Cherry-Todd Electric Coop Inc	_	90,807	3,176,222	45	1,554	90,852	3,177,776
Clay-Union Electric Corp	_	57,666	2,022,561	_		57,666	2,022,561
Codington-Clark Elec Coop Inc	_	76,577	2,663,115	_	_	76,577	2,663,115
Dakota Energy Coop Inc	_	74,245	2,691,072	_	_	74,245	2,691,072
Douglas Electric Coop Inc	_	20,985	762,947	_	_	20,985	762,947
FEM Electric Assn Inc	_	48,865	1,722,935	_	_	48,865	1,722,935
Grand Electric Coop Inc	_	125,942 63,796	3,337,753	_		164,452 63,796	3,896,836
Intercounty Electric Assn Inc	_	69,141	2,284,659 2,548,114	_	_	69,141	2,284,659 2,548,114
Kingsbury Electric Coop Inc	_	21,752	803,679	_		21,752	803,679
Lake Region Electric Assn Inc	_	67,373	2,296,280	_	_	67,373	2,296,280
LaCreek Electric Assn Inc	_	84,469	2,955,078	_	_	84,469	2,955,078
Lincoln-Union Electric Co	_	88,336	3,030,021	1	51	88,337	3,030,072
McCook Electric Coop Inc	_	32,116	1,187,297	_	_	32,116	1,187,297
Moreau-Grand Electric Coop Inc	_	82,296	2,847,778			82,296	2,847,778
Northern Electric Coop Inc	_	113,900	3,880,435	210	2,598	121,807	3,993,368
Oahe Electric Coop Inc	_	54,795 27,414	1,872,149 1,085,506	_		54,795 93,467	1,872,149 2,089,022
Sioux Valley Empire E A Inc		365,733	12,936,016	37	1,913	365,770	12,937,929
Spink Electric Coop Inc		30,547	1,082,713	_		30,547	1,082,713
Tri-County Electric Assn Inc	_	72,704	2,559,437	_	-37,150	72,704	2,522,287
Turner-Hutchinson El Coop Inc	_	92,037	3,348,948	_	_ ^	92,037	3,348,948
Union County Electric Coop Inc	_	19,529	708,454	_	-34,048	19,529	674,406
West Central Electric Coop Inc	_	115,132	4,026,039	_	_	115,132	4,026,039
West River Electric Assn Inc	_	161,026 65,505	5,350,301 2,379,294	_	_	161,026 65,505	5,350,301 2,379,294
Tennessee							
Appalachian Electric Coop	_	_	_	_	_	832,284	35,618,114
Caney Fork Electric Coop Inc	_	_	_	_	_	561,947	24,698,741
Chickasaw Electric Coop Inc	_	_	_	_	_	328,787	15,677,871
Cumberland Elec Member Corp	_	_	_			1,700,365	72,366,439
Duck River Elec Member Corp	_	_	_	271	4,548	1,250,106	54,785,271
Forked Deer Electric Coop Inc	_			_		205,748 438,081	8,874,297 19,720,517
Gibson Electric Members Corp	_	_	_	_	_	760,525	33,984,250
Holston Electric Coop Inc	_	_	_	_	_	698,733	28,075,653
Meriwether Lewis Electric Coop	_	_	_	_	_	727,980	31,696,961
Middle Tennessee E M C	_	_	_	_	_	3,177,115	132,984,686
Mountain Electric Coop Inc	_	_	_	_	_	553,140 398,373	22,446,891 17,831,998
Pickwick Electric Coop	_	_	_	82	1,459	271,251	12,424,790
Powell Valley Electric Coop		_	_			471,346	20,181,296
Sequachee Valley Electric Coop	_	_	_	_	_	721,444	31,068,936
Southwest Tennessee E M C	_	_	_	_	_	890,741	39,328,774
Tennessee Valley Electric Coop	_	_	_	_	_	351,422	15,845,915
Tri-County Elec Member Corp	_	_	_	_	_	1,064,256	46,050,277
Upper Cumberland E M C	_	_	_	_	_	865,986	38,038,819
Volunteer Electric Coop	_	_	_		_	1,750,557	75,797,239

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			Se	ource of Electricit	ty			
State /	Inves Owr		Fed	eral	State and Govern		Municipal	
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	
Texas								
B-K Electric Coop Inc	_	_	_	_	_	_	_	
Bailey County Elec Coop Assn	_	_	_	_	_	_	_	
Bartlett Electric Coop Inc	_	_	_	_	_	_	_	
Belfalls Electric Coop Inc	_	_	_	_	_	_	_	
Central Texas Elec Coop Inc		_		_	318,696	13,943,268	_	
Cherokee County Elec Coop Assn	_	_	_	_	_	-	_	
Coleman County Elec Coop Inc	111,019	4,209,326	_	_	_	_	_	
Comanche County Elec Coop Assn	_	_	_	_	_	_	_	
Deep East Texas Elec Coop Inc	_	_	_	_	 76,738	2 154 629	_	
Dewitt Electric Coop Inc Erath County Elec Coop Assn	_	_	_	_		3,154,628	_	
Fannin County Electric Coop	_	_	_	_	_	_	_	
Gate City Electric Coop Inc	_	_	_	_	_	_	_	
Grayson-Collin Elec Coop Inc	_	_	_	_	_	_	_	
Greenbelt Electric Coop Inc	_	_	_	_	_	_	_	
Hamilton County Elec Coop Assn Houston County Elec Coop Inc	_	_	_	_	_	_	_	
J-A-C Electric Coop Inc								
Jackson Electric Coop Inc	_	_	_	_	_	_	_	
Jasper-Newton Elec Coop Inc	_	_	_	_	_	_	_	
Johnson County Elec Coop Assn	_	_	_	_	_	_	_	
Karnes Electric Coop Inc	— 16.137		_	_	— 36,419	1 451 206	_	
Kimble Electric Coop Inc Lamar County Elec Coop Assn		696,499 —	_	_	30,419	1,451,296	_	
Lamb County Electric Coop Inc	_	_	_	_	_	_	_	
Lighthouse Électric Coop Inc	13,978	581,045	_	_	_	_	_	
Lyntegar Electric Coop Inc	513,786	20,350,499	_	_	_	_	_	
Magic Valley Electric Coop Inc	714,352	32,224,595	_	_	72.440	2 001 201	_	
McCulloch Electric Coop Inc McLennan County Elec Coop Inc	_	_		_	72,449	2,881,301		
Medina Electric Coop Inc	78,873	3,442,190		_			_	
Midwest Electric Coop Inc	77,271	3,324,577	_	_	_	_	_	
Navarro County Elec Coop Inc	_	_	_	_	_	_	_	
New Era Electric Coop Inc	_	_	_	_	_	_	_	
North Plains Electric Coop Inc	_	_	_	_	_	_	_	
Nueces Electric Coop Inc Panola-Harrison Elec Coop Inc	_	_	_	_	_	_	_	
Rio Grande Electric Coop Inc	118,053	5,205,499	_	_	_	_	_	
Rita Blanca Electric Coop Inc			_	_	_	_	_	
Rusk County Electric Coop Inc	_	_	_	_	_	_	_	
San Patricio Electric Coop Inc	_	_	_	_	_	_	_	
South Plains Electric Coop Inc	169.083	6,187,255		_	_			
Swisher Electric Coop Inc			_	_	_	_	_	
Taylor Electric Coop Inc	201,217	8,744,958	_	_	_	_	_	
Upshur Rural Elec Coop Corp	_	_	_	_	_	_	_	
Victoria Electric Coop Inc	_	_	_	_	_	_	_	
Wood County Electric Coop Inc	_	_	_	_	_	_	_	
Utah Garkane Power Assn Inc	_	_	69,387	1,367,036	_	_	_	
Vermont Washington Electric Coop Inc	11,150	1,587,709	_	_	9,249	142,868	9,51	
Virginia								
A & N Electric Coop	_	_		_	_	_	_	
BARC Electric Coop Inc Central Virginia Electric Coop	— 266 854	12 026 000	15,429	269,362 626,001	_	_	_	
Community Electric Coop	266,854	12,926,090	33,955 18,053	626,091 303,859	_	_	_	
Craig-Botetourt Electric Coop	18,408	861,976	7,221	124,881	_	_	_	
Mecklenburg Electric Coop Inc			48,414	892,708	_	_	_	
Northern Neck Elec Coop Inc	_	_	16,832	310,370	_	_	_	

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	ource of Electricit	of Electricity			
State /	Municipal	Cooper	ative	Othe	r1	Tot	al	
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	
Texas								
B-K Electric Coop Inc	_	94,733	3,610,569	_	_	94,733	3,610,569	
Bailey County Elec Coop Assn		211,449	8,757,190	_	_	211,449	8,757,190	
Bartlett Electric Coop Inc		107,624	4,589,729	_	_	107,624	4,589,729	
Belfalls Electric Coop Inc		67,596	2,786,627	_	_	67,596	2,786,627	
Bowie-Cass Electric Coop Inc		537,741	16,142,947	_	_	537,741 318,696	16,142,947 13,943,268	
Cherokee County Elec Coop Assn		231,968	10,927,002	_	_	231,968	10,927,002	
Coleman County Elec Coop Inc		_		_	_	111,019	4,209,326	
Comanche County Elec Coop Assn	_	169,215	6,784,244	_	_	169,215	6,784,244	
Deep East Texas Elec Coop Inc		651,972	26,936,154	_	_	651,972	26,936,154	
Dewitt Electric Coop Inc				_	_	76,738	3,154,628	
Erath County Elec Coop Assn Fannin County Electric Coop		293,737 83,350	12,099,770 4,456,242	_		293,737 83,350	12,099,770 4,514,242	
Gate City Electric Coop Inc	_	36,986	1,382,607	_		36,986	1,382,607	
Grayson-Collin Elec Coop Inc		310,132	16,378,670	_	_	310,132	16,378,670	
Greenbelt Electric Coop Inc		41,062	1,651,131	_	_	41,062	1,651,131	
Hamilton County Elec Coop Assn	_	145,579	6,105,056	_	_	145,579	6,105,056	
Houston County Elec Coop Inc		229,148	10,359,520	_	_	229,148	10,359,520	
J-A-C Electric Coop Inc		93,227	3,639,828	_	_	93,227	3,639,828	
Jackson Electric Coop Inc		159,617 354,119	8,324,889 14,133,322	_	_	159,617 354,119	8,324,889 14,133,322	
Johnson County Elec Coop Assn		737,531	30,734,230		_	737,531	30,734,230	
Karnes Electric Coop Inc		187,612	9,445,102	_	_	187,612	9,445,102	
Kimble Electric Coop Inc			_	_	_	52,556	2,147,795	
Lamar County Elec Coop Assn		120,083	6,388,909	_	_	120,083	6,388,909	
Lamb County Electric Coop Inc		269,201	11,349,836	_	_	269,201	11,349,836	
Lighthouse Electric Coop Inc		225,630	9,567,534	_	_	239,608	10,148,579	
Lyntegar Electric Coop Inc		_	_	_	_	513,786	20,350,499	
McCulloch Electric Coop Inc		_			_	714,352 72,449	32,224,595 2,881,301	
McLennan County Elec Coop Inc		192,208	8,100,428	_	_	192,208	8,100,428	
Medina Electric Coop Inc		342,277	10,834,790	_	_	421,150	14,276,980	
Midwest Electric Coop Inc		69,429	2,610,405	_	_	146,700	5,934,982	
Navarro County Elec Coop Inc		245,077	9,900,677	_	_	245,077	9,900,677	
New Era Electric Coop Inc		311,461	15,978,223	_		311,461	15,978,223	
North Plains Electric Coop Inc		133,100 181,878	5,051,417	6	139	133,106 181,878	5,051,556	
Panola-Harrison Elec Coop Inc	_	265,175	9,011,778 8,004,472		_	265,175	9,011,778 8,004,472	
Rio Grande Electric Coop Inc		25,717	1,129,415	_	_	143,770	6,334,914	
Rita Blanca Electric Coop Inc		148,107	5,742,865	_	_	148,107	5,742,865	
Rusk County Electric Coop Inc	_	331,890	10,032,093	_	_	331,890	10,032,093	
San Patricio Electric Coop Inc		149,622	7,426,327	_	_	149,622	7,426,327	
South Plains Electric Coop Inc		519,214	21,612,736	_	_	519,214	21,612,736	
Southwest Texas Elec Coop Inc Swisher Electric Coop Inc		202,644	— 8,388,865	_	_	169,083 202,644	6,187,255 8,388,865	
Taylor Electric Coop Inc			— —	_	_	202,044	8,744,958	
Upshur Rural Elec Coop Corp		636,132	18,609,817	_	_	636,132	18,609,817	
Victoria Electric Coop Inc		263,737	13,880,015	_	_	263,737	13,880,015	
Wood County Electric Coop Inc		453,058	15,260,167	_	_	453,058	15,260,167	
Utah		10.050	#0 *0		200 =			
Garkane Power Assn Inc	_	18,853	585,307	2,351	309,760	90,591	2,262,103	
Vermont Washington Electric Coop Inc	677,169	_	_	35,060	1,302,334	64,969	3,710,080	
Virginia								
A & N Electric Coop		181,810	7,969,921	_	_	181,810	7,969,921	
BARC Electric Coop Inc		141,327	6,717,130		-354,991	156,756	6,631,501	
Central Virginia Electric Coop				171,774	4,344,064	472,583	17,896,245	
Community Electric Coop Craig-Botetourt Electric Coop		132,542	7,054,758			150,595	7,358,617	
Mecklenburg Electric Coop Inc		419,736	19,922,639	45,522 —	1,023,375	71,151 468,150	2,610,232 20,815,347	
Northern Neck Elec Coop Inc		177,209	9,359,683	_	_	194,041	9,670,053	

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

	Source of Electricity								
State /	Inves Owi		Fede	ral	State and Other Government		Municipal		
Cooperative Borrower	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)		
Virginia Northern Virginia Elec Coop	_		12 047	246 072					
Prince George Electric Coop	_	_	13,947 10,798	246,073 195,515	_	_	_		
	_	_	95,715	2,138,180	_	_	_		
Rappahannock Electric Coop	_	_	42,414	782,063	_	_	_		
Shenandoah Valley Elec Coop Southside Electric Coop Inc	_	_	62,204	1,146,969	_	_	_		
Washington									
Washington Benton Rural Electric Assn			416,281	10,471,447					
Columbia Rural Elec Assn Inc	948	33,723	219,150	5,054,486	_	_	_		
Nespelem Valley Elec Coop Inc	948	33,723	42,680	1,158,643	_	_	_		
Okanogan County Elec Coop Inc		_	42,416	1,156,712	_		_		
Orcas Power & Light Co		_	167,085	4,675,222	_		_		
Tanner Electric Coop		_	51,260	1,405,663		_	_		
West Virginia									
Harrison Rural Elec Assn Inc	_	_	_	_	_	_	_		
Wisconsin									
Adams-Columbia Electric Coop	352,701	11,180,703	_	_	_	_	_		
Bayfield Electric Coop Inc		_	_	_	_	_	_		
Central Wisconsin Elec Coop	81,943	2,572,111	_	_	_	_	_		
Chippewa Valley Electric Coop	_		_	_	_	_	_		
Clark Electric Coop	_	_	_	_	_	_	_		
Crawford Electric Coop	_	_	_	_	_	_	_		
Dunn County Electric Coop	_	_	_	_	_	_	_		
Grant-Lafayette Electric Coop	_	_	_	_	_	_	_		
Head of Lakes Electric Coop	_	_	_	_	_	_	_		
Jackson Electric Coop Inc	_	_	_	_	_	_	_		
Jump River Electric Coop Inc	_	_	_	_	_	_	_		
Oakdale Electric Coop	_	_	_	_	_	_	_		
Oconto Electric Coop	84,649	2,946,960	_	_	_	_	_		
Price Electric Coop Inc			_	_	_	_	_		
Richland Electric Coop	_	_	_	_	_	_	_		
Rock County Electric Coop Assn	68,866	2,273,325	_	_	_	_	_		
St Croix Electric Coop	_		_	_	_	_	_		
Vernon Electric Coop	_	_	_	_	_	_	_		
Washington Island El Coop Inc	9,106	321,887	_	_	_	_	_		
Wyoming									
Big Horn Rural Electric Co	_	_	_	_	_	_	_		
Bridger Valley Elec Assn Inc	_	_	39,411	761,961	_	_	_		
Carbon Power & Light Inc	_	_			_	_	_		
Garland Light & Power Co	_	_	_	_	_	_	_		
Hot Springs Rural El Assn Inc	_	_	_	_	_	_	_		
Niobrara Electric Assn Inc	_	_	_	_	_	_	_		
Riverton Valley Elec Assn Inc	_	_	_	_	_	_	_		
Rural Electric Co	_	_	_	_	_	_	_		
Sheridan-Johnson Rrl Elec Assn	_	_	_	_	_	_	_		
Tri-County Electric Assn Inc	_	_	_	_	_	_	_		
Wheatland Rural Elec Assn Inc	_	_	_	_	_	_	_		
Wyrulec Co									

Table 34. Electricity Purchases by the Distribution Segment of Cooperative Borrowers, by State, 1996 (Continued)

			So	ource of Electricit	y		
State /	Municipal	Cooper	ative	Othe	er1	Tot	al
Cooperative Borrower	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)	Purchases (thousand kWh)	Cost (dollars)
Virginia		1 001 161	07.061.105			1.015.100	07.207.250
Northern Virginia Elec Coop	_	1,901,161	97,061,185	_	_	1,915,108	97,307,258
Prince George Electric Coop	_	167,054 1,830,525	8,768,785 77,605,392	_	_	177,852 1,926,240	8,964,300 79,743,572
Shenandoah Valley Elec Coop	_	583,888	26,643,579		_	626,302	27,425,642
Southside Electric Coop Inc	_	569,803	29,288,880	_	_	632,007	30,435,849
Washington							
Benton Rural Electric Assn	_	_	59,628	_	_	416,281	10,531,075
Columbia Rural Elec Assn Inc	_	_	_	_	_	220,098	5,088,209
Nespelem Valley Elec Coop Inc	_	_	_	1,134	3,339	43,814	1,161,982
Okanogan County Elec Coop Inc	_	_	_	_	_	42,416	1,156,712
Orcas Power & Light Co	_	_	_	73	1,280	167,158	4,676,502
Tanner Electric Coop	_	_	_	16	468	51,276	1,406,131
West Virginia							
Harrison Rural Elec Assn Inc	_	_	_	53,294	2,516,216	53,294	2,516,216
Wisconsin				0.0	2.104	352.797	11 102 007
Adams-Columbia Electric Coop	_		2 (01 000	96	3,194	,	11,183,897
Bayfield Electric Coop Inc	_	68,489	2,681,898	_	_	68,489	2,681,898
Central Wisconsin Elec Coop	_	96.752	2 221 574	_	_	81,943	2,572,111
Chippewa Valley Electric Coop	_	86,752	3,331,574	_	_	86,752	3,331,574
Clark Electric Coop	_	140,574	5,567,828	_	_	140,574	5,567,828
Crawford Electric Coop Dunn County Electric Coop	_	45,787 121,910	1,797,915 4,920,954	_	_	45,787 121,910	1,797,915 4,920,954
Grant-Lafayette Electric Coop	_	162,948	6,589,672			162,948	6,589,672
Head of Lakes Electric Coop		44,484	1,582,805			44,484	1,582,805
Jackson Electric Coop Inc	_	107,935	3,416,301	_	_	107,935	3,416,301
Jump River Electric Coop Inc		78,696	2,883,490			78,696	2,883,490
Oakdale Electric Coop		170,169	6,271,010			170,169	6,271,010
Oconto Electric Coop		- 170,102		18	5,696	84,667	2,952,656
Price Electric Coop Inc		63,053	2,345,976	_		63,053	2,345,976
Richland Electric Coop	_	49,549	1,935,672	_	_	49,549	1,935,672
Rock County Electric Coop Assn	_			_	_	68,866	2,273,325
St Croix Electric Coop	_	118,318	4,616,549	_	_	118,318	4,616,549
Vernon Electric Coop	_	133,849	5,425,695	_	_	133,849	5,425,695
Washington Island El Coop Inc	_	_	_	_	_	9,106	321,887
Wyoming							
Big Horn Rural Electric Co	_	78,422	2,887,926	_	_	78,422	2,887,926
Bridger Valley Elec Assn Inc	_	50,958	2,732,520	_	_	90,369	3,494,481
Carbon Power & Light Inc	_	85,642	3,155,146	_	_	85,642	3,155,146
Garland Light & Power Co	_	19,741	789,004	_	_	19,741	789,004
Hot Springs Rural El Assn Inc	_	290,476	10,019,245	_	_	290,476	10,019,245
Niobrara Electric Assn Inc	_	48,797	1,685,317	_	_	48,797	1,685,317
Riverton Valley Elec Assn Inc	_	188,113	6,952,588	_	_	188,113	6,952,588
Rural Electric Co	_	187,237	7,426,600	_	_	187,237	7,426,600
Sheridan-Johnson Rrl Elec Assn	_	84,362	3,092,366	_	_	84,362	3,092,366
Tri-County Electric Assn Inc	_	1,322,215	45,998,552	_	_	1,322,215	45,998,552
Wheatland Rural Elec Assn Inc	_	109,121	3,614,000	_	_	109,121	3,614,000
Wyrulec Co	_	130,792	4,494,739	_	_	130,792	4,494,739

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

Source: Rural Utilities Service, RUS Form 7, "Financial and Statistical Report," RUS Form 12a through 12i, "Electric Power Supply Borrowers," Form 12c through 12g, "Electric Distribution Borrowers with Generating Facilities."

⁻Not Applicable

Notes: •The Department of Agriculture under the Rural Electrification Act is authorized to provide Federal commitments for long-term financing and to guarantee non-Federal long-term loans to utilities supplying power to rural America. The utilities that received guarantees for their loans are referred to as borrowers by the Rural Utilities Service (formerly, the Rural Electrification Administration). Nonborrowing cooperatives and other utilities that do not borrow from the RUS are not required to file the RUS-7 and RUS-12 forms. •Distribution borrowers do not generate electricity; they purchase electricity from other utilities. •For identification purposes, the Cooperative Borrowers are listed in the State in which the administrative office is located. •Totals may not equal sum of components because of independent rounding.

Table 35. Electricity Purchases by Electrical Cooperatives Not Reported to the Rural Utilities Service, by State, 1996

National				ource of Electricit ases in thousand				
Marshall-De Kalb Elec Coop	Total	Other ¹	Cooperative	Municipal	Other	Federal		State / Utility
Chagach Electric Assa Inc.	417,227	_	_	_	_	417,227	_	
Florida	295,550	_	199,075	23,589	_	72,886	_	
Lee County Electric Coop Inc	118,172	_	118,172	_	_	_	_	
Fall River Rural Elec Coop	2,409,649	_	2,409,649	_	_	_	_	
Farmers Electric Co								
Rural Electric Co	169,633	_	_	_	_	169,633	_	Fall River Rural Elec Coop
South Side Elec Lines, Inc.	4,117	_	_	_	_	4,117	_	
Unity Light & Power Coop	93,578	_	_	_	_		_	
Indiana	45,485	_	_	_	_		_	
Bartholomew County Rural E M C. — — — — — — — — — — — — — — — — — —	82,825	_	_	_	_	82,825	_	Unity Light & Power Coop
Carroll County Rural E M C	232,828	_	232 828	_	_	_	_	
Central Indiana Power	138,275			_	_	_	_	
Clark County Rural E M C	144,316							
Hendricks County Rural E M C.	264,039	_		_	_	_	_	
Sosciusko Cnty Rural EMC	307,689	_		_	_	_	_	
Maimi-Cass City Rural EMC	258,823	_		_	_	_	_	
Noble Cnty Rural EMC.	105,469	_		_	_	_	_	
Steuben County Rural EMC	171,607							
Warren County Rural EMC	103,101	_		_	_	_	_	
Boone Valley Elec Coop	73,777	_		_	_	_	_	
Cass Electric Coop								Iowa
Nishnabotna Valley REC	6,600	_	6,600	_	_	_	_	Boone Valley Elec Coop
North West Rural Elec Coop	1,446	_	1,446	_	_	_	_	Cass Electric Coop
Louisiana Beauregard Electric Coop Inc	77,230 132,680	_	,	_	_	_	_	
Michigan Oceana Electric Coop Inc	,		,					-
Oceana Electric Coop — — 96,140 — Presque Isle Electric Coop Inc — — 209,389 — Mississippi Delta Electric Power Assoc — 348,662 — — — Pontotoc Elec Power Assoc — 332,175 — — — — Prentiss Cnty Elec Power Assoc — 306,398 — — — — Tippah Elec Power Assoc — 306,398 — — — — Missouri Consolidated Elec Coop — — — 50,082 — Cuivre River Electric Coop Inc — — — 671,305 — Scott-New Madrid-MS El Coop — — — 236,462 — Montana Flathead Electric Coop Inc — 1,559,678 — — — — Glacier Electric Coop Inc — 184,177 — — — — Nebraska	566,734	_	566,734	_	_	_	_	
Mississippi — — 448,928 — Pontotoc Elec Power Assoc. — 348,662 — — — Prentiss Cnty Elec Pwr Assoc. — 332,175 — — — Tippah Elec Power Assoc. — 306,398 — — — Missouri — — — 50,082 — Cuivre River Electric Coop Inc. — — — 671,305 — Scott-New Madrid-MS El Coop. — — — 236,462 — Montana Flathead Electric Coop Inc. — 1,559,678 — — — — Nebraska	06.140		06.140					
Mississippi Delta Electric Power Assn	96,140 209,389		, -					
Delta Electric Power Assn	207,307		207,307					•
Pontotoc Elec Power Assoc	448,928		449 029					
Prentiss Cnty Elec Pwr Assoc — 332,175 — — — Tippah Elec Power Assoc — 306,398 — — — Missouri Consolidated Elec Coop — — — 50,082 — Cuivre River Electric Coop Inc — — — 671,305 — Scott-New Madrid-MS El Coop — — — 236,462 — Montana Flathead Electric Coop Inc — 1,559,678 — — — — Glacier Electric Coop Inc — 184,177 — — — — Nebraska	348,662	_	440,920	_	_	249 662	_	
Tippah Elec Power Assoc	332,175	_	_	_	_		_	
Missouri Consolidated Elec Coop	306,398					,		
Consolidated Elec Coop	300,398					300,398		
Cuivre River Electric Coop Inc	50.082	_	50.082	_	_	_	_	
Scott-New Madrid-MS El Coop — — — — 236,462 — Montana Flathead Electric Coop Inc — 1,559,678 — — — — Glacier Electric Coop Inc — 184,177 — — — — Nebraska	671,305	_		_	_	_	_	
Flathead Electric Coop Inc	236,462	_	,	_	_	_	_	
Flathead Electric Coop Inc								M
Glacier Electric Coop Inc	1 550 679					1.550.670		
	1,559,678 184,177	_	_	_	_		_	
	98,181	_	_	_	98,181	_	_	Nebraska Niobrara Valley El Mbr Corp
	- 5,151				,1			•
Nevada Farmers Mutual Power Assn	1,154	_	1,154	_	_	_	_	
Penoyer Valley Electric Coop	526	_		_	526	_	_	

Table 35. Electricity Purchases by Electrical Cooperatives Not Reported to the Rural Utilities Service, by State, 1996 ¬Continued

				ource of Electrici			
State / Utility	Investor- Owned	Federal	State and Other Government	Municipal	Cooperative	Other ¹	Total
North Carolina 4-County Electric Power Assn	_	874,494	_	_	_	_	874,494
Ohio							
Licking Rural Electric Inc	_				282,541 217,451 56,020		282,541 217,451 56,020
Oklahoma					225 (57		225 657
Kiamichi Elec Coop Inc Oklahoma Elec Coop Inc	_	_	_	_	225,657 640,381	_	225,657 640,381
People 's Electric Coop	_	_	_	_	272,562	_	272,562
Oregon		04.272					04.272
Hood River Electric Coop Salem Electric	_	94,373 398,033	_	_	_	_	94,373 398,033
Pennsylvania							
New Enterprise R E C Inc	_	_	_	_	41,647	_	41,647
Texas			225 525				225 505
Bandera Elec Coop Inc	_	_	335,605 1,156,641	_	_	_	335,605 1,156,641
Cooke County Elec Coop Assn		_			281,513		281,513
Denton Cnty Elec Coop Inc	_	_	_	_	840,217	_	840,217
Dickens Elec Coop Inc	_	_	_	_	513,894	_	513,894
Fayette Electric Coop Inc	_	_	172,730	_	_	_	172,730
Fort Belknap Electric Coop Inc	_	_		_	97,754	_	97,754
Guadalupe Valley Elec Coop	_	_	1,160,028	_		_	1,160,028 247,046
Hill County Elec Coop		_		_	327,270		327,270
Navasota Valley Elec Coop	_	_	_	_	293,528	_	293,528
Pedernales Elec Coop Inc	_	_	2,400,933	_	_	_	2,400,933
Rayburn Country Elec Coop Inc	1,391,770	177,574	_	_	218,112	_	1,787,456
San Bernard Elec Coop Inc	_	_	353,934	_		_	353,934
Wharton Cnty Elec Coop Inc	_	_	_	_	148,306	_	148,306
Wise Elec Coop Inc	_	_	_	_	215,425	_	215,425
Virginia Old Dominion Electric Coop	3,732,364	_	_	103	_	173,703	3,906,170
Washington		/== 00-					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Big Bend Elec Coop Inc Lakeview Light & Power	_	425,000 —	_	_	_		425,000 287,769
Wisconsin							
Barron Elec Coop	_	_	_	_	300,391	_	300,391
Buffalo Electric Coop	_	_	_	_	75,379	_	75,379
Eau Claire Elec Coop	_	_	_	_	135,348	_	135,348 101,355
Pierce-Pepin Elec Coop Taylor Electric Coop	_	_	_	_	101,355 59,567	_	101,355 59,567
Trempealeau Elec Coop	_	_	_	_	141,544	_	141,544
Wyoming							
Lower Valley Pwr & Lgt Inc	_	254,897	_	_	254,898	_	509,795

¹ Includes transactions with power marketers, power pools, utilities in Canada and Mexico, and nonutilities.

Utilities and Licensees.'

⁻Not Applicable

Notes: •The Department of Agriculture under the Rural Electrification Act is authorized to provide Federal commitments for long-term financing and to guarantee non-Federal long-term loans to utilities supplying power to rural America. The utilities that received guarantees for their loans are referred to as borrowers by the REA. Nonborrowing cooperatives and other utilities that do not borrow from the REA are not required to file the REA-7 and REA-12 forms. Distribution borrowers do not generate electricity; they purchase electricity from other utilities. For identification purposes, the Cooperative Borrowers are listed in the State in which the administrative office is located. Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration Form EIA-861, "Annual Electric Utility Report" and FERC Form 1-F, "Annual Report of Nonmajor Public

Table 36. Electricity Exchanges and Wheeling by Cooperative Borrowers, by State, 1996 (Thousand Kilowatthours)

State /	Exc	hanges	Whe	eling
Cooperative Borrower	Received	Delivered	Received	Delivered
Alabama Alabama Electric Coop Inc	_	_	102,338	99,357
Alaska Chugach Electric Assn Inc	99,152	96,613	113,468	113,468
Arizona Arizona Electric Pwr Coop Inc	26,159	18,505	12,273	12,040
Arkansas Arkansas Electric Coop Corp	37,665	29,162	_	_
Colorado Empire Electric Assn Inc Tri-State G & T Assn Inc	1,176,558	1,096,746	32,744 189,545	32,018 181,651
Florida Seminole Electric Coop Inc	24,071	18,983	225,577	224,139
Idaho Idaho Cnty L&P Coop Assn Inc Rural Electric Co		Ξ	3,811 1,429	3,811 1,429
Illinois Southern Illinois Power Coop	133,310	190,218	120,585	120,585
Indiana Hoosier Energy R E C Inc	94,159	87,157	245,161	233,341
Iowa Central Iowa Power Coop Corn Belt Power Coop L & O Power Coop Northwest Iowa Power Coop	1,829,995 150,257 ————————————————————————————————————	1,732,388 176,645 — 156,610		 101,625 341,689
Kansas Midwest Energy Inc Sunflower Electric Power Corp		Ξ	130,758 314,846	130,758 314,846
Kentucky Big Rivers Electric Corp East Kentucky Power Coop Inc	2,809 252,511	4,714 211,838	1,659,002 2,064,334	1,659,002 2,064,334
Minnesota United Power Assn	12,762	111,807	96,184	27,140
Mississippi South Mississippi El Pwr Assn	29,229	28,084	598,669	580,708
Missouri Associated Electric Coop Inc Northeast Missouri El Pwr Coop	139,483	63,196 —	785,951 176,253	725,343 176,253
Montana Sun River Electric Coop Inc	_	_	3,378	3,378
Nevada Valley Electric Assn Inc	25,187	25,765	_	_
New Mexico Jemez Mountains Elec Coop Inc	— 9,569	 16,433	43,881	42,849 —
North Dakota Basin Electric Power Coop Minnkota Power Coop Inc Mor-Gran-Sou Electric Coop Inc Oliver-Mercer Elec Coop Inc	260,543 60,665 —	4,760 170,769 —	24,592 169 2,192	22,983 169 2,192

Table 36. Electricity Exchanges and Wheeling by Cooperative Borrowers, by State, 1996

(Thousand Kilowatthours) (Continued)

State /	Exch	anges	Whee	eling
Cooperative Borrower	Received	Delivered	Received	Delivered
Oklahoma				
Peoples Electric Coop Inc	_		49,766	49,766
Western Farmers Elec Coop Inc	60,966	41,821	_	_
Oregon				
Hood River Electric Coop	_	_	25,869	25,869
Pacific Northwest Genertg Coop	_	_	260,328	260,328
outh Dakota				
East River Elec Power Coop Inc	_	_	385,442	361,044
exas				
Brazos Electric Power Coop Inc	21,473,267	21,027,081	205,086	201,410
Rayburn Country Elec Coop, Inc	143,160	173,290	_	_
South Texas Electric Coop Inc		341,708	325,237	322,111
Utah				
Deseret Generation & Tran Coop	27,581	43,772	_	_
Flowell Electric Assn Inc	4,059	4,059	_	_
Moon Lake Electric Assn Inc	_	_	30,495	30,495
⁷ irginia				
Rappahannock Electric Coop	_	_	5,867	5,759
Vromina				
Vyoming Big Horn Rural Electric Co	_	_	10,689	9,681
Dig Hoth Rulai Electric Co		- 	10,089	9,001

⁻Not Applicable

Notes: •The Department of Agriculture under the Rural Electrification Act is authorized to provide Federal commitments for long-term financing and to guarantee non-Federal long-term loans to utilities supplying power to rural America. The utilities that received guarantees for their loans are referred to as borrowers by the RUS. Nonborrowing cooperatives and other utilities that do not borrow from the RUS are not required to file the Rural Utilities Service, RUS Form 7, "Financial and Statistical Report," the RUS Form 12a through 12i, "Electric Power Supply Borrowers," and the Form 12c through 12g, "Electric Distribution Borrowers with Generating Facilities." •For identification purposes, the Cooperative Borrowers are listed in the State in which the administrative office is located. •Totals may not equal sum of components because of independent rounding.

Source: Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

Appendix A

Federal
Energy
Regulatory
Commission
Regulation of
the Electric
Utility
Industry

Appendix A

Federal Energy Regulatory Commission Regulation of the Electric Utility Industry

The responsibility for regulating most interstate wholesale electric trade rests with the Federal Government, and not with State or local governments. Therefore, data on wholesale trade are collected within a framework of Federal laws and regulations. In wholesale trade between electrically connected utilities, if even one utility is electrically connected to a utility that operates in a different State, then trade among any of these utilities is considered interstate and jurisdictional for the Federal Energy Regulatory Commission (FERC) regulatory purposes. Hence virtually all wholesale trade except that in Alaska, Hawaii, and part of Texas is considered interstate.

FERC is responsible for governing interstate trade of wholesale electricity for investor-owned utilities. In order to participate in wholesale electricity trade, utilities must file interconnection agreements (contracts) with the FERC. FERC exercises its regulatory authority directly by approving interconnections between utilities, coordinating agreements exchange power, and approving wholesale power rates. Authority for bulk power transactions is typically prearranged under interconnection contracts. These agreements define an individual electric utility's overall relationship to other utilities. In addition, they define how each will maintain its part of the electrical system operations. Other contracts are often negotiated to handle specific needs. In fact, one of the most common is for support of full or partial requirement power. Requirements contracts cover electric utilities that have either insufficient or no generating capability to satisfy their customer load. They represent long-term, firm power contractual obligations in which the terms and conditions obligate the selling electric utility to provide the buying electric utility a level of service equivalent to the seller's requirement to support its own retail customers. These contracts may be with more than one electric utility.

For restructuring the electric utility industry, the FERC has issued policy statements in several critical areas and initiated a number of proceedings in the period immediately following the passage of the Energy Policy Act of 1992. These include: (1) Regional Transmission Group Policy Statement,

Docket No. RM93-3-000 (July 30, 1993), (2) Docket No. RM94-7-000, Recover of Stranded Costs by Public Utilities and Transmitting Utilities, Notice of Proposed Rulemaking (June 29, 1994), (3) Transmission Pricing Policy Statement, Docket No. RM93-19-000 (October 26, 1994), (4) Pooling Notice of Inquiry, Docket No. RM94-20-000 (October 26, 1994), (5) Notice of Proposed Rulemaking and Supplemental Notice of Proposed Rulemaking: (1) Promoting Wholesale Competition through Open Access Non-Discriminatory Transmission Services by Public Utilities, Docket No. RM95-8-000, and (ii) Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Docket No RM-94-7-001 (March 29, 1995), and Notice of Inquiry on Merger Policy, Docket No. Rm-96-000 (January 31, 1996).

These reviews and actions taken by the FERC are designed to create a business environment conducive to competition in wholesale electricity trade. However, the contemplated industry transformation from a regulated cost-of-service pricing structure which has an obligation to serve all customers to one that is fully competitive in generation with open access to transmission faces a host of complex and controversial issues. See the Energy Information Administration report, *The Changing Structure of the Electric Power Industry: Selected Issues, 1998* for a discussion of many of the current issues. ¹⁶

The FERC established a Uniform System of Accounts for the financial reporting of electric trade transactions. The transactions reported are complex and involve specifics of contracts, simultaneous energy transactions, the unintended receipt and delivery of energy, and the handling of energy losses. These accounts can be found in the FERC's "Accounting and Reporting Requirements For Public Utilities and Licensees." FERC requires only investor-owned utilities to file financial information on electric trade. The Rural Utilities Service (RUS) requires its borrowers (usually cooperatives) to file similar information, while EIA requires similar information from public utilities. Both the RUS and the EIA request the reporting of information based on the Uniform System of Accounts.

Energy Information Administration, *The Changing Structure of the Electric Power Industry: Selected Issues*, 1998 DOE/EIA-0562(98)(Washington DC, July 1998).

Data on wholesale electricity trade are collected on Federal survey data forms that are accounting-system based. They were designed for regulatory purposes to meet individual electric utility administrative and rate case needs as opposed to overall aggregate industry statistical and analytical purposes.

The FERC Forms 1 and 1-F are the primary financial reporting forms. Wholesale data are collected on 4 of the approximately 75 survey schedules comprising the FERC Form 1. The wholesale electricity trade schedules are categorized as sales for resale, purchased power, summary of interchange, and transmission of electricity for or by others. These schedules correspond to one or more of the following accounts from the Uniform System of Accounts as follows:

• Sales for Resale (447)

- A. This account shall include the net billing for electricity supplied to other electric utilities or to public authorities for resale purposes.
- B. Records shall be maintained so as to show the quantity of electricity sold and the revenue received from each customer.
- NOTE: Revenues from electricity supplied to other public utilities for use by them and not for distribution shall be included in account 443, Commercial and Industrial Sales, unless supplied under the same contract as and not readily separable from revenues includable in this account.

• Purchased Power (555)

- A. This account shall include the cost at point of receipt by the utility of electricity purchased for resale. It shall include, also, net settlements for exchange of electricity or power, such as economy energy, off-peak energy for on-peak energy, spinning reserve capacity, etc. In addition, the account shall include the net settlements for transactions under pooling or interconnection agreements wherein there is a balancing of debits and credits for energy, capacity, etc. Distinct purchases and sales shall not be recorded as exchanges and net amounts are only recorded merely because debit and credit amounts are combined in the voucher settlement.
- B. The records supporting this account shall show, by months, the demands and demand charges, kilowatthours and prices thereof under each purchase contract and the charges and credits under each exchange or power pooling contract.

• Other Electric Revenues (456)

 5. Revenues from transmission of electricity of others over transmission facilities of the utility.

• Transmission of Electricity By Others (565)

 This account shall include amounts payable to others for the transmission of the utility's electricity over transmission facilities owned by others.

Addition of Statistical Classification Codes to the FERC Form 1

The Federal Energy Regulatory Commission modified the FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others" for the 1990 collection year. The Statistical Classification Codes are based on the original contractual terms and conditions of the service. The following codes were added to FERC Form 1:

- RQ for requirements service. Requirements service is service which the supplier plans to provide on an ongoing basis (i.e., the supplier includes projected load for this service in its system resource planning). In addition, the reliability of requirements service must be the same as, or second only to, the supplier's service to its own ultimate consumers.
- LF for long-term firm service. "Long-term" means 5 years or longer and "firm" means that service cannot be interrupted for economic reasons and is intended to remain reliable even under adverse conditions (e.g., the supplier must attempt to buy emergency energy from third parties to maintain deliveries of LF service). This category should not be used for long-term firm service, which meets the definition of RQ service. For all transactions identified as LF, provide in a footnote the termination date of the contract defined as the earliest date that either buyer or seller can unilaterally get out of the contract.
- IF for intermediate-term firm service. The same as LF service except that "intermediate-term" means longer than 1 year but less than 5 years.
- SF for short-term firm service. Use this category for all firm services where the duration of each period of commitment for service is 1 year or less.
- LU for long-term service from a designated generating unit. "Long-term" means 5 years or longer. The availability and reliability of service, aside from transmission constraints, must match the availability and reliability of the designated unit.
- IU for intermediate-term service from a designated generating unit. The same as LU service except that "intermediate-term" means longer than 1 year but less than 5 years.
- EX for exchange of electricity. Use this category for transactions involving a balancing of debits and credits for energy, capacity, etc. and any settlements for imbalanced exchanges.
- OS for other service. Use this category only for those services which cannot be placed in the above-defined categories, such as all nonfirm service regardless of the length of the contract and service from designated units of less than 1 year. Describe the nature of the service in a footnote.
- AD for out-of-period adjustments. Use this code for any accounting adjustments or "tune-ups" for

service provided in prior reporting years. Provide an explanation in a footnote for each adjustment.

Appendix B

State, NERC Region, and Data Sources for Electric Utilities

Appendix B

State, NERC Region, and Data Sources for Electric Utilities

Table B1. Investor-Owned Utilities, 1996

Utility	State ¹	NERC Region ²	Survey Form ³
Alabama Power Co	Alabama	SERC	FERC FORM 1
Alaska Electric Light&Power Co	Alaska	ASCC	FERC FORM 1-F
Alcoa Generating Corp	Indiana	ECAR	FERC FORM 1
Allegheny Generating Co	Maryland	ECAR	FERC FORM 1-F
Appalachian Power Co	Virginia	ECAR	FERC FORM 1
Arizona Public Service Co	Arizona	WSCC	FERC FORM 1
Aroostook Valley Electric Co	Maine	NPCC	FERC FORM 1
Atlantic City Electric Co	New Jersey	MAAC	FERC FORM 1
AEP Generating Co	Ohio	ECAR	FERC FORM 1
Baltimore Gas & Electric Co	Maryland	MAAC	FERC FORM 1
Bangor Hydro-Electric Co	Maine	NPCC	FERC FORM 1
Beebee Island Corp	New York	NPCC	FERC FORM 1
Black Hills Corp	South Dakota	WSCC	FERC FORM 1
Blackstone Valley Electric Co	Rhode Island	NPCC	FERC FORM 1
Boston Edison Co	Massachusetts	NPCC	FERC FORM 1
Cambridge Electric Light Co	Massachusetts	NPCC	FERC FORM 1
Canal Electric Co	Massachusetts	NPCC	FERC FORM 1
Carolina Power & Light Co	North Carolina	SERC	FERC FORM 1
Catalyst Old River Hydroel LP	Louisiana	SPP	FERC FORM 1
Central Hudson Gas & Elec Corp	New York	NPCC	FERC FORM 1
Central Illinois Light Co	Illinois	MAIN	FERC FORM 1
Central Illinois Pub Serv Co	Illinois	MAIN	FERC FORM 1
Central Louisiana Elec Co Inc	Louisiana	SPP	FERC FORM 1
Central Maine Power Co	Maine	NPCC	FERC FORM 1
Central Power & Light Co	Texas	ERCOT	FERC FORM 1
Central Vermont Pub Serv Corp	Vermont	NPCC	FERC FORM 1
Cincinnati Gas & Electric Co	Ohio	ECAR	FERC FORM 1
Citizens Utilities Co	Connecticut	NPCC	FERC FORM 1
Citizens ' Electric Co	Pennsylvania	MAAC	FERC FORM 1-F
Cleveland Electric Illum Co	Ohio	ECAR	FERC FORM 1
Columbus Southern Power Co	Ohio	ECAR	FERC FORM 1
Commonwealth Edison Co	Illinois	MAIN	FERC FORM 1
Commonwealth Edison Co IN Inc	Indiana	MAIN	FERC FORM 1
Commonwealth Electric Co	Massachusetts	NPCC	FERC FORM 1
Concord Electric Co	New Hampshire	NPCC	FERC FORM 1-F
Connecticut Light & Power Co	Connecticut	NPCC	FERC FORM 1
Connecticut Valley Elec Co Inc	New Hampshire	NPCC	FERC FORM 1
Connecticut Yankee Atom Pwr Co	Connecticut	NPCC	FERC FORM 1
Consolidated Edison Co-NY Inc	New York	NPCC	FERC FORM 1
Consolidated Water Power Co	Wisconsin	MAIN	FERC FORM 1
Consumers Power Co	Michigan	ECAR	FERC FORM 1
Dayton Power & Light Co	Ohio	ECAR	FERC FORM 1
Delmarva Power & Light Co	Delaware	MAAC	FERC FORM 1
Detroit Edison Co	Michigan	ECAR	FERC FORM 1
Ouke Power Co	North Carolina	SERC	FERC FORM 1
Duquesne Light Co	Pennsylvania	ECAR	FERC FORM 1
Eastern Edison Co	Massachusetts	NPCC	FERC FORM 1
Edison Sault Electric Co	Michigan	ECAR	FERC FORM 1
	Texas	WSCC	FERC FORM 1
El Paso Electric Co			

Table B1. Investor-Owned Utilities, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Empire District Electric Co	Missouri	SPP	FERC FORM 1
Entergy Arkansas Inc		SPP	FERC FORM 1
Entergy Gulf States Inc		SPP	FERC FORM 1
Entergy Louisiana Inc		SPP	FERC FORM 1
Entergy Mississippi Inc		SPP	FERC FORM 1
Entergy New Orleans Inc		SPP	FERC FORM 1
Entergy Power Inc		SPP	FERC FORM 1
Exeter & Hampton Electric Co		NPCC	FERC FORM 1-F
	•	NPCC	FERC FORM 1
Fischburg Gas & Elec Light Co			
Florida Power & Light Co		SERC	FERC FORM 1
Florida Power Corp		SERC	FERC FORM 1
Georgia Power Co		SERC	FERC FORM 1
Granite State Electric Co	•	NPCC	FERC FORM 1-F
Great Bay Power Corp		NPCC	FERC FORM 1
Green Mountain Power Corp		NPCC	FERC FORM 1
Gulf Power Co		SERC	FERC FORM 1
Hawaiian Electric Co Inc	Hawaii	HI	FERC FORM 1
Holyoke Power & Electric Co	Massachusetts	NPCC	FERC FORM 1
Holyoke Water Power Co	Massachusetts	NPCC	FERC FORM 1
Houston Lighting & Power Co	Texas	ERCOT	FERC FORM 1
Idaho Power Co		WSCC	FERC FORM 1
Illinois Power Co		MAIN	FERC FORM 1
Indiana Michigan Power Co		ECAR	FERC FORM 1
Indiana-Kentucky Electric Corp		ECAR	FERC FORM 1
Indiana-Kentacky Electric Corp		ECAR	FERC FORM 1
Interstate Power Co		MAPP	FERC FORM 1
		MAPP	FERC FORM 1
IES Utilities Inc			
Jersey Central Power&Light Co		MAAC	FERC FORM 1
Kansas City Power & Light Co		SPP	FERC FORM 1
Kansas Gas & Electric Co		SPP	FERC FORM 1
Kentucky Power Co	=	ECAR	FERC FORM 1
Kentucky Utilities Co	-	ECAR	FERC FORM 1
Kingsport Power Co		ECAR	FERC FORM 1
Lockhart Power Co	South Carolina	SERC	FERC FORM 1
Long Island Lighting Co	New York	NPCC	FERC FORM 1
Long Sault Inc	New York	ERCOT	FERC FORM 1
Louisville Gas & Electric Co	Kentucky	ECAR	FERC FORM 1
Madison Gas & Electric Co	Wisconsin	MAIN	FERC FORM 1
Maine Electric Power Co Inc	Maine	NPCC	FERC FORM 1
Maine Public Service Co		NPCC	FERC FORM 1
Maine Yankee Atomic Power Co		NPCC	FERC FORM 1
Massachusetts Electric Co		NPCC	FERC FORM 1
Maui Electric Co Ltd		HI	FERC FORM 1
Metropolitan Edison Co		MAAC	FERC FORM 1
MidAmerican Energy Co		MAPP	FERC FORM 1
		MAPP	FERC FORM 1
Minnesota Power & Light Co			
Mississippi Power Co		SERC	FERC FORM 1
Monongahela Power Co		ECAR	FERC FORM 1
Montana Power Co		WSCC	FERC FORM 1
Montaup Electric Co		NPCC	FERC FORM 1
Mt Carmel Public Utility Co		MAIN	FERC FORM 1
MDU Resources Group Inc		MAPP	FERC FORM 1
Nantahala Power & Light Co		SERC	FERC FORM 1
Narragansett Electric Co		NPCC	FERC FORM 1
Nevada Power Co	Nevada	WSCC	FERC FORM 1
New England Elec Transm 'n Cor	New Hampshire	NPCC	FERC FORM 1
New England Hydro-Tran Elec Co	Massachusetts	NPCC	FERC FORM 1
New England Hydro-Trans Corp	New Hampshire	NPCC	FERC FORM 1
New England Power Co	•	NPCC	FERC FORM 1
New York State Elec & Gas Corp		NPCC	FERC FORM 1
Newport Electric Corp		NPCC	FERC FORM 1
Niagara Mohawk Power Corp		NPCC	FERC FORM 1
North Atlantic Energy Corp		NPCC	FERC FORM 1
Northern Indiana Pub Serv Co		ECAR	FERC FORM 1
Northern States Power Co		MAPP	FERC FORM 1
Northern States Power Co		MAPP	FERC FORM 1
Northwestern Public Service Co		MAPP	FERC FORM 1
Northwestern Wisconsin Elec Co		MAPP	FERC FORM 1
Ocean State Power		NPCC	FERC FORM 1
Ohio Edison Co	Ohio	ECAR	FERC FORM 1

Table B1. Investor-Owned Utilities, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Ohio Power Co	Ohio	ECAR	FERC FORM 1
Ohio Valley Electric Corp	Ohio	ECAR	FERC FORM 1
Oklahoma Gas & Electric Co		SPP	FERC FORM 1
Orange & Rockland Utils Inc		NPCC	FERC FORM 1
Otter Tail Power Co		MAPP	FERC FORM 1
Pacific Gas & Electric Co		WSCC	FERC FORM 1
PacifiCorp		WSCC	FERC FORM 1
Pennsylvania Electric Co	2	MAAC	FERC FORM 1
•	-	MAAC	FERC FORM 1
Pennsylvania Power & Light Co	· · · · · · · · · · · · · · · · · · ·		
Pennsylvania Power Co		ECAR	FERC FORM 1
Pioneer Power & Light Co		MAIN	FERC FORM 1
Portland General Electric Co	ē	WSCC	FERC FORM 1
Potomac Edison Co	,	ECAR	FERC FORM 1
Potomac Electric Power Co		MAAC	FERC FORM 1
Public Service Co of Colorado	Colorado	WSCC	FERC FORM 1
Public Service Co of NH	New Hampshire	NPCC	FERC FORM 1
Public Service Co of NM	New Mexico	WSCC	FERC FORM 1
Public Service Co of Oklahoma	Oklahoma	SPP	FERC FORM 1
Public Service Electric&Gas Co	New Jersey	MAAC	FERC FORM 1
Puget Sound Power & Light Co	Washington	WSCC	FERC FORM 1
PECO Energy Co	Pennsylvania	MAAC	FERC FORM 1
PSI Energy Inc	· · · · · · · · · · · · · · · · · · ·	ECAR	FERC FORM 1
Rochester Gas & Electric Corp		NPCC	FERC FORM 1
Rockland Electric Co		MAAC	FERC FORM 1
Safe Harbor Water Power Corp	•	MAAC	FERC FORM 1
San Diego Gas & Electric Co		WSCC	FERC FORM 1
Savannah Electric & Power Co		SERC	FERC FORM 1
Sierra Pacific Power Co		WSCC	FERC FORM 1
South Beloit Water Gas&Elec Co		MAIN	FERC FORM 1
South Carolina Electric&Gas Co		SERC	FERC FORM 1
South Carolina Genertg Co Inc		SERC	FERC FORM 1
Southern California Edison Co		WSCC	FERC FORM 1
Southern Electric Generat 'g C		SERC	FERC FORM 1
Southern Indiana Gas & Elec Co		ECAR	FERC FORM 1
Southwestern Electric Power Co	Louisiana	SPP	FERC FORM 1
Southwestern Electric Serv Co		ERCOT	FERC FORM 1
Southwestern Public Service Co	Texas	SPP	FERC FORM 1
St Joseph Light & Power Co	Missouri	SPP	FERC FORM 1
Superior Water Light&Power Co	Wisconsin	MAPP	FERC FORM 1
Susquehanna Electric Co	Pennsylvania	MAAC	FERC FORM 1
System Energy Resources Inc	-	SERC	FERC FORM 1
Tampa Electric Co		SERC	FERC FORM 1
Texas Utilities Electric Co		ERCOT	FERC FORM 1
Texas-New Mexico Power Co		ERCOT	FERC FORM 1
Toledo Edison Co		ECAR	FERC FORM 1
Fucson Electric Power Co		WSCC	FERC FORM 1
Union Electric Co		MAIN	FERC FORM 1
Union Light Heat & Power Co		ECAR	
	•		FERC FORM 1
United Illuminating Co		NPCC	FERC FORM 1
Upper Peninsula Power Co	- C	MAIN	FERC FORM 1
UtiliCorp United Inc		SPP	FERC FORM 1
UNITIL Power Corp		NPCC	FERC FORM 1-F
Vermont Electric Power Co Inc		NPCC	FERC FORM 1
Vermont Electric Trans Co Inc		NPCC	FERC FORM 1
Vermont Yankee Nucl Pwr Corp		NPCC	FERC FORM 1
Virginia Electric & Power Co		SERC	FERC FORM 1
Washington Water Power Co	Washington	WSCC	FERC FORM 1
West Penn Power Co		ECAR	FERC FORM 1
West Texas Utilities Co		ERCOT	FERC FORM 1
Western Massachusetts Elec Co		NPCC	FERC FORM 1

Table B1. Investor-Owned Utilities, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Western Resources Inc	Kansas	SPP	FERC FORM 1
Wheeling Power Co	West Virginia	ECAR	FERC FORM 1
Wisconsin Electric Power Co	Wisconsin	MAIN	FERC FORM 1
Wisconsin Power & Light Co	Wisconsin	MAIN	FERC FORM 1
Wisconsin Public Service Corp	Wisconsin	MAIN	FERC FORM 1
Wisconsin River Power Co	Wisconsin	MAIN	FERC FORM 1
Yankee Atomic Electric Co	Massachusetts	NPCC	FERC FORM 1
York Haven Power Co	Pennsylvania	MAAC	FERC FORM 1

¹ The State in which the corporate office of the utility is located.

The principal North American Electric Reliability Council region in which the utility operates. See Glossary for a list of all regions.

The principal North American

Source of data for this publication

the investor-owned electric states and the control of the c

Note: Some of the investor-owned electric utilities that are required to file as "minor" utilities did not use the FERC Form 1-F, instead they filed the FERC Form 1. Table B1 identifies only the actual form filed with the FERC and not the list of "minor" investor-owned electric utilities.

Sources: •Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others."

•FERC Form 1-F, "Annual Report for Nonmajor Public Utilities and Licensees." •FERC

Table B2. Federal Utilities, 1996

Utility	State ¹	NERC Region ²	Survey Form ³
Bonneville Power Admin	Oregon	WSCC	EIA-412
Southeastern Power Admin	Georgia	SERC	EIA-412
Southwestern Power Admin	Oklahoma	SPP	EIA-412
Tennessee Valley Authority	Tennessee	SERC	EIA-412
U S Army Corps of Engineers	Michigan	ECAR	EIA-412
U S Bureau of Indian Affairs	_		
Mission Valley Power 4	Montana	WSCC	EIA-412
San Carlos Irrigation Project ⁵	Arizona	WSCC	EIA-412
Western Area Power Admin	Colorado	WSCC/MAPP	EIA-412

- 1 The State in which the administrative office of the utility is located.
- ² The principal North American Electric Reliability Council regions in which the utility operates. See glossary for a list of all regions.
- 3 Source of data for this publication
- ⁴ Under P.L. 93-638, the operation and maintenance of the electric utility portion of the irrigation project has been contracted with Mission Valley Power, an entity of the Confederated Salish and Kootenai Tribes.
- 5 During 1992, portions of the utility were divested by the Federal Government. The off-reservation distribution system is to be transferred to San Carlos Irrigation and Drainage District (a state entity) which will sell it to Arizona Public Service. The on-reservation distribution system is to be transferred to Gila River Utility Authority (of the Gila River Indian Community) and the San Carlos Apache Tribe. The Coolidge Dam will remain U.S. property and be run by the Bureau of Indian Affairs.

Note: The Federal Government both produces electricity and sells it at wholesale. Federal producers include the U.S. Army Corps of Engineers, Bureau of Indian Affairs, Bureau of Reclamation, and the International Boundary and Water Commission. The power marketing administrations of the U.S. Department of Energy are also federally owned utilities; they include the Alaska, Bonneville, Southeastern, Southwestern, and Western Area Power Administrations. The Tennessee Valley Authority also both generates and markets electricity.

Sources: •Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities." •Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

Table B3. State and Other Government Utilities, 1996

Utility	State ¹	NERC Region ²	Survey Form ³
Alaska Energy Authority	Alaska	ASCC	EIA-412
Arizona Power Authority		WSCC	EIA-412
Arkansas River Power Authority		WSCC	EIA-412
Burt County Public Power Dist		MAPP	RUS-7
Butler County Rural P P D		MAPP	RUS-7
California Dept-Wtr Resources		WSCC	EIA-412
Central Lincoln Peoples Utl Dt		WSCC	EIA-412
Central Nebraska Pub P&I Dist		MAPP	EIA-412
Chimney Rock Public Power Dist		MAPP	RUS-7
Clatskanie Peoples Util Dist		WSCC	EIA-412
Colorado River Comm of Nevada		WSCC	EIA-412
Columbia River Peoples Ut Dist		WSCC	EIA-412 EIA-412
fornhusker Public Power Dist		MAPP	EIA-412 EIA-412
Crisp County Power Comm		SERC	EIA-412 EIA-412
Pawson County Public Pwr Dist		MAPP	EIA-412
lectrical Dist No2 Pinal Cnty		WSCC	EIA-412
merald People 's Utility Dist		WSCC	EIA-412
rand River Dam Authority		SPP	EIA-412
eartland Consumers Power Dist		MAPP	EIA-412
nperial Irrigation District		WSCC	EIA-412
ndiana Municipal Power Agency		ECAR	EIA-412
ansas Municipal Energy Agency		SPP	EIA-412
ings River Conservation Dist		WSCC	EIA-412
BR Rural Public Power Dist	Nebraska	MAPP	RUS-7
afayette Public Power Auth	Louisiana	SPP	EIA-412
ouisiana Energy & Power Auth	Louisiana	SPP	EIA-412
oup River Public Power Dist		MAPP	EIA-412
ower Colorado River Authority		ERCOT	EIA-412
Iassachusetts Mun Whls Elec Co		NPCC	EIA-412
ferced Irrigation District	California	WSCC	EIA-412
Michigan Public Power Agency		ECAR	EIA-412
lichigan South Central Pwr Agy		ECAR	EIA-412
Innesota Municipal Power Agny		MAPP	EIA-412
fissouri Basin Mun Power Agny		MAPP	EIA-412
Indesto Irrigation District		WSCC	EIA-412
Iunicipal Electric Authority		SERC	EIA-412
Iunicipal Energy Agency of NE		MAPP	EIA-412 EIA-412
MSR Public Power Agency		WSCC	EIA-412
Javajo Tribal Utility Auth		WSCC	EIA-412
Jebraska Public Power District		MAPP	EIA-412
New River Light & Power Co		SERC	EIA-412
Jorris Public Power District		MAPP	EIA-412
Jorth Central Public Pwr Dist		MAPP	RUS-7
Iortheast Nebraska Rural P P D		MAPP	RUS-7
Jorthern California Power Agny		WSCC	EIA-412
Iorthern Municipal Power Agny		MAPP	EIA-412
orthern Wasco County P U D		WSCC	EIA-412
akdale & South San Joaquin	California	WSCC	EIA-412
klahoma Municipal Power Auth	Oklahoma	SPP	EIA-412
maha Public Power District	Nebraska	MAPP	EIA-412
roville-Wyandotte Irrig Dist	California	WSCC	EIA-412
verton Power District No 5		WSCC	EIA-412
lacer County Water Agency		WSCC	EIA-412
latte River Power Authority		WSCC	EIA-412
olk County Rural Pub Pwr Dist		MAPP	RUS-7
ower Authority of State of NY		NPCC	EIA-412
UD No 1 of Benton County		WSCC	EIA-412
UD No 1 of Chelan County		WSCC	EIA-412
UD No 1 of Clallam County		WSCC	EIA-412
UD No 1 of Clark County		WSCC	EIA-412
UD No 1 of Cowlitz County		WSCC	EIA-412 EIA-412
UD No 1 of Douglas County		WSCC	EIA-412 EIA-412
UD No 1 of Ferry County		WSCC	RUS-7
UD No 1 of Franklin County		WSCC	EIA-412
UD No 1 of Grays Harbor Cnty		WSCC	EIA-412 EIA-412
UD No 1 of Grays Harbor CityUD No 1 of Klickitat County		WSCC	EIA-412 EIA-412
UD No 1 of Lewis County		WSCC	EIA-412
UD No 1 of Mason County		WSCC	RUS-7
UD No 1 of Okanogan County		WSCC	EIA-412
UD No 1 of Pend Oreille Cnty		WSCC	EIA-412
UD No 1 of Snohomish County		WSCC	EIA-412
UD No 1 of Whatcom County		WSCC	EIA-412
UD No 2 of Grant County		WSCC	EIA-412
UD No 2 of Pacific County		WSCC	EIA-412
UD No 3 of Mason County	Washington	WSCC	EIA-412
es ites of mason county minimum.	···· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·	WSCC	

Table B3. State and Other Government Utilities, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Salt River Proj Ag I & P Dist	Arizona	WSCC	EIA-412
Sam Rayburn Municipal Pwr Agny	Texas	SPP	EIA-412
Seward County Rrl Pub Pwr Dist	Nebraska	MAPP	RUS-7
South Carolina Pub Serv Auth	South Carolina	SERC	EIA-412
Southern California P P A	California	WSCC	EIA-412
Southern Minnesota Mun P Agny	Minnesota	MAPP	EIA-412
Southern Nebraska Rural P P D	Nebraska	MAPP	EIA-412
Stanton County Public Pwr Dist	Nebraska	MAPP	RUS-7
Tillamook Peoples Utility Dist	Oregon	WSCC	EIA-412
Tlingit & Haida Region El Auth	Alaska	ASCC	RUS-7
Γohono O 'Odham Utility Auth	Arizona	WSCC	EIA-412
Toledo Bend Project Joint Oper	Texas	SPP	EIA-412
Twin Valleys Public Power Dist	Nebraska	MAPP	RUS-7
Utah Associated Mun Power Sys	Utah	WSCC	EIA-412
Utah Municipal Power Agency	Utah	WSCC	EIA-412
Vera Irrigation District # 15	Washington	WSCC	EIA-412
Vermont Public Pwr Supply Auth	Vermont	NPCC	EIA-412
Virginia Tech Electric Service	Virginia	ECAR	EIA-412
Washington Pub Pwr Supply Sys	Washington	WSCC	EIA-412
Wayne County Public Power Dist	Nebraska	MAPP	RUS-7
Wheat Belt Public Power Dist	Nebraska	WSCC	RUS-7
Wyoming Municipal Power Agency	Wyoming	WSCC	EIA-412
Yuba County Water Agency	California	WSCC	EIA-412

¹ The State in which the authority is located.

Sources: •Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities." •Rural Utilities Service, RUS Form 7, "Financial and Statistical Report," RUS Form 12a through 12i, "Electric Power Supply Borrowers," Form 12c through 12g, "Electric Distribution Borrowers with Generating Facilities." •Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

The principal North American Electric Reliability Council region in which the utility operates. See glossary for a list of all regions.

Source of data for this publication

Table B4. Municipal Utilities, 1996

Utility	State ¹	NERC Region ²	Survey Form ³
Alabama Municipal Elec Auth	Alabama	SERC	EIA-412
Alameda City of	California	WSCC	EIA-412
Albany Water Gas & Light Comm	Georgia	SERC	EIA-412
Ibemarle City of	North Carolina	SERC	EIA-412
lbertville Municipal Utils Bd	Alabama	SERC	EIA-412
lcoa Utilities	Tennessee	SERC	EIA-412 EIA-412
lexandria City of	Minnesota	MAPP	EIA-412
lexandria City of	Louisiana	SPP	EIA-412
ltus City of	Oklahoma	SPP	EIA-412
merican Mun Power-Ohio Inc	Ohio	ECAR	EIA-412
mes City of	Iowa	MAPP	EIA-412
naheim City of	California	WSCC	EIA-412
nchorage City of	Alaska	ASCC	EIA-412
ndalusia City of	Alabama	SERC	EIA-412
nderson City of	Indiana	ECAR	EIA-412
noka City of	Minnesota	MAPP	EIA-412
shland City of	Oregon	WSCC	EIA-412
thens City of	Alabama	SERC	EIA-412
thens Utility Board	Tennessee	SERC	EIA-412
uburn City of	Indiana	ECAR	EIA-412
ustin City of	Minnesota	MAPP	EIA-412
astin City of	Texas	ERCOT	EIA-412
zusa City of	California	WSCC	EIA-412
dger Power Marketing Auth	Wisconsin	MAIN	EIA-412
ardstown City of	Kentucky	ECAR	EIA-412
artow City of	Florida	SERC	EIA-412 EIA-412
	Illinois	MAIN	EIA-412 EIA-412
atavia City of			
ay City City of	Michigan	ECAR	EIA-412
eatrice City of	Nebraska	MAPP	EIA-412
edford City of	Virginia	ECAR	EIA-412
enton City of	Arkansas	SPP	EIA-412
enton County	Tennessee	SERC	EIA-412
entonville City of	Arkansas	SPP	EIA-412
essemer City of	Alabama	SERC	EIA-412
luffton City of	Indiana	ECAR	EIA-412
olivar City of	Tennessee	SERC	EIA-412
ountiful City City of	Utah	WSCC	EIA-412 EIA-412
owling Green City of	Ohio	ECAR	EIA-412
owling Green City of	Kentucky	SERC	EIA-412
rainerd Public Utilities	Minnesota	MAPP	EIA-412
raintree Town of	Massachusetts	NPCC	EIA-412
renham City of	Texas	ERCOT	EIA-412
ristol City of	Tennessee	SERC	EIA-412
ristol Utilities Board	Virginia	SERC	EIA-412
rookings City of	South Dakota	MAPP	EIA-412
rownsville Public Utils Board	Texas	ERCOT	EIA-412
ryan City of	Ohio	ECAR	EIA-412
ryan City of	Texas	ERCOT	EIA-412
urbank City of	California	WSCC	EIA-412
arlington City of	Vermont	NPCC	EIA-412
alhoun City of	Georgia	SERC	EIA-412
amden City of	South Carolina	SERC	EIA-412
arroll County	Tennessee	SERC	EIA-412
artersville City of	Georgia	SERC	EIA-412
arthage City of	Missouri	SPP	EIA-412
edar Falls City of	Iowa	MAPP	EIA-412
elina City of	Ohio	ECAR	EIA-412
entralia City of	Washington	WSCC	EIA-412
hambersburg Borough of	Pennsylvania	ECAR	EIA-412
hanute City of	Kansas	SPP	EIA-412
naska City of	Minnesota	MAPP	EIA-412
hattanooga City of	Tennessee	SERC	EIA-412
nicopee City of	Massachusetts	NPCC	EIA-412
aremore City of	Oklahoma	SPP	EIA-412
arksdale City of	Mississippi	SPP	EIA-412
arksville City of	Tennessee	SERC	EIA-412 EIA-412
arksville City of	Arkansas	SPP	
			EIA-412
leveland City of	Tennessee	SERC	EIA-412
leveland City of	Ohio	ECAR	EIA-412
linton City of	Tennessee	SERC	EIA-412
offeyville City of	Kansas	SPP	EIA-412
oldwater Board of Public Util	Michigan	ECAR	EIA-412
ollege Park City of	Georgia	SERC	EIA-412
ollege Station City of	Texas	ERCOT	EIA-412 EIA-412
olorado Springs City of	Colorado California	WSCC WSCC	EIA-412 EIA-412
olton City of			

Table B4. Municipal Utilities, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Columbia City of	Tennessee	SERC	EIA-412
Columbia City of		MAIN	EIA-412
Columbus City of	Ohio	ECAR	EIA-412
Columbus City of	Mississippi	SERC	EIA-412
Concord City of	North Carolina	SERC	EIA-412
Concord Town of	Massachusetts	NPCC	EIA-412
Connecticut Mun Elec Engy Coop	Connecticut	NPCC	EIA-412
Conway Corp	Arkansas	SPP	EIA-412
Cookeville City of	Tennessee	SERC	EIA-412
Covington City of		SERC	EIA-412
Covington City of		SERC	EIA-412
Crawfordsville Elec Lgt&Pwr Co		ECAR	EIA-412
Cullman Power Board		SERC	EIA-412
Cuyahoga Falls City of		ECAR	EIA-412
Dalton City of		SERC	EIA-412
Danvers Town of		NPCC	EIA-412
Danville City of		ECAR	EIA-412
Decatur City of		SERC	EIA-412
Denton City of		ERCOT	EIA-412
Detroit City of		ECAR	EIA-412
Dickson City of		SERC	EIA-412
Dothan City of		SERC	EIA-412
Douglas City of		SERC	EIA-412
Dover City of		MAAC	EIA-412
Dover City of		ECAR	EIA-412
Duncan City of		SPP	EIA-412
Dyersburg City of		SERC	EIA-412
Easley Combined Utility System		SERC	EIA-412
East Point City of		SERC	EIA-412
Easton Utilities Comm	5	MAAC	EIA-412
Edmond City of		SPP	EIA-412
Elizabeth City City of		SERC	EIA-412
Elizabethton City of		SERC	EIA-412
Ellensburg City of		WSCC	EIA-412
Ephrata Borough of		MAAC	EIA-412
Erwin Town of		SERC	EIA-412
Eugene City of		WSCC	EIA-412
Fairbanks City of		ASCC MAPP	EIA-412 EIA-412
Fairmont Public Utilities Comm		NPCC	EIA-412 EIA-412
Farmington City of		WSCC	EIA-412
Fayetteville City of		SERC	EIA-412 EIA-412
Fayetteville Public Works Comm		SERC	EIA-412 EIA-412
Fitzgerald Wtr Lgt & Bond Comm		SERC	EIA-412
Florence City of		SERC	EIA-412
Floresville City of		ERCOT	EIA-412
Florida Municipal Power Agency		SERC	EIA-412
Foley City of (Riviera Utils)		SERC	EIA-412
Forest City Town of		SERC	EIA-412
Forest Grove City of		WSCC	EIA-412
Fort Collins City of		WSCC	EIA-412
Fort Morgan City of		WSCC	EIA-412
Fort Payne Improvement Auth		SERC	EIA-412
Fort Pierce Utilities Auth		SERC	EIA-412
Frankfort City of		ECAR	EIA-412
Frankfort City of	Kentucky	ECAR	EIA-412
Freeport Village of Inc		NPCC	EIA-412
Fremont City of	Nebraska	MAPP	EIA-412
Gaffney City of	South Carolina	SERC	EIA-412
Gainesville Regional Utilities		SERC	EIA-412
Gallatin City of		SERC	EIA-412
Gallup City of		WSCC	EIA-412
Garden City City of		SPP	EIA-412
Garland City of		ERCOT	EIA-412
Gastonia City of		SERC	EIA-412
Geneva City of		MAIN	EIA-412
Georgetown City of		ERCOT	EIA-412
Gillette City of		WSCC	EIA-412
Glendale City of		WSCC	EIA-412
Grand Haven City of		ECAR	EIA-412
Grand Island City of		MAPP	EIA-412
Greeneville City of		SERC	EIA-412
Greenfield City of		ECAR	EIA-412
Greenville Electric Util Sys	Texas	ERCOT	EIA-412
	North Carolina	SERC	EIA-412
Greenville Utilities Comm	South Carolina	SERC	EIA-412

Table B4. Municipal Utilities, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
reenwood Utilities Comm	Mississippi	SPP	EIA-412
reer Comm of Public Works		SERC	EIA-412
riffin City of		SERC	EIA-412
iroton City of		NPCC	EIA-412
untersville Electric Board		SERC	EIA-412
lagerstown City of		ECAR	EIA-412
lamilton City of		ECAR	EIA-412 EIA-412
Iannibal City of		MAIN	EIA-412
arriman City of		SERC	EIA-412
larrisonburg City of		SERC	EIA-412
astings City of		MAPP	EIA-412
lenderson City Utility Comm		ECAR	EIA-412
ligh Point Town of		SERC	EIA-412
fillsdale Board of Public Wks		ECAR	EIA-412
lingham City of		NPCC	EIA-412
folland City of	Michigan	ECAR	EIA-412
folly Springs City of	Mississippi	SERC	EIA-412
olyoke City of		NPCC	EIA-412
omestead City of		SERC	EIA-412
ope City of		SPP	EIA-412
opkinsville City of		SERC	EIA-412
udson Town of		NPCC	EIA-412 EIA-412
umboldt City of		SERC	EIA-412 EIA-412
untsville City of		SERC	EIA-412
utchinson Utilities Comm		MAPP	EIA-412
aho Falls City of		WSCC	EIA-412
linois Municipal Elec Agency		MAIN	EIA-412
dependence City of		SPP	EIA-412
termountain Power Agency		WSCC	EIA-412
ckson City of	Tennessee	SERC	EIA-412
cksonville Beach City of	Florida	SERC	EIA-412
cksonville Electric Auth	Florida	SERC	EIA-412
mestown City of		NPCC	EIA-412
sper City of		SPP	EIA-412
sper City of		ECAR	EIA-412
fferson City of		MAIN	EIA-412
hnson City City of		SERC	EIA-412
		SPP	EIA-412 EIA-412
onesboro City of			
ansas City City of		SPP	EIA-412
aukauna City of		MAIN	EIA-412
ennett City of		SPP	EIA-412
errville Public Utility Board		ERCOT	EIA-412
etchikan City of		ASCC	EIA-412
ey West City of		SERC	EIA-412
inston City of	North Carolina	SERC	EIA-412
irkwood City of	Missouri	MAIN	EIA-412
issimmee Utility Authority	Florida	SERC	EIA-412
noxville Utilities Board	Tennessee	SERC	EIA-412
a Grange City of	Georgia	SERC	EIA-412
afayette City of		SPP	EIA-412
ske Placid Village Inc		NPCC	EIA-412
ike Worth City of		SERC	EIA-412
ikeland City of		SERC	EIA-412
insdale Borough of		MAAC	EIA-412
nsing City of		ECAR	EIA-412 EIA-412
ussen Municipal Utility Dist	California	WSCC	EIA-412 EIA-412
urinburg City of	North Carolina	SERC	EIA-412
wrenceburg City of		SERC	EIA-412
wrenceville City of		SERC	EIA-412
Follette City of		SERC	EIA-412
banon City of		ECAR	EIA-412
banon City of		SERC	EIA-412
banon City of		SPP	EIA-412
esburg City of	Florida	SERC	EIA-412
noir City City of	Tennessee	SERC	EIA-412
wisburg City of	Tennessee	SERC	EIA-412
xington City of		SERC	EIA-412
exington City of		SERC	EIA-412
ncoln Electric System		MAPP	EIA-412
ttleton Town of		NPCC	EIA-412
odi City of		WSCC	EIA-412
ogan City of		WSCC	EIA-412
ogansport City of		ECAR	EIA-412
ongmont City of		WSCC	EIA-412
os Alamos County		WSCC	EIA-412
os Angeles City of	California	WSCC	EIA-412

Table B4. Municipal Utilities, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Loudon Utilities Board	Tennessee	SERC	EIA-412
Loveland City of		WSCC	EIA-412
Lubbock City of		SPP	EIA-412
Lumberton City of		SERC	EIA-412
Madison Borough		MAAC	EIA-412
Madisonville Municipal Utils		ECAR	EIA-412
Manassas City of	Virginia	SERC	EIA-412
Manitowoc Public Utilities	Wisconsin	MAIN	EIA-412
Mansfield Town of	Massachusetts	NPCC	EIA-412
Marietta City of	Georgia	SERC	EIA-412
Marquette City of		MAIN	EIA-412
Marshall City of		MAPP	EIA-412
Marshall City of		SPP	EIA-412
Marshfield City of		MAIN	EIA-412
Martinsville City of	Virginia	ECAR	EIA-412
Maryville Utilities		SERC	EIA-412
Massena Town of	New York	NPCC	EIA-412
McMinnville City of		WSCC	EIA-412
McMinnville Electric System	Tennessee	SERC	EIA-412
McPherson City of	Kansas	SPP	EIA-412
Memphis City of		SERC	EIA-412
Menasha City of		MAIN	EIA-412
Mesa City of		WSCC	EIA-412
Metropolitan Water District		WSCC	EIA-412
Miami City of		SPP	EIA-412
Middleborough Town of		NPCC	EIA-412
Milan City of		SERC	EIA-412
Milford City of		MAAC	EIA-412
Mishawaka City of		ECAR	EIA-412
Monett City of	Missouri	SPP	EIA-412
Monroe City of		SERC	EIA-412
Moorhead City of		MAPP	EIA-412
Morgan City City of		SPP	EIA-412
Morganton City of		SERC	EIA-412
Morristown City of	Tennessee	SERC	EIA-412
Moultrie City of	Georgia	SERC	EIA-412
Municipal Energy Agency of MS		SPP	EIA-412
Murfreesboro City of		SERC	EIA-412
Murray City of		WSCC	EIA-412
Murray City of		SERC	EIA-412
Muscatine City of		MAPP	EIA-412
Naperville City of		MAIN	EIA-412
Napoleon City of		ECAR	EIA-412
Nashville Electric Service		SERC	EIA-412
Natchitoches City of		SPP	EIA-412
New Albany City of		SERC	EIA-412
New Bern City of		SERC	EIA-412
New Braunfels City of		ERCOT	EIA-412
New London Electric&Water Util		MAIN	EIA-412
New Smyrna Beach Utils Comm		SERC	EIA-412
New Ulm Public Utilities Comm		MAPP	EIA-412
Newark City of		MAAC	EIA-412
Newberry City of		SERC	EIA-412
Newport City of		SERC	EIA-412
Niles City of		ECAR NBCC	EIA-412
North Attleborough Town of	Massachusetts	NPCC	EIA-412
North Carolina Eastern M P A		SERC	EIA-412
North Carolina Mun Power Agny		SERC	EIA-412
North Little Rock City of		SPP	EIA-412
North Platte City of		MAPP NBCC	EIA-412
Norwich City of		NPCC NPCC	EIA-412
Norwood City of		NPCC SERC	EIA-412
Oak Ridge City of		SERC	EIA-412
Ocala City of		SERC MAIN	EIA-412 EIA-412
Oconomowoc City of		MAIN SERC	
Okolona City of		SERC SERC	RUS-7 EIA-412
			EIA-412 EIA-412
Orangeburg City of		SERC SERC	
		SERC ECAR	EIA-412
Orrville City of			EIA-412
Osceola City of		SPP MADD	EIA-412 EIA-412
Owarshore City of		MAPP ECAP	
Owensboro City of		ECAR ECAR	EIA-412
Paducah City of		ECAR ECAR	EIA-412
EARDESVILLE VIIV OI	Ohio	ECAR	EIA-412
Palo Alto City of	California	WSCC	EIA-412

Table B4. Municipal Utilities, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Paragould Light & Water Comm	Arkansas	SPP	EIA-412
Paris City of	Tennessee	SERC	EIA-412
Pasadena City of	California	WSCC	EIA-412
Peabody City of	Massachusetts	NPCC	EIA-412
Pella City of	Iowa	MAPP	EIA-412
Peru City of	Indiana	ECAR	EIA-412
Piedmont Municipal Power Agny	South Carolina	SERC	EIA-412
Pierre City of	South Dakota	MAPP	EIA-412
Piqua City of	Ohio	ECAR	EIA-412
Plattsburgh City of	New York	NPCC	EIA-412
Plymouth City of	Wisconsin	MAIN	EIA-412
Ponca City City of	Oklahoma	SPP	EIA-412
Poplar Bluff City of	Missouri	SPP	EIA-412
Port Angeles City of	Washington	WSCC	EIA-412
rovo City Corp	Utah	WSCC	EIA-412
ulaski City of	Tennessee	SERC	EIA-412
Quincy City of	Florida	SERC	EIA-412
Radford City of	Virginia	ECAR	EIA-412
Reading Town of	Massachusetts	NPCC	EIA-412
Redding City of	California	WSCC	EIA-412
Reedsburg Utility Comm	Wisconsin	MAPP	EIA-412
Reedy Creek Improvement Dist	Florida	SERC	EIA-412
Richland City of	Washington	WSCC	EIA-412
Richmond City of	Indiana	ECAR	EIA-412
Ripley City of	Tennessee	SERC	EIA-412
Riverside City of	California	WSCC	EIA-412
Rochelle Municipal Utilities	Illinois	MAIN	EIA-412
Rochester Public Utilities	Minnesota	MAPP	EIA-412
Rock Hill City of	South Carolina	SERC	EIA-412
Rockville Centre Village of	New York	NPCC	EIA-412
Rockwood City of	Tennessee	SERC	EIA-412
Rocky Mount City of	North Carolina	SERC	EIA-412
Rolla City of	Missouri	SPP	EIA-412
Roseville City of	California	WSCC	EIA-412
Ruston City of	Louisiana	SPP	EIA-412
Salem City of	Virginia	ECAR	EIA-412
San Antonio Public Service Bd	Texas	ERCOT	EIA-412
San Francisco City & County of	California	WSCC	EIA-412
San Marcos City of	Texas	ERCOT	EIA-412
Santa Clara City of	California	WSCC	EIA-412
Scottsboro City of	Alabama Indiana	SERC	EIA-412 EIA-412
Scottsburg City of	Washington	ECAR WSCC	EIA-412 EIA-412
Seguin City of	Texas	ERCOT	EIA-412 EIA-412
Seneca City of	South Carolina	SERC	EIA-412 EIA-412
Shakopee Public Utilities Comm	Minnesota	MAPP	EIA-412 EIA-412
Shawano Municipal Utilities	Wisconsin	MAIN	EIA-412
Sheboygan Falls City of	Wisconsin	MAIN	EIA-412
Sheffield Utilities	Alabama	SERC	EIA-412
Shelby City of	North Carolina	SERC	EIA-412
Shelbyville City of	Tennessee	SERC	EIA-412
Shrewsbury Town of	Massachusetts	NPCC	EIA-412
Sikeston City of	Missouri	SPP	EIA-412
Siloam Springs City of	Arkansas	SPP	EIA-412
Solvay Village of	New York	NPCC	EIA-412
Springfield City of	Illinois	MAIN	EIA-412
pringfield City of	Tennessee	SERC	EIA-412
pringfield City of	Missouri	SPP	EIA-412
pringfield City of	Oregon	WSCC	EIA-412
St Charles City of	Illinois	MAIN	EIA-412
St Cloud City of	Florida	SERC	EIA-412
St George City of	Utah	WSCC	EIA-412
St Marys City of	Ohio	ECAR	EIA-412
Starkville City of	Mississippi	SERC	EIA-412
Statesville City of	North Carolina	SERC	EIA-412
Stillwater Utilities Authority	Oklahoma	SPP	EIA-412
Sturgeon Bay City of	Wisconsin	MAIN	EIA-412
Sturgis City of	Michigan	ECAR	EIA-412
Sun Prairie Water & Light Comm	Wisconsin	MAIN	EIA-412
Sylacauga Utilities Board	Alabama	SERC	EIA-412
Tacoma City of	Washington	WSCC	EIA-412
Γallahassee City of	Florida	SERC	EIA-412
Γarboro Town of	North Carolina	SERC	EIA-412
Γaunton City of	Massachusetts	NPCC	EIA-412
Terrebonne Parish Consol Gov '	Louisiana	SPP	EIA-412
Texas Municipal Power Agency	Texas	ERCOT	EIA-412

Table B4. Municipal Utilities, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Thomasville City of	Georgia	SERC	EIA-412
Traverse City City of	Michigan	ECAR	EIA-412
Troy City of	Alabama	SERC	EIA-412
Tullahoma Board of Pub Utils	Tennessee	SERC	EIA-412
Tupelo City of	Mississippi	SERC	EIA-412
Furlock Irrigation District	California	WSCC	EIA-412
Union City City of	Tennessee	SERC	EIA-412
Vernon City of	California	WSCC	EIA-412
Vero Beach City of	Florida	SERC	EIA-412
Vineland City of	New Jersey	MAAC	EIA-412
Wadsworth City of	Ohio	ECAR	EIA-412
Wakefield Town of	Massachusetts	NPCC	EIA-412
Wallingford Town of	Connecticut	NPCC	EIA-412
Wapakoneta City of	Ohio	ECAR	EIA-412
Washington City of	Indiana	ECAR	EIA-412
Washington City of	North Carolina	SERC	EIA-412
Watertown Municipal Utilities	South Dakota	MAPP	EIA-412
Weakley County Mun Elec Sys	Tennessee	SERC	EIA-412
Weatherford Mun Utility System	Texas	ERCOT	EIA-412
Wellesley Town of	Massachusetts	NPCC	EIA-412
West Memphis City of	Arkansas	SPP	EIA-412
West Plains City of	Missouri	SPP	EIA-412
Western Minnesota Mun Pwr Agny	Minnesota	MAPP	EIA-412
Westerville City of	Ohio	ECAR	EIA-412
Westfield City of	Massachusetts	NPCC	EIA-412
Willmar Municipal Utils Comm	Minnesota	MAPP	EIA-412
Wilson City of	North Carolina	SERC	EIA-412
Winfield City of	Kansas	SPP	EIA-412
Wisconsin Public Power Inc Sys	Wisconsin	MAIN	EIA-412
Wisconsin Rapids W W & L Comm	Wisconsin	MAPP	EIA-412
Worthington City of	Minnesota	MAPP	EIA-412
Wyandotte Municipal Serv Comm	Michigan	ECAR	EIA-412
Zeeland City of	Michigan	ECAR	EIA-412

¹ The State in which the municipality is located.

The principal North American Electric Reliability Council region in which the utility operates. See glossary for a list of all regions.

³ Source of data for this publication

Sources: •Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities." •Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

Table B5. Cooperative Borrowers, 1996

Utility	State ¹	NERC Region ²	Survey Form ³
A & N Electric Coop	Virginia	MAAC	RUS-7
Adams County Coop Electric Co	Iowa	MAPP	RUS-7
Adams Electric Coop Inc	Pennsylvania	MAAC	RUS-7
Adams Electrical Coop	Illinois	MAIN	RUS-7
Adams Rural Electric Coop Inc	Ohio	ECAR	RUS-7
Adams-Columbia Electric Coop	Wisconsin	MAIN	RUS-7
Agralite Coop	Minnesota	MAPP	RUS-7
Aiken Electric Coop Inc	South Carolina	SERC	RUS-7
Alabama Electric Coop Inc	Alabama	SERC	RUS-12
Alaska Electric G & T Coop Inc	Alaska	ASCC	RUS-12
Albemarle Electric Member Corp	North Carolina	SERC	RUS-7
Alfalfa Electric Coop Inc		SPP	RUS-7
	Oklahoma		
Alger-Delta Coop Electric Assn	Michigan	ECAR	RUS-7
Allamakee-Clayton El Coop Inc	Iowa	MAPP	RUS-7
Allegheny Electric Coop Inc	Pennsylvania	MAAC	RUS-12
Itamaha Electric Member Corp	Georgia	SERC	RUS-7
amicalola Electric Member Corp	Georgia	SERC	RUS-7
Anza Electric Coop Inc	California	WSCC	RUS-7
ppalachian Electric Coop	Tennessee	SERC	RUS-7
rab Electric Coop Inc	Alabama	SERC	RUS-7
rizona Electric Pwr Coop Inc	Arizona	WSCC	RUS-12
Ark Valley Elec Coop Assn Inc	Kansas	SPP	RUS-7
Arkansas Electric Coop Corp	Arkansas	SPP	RUS-12
Arkansas Valley Elec Coop Corp	Arkansas	SPP	RUS-7
Arrowhead Electric Coop Inc	Minnesota	MAPP	RUS-7
Ashley Chicot Elec Coop Inc	Arkansas	SPP	RUS-7
Associated Electric Coop Inc	Missouri	SPP	RUS-12
Atchison-Holt Electric Coop	Missouri	SPP	RUS-7
3-K Electric Coop Inc	Texas	ERCOT	RUS-7
Bailey County Elec Coop Assn	Texas	SPP	RUS-7
Baker Electric Coop Inc	North Dakota	MAPP	RUS-7
Baldwin County El Member Corp	Alabama	SERC	RUS-7
, ,			
Barry Electric Coop	Missouri	MAIN	RUS-7
Bartlett Electric Coop Inc	Texas	ERCOT	RUS-7
Barton County Elec Coop Inc	Missouri	SPP	RUS-7
Basin Electric Power Coop	North Dakota	WSCC	RUS-12
Bayfield Electric Coop Inc	Wisconsin	MAPP	RUS-7
Beartooth Electric Coop Inc	Montana	WSCC	RUS-7
Bedford Rural Elec Coop Inc	Pennsylvania	MAAC	RUS-7
Belfalls Electric Coop Inc	Texas	ERCOT	RUS-7
Beltrami Electric Coop Inc	Minnesota	MAPP	RUS-7
Benton Rural Electric Assn	Washington	WSCC	RUS-7
Berkeley Electric Coop Inc	South Carolina	SERC	RUS-7
Big Flat Electric Coop Inc	Montana	WSCC	RUS-7
Big Horn County Elec Coop Inc	Montana	WSCC	RUS-7
Big Horn Rural Electric Co	Wyoming	WSCC	RUS-7
Big Rivers Electric Corp	Kentucky	ECAR	RUS-12
Big Sandy Rural Elec Coop Corp	Kentucky	ECAR	RUS-7
Blachly-Lane Cnty Coop El Assn	Oregon	WSCC	RUS-7
	South Dakota	MAPP	
Black Hills Electric Coop Inc	Missouri	MAIN	RUS-7 RUS-7
Black River Electric Coop Inc	South Carolina	SERC	RUS-7
Black Warrior Elec Member Corp	Alabama	SERC	RUS-7
Blue Earth-Nicollet-Faribault	Minnesota	MAPP	RUS-7
Blue Grass Rural El Coop Corp	Kentucky	ECAR	RUS-7
Blue Ridge Elec Member Corp	North Carolina	SERC	RUS-7
Blue Ridge Electric Coop Inc	South Carolina	SERC	RUS-7
Blue Ridge Mountain E M C	Georgia	SERC	RUS-7
Son Homme Yankton El Assn Inc	South Dakota	MAPP	RUS-7
Boone Electric Coop	Missouri	MAIN	RUS-7
Sowie-Cass Electric Coop Inc	Texas	SPP	RUS-7
Brazos Electric Power Coop Inc	Texas	ERCOT	RUS-12
Bridger Valley Elec Assn Inc	Wyoming	WSCC	RUS-7
Froad River Electric Coop Inc	South Carolina	SERC	RUS-7
rown County Rural Elec Assn	Minnesota	MAPP	RUS-7
Brown-Atchison E C A Inc	Kansas	SPP	RUS-7
runswick Electric Member Corp	North Carolina	SERC	RUS-7
Buckeye Power Inc	Ohio	ECAR	RUS-12
	Ohio	ECAR ECAR	RUS-7
Buckeye Rural Elec Coop Inc			
Burke-Divide Electric Coop Inc	North Dakota	MAPP	RUS-7
Butler County Rural Elec Coop	Iowa	MAPP	RUS-7
Butler Rural El Coop Assn Inc	Kansas	SPP	RUS-7
Butler Rural Electric Coop Inc	Ohio	ECAR	RUS-7
Butte Electric Coop Inc	South Dakota	MAPP	RUS-7
BARC Electric Coop Inc	Virginia	SERC	RUS-7
		SPP	RUS-7

Table B5. Cooperative Borrowers, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
C & W Rural Elec Coop Assn Inc	Kansas	SPP	RUS-7
Caddo Electric Coop Inc	Oklahoma	SPP	RUS-7
Cajun Electric Power Coop Inc	Louisiana	SPP	RUS-12
Calhoun County Elec Coop Assn	Iowa	MAPP	RUS-7
Callaway Electric Coop	Missouri	SPP	RUS-7
Cam Wal Electric Coop Inc	South Dakota	MAPP	RUS-7
Canadian Valley Elec Coop Inc	Oklahoma	SPP	RUS-7
Caney Valley El Coop Assn Inc	Tennessee Kansas	SERC SPP	RUS-7 RUS-7
Canoochee Electric Member Corp	Georgia	SERC	RUS-7
Cape Hatteras Elec Member Corp	North Carolina	SERC	RUS-7
Capital Electric Coop Inc	North Dakota	MAPP	RUS-7
Carbon Power & Light Inc	Wyoming	WSCC	RUS-7
Carlton County Coop Power Assn	Minnesota	MAPP	RUS-7
Carroll Electric Coop Corp	Arkansas	SPP	RUS-7
Carroll Electric Coop Inc	Ohio	ECAR	RUS-7
Carroll Electric Member Corp	Georgia	SERC	RUS-7
Carteret-Craven El Member Corp	North Carolina	SERC	RUS-7
Cass County Electric Coop Inc	North Dakota	MAPP	RUS-7
Cavalier Rural Elec Coop Inc	North Dakota	MAPP	RUS-7
Cedar Valley Electric Coop	Iowa	MAPP	RUS-7
Central Alabama Electric Coop Central Electric Coop Inc	Alabama Pennsylvania	SERC MAAC	RUS-7 RUS-7
Central Electric Coop Inc	North Carolina	SERC	RUS-7 RUS-7
Central Electric Power Assn	Mississippi	SERC	RUS-7
Central Electric Power Coop	Missouri	MAIN	RUS-12
Central Electric Pwr Coop Inc	South Carolina	SERC	RUS-12
Central Florida Elec Coop Inc	Florida	SERC	RUS-7
Central Georgia El Member Corp	Georgia	SERC	RUS-7
Central Iowa Power Coop	Iowa	MAPP	RUS-12
Central Missouri Elec Coop Inc	Missouri	MAIN	RUS-7
Central New Mexico El Coop Inc	New Mexico	WSCC	RUS-7
Central Power Elec Coop Inc	North Dakota	MAPP	RUS-12
Central Rural Electric Coop	Oklahoma	SPP ERCOT	RUS-7
Central Valley Flor Coop Inc	Texas New Mexico	SPP	RUS-7 RUS-7
Central Valley Elec Coop Inc	Virginia	SERC	RUS-7 RUS-7
Central Wisconsin Elec Coop	Wisconsin	MAIN	RUS-7
Chariton Valley Elec Coop Inc	Iowa	MAPP	RUS-7
Charles Mix Electric Assn Inc	South Dakota	MAPP	RUS-7
Cherokee County Elec Coop Assn	Texas	ERCOT	RUS-7
Cherokee Electric Coop	Alabama	SERC	RUS-7
Cherry-Todd Electric Coop Inc	South Dakota	MAPP	RUS-7
Cherryland Electric Coop Inc	Michigan	ECAR	RUS-7
Chickasaw Electric Coop Inc	Tennessee	SERC	RUS-7
Chippewa Valley Electric Coop	Wisconsin	MAPP	RUS-7
Choctaw Electric Coop Inc	Oklahoma	SPP	RUS-7
Choctawhatche Elec Coop Inc	Florida Maryland	SERC MAAC	RUS-7 RUS-7
Cimarron Electric Coop	Oklahoma	SPP	RUS-7
Citizens Electric Corp	Missouri	SPP	RUS-7
Claiborne Electric Coop Inc	Louisiana	SPP	RUS-7
Clark Electric Coop	Wisconsin	MAPP	RUS-7
Clark Rural Electric Coop Corp	Kentucky	ECAR	RUS-7
Clarke Electric Coop Inc	Iowa	MAPP	RUS-7
Clarke-Washington E M C	Alabama	SERC	RUS-7
Claverack Rural Elec Coop Inc	Pennsylvania	MAAC	RUS-7
Clay County Electric Coop Corp	Arkansas	SPP	RUS-7
Clay Electric Coop Inc	Illinois	MAIN	RUS-7
Clay Electric Coop Inc	Florida	SERC	RUS-7
Clay-Union Electric Corp	South Dakota	MAPP	RUS-7
Clearwater Power Co	Idaho Minnasata	WSCC MADD	RUS-7
Clearwater-Polk Elec Coop Inc	Minnesota Illinois	MAPP MAIN	RUS-7 RUS-7
Cloverland Electric Coop	Michigan	ECAR	RUS-7
Coahoma Electric Power Assn	Mississippi	SPP	RUS-7
Coast Electric Power Assn	Mississippi	SERC	RUS-7
Coastal Electric Coop Inc	South Carolina	SERC	RUS-7
Coastal Electric Member Corp	Georgia	SERC	RUS-7
Codington-Clark Elec Coop Inc	South Dakota	MAPP	RUS-7
Coleman County Elec Coop Inc	Texas	ERCOT	RUS-7
Coles-Moultrie Electric Coop	Illinois	MAIN	RUS-7
Colquitt Electric Members Corp	Georgia	SERC	RUS-7
Columbia Basin Elec Coop Inc	Oregon	WSCC	RUS-7
Columbia Power Coop Assn Inc	Oregon Washington	WSCC	RUS-7
Columbia Rural Elec Assn Inc	Washington	WSCC	RUS-7

Table B5. Cooperative Borrowers, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Columbus Electric Coop Inc	New Mexico	WSCC	RUS-7
Comanche County Elec Coop Assn	Texas	ERCOT	RUS-7
Community Electric Coop	Virginia	SERC	RUS-7
oncordia Electric Coop Inc	Louisiana	SPP	RUS-7
onsolidated Electric Coop	Missouri	SPP	RUS-7
onsumers Power Inc	Oregon	WSCC	RUS-7
ontinental Divide El Coop Inc	New Mexico	WSCC	RUS-7
ookson Hills Elec Coop Inc	Oklahoma	SPP	RUS-7
loop L & P Assn of Lake County	Minnesota	MAPP	RUS-7
loop Power Assn	Minnesota	MAPP	RUS-12
loos-Curry Electric Coop Inc	Oregon	WSCC	RUS-7
oosa Valley Electric Coop Inc	Alabama	SERC	RUS-7
opper Valley Elec Assn Inc	Alaska	ASCC	RUS-7
orn Belt Power Coop	Iowa	MAPP	RUS-12
Cotton Electric Coop Inc	Oklahoma	SPP	RUS-7
Covington Electric Coop Inc	Alabama	SERC	RUS-7
Coweta-Fayette El Member Corp	Georgia	SERC	RUS-7
Craig-Botetourt Electric Coop	Virginia	ECAR	RUS-7
raighead Electric Coop Corp	Arkansas	SPP	RUS-7
rawford Electric Coop	Wisconsin	MAPP	RUS-7
rawford Electric Coop Inc	Missouri	SPP	RUS-7
Crescent Electric Member Corp	North Carolina	SERC	RUS-7
Crow Wing Coop Power&Light Co	Minnesota	MAPP	RUS-7
Cullman Electric Coop Inc	Alabama	SERC	RUS-7
Cumberland Elec Member Corp	Tennessee	SERC	RUS-7
Cumberland Valley Rural E C C	Kentucky	SERC	RUS-7
CMS Electric Coop Inc	Kansas	SPP	RUS-7
CO-MO Electric Coop Inc	Missouri	MAIN	RUS-7
OS & O Rural E C A Inc	Kansas	SPP	RUS-7
Dairyland Electric Coop Inc	Minnesota	MAPP	RUS-7
Dairyland Power Coop	Wisconsin	MAPP	RUS-12
Oakota Energy Coop Inc	South Dakota	MAPP	RUS-7
Darke Rural Electric Coop Inc	Ohio	ECAR	RUS-7
Davidson Electric Member Corp	North Carolina	SERC	RUS-7
Daviess Martin County R E M C	Indiana	ECAR	RUS-7
Decatur County Rural E M C	Indiana	ECAR	RUS-7
Deep East Texas Elec Coop Inc	Texas	ERCOT	RUS-7
Delaware County Elec Coop Inc	New York	NPCC	RUS-7
Delaware Electric Coop Inc	Delaware	MAAC	RUS-7
Delta Montrose Electric Assn	Colorado	WSCC	RUS-7
Dewitt Electric Coop Inc	Texas	ERCOT	RUS-7
Dixie Electric Coop	Alabama	SERC	RUS-7
Dixie Electric Membership Corp	Louisiana	SPP	RUS-7
Dixie Electric Power Assn	Mississippi	SERC	RUS-7
Ooniphan Elec Coop Assn Inc	Kansas	SPP	RUS-7
Oouglas Electric Coop Inc	Oregon	WSCC	RUS-7
Oouglas Electric Coop Inc	South Dakota	MAPP	RUS-7
Oubois Rural Electric Coop Inc	Indiana	ECAR	RUS-7
Ouck River Elec Member Corp	Tennessee	SERC	RUS-7
Ouncan Valley Elec Coop Inc	Arizona	WSCC	RUS-7
Ounn County Electric Coop	Wisconsin	MAPP	RUS-7
East Central Electric Assn	Minnesota	MAPP	RUS-7
ast Central Okla El Coop Inc	Oklahoma	SPP	RUS-7
Cast Kentucky Power Coop Inc	Kentucky	ECAR	RUS-12
ast Mississippi Elec Pwr Assn	Mississippi	SERC	RUS-7
ast River Elec Power Coop Inc	South Dakota	MAPP	RUS-12
East-Central Iowa Rrl El Coop	Iowa	MAPP	RUS-7
Eastern Illini Electric Coop	Illinois	MAIN	RUS-7
Castern Iowa Light&Power Coop	Iowa	MAPP	RUS-7
astern Maine Electric Coop	Maine	NPCC	RUS-7
dgecombe-Martin County E M C	North Carolina	SERC	RUS-7
disto Electric Coop Inc	South Carolina	SERC	RUS-7
gyptian Electric Coop Assn	Illinois	MAIN	RUS-7
Impire Electric Assn Inc	Colorado	WSCC	RUS-7
rath County Elec Coop Assn	Texas	ERCOT	RUS-7
scambia River Elec Coop Inc	Florida	SERC	RUS-7
Excelsior Electric Member Corp	Georgia	SERC	RUS-7
Pairfield Electric Coop Inc	South Carolina	SERC	RUS-7
Fannin County Electric Coop	Texas	ERCOT	RUS-7
Farmers Electric Coop Corp	Arkansas	SPP	RUS-7
Farmers Electric Coop Inc	Iowa	MAPP	RUS-7
Farmers Mutual Electric Co	Illinois	MAIN	RUS-7
Farmers Rural Elec Coop Corp	Kentucky	ECAR	RUS-7
Farmers ' Electric Coop Inc	Missouri	SPP	RUS-7
Farmers 'Electric Coop Inc	New Mexico	WSCC	RUS-7
Federated Rural Electric Assn	Minnesota	MAPP	RUS-7

Table B5. Cooperative Borrowers, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Fergus Electric Coop Inc	Montana	WSCC	RUS-7
Firelands Electric Coop Inc	Ohio	ECAR	RUS-7
First Electric Coop Corp	Arkansas	SPP	RUS-7
Fleming-Mason Rural E C C	Kentucky	ECAR	RUS-7
Flint Electric Membership Corp	Georgia	SERC	RUS-7
Flint Hills Rural E C A Inc	Kansas	SPP	RUS-7
Forked Deer Electric Coop Inc	Tennessee	SERC	RUS-7
Fort Loudoun Electric Coop	Tennessee	SERC	RUS-7
Four County Elec Member Corp	North Carolina	SERC	RUS-7
Fox Creek Rural Elec Coop Corp	Kentucky	ECAR	RUS-7
Fox Islands Electric Coop Inc	Maine	NPCC	RUS-7
Franklin Electric Coop	Alabama	SERC	RUS-7
Franklin Rural Electric Coop	Iowa	MAPP	RUS-7
Freeborn-Mower Electric Coop	Minnesota	MAPP	RUS-7
French Broad Elec Member Corp Frontier Power Co	North Carolina Ohio	SERC ECAR	RUS-7 RUS-7
Fruit Belt Electric Coop	Michigan	ECAR	RUS-7
Fulton County Rural E M C	Indiana	ECAR	RUS-7
FEM Electric Assn Inc	South Dakota	MAPP	RUS-7
Garkane Power Assn Inc	Utah	WSCC	RUS-7
Garland Light & Power Co	Wyoming	WSCC	RUS-7
Gascosage Electric Coop	Missouri	MAIN	RUS-7
Gate City Electric Coop Inc	Texas	ERCOT	RUS-7
Gibson Electric Members Corp	Tennessee	SERC	RUS-7
Glades Electric Coop Inc	Florida	SERC	RUS-7
Glidden Rural Electric Coop	Iowa	MAPP	RUS-7
Golden Valley Elec Assn Inc	Alaska	ASCC	RUS-7
Goldenwest Electric Coop Inc	Montana	WSCC	RUS-7
Goodhue County Coop Elec Assn	Minnesota	MAPP	RUS-7
Grady County Elec Member Corp	Georgia	SERC	RUS-7
Grand Electric Coop Inc	South Dakota	MAPP	RUS-7
Grand Valley Rrl Pwr Line Inc	Colorado	WSCC	RUS-7
Grant-Lafayette Electric Coop	Wisconsin	MAPP	RUS-7
Grayson Rural Elec Coop Corp	Kentucky	ECAR	RUS-7
Grayson-Collin Elec Coop Inc	Texas	ERCOT	RUS-7
Green River Electric Corp	Kentucky	ECAR	RUS-7
Greenbelt Electric Coop Inc	Texas	SPP	RUS-7
GreyStone Power Corp	Georgia	SERC	RUS-7
Grundy County Rural Elec Coop	Iowa	MAPP	RUS-7
Grundy Electric Coop Inc	Missouri	SPP	RUS-7
Guernsey-Muskingum El Coop Inc	Ohio	ECAR	RUS-7
Gulf Coast Electric Coop Inc	Florida Iowa	SERC	RUS-7 RUS-7
Guthrie County Rural E C A	South Dakota	MAPP MAPP	RUS-7 RUS-7
H-D Electric Coop Inc Habersham Electric Member Corp	Georgia	SERC	RUS-7 RUS-7
Halifax Electric Member Corp	North Carolina	SERC	RUS-7
Hamilton County Elec Coop Assn	Texas	ERCOT	RUS-7
Hancock County Rural Elec Coop	Iowa	MAPP	RUS-7
Hancock-Wood Electric Coop Inc	Ohio	ECAR	RUS-7
Harkers Island El Member Corp	North Carolina	SERC	RUS-7
Harmon Electric Assn Inc.	Oklahoma	SPP	RUS-7
Harney Electric Coop Inc	Oregon	WSCC	RUS-7
Harrison County Rrl Elec Coop	Iowa	MAPP	RUS-7
Harrison County Rural E C C	Kentucky	ECAR	RUS-7
Harrison County Rural E M C	Indiana	ECAR	RUS-7
Harrison Rural Elec Assn Inc	West Virginia	ECAR	RUS-7
Hart Electric Member Corp	Georgia	SERC	RUS-7
Hawkeye Tri-County El Coop Inc	Iowa	MAPP	RUS-7
Haywood Electric Member Corp	North Carolina	SERC	RUS-7
Head of Lakes Electric Coop	Wisconsin	MAPP	RUS-7
Henderson-Union Elec Coop Corp	Kentucky	ECAR	RUS-7
Hickman-Fulton Counties RECC	Kentucky	ECAR	RUS-7
Highline Electric Assn	Colorado	WSCC	RUS-7
Hill County Electric Coop Inc	Montana	WSCC	RUS-7
Holmes-Wayne Electric Coop Inc	Ohio	ECAR	RUS-7
Holston Electric Coop Inc	Tennessee	SERC	RUS-7
Holy Cross Electric Assn Inc	Colorado	WSCC	RUS-7
Homer Electric Assn Inc	Alaska	ASCC	RUS-7
Hoosier Energy R E C Inc	Indiana	ECAR	RUS-12
Horry Electric Coop Inc	South Carolina Wyoming	SERC WSCC	RUS-7
	Wyoming	WSCC ERCOT	RUS-7
Houston County Elec Coop Inc	Texas		RUS-7
Howard Electric Coop	Missouri Missouri	SPP SPP	RUS-7 RUS-7
Humboldt County R E C	Iowa	MAPP	RUS-7 RUS-7
Ida County Rural Electric Coop	Iowa	MAPP	RUS-7
rua County Kurai Electric Coop	iowa	181731 1	KUD-1

Table B5. Cooperative Borrowers, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Idaho Cnty L&P Coop Assn Inc	Idaho	WSCC	RUS-7
Illinois Rural Electric Co	Illinois	MAIN	RUS-7
Indian Electric Coop Inc	Oklahoma	SPP	RUS-7
Inter County Rural E C C	Kentucky	ECAR	RUS-7
Intercounty Electric Assn Inc	South Dakota	MAPP	RUS-7
Intercounty Electric Coop Assn	Missouri	SPP	RUS-7
Iowa Lakes Electric Coop	Iowa	MAPP	RUS-7
Irwin Electric Membership Corp	Georgia	SERC	RUS-7
Itasca-Mantrap Co-op Elec Assn	Minnesota	MAPP	RUS-7
J-A-C Electric Coop Inc	Texas	ERCOT	RUS-7
Jackson County Rural E C C	Kentucky	ECAR	RUS-7
Jackson County Rural E M C	Indiana	ECAR	RUS-7
Jackson Electric Coop Inc	Wisconsin	MAPP	RUS-7
Jackson Electric Coop Inc	Texas	ERCOT	RUS-7
Jackson Electric Member Corp	Georgia	SERC	RUS-7
Jackson Purchase El Coop Corp	Kentucky	ECAR	RUS-7
James Valley Electric Coop Inc	North Dakota	MAPP	RUS-7
Jasper County Rural E M C	Indiana	ECAR	RUS-7
Jasper-Newton Elec Coop Inc	Texas	SPP	RUS-7
Jay County Rural E M C	Indiana	ECAR	RUS-7
Jefferson Davis Elec Coop Inc	Louisiana	SPP	RUS-7
Jefferson Electric Member Corp	Georgia	SERC	RUS-7
Jemez Mountains Elec Coop Inc	New Mexico	WSCC	RUS-7
Jewell-Mitchell Coop Elec Inc	Kansas	SPP	RUS-7
Jo-Carroll Electric Coop Inc	Illinois	MAPP	RUS-7
Joe Wheeler Elec Member Corp	Alabama	SERC	RUS-7
Johnson County Elec Coop Assn	Texas	ERCOT	RUS-7
Johnson County Rural E M C	Indiana	ECAR	RUS-7
Jump River Electric Coop Inc	Wisconsin	MAPP	RUS-7
K C Electric Assn	Colorado	WSCC	RUS-7
Kandiyohi Coop Elec Power Assn	Minnesota	MAPP	RUS-7
Kankakee Valley Rural E M C	Indiana	ECAR	RUS-7
Kansas Electric Power Coop Inc	Kansas	SPP	RUS-12
Karnes Electric Coop Inc	Texas	ERCOT	RUS-7
Kaw Valley Electric Coop Inc	Kansas	SPP	RUS-7
Kay Electric Coop	Oklahoma	SPP	RUS-7
Kimble Electric Coop Inc	Texas	ERCOT	RUS-7
Kingsbury Electric Coop Inc	South Dakota	MAPP	RUS-7
Kit Carson Electric Coop Inc	New Mexico	WSCC	RUS-7
Kiwash Electric Coop Inc	Oklahoma	SPP	RUS-7
Knox County Rural E M C	Indiana Alaska	ECAR	RUS-7 RUS-7
Kodiak Electric Assn Inc	Idaho	ASCC WSCC	RUS-7 RUS-7
KAMO Electric Coop Inc	Oklahoma	SPP	RUS-7 RUS-12
KEM Electric Coop Inc	North Dakota	MAPP	RUS-7
L & O Power Coop	Iowa	MAPP	RUS-12
La Plata Electric Assn Inc	Colorado	WSCC	RUS-7
Laclede Electric Coop Inc	Missouri	SPP	RUS-7
Lagrange County Rural E M C	Indiana	ECAR	RUS-7
Lake Region Coop Elec Assn	Minnesota	MAPP	RUS-7
Lake Region Electric Assn Inc	South Dakota	MAPP	RUS-7
Lake Region Electric Coop Inc	Oklahoma	SPP	RUS-7
Lamar County Elec Coop Assn	Texas	ERCOT	RUS-7
Lamar Electric Membership Corp	Georgia	SERC	RUS-7
Lamb County Electric Coop Inc	Texas	SPP	RUS-7
Lane Electric Coop Inc	Oregon	WSCC	RUS-7
Lane-Scott Electric Coop Inc	Kansas	SPP	RUS-7
Laurens Electric Coop Inc	South Carolina	SERC	RUS-7
LaCreek Electric Assn Inc	South Dakota	MAPP	RUS-7
Lea County Electric Coop Inc	New Mexico	SPP	RUS-7
Leavenworth-Jefferson E C Inc	Kansas	SPP	RUS-7
Lewis County Rural E C A	Missouri	MAIN	RUS-7
Licking Valley Rural E C C	Kentucky	ECAR	RUS-7
Lighthouse Electric Coop Inc	Texas	SPP	RUS-7
Lincoln Electric Coop Inc	Montana	WSCC	RUS-7
Lincoln-Union Electric Co	South Dakota	MAPP	RUS-7
Linn County Rural E C A	Iowa	MAPP	RUS-7
Little Ocmulgee El Member Corp	Georgia	SERC	RUS-7
Little River Electric Coop Inc	South Carolina	SERC	RUS-7
Logan Cnty Coop P&L Assn Inc	Ohio	ECAR	RUS-7
Lorain-Medina R E C Inc	Ohio	ECAR	RUS-7
Lost River Electric Coop Inc	Idaho	WSCC	RUS-7
Lower Yellowstone R E A Inc	Montana	MAPP	RUS-7
Lumbee River Elec Member Corp	North Carolina	SERC	RUS-7
Lynches River Elec Coop Inc	South Carolina	SERC	RUS-7
Lyntegar Electric Coop Inc	Texas	SPP	RUS-7

Table B5. Cooperative Borrowers, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Lyon Rural Electric Coop	Iowa	MAPP	RUS-7
Lyon-Coffey Electric Coop Inc	Kansas	SPP	RUS-7
Lyon-Lincoln Electric Coop Inc	Minnesota	MAPP	RUS-7
M & A Electric Power Coop	Missouri	SPP	RUS-12
M J M Electric Coop Inc	Illinois	MAIN	RUS-7
Macon Electric Coop	Missouri	SPP	RUS-7
Magic Valley Electric Coop Inc	Texas	ERCOT	RUS-7
Magnolia Electric Power Assn	Mississippi	SPP	RUS-7
Maquoketa Valley Rrl Elec Coop	Iowa	MAPP	RUS-7
Marias River Electric Coop Inc	Montana	WSCC	RUS-7
Marion Rural Electric Coop Inc	Ohio	ECAR	RUS-7
Marlboro Electric Coop Inc	South Carolina	SERC	RUS-7
Marshall County Rrl Elec Coop	Iowa	MAPP	RUS-7
Marshall County Rural E M C	Indiana	ECAR	RUS-7
McCone Electric Coop Inc	Montana	WSCC	RUS-7
McCook Electric Coop Inc	South Dakota	MAPP	RUS-7
McCulloch Electric Coop Inc	Texas	ERCOT	RUS-7
McDonough Power Coop	Illinois	MAIN	RUS-7
McKenzie Electric Coop Inc.	North Dakota	MAPP	RUS-7
McLean Electric Coop Inc	North Dakota	MAPP	RUS-7
McLennan County Elec Coop Inc	Texas	ERCOT	RUS-7
McLeod Coop Power Assn	Minnesota Kontucky	MAPP ECAP	RUS-7
Meade County Rural E C C	Kentucky	ECAR SEDC	RUS-7
Mecklenburg Electric Coop Inc	Virginia	SERC	RUS-7
Medina Electric Coop Inc	Texas Minnesota	ERCOT MAPP	RUS-7 RUS-7
Menard Electric Coop	Illinois	MAIN	RUS-7 RUS-7
Meriwether Lewis Electric Coop	Tennessee	SERC	RUS-7 RUS-7
Mid-Carolina Electric Coop Inc	South Carolina	SERC	RUS-7
Mid-Yellowstone Elec Coop Inc	Montana	WSCC	RUS-7
Middle Georgia El Member Corp	Georgia	SERC	RUS-7
Middle Tennessee E M C	Tennessee	SERC	RUS-7
Midland Power Coop	Iowa	MAPP	RUS-7
Midstate Electric Coop Inc	Oregon	WSCC	RUS-7
Midwest Electric Coop Inc	Texas	ERCOT	RUS-7
Midwest Electric Inc	Ohio	ECAR	RUS-7
Midwest Electric Member Corp	Nebraska	MAPP	RUS-7
Mille Lacs Electric Coop	Minnesota	MAPP	RUS-7
Minnesota Valley Coop L&P Assn	Minnesota	MAPP	RUS-7
Minnesota Valley Electric Coop	Minnesota	MAPP	RUS-7
Minnkota Power Coop Inc	North Dakota	MAPP	RUS-12
Mississippi Cnty Elec Coop Inc	Arkansas	SPP	RUS-7
Missoula Electric Coop Inc	Montana	WSCC	RUS-7
Missouri Rural Electric Coop	Missouri	MAIN	RUS-7
Mohave Electric Coop Inc	Arizona	WSCC	RUS-7
Monona County Rural Elec Coop	Iowa	MAPP	RUS-7
Monroe County Elec Coop Inc	Illinois	MAIN	RUS-7
Monroe County Elec Power Assn	Mississippi	SERC	RUS-7
Mor-Gran-Sou Electric Coop Inc	North Dakota	MAPP	RUS-7
Mora-San Miguel Elec Coop Inc	New Mexico	WSCC	RUS-7
Moreau-Grand Electric Coop Inc	South Dakota	MAPP	RUS-7
Morgan County Rural Elec Assn	Colorado Ohio	WSCC ECAR	RUS-7 RUS-7
Morrow Electric Coop Inc	Onio Tennessee	SERC	
Mountain Electric Coop Inc	Colorado	WSCC	RUS-7 RUS-7
Mountain View Elec Assn Inc	Colorado	WSCC	RUS-7 RUS-7
Mountrail-Williams Elec Coop	North Dakota	MAPP	RUS-7
Mt Wheeler Power Inc	North Dakota Nevada	WSCC	RUS-7 RUS-7
N C K Electric Coop Inc	Kansas	SPP	RUS-7
N W Electric Power Coop Inc	Missouri	SPP	RUS-12
National Chemical Corp	Alabama	SERC	RUS-7
Navarro County Elec Coop Inc	Texas	ERCOT	RUS-7
Navopache Electric Coop Inc	Arizona	WSCC	RUS-7
Nebraska Electric G&T Coop Inc	Nebraska	MAPP	RUS-12
Nemaha-Marshall E C A Inc	Kansas	SPP	RUS-7
Nespelem Valley Elec Coop Inc	Washington	WSCC	RUS-7
New Era Electric Coop Inc	Texas	ERCOT	RUS-7
New Hampshire Elec Coop Inc	New Hampshire	NPCC	RUS-7
New-Mac Electric Coop Inc	Missouri	MAIN	RUS-7
Newberry Electric Coop Inc	South Carolina	SERC	RUS-7
Newton County Rural E M C	Indiana	ECAR	RUS-7
Ninnescah Rural E C A Inc	Kansas	SPP	RUS-7
Niobrara Electric Assn Inc	Wyoming	WSCC	RUS-7
Nobles Coop Electric	Minnesota	MAPP	RUS-7
Nodak Electric Coop Inc	North Dakota	MAPP	RUS-7
		SPP	

Table B5. Cooperative Borrowers, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Nolin Rural Electric Coop Corp	Kentucky	ECAR	RUS-7
North Alabama Electric Coop	Alabama	SERC	RUS-7
North Arkansas Elec Coop Inc	Arkansas	SPP	RUS-7
North Carolina El Member Corp	North Carolina	SERC	RUS-12
North Central Elec Coop Inc	Ohio	ECAR	RUS-7
North Central Elec Coop Inc	North Dakota	MAPP	RUS-7
North Central MO Elec Coop Inc	Missouri	SPP	RUS-7
North East Mississippi E P A	Mississippi	SERC	RUS-7
North Georgia Elec Member Corp	Georgia	SERC	RUS-7
North Itasca Electric Coop Inc	Minnesota	MAPP	RUS-7
North Plains Electric Coop Inc	Texas	SPP	RUS-7
North Star Electric Coop Inc	Minnesota	MAPP	RUS-7
North Western Elec Coop Inc.	Ohio	ECAR	RUS-7
Northcentral Mississippi E P A	Mississippi	SERC SPP	RUS-7 RUS-7
Northeast Missouri El Pwr Coop	Louisiana Missouri	MAIN	RUS-7 RUS-12
Northeast Oklahoma El Coop Inc	Oklahoma	SPP	RUS-7
Northeast Texas Elec Coop Inc	Texas	SPP	RUS-12
Northeastern Rural E M C	Indiana	ECAR	RUS-7
Northern Electric Coop Assn	Minnesota	MAPP	RUS-7
Northern Electric Coop Inc	Montana	WSCC	RUS-7
Northern Electric Coop Inc	South Dakota	MAPP	RUS-7
Northern Lights Inc	Idaho	WSCC	RUS-7
Northern Neck Elec Coop Inc	Virginia	SERC	RUS-7
Northern Rio Arriba E C Inc	New Mexico	WSCC	RUS-7
Northern Virginia Elec Coop	Virginia	SERC	RUS-7
Northfork Electric Coop Inc	Oklahoma	SPP	RUS-7
Northwest Iowa Power Coop	Iowa	MAPP	RUS-12
Northwest Kansas E C A Inc	Kansas	SPP	RUS-7
Northwest Missouri El Coop Inc	Missouri	MAIN	RUS-7
Northwestern Electric Coop Inc	Oklahoma	SPP	RUS-7
Northwestern Rural E C A Inc	Pennsylvania	MAAC	RUS-7
Norton-Decatur Coop El Co Inc	Kansas	SPP	RUS-7
Nueces Electric Coop Inc	Texas	ERCOT	RUS-7
Nyman Electric Coop Inc	Iowa	MAPP	RUS-7
O & A Electric Coop	Michigan	ECAR	RUS-7
Oahe Electric Coop Inc	South Dakota	MAPP	RUS-7
Oakdale Electric Coop	Wisconsin	MAPP	RUS-7
Ocmulgee Electric Member Corp	Georgia	SERC	RUS-7
Oconee Electric Member Corp	Georgia Wisconsin	SERC MAIN	RUS-7 RUS-7
Oconto Electric Coop	Georgia	SERC	RUS-7 RUS-12
Okanogan County Elec Coop Inc	Washington	WSCC	RUS-7
Okefenoke Rural El Member Corp	Georgia	SERC	RUS-7
Oliver-Mercer Elec Coop Inc	North Dakota	MAPP	RUS-7
Oneida-Madison Elec Coop Inc	New York	NPCC	RUS-7
Ontonagon County R E A	Michigan	MAIN	RUS-7
Orange County Rural E M C	Indiana	ECAR	RUS-7
Orcas Power & Light Co	Washington	WSCC	RUS-7
Osage Valley Elec Coop Assn	Missouri	SPP	RUS-7
Osceola Electric Coop Inc	Iowa	MAPP	RUS-7
Otero County Electric Coop Inc	New Mexico	WSCC	RUS-7
Otsego Electric Coop Inc	New York	NPCC	RUS-7
Ouachita Electric Coop Corp	Arkansas	SPP	RUS-7
Owen Electric Coop Inc	Kentucky	ECAR	RUS-7
Ozark Border Electric Coop	Missouri	SPP	RUS-7
Ozark Electric Coop Inc	Missouri	SPP	RUS-7
Ozarks Electric Coop Corp	Arkansas	SPP	RUS-7
P K M Electric Coop Inc	Minnesota	MAPP	RUS-7
P R & W Electric Coop Assn Inc	Kansas	SPP	RUS-7
Palmetto Electric Coop Inc	South Carolina	SERC	RUS-7
Panhandle Rural El Member Assn	Nebraska	MAPP	RUS-7
Panola-Harrison Elec Coop Inc	Texas	SPP	RUS-7
Park Electric Coop Inc	Montana Indiana	WSCC ECAR	RUS-7 RUS-7
Parke County Rural E M C	Georgia	SERC	RUS-7 RUS-7
Pea River Electric Coop	Alabama	SERC	RUS-7
Peace River Electric Coop Inc	Florida	SERC	RUS-7
Pee Dee Electric Coop Inc	South Carolina	SERC	RUS-7
Pee Dee Electric Member Corp	North Carolina	SERC	RUS-7
Pella Coop Elec Assn	Iowa	MAPP	RUS-7
Pemiscot-Dunklin Elec Coop Inc	Missouri	SPP	RUS-7
Pennyrile Rural Elec Coop Corp	Kentucky	SERC	RUS-7
People 's Coop Power Assn	Minnesota	MAPP	RUS-7
Petit Jean Electric Coop Corp	Arkansas	SPP	RUS-7

Table B5. Cooperative Borrowers, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Piedmont Electric Member Corp	North Carolina	SERC	RUS-7
Pioneer Electric Coop Inc	Kansas	SPP	RUS-7
Pioneer Electric Coop Inc	Alabama	SERC	RUS-7
Pioneer Rural Elec Coop Inc	Ohio New Mexico	ECAR WSCC	RUS-7 RUS-12
Plains Elec Gen&Trans Coop Inc	Georgia	SERC	RUS-12 RUS-7
Plateau Electric Coop	Tennessee	SERC	RUS-7
Platte-Clay Electric Coop Inc	Missouri	SPP	RUS-7
Plumas-Sierra Rural Elec Coop	California	WSCC	RUS-7
Plymouth Electric Coop Assn	Iowa	MAPP	RUS-7
Pointe Coupee Elec Member Corp	Louisiana	SPP	RUS-7
Poudre Valley R E A Inc	Colorado	WSCC	RUS-7
Powell Valley Electric Coop	Tennessee	SERC	RUS-7
Price Electric Coop Inc	Wisconsin	MAPP	RUS-7
Prince George Electric Coop	Virginia North Dakota	SERC MADD	RUS-7
R S R Electric Coop Inc	Kansas	MAPP SPP	RUS-7 RUS-7
Raft River Rural Elec Coop Inc	Idaho	WSCC	RUS-7
Ralls County Electric Coop	Missouri	SPP	RUS-7
Randolph Electric Member Corp	North Carolina	SERC	RUS-7
Rappahannock Electric Coop	Virginia	SERC	RUS-7
Ravalli County Elec Coop Inc	Montana	WSCC	RUS-7
Rayle Electric Membership Corp	Georgia	SERC	RUS-7
Red Lake Electric Coop Inc	Minnesota	MAPP	RUS-7
Red River Valley Coop Pwr Assn	Minnesota	MAPP	RUS-7
Red River Valley Rrl Elec Assn	Oklahoma	SPP	RUS-7
Redwood Electric Coop	Minnesota	MAPP	RUS-7
Renville-Sibley Coop Pwr Assn	Minnesota	MAPP	RUS-7
Rich Mountain Elec Coop Inc	Arkansas Wisconsin	SPP MADD	RUS-7 RUS-7
Rideta Electric Coop Inc	Iowa	MAPP MAPP	RUS-7 RUS-7
Rio Grande Electric Coop Inc	Texas	ERCOT	RUS-7
Rita Blanca Electric Coop Inc	Texas	SPP	RUS-7
Riverton Valley Elec Assn Inc	Wyoming	WSCC	RUS-7
Roanoke Electric Member Corp	North Carolina	SERC	RUS-7
Rock County Electric Coop Assn	Wisconsin	MAPP	RUS-7
Roosevelt County Elec Coop Inc	New Mexico	SPP	RUS-7
Roseau Electric Coop Inc	Minnesota	MAPP	RUS-7
Rosebud Electric Coop Inc	South Dakota	MAPP	RUS-7
Runestone Electric Assn	Minnesota	MAPP	RUS-7
Rural Electric Co	Wyoming Illinois	WSCC MAIN	RUS-7 RUS-7
Rural Electric Coop Inc	Oklahoma	SPP	RUS-7
Rush County Rural E M C	Indiana	ECAR	RUS-7
Rusk County Electric Coop Inc	Texas	SPP	RUS-7
Rutherford Elec Member Corp	North Carolina	SERC	RUS-7
S E Iowa Coop Electric Assn	Iowa	MAPP	RUS-7
Sac County Rural Electric Coop	Iowa	MAPP	RUS-7
Sac-Osage Electric Coop Inc	Missouri	SPP	RUS-7
Salmon River Electric Coop Inc	Idaho	WSCC	RUS-7
Salt River Electric Coop Corp	Kentucky	ECAR	RUS-7
Saluda River Electric Coop Inc	South Carolina Texas	SERC SPP	RUS-12 RUS-12
San Isabel Electric Assn Inc	Colorado	WSCC	RUS-7
San Luis Valley R E C Inc	Colorado	WSCC	RUS-7
San Miguel Power Assn Inc	Colorado	WSCC	RUS-7
San Patricio Electric Coop Inc	Texas	ERCOT	RUS-7
Sand Mountain Electric Coop	Alabama	SERC	RUS-7
Sangre De Cristo Elec Assn Inc	Colorado	WSCC	RUS-7
Santee Electric Coop Inc	South Carolina	SERC	RUS-7
Satilla Rural Elec Member Corp	Georgia	SERC	RUS-7
Sawnee Electric Members Corp	Georgia	SERC	RUS-7
Sedgwick Cnty El Coop Assn Inc	Kansas Kansas	SPP SPP	RUS-7 RUS-7
Seminole Electric Coop Inc	Florida	SERC	RUS-12
Sequachee Valley Electric Coop	Tennessee	SERC	RUS-7
Shelby County Rural E M C	Indiana	ECAR	RUS-7
Shelby Rural Elec Coop Corp	Kentucky	ECAR	RUS-7
Shenandoah Valley Elec Coop	Virginia	SERC	RUS-7
Sheridan Electric Coop Inc	Montana	MAPP	RUS-7
Sheridan-Johnson Rrl Elec Assn	Wyoming	WSCC	RUS-7
Sheyenne Valley Elec Coop Inc	North Dakota	MAPP	RUS-7
Sho-Me Power Electric Coop	Missouri	SPP	RUS-12
Sierra Electric Coop Inc	New Mexico	WSCC	RUS-7
Singing River Elec Power Assn	Mississippi South Dakota	SERC MADD	RUS-7
Sioux Valley Empire E A Inc	South Dakota	MAPP	RUS-7

Table B5. Cooperative Borrowers, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Slash Pine Elec Member Corp	Georgia	SERC	RUS-7
Slope Electric Coop Inc	North Dakota	MAPP	RUS-7
Smoky Hill Elec Coop Assn Inc	Kansas	SPP	RUS-7
Socorro Electric Coop Inc	New Mexico	WSCC	RUS-7
Somerset Rural Elec Coop Inc	Pennsylvania	MAAC	RUS-7
South Alabama Elec Coop Inc	Alabama	SERC	RUS-7
South Central Ark El Coop Inc	Arkansas	SPP	RUS-7
South Central Electric Assn	Minnesota	MAPP	RUS-7
South Central Indiana REMC	Indiana	ECAR	RUS-7
South Central Power Co	Ohio	ECAR MARR	RUS-7
South Crawford Rural Elec Corp South Kentucky Rural E C C	Iowa Kantualiu	MAPP ECAR	RUS-7 RUS-7
South Louisiana Elec Coop Assn	Kentucky Louisiana	SPP	RUS-7 RUS-7
South Mississippi El Pwr Assn	Mississippi	SERC	RUS-12
South Plains Electric Coop Inc	Texas	SPP	RUS-7
South River Elec Member Corp	North Carolina	SERC	RUS-7
South Texas Electric Coop Inc	Texas	ERCOT	RUS-12
Southeast Colorado Power Assn	Colorado	WSCC	RUS-7
Southeast Electric Coop Inc	Montana	WSCC	RUS-7
Southeastern Electric Coop Inc	Oklahoma	SPP	RUS-7
Southeastern Indiana R E M C	Indiana	ECAR	RUS-7
Southeastern IL Elec Coop Inc	Illinois	MAIN	RUS-7
Southeastern Michigan REC Inc	Michigan	ECAR	RUS-7
Southern Illinois Elec Coop	Illinois	MAIN	RUS-7
Southern Illinois Power Coop	Illinois	MAIN	RUS-12
Southern Indiana R E C Inc	Indiana	ECAR	RUS-7
Southern Iowa Elec Coop Inc	Iowa	MAPP	RUS-7
Southern Maryland El Coop Inc	Maryland	MAAC	RUS-7
Southern Pine Elec Coop Inc	Alabama Mississippi	SERC SERC	RUS-7 RUS-7
Southside Electric Coop Inc	Mississippi Virginia	SERC	RUS-7 RUS-7
Southwest Arkansas E C C	Arkansas	SPP	RUS-7
Southwest Central R E C Corp	Pennsylvania	MAAC	RUS-7
Southwest Electric Coop Inc	Missouri	SPP	RUS-7
Southwest Louisiana E M C	Louisiana	SPP	RUS-7
Southwest Mississippi E P A	Mississippi	SPP	RUS-7
Southwest Rural Elec Assn Inc	Oklahoma	SPP	RUS-7
Southwest Tennessee E M C	Tennessee	SERC	RUS-7
Southwest Texas Elec Coop Inc	Texas	ERCOT	RUS-7
Southwestern Electric Coop Inc	Illinois	MAIN	RUS-7
Southwestern Electric Coop Inc	New Mexico	SPP	RUS-7
Spink Electric Coop Inc	South Dakota	MAPP	RUS-7
Spoon River Electric Coop Inc	Illinois	MAIN	RUS-7
Springer Electric Coop Inc	New Mexico	WSCC	RUS-7
Square Butte Electric Coop	North Dakota Wisconsin	MAPP MAPP	RUS-12 RUS-7
Stearns Coop Electric Assn	Minnesota	MAPP	RUS-7
Steele-Waseca Coop Electric	Minnesota	MAPP	RUS-7
Steuben Rural Elec Coop Inc	New York	NPCC	RUS-7
Sullivan County R E C Inc	Pennsylvania	MAAC	RUS-7
Sullivan County Rural E M C	Indiana	ECAR	RUS-7
Sulphur Springs Valley E C Inc	Arizona	WSCC	RUS-7
Sumner-Cowley Elec Coop Inc	Kansas	SPP	RUS-7
Sumter Electric Coop Inc	Florida	SERC	RUS-7
Sumter Electric Member Corp	Georgia	SERC	RUS-7
Sun River Electric Coop Inc	Montana	WSCC	RUS-7
Sunflower Electric Power Corp	Kansas	SPP	RUS-12
Surprise Valley Electric Corp	California	WSCC SERC	RUS-7
Surry-Yadkin Elec Member Corp Sussex Rural Electric Coop Inc	North Carolina New Jersey	MAAC	RUS-7 RUS-7
Suwannee Valley Elec Coop Inc	Florida	SERC	RUS-7 RUS-7
Swans Island Electric Coop Inc	Maine	NPCC	RUS-7
Swisher Electric Coop Inc	Texas	SPP	RUS-7
SE-MA-NO Electric Coop	Missouri	SPP	RUS-7
T I P Rural Electric Coop	Iowa	MAPP	RUS-7
Tallahatchie Valley E P A	Mississippi	SERC	RUS-7
Tallapoosa River Elec Coop Inc	Alabama	SERC	RUS-7
Talquin Electric Coop Inc	Florida	SERC	RUS-7
Tanner Electric Coop	Washington	WSCC	RUS-7
Taylor County Rural E C C	Kentucky	ECAR	RUS-7
Taylor Electric Coop Inc	Texas	ERCOT	RUS-7
Teche Electric Coop Inc	Louisiana	SPP	RUS-7
Tennessee Valley Electric Coop	Tennessee	SERC	RUS-7
Tex-La Electric Coop-Texas Inc	Texas	ERCOT	RUS-12
Three Notch Elec Member Corp	Georgia	SERC	RUS-7
Three Rivers Electric Coop	Missouri	SPP	RUS-7

Table B5. Cooperative Borrowers, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Thumb Electric Coop-Michigan	Michigan	ECAR	RUS-7
Tideland Electric Member Corp	North Carolina	SERC	RUS-7
Tipmont Rural Elec Member Corp	Indiana	ECAR	RUS-7
Tishomingo County E P A	Mississippi	SERC	RUS-7
Todd-Wadena Electric Coop	Minnesota	MAPP	RUS-7
Tombigbee Electric Coop Inc	Alabama	SERC	RUS-7
Tombigbee Electric Power Assn	Mississippi	SERC	RUS-7
Tongue River Electric Coop Inc	Montana	MAPP	RUS-7
Top O'Michigan Electric Co	Michigan	ECAR	RUS-7
Traverse Electric Coop Inc	Minnesota	MAPP	RUS-7
Tri-County Elec Member Corp	Georgia	SERC	RUS-7
Tri-County Elec Member Corp	North Carolina	SERC	RUS-7
Tri-County Elec Member Corp	Tennessee	SERC	RUS-7
Tri-County Electric Assn Inc	South Dakota	MAPP	RUS-7
Tri-County Electric Assn Inc	Wyoming	WSCC	RUS-7
Tri-County Electric Coop	Minnesota	MAPP	RUS-7
Tri-County Electric Coop	Michigan	ECAR	RUS-7
Tri-County Electric Coop Assn	Missouri	SPP	RUS-7
Tri-County Electric Coop Inc	South Carolina	SERC	RUS-7
Tri-County Electric Coop Inc	Oklahoma	SPP	RUS-7
Tri-County Electric Coop Inc	Florida	SERC	RUS-7
Tri-County Electric Coop Inc	North Dakota	MAPP	RUS-7
Tri-County Rural Elec Coop Inc	Pennsylvania	MAAC	RUS-7
Tri-State Electric Member Corp	Georgia	SERC	RUS-7
Tri-State G & T Assn Inc	Colorado	WSCC	RUS-12
Trico Electric Coop Inc	Arizona	WSCC	RUS-7
Turner-Hutchinson El Coop Inc	South Dakota	MAPP	RUS-7
Twin County Electric Pwr Assn	Mississippi	SERC	RUS-7
Twin Valley Electric Coop Inc	Kansas	SPP	RUS-7
Umatilla Electric Coop Assn	Oregon	WSCC	RUS-7
Union County Electric Coop Inc	South Dakota	MAPP	RUS-7
Union Electric Membership Corp	North Carolina	SERC	RUS-7
Union Rural Electric Coop Inc	Ohio	ECAR	RUS-7
United Electric Coop Inc	Kansas	SPP	RUS-7
United Electric Coop Inc	Pennsylvania	MAAC	RUS-7
United Power Assn	Minnesota	MAPP	RUS-12
United Power Inc	Colorado	WSCC	RUS-7
United Rural Elec Member Corp	Indiana	ECAR	RUS-7
United Rural Electric Coop Inc	Ohio	ECAR	RUS-7
Upper Cumberland E M C	Tennessee	SERC	RUS-7
Upper Missouri G&T El Coop Inc	Montana	MAPP	RUS-12
Upshur Rural Elec Coop Corp	Texas	SPP	RUS-7
Upson County Elec Member Corp	Georgia	SERC	RUS-7
Utilities Dist-Western IN REMC	Indiana	ECAR	RUS-7
Valley Electric Coop Inc	Montana	WSCC	RUS-7
Valley Electric Member Corp	Louisiana	SPP	RUS-7
Valley Rural Electric Coop Inc	Pennsylvania	MAAC	RUS-7
Verdigris Valley Elec Coop Inc	Oklahoma	SPP	RUS-7
Verendrye Electric Coop Inc	North Dakota	MAPP	RUS-7
Vernon Electric Coop	Wisconsin	MAPP	RUS-7
Victoria Electric Coop Inc	Texas	ERCOT	RUS-7
Victory Electric Coop Assn Inc	Kansas	SPP	RUS-7
Vigilante Electric Coop Inc	Montana	WSCC	RUS-7
Volunteer Electric Coop	Tennessee	SERC	RUS-7
Wabash County Rural E M C	Indiana	ECAR	RUS-7
Warren Electric Coop Inc	Pennsylvania	MAAC	RUS-7
Warren Rural Elec Coop Corp	Kentucky	SERC	RUS-7
Wasco Electric Coop Inc	Oregon	WSCC	RUS-7
Washington Elec Member Corp	Georgia	SERC	RUS-7
Washington Electric Coop Inc	Ohio	ECAR	RUS-7
Washington Electric Coop Inc	Vermont	NPCC	RUS-7
Washington Island El Coop Inc	Wisconsin	MAIN	RUS-7
Washington-St Tammany E C Inc	Louisiana	SPP	RUS-7
Wayne-White Counties Elec Coop	Illinois	MAIN	RUS-7
Webster Electric Coop	Missouri	SPP	RUS-7
Wells Rural Electric Co	Nevada	WSCC	RUS-7
West Central Electric Coop Inc	Missouri	SPP	RUS-7
West Central Electric Coop Inc	South Dakota	MAPP	RUS-7
West Florida El Coop Assn Inc	Florida	SERC	RUS-7
West Kentucky Rural E C C	Kentucky	ECAR	RUS-7
West Oregon Electric Coop Inc	Oregon	WSCC	RUS-7
West Plains Electric Coop Inc	North Dakota	MAPP	RUS-7
West River Electric Assn Inc	South Dakota	MAPP	RUS-7
	Kansas	SPP	RUS-7
Western Coop Electric Assn Inc	Kalisas		
Western Coop Electric Assn Inc	Oklahoma	SPP	RUS-12

Table B5. Cooperative Borrowers, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Western Michigan Electric Coop	Michigan	MAIN	RUS-7
Wheatland Electric Coop Inc	Kansas	SPP	RUS-7
Wheatland Rural Elec Assn Inc	Wyoming	WSCC	RUS-7
Whetstone Valley Elec Coop Inc	South Dakota	MAPP	RUS-7
White County Rural E M C	Indiana	ECAR	RUS-7
White River Electric Assn Inc	Colorado	WSCC	RUS-7
White River Valley El Coop Inc	Missouri	SPP	RUS-7
Whitewater Valley Rural EMC	Indiana	ECAR	RUS-7
Wild Rice Electric Coop Inc	Minnesota	MAPP	RUS-7
Winnebago Rural Elec Coop Assn	Iowa	MAPP	RUS-7
Wiregrass Electric Coop Inc	Alabama	SERC	RUS-7
Withlacoochee River Elec Coop	Florida	SERC	RUS-7
Wolverine Pwr Supply Coop Inc	Michigan	ECAR	RUS-12
Wood County Electric Coop Inc	Texas	SPP	RUS-7
Woodbury County Rural E C A	Iowa	MAPP	RUS-7
Woodruff Electric Coop Corp	Arkansas	SPP	RUS-7
Wright County Rural Elec Coop	Iowa	MAPP	RUS-7
Wright-Hennepin Coop Elec Assn	Minnesota	MAPP	RUS-7
Wyrulec Co	Wyoming	WSCC	RUS-7
Y-W Electric Assn Inc	Colorado	WSCC	RUS-7
Yampa Valley Electric Assn Inc	Colorado	WSCC	RUS-7
Yazoo Valley Elec Power Assn	Mississippi	SERC	RUS-7
Yellowstone Vlly Elec Coop Inc	Montana	WSCC	RUS-7
York Electric Coop Inc	South Carolina	SERC	RUS-7

The State in which the administrative office of the cooperative borrower is located.
 The principal North American Electric Reliability Council region in which the utility operates. See glossary for a list of all regions.

³ Source of data for this publication

Sources: •Rural Utilities Service, RUS Form 7, "Financial and Statistical Report," RUS Form 12a through 12i, "Electric Power Supply Borrowers," Form 12c through 12g, "Electric Distribution Borrowers with Generating Facilities." •Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

Table B6. Electric Utilities Not Reported Elsewhere in Surveys Reporting Detailed Transactions, 1996

Utility	State ¹	NERC Region ²	Survey Form ³
nvestor-Owned			
Ajo Improvement Co		WSCC	EIA-861
Block Island Power Co		NPCC	EIA-861
Champion International Corp		WSCC	EIA-861
Haines Light & Power Co Inc		ASCC	EIA-861
Hawaii Electric Light Co Inc		HI	EIA-861
Modern Electric Water Company	Washington	WSCC	EIA-861
Morenci Water & Electric Co		WSCC	EIA-861
Napakiak Ircinaq Power Co		ASCC	EIA-861
Panaca Power & Light Co		WSCC	EIA-861
Westfield Milling & El Lgt Co		MAIN	EIA-861
ooperative			
Bandera Elec Coop Inc		ERCOT	EIA-861
Barron Elec Coop		MAPP	EIA-861
Bartholomew County Rural E M C		ECAR	EIA-861
Beauregard Electric Coop Inc		SPP	EIA-861
Big Bend Elec Coop Inc		WSCC	EIA-861
Bluebonnet Electric Coop Inc		ERCOT	EIA-861
Boone Valley Elec Coop		MAPP	EIA-861
Buffalo Electric Coop		MAPP	EIA-861
Carroll County Rural E M C			EIA-861
		ECAR MAPP	EIA-861
Cass Electric Coop Central Indiana Power		ECAR	EIA-861
Clark County Rural E M C		ECAR	EIA-861
Consolidated Elec Coop		MAIN	EIA-861
Cooke County Elec Coop Assn		ERCOT	EIA-861
Cuivre River Electric Coop Inc		MAIN	EIA-861
Delta Electric Power Assn		SERC	EIA-861
Denton Cnty Elec Coop Inc		ERCOT	EIA-861
Dickens Elec Coop Inc		ERCOT	EIA-861
Eau Claire Elec Coop		MAPP	EIA-861
Fall River Rural Elec Coop		WSCC	EIA-861
Farmers Electric Co		WSCC	EIA-861
Farmers Mutual Power Assn	Nevada	WSCC	EIA-861
Fayette Electric Coop Inc	Texas	ERCOT	EIA-861
Flathead Electric Coop Inc	Montana	WSCC	EIA-861
Fort Belknap Electric Coop Inc	Texas	ERCOT	EIA-861
Glacier Electric Coop Inc	Montana	WSCC	EIA-861
Graham County Elec Coop Inc	Arizona	WSCC	EIA-861
Guadalupe Valley Elec Coop	Texas	ERCOT	EIA-861
Hendricks County Rural E M C		ECAR	EIA-861
Hill County Elec Coop		ERCOT	EIA-861
Hood River Electric Coop		WSCC	EIA-861
Kiamichi Elec Coop Inc		SPP	EIA-861
Kosciusko Cnty Rural EMC		ECAR	EIA-861
Lakeview Light & Power		WSCC	EIA-861
Lee County Electric Coop Inc		SERC	EIA-861
Licking Rural Electric Inc		ECAR	EIA-861
Lower Valley Pwr & Lgt Inc		WSCC	EIA-861
Marshall-De Kalb Elec Coop	, ,	SERC	EIA-861
Miami-Cass Cnty Rural EMC		ECAR	EIA-861
		ECAR ERCOT	EIA-861
Mid-South Electric Coop Assn			EIA-861
Navasota Valley Elec Coop		ERCOT MAAC	
New Enterprise R E C Inc		MAAC SPP	EIA-861
Niobrara Valley El Mbr Corp			EIA-861
Nishnabotna Valley REC		MAPP	EIA-861
Noble Cnty Rural EMC		ECAR	EIA-861
North West Rural Elec Coop		MAPP	EIA-861
Oceana Electric Coop		ECAR	EIA-861
Oklahoma Elec Coop Inc		SPP	EIA-861
Paulding-Putman Elec Coop		ERCOT	EIA-861
Pedernales Elec Coop Inc		ERCOT	EIA-861
Penoyer Valley Electric Coop		WSCC	EIA-861
Pierce-Pepin Elec Coop		MAPP	EIA-861
Pontotoc Elec Power Assoc	Mississippi	SERC	EIA-861
Prentiss Cnty Elec Pwr Assoc	Mississippi	SERC	EIA-861
Presque Isle Electric Coop Inc		ECAR	EIA-861
Rural Electric Co		WSCC	EIA-861
Salem Electric		WSCC	EIA-861
San Bernard Elec Coop Inc		ERCOT	EIA-861
Scott-New Madrid-MS El Coop		MAPP	EIA-861
South Side Elec Lines, Inc		WSCC	EIA-861
			EIA-861
Steuben County Rural EMC Taylor Electric Coop		ECAR	
Lavior Electric Loop	Wisconsin	MAPP	EIA-861

Table B6. Electric Utilities Not Reported Elsewhere in Surveys Reporting Detailed Transactions, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Tippah Elec Power Assoc	Mississippi	SERC	EIA-861
Trempealeau Elec Coop		MAPP	EIA-861
FriCounty Rural Elec Coop Inc		ECAR	EIA-861
Unity Light & Power Coop		WSCC	EIA-861
Warren County Rural EMC		ECAR	EIA-861
Wharton Cnty Elec Coop Inc		ERCOT	EIA-861
Vise Elec Coop Inc		ERCOT	EIA-861
-County Electric Power Assn		SERC	EIA-861
unicipal			
Aberdeen City of		SERC	EIA-861
Albany City of	Missouri	SPP	EIA-861
Albion City of	Idaho	WSCC	EIA-861
Alder Mutual Lgt Co	Washington	WSCC	EIA-861
Alpha City of		MAPP	EIA-861
Alvarado City of		MAPP	EIA-861
Amory City of		SERC	EIA-861
Anadarko Public Works Auth			
		SPP	EIA-861
Aplington City of		MAPP	EIA-861
Arcadia City of		MAPP	EIA-861
Arctic Utilities Inc	Alaska	ASCC	EIA-861
Argyle City of	Wisconsin	MAPP	EIA-861
Ava City of		SPP	EIA-861
Bancroft City of		MAPP	EIA-861
Bandon City of		WSCC	EIA-861
Bartley Village of		MAPP	EIA-861
Basin Town of		WSCC	EIA-861
	, ,		
Belleville City of		SPP	EIA-861
Bennettsville City of		SERC	EIA-861
Bethany City of		MAIN	EIA-861
Bigelow City of	Minnesota	MAPP	EIA-861
Blaine City of	Washington	WSCC	EIA-861
Bloomfield City of	Iowa	MAPP	EIA-861
Bonners Ferry City of		WSCC	EIA-861
Braman Town of		SPP	EIA-861
Brooklyn City of		MAPP	EIA-861
Brownsville City of		SERC	EIA-861
Brundidge City of		SERC	EIA-861
Burley City of		WSCC	EIA-861
Burlington City of		SPP	EIA-861
Butler City of	Missouri	SPP	EIA-861
Cabool City of	Missouri	MAIN	EIA-861
Caledonia City of	Minnesota	MAPP	EIA-861
Caliente City of	Nevada	WSCC	EIA-861
Cameron City of		SPP	EIA-861
Campbell Village of		MAPP	EIA-861
Cannelton Utilities		ECAR	EIA-861
Cascade City of		MAPP	EIA-861
Cascade Locks City of		WSCC	EIA-861
Cashton Village of		MAPP	EIA-861
Ceylon City of		MAPP	EIA-861
Chester Mun Elec Light Dept		NPCC	EIA-861
Chewelah Light Dept	Washington	MAPP	EIA-861
Chillicothe City of	Missouri	SPP	EIA-861
Cordell City of		SPP	EIA-861
Corwith City of		MAPP	EIA-861
Coulee Dam Light Dept		WSCC	EIA-861
Courtland City of		SERC	EIA-861
Crane City of		MAIN	EIA-861
Cuba City of		MAIN	EIA-861
Culpeper Town of		SERC	EIA-861
Cumberland City of		MAPP	EIA-861
Dakota Elec Assoc		MAPP	EIA-861
Darwin Village of	Minnesota	MAPP	EIA-861
Dayton City of		MAPP	EIA-861
Dayton City of		SERC	EIA-861
Decatur Village of		MAPP	EIA-861
Declo City of		WSCC	EIA-861
Dighton City of		SPP	EIA-861
Doerun City of		SERC	EIA-861
Drain Electric Dept		WSCC	EIA-861
Dunnell Village of	Minnesota	MAPP	EIA-861
Durant City of		MAPP	EIA-861
Earlville City of		MAPP	EIA-861

Table B6. Electric Utilities Not Reported Elsewhere in Surveys Reporting Detailed Transactions, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Easton City of	Missouri	SPP	EIA-861
Eatonville Town of	Washington	WSCC	EIA-861
Elba City of	Alabama	SERC	EIA-861
Electra City of	Texas	ERCOT	EIA-861
	South Dakota		
Elk Point City of		MAPP	EIA-861
Ellsworth City of	Iowa	MAPP	EIA-861
Elmhurst Mutual Power & Lgt	Washington	WSCC	EIA-861
Elroy City of	Wisconsin	MAPP	EIA-861
Emerson City of	Nebraska	MAPP	EIA-861
Endicott Village of	Nebraska	MAPP	EIA-861
Escanaba Munic Elec Util	Michigan	ECAR	EIA-861
Etowah City of	Tennessee	SERC	EIA-861
Fairfield City of	Illinois	MAIN	EIA-861
Farnhamville City of	Iowa	MAPP	EIA-861
Payette City of	Missouri	MAIN	EIA-861
Fennimore City of	Wisconsin	MAPP	EIA-861
Forest City City of	Iowa	MAPP	EIA-861
Fort Supply Town of	Oklahoma	SPP	EIA-861
Countain Town of	North Carolina	SERC	EIA-861
Franklin City of	Kentucky	SERC	EIA-861
Gallatin City of	Missouri	MAIN	EIA-861
farrison City of	Texas	ERCOT	EIA-861
lasgow City of	Kentucky	SERC	EIA-861
Sowrie Municipal Utilities	Iowa	MAPP	EIA-861
Granada Town of	Colorado	WSCC	EIA-861
	Iowa	MAPP	EIA-861
Greenfield City of			EIA-861 EIA-861
Grove City City of	Minnesota	MAPP	
Grundy Center City of	Iowa	MAPP	EIA-861
Harmony City of	Minnesota	MAPP	EIA-861
Hartselle City of	Alabama	SERC	EIA-861
Iearne City of	Texas	ERCOT	EIA-861
Iemphill City of	Texas	SPP	EIA-861
Ierndon City of	Kansas	SPP	EIA-861
leyburn City of	Idaho	WSCC	EIA-861
Iouston City of	Missouri	SPP	EIA-861
Iunnewell City of	Missouri	SPP	EIA-861
uka City of	Kansas	SPP	EIA-861
ohnson City of	Kansas	SPP	EIA-861
Keosauqua City of	Iowa	MAPP	EIA-861
Kiowa City of	Kansas	SPP	EIA-861
La Farge Municipal Electric Co	Wisconsin	MAPP	EIA-861
a Plata City of	Missouri	MAIN	EIA-861
ake Mills City of	Iowa	MAPP	EIA-861
akin City of	Kansas	SPP	EIA-861
amoni City of	Iowa	MAPP	EIA-861
anesboro Public Utility Comm	Minnesota	MAPP	EIA-861
archwood City of	Iowa	MAPP	EIA-861
ehigh City of	Iowa	MAPP	EIA-861
indsay City of	Oklahoma	SPP	EIA-861
Louisville Electric System	Mississippi	SERC	EIA-861
Mabel City of	Minnesota	MAPP	EIA-861
Macon City of	Missouri	MAIN	EIA-861
Mansfield City of	Missouri	MAIN	EIA-861
Mayfield City of	Kentucky	ECAR	EIA-861
IcCleary Light & Power	Washington	WSCC	EIA-861
IcLeansboro City of	Illinois	MAIN	EIA-861
leade City of	Kansas	SPP	EIA-861
Meadville City of	Missouri	SPP	EIA-861
Memphis City of	Missouri		EIA-861
		MAIN	
fidvale Irrigation District	Wyoming	WSCC	EIA-861
Ailan City of	Missouri	SPP	EIA-861
filltown Borough of	New Jersey	MAAC	EIA-861
Iilton City of	Washington	WSCC	EIA-861
Inidoka City of	Idaho	WSCC	EIA-861
Ionmouth City of	Oregon	WSCC	EIA-861
Monroe City City of	Missouri	SPP	EIA-861
Moore Haven City of	Florida	SERC	EIA-861
Mooreland City of	Oklahoma	SPP	EIA-861
Mountain View City of	Missouri	SPP	EIA-861
Muscle Shoals City of	Alabama	SERC	EIA-861
Vashwauk City of	Minnesota	MAPP	EIA-861
New Hampton City of	Iowa	MAPP	EIA-861
	Wisconsin	MAPP	EIA-861
New Lisbon City of	WISCONSIII		

Table B6. Electric Utilities Not Reported Elsewhere in Surveys Reporting Detailed Transactions, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
Newburg City of	Missouri	MAIN	EIA-861
Norton City of	Kansas	SPP	EIA-861
Oak City Town of	North Carolina	SERC	EIA-861
Ohop Mutual Light Co	Washington	WSCC	EIA-861
Onida City of	South Dakota	MAPP	EIA-861
Opp City of	Alabama	SERC	EIA-861
Osage City of	Iowa	MAPP	EIA-861
Oxford City of	Georgia	SERC	EIA-861
Oxford City of	Mississippi	SERC	EIA-861
Palmyra City of	Missouri	MAIN	EIA-861
Panama Village of	Nebraska	MAPP	EIA-861
Panora Mun Electric Util	Iowa	MAPP	EIA-861
Paris City of	Missouri	SPP	EIA-861
Park Ridge Elec Dept Borough	New Jersey	MAAC	EIA-861
Parkland Light & Water Co	Washington	WSCC	EIA-861
Paton City of	Iowa	MAPP	EIA-861
Pattonsburg City of	Missouri	MAIN	EIA-861
Peninsula Light Company	Washington	WSCC	EIA-861
Peterson City of	Minnesota	MAPP	EIA-861
Philadelphia City of	Mississippi	SERC	EIA-861
Pioche City of	Nevada	WSCC	EIA-861
Plains City of	Texas	SPP	EIA-861
		WSCC	EIA-861 EIA-861
Plummer Electric Dept	Idaho Washington		
PUD No 1 Asotin County	Washington	WSCC	EIA-861
Radium City of	Kansas	SPP MAIN	EIA-861 EIA-861
Red Bud City of	Illinois		
Renwick City of	Iowa Nahwaaka	MAPP	EIA-861
Reynolds Village of	Nebraska	MAPP	EIA-861
Richland City of	Missouri	MAIN	EIA-861
Rockport City of	Missouri	SPP	EIA-861
Round Lake City of	Minnesota	MAPP	EIA-861
Rupert City of	Idaho	WSCC	EIA-861
Rushmore City of	Minnesota	MAPP	EIA-861
Russell Municipal Light Dept	Massachusetts	NPCC	EIA-861
Russellville City of	Kentucky	SERC	EIA-861
Salem City of	Missouri	SPP	EIA-861
San Augustine City of	Texas	SPP	EIA-861
Sanger City of	Texas	ERCOT	EIA-861
Seymour City of	Missouri	SPP	EIA-861
Seymour City of	Texas	ERCOT	EIA-861
Shelbina City of	Missouri	SPP	EIA-861
Soda Springs City of	Idaho	WSCC	EIA-861
Spring Grove City of	Minnesota	MAPP	EIA-861
Springer Town of	New Mexico	SPP	EIA-861
St Paul City of	Nebraska	MAPP	EIA-861
St Robert City of	Missouri	MAIN	EIA-861
Stanberry City of	Missouri	SPP	EIA-861
Stanton City of	Iowa	MAPP	EIA-861
Steelville City of	Missouri	MAIN	EIA-861
Steilacoom Town of	Washington	WSCC	EIA-861
Stratford City of	Iowa	MAPP	EIA-861
Stratton City of	Nebraska	MAPP	EIA-861
Stromsburg City of	Nebraska	MAPP	EIA-861
Stuart Municipal Utility	Iowa	MAPP	EIA-861
Sullivan City of	Missouri	MAIN	EIA-861
Sumner City of	Iowa	MAPP	EIA-861
Sweetwater City of	Tennessee	SERC	EIA-861
Talmage Village of	Nebraska	MAPP	EIA-861
Tennant City of	Iowa	MAPP	EIA-861
Timpson City of	Texas	ERCOT	EIA-861
Trenton City of	Nebraska	MAPP	EIA-861
Troy City of	Indiana	ECAR	EIA-861
Troy City of	Montana	ECAR	EIA-861
Tuskegee City of	Alabama	SERC	EIA-861
Unalaska City of	Alaska	ASCC	EIA-861
Vandalia City of	Missouri	MAIN	EIA-861
	Nebraska	MAPP	EIA-861
Village of Holbrook	Nebraska Wisconsin		
		MAPP	EIA-861
Waelder Utilities	Texas	ERCOT	EIA-861
Waynesville City of	Missouri	SPP	EIA-861
Webster City City of	Iowa	MAPP	EIA-861
Weimar Utilities	Texas	ERCOT	EIA-861
	Louisiana	SPP	EIA-861
Welsh Town of	Iowa	MAPP	EIA-861

Table B6. Electric Utilities Not Reported Elsewhere in Surveys Reporting Detailed Transactions, 1996 (Continued)

Utility	State ¹	NERC Region ²	Survey Form ³
West Point City of	Mississippi	SERC	EIA-861
Westfield Town of	Iowa	MAPP	EIA-861
Whalan City of	Minnesota	MAPP	EIA-861
Whitesboro City of	Texas	ERCOT	EIA-861
Willow Springs City of	Missouri	SPP	EIA-861
Wilton City of	Iowa	MAPP	EIA-861
Winchester City of	Tennessee	SERC	EIA-861
Winona City of	Missouri	SPP	EIA-861
Winterset City of	Iowa	MAPP	EIA-861
Woodsfield City of	Ohio	ECAR	EIA-861
Woolstock City of	Iowa	MAPP	EIA-861

¹ The State in which the administrative or corporate office of the utility is located.

Source: •Energy Information Administration, Form EIA-861, "Annual Electric Utility Report."

The principal North American Electric Reliability Council region in which the utility operates. See glossary for a list of all regions.

Source of data for this publication

Note: These electric utilities are not reported elsewhere because they fall below the class of ownership survey threshold and/or information on exchanges and wheeling for selected utilities are only reported on the Form, EIA-861.

Table B7. Electric Power Marketers in the United States, 1996

Company Name	Total Purchase (megawatthours)	Total Sales (megawatthours)	Total Revenue from Sales (thousand dollars)
e prime, inc	1,144,900	1,144,900	14,366
Amoco Energy Trading Corp		2,978,240	72,895
Aquila Power Corp		65,301,117	1,500,589
Avista Energy, Inc		6.001,560	91,621 112,333
AES Power, Inc		23,978,502	586,141
AYP Energy, Inc		3,695,758	81,736
Bonneville Fuels Manage 't Cor		19,918	506
Bruin Energy, Inc.			_
Calpine Power Marketing, Inc	987,600	987,600	15,384
Cargill-Alliant LLC		78,155	1,649
Catex Vitol Electric		64,568,331	1,552,728
Citizens Power Sales		34,510,711	801,436
Cogentrix Energy Pwr Marketing		2,386,107	36,767
Cook July Engage Surgely		1,268,196	30,478 72
Cook Inlet Energy Supply		3,200 9,842,916	235,110
CL Power Sales Two LLC		356,354	17,736
CNG Power Services Corp		25,248,346	594,575
CNG Retail Services Corp			
Delhi Energy Services, Inc		5,812,676	158,453
Destec Power Services Inc		557,339	20,544
Duke Energy Trading & Mkt 'g	22,469,842	21,623,375	531,805
Duke/Lous Dreyfus LLC		69,333,306	1,590,104
Dupont Power Marketing, Inc		21,003,964	507,800
DTE Energy Trading, Inc		500	13
DTE-CoEnergy LLC.		2 105 194	
Edison Source Energy, Inc		2,195,184 9,486,238	45,172 239,101
El Paso Energy Marketing Co	9,480,238 93,644,728	93,589,956	2,269,066
Energis Resources, Inc.		3,796	89
Energy Masters internat 'al In		147,015	1,968
Energy Services, Inc		1,158,250	16,575
Energy Transfer Group LLC		196,374	358
EnerZ Corporation	5,326,875	5,326,875	132,184
Engage Energy US, LP		31,048,000	755,490
Engelhard Power Marketing, Inc		3,180,950	89,234
Enron Power Marketing		188,780,078	4,384,277
EPEC Marketing Company		2,986,650	64,167
Federal Energy Sales, Inc		1,735,302 381,888	6,182
GPU Advanced Resources, Inc		361,666	0,182
Hartford Power Sales LLC		335,326	20,309
Hinson Power Company		1,215,795	28,324
Horizon Energy Company		_	
Illinova Power Marketing, Inc	35,567,702	35,236,177	703,426
International Util Consult Inc		400	9
InterCoast Power Marketing Co		80,945	1,586
IGI Resources, Inc		322,092	4,043
Koch Energy Trading, Inc		16,156,106	398,362
KN Marketing Inc		3,266,094	4,614
Louis Dreyfus Elec PwrLG&E Power Marketing		53,384,815	1,183,564
MidCon Power Services Corp		4,354,730	112,316
Montana Power Trad&Market 'g C		52,351	862
Morgan Stanley Capital Group	10,290,030	10,290,030	158,451
National Fuel Resources, Inc		<u> </u>	<u>—</u>
National Gas & Electric LP		1,239,814	33,501
New Millennium Energy Corp			
North American Energy Cons		5,499,071	114,619
NorAm Energy Services, Inc.		25,025,901 7,455,012	608,032 167,050
NESI Power Marketing, Inc		7,455,012 960,903	167,050 18,233
NP Energy, Inc.		10,231,967	257,267
NUI Energy Brokers, Inc			
PacifiCorp Power Marketing Inc		35,800,241	911,929
Phibro, Inc	4,527,914	4,527,914	116,032
Plum Street Energy Market Co	3,265,235	3,258,614	87,146
Powertec International LLC	_	_	_
Progress Power Marketing, Inc		1,532	40
Proliance Energy LCC		89,176	2,203
PG&E Energy Services.		4,466,983	88,851 12,110
Questar Energy Trading Company	699,267 1,069,135	699,267 1,069,135	12,110 25,073
QST Energy Trading, Inc	1,069,135 350,759	1,069,135 4,308	25,073 63
ζ		1,500	

Table B7. Electric Power Marketers in the United States, 1996¬Continued

Company Name	Total Purchase (megawatthours)	Total Sales (megawatthours)	Total Revenue from Sales (thousand dollars)
Rainbow Energy Marketing	848,866	845,034	23,532
Sonat Power Mkt 'g Limited	8,782,536	8,767,524	225,282
Southern Energy Trd 'g & Mkt'g	76,808,022	76,808,022	1,880,743
Stand Energy Corporation	3,559,909	3,559,909	67,943
State Line Energ LCC	7,642	7,642	216
Strategic Energy Limited	_	_	_
Sunoco Power Marketing LLC	364	364	7
SCANA Energy Marketing, Inc	109,964	108,556	2,129
Tenaska Power Services Co	1,229,515	1,226,940	24,740
Tennessee Power Company	117,665	117,665	2,048
The Power Co of America LP	18,203,968	18,198,374	423,097
Fractebel Energy Markt 'g Inc	2,582,800	2,582,800	64,079
Unitil Resources, Inc	16,800	_	_
UGI Power Supply, Inc	107	_	_
Vastar Power Marketing, Inc	5,901,096	5,900,487	141,505
Wheeled Electric Power Company	1,727,392	_	_
Williams Energy Services Co	13,258,110	13,258,110	332,432
Williams Generation Co-Hazeltn	_	816	16
Working Assets Green Power,Inc	4,551	_	_
XENERGY, INC	246,903	_	_

Notes: •Active Power Marketers that submitted information to EIA. •Information on cost of purchase power are not collected on the Form EIA-861. Source: Energy Information Administration, Form EIA-861 "Annual Electric Utility Report."

Appendix C

Fundamentals of Electric Power Transmission and Integrating Nonutility Generators

Appendix C

Fundamentals of Electric Power Transmission and Integrating Nonutility Generators

Fundamentals of the Electric Power Transmission System

The electric power system in the United States contains three interrelated elements: the generating facilities that produce the power; the transmission network that conducts the flow of power from the points of generation to the points of distribution; and the distribution system that delivers the electric power to the consumers. The transmission network is the integrating medium of the power supply system providing the electrical connections between the many geographically separated parts of the electric power generating and distribution systems.

The electric transmission network is unlike any other mode of transportation. The flow of electricity is virtually instantaneous, changing magnitude and direction as conditions on the power system dictate.17 Electricity distributes itself along paths of least resistance that are determined by a complex electrical relationship involving the relative size, location and distribution of generation resources, transmission line facilities, and centers of demand. All transmission paths share the power transfer, and the degree of sharing is determined by the relationship of the network components. The system consists of transmission lines, substations with voltage transformers, circuit breakers, and other equipment required to transmit power safely from generation sources to ultimate customers. Transmission voltage levels have increased with improvements in technology and in keeping with the growing demand for electricity.

The transmission system performs several essential functions simultaneously: (1) it supplies the physical means for delivering electricity from the generating sources to the load centers; (2) it integrates generating sources and load centers into a flexible and resilient whole; and (3) it interconnects the physical facilities with those of neighboring systems. Although transmission lines are often added to the network initially to meet a single specific requirement, once added they become an integrated part of the transmission network

and their operation becomes interdependent with all the other elements of the network. Operating the system effectively requires significant planning and operational coordination of the generators and transmission facilities to: (1) achieve efficient use of all system facilities, (2) prevent overloading and failure, and (3) maintain adequate reserve transmission and generation capacity to ensure system reliability.

The Need for Coordination of System Operation

The current electrical system has developed in response to the regulations and economics of the electrical utility and nonutility sectors of the electric power industry, as well as to the changing technical factors that influence the generation, transmission, and distribution of electricity. Since the different electrical systems operate as a unified power grid (there are three in the contiguous United States) and the effects of power flows are not confined to contractual paths or apparent direct paths, handling the ever changing flow of electricity is a critical activity for system operators of the power grids. Large power transfers, for example, can change transmission line loadings hundreds of miles from the direct electrical path connecting the source and destination. Actions by individual utilities or NUGs can affect the operation of all the others on the system.

Control and Operation of Electric Systems

As electrical energy itself cannot be stored (at the voltage and ampere levels in use on a power grid), power must be instantaneously available to end users at any time, in any amount at the proper voltage. As a result, severe demands are imposed on electrical equipment and the transmission network when meeting changing loads. Monitoring the flow of scheduled electricity, handling customer requirements, and coordinating trade among utilities are the responsibility of the dispatch center. A dispatch center

¹⁷ The frequency of electric power supply in the United States is almost entirely 60 hertz (formerly cycles per second). The frequency of a system depends entirely upon the speed at which the supply generator is rotated by its prime mover. James Robert Eaton, *Electric Power Transmission Systems* (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972), pp. 2-3.

can be operated independently of other electrical systems by a single utility; it can link two or more interconnected utilities, or even unify several power systems with combined load requirements and maintenance programs.

The operators of dispatch centers must continually monitor load patterns to ensure that adequate electricity is available at all times. For most dispatch centers, it is the daily responsibility to (1) record the flow of electricity at the customer load centers and the entering and exiting amounts on its transmission lines, (2) watch the transmission connecting points for each interconnected electrical system, and (3) monitor the power flow from each generation plant. The dispatch center determines the power available from its system, balances the unit-generation marginal costs with buyor-sell opportunities with other utilities, coordinates the bulk power transactions, examines what plants must be dispatched to avoid technical system problems or undue economic costs, and accounts for system power losses. It also projects demand requirements in order to determine how much generating capacity will be needed and when. These projections may be done hourly, daily, weekly, or at longer intervals.

One electrical operating entity (power pool, electric utility, State authority, and/or Federal utility) within a group of interconnected electrical systems takes responsibility for maintaining system frequency for that electrical geographic area, monitors the load, and ensures generation availability to meet load requirements. Some control centers within these control areas are highly computerized, automatically loading the generating facilities as needed and maintaining the system at the correct operating frequency. This is important because deviations in the scheduled power flows or from the standard system frequency can automatically cause compensating changes in the output at the generating plants. These deviations can mean there has been a loss or gain of a customer load, a plant or line has suffered a forced outage, or some plant or line has been returned to the system. Any of these changes can require some review or action by these control centers.

Stabilizing system frequency is made easier by coordination with other electric systems and by drawing from a larger base of on-line capability. Load changes are absorbed by all the electrical systems, and many of the increasing and decreasing load changes cancel out or offset each other, so that the effect on the entire interconnected electrical system is less than it would be on an isolated electric utility. Also, this integrated system frees each generating unit from the necessity to make continual large changes in production levels.

Integrating Nonutility Generators with the Bulk Electric System

Nonutility generation sources continue to be a growing portion of the U.S. electrical generation capacity. This role of NUGs reflects the changing structure of the electric supply system.

Integrating Nonutility Generators

NUGs present a challenge to the operators of the power grids because of the increasing numbers and their growing contribution to wholesale generation. Matching customer load and generation for both daily operations and future planning activities is becoming increasingly complex with the growing NUG role and increasing use of the transmission system. Electrical reliability concerns and the proper integration of NUGs into the supply system have become important issues.

The proper integration of NUGs into the electrical operations of interconnection and dispatching generation can be regarded as engineering problems for which technical solutions are available. However, there are institutional issues associated with the responsibility for serving customers and control of the electrical system. The increasing role of NUGs has altered the traditional view of participants in the electrical supply.

Utilities have three basic concerns involving the integration of NUGs with the bulk power system, relating primarily to the relationships of the NUGs, utilities, and customers:

- Utilities, with the principal responsibility to operate the system, do not always have full operating control over the NUGs.
- The forces that drive NUG development and operation do not necessarily coincide with the obligations of the utilities to serve customer demands.
- The fulfillment of NUG development plans to support the future generation requirements of the system are not controlled by the utilities, which are obligated to provide sufficient capacity.

The investor-owned utility obligation to serve is part of what was once called the "regulatory compact," which tied the utility exclusivity to a service territory franchise and requires that the rate of return and prices be set by a regulatory body. However, the obligation of NUGs to provide power tends to be contractual. This contractual obligation (power sales contract) must be satisfied to provide an adequate return on investment and to service debt.

The perspectives of some utility industry organizations and NUG participants on these obligations may differ. Some of these differences can be attributed to positions of the organizations in the market, with respect to their cost structures and existing capacity.

Some utilities welcome the opportunity for potential cost savings and diversity of supply options offered by NUGs, others are more concerned about operations and overall system reliability.

In response to such concerns, the North American Electric Reliability Council (NERC), which the utility industry charged to oversee the reliability of the bulk electric supply, has established guidelines on the minimum operating considerations that all utility and nonutility generators must follow to ensure the continued reliability of the system.¹⁸

Impact of Nonutility Generation on the Supply System

The electric utility industry and nonutility industry have worked together to safely and reliably interconnect NUGs. Many utilities are increasingly relying on NUG power as an important source of power. Several factors which utilities may not control can influence the operation of the overall system. The overall level of increase in NUG capacity is just one element. The size of individual facilities has a direct bearing on the potential system impacts; small facilities are less likely to have the same impacts as large ones. At the same time, the locations of individual projects, even small ones, can be critical. Where a facility is sited can affect transmission line loadings and substation equipment operation. Similarly, the timing of power

production from a NUG facility can affect the balance of power flows on the system. Moreover, the availability and reliability of NUG power can influence the operation of the system and the requirements for reserve capacity.

The electrical supply system is operated within closely watched tolerances and can require complex and real-time balancing of generation and transmission facilities with fluctuating demand. The substantial interrelationships of all the system components--utility and nonutility--suggest that generation capacity that falls outside the direct control of system operators increases their operational and planning challenges, and may affect system reliability. The extent to which operation, size, location, timing, availability and reliability of NUG power production can be coordinated with system operators will determine the impacts of NUG integration on the bulk electricity supply system.

Technically, all of these factors exert both positive and negative influences on the electrical system, depending on site-specific conditions and timing of actions. For example, a NUG facility could be located specifically to help a utility avoid a transmission or distribution bottleneck. Proper integration of NUGs into the daily operational control and management of the electrical power grid is critical for capturing the benefits and minimizing the disadvantages for all entities connected to the grid.

¹⁸ North American Electric Reliability Council, *Integrating Nonutility Generators* (Princeton, New Jersey, January 1992). The specific guidelines now address both planning and operating considerations, and apply to all utility and nonutility sources. The guidelines address a range of needs, from specific design issues, to information needs, and data exchange requirements. The guidelines also cover how the generation sources would be brought on- and off-line during routine and emergency conditions.

Appendix D

Technical Notes

Appendix D

Technical Notes

Sources of Data

The data sources used to produce this publication include selected items from the following Federal Energy Regulatory Commission (FERC), Energy Information Administration (EIA), and Rural Utilities Service Administration (RUS) annual data collection forms:

- Form EIA-412, " Annual Report of Public Electric Utilities"
- Form EIA-861, "Annual Electric Utility Report"
- Form FE-781R, "Annual Report of International Electrical Export/Import Data"
- FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others"
- FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees"
- RUS Form 7, "Financial and Statistical Reports -Electric Distribution Borrowers"
- RUS Form 12a through 12i, "Electric Power Supply Borrowers," and RUS Form 12c through 12g, "Electric Distribution Borrowers with Generating Facilities"

Completion of these forms by electric utilities is mandatory. Individual forms are completed by all U.S. utilities meeting specific ownership and size criteria. Sampling methods are not used as part of these surveys except for minimum threshold reporting; all qualifying utilities (that is, all utilities satisfying reporting criteria) are required to report annually.

Other 1996 data collected on these forms are also published by EIA and RUS in the following reports: Financial Statistics of Selected Investor-Owned Electric Utilities 1996 (DOE/EIA-0437)/1, Financial Statistics of Selected Publicly Owned Electric Utilities 1996 (DOE/EIA-0437)/2, and Annual Report of Energy Purchased by RUS Borrowers (REA).

Form EIA-412, "Annual Report of Public Electric Utilities"

Summary of Primary Purpose.

Form EIA-412 is used to collect detailed accounting, financial, and operating data annually from publicly owned electric utilities in the United States. For the fiscal or calendar year that ended December 31, 1996, new criteria were used to select the reporting respondents for this form. Publicly owned electric utilities engaged in the generation, transmission, or distribution of electricity that had 120 million kilowatthours of sales to ultimate consumers or 120 million kilowatthours of sales for resale for the 2 previous years as reported on Form EIA-861, "Annual Electric Utility Report," must submit Form EIA-412.

Instrument and Design History.

Federal Power Commission (FPC) Form 1M was implemented as a mandatory survey by the FPC in 1961. It became the responsibility of the EIA in October 1977 when the FPC was merged into the DOE. Effective January 1980, the FPC Form 1M was superseded by Form EIA-412, also a mandatory survey, used to collect the same data as those previously reported on FPC Form 1M.

Data Processing

The processing of data reported on FERC Form 1, Form EIA-412, and Form EIA-861 is the responsibility of the Electric Power Division of the Office of Coal, Nuclear, Electric and Alternate Fuels. The normal processing of FERC Form 1-F is the responsibility of the FERC. Automated systems are used to edit data from the surveys, using deterministic and statistical checks. When these data have passed the editing process, they are aggregated into a master file, which is used as input to this publication's data base.

Form EIA-861, "Annual Electric Utility Report"

Summary of Primary Purpose.

Form EIA-861 is a census of electric utilities in the United States. The mandatory survey is used to collect information on power production and sales data from approximately 3,195 electric utilities. The data collected are used to maintain and update the EIA electric utility frame data base. This data base supports queries from the Executive Branch, Congress, other public agencies, and the general public. Summary data from Form EIA-861 are also contained in the Electric Power Monthly, the Electric Sales and Revenues 1996, the Financial Statistics of Selected Investor-Owned Electric Utilities 1996, and the Financial Statistics of Selected Publicly Owned Electric Utilities 1996. These reports present totals for electric utilities on a national level, by State, and by ownership type.

Instrument and Design History.

Form EIA-861 was implemented in January 1985 to collect data as of the end of 1984. The Federal Energy Administration Act of 1974 (Public Law 93-275) defines the legislative authority to collect these data. Detailed comparisons and descriptions of conceptual problems affecting the quality of the data are discussed in the report, An Assessment of the Quality of Selected EIA Data Series: Electric Power Data.

Form FE-781R, "Annual Report of International Electrical Export/Import Data"

Summary of Primary Purpose.

Form FE-781R is used to collect on an annual basis, monthly international electricity trade information on the gross amounts of electrical energy imports and exports and the costs and revenues associated with these transactions. The use of the format contained in Form FE-781R is optional for reporting purposes; however, submission of the data is mandatory

Instrument and Design History.

The authority to issue presidential permits pursuant to Executive Order Number 10485 was transferred to the Secretary of Energy by Executive Order Number 12038 (43 FR 4957 February 7, 1987). This responsibility was delegated by the Secretary to the Economic Regulatory Administration (DOE Delegation Order Number 0204-04, October 1, 1977). The authority was redelegated (DOE Delegation Order Number 127) to the Office of Fuels Programs, the Office of Fossil Energy (54 FR 11436 March 20, 1989). The survey universe is defined under Title 10 of the Code of Federal Regulations, Sections 205.308 and 205.325 to include all public utilities or other entities subject to the Department of Energy jurisdiction under Part II of the Federal Power Act, engaged in the export of electrical energy across the international borders of the United States with Canada and Mexico, or, who own the physical facilities, which are used to transmit power across the international border.

Data Processing.

Form FE-781R is mailed to the respondents to collect annually the monthly data for the preceding calendar year. The completed forms are to be returned to the DOE by February 15. The receipts are manually edited and the data used for the Presidential Permit Program are entered into a machine readable format.

FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others"

Summary of Primary Purpose.

The Federal Energy Regulatory Commission (FERC) Form 1 is used to collect detailed accounting, financial, and operating data annually from "major" investor-owned electric utilities having, in each of the last 3 consecutive years, sales or transmission service that exceeds any one of the following: 1 billion kilowatthours of total sales, 100 kilowatthours of sales for resale, 500 thousand kilowatthours of gross interchange out, or 500 thousand kilowatthours of wheeling for others (deliveries plus losses). The FERC Form 1-F is used to collect detailed accounting, financial, and operating data annually from "minor" investor-owned electric utilities that fall below the major category. For the year 1996, jurisdictional filings of the FERC Form 1 and 1-F totaled 212; though not all can be considered traditional electric utilities. See Table B1 (Appendix B) for those that qualified in 1996.

Instrument and Design History.

FERC Form 1 was implemented in 1935 by the Federal Power Commission (FPC). In October 1977, it became the responsibility of the EIA to publish energy data when the FPC was merged into the Department of Energy (DOE). This mandatory report is prepared in accordance with the FERC's Uniform System of Accounts for private utilities and licensees. In 1990, the wholesale trade schedules were modified. The Summary of Interchange schedule was absorbed by the Purchased Power Schedule and the Transmission For and By Others schedule was changed from a narrative format into two separate tabular collection schedules. In addition to these schedule changes, the statistical classifications covering the data filed on these schedules were adjusted.

Uniformity of Treatment.

The uniformity of treatment accorded the utilities' statements in this report will generally permit ready comparison of items among the utilities included in the compilations. These statements were filed by all "major" investor-owned electric utilities subject to the FERC accounting jurisdiction.

The Uniform System of Accounts prescribed for use by electric utilities under the FERC's jurisdiction was prepared in cooperation with the National Association of Regulatory Utility Commissioners. ¹⁹ In all material respects, the Uniform System of Accounts conforms with the Association's approved system adopted by certain State commissions. The "major" investorowned electric utilities are required to follow the Uniform System of Accounts. In the presentation of individual utility data, the utilities are grouped according to the survey form and the class of ownership to which the utility belongs. The 504 publicly owned electric utilities that filed the EIA-412 in 1996 are requested to follow the Uniform System of Accounts when making their filings.

No attempt has been made to consolidate (in the technical accounting sense) the accounts of the utilities included in the summary statement of this report. The combined totals represent the arithmetic sum of accounts as reported by the individual utilities. Consequently, duplications exist to a limited extent in the composite totals shown in several statements. Therefore, as a result of mergers, consolidations, and sales of properties to public authorities, as well as the introduction of new utilities, the dollar and quantity figures presented in the report will not be representative of exactly the same properties from year to year.

FERC Form 1-F, "Annual Report of Nonmajor Public Utilities and Licensees"

Summary of Primary Purpose.

FERC Form 1-F is used to collect limited accounting, financial, and operating data annually from investor-owned electric utilities that are not classified as "major," and had total sales in each of the last 3 consecutive years of 10 million kilowatthours or more.

Instrument and Design History.

FERC Form 1-F was implemented by the FPC regulations under the authority of the Federal Power Act as FPC Form 1-F for the year 1961 and thereafter. In October 1977, the FPC was merged into the DOE. This mandatory report is prepared in accordance with the FERC's Uniform System of Accounts for Private Utilities and Licensees.

Publication--FERC Form 1 and Form EIA-412

Data on plant construction cost, production expenses, generating equipment characteristics, and other relevant operating data are no longer published.

Financial data can be found in the Financial Statistics of Selected Investor-Owned Electric Utilities 1996 and Financial Statistics of Selected Publicly Owned Electric Utilities 1996. These data include the following: income and earnings, taxes, depreciation and amortization, distribution of salaries and wages, electric utility operating revenues, electric utility operation and maintenance expenses, and generating plant statistics. Planned construction data, year-end balance sheets, and general corporate information are also included.

Information Collected on FERC Form 1, Form EIA-412, and Form

EIA-861

Reported data selected from FERC Form 1 include sales for resale, purchased power, exchanges, and wheeling, while the reported data selected from Form EIA-412 include only sales for resale and purchased power.

"Electric Energy Account Summary data" for the municipals, cooperatives, Federal power marketing administrations, and the Tennessee Valley Authority were summarized from Form EIA-861. Form EIA-861 is used to collect information for EIA on the statistics of electric utilities and their generation, transmission and distribution of electric energy in the United States, its territories, or Puerto Rico. Form EIA-861 is mandatory under Public Law 93-275, the Federal Energy Administration Act of 1974.

Rural Utilities Service (USDA) Cooperative Utilities

In an effort to broaden the coverage in this report of the electric utility industry, information has been included from the Cooperative Borrowers of the Rural Utilities Service (RUS). These data are based on financial and statistical information submitted to the RUS in 1996.

The operating data collected by the RUS furnish information needed for checking the security of government loans, the preparation of estimates used in forecasting expenses for future loans, and allow the RUS to fulfill its reporting obligations. The reports prepared by the cooperative utilities must accurately

¹⁹ The National Association of Regulatory Utility Commissioners includes members of the railroad, public utilities, and public service commissions of the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, and the territory of the Virgin Islands. The following Federal regulatory agencies also were included: the Interstate Commerce Commission, the Federal Energy Regulatory Commission, the Federal Communication Commission, and the Securities and Exchange Commission.

reflect the financial data as shown by their books of account.

Confidentiality of the Data.

The data collected on the forms used for input to this report are not confidential.

Quality of Data

The Office of Coal, Nuclear, Electric and Alternate Fuels is responsible for routine data improvements and quality-assurance activities in accordance with standards established by EIA. These standards are the measuring rod necessary for quality statistics. Data-improvement efforts include follow-up on nonrespondents, verification of data-keyed input by automatic computerized methods, and editing by subject-matter specialists.

Completed forms received by the Office of Coal, Nuclear, Electric and Alternate Fuels are sorted, screened for completion of reported information, and keyed onto computer tapes for storage and transfer to data bases on random access storage devices for computer processing. The information coded on the computer tapes is spot-checked against the data reported on the forms to certify accuracy of the tapes. Computerized respondent data files are checked to identify those who fail to respond to the survey. By law, non-respondents may be fined or otherwise penalized for not filing an EIA data form as prescribed in the instructions. Before invoking the law, EIA tries to obtain the required information by encouraging cooperation of nonrespondents.

The individual utility identification codes for new and existing entities are edited prior to being sent for data entry. Additional edit checks of these data are performed through computer programs. The program edits include both deterministic checks, in which records are checked for the presence of data in required fields, and statistical checks, in which the data are checked against a range of values based on historical data values and for logical or mathematical consistency with data elements reported in the form. Discrepancies arising as a result of these checks are resolved either by the processing office or by a telephone call to the company concerned.

Data Validation Procedures

The methodology used to develop this report is based on procedures and techniques routinely employed in data requirement reviews and data validation projects conducted by and for EIA. The four-step process used consists of: (1) identifying patterns of respondent misreporting and inconsistencies in reporting between respondents; (2) analyzing each problem identified to develop probable causes; (3) correcting the identified problems; and (4) modifying the forms and/or instructions to eliminate or minimize future occurrences. The objective of the process is to make improvements that will:

- Improve the readability, accuracy, and meaningfulness of the data collected on wholesale electricity trade
- Reduce respondent burden by means of clarifying instructions, simplifying form layout, and eliminating unnecessary calculations
- Effect data standardization among the various forms used to collect wholesale electricity trade data
- Facilitate the computerization of wholesale electricity trade data to be collected in the future.

A variety of methods were used to identify reporting problems including:

- Manual pre-edit of FERC Form 1 and Form EIA-412 to identify nonstandard responses that could not be computerized as submitted by the respondent
- Manual review of selected forms to characterize patterns of reporting and misreporting and the type of respondents responsible
- Automated statistical reports (such as frequency counts) summarizing respondent reporting regarding individual data items
- Automated interform data validation to identify inconsistencies between aggregate level data reported by a respondent on Form EIA-861 and FERC Form 1
- Automated intraform data validation to identify reporting inconsistencies (such as, total does not equal the sum of the components)
- Automated interform data validation to identify inconsistencies between respondents reporting the same transaction (such as, the buyer and the seller of power reporting different quantities of energy delivered and received)
- Follow-up telephone calls are made to respondents (excluding those who filed FERC Forms) regarding confusing and/or inaccurate entries.
 Questions on the accuracy of filings made to the FERC are handled at the discretion of FERC staff.

The causes of misreporting and inconsistent reporting were identified principally by studying in detail the form layouts and instructions, and identifying patterns and trends in misreporting among all respondents. Considerable judgment was necessary in developing probable causes since all respondents could not be systematically contacted regarding errors. As an alternative, explanatory footnotes found in the completed forms, supplementary pages, and manual checks were used to confirm and validate the data. Once probable causes were identified, modification of the forms was straightforward.

Data Edits

The data used for this publication are limited to those reported by respondent utilities. The following edit checks were used to identify missing or inaccurate data from the information that was initially reported by the respondent utilities.

- Energy--Sales for Resale and Purchased Power
 - No single transaction could exceed 4,380 million kilowatthours.
 - If sales or purchase transactions were reported, an energy receipt or delivery was required.
 - Reported totals or subtotals had to equal the sum of energy transactions.
- Energy--Interchanges (Exchanges)
 - No single transaction could exceed 4,380 million kilowatthours.
 - If interchange transactions were reported, an energy receipt or delivery was required.
 - Net energy received for a transaction had to equal total energy received minus energy delivered.
 - Reported totals or subtotals had to equal the sum of energy transactions.

· Revenue--Sales for Resale

- Total revenue for a transaction had to equal the sum of reported revenue-demand, revenue-energy, and revenue-other.
- Total revenue for a transaction divided by the kilowatthours sold for resale had to be in the range of 0.5 to 20 cents per kilowatthour.
- Reported revenue totals or subtotals had to equal the sum of revenue transactions.

· Cost--Purchased Power

- Total cost for a transaction had to equal the sum of demand, energy, and other costs.
- Total cost of a transaction divided by kilowatthours purchased had to be in the range of 0.5 to 20 cents per kilowatthour.
- Reported cost totals or subtotals had to equal the sum of cost transactions.

Settlement--Interchanged Energy (Exchanges)

- For transactions involving monetary settlement, the settlement amount divided by net kilowatthours received or delivered was required to be in the range of 0.5 to 20 cents per kilowatthour.
- For settlement transactions involving monetary settlement, settlement amount was required to be positive if more energy was received than delivered; negative if more energy was delivered than received.
- Reported totals and subtotals had to equal the sum of settlement transactions.

Adjustments

Since the Federal forms used to collect electricity trade data are essentially accounting forms, adjustment data are routinely provided so that submitted data will be consistent with the accounting systems of the utilities. Many respondents include adjustments, particularly those related to transactions occurring in the reporting year, as a component of the related transaction. However, adjustments to transactions occurring in previous years are aggregated with current year transactions or are listed separately (that is, rebates, overcharges, reclassifications, fuel cost adjustments, etc.).

Sales for Resale and Purchased Power

Sales for resale data are collected on FERC Form 1, Form EIA-412, RUS Form 7, and RUS Form 12. The primary sources of this information are FERC Form 1 and a few of the Form EIA-412's completed by Federal and State agencies. These respondents account for most of the wholesale electricity trade in the United States. The detailed data on sales for resale are not keyed into a machine-readable format by the RUS; therefore computer matching was not done.

Since sales for resale on Form EIA-412 is on a fiscal-year basis as opposed to calendar year, the Form EIA-412 data are not consistent with data collected on the other wholesale electricity trade schedules. Also wholesale electricity trade sales cannot be aggregated for all Form EIA-412 respondents because the respondents use different fiscal years. This is also true for the purchased power data. In 1989, the statistical classifications of the Form EIA-412 were modified to gather information on the types of electrical power and energy purchased and sold. The 1990 data reflect the collection of data using the enlarged statistical classification groupings.

The RUS Form 12, unlike FERC Form 1 and Form EIA-412, is not used to collect sales according to statistical classification (that is, firm, dump, and other power). The RUS does not process the sales for resale data reported on the RUS Forms 7 and 12. As such, cross-checking between buyers and sellers is less comprehensive. It also should be noted that Form EIA-412 was used to collect statistical classification data for both sales and purchased energy in 1996, while the RUS did not collect statistical classification data for either.

The purchased power schedules on Form EIA-412 and RUS Forms 7 and 12 does not include interchange (exchange) transactions. Form EIA-412 respondents are asked to report exchanges on a gross basis on the Energy Account Balance schedule. The RUS Forms 7 and 12 do not specifically address interchange (exchanges) transactions, but respondents are to report transactions on a net basis, if there is a cash payment.

Interchange (Exchange)

Both purchase and interchange costs fall under the Uniform System of Accounts No. 555, and were reported on two different schedules until 1990. In 1990, the Summary of Interchange Schedule was deleted from the FERC Form 1 and the information collected on that schedule were shifted to the Purchased Power Schedule. The FERC has determined, for their regulatory accounting purposes, that the term, "interchange," means energy that is only exchanged in kind. Historically, however, "interchange" has been used by the industry to mean all energy transfers between utilities (sales, purchases, exchanges, and wheeling) and it has resulted in inconsistent reporting.

Transmission For Others and By Others (Wheeling)

Detailed data on the Transmission For or By Others are collected only on FERC Form 1. Before 1990, respondents provided in a narrative format six basic elements of information for each wheeling transaction:

- · Name of company and description of service
- · Points of origin and termination of service
- Megawatthours received and delivered
- · Monetary settlement
- · Nonmonetary settlement
- Other explanations needed to describe the transactions.

The FERC Form 1 was modified for the 1990 collection year. The narrative schedule was changed to two separate tabular formats. The Transmission For Others schedule now collects additional information on: payments made by, energy received from; energy delivered to; statistical classification; FERC rate schedule; disaggregation of monetary settlement into demand, energy, other, and total; and points of origin, termination of service, and nonmonetary settlement were all deleted. Transmission By Others now collects information on name of company; megawatthours received and delivered; and expenses for transmission of electricity by others (e.g., demand, energy, other, and total).

Difference between Publication Methodologies

The Federal Energy Regulatory Commission modified the FERC Form 1 in 1990 in order to handle better their responsibilities under the Federal Power Act. New information was requested that included statistical classification categories which collected data on power and energy transactions based on the original contractual terms and conditions. Because of this new information, the firm, nonfirm, and miscellaneous publication categories used in prior years were adjusted to handle these new classifications.

In prior publications, firm trade was defined as any transaction in which the charges had to include a demand charge. Firm trade data were then separated into two groups. The first group included transactions with demand charges where no quantities of energy were delivered or received (possible under "take or pay contracts"), and the second included quantities of energy that were traded with an "Energy," and sometimes, "Other" charge. (The "Other" charge in the firm category covers associated payments made on utility transactions for expenses associated with operating and/or renting physical facilities such as transmission lines and substations).

The differences between nonfirm electricity trade and the firm categories is that no demand charges are involved in the nonfirm transactions. The energy charge plus any "Other" charges associated with those transactions represented the value of these nonfirm transactions. The last grouping, "Other," includes transactions which did not include a demand or energy charge. (The filing electric utilities usually did not provide descriptive explanations.) However, from the footnotes provided and the account descriptions, data in this category do include: purchasing or maintaining operating reserve expenses; stability and reliability standards expenses; transmission line and other facility rentals; and other system operating charges.²⁰

For this publication, the revised FERC classifications were used for inputs which helped define the firm, economy, and other electricity trade categories. Form redesigns implemented in reporting year 1990 for both FERC Form 1 and Form EIA-412 permitted respondent reported data to be used to differentiate between firm and nonfirm power trades.

The following list shows the type-of-trade categories reported by the FERC Form 1 and the Form EIA-412 respondents.

- · FERC Form 1
 - Requirements (RQ)
 - Long-Term (LF)
 - Intermediate Firm (IF)
 - Short-Term Firm (SF)

²⁰ FERC Form 1 provides summary totals for electric operation and maintenance expenses. Pages 320-323 of FERC Form 1, under the schedule "Electric Operation and Maintenance Expenses," include information on power production, transmission, and distribution expenses (Uniform System of Accounts 500 to 935). These summary data are reported in the EIA publication, *Financial Statistics of Selected Investor-Owned Electric Utilities*, DOE/EIA-0437(94). This information cannot be linked to the individual transactions.

- Long-Term
- Intermediate Firm (IF)
- Short-Term Firm (SF)
- Long-Term Unit (LU)
- Intermediate Unit (IU)
- Exchange Power (EX)
- Other Service (OS)
- Adjustments (AD)
- Form EIA-412
 - Firm Power (FP)
 - Unit Power (UP)
 - Economy Power (EP)
 - Dump Power (DP)
 - Maintenance/Emergency Power (ME)
 - Operating Reserve (OR)
 - Other Capacity/Energy (OT).

Appendix A provides the FERC Form 1 definitions found on pages 310 and 326. Form EIA-412 definitions are found on Schedules V and VII of the form.

Like previous years, 1996 transactions without energy receipts or deliveries but with demand charges are classified as firm, "demand charge only" trade. FERC Form 1 and Form EIA-412 respondents do not always report type of trade data, which results in missing data. Likewise, data is missing for cooperatives, since they are not required to report the type-of-trade on the Rural Utilities Service (RUS) Forms RUS-7 and RUS-12. Imputations for missing type-of-trade data are performed according to the following procedures:

 Purchased Power. If the respondent utility (the purchasing utility) reported no net generation on the 1996 Form EIA-861, then the trade is classified as firm. Otherwise the trade is classified as economy.

Data Revisions

The foregoing edits identified data errors. Data inaccuracies resulting from transcription and typographical errors, reporting in the wrong units (for example, kilowatthours instead of megawatthours) and arithmetic errors were corrected after discussions with respondents. Many suspected data errors were found to be correct as reported. Explanations provided by respondents included:

- The transaction was an energy or monetary adjustment to information previously reported. Adjustments reflected settlement of contract disputes, reimbursement of overcharges, or accounting errors and often were one-time bookkeeping corrections.
- The transaction involved large demand charges, but a small amount of energy was delivered.

- The transaction was a nonstandard operating condition such as loop and inadvertent energy flow, emergency power deliveries, or sale of energy under a purchase contract.
- The transaction was for access rights or the lease of equipment used in the sale or purchase of energy.
- The transaction was between two associated utilities or a utility and a power pool reporting internal energy, revenue, or cost accounting practices (for example, allocations).

Consistency Checks

In addition to edit checks, data consistency checks were performed to improve the quality of the data presented in this publication. The consistency checks involved comparing, when possible, Sales for Resale data (revenue and energy) reported by one respondent with the purchased power data (cost and energy) reported by the respective buyers of the energy. Discrepancies of more than 10 percent were discussed with both the selling and the buying utilities to determine if a reporting error had been made. A similar procedure was used to confirm data inconsistencies between utilities that interchanged energy.

Consistency checks identified data errors, but discussions with respondents determined that most of the data were correct as reported. Reasons provided included:

- A sale or purchase by one utility was considered an interchange by the other utility in the transaction.
- Sales, purchases, and interchanges for noninvestor-owned utilities transacted late in the year can be reported in the year in which the transaction occurred or in the following year in which they are booked.
- Data submitted by a utility can cover different reporting periods depending upon the requirements of the forms; Form EIA-412 is a report of the utility's fiscal year while the other forms are for a calendar year.
- Different accounting and reporting procedures are used for recording loop and inadvertent energy flow, equipment and lease charges, service fees, fuel and other adjustments, and corrections to previously reported information.

Corrections

Corrections were made to the data when missing or inaccurate data were provided by the respondent. Missing and inaccurate information identified during data automation and report preparation were discussed with respondents during the edit process either to correct the data supplied, or to confirm the values. In all cases, the forms were reviewed during the edit process with the respondent, and changes were made at the direction of the respondent.

Explanatory Notes

Data are reported on FERC Form 1 in accordance with the FERC's Uniform System of Accounts. Data are reported on the RUS Forms 7 and 12 in accordance with the RUS Uniform System of Accounts (based on the FERC System, with minor modifications). Copies of the *Uniform System of Accounts Prescribed for Both Private and Cooperative Borrowing Electric Utilities* are available from the U.S. Government Printing Office (GPO).

General Information

Use of the Glossary

The terms in the glossary have been defined for general use. Restrictions on the definitions, as used in these data collection systems, are included in each definition when necessary to define the terms as they are used in this report.

Obtaining Copies of the Data

This publication is available on a subscription basis from the Superintendent of Documents, U.S. Government Printing Office (GPO). Make check or money order payable to the Superintendent of Documents. You may send your order to the GPO or the National Technical Information Center (NTIC). GPO and NTIC prices are subject to change without advance notice.

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National Technical Information Service (NTIS) Office of Data Base Services U.S. Department of Commerce 5285 Port Royal Road Springfield, VA 22161 (703) 487-4650

Glossary

Accounting System: A system of recording accounting data for a utility or company; or of supplying accounting information for controlling, evaluating, planning, and decision-making.

Administrative and General Expenses: Expenses of an electric utility relating to the overall directions of its corporate offices and administrative affairs, as contrasted with expenses incurred for specialized functions. Examples include office salaries, office supplies, advertising, and other general expenses.

Ampere: The unit of measurement of electrical current produced in a circuit by 1 volt acting through a resistance of 1 ohm.

Associated Company (Affiliated): A company that is either directly or indirectly controlled by or owned by another firm or holding company.

Automatic Generating Control: The regulation of the power output of electric generators within a prescribed control area in response to changes in system frequency. The line loading or the relation of these to each other, so as to maintain the scheduled system frequency and/or establish interchange with other areas within predetermined limits.

Available but not Needed Capability: Net capability of main generating units that are operable but not considered necessary to carry load, and cannot be connected to load within 30 minutes.

Average Water Conditions: The amount and distribution of precipitation within a drainage basin, and the run-off conditions present, as determined by reviewing the area water supply records over a long period of time.

Backup Power: Electric energy supplied by a utility to replace power and energy lost during an unscheduled equipment outage.

Base Bill: A charge calculated by taking the rate from the appropriate electric rate schedule and applying it to the level of consumption.

Base Rate: A fixed amount charged each month for any of the classes of utility service provided to a customer.

Baseload: The minimum amount of electric power delivered or required over a given period of time at a steady state.

Baseload Capacity: The generating equipment normally operated to serve loads on a round-the-clock basis.

Baseload Plant: A plant, usually housing highefficiency steam-electric units, which is normally operated to take all or part of the minimum load of a system, and which consequently produces electricity at an essentially constant rate and runs continuously. These units are operated to maximize system mechanical and thermal efficiency and minimize system operating costs.

Black Start Capability: The ability of a generating unit or station to go from a shutdown condition to an operating condition and start delivering power without assistance from the power system.

Block Rate Schedule: An electric rate schedule with a provision for charging a different unit cost for various increasing blocks of demand or energy. A reduced price is charged on succeeding blocks.

Boiler: A device for generating steam for power, processing, or heating purposes; or hot water for heating purposes or hot water supply. Heat from an external combustion source is transmitted to a fluid contained within the tubes found in the boiler shell. This fluid is delivered to an end-use at a desired pressure, temperature and quality.

Boiler Fuel: An energy source to produce heat that is transferred to the boiler vessel in order to generate steam or hot water. Fossil fuel is the primary energy source used to produce heat for boilers.

Borderline Customer: A customer located in the service area of one utility, but supplied by a neighboring utility through an arrangement between the utilities.

Btu (**British thermal unit**): A standard unit for measuring the quantity of heat energy equal to the quantity of heat required to raise the temperature of 1 pound of water by 1 degree Fahrenheit.

Bulk Power System: The interconnected electrical systems comprising generation and transmission facilities on which faults or disturbances can have a significant effect outside the local area.

Bulk Power Transactions: The wholesale sale, purchase, exchange of electricity, and/or transmission services (wheeling) among electric utilities. Bulk power transactions are used by electric utilities for many different aspects of electric utility operations, from maintaining load to reducing costs.

Bus: An electrical conductor which serves as a common connection for two or more electrical circuits.

Capability: The maximum load that a generating unit, generating station, or other electrical apparatus can carry under specified conditions for a given period of time without exceeding approved limits of temperature and stress.

Capability Margin: The difference between net system capability and system peak load. Nationally, it is the difference between aggregate net system capability and the sum of system peak loads without allowance for time diversity between the loads of the individual systems. Regional computations take into account the diversity between peak loads of the systems that coordinate operations. This margin indicates the capability available to provide for scheduled maintenance, emergency outages, system operating requirements, and unforeseen loads.

Capability, Emergency Transfer: The amount of power transfer allowed between areas or within an area when operating to meet NERC emergency criteria contingencies.

Capability, Normal Transfer: The amount of power transfer allowed between areas or within an area when operating to meet NERC normal criteria contingencies.

Capacity: The full-load continuous rating of a generator, prime mover, or other electric equipment under specified conditions as designated by the manufacturer. It is usually indicated on a nameplate attached to the equipment as the full-load rating.

Capacity (Nameplate): The amount of electric power delivered or required for which a generator, turbine, transformer, transmission circuit, station, or system is rated by the manufacturer.

Capacity Charge: An element in a two-part pricing method used in capacity transactions (energy charge is the other element). The capacity (demand) charge is assessed on the amount of capacity being purchased.

Capacity Factor: The ratio of the average load on the generating unit, generating plant, or other electrical apparatus during a specified period of time during its operations.

Capacity Transaction: The acquisition of a specified quantity of generating capacity from another utility for a specified period of time. The utility selling the capacity is obligated to make available to the buyer a specified quantity.

Certificate: A type of permit for public convenience and necessity issued by a utility commission, which authorizes a utility or regulated company to engage in business, construct facilities, provide some services, or abandon service.

Circuit: A conductor or a system of conductors through which electric current flows.

Circuit-Mile: The total length in miles of separate circuits regardless of the number of conductors used per circuit.

Classes of Service: Customers grouped by similar characteristics in order to be identified for the purpose of setting a common rate for electric service. Usually classified into groups identified as residential, commercial, industrial, governmental, or other similar groupings within each major classification.

Code of Federal Regulations: A compilation of the general and permanent rules of the executive departments and agencies of the Federal Government as published in the Federal Register. The Code is divided into 50 titles that represent broad areas subject to Federal regulation. Title 18 contains the FERC's regulations.

Cogeneration: The sequential or simultaneous process in which useful heat/steam is generated, used in a variety of process applications, and then directed into a turbine to generate electricity and/or mechanical work from the useful thermal energy still available for use.

Cogenerator: A generating facility that produces electricity and another form of useful thermal energy (such as heat or steam), used for industrial, commercial, heating, or cooling purposes.

Combined Cycle: A cogeneration technology in which additional electricity is produced sequentially from the otherwise lost waste heat exiting from one or more gas-fired turbines. The exiting heat flow is routed to an exhaust-fired conventional boiler or to a heat recovery steam generator for utilization by a steam turbine in the production of electricity. This process increases the efficiency of an electric generating system by turning the rejected heat into thermal steam rather than discharging it into the atmosphere.

Commercial and Industrial: Classes of service supplied to a similar grouping of customers. These customer groupings are usually subdivided into smaller segments by classifying such customers as commercial or industrial using the Federal Government's Office Of Management and Budget's Standard Industrial Classification Guide and/or a scale of energy usage as yardsticks; other customers are reclassified as commercial or industrial when their demands or annual use exceeds some specified limit. These limits are generally based on a utility's rate schedules, except for those customers who are supplied under special contracts or agreements calling for particular services.

Commingling: The mixing of one utility's generated supply of electric energy with another utility's generated supply within a transmission system.

Commission: An agency of government usually composed of three or more members charged with specific duties, functions, and responsibilities.

Conductor: Metal wires, cables, and bus-bar used for carrying electric current. Conductors may be solid or stranded, that is, built up by an assembly of smaller solid conductors.

Connected Load: The sum of the continuous ratings or the capacities for a system, part of a system, or a customer's electric power consuming apparatus.

Contingency: The unexpected event, usually the loss of one or more segments in the interconnected electrical power system.

Cooperative (electric utility): An electric utility legally established to be owned by and operated for the benefit of those using its services. The utility company will generate, transmit, and/or distribute supplies of electric energy to a specified area not being serviced by another utility. Such ventures are generally exempt from the Federal income tax laws. Most cooperatives have initially been financed by the U.S. Department of Agriculture's Rural Utilities Service Administration.

Coordination Service: Coordination service generally involves the sale, exchange, or transmission of electricity between two or more electric utilities that typically have sufficient generation and transmission capacity to supply their load requirements under normal conditions.

Coordination Service Pricing: The typical price components of a bulk power coordination sale are an energy charge, a capacity, or reservation charge, and an adder. The price for a particular sale may embody some or all of these components. The energy charge is made on a per-kilowatthour basis and is intended to recover the seller's system incremental variable costs of making a sale. Since the nonfuel expenses are usually hard to quantify and small relative to fuel expense, energy charges quoted are usually based on fuel cost. A capacity charge is set at a certain level per kilowatt and is normally paid whether or not energy is taken by the buyer. An adder is added to the energy charge to recover the hard-to-quantify nonfuel variable costs. There are three types of adders: percentage, fixed, and split-savings. A percentage adder increases the energy charge by a certain percentage. A fixed adder, adds a fixed amount per kilowatt-hour to the energy charge. Split-savings adders are used only in economy energy transactions. They split production cost savings between the seller and the buyer by adding one-half of the savings to the energy cost.

Cost: The amount paid to acquire resources such as plant and equipment, fuel, or labor services. Fixed costs in the electric utility industry are associated with resources that cannot be changed easily during a short time span (such as plant and equipment) and are independent of the level of generation. Variable costs are associated with resources that can vary during a given time period (such as fuel or labor services) and are directly related to the level of generation.

Cost of Service: A ratemaking concept used for the design and development of rate schedules to ensure that the filed rate schedules recover only the cost of

providing the electric service at issue. This concept attempts to correlate the utility's costs and revenue with the service provided to each of the various customer classes.

Current: A flow of electrons in an electrical conductor. The strength or rate of movement of the electricity is measured in amperes.

Deliveries (Electric): Energy generated by one system and delivered to another system through one or more transmission lines.

Demand (Electric): The rate at which electric energy is delivered to or by a system, part of a system, or piece of equipment, at a given instant or averaged over any designated period of time.

Demand Charge: That portion of the consumer's bill for electric service based on the consumer's maximum electric capacity usage and calculated based on the billing demand charges under the applicable rate schedule.

Demand Charge Credit: Compensation received by the buyer when the delivery terms of the contract cannot be met by the seller.

Demand Interval: The time period during which the flow of electricity is measured, usually in 15-, 30-, or 60-minute increments.

Dependable Capacity: The load-carrying ability of a station or system under adverse conditions for a specified period of time.

Diesel-Electric Plant: A generating station that uses diesel engines to drive its electric generators.

Direct Current (DC): An electric current that flows in a constant direction. The magnitude of the current does not vary or has a slight variation.

Dispatching: The operating control of an integrated electric system involving operations such as (1) the assignment of load to specific generating stations and other sources of supply to effect the most economical supply as the total or the significant area loads rise or fall; (2) the control of operations and maintenance of high-voltage lines, substations, and equipment; (3) the operation of principal tie lines and switching; (4) the scheduling of energy transactions with connecting electric utilities.

Distribution system: The portion of the transmission lines and facilities of an electric system off the bulk power system that is dedicated to delivering electric energy to an end-user.

Disturbance: Severe oscillations or sever step changes of current, voltage and/or frequency usually caused by faults.

Disturbance (System): An event resulting in widespread interruptions and characterized by one or more of the following phenomena: the loss of power system stability: cascading outages of circuits; abnormal ranges of frequency or voltage or both.

Diversity: The electric utility system's load is made up of many individual loads that make demands upon the system usually at different times of the day. The individual loads within the customer classes follow similar usage patterns, but these classes of service place different demands upon the facilities and the system grid. The service requirements of one electrical system can differ greatly from another by time of day usage, facility usage, and/or demands placed upon the system grid.

Diversity Exchange: An exchange of capacity or energy, or both, between systems whose peak loads occur at different times.

Diversity Factor: The ratio of the sum of the non-coincident maximum demands for two or more loads to their coincident maximum demand for the same time period.

Docket: A formal record of a Federal Energy Regulatory Commission proceeding. These records are available for inspection and copying by the public. Each individual case proceeding is identified by an assigned number.

DOE: Department of Energy.

Double-circuit Line: A transmission line having two separate circuits. Since each carries three-phase power, at least six conductors, three per circuit, are required.

Dual-Fired Unit: A generating unit that can produce electricity using two or more input fuels. In some of these units only the primary fuel can be used continuously; the alternate fuel(s) can be used only as a start-up fuel or in emergencies.

Dump Energy: Energy generated in a hydroelectric plant by water that cannot be stored or conserved and which energy is in excess of the needs of the system producing the energy.

Economy Energy: Energy produced and supplied from a more economical source in one system, substituted for that being produced or capable of being produced by a less economical source in another system.

Economy of Scale: A proposition that relatively larger production facilities have lower unit costs than smaller facilities. Economy of scale may exist for any of the phases of operation: generation, transmission, or distribution.

EIA: The Energy Information Administration. An independent agency within the U.S. Department of Energy that develops surveys, collects energy data, and analyzes and models energy issues. The Agency must meet the requests of Congress, other elements within the Department of Energy, the Federal Energy Regulatory Commission, the Executive Branch, its own independent needs, and assist the general public,

or other interest groups, without taking a policy position.

Electric Current: The number of electrons per unit of time moving past a point in a conductor.

Electric Energy: The ability of an electric current to produce work, heat, light or other forms of energy. It is measured in kilowatthours.

Electric Expenses: The cost of labor, material, and expenses incurred in operating a facility's prime movers, generators, auxiliary apparatus, switching gear, and other electric equipment for each of the points where electricity enters the transmission or distribution grid.

Electric Plant (Financial): Assets comprising land, building, and equipment permanently employed.

Electric Plant (Physical): A facility containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Power: The rate at which electric energy is generated, transmitted, or consumed. Electric power is measured in watts or kilowatts.

Electric Power Industry: The public, private, and cooperative electric utility systems of the United States taken as a whole. This includes all electric systems serving the public: regulated investor-owned electric utility companies; Federal power projects; State, municipal, and other government-owned systems, including electric public utility districts; electric cooperatives, including generation and transmission entities (G & T's); jointly owned electric utility facilities, and electric utility facilities owned by a lessor and leased to an electric utility. Excluded from this list are the special purpose electric facilities or systems that do not offer service to the public.

Electric Power System: An individual electric power entity--a company, an electric cooperative, a public electric supply corporation like the Tennessee Valley Authority, a similar Federal department or agency like the Bonneville Power Administration, the Bureau of Reclamation or the Corps of Engineers, a municipally owned, electric department offering service to the public, or an electric public utility district (a "PUD"); also a jointly owned electric supply project such as the Keystone.

Electric Rate: The price set for a specified amount and type of electricity by class of service in an electric rate schedule or sales contract.

Electric Rate Schedule: A statement of the electric rate and the terms and conditions governing its application, including attendant contract terms and conditions that have been accepted by a regulatory body with appropriate oversight authority.

Electric System Loss: Total electric energy loss from all causes for a electric utility.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality that owns and/or operates facilities within the United States, its territories, or Puerto Rico for the generation, transmission, distribution, or sale of electric energy, primarily for use by the public and files forms listed in the Code of Federal Regulations, Title 18, Part 141. Facilities that qualify as cogenerators or small power producers under the Public Utility Regulatory Policies Act of 1978 and exempt wholesale generators under the Energy Policy Act of 1992 are not considered electric utilities.

Electrical System Energy Losses: The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted for use.

Electricity: A form of energy generated by friction, induction, or chemical change that is caused by the presence and motion of elementary charged particles of which matter consists.

Emergency: The failure of an electric power system to generate or deliver electric power as normally intended, resulting in the cutoff or curtailment of service.

Emergency Energy: Electric energy provided for a limited duration, intended only for use during emergency conditions.

Emergency, (Major): A situation usually accompanied by abnormal frequency, abnormal voltage and/or equipment overloads which might seriously affect the reliability of the bulk power system.

Emergency (System): An emergency is considered to exist in an area if firm load may have to be shed because sufficient power or energy is unavailable in that area or in a portion of it after due allowance for purchases.

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Energy Broker System: Introduced into Florida by the Public Service Commission, the energy broker system is a system for exchanging information that allows utilities to efficiently exchange hourly quotations of prices at which each is willing to buy and sell electric energy. For the broker system to operate, utility systems must have in place bilateral agreements between all potential parties and must have transmission arrangements between all potential parties which allow the exchanges to take place.

Energy Charge: That portion of the charge for electric service based upon the electric energy (expressed in kilowatthours) consumed or billed.

Energy Deliveries: Energy generated by one electric utility system and delivered to another system through one or more transmission lines.

Energy Loss (Power): The difference between energy input and output as a result of transfer of energy between two points. The loss changed to the equivalent power rating is sometimes referred to as capacity loss.

Energy Receipts: Energy generated by one electric utility system and received by another system through one or more transmission lines.

Energy Source: The primary fuel or transfer medium that provides the heat/power that is converted to electricity through chemical, mechanical, or other means. Energy sources include coal, petroleum and petroleum products, gas, water, uranium, wind, sunlight, geothermal, and other sources.

End-User: The final consumer of electricity.

Exchange Energy: Electric energy received by an electric utility system usually in exchange for energy delivered to the other system at another time or place. Exchange energy is to be distinguished from a direct purchase or sale, although accumulated energy balances are sometimes settled in cash.

Facilities Charge: An amount to be paid by the customer in a lump sum, or periodically as reimbursement for facilities furnished. The charge may include operation and maintenance as well as fixed costs.

Facility: A location at which prime movers, electric generators, and/or equipment for converting mechanical, chemical, and/or nuclear energy into electric energy are situated. A facility may contain more than one type of prime mover. For cogenerators, the facility includes the industrial or commercial process.

Failure or Hazard: Any electric power supply equipment or facility failure or other event that, in the judgment of the reporting entity, constitutes a hazard to maintaining the continuity of the bulk electric power supply system such that a load reduction action may become necessary and a reportable outage may occur. The impact of this failure/hazard may require the imposition of a special operating procedure, the extended purchase of emergency power, and/or other bulk power system actions.

Federal Energy Regulatory Commission (FERC): The independent Federal regulatory agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification.

Federal Power Act: Enacted in 1920, and as amended in 1935, the Act consists of three parts. The first part incorporated the Federal Water Power Act

administered by the former Federal Power Commission, whose activities were confined almost entirely to licensing non-Federal hydroelectric projects. Parts II and III were added with the passage of the Public Utility Act. These parts extended the Act's jurisdiction to include regulating the interstate transmission of electrical energy and rates for its sale as wholesale electricity in interstate commerce. The Federal Energy Regulatory Commission is now charged with the administration of this law.

Federal Power Commission: The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the Department of Energy was created. Its functions were divided between the Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

Feeder Line: An electrical line that extends radially from a distribution substation to supply electrical energy within an electric service area or sub-area.

FERC: The Federal Energy Regulatory Commission.

FERC Guidelines: A compilation of the Federal Energy Regulatory Commission's enabling statutes, procedural and program regulations, and orders, opinions and decisions.

File Rate Schedule: The rate for a particular electric service, including attendant contract terms and conditions, accepted for filing by a regulatory body with appropriate oversight authority.

Filing: Any written application, complaint, declaration, petition, protest, answer, motion, brief, exception, rate schedule, or other pleading, amendment to a pleading, document, or similar paper that is submitted to a utility commission.

Final Order: A final ruling by FERC that terminates an action, decides some matter litigated by the petitioning parties, operates to some right, or completely disposes of the subject matter.

Firm Power: Electric power intended to meet the load requirement of a utility's customers; there is no planned interruption of services with this type of sale. Utilities may sell capacity for a limited duration and time to other utilities and these types of contractual transactions are also referred to as firm power.

Firm Service: The commitment of generation and/or transmission service to a customer under a filed rate schedule to which the parties to the service anticipate no planned interruption. The allocation of the utility's resources may be system wide, or only for a named unit; the time of availability is usually prescribed as well.

Fiscal Year: A financial year based on a predetermined starting date. The Federal Government's

12-month financial year runs from October 1 through September 30.

Force Majeure Clause: An occurrence generally beyond the control of the buyer or seller in which relief is given by this clause to the parties involved in an agreement. This event, which results in nonperformance of terms in a contract, reliability standards, or operating agreements, will typically relieve a buyer or seller of liability for damages. Some financial or other compensation relief may be available, if additional terms or conditions are written into the contract concerning unexpected problems beyond the control of the parties.

Forced Outage: The shutdown of a generating unit, transmission line or other facility, for emergency reasons or a condition in which the generating equipment is unavailable for load because of unanticipated breakdown.

Frame: All units (i.e., electric utilities) that comprise the population of interest to a given survey. Subunits may in some instances only be represented in groups, but complete coverage is maintained.

Fuel Emergency: An emergency that exists when supplies of fuels or hydroelectric storage for generation are at a level or estimated to be at a level that would threaten the reliability or adequacy of the bulk electric power supply. The following factors should be taken into account to determine that a fuel emergency exists: (1) Fuel stock or hydroelectric project water storage levels are 50 percent or less of normal for that particular time of the year and a continued downward trend in fuel stock or hydroelectric project water storage level are estimated; or (2) Unscheduled dispatch or emergency generation is causing an abnormal use of a particular fuel type, such that the future supply or stocks of that fuel could reach a level which threatens the reliability or adequacy of bulk electric power supplies.

Full-Forced Outage: The net capability of main generating units that are unavailable for load for emergency reasons.

Gas-Turbine Plant: A plant in which the prime mover is a gas turbine. A gas turbine consists typically of an axial-flow air compressor, one or more combustion chambers where liquid or gaseous fuel is burned and the hot gases are passed to the turbine; where the hot gases expand to drive the generator and then are used to run the compressor.

Generally Accepted Accounting Principles (GAAP): Defined as the conventions, rules, and procedures necessary to define accepted accounting practice at a particular time; includes both broad guidelines and relatively detailed practices and procedures.

Generating Station: A station which consists of electric generators and auxiliary equipment for converting mechanical, chemical or nuclear energy into electric energy.

Generating Unit: An electric generator together with its prime mover.

Generation: The process of producing electric energy by transforming other forms of energy; also, the amount of electric energy produced, expressed in kilowatthours.

Generation (Gross): The total amount of electric energy produced by the generating units in a generating station or stations, measured at the generator terminals.

Generation (Net): Gross generation less the electric energy consumed at the generating station for station use.

Generation Rejection: The process of deliberately removing preselected generation from a Power System in response to an abnormal condition in order to maintain the integrity of the system; sometimes also called generator dropping.

Geothermal Energy: Energy from the internal heat of the earth which may be residual heat, friction heat, or a result of radioactive decay. The heat is found in rocks and fluids at various depths and can be extracted by drilling and/or pumping.

Geothermal Plant: A plant in which the prime mover is a steam turbine. The turbine is driven either by steam produced from hot water or by natural steam that derives its energy from heat found in rocks or fluids at various depths beneath the surface of the earth. The energy is extracted by drilling and/or pumping.

Gigawatt (GW): One billion watts.

Gigawatthour (GWh): One billion watthours.

Grid: The layout of an electrical system.

Gross Generation: The total amount of electric energy produced by a generating station or stations, measured at the generator terminals.

Gross Head: A dam's maximum allowed vertical distance between the upstream's surface water (headwater) forebay elevation and the downstream's surface water (tailwater) elevation at the tail-race for reaction wheel dams or the elevation of the jet at impulse wheel dams during specified operation and water conditions.

Head: The product of the water's weight and a usable difference in elevation gives a measurement of the potential energy possessed by water.

Holding Company: A corporation (parent company) that directly or indirectly owns a majority of all of the voting securities of one or more companies located in the same, contiguous States, or operating independent integrated public utility systems in noncontiguous States. A holding company is so structured to bring companies that can best be operated as part of an integrated public utility system under one management.

Many States do not permit or authorize a registered utility company to acquire ownership or operation of an electric or gas utility company serving substantially the same territory. The Securities and Exchange Commission, as administrator of the Public Utility Holding Company Act of 1935, defines a holding company as "a company which...owns, controls...10 percent or more of the outstanding voting securities of a public utility company."

Horsepower: A unit for measuring the rate of work (or power) equivalent to 33,000 foot-pounds per minute or 746 watts.

Hybrid Transmission Line: A double-circuit line which has one alternating current circuit and one direct current circuit. The AC circuit usually serves local loads along the line.

Hydraulic Head: The distance between the respective elevations of the upstream's water surface (headwater) above and the downstream surface water (tailwater) below a hydroelectric power plant.

Hydroelectric Energy: The production of electricity from kinetic energy in flowing water.

Hydroelectric Plant: A plant in which the turbine generators are driven by falling water.

Hydroelectric Plant Capacity: This capacity figure is a function of fluid flow losses, hydraulic turbines, head, and water flow. The minimum net head limits the firm capacity of the plant.

Hydroelectric Power: The harnessing of flowing water to produce mechanical or electrical energy.

Hydroelectric Project: The complete development of a hydroelectric power site. This includes dams, reservoirs, transmission lines and accessories needed for the maintenance and operation of the powerhouse and any other hydroelectric plant support facilities.

Impedance: The opposition to power flow in an AC circuit. Also, applicable to any device that introduces such opposition, in the form of resistance, reactance, or both. The impedance of a circuit or device is measured as the ratio of voltage to current, where a sinusoidal voltage and current of the same frequency are used for the measurement; measured in ohms.

Inadvertent Power Exchange: An unintended power exchange among utilities that is either not previously agreed upon or in an amount different from the amount agreed upon.

Incremental Energy Costs: The additional cost of producing and/or transmitting electric energy above some previously determined base cost.

Installed Nameplate Capacity: The full-load continuous rating of a generator, prime mover, or other electrical equipment under specified conditions as designated by the manufacturer. Installed nameplate capacity is usually indicated on a nameplate attached

physically to the equipment. Installed station capacity does not include auxiliary or house units.

Instantaneous Peak Demand: The maximum demand at the instant of greatest load.

Insulator: A material that is a very poor conductor of electricity. The insulating material is usually a ceramic or fiberglass when used in the transmission line and is designed to support a conductor physically and to separate it electrically from other conductors and supporting material.

Integrated Demand: The summation of the continuously varying instantaneous demand averaged over a specified interval of time. The information is usually determined by examining a demand meter.

Integrated Gasification-Combined Cycle Technology: Coal, water, and oxygen are fed to a gasifier, which produces synthetic natural gas (syngas). This medium Btu gas is cleaned (particulates and sulfur compounds removed) and is fed to a gas turbine. The hot exhaust of the gas turbine and heat recovered from the gasification process are routed through a heat-recovery generator to produce steam, which drives a steam turbine to produce electricity.

Interchange Energy: Kilowatthours delivered to or received by one electric utility or pooling system from another. Settlement may be by payment, returned in kind at a later time or accumulated as energy balances until the end of the stated period.

Interconnected System: A system consisting of two or more individual power systems normally operating with connecting tie lines.

Interconnection: Two or more electric systems having a common transmission line that permits a flow of energy between them. The physical connection of the electric power transmission facilities allows for the sale or exchange of energy.

Interdepartmental Sales: Includes amounts charged by the electric department at tariff or other specified rates for electricity supplied by it to other utility departments.

Interdepartmental Service (Electric): Electricity supplied to departments of the electric utility company other than the electric generating department.

Interlocking Directorates: The holding of a significant position in management or a position on the corporate board of a utility, while simultaneously holding a comparable position with another utility, or with a firm doing business with the utility.

Intermediate Load (Electric System): The range from base load to a point between base load and peak. This point may be the midpoint, a percent of the peak load, or the load over a specified time period.

Internal Combustion Plant: A plant in which the prime mover is an internal combustion engine. An

internal combustion engine has one or more cylinders in which the process of combustion take place, converting energy released from the rapid burning of a fuel-air mixture into mechanical energy. Diesel or gas-fired engines are the principal types used in electric plants. The plant is usually operated during periods of high demand for electricity.

Interruptible Power: Power and usually the associated energy made available by one utility to another which is subject to curtailment or cessation of delivery by the supplier in accordance with a prior agreement with the other party or under specified conditions.

Intervenor: A person, institution, or organization admitted as a participant to a proceeding.

Investor-Owned Electric Utility: A class of utility whose stock is publicly traded and which is organized as a tax-paying business, usually financed by the sale of securities in the capital market. It is regulated and authorized to achieve an allowed rate of return.

Island: A portion of a power system, or several power systems which is (are) electrically separated from the main grid.

Joint-Use Facility: A multiple-purpose hydroelectric plant. An example is a dam that stores water for both flood control and power production.

Jurisdictional Utilities: Utilities regulated by public laws.

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): One thousand watthours.

Line Loss: Electric energy lost because of the transmission of electricity. Much of the loss is thermal in nature.

Load: The power provided to customers of a system. This may be further identified to more precisely indicate which portion of the system is being considered, (e.g., customer load, station auxiliary load, etc.).

Load, Firm: Power provided to customers that is continuously available on demand and which is subject to interruption only under extreme circumstances.

Load, Interruptible: Those loads that, by contract, can be interrupted in the event of a deficiency on the supplying system.

Load (Electric): The amount of electric power delivered or required at any specific point or points on a system. The requirement originates at the energy-consuming equipment of the customers.

Load Curve: The relationship of power supplied to the time of occurrence which illustrates the varying magnitude of the load during the period covered.

Load Diversity: The difference between the peak of coincident and noncoincident demands of two or more individual loads.

Load Factor: The ratio of the average load to peak load during a specified time interval.

Load Following: Regulation of the power output of electric generators within a prescribed area in response to changes in system frequency, tieline loading, or the relation of these to each other, so as to maintain the scheduled system frequency and/or the established interchange with other areas within predetermined limits.

Load Leveling: Any load control technique that dampens the cyclical daily load flows and increases baseload generation. Peak load pricing and time-of-day charges are two techniques that electric utilities use to reduce peak load and to maximize efficient generation of electricity.

Load Loss (3 hours): Any significant incident on an electric utility system which results in a continuous outage of 3 hours or longer to over 50,000 customers or more than one half of the total customers being served immediately prior to the incident, whichever is less.

Load Management Technique: Utility demand management practices directed at reducing the maximum kilowatt demand on an electric system, and/or modifying the coincident peak demand of one or more classes of service to better meet the utility system capability for a given hour, day, week, season, or year.

Load Reduction Request: The issuance of any public or private request to any customer or the general public to reduce the use of electricity for reasons of maintaining the continuity of service of the reporting entity's electric power supply system. Requests to a customer(s) served under provisions of an interruptible contract are not a reportable action unless the request is made for reasons of maintaining the continuity of service of the reporting entity's electric power supply.

Load Relief: Load reduction accomplished by voltage reduction and/or load shedding.

Load Shedding: Deliberate disconnection of customer load in response to an abnormal condition in order to maintain the integrity of the power system. Disconnection may be automatically or manually initiated. The routine use of load control equipment that reduces firm customer load is not considered to be a reportable action.

Loop Flow: The movement of electric power from generator to load by dividing along multiple parallel paths; it especially refers to power flow along an unintended path that loops away from the most direct geographic path, or contract path.

Low Head: Vertical difference of 100 feet or less in the upstream surface water elevation (headwater) and

the downstream surface water elevation (tailwater) at a dam.

Maximum Demand: The greatest of all demands of the load that has occurred within a specified period of time.

Maximum Dependable Capacity, Net: The gross electrical output measured at the output terminals of the turbine generator(s) during the most restrictive seasonal conditions, less the station service load.

Median Streamflow: The middle rate of flow of water past a given point for which there have been several greater and lesser rates of flow occurring during a specified period.

Median Water Condition: The middle precipitation and run-off condition for a distribution of water conditions that have happened over a long period time; usually determined by examining water supply records of the periods in question.

Megawatt (MW): One million watts.

Megawatt-Electric (MW): One million watts of electric capacity.

Megawatthour (MWh): One million watthours.

Mill: A monetary cost and billing unit used by utilities; it is equal to 1/1000 of the U.S. dollar (equivalent to 1/10 of 1 cent).

Minimum Streamflow: The minimum rate of flow of water past a given point during a specified period.

Multiple Purpose Project: The development of hydroelectric facilities to serve more than one function. Some of the uses include hydroelectric power, irrigation, water supply, water quality control, and/or fish and wildlife enhancement.

Multiple Purpose Reservoir: Stored water and its usage governed by advanced water resource conservation practices to achieve more than one water control objective. Some of the objectives include flood control, hydro-electric power development, irrigation, recreation usage, and wilderness protection.

Municipality: A city, county, district, or a political subdivision of a State competent under the laws thereof to carry on the business of its charter.

National Association of Regulatory Utility Commissioners: An affiliation of the public service commissioners to promote the uniform treatment of members of the railroad, public utilities, and public service commissions of the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, and the territory of the Virgin Islands.

Natural Streamflow: The rate of flow of water past a given point of an uncontrolled stream, or regulated streamflow adjusted to eliminate the effects of reservoir storage or upstream diversions at a set time interval. **Net Energy for Load**: Net generation of main generating units that are system-owned or system-operated plus energy receipts minus energy deliveries.

Net Energy for System: The net generation of a group of plants that are electrically interconnected and centrally controlled, plus system receipts of any electrical energy from outside the system minus any system energy delivered to other electrical systems.

Net Generation: Gross generation less plant use, measured at the high-voltage terminals of a station's step-up transformer. The energy required for pumping at pumped-storage plants is regarded as plant use and must be deducted from the gross generation.

Net Head: The gross head minus all hydraulic losses except those chargeable to the turbine.

Net Summer Capability: The steady hourly output which generating equipment is expected to supply to system load exclusive of auxiliary power as demonstrated by test at the time of summer peak demand.

Net System Capability: The generating station capability of a system at a stated period of time (usually at the time of the system's maximum load) plus capability available at such time from other sources through firm power contacts less firm power obligations at such time to other companies or systems.

Net Winter Capability: The steady hourly output which generating equipment is expected to supply to system load exclusive of auxiliary power as demonstrated by test at the time of winter peak demand.

No-Load Loss: Power and energy lost by an electric system when not operating under demand.

Noncoincident Demand: Sum of two or more demands on individual systems that do not occur in the same demand interval.

Noncoincident Peak Load: The sum of two or more peak loads on individual systems that do not occur in the same time interval. Meaningful only when considering loads within a limited period of time, such as a day, week, month, a heating or cooling season, and usually for not more than 1 year.

Nonfirm Power: Power or power-producing capacity supplied or available under a commitment having limited or no assured availability.

Nonspinning Reserve: The generating capacity not currently running, but capable of being connected to the bus and load within a specified time.

Nonutility Generation: Electric generation by endusers, or small power producers under the Public Utility Regulatory Policies Act of 1978, to supply electric power for industrial, commercial, or sales to electric utilities.

Nonutility Power Producer: An enterprise that has electric generating capacity and is not an electric utility. Nonutility power producers include qualifying

cogenerators, qualifying small power producers, and other nonutility generators (including independent power producers) without a designated franchised service area, and which are not otherwise required to file forms listed in the *Code of Federal Regulations*, Title 18, Part 141.

North American Electric Reliability Council (NERC): A council formed in 1968 by the electric utility industry to promote the reliability and adequacy of the bulk power supply in the electric utility systems of North America. NERC consists of ten regional reliability councils and encompasses essentially all the power systems of the contiguous United States, Canada, and some in Mexico. The data summarized by NERC regions in this publication are limited to that portion applicable to the United States, thereby excluding that portion of NERC data applicable to Canada and Mexico. The NERC Regions are:

ASCC--Alaska System Coordination Council

ECAR--East Central Area Reliability Coordination Agreement

ERCOT--Electric Reliability Council of Texas

MAIN--Mid-America Interconnected Network

MAAC--Mid-Atlantic Area Council

MAPP--Mid-Continent Area Power Pool

NPCC--Northeast Power Coordinating Council

SERC--Southeastern Electric Reliability Council

SPP--Southwest Power Pool

WSCC--Western Systems Coordinating Council

Nuclear Power Plant: A facility in which heat produced in a reactor by the fissioning of nuclear fuel is used to drive a steam turbine.

Off-Peak: Period of relatively low system demand. These periods often occur in daily, weekly, and seasonal patterns; these off-peak periods differ for each individual electric utility.

Ohm: The unit of measurement of electrical resistance. The resistance of a circuit in which a potential difference of 1 volt produces a current of 1 ampere.

On-Peak: Periods of relatively high system demand. These periods often occur in daily, weekly, and seasonal patterns; these on-peak periods differ for each individual electric utility.

Operating Limit: The maximum value of the most critical system operation parameter(s) which meets: precontingency criteria as determined by equipment loading capability and acceptable voltage conditions; transient performance criteria; and post contingency loading and voltage criteria.

Order: A ruling issued by a utility commission granting or denying an application in whole or in part. The order explains the basis for the decision, noting any dispute with the factual assertions of the applicant. Also applied to a final regulation of a utility commission.

Other Generation: Electricity originating from these sources: biomass, fuel cells, geothermal heat, solar power, waste, wind, and wood.

Other Sector: Electricity supplied to public street and highway lighting; other service to public authorities; service to railroads and railways; and interdepartmental service.

Other Service to Public Authorities: Electricity supplied to municipalities or divisions or agencies of State or Federal governments, under special contracts or agreements or service classifications applicable only to public authorities.

Other Unavailable Capability: Net capability of main generating units that are unavailable for load for reasons other than full-forced outage or scheduled maintenance. Legal restrictions or other cause make these units unavailable.

Outage: The period during which a generating unit, transmission line, or other facility is out of service.

Output: The amount of power or energy produced by a generating unit, station, or system.

Peak Load: The maximum load during a specified period of time.

Peak Load Plant: A plant usually housing old, lowefficiency steam units, gas turbines, diesels, or pumped-storage hydroelectric equipment normally used during the peak-load periods.

Peaking Capacity: Capacity of generating equipment normally operated during the hours of highest daily, weekly, or seasonal loads. Some generating equipment may be operated at certain times as peaking capacity and at other times to serve loads on a 'round-the-clock basis.

Percent Difference: The relative change in a quantity over a specified time period. It is calculated as follows: the current value number has the previous value number subtracted from it, and this new number is divided by the absolute value of the previous value number; then this new number is multiplied by 100.

Plant: A station at which are located prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or nuclear energy into electric energy. A station may contain more than one type of prime mover. Electric utility plants exclude stations that satisfy the definition of qualifying facility under the Public Utility Regulatory Policies Act of 1978.

Plant-Use Electricity: The electric energy used in the operation of a plant. This energy total is subtracted from the gross energy production of the plant; for reporting purposes the plant energy production is then reported as a net figure. The energy required for pumping at pumped-storage plants is by definition subtracted, and the energy production for these plants is then reported as a net figure.

Plant Hours Connected to Load: The number of hours the plant is synchronized to load over a time interval usually of 1 year.

Pole-Mile: A unit of measuring the simple length of a transmission line carrying electric conductors, without regard to the number of conductors carried.

Pondage: The amount of water stored behind a hydroelectric dam of relatively small storage capacity; the dam is usually used for daily or weekly control of the flow of the river.

Power: The rate at which energy is transferred, usually measured in watts. Also used for a measurement of capacity.

Power (Electrical): An electric measurement unit of power called a voltampere is equal to the product of 1 volt and 1 ampere. This is equivalent to 1 Watt for a direct current system and a unit of apparent power is separated into real and reactive power. Real power is the work-producing part of apparent power that measures the rate of supply of energy and is denoted as kilowatts (kW). Reactive power is the portion of apparent power that does no work and is referred to as kilovars; this type of power must be supplied to most types of magnetic equipment, such as motors, and is supplied by generator or by electrostatic equipment. Voltamperes are usually divided by 1,000 and called kilovoltamperes (kVA). Energy is denoted by the product of real power and the length of time utilized; this product is expressed as kilowatthours.

Power Factor: The ratio of real power (kilowatt) to apparent power kilovoltampere for any given load and time.

Power Loss: The difference between power input and output as a result of transfer of energy between two points; sometimes referred to as capacity loss.

Power Pool: An association of two or more interconnected electric systems to provide better system reliability and efficiencies. Depending upon the degree of control authorized by the member utilities, these pools many be run under a single system dispatch to supply power to meet combined load requirements and maintenance programs, or just share the benefits of planned or hourly available wholesale sales of power and energy among the member utilities.

Power Production Plant: All the land and land rights, structures and improvements, boiler or reactor vessel equipment, engines and engine-driven generator, turbogenerator units, accessory electric equipment, and miscellaneous power plant equipment are grouped together for each individual facility.

Power System: A group of one or more generating sources and/or connecting transmission lines operated under common management or supervision to supply load.

Power Transfer Limit: The maximum power that can be transferred from one electric utility system to

another without overloading any facility in either system.

Powerhouse: A structure at a hydroelectric plant site that contains the turbine and generator.

Preliminary Permit (Hydroelectric Power): A single site permit granted by the FERC, which gives the recipient priority over anyone else to apply for a hydroelectric license. The preliminary permit enables the recipient to prepare a license application and conduct various studies for economic feasibility and environmental impacts. The period for a preliminary permit may extend to 3 years.

Price: The amount of money or consideration-inkind for which a service is bought, sold, or offered for sale.

Price Squeeze: Discriminatory rates charged for wholesale electric power that impede competition for retail customers. A price squeeze occurs if an electric utility's price for wholesale service is higher in relation to its wholesale cost than its price for retail service is in relation to its retail costs.

Prime Mover: The engine, turbine, water wheel, or similar machine that drives an electric generator.

Proposed Rates: New electric rate schedule proposed by an applicant to become effective at a future date.

Prudence: Carefulness, precaution, attentiveness, and good judgment, as applied to action or conduct. A legal concept used by regulators to determine the costs to be allowed in a rate base.

Public Authorities: Electricity supplied to municipalities or divisions or agencies of State and Federal governments, usually under special contracts or agreements that are applicable only to public authorities.

Public Utility: Enterprise providing essential public services, such as electric, gas, telephone, water, and sewer, under legally established monopoly conditions.

Public Utility District: Municipal corporations organized to provide electric service to both incorporated cities and towns and unincorporated rural areas. Public utility districts, sometimes called "People's Utility Districts" or "Public Power Districts," operate in six States.

Publicly Owned Electric Utility: A class of ownership found in the electric power industry. This group includes those utilities operated by municipalities, and State and Federal power agencies.

Pumped-Storage Hydroelectric Plant: A plant that usually generates electric energy during peak-load periods by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit

to turbine generators located in a power plant at a lower level.

Purchased Power: Power purchased or available for purchase from a source outside the system.

Purchased Power Adjustment: A clause in a rate schedule that provides for adjustments to the bill when energy from other electric system is acquired and its cost varies from a specified unit base amount.

Pure Pumped-Storage Hydroelectric Plant: A plant that produces power only from water that has previously been pumped to an upper reservoir.

Qualifying Facility: A cogeneration facility or small power production facility that meets certain ownership, operating, and efficiency criteria established by the Federal Energy Commission pursuant to the Public Utilities Regulatory Policies Act of 1978 (See the Code of Federal Regulations, title 18, Part 282).

Rate Base: The value of property upon which a utility is permitted to earn a specified rate of return as established by a regulatory authority. The rate base generally represents the value of property used by the utility in providing service and may be calculated by any one or a combination of the following accounting methods: fair value, prudent investment, reproduction cost, or original cost. Depending on which method is used, the rate base includes cash working capital, materials and supplies, and deductions for accumulated provisions for depreciation, contributions in aid of construction, customer advances for construction, accumulated deferred income taxes, and accumulated deferred investment tax credits.

Rate Case: A proceeding, usually before a regulatory commission, involving the rates to be charged for a public utility service.

Rate of Return: The ratio of net operating income earned by a utility is calculated as a percentage of its rate base.

Rate of Return on Rate Base: The ratio of net operating income to a specified rate base, expressed as a percentage.

Rate Schedule (Electric): A statement of the financial terms and conditions governing a class or classes of utility services provided to a customer. Approval of the schedule is given by the appropriate ratemaking authority.

Rates: The authorized charges per unit or level of consumption for a specified time period for any of the classes of utility services provided to a customer.

Ratemaking Authority: A utility commission's legal authority to fix, modify, approve, or disapprove rates as determined by the powers given the commission by a State or Federal legislature.

Rating: A manufacturer's guaranteed performance of a machine, transmission line, or other electrical apparatus, based on design features and test data. The

rating will specify such limits as load, voltage, temperature, and frequency. The rating is generally printed on a nameplate attached to equipment and is commonly referred to as the nameplate rating, nameplate capacity, etc.

Reactance: A phenomenon associated with AC power characterized by the existence of a time difference between voltage and current variations.

Rectifier: A device for converting alternating current to direct current.

Regulated Streamflow: The rate of flow past a given point during a specified period that is controlled by reservoir water release operations.

Regulation, Procedures, and Practices: A utility commission carries out its regulatory functions rulemaking and adjudication. through Under rulemaking, the utility commission may propose a general rule or regulation change. By law, it must issue a notice of the proposed rule and a request for comments is also made; the Federal Energy Regulatory Commission publishes this in the Federal Register. The final decision must be published. A utility commission may also work on a case-by-case basis from submissions from regulated companies or others. Objections to a proposal may come from the commission or intervenors, in which case the proposal must be presented at a hearing presided over by an administrative law judge. The judge's decision may be adopted, modified, or reversed by the utility commissioners in which case those involved can petition for a rehearing, and may appeal a decision through the courts system to the U.S. Supreme Court.

Reliability (**Electric System**): A measure of the ability of the system to continue operation while some lines or generators are out of service. Reliability deals with the performance of the system under stress.

Renewable Energy Source: An energy source that is regenerative or virtually inexhaustible. Typical examples are wind, geothermal and water power.

Repowering: Replacement of the combustion technology in an aging generating plant with a new combustion technology, usually resulting in better performance and greater capacity.

Required Rate of Return: The minimum rate of return necessary to induce investors to buy or hold a given security. It equals the risk-free rate of interest, usually represented by the current yield on U.S. Treasury securities, growth potential, plus a risk premium.

Requirements Power: The firm service needs required by designated load plus losses from the points of supply.

Reserve Generating Capacity: Amount of generating capacity available to meet peak or abnormally high demands for power and to generate power during scheduled or unscheduled outages.

Reserve Margin (Operating): The amount of unused available capability of an electric power system at peak load for a utility system. This figure is calculated by adding running and quick-start capability to the capability available but not needed and then subtracting peak load.

Reservoir: A body of water collected and stored in a natural or artificial lake.

Residential Sector: The residential sector includes private household establishments that consume energy primarily for space heating, water heating, air conditioning, lighting, refrigeration, cooking, and clothes drying. The classification of an individual consumer's account, where the use is both residential and commercial, is based on principal use. Apartment houses are included.

Restoration Time: The time when the major portion of the interrupted load has been restored and the emergency is considered to be ended. However, some of the loads interrupted may not have been restored because of local problems.

Retail Wheeling: An arrangement in which a utility transmits electricity from outside its service territory to a retail customer within its customer service territory.

Retired Hydropower Plant Sites: The site of a plant that formerly produced electrical or mechanical power but is now out of service. Includes plants which have been abandoned, damaged by flood or fire, inundated by new reservoirs, or dismantled.

Reversible Turbine: A hydraulic turbine, normally installed in a pumped-storage plant, which can be used alternatively as a pump or as an engine, turbine, water wheel, or other apparatus that drives an electrical generator.

Right-Of-Way: The land, and legal right to use and service the land along which a transmission line is located. Transmission line right-of-way is usually acquired in widths that vary with the kilovolt (kV) size of the line.

Rulemaking (Regulations): The authority delegated to administrative agencies by Congress or State legislative bodies to make rules that have the force of law. Frequently, statutory laws that express broad terms of a policy are implemented more specifically by administrative rules, regulations and practices.

Running and Quick-Start Capability: The net capability of generating units that carry load or have quick-start capability. In general, quick-start capability refers to generating units that can be available for load within a 30-minute period.

Run-off: That portion of the precipitation that flows over the land surface and ultimately reaches streams to complete the water cycle. Melting snow is an important source of this water as well as all amounts of surface water that moves to streams or rivers through any given area of a drainage basin.

Rural Electrification Administration (REA): A former lending agency of the U.S. Department of Agriculture (USDA) that was established in the 1930's and was terminated in the early 1990's. Its responsibilities now reside with the Rural Utilities Service (RUS) in USDA. RUS makes self-liquidation loans to qualified borrowers to finance electric, telephone, water, and other services to rural areas. RUS finances the construction and operation of generating plants, electric transmission and distribution lines, or systems, for the furnishing of initial and continued adequate electric services to persons in rural areas not receiving central station service.

Sales: The amount of kilowatthours sold in a given period of time; usually grouped by classes of service such as residential, commercial, industrial, and other.

Sales for Resale: A type of wholesale sales covering energy supplied to other electric utilities, cooperatives, municipals, and Federal and State electric agencies for resale to ultimate consumers.

Schedule: A statement of the pricing format of electricity and the terms and conditions governing its applications.

Scheduled Outage: The shutdown of a generating unit, transmission line, or other facility, for inspection or maintenance, in accordance with an advance schedule.

Service Area: The territory in which a utility system or distributor is authorized to provide service to consumers.

Single-circuit Line: A transmission line with one electric circuit. For three-phase supply, a single circuit requires at least three conductors, one per phase.

Single-Purpose Project: A hydroelectric project constructed only to generate electricity.

Small Power Producer: Under the Public Utility Regulatory Policies Act, A small power production facility (or small power producer) generates electricity using renewable biomass, conventional hydroelectric, solar, wind, and geothermal energy as a primary energy source. Fossil fuels can be used, but renewable resources must provide at least 75 percent of the total energy input. (See Code of Federal Regulations, Title 18, Part 292.)

Special Contract Rate Schedule: An electric rate schedule for an electric service agreement between a utility and another party in addition to, or independent of any standard rate schedule.

Special Purpose Rate Schedule: An electric rate schedule limited in its application to some particular purpose or process within one, or more than one, type of industry or business.

Stability: The property of a system or element by virtue of which its output will ultimately attain a

steady state. The amount of power that can be transferred from one machine to another following a disturbance. The stability of a power system is its ability to develop restoring forces equal to or greater than the disturbing forces so as to maintain a state of equilibrium.

Standby Charge: A charge for the potential use of a utility service, usually done by an agreement with another electric utility system. These services include system backup support, and other running and quick-start capabilities.

Standby Facility: A facility that is on call to support a utility system and is available to replace or supplement a facility normally in service.

Standby Service: Support service that is available as needed to supplement a customer, a utility system, or to another utility if a schedule or an agreement authorizes the transaction. The service is not regularly used.

State Severance Taxes: Any severance, production, or similar tax, fee, or other levy imposed on the production of crude oil, natural gas, or coal by any State, local government acting under authority of State law, or by an Indian tribe recognized as eligible for services by the Secretary of the Interior.

Station (Electric): A plant containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or nuclear energy into electric energy.

Station Use: Energy that is used in the operation of an electric generating plant. It includes energy consumed for plant lighting, power, and auxiliary facilities, regardless of whether the energy is produced at the plant or comes from another source.

Steam-Electric Plant (Conventional): A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

Streamflow: The rate at which water passes a given point in a stream, usually expressed in cubic feet per second.

Substation: Facility equipment that switches, changes, or regulates electric voltage.

Subtransmission: A set of transmission lines of voltages between transmission voltages and distribution voltages. Generally, lines in the voltage range of 69 kV to 138 kV.

Supporting Structure: The main supporting unit (usually a pole or tower) for transmission line conductors, insulators, and other auxiliary line equipment.

Surplus Energy: Energy generated that is beyond the immediate needs of the producing system. This energy may be supplied by spinning reserve and sold on an interruptible basis.

Suspended Rates: New rates that have been accepted for review by a utility commission. When these rates are suspended, they do not go into effect for a designated period of time, up to a maximum of five months for FERC. Charges under the new rate may be refunded after the resolution of the rate proceeding.

Switching Station: Facility equipment used to tie together two or more electric circuits through switches. The switches are selectively arranged to permit a circuit to be disconnected, or to change the electric connection between the circuits.

System (Electric): Physically connected generation, transmission, and distribution facilities operated as an integrated unit under one central management, or operating supervision.

System Interconnection: A physical connection between two electric systems that permits the transfer of electric energy in either direction.

Tariff: A published volume of rate schedules and general terms and conditions under which a product or service will be supplied.

Terawatthour (TWh): One trillion (10^{12}) watthours of electric energy.

Thermal Limit: The maximum amount of power a transmission line can carry without suffering heat-related deterioration of line equipment, particularly conductors.

Three-party Wheeling: An arrangement in which a utility transmits electricity for two other utilities that are not physically connected, where the transmitting utility neither buys nor sells the electricity.

Three-phase Power: Power generated, and transmitted from generator to load, on three conductors.

Tie Line: A Circuit connecting two or more power systems and/or a generating facility to the grid.

Transfer Capability: The overall capacity of interregional or international power lines, together with the associated electrical system facilities, to transfer power and energy from one electrical system to another.

Transformer: An electrical device for changing the voltage of alternating current.

Transmission: The movement or transfer of electric energy over an interconnected group of lines and associated equipment between points of supply and points at which it is transformed for delivery to consumers, or is delivered to other electric systems. Transmission is considered to end when the energy is transformed for distribution to the consumer.

Transmission Circuit: A conductor used to transport electricity from generating stations to load.

Transmission Line: A set of conductors, insulators, supporting structures, and associated equipment used to move large quantities of power at high voltage, usually over long distances between a generating or receiving point and major substations or delivery points.

Transmission Network: A system of transmission or distribution lines so cross-connected and operated as to permit multiple power supply to any principal point.

Transmission System, Electric: An interconnected group of electric transmission lines and associated equipment for moving or transferring electric energy in bulk between points of supply and points at which it is transformed for delivery over the distribution system lines to consumers, or is delivered to other electric systems.

Turbine: A machine for generating rotary mechanical power from the energy in a stream of fluid (such as water, steam, or hot gas). Turbines convert the kinetic energy of fluids to mechanical energy through the principles of impulse and reaction, or a mixture of the two.

Two-party Wheeling: An arrangement between two utilities in which one utility agrees to transmit electricity owned by the other.

Ultimate Consumer: A consumer that purchases electricity for its own use and not for resale.

Uniform System of Accounts: Prescribed financial rules and regulations established by the Federal Energy Regulatory Commission for utilities subject to its jurisdiction under the authority granted by the Federal Power Act.

Unscheduled Outage Service: Power received by a system from another system to replace power from a generating unit forced out of service.

Used and Useful: A concept used by regulators to determine whether an asset should be included in the utility's rate base. This concept requires that an asset currently provide or be capable of providing a needed service to customers.

Utility (Electric): Privately owned companies and public agencies engaged in the generation, transmission, or distribution of electric power for public use. Public agencies include municipal electric utilities, Federal power projects, rural electrification cooperatives, power districts, and State power authorities and projects.

Utility Generation: Generation by electric systems engaged in selling electric energy to the public.

Volt: The unit of measurement of voltage, electrical force, or pressure. The electrical force that, if steadily applied to a circuit with a resistance of 1 ohm, will produce a current of 1 ampere.

Voltage: The difference in electrical potential between any two conductors or between a conductor and ground. It is a measure of the electric energy per electron that electrons can acquire and/or give up as they move between the two conductors.

Voltage Reduction: Any intentional reduction of system voltage by 3 percent or greater for reasons of maintaining the continuity of service of the reporting entity's electric power supply system.

Waterway: A river, channel, canal, or other navigable body of water used for travel or transport.

Watt: The electrical unit of power. The rate of energy transfer equivalent to 1 ampere flowing under a pressure of 1 volt at unity power factor.

Watthour (**Wh**): An electrical energy unit of measure equal to 1 watt of power supplied to, or taken from, an electric circuit steadily for 1 hour.

Weir: A dam in a waterway over which water flows and that serves to raise the water level, or direct or regulate flow.

Wheeling: The use of the transmission facilities of one entity to transmit electricity of and for another entity or entities. The most common type of wheeling involves one utility transferring electricity generated by a second utility for sale to a third utility.

Wheeling Charge: An amount charged by one electrical system to transmit the energy of, and for, another system or systems.

Wheeling Service: The movement of electricity from one system to another over transmission facilities of intervening systems. Wheeling service contracts can be established between two or more systems.

Wholesale Sales: Energy supplied to other electric utilities, cooperatives, municipals, and Federal and State electric agencies for resale to ultimate consumers.

Wholesale Wheeling: An arrangement in which electricity is transmitted from a generator to a utility through the transmission facilities of an intervening system.

Wind Energy: Energy produced by harnessing the force of the wind. In a wind energy conversion system such as a windmill, the energy of wind is used to turn the shaft of a generator, which in turn usually produces direct current. This direct current is usually converted to alternating current before being fed into a utility grid system.

Year to Date: The cumulative sum of each month's value starting with January and ending with the current month of the data.