
Investor-Owned Utility Ratio Comparisons

2002 Data

Published March 2004



American Public Power Association

**2301 M Street NW
Washington, D.C. 20037-1484
202/467-2900**

Investor-Owned Utility Ratio Comparisons, 2002 Data

APPA provides several tools to help public power systems assess their position in comparison with other utilities. For example, the annual report, *Selected Financial and Operating Ratios of Public Power Systems*, provides summaries of performance measurements for public power systems by utility size and region of the country. Revenue per kilowatt-hour summaries for each state are published every year in *Public Power Magazine*, and average revenue per kilowatt-hour for each utility in a state are provided to all APPA public power members.

Nearly a decade ago APPA began providing its members comparative data for individual investor-owned utilities. This 2004 update incorporates the most recently available 2002 data. It includes information on revenue per kilowatt-hour, total expenses, power supply costs, and non-power supply expenses. The current report presents fewer trend analyses than the earliest versions because some of the 2002 information is not comparable to prior years. In particular, there is a lack of uniformity between utilities as to what type of wholesale transactions they report and how they account for retail choice activity. Since problems with data consistency have grown, comparisons between utilities should be made with even more care than previously.

The report covers 141 investor-owned utilities that file data with the Federal Energy Regulatory Commission (FERC) on FERC Form 1. One utility, Maine Public Service Company, is included only in the non-power supply ratios because the utility does not report any power supply expenses or retail sales; all of its customers receive power from alternative suppliers. NorthWestern Energy is included only in the revenue per kilowatt-hour ratios because its expense data reflect only part of the year for the company's Montana service territory.

Excluded from the report are utilities that sell power primarily to wholesale markets and utilities with only one customer. Data sources for the report are the FERC Form 1 as compiled by SNL Financial and the Energy Information Administration's Form EIA-861. The appendix to the report shows how ratios are calculated and the data sources for all items.

I. Revenue per Kilowatt-hour Comparisons

Table 1 shows mean and median revenue per kilowatt-hour values by residential, commercial, and industrial sectors, and for wholesale sales (sales for resale).

Table 1
Investor-Owned Utilities: Revenue per Kilowatt-hour, 2002

	Revenue per Kilowatt-hour, in Cents			
	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Sales for Resale</u>
Mean	8.64	7.82	4.89	3.24
Median	8.23	7.05	4.90	3.62

Table 1A, below, shows the trend in average revenue per kilowatt-hour for residential, commercial and industrial customers. Retail revenue per kilowatt-hour fell for all three customer classes in 2002, but these average rate levels remain above the 1999 and 2000 averages. A return to lower wholesale rates in the West, after the large increases in power supply in 2000-2001, is one reason for the lower retail rates in 2002.

Importantly, the sales and revenue data do not cover sales to all ultimate customers, as investor-owned utilities' customers served by an alternative supplier are not included in the database. These customers typically are in high-cost states, so their exclusion has the effect of lowering the overall average. While the amount of sales to customers served by alternate suppliers remains small, excluding these sales changes the overall composition of the database, so care should be taken in making year to year comparisons. Customers in

the ERCOT region of Texas are also excluded from the revenue per kilowatt-hour tables because investor-owned utilities in ERCOT no longer report sales to ultimate customers. Their customers are counted as full-service customers of retail electric providers, which bill customers for full service and then pay the IOU for the delivery portion.

Trends in resale rates are not included in Table 1A because of differences in how utilities are reporting wholesale data and large year-to-year variations in the volume of sales. Some utilities – American Electric Power Company’s (AEP) subsidiaries, Cincinnati Gas & Electric, and PSI Energy, for example – include power marketing functions within the utility itself, so reported sales may include large market transactions. Other entities conduct all or most power marketing transactions in a separate affiliate or subsidiary.

Table 1A
Investor-Owned Utilities: Revenue per Kilowatt-hour, 1994-2002
(Mean Values)

	-----Revenue per Kilowatt-hour, in Cents-----		
	<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>
2002	8.64	7.82	4.89
2001	8.97	7.94	5.25
2000	8.52	7.49	4.74
1999	8.50	7.36	4.60
1998	8.67	7.56	4.67
1997	8.94	7.81	4.75
1996	8.86	7.83	4.79
1995	8.87	7.88	4.87
1994	8.83	7.90	4.98

Table 2, on the following pages, shows average revenue per kilowatt-hour, by retail sector and for wholesale sales, by individual utility. Also shown are the states served by each utility and the total revenue received from sales to ultimate customers that receive bundled

electric service. This last measure gives an indication of the size of the utility. Sales for resale ratios for the AEP companies' ECAR subsidiaries are excluded from Table 2, as well as from the national averages shown in Table 1, because these companies reported sales net of purchases.

Average revenue per kilowatt-hour is a good indication of the overall rate level charged by a utility. However, since it is calculated by dividing total revenue received from a specific sector (for example, residential) by the total kilowatt-hours sold to that sector, it does not represent the actual rate charged to any specific customer. Specific industrial rates, in particular, may vary substantially from the average because utilities often customize industrial rates to fit the needs of their customers. In addition, average sales for resale rates should be used with caution because revenues include energy, demand and other charges. A utility's average wholesale rate may be very high in cases where a utility received a demand charge and sold no energy. The effect will be especially large if a utility has relatively few sales for resale.

Table 2**Investor-Owned Utilities: 2002 Revenue per Kilowatt-hour Comparisons**

<u>Utility</u>	<u>States Served</u>	Revenue from Sales to Ultimate <u>Customers</u> (in thousands)	<u>Average Revenue per Kilowatt-hour (in Cents)</u>			
			<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Sales for Resale</u>
<u>ECAR Region</u>						
Appalachian Power Company	VA, WV	\$1,327,017	5.39	4.81	3.50	NA
Cincinnati Gas & Electric Co.	OH	\$1,187,207	7.56	7.05	4.50	2.72
Cleveland Electric Illuminating Co	OH	\$1,069,116	10.67	11.16	6.47	2.59
Columbus Southern Power Company	OH	\$1,146,234	7.60	6.38	4.90	NA
Consumers Energy Company	MI	\$2,511,027	8.10	7.37	5.41	3.63
Dayton Power and Light Company	OH	\$805,927	7.24	5.84	4.19	2.82
Detroit Edison Company	MI	\$3,493,500	8.59	7.74	4.80	3.71
Duquesne Light Company	PA	\$805,461	10.23	7.31	5.17	3.36
Indiana Michigan Power Company	IN, MI	\$988,049	6.43	5.71	4.03	NA
Indianapolis Power & Light Company	IN	\$769,859	5.93	6.47	4.52	2.08
Kentucky Power Company	KY	\$282,356	4.81	4.98	3.07	NA
Kentucky Utilities Company	KY, TN, VA	\$707,881	4.43	4.29	3.34	2.49
Kingsport Power Company	TN	\$82,000	4.78	4.91	3.31	NA
Louisville Gas and Electric Company	KY	\$587,583	5.76	5.31	3.70	1.97
Monongahela Power Company	OH, WV	\$615,520	7.21	5.84	3.68	2.94
Northern Indiana Public Service Co.	IN	\$1,014,088	9.59	8.21	4.46	3.11
Ohio Edison Company	OH	\$1,553,926	9.80	10.07	5.55	3.08
Ohio Power Company	OH	\$1,322,975	6.58	5.60	3.63	NA
Pennsylvania Power Company	PA	\$316,165	9.03	7.70	5.31	2.49
Potomac Edison Company	MD, VA, WV	\$770,334	6.83	6.02	3.63	3.47
PSI Energy, Inc.	IN	\$1,359,622	6.52	5.15	3.72	2.94
Southern Indiana Gas and Electric	IN	\$282,273	6.91	5.51	3.62	2.81
Toledo Edison Company	OH	\$599,998	10.24	11.07	4.13	3.85
Union Light, Heat and Power Co.	KY	\$224,489	6.46	5.88	5.06	NA
West Penn Power Company	PA	\$1,075,457	6.91	5.86	4.48	3.89
Wheeling Power Co	WV	\$83,940	6.59	5.56	3.66	NA

<u>Utility</u>	<u>States Served</u>	Revenue from Sales to Ultimate <u>Customers</u> (in thousands)	<u>Average Revenue per Kilowatt-hour (in Cents)</u>			
			<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Sales for Resale</u>
<u>ERCOT Region</u>						
AEP Texas Central Company	TX	\$102,903	NA	NA	NA	4.13
AEP Texas North Company	TX	\$16,521	NA	NA	NA	3.83
CenterPoint Energy	TX	\$300,561	NA	NA	NA	NA
Oncor Electric Delivery Company	TX	\$0	NA	NA	NA	65.60
Texas-New Mexico Power Company	NM, TX	\$126,451	NA	NA	NA	2.72
<u>FRCC Region</u>						
Florida Power & Light Company	FL	\$7,027,748	8.02	6.66	5.25	3.74
Florida Power Corporation	FL	\$2,724,244	8.68	6.30	5.39	5.51
Tampa Electric Company	FL	\$1,488,940	9.37	7.88	6.05	6.26
<u>MAAC Region</u>						
Atlantic City Electric Company	NJ	\$882,888	11.14	9.57	8.46	106.31
Baltimore Gas and Electric Company	MD	\$1,868,392	7.80	6.21	3.40	NA
Delmarva Power & Light Company	DE, MD, VA	\$916,306	8.41	7.18	5.00	5.55
Jersey Central Power & Light Co.	NJ	\$2,062,612	10.90	9.75	7.93	4.10
Metropolitan Edison Company	PA	\$909,287	9.12	8.02	6.88	3.19
PECO Energy Company	PA	\$3,362,342	12.97	11.21	7.28	4.30
Pennsylvania Electric Company	NY, PA	\$949,033	8.89	7.60	5.99	8.37
Potomac Electric Power Company	DC, MD	\$1,139,351	7.93	6.72	4.94	136.40
PPL Electric Utilities Corporation	PA	\$2,476,793	8.37	7.69	5.45	2.69
Public Service Electric and Gas Co	NJ	\$3,638,815	9.82	8.48	7.42	2.71
<u>MAIN Region</u>						
AmerenCIPS	IL	\$511,098	7.50	6.76	4.06	3.47
AmerenUE	IL, MO	\$2,176,859	7.20	5.89	4.46	2.55
Central Illinois Light Company	IL	\$374,600	7.45	7.02	4.25	2.44
Commonwealth Edison Company	IL	\$5,457,125	8.67	7.60	5.28	4.73
Consolidated Water Power Company	WI	\$53,000	5.52	5.48	3.63	2.10

<u>Utility</u>	<u>States Served</u>	Revenue from Sales to Ultimate <u>Customers</u> (in thousands)	<u>Average Revenue per Kilowatt-hour (in Cents)</u>			
			<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Sales for Resale</u>
Edison Sault Electric Company	MI	\$33,108	5.89	6.20	3.83	3.05
Illinois Power Company	IL	\$1,080,746	7.85	7.65	4.47	5.69
Interstate Power & Light Company	IA,IL,MN	\$910,575	8.49	6.77	4.02	3.00
Madison Gas and Electric Company	WI	\$220,100	9.69	6.64	4.37	4.46
Mt. Carmel Public Utility Company	IL	\$10,837	9.18	9.65	5.62	4.06
Pioneer Power & Light Company	WI	\$1,215	7.65	7.79	7.23	4.45
South Beloit Water, Gas & Electric	IL	\$11,194	6.33	6.29	4.40	2.34
Upper Peninsula Power Co	MI	\$55,121	9.10	7.34	4.31	3.97
Wisconsin Electric Power Company	MI, WI	\$1,776,062	8.51	6.98	4.35	3.26
Wisconsin Power and Light Company	WI	\$623,609	7.94	6.84	4.74	3.43
Wisconsin Public Service Corp	MI, WI	\$606,198	8.25	5.74	3.72	2.95
<u>MAPP Region</u>						
MDU Resources Group, Inc.	MT,ND,SD,WY	\$142,137	7.14	6.12	4.67	1.96
MidAmerican Energy Company	IA,IL,SD	\$1,115,094	8.61	6.70	4.08	2.43
Minnesota Power, Inc.	MN	\$370,379	6.64	5.80	3.57	3.66
Northern States Power Co - MN	MN, ND, SD	\$1,946,196	7.54	5.65	4.01	2.34
Northern States Power Co - WI	MI, WI	\$355,636	7.60	6.64	4.96	3.62
Northwestern Wisconsin Electric Co.	MN, WI	\$13,783	9.14	8.23	5.92	5.63
Otter Tail Corporation	MN, ND, SD	\$206,870	6.38	5.47	4.06	5.32
Superior Water, Light & Power Co.	WI	\$24,172	6.43	4.79	3.74	NA
<u>NPCC Region</u>						
Bangor Hydro-Electric Company	ME	\$46,454	15.34	11.99	5.99	4.70
Boston Edison Company	MA	\$1,334,441	13.13	12.07	11.44	4.21
Cambridge Electric Light Company	MA	\$126,013	12.39	8.32	7.32	4.40
Central Hudson Gas & Electric Corp	NY	\$380,242	9.96	7.34	5.00	6.14
Central Maine Power Company	ME	\$28,156	12.05	14.12	9.86	3.40
Central Vermont Public Service Corp	VT	\$260,315	13.27	12.01	8.40	4.73
Citizens Communications Company	AZ, VT, HI	\$214,427	10.76	11.01	14.25	7.34

<u>Utility</u>	<u>States Served</u>	Revenue from Sales to Ultimate <u>Customers</u> (in thousands)	<u>Average Revenue per Kilowatt-hour (in Cents)</u>			
			<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Sales for Resale</u>
Commonwealth Electric Company	MA	\$409,084	13.64	11.34	10.36	3.94
Concord Electric Co,	NH	\$52,949	10.42	9.80	8.39	NA
Connecticut Light and Power Co	CT	\$2,194,206	10.70	9.11	7.56	4.33
Connecticut Valley Electric Co Inc.	NH	\$19,803	14.53	11.93	8.95	NA
Consolidated Edison Co of New York	NY	\$4,873,780	16.99	14.32	13.03	56.68
Exeter & Hampton Electric Company	NH	\$59,692	9.94	10.35	7.88	NA
Fitchburg Gas & Electric Light Co.	MA	\$48,246	12.10	11.40	6.99	4.38
Granite State Electric Company	NH	\$68,464	10.43	8.51	8.06	NA
Green Mountain Power Corporation	VT	\$196,661	12.96	10.35	7.28	3.35
Maine Public Service Company	ME	\$0	NA	NA	NA	NA
Massachusetts Electric Company	MA	\$1,536,083	9.46	8.72	7.73	5.05
Narragansett Electric Company	RI	\$604,528	10.18	8.66	7.80	4.72
New York State Electric & Gas Corp	NY	\$1,283,446	12.32	10.40	6.49	4.10
Niagara Mohawk Power Corporation	NY	\$2,720,622	12.39	10.99	4.85	3.35
Orange and Rockland Utilities, Inc.	NY	\$278,279	12.47	9.37	6.06	4.36
PSC of New Hampshire	NH	\$778,509	11.79	10.01	9.15	3.75
Rochester Gas and Electric Corp	NY	\$510,744	10.61	9.25	6.67	5.57
Rockland Electric Company	NJ	\$137,271	9.35	8.56	7.74	NA
United Illuminating Company	CT	\$639,025	12.52	10.39	8.92	3.21
Western Massachusetts Electric Co	MA	\$327,237	10.88	9.43	8.03	5.22
<u>SERC Region</u>						
Alabama Power Company	AL	\$2,951,218	7.27	6.61	3.74	2.82
Carolina Power & Light Company	NC, SC	\$2,806,915	8.12	6.66	4.92	4.34
Dominion Virginia Power	NC, VA	\$4,610,598	8.24	5.92	4.35	6.12
Duke Energy Corporation	NC, SC	\$4,345,189	7.32	5.90	4.13	3.75
Entergy Arkansas, Inc.	AR, TN	\$1,206,017	7.89	5.83	4.66	2.76
Entergy Gulf States, Inc.	LA, TX	\$1,930,720	7.37	6.36	4.37	3.27
Entergy Louisiana, Inc.	LA	\$1,713,276	7.27	7.28	4.32	6.89
Entergy Mississippi, Inc.	MS	\$877,829	7.36	6.96	5.66	5.91
Entergy New Orleans, Inc.	LA	\$414,849	7.90	6.82	6.03	4.97

<u>Utility</u>	<u>States Served</u>	Revenue from Sales to Ultimate <u>Customers</u> (in thousands)	<u>Average Revenue per Kilowatt-hour (in Cents)</u>			
			<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Sales for Resale</u>
Georgia Power Company	GA	\$4,288,097	7.23	6.05	3.90	3.07
Gulf Power Company	FL	\$658,659	7.04	5.79	4.29	3.03
Lockhart Power Company	SC	\$13,003	8.23	8.71	4.72	5.03
Mississippi Power Company	MS	\$536,827	8.11	6.24	3.94	3.88
Savannah Electric and Power Co	GA	\$285,770	7.77	7.05	4.10	3.77
South Carolina Electric & Gas Co	SC	\$1,292,155	8.05	6.34	3.96	3.44
<u>SPP Region</u>						
Aquila	CO, KS,MO	\$605,022	6.95	5.69	4.10	3.35
Cleco Power LLC	LA	\$532,226	7.29	6.75	4.65	4.21
Empire District Electric Company	AR, KS, MO, OK	\$274,504	7.30	6.61	4.88	2.75
Kansas City Power & Light	KS, MO	\$888,331	7.34	6.07	4.76	2.17
Kansas Gas and Electric Company	KS	\$552,052	7.73	6.39	4.50	2.47
Oklahoma Gas and Electric Company	AR, OK	\$1,298,678	6.93	6.00	3.89	3.04
PSC of Oklahoma	OK	\$735,812	5.49	4.34	3.35	7.57
Southwestern Electric Power Co	AR, LA, TX	\$773,376	6.14	4.89	3.84	2.67
Southwestern Public Service Co	KS, NM, OK, TX	\$683,690	5.82	4.29	3.15	3.18
Western Resources - KPL	KS	\$528,217	6.67	5.18	4.38	2.73
<u>WECC Region</u>						
Arizona Public Service Company	AZ	\$1,845,556	8.73	7.52	5.65	3.51
Avista Corporation	WA,MT,ID	\$464,567	6.12	6.86	4.48	2.89
Black Hills Power	MT, SD, WY	\$106,260	8.24	7.47	4.93	3.42
El Paso Electric Company	NM, TX	\$579,967	11.00	10.07	6.03	3.99
Idaho Power Company	ID, NV, OR	\$772,035	6.97	5.46	5.48	2.66
Morenci Water & Electric Company	AZ	\$70,499	11.03	10.23	4.38	NA
Nevada Power Company	NV	\$1,569,988	9.33	9.43	8.26	6.61
NorthWestern Energy Division *	SD, MT, WY	\$412,101	7.18	6.56	4.82	NA
Pacific Gas and Electric Company	CA	\$6,820,665	13.41	14.79	10.85	168.26
PacifiCorp	CA,ID,OR,UT,WA,WY	\$2,304,325	6.20	5.41	3.57	3.18
Portland General Electric Company	OR	\$1,384,323	8.05	7.62	5.81	3.10

<u>Utility</u>	<u>States Served</u>	Revenue from Sales to Ultimate <u>Customers</u> (in thousands)	<u>Average Revenue per Kilowatt-hour (in Cents)</u>			
			<u>Residential</u>	<u>Commercial</u>	<u>Industrial</u>	<u>Sales for Resale</u>
PSC of Colorado	CO	\$1,485,011	7.20	5.34	4.09	3.20
PSC of New Mexico	NM	\$541,925	8.58	7.61	5.09	2.94
Puget Sound Energy, Inc.	WA	\$1,260,477	6.32	6.74	6.55	2.55
San Diego Gas & Electric Company	CA	\$1,451,773	20.59	20.78	16.96	2.65
Sierra Pacific Power Company	CA, NV	\$759,830	10.37	9.45	7.20	5.97
Southern California Edison Company	CA	\$7,848,312	13.46	15.65	12.78	5.13
Tucson Electric Power Company	AZ	\$666,049	9.10	10.45	6.39	3.83
<u>Alaska & Hawaii</u>						
Alaska Electric Light and Power Co.	AK	\$26,356	9.77	8.26	7.28	NA
Hawaiian Electric Company, Inc.	HI	\$865,608	13.86	12.20	9.92	NA
Maui Electric Company	HI	\$191,029	17.36	17.85	14.26	NA

* NorthWestern Energy and Montana Power combined operations in 2002. Ratios are based on data submitted to EIA by both systems.

Source: 2002 FERC Form 1, as compiled in SNL Financial's Energy Information System for data on sales for resale;

2002 EIA-861, Energy Information Administration, for all other information; Calculations by APPA.

APPA adjusted sales for resale data for some utilities; adjustments based on details reported on FERC Form 1, pages 310-311.

II. Total Operations & Maintenance and Power Supply Cost Comparisons

Tables 3 summarizes mean and median values for total operations and maintenance, power supply, and transmission expenses per kilowatt-hour sold, and purchased power cost per kilowatt-hour. Total operations and maintenance expenses include the costs of power generation, purchased power, transmission, distribution, customer accounts, customer service, sales and administrative and general. Power supply expenses include both power generation and purchased power costs.

Note that the purchased power cost per kilowatt-hour ratio cannot be directly compared to the other three ratios because it has a different denominator: kilowatt-hours purchased. The denominator for the other three ratios is kilowatt-hours sold, which includes both full-service sales to consumers and sales for resale.

Table 3
Investor-Owned Utilities: Total O&M and Power Supply Cost Comparisons, 2002

	---Expenses per Kilowatt-hour Sold, in Cents---			Purchased Power Cost
	<u>Total O&M</u>	<u>Power Supply</u>	<u>Transmission</u>	<u>Per KWH - in Cents</u>
Mean	4.22	3.26	0.12	4.09
Median	4.38	3.42	0.10	3.75

Year-to-year trends for these ratios are not provided because the purchased power data, which is included in the power supply and total operations & maintenance costs, are not comparable across years. As noted in the sales for resale discussion, some utilities include power marketing activities in their reports while others do not, and the volumes traded vary greatly from year to year. As an indication of this variance, the volume of power purchases by the utilities in the APPA database increased by 660 billion megawatt-hours between 2000 and 2001 (a greater than 50 percent increase), and then declined by 447 billion megawatt-hours between 2001 and 2002.

The inclusion of some utilities' power marketing activity has an effect on the power supply and total O&M ratios as well as on the purchased power ratio. Power marketing purchases and sales would increase both the numerator (higher purchased power costs) and the denominator (higher sales for resale) of these ratios.

Table 4, on the following pages, presents these same four ratios for each individual investor-owned utility. In addition, Table 4 shows each utility's net generation and total purchases, as these values are useful both as an indicator of size and to show a utility's power supply mix.

Adjustments were made to the total operations and maintenance expense per KWH sold ratio for those utilities that had significant delivery-only sales to consumers. A two-part calculation was made for these 35 utilities. The portion of the ratio closely related to delivery of electricity was calculated by dividing the sum of distribution, customer accounting, customer service, sales and administrative & general expenses by the sum of sales for resale and sales to all consumers, both full-service and delivery-only. The portion of the ratio related to power supply (both power supply and transmission costs) was computed using sales for resale and full-service sales to consumers as the denominator, same as for the standard total O&M per KWH calculation.

Table 4

Investor-Owned Utilities: 2002 Total O&M and Power Supply Cost Comparisons

<u>Utility</u>	<u>Net Generation</u> -----in megawatt-hours-----	<u>Purchases</u>	Total O&M Expense per <u>KWH Sold</u> (in cents)	Power Supply Expense per <u>KWH Sold</u> (in cents)	Transmission Expense per <u>KWH Sold</u> (in cents)	Purchased Power Cost per KWH (in cents)
<u>ECAR Region</u>						
Appalachian Power Company	32,901,943	15,213,636	2.46	1.86	0.02	1.92
* Cincinnati Gas & Electric Co	26,923,480	108,300,792	2.74	2.53	0.03	2.66
Cleveland Electric Illuminating Co	9,913,076	15,161,288	4.34	3.42	0.18	3.46
Columbus Southern Power Company	14,426,270	12,490,075	3.12	2.32	0.19	2.61
Consumers Energy Company	26,320,613	13,820,930	4.57	3.58	0.27	5.78
Dayton Power and Light Company	16,567,575	3,741,676	2.63	2.16	0.02	2.85
Detroit Edison Company	48,317,453	9,807,957	4.19	2.57	0.23	3.93
Duquesne Light Company	0	11,458,784	4.86	3.94	0.12	3.74
Indiana Michigan Power Company	29,730,448	12,539,745	2.75	2.31	-0.05	2.05
Indianapolis Power & Light Company	16,815,900	330,503	2.26	1.57	0.04	5.45
Kentucky Power Company	5,752,802	5,909,275	2.63	2.13	0.00	2.25
Kentucky Utilities Company	16,722,125	7,882,935	2.63	2.00	0.07	2.00
Kingsport Power Company	0	1,962,229	3.49	3.01	0.01	2.97
Louisville Gas and Electric Company	15,474,056	4,289,181	2.64	1.88	0.11	1.97
Monongahela Power Company	11,758,462	3,507,095	3.71	2.70	0.11	4.12
Northern Indiana Public Service Co.	14,150,220	5,311,831	3.15	2.43	0.05	2.96
Ohio Edison Company	8,204,786	25,810,594	4.12	3.21	0.24	3.00
Ohio Power Company	48,152,764	7,547,875	2.33	1.86	0.06	1.83
* Pennsylvania Power Company	5,973,519	5,149,905	2.98	2.33	0.13	3.04
Potomac Edison Company	2,903,830	15,806,665	4.34	3.64	0.11	3.58
PSI Energy, Inc.	32,933,973	31,095,602	2.87	2.34	0.06	2.64
* Southern Indiana Gas and Electric	6,888,607	10,362,195	2.71	2.48	0.01	2.76
Toledo Edison Company	5,872,717	11,223,816	5.09	4.19	0.16	2.92
Union Light, Heat and Power Co.	0	4,095,119	5.13	4.21	0.42	3.90
West Penn Power Company	0	22,843,475	4.23	3.30	0.17	3.12
Wheeling Power Co	0	1,787,054	3.87	3.26	0.04	3.18

<u>Utility</u>	<u>Net Generation</u> -----in megawatt-hours-----	<u>Purchases</u>	<u>Total O&M</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Power Supply</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Transmission</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Purchased</u> <u>Power Cost</u> <u>per KWH</u> (in cents)
<u>ERCOT Region</u>						
AEP Texas Central Company	13,866,191	6,621,143	NA	NA	NA	3.55
AEP Texas North Company	4,418,222	3,509,220	NA	NA	NA	3.36
CenterPoint Energy	0	1,968,793	NA	NA	NA	NA
Oncor Electric Delivery Company	0	0	NA	NA	NA	NA
Texas-New Mexico Power Company	7,293,562	1,106,923	NA	NA	NA	5.85
<u>FRCC Region</u>						
Florida Power & Light Company	84,714,740	20,894,179	4.60	3.80	0.05	4.82
Florida Power Corporation	34,481,078	9,072,160	4.78	3.83	0.08	5.60
Tampa Electric Company	15,626,574	4,325,896	4.95	3.97	0.04	5.86
<u>MAAC Region</u>						
Atlantic City Electric Company	2,501,859	8,813,234	7.71	6.05	0.09	6.24
Baltimore Gas and Electric Company	0	33,516,823	4.21	3.41	0.04	3.56
Delmarva Power & Light Company	0	14,114,340	5.58	4.66	0.07	4.36
Jersey Central Power & Light Co.	-91,732	27,438,733	5.94	4.92	0.09	5.57
Metropolitan Edison Company	6,689	12,986,872	6.00	5.20	0.04	4.98
PECO Energy Company	0	35,753,490	6.05	4.93	0.06	4.67
Pennsylvania Electric Company	70,916	14,064,791	5.97	5.04	0.07	5.06
Potomac Electric Power Company	0	17,013,866	4.82	3.89	0.10	3.58
PPL Electric Utilities Corporation	0	37,041,518	5.69	4.73	0.04	4.39
Public Service Electric and Gas Co	0	50,162,957	6.58	5.37	0.07	4.78
<u>MAIN Region</u>						
AmerenCIPS	0	12,714,083	5.69	4.35	0.09	3.28
AmerenUE	39,939,556	5,920,012	3.09	1.93	0.10	3.31
Central Illinois Light Company	5,660,582	1,253,458	3.78	2.89	0.07	3.84
Commonwealth Edison Company	0	83,824,166	4.43	3.39	0.06	3.08
Consolidated Water Power Company	190,245	1,289,035	3.53	3.14	0.26	3.33

<u>Utility</u>	<u>Net Generation</u> -----in megawatt-hours-----	<u>Purchases</u>	<u>Total O&M</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Power Supply</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Transmission</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Purchased</u> <u>Power Cost</u> <u>per KWH</u> (in cents)
Edison Sault Electric Company	215,248	676,854	3.13	2.13	0.27	2.38
Illinois Power Company	97	17,447,505	4.79	4.07	0.10	3.88
Interstate Power & Light Company	13,547,813	4,134,068	3.53	2.51	0.16	3.51
Madison Gas and Electric Company	2,051,129	1,305,930	4.75	3.17	0.33	3.42
Mt. Carmel Public Utility Company	0	155,868	5.71	3.71	0.25	3.61
Pioneer Power & Light Company	0	30,632	5.55	3.80	0.00	3.75
South Beloit Water, Gas & Electric	0	210,662	4.79	3.48	0.00	3.15
Upper Peninsula Power Co	180,337	871,879	5.25	2.93	0.54	2.64
Wisconsin Electric Power Company	27,557,868	4,479,793	3.68	2.44	0.24	4.65
Wisconsin Power and Light Company	10,191,434	4,464,029	3.83	2.74	0.34	3.83
Wisconsin Public Service Corp	11,346,028	2,943,165	3.52	2.34	0.27	3.04
<u>MAPP Region</u>						
MDU Resources Group, Inc.	2,316,980	864,640	3.34	2.27	0.21	3.31
MidAmerican Energy Company	21,858,521	6,719,146	2.72	1.92	0.04	3.40
Minnesota Power, Inc.	7,714,134	4,007,610	2.88	2.25	0.06	3.01
Northern States Power Co - MN	35,883,149	10,930,970	3.86	2.81	0.24	4.02
Northern States Power Co - WI	1,430,131	5,530,052	4.76	3.58	0.31	2.92
Northwestern Wisconsin Electric Co.	57	192,762	5.52	3.87	0.06	3.49
Otter Tail Corporation	3,548,413	1,900,971	4.08	3.01	0.09	4.98
Superior Water, Light & Power Co.	0	560,836	3.78	3.27	0.02	3.18
<u>NPCC Region</u>						
* Bangor Hydro-Electric Company	868	2,572,696	7.36	5.55	0.45	2.68
Boston Edison Company	0	20,404,798	7.10	5.46	0.46	5.22
Cambridge Electric Light Company	36,590	2,134,176	6.84	5.58	0.62	5.22
Central Hudson Gas & Electric Corp	104,385	5,140,335	6.51	5.07	0.15	4.84
* Central Maine Power Company	0	2,806,475	13.10	9.75	1.94	9.33
Central Vermont Public Service Corp	378,232	2,587,859	8.14	5.52	0.68	5.50
Citizens Communications Company	315,153	1,864,305	7.96	6.28	0.13	6.13
Commonwealth Electric Company	0	6,720,948	7.76	6.21	0.34	5.79

<u>Utility</u>	<u>Net Generation</u> -----in megawatt-hours-----	<u>Purchases</u>	<u>Total O&M</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Power Supply</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Transmission</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Purchased</u> <u>Power Cost</u> <u>per KWH</u> (in cents)
Concord Electric Co,	0	583,558	8.26	7.45	0.01	7.07
Connecticut Light and Power Co	308,496	30,637,649	6.35	5.08	0.18	4.35
Connecticut Valley Electric Co Inc.	0	163,741	11.88	9.68	0.01	9.33
Consolidated Edison Co of New York	1,259,533	32,712,722	10.53	8.56	0.43	7.92
Exeter & Hampton Electric Company	0	658,403	8.33	7.55	0.00	7.18
Fitchburg Gas & Electric Light Co.	277	491,925	6.59	5.00	0.34	6.32
Granite State Electric Company	0	746,980	7.73	5.73	0.75	5.71
Green Mountain Power Corporation	205,458	3,987,244	5.71	4.82	0.38	4.72
Maine Public Service Company	0	0	NA	NA	NA	NA
Massachusetts Electric Company	0	16,997,506	7.89	5.68	0.81	5.73
Narragansett Electric Company	0	7,043,011	7.07	5.26	0.34	4.91
New York State Electric & Gas Corp	256,536	14,653,635	7.58	5.90	0.17	5.73
Niagara Mohawk Power Corporation	0	34,034,216	6.65	4.68	0.12	4.49
Orange and Rockland Utilities, Inc.	0	4,621,244	7.18	5.22	0.29	3.56
PSC of New Hampshire	4,688,774	9,960,033	4.10	3.15	0.15	2.93
Rochester Gas and Electric Corp	5,748,267	3,859,127	4.69	2.91	0.36	3.54
Rockland Electric Company	0	1,633,080	6.72	4.77	0.06	4.45
United Illuminating Company	1,329,774	6,533,665	6.19	3.90	0.42	4.08
Western Massachusetts Electric Co	0	3,775,138	6.77	5.19	0.20	4.93
<u>SERC Region</u>						
Alabama Power Company	71,331,567	7,239,413	2.74	2.10	0.05	3.44
Carolina Power & Light Company	54,396,868	5,192,275	3.33	2.54	0.09	6.69
Dominion Virginia Power	64,217,895	16,276,599	3.69	3.09	0.03	6.74
Duke Energy Corporation	85,131,761	2,198,287	3.03	1.94	0.05	5.12
Entergy Arkansas, Inc.	23,260,860	10,405,287	3.87	2.62	0.05	3.41
Entergy Gulf States, Inc.	27,280,097	13,079,028	3.79	3.08	0.10	2.81
Entergy Louisiana, Inc.	19,877,118	11,576,270	4.11	3.43	0.05	3.79
Entergy Mississippi, Inc.	7,968,056	6,545,210	5.68	4.76	0.07	4.83
Entergy New Orleans, Inc.	2,580,428	3,746,955	5.68	4.63	0.11	4.22
Georgia Power Company	70,380,269	20,303,228	3.45	2.57	0.09	3.37

<u>Utility</u>	<u>Net Generation</u> -----in megawatt-hours-----	<u>Purchases</u>	<u>Total O&M</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Power Supply</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Transmission</u> <u>Expense per</u> <u>KWH Sold</u> (in cents)	<u>Purchased</u> <u>Power Cost</u> <u>per KWH</u> (in cents)
Gulf Power Company	13,141,724	2,322,593	3.67	2.88	0.06	2.71
Lockhart Power Company	40,310	328,762	4.50	4.04	0.03	4.13
Mississippi Power Company	15,079,053	1,866,418	3.46	2.73	0.05	2.75
Savannah Electric and Power Co	2,249,130	2,378,677	4.72	3.48	0.07	3.18
South Carolina Electric & Gas Co.	18,209,913	5,809,771	3.15	2.34	0.04	2.61
<u>SPP Region</u>						
Aquila	7,953,897	5,326,793	4.09	2.95	0.20	3.48
Cleco Power LLC	5,405,076	4,648,790	4.37	3.53	0.05	3.64
Empire District Electric Company	3,132,677	2,520,421	3.44	2.63	0.09	2.49
Kansas City Power & Light	18,815,079	974,351	2.74	1.76	0.06	4.74
Kansas Gas and Electric Company	13,037,704	334,343	3.34	2.18	0.35	2.42
Oklahoma Gas and Electric Company	23,358,706	3,531,868	3.93	3.08	0.05	7.36
PSC of Oklahoma	15,047,242	3,435,747	3.28	2.51	0.10	3.99
Southwestern Electric Power Co	21,134,399	4,328,259	2.88	2.25	0.08	1.99
Southwestern Public Service Co	21,210,450	5,000,330	2.84	2.32	0.15	2.91
Western Resources - KPL	15,342,107	723,945	2.92	1.82	0.30	6.46
<u>WECC Region</u>						
Arizona Public Service Company	22,560,972	7,881,916	3.83	2.90	0.09	4.36
Avista Corporation	5,723,919	4,664,491	3.81	2.81	0.14	2.47
Black Hills Power	2,075,253	943,658	2.69	1.92	0.11	2.74
El Paso Electric Company	7,785,938	1,560,200	5.04	3.50	0.25	6.27
Idaho Power Company	13,354,722	2,855,620	4.15	3.18	0.10	4.98
Morenci Water & Electric Company	0	1,578,885	4.38	4.33	0.00	4.32
Nevada Power Company	10,147,053	12,907,835	9.06	8.38	0.03	9.61
NorthWestern Energy Division **	2,946,458	6,129,975	NA	NA	NA	NA
Pacific Gas and Electric Company	26,563,455	28,171,233	5.59	3.51	0.21	6.41
PacifiCorp	50,370,211	31,418,353	2.93	2.18	0.13	3.23
Portland General Electric Company	7,625,096	24,935,250	4.53	3.70	0.22	3.87
* PSC of Colorado	23,045,514	63,552,583	3.26	2.94	0.06	3.41

<u>Utility</u>	<u>Net Generation</u> -----in megawatt-hours-----	<u>Purchases</u>	Total O&M Expense per <u>KWH Sold</u> (in cents)	Power Supply Expense per <u>KWH Sold</u> (in cents)	Transmission Expense per <u>KWH Sold</u> (in cents)	Purchased Power Cost per <u>KWH</u> (in cents)
* PSC of New Mexico	10,270,182	7,139,641	4.03	3.25	0.15	3.48
Puget Sound Energy, Inc.	6,996,276	19,621,559	3.69	2.74	0.18	2.27
San Diego Gas & Electric Company	3,609,624	3,823,022	7.73	4.84	1.11	6.15
Sierra Pacific Power Company	4,699,480	7,206,305	7.08	6.19	0.13	7.42
Southern California Edison Company	32,404,160	27,145,352	6.81	5.06	0.23	7.07
Tucson Electric Power Company	11,469,573	1,870,075	4.61	3.83	0.05	3.41
<u>Alaska & Hawaii</u>						
Alaska Electric Light and Power Co.	70,890	257,288	5.04	3.51	0.05	3.13
Hawaiian Electric Company, Inc.	4,637,906	3,119,793	8.11	7.03	0.09	8.37
Maui Electric Company	1,146,581	87,435	9.61	7.83	0.10	8.46

* KWHs sold for these utilities are primarily wholesale sales.

** NorthWestern Energy & Montana Power combined operations in 2002. Data are based on submissions to EIA by both systems.

Source: FERC Form 1, as compiled in SNL Financial's Energy Information System for all other data. Calculations by APPA.

APPA adjusted purchased power data for some utilities (adjustments based on details reported on FERC Form 1, pages 326-327), and some total O&M per kWh ratios (adjustments based on delivery sales reported in EIA's 2002 EIA-861 file).

III. Operations & Maintenance Expenses other than Power Supply

Table 5 summarizes mean and median values for ratios that measure operations and maintenance expenses other than those associated with power supply. These expenses – distribution; customer accounts, customer service, and sales; and administrative and general – are presented on a per customer basis because they typically are more closely related to the number of customers served than to the amount of kilowatt-hours sold. Examples of these types of expenses include distribution line maintenance, meter reading, billing, and general overhead. Ultimate customers include all customers for which the utility provides delivery service, whether via full-service, bundled sales or delivery-only sales.

Table 5
Investor-Owned Utilities: O&M Expenses other than Power Supply, 2002

	<u>Distribution Expense Per Customer</u>	<u>Customer Accounts, Customer Service & Sales Expense Per Customer</u>	<u>Administrative & General Expense Per Customer</u>
Mean	\$76	\$66	\$134
Median	\$76	\$61	\$139

Table 5A, below, compares the mean value of these ratios for 1994 through 2002. Distribution costs per customer costs remained at the same level for the third year in a row, and administration & general (A&G) costs per customer increased after three straight years of declines. Customer accounting, customer service and sales expense per customer has remained relatively steady between 1994 and 2002, while A&G cost per customer has fallen by 17 percent. Utilities' sales of generating or transmission assets and transfers of these assets to unregulated affiliates should lead to lower A&G expenses. For example, the regulated utility will no longer have to pay for insurance on the plant and employees operating the plant will no longer work for the regulated utility.

Table 5A
Investor-Owned Utilities: O&M Expenses other than Power Supply, 1994 - 2002
(Mean Values)

	<u>Distribution Expense Per Customer</u>	<u>Customer Accounts, Customer Service & Sales Expense Per Customer</u>	<u>Administrative & General Expense Per Customer</u>
2002	\$76	\$66	\$134
2001	\$76	\$69	\$129
2000	\$76	\$69	\$138
1999	\$74	\$71	\$143
1998	\$72	\$71	\$147
1997	\$67	\$68	\$147
1996	\$68	\$69	\$150
1995	\$66	\$66	\$147
1994	\$68	\$65	\$162

Table 6, on the following pages, presents these same three ratios for each investor-owned utility. The ratio of Customer Accounting, Customer Service and Sales Expense per Customer is not computed for utilities in the ERCOT NERC region, as these utilities no longer perform billing services, which are a significant portion of customer accounting expenses. Retail Electric Providers (REP) have been responsible for customer billing since retail choice began in ERCOT in January 2002.

Table 6 also lists number of ultimate customers, and generation as a percent of total sources of energy for each utility. The information on power generation is provided because the operation of power plants typically is associated with an increase in administrative and general expenses.

Table 6**Investor-Owned Utilities: 2002 Operations & Maintenance Expenses other than Power Supply**

<u>Utility</u>	<u>Total Ultimate Customers</u>	<u>Distribution Expense per Customer</u>	<u>Customer Accounts, Customer Service & Sales Expense per Customer</u>	<u>Administrative & General Expense per Customer</u>	<u>Generation as a Percent of Total Sources of Energy</u>
<u>ECAR Region</u>					
Appalachian Power Company	920,813	\$88	\$50	\$149	68.4%
Cincinnati Gas & Electric Co.	659,442	\$51	\$52	\$242	82.5%
Cleveland Electric Illuminating Co	751,430	\$69	\$30	\$208	39.5%
Columbus Southern Power Company	683,800	\$67	\$58	\$102	53.6%
Consumers Energy Company	1,721,944	\$66	\$32	\$66	65.6%
Dayton Power and Light Company	504,720	\$39	\$53	\$81	81.6%
Detroit Edison Company	2,132,404	\$85	\$75	\$197	83.1%
Duquesne Light Company	586,184	\$46	\$72	\$72	0.0%
Indiana Michigan Power Company	568,868	\$78	\$40	\$228	70.3%
Indianapolis Power & Light Company	446,614	\$79	\$42	\$118	98.1%
Kentucky Power Company	173,050	\$115	\$57	\$150	49.3%
Kentucky Utilities Company	502,698	\$49	\$41	\$165	68.0%
Kingsport Power Company	45,450	\$89	\$42	\$69	0.0%
Louisville Gas and Electric Company	381,358	\$63	\$30	\$229	78.3%
Monongahela Power Company	393,724	\$86	\$42	\$205	77.0%
Northern Indiana Public Service Co.	433,798	\$58	\$64	\$171	72.7%
Ohio Edison Company	1,008,197	\$68	\$30	\$159	24.1%
Ohio Power Company	699,519	\$78	\$66	\$170	86.4%
Pennsylvania Power Company	154,281	\$60	\$34	\$270	53.7%
Potomac Edison Company	422,950	\$78	\$33	\$138	15.3%
PSI Energy, Inc.	733,201	\$52	\$68	\$272	79.5%
Southern Indiana Gas and Electric	133,488	\$58	\$34	\$190	39.9%
Toledo Edison Company	305,860	\$74	\$35	\$302	34.4%
Union Light, Heat and Power Co.	127,058	\$28	\$49	\$72	0.0%
West Penn Power Company	689,422	\$70	\$42	\$129	0.0%
Wheeling Power Co	41,330	\$88	\$57	\$95	0.0%

<u>Utility</u>	<u>Total Ultimate Customers</u>	<u>Distribution Expense per Customer</u>	<u>Customer Accounts, Customer Service & Sales Expense per Customer</u>	<u>Administrative & General Expense per Customer</u>	<u>Generation as a Percent of Total Sources of Energy</u>
<u>ERCOT Region</u>					
AEP Texas Central Company	685,661	\$79	NA	\$152	67.7%
AEP Texas North Company	187,075	\$94	NA	\$205	55.7%
CenterPoint Energy	1,793,922	\$91	NA	\$77	0.0%
Oncor Electric Delivery Company	2,569,022	\$68	NA	\$73	NA
Texas-New Mexico Power Company	244,699	\$72	NA	\$100	NA
<u>FRCC Region</u>					
Florida Power & Light Company	4,019,814	\$60	\$46	\$78	80.1%
Florida Power Corporation	1,475,761	\$56	\$84	\$104	79.1%
Tampa Electric Company	590,199	\$63	\$88	\$152	78.3%
<u>MAAC Region</u>					
Atlantic City Electric Company	511,926	\$71	\$114	\$104	24.6%
Baltimore Gas and Electric Company	1,162,568	\$66	\$40	\$129	0.0%
Delmarva Power & Light Company	482,698	\$79	\$91	\$88	0.0%
Jersey Central Power & Light Co.	1,033,938	\$89	\$70	\$72	-0.3%
Metropolitan Edison Company	506,134	\$73	\$60	\$71	0.1%
PECO Energy Company	1,528,884	\$99	\$85	\$75	0.0%
Pennsylvania Electric Company	583,462	\$84	\$61	\$59	0.5%
Potomac Electric Power Company	717,628	\$86	\$75	\$141	0.0%
PPL Electric Utilities Corporation	1,299,183	\$91	\$51	\$111	0.0%
Public Service Electric and Gas Co	2,048,139	\$65	\$102	\$95	0.0%
<u>MAIN Region</u>					
AmerenCIPS	325,617	\$134	\$62	\$204	0.0%
AmerenUE	1,233,571	\$97	\$56	\$225	87.2%
Central Illinois Light Company	203,337	\$92	\$53	\$123	56.0%
Commonwealth Edison Company	3,589,532	\$91	\$62	\$91	0.0%
Consolidated Water Power Company	1,172	\$140	\$65	\$1,379	13.1%

<u>Utility</u>	<u>Total Ultimate Customers</u>	<u>Distribution Expense per Customer</u>	<u>Customer Accounts, Customer Service & Sales Expense per Customer</u>	<u>Administrative & General Expense per Customer</u>	<u>Generation as a Percent of Total Sources of Energy</u>
Edison Sault Electric Company	21,941	\$97	\$52	\$135	24.1%
Illinois Power Company	598,446	\$86	\$36	\$77	0.0%
Interstate Power & Light Company	524,221	\$68	\$85	\$122	76.2%
Madison Gas and Electric Company	129,529	\$62	\$74	\$171	61.2%
Mt. Carmel Public Utility Company	5,587	\$122	\$34	\$320	0.0%
Pioneer Power & Light Company	1,990	\$108	\$63	\$95	0.0%
South Beloit Water, Gas & Electric	8,301	\$53	\$170	\$107	0.0%
Upper Peninsula Power Co	50,922	\$137	\$51	\$152	17.1%
Wisconsin Electric Power Company	1,050,345	\$69	\$72	\$149	86.4%
Wisconsin Power and Light Company	417,714	\$55	\$81	\$114	69.5%
Wisconsin Public Service Corp	403,850	\$95	\$100	\$111	80.4%
<u>MAPP Region</u>					
MDU Resources Group, Inc.	116,417	\$70	\$36	\$120	71.6%
MidAmerican Energy Company	676,669	\$95	\$74	\$136	76.5%
Minnesota Power, Inc.	132,491	\$107	\$127	\$239	65.4%
Northern States Power Co - MN	1,308,882	\$62	\$83	\$104	76.5%
Northern States Power Co - WI	231,648	\$86	\$64	\$88	20.6%
Northwestern Wisconsin Electric Co.	12,120	\$105	\$46	\$82	0.0%
Otter Tail Corporation	126,832	\$66	\$107	\$235	54.9%
Superior Water, Light & Power Co.	14,339	\$49	\$62	\$81	0.0%
<u>NPCC Region</u>					
Bangor Hydro-Electric Company	126,577	\$86	\$55	\$123	0.0%
Boston Edison Company	687,074	\$121	\$141	\$138	0.0%
Cambridge Electric Light Company	47,041	\$70	\$142	\$98	1.6%
Central Hudson Gas & Electric Corp	282,812	\$92	\$71	\$83	2.0%
Central Maine Power Company	559,792	\$119	\$77	\$88	0.0%
Central Vermont Public Service Corp	146,051	\$146	\$49	\$171	13.0%
Citizens Communications Company	123,395	\$50	\$57	\$141	14.6%
Commonwealth Electric Company	355,451	\$95	\$72	\$81	0.0%

<u>Utility</u>	<u>Total Ultimate Customers</u>	<u>Distribution Expense per Customer</u>	<u>Customer Accounts, Customer Service & Sales Expense per Customer</u>	<u>Administrative & General Expense per Customer</u>	<u>Generation as a Percent of Total Sources of Energy</u>
Concord Electric Co,	28,551	\$48	\$31	\$77	0.0%
Connecticut Light and Power Co	1,147,835	\$82	\$110	\$87	1.0%
Connecticut Valley Electric Co Inc.	10,633	\$90	\$48	\$188	0.0%
Consolidated Edison Co of New York	3,117,515	\$110	\$60	\$46	3.7%
Exeter & Hampton Electric Company	42,663	\$33	\$24	\$57	0.0%
Fitchburg Gas & Electric Light Co.	26,479	\$66	\$99	\$128	0.1%
Granite State Electric Company	38,717	\$87	\$61	\$114	0.0%
Green Mountain Power Corporation	87,110	\$82	\$36	\$125	4.9%
Maine Public Service Company	36,592	\$63	\$45	\$222	NA
Massachusetts Electric Company	1,199,910	\$82	\$88	\$82	0.0%
Narragansett Electric Company	466,629	\$68	\$79	\$89	0.0%
New York State Electric & Gas Corp	838,150	\$105	\$88	\$98	1.7%
Niagara Mohawk Power Corporation	2,273,522	\$66	\$72	\$175	0.0%
Orange and Rockland Utilities, Inc.	210,512	\$117	\$91	\$144	0.0%
PSC of New Hampshire	447,583	\$71	\$54	\$126	32.0%
Rochester Gas and Electric Corp	355,415	\$120	\$71	\$240	59.8%
Rockland Electric Company	70,407	\$77	\$159	\$176	0.0%
United Illuminating Company	320,286	\$107	\$121	\$213	16.9%
Western Massachusetts Electric Co	203,828	\$96	\$116	\$65	0.0%
<u>SERC Region</u>					
Alabama Power Company	1,349,662	\$92	\$96	\$143	90.3%
Carolina Power & Light Company	1,290,632	\$71	\$56	\$182	91.3%
Dominion Virginia Power	2,171,975	\$33	\$28	\$139	79.6%
Duke Energy Corporation	2,159,296	\$100	\$57	\$244	95.4%
Entergy Arkansas, Inc.	650,600	\$78	\$66	\$436	68.7%
Entergy Gulf States, Inc.	697,389	\$84	\$65	\$188	67.2%
Entergy Louisiana, Inc.	648,757	\$78	\$50	\$163	62.8%
Entergy Mississippi, Inc.	407,790	\$80	\$70	\$146	54.5%
Entergy New Orleans, Inc.	190,273	\$62	\$54	\$184	40.5%
Georgia Power Company	1,979,812	\$98	\$105	\$144	77.6%

<u>Utility</u>	<u>Total Ultimate Customers</u>	<u>Distribution Expense per Customer</u>	<u>Customer Accounts, Customer Service & Sales Expense per Customer</u>	<u>Administrative & General Expense per Customer</u>	<u>Generation as a Percent of Total Sources of Energy</u>
Gulf Power Company	381,520	\$81	\$83	\$117	85.3%
Lockhart Power Company	6,249	\$50	\$43	\$151	10.9%
Mississippi Power Company	192,423	\$160	\$140	\$277	88.9%
Savannah Electric and Power Co	135,852	\$117	\$86	\$182	48.8%
South Carolina Electric & Gas Co	553,918	\$59	\$78	\$183	75.8%
<u>SPP Region</u>					
Aquila	435,749	\$83	\$39	\$143	59.9%
Cleco Power LLC	261,124	\$63	\$88	\$132	53.8%
Empire District Electric Company	152,589	\$74	\$54	\$124	55.4%
Kansas City Power & Light	480,540	\$124	\$42	\$196	95.1%
Kansas Gas and Electric Company	295,837	\$70	\$31	\$247	90.1%
Oklahoma Gas and Electric Company	713,213	\$61	\$52	\$165	86.9%
PSC of Oklahoma	503,683	\$72	\$44	\$109	81.4%
Southwestern Electric Power Co	434,311	\$93	\$64	\$152	83.0%
Southwestern Public Service Co	387,504	\$59	\$51	\$129	80.9%
Western Resources - KPL	351,051	\$75	\$30	\$233	101.4%
<u>WECC Region</u>					
Arizona Public Service Company	902,029	\$69	\$80	\$122	73.6%
Avista Corporation	317,548	\$45	\$74	\$145	55.0%
Black Hills Power	59,807	\$59	\$92	\$168	68.5%
El Paso Electric Company	312,953	\$49	\$38	\$276	83.4%
Idaho Power Company	407,828	\$103	\$61	\$155	82.5%
Morenci Water & Electric Company	1,880	\$209	\$57	\$184	0.0%
Nevada Power Company	650,356	\$33	\$53	\$133	44.0%
NorthWestern Energy Division *	356,418	NA	NA	NA	31.7%
Pacific Gas and Electric Company	4,759,417	\$83	\$85	\$139	33.2%
PacifiCorp	1,522,448	\$68	\$62	\$182	61.5%
Portland General Electric Company	741,949	\$59	\$81	\$120	23.4%
PSC of Colorado	1,255,661	\$39	\$32	\$105	26.7%

<u>Utility</u>	<u>Total Ultimate Customers</u>	<u>Distribution Expense per Customer</u>	<u>Customer Accounts, Customer Service & Sales Expense per Customer</u>	<u>Administrative & General Expense per Customer</u>	<u>Generation as a Percent of Total Sources of Energy</u>
PSC of New Mexico	384,478	\$51	\$48	\$179	58.6%
Puget Sound Energy, Inc.	950,043	\$63	\$63	\$58	26.2%
San Diego Gas & Electric Company	1,268,549	\$60	\$62	\$128	48.6%
Sierra Pacific Power Company	320,311	\$55	\$51	\$162	39.5%
Southern California Edison Company	4,506,095	\$56	\$70	\$144	56.0%
Tucson Electric Power Company	355,486	\$43	\$47	\$164	86.2%
<u>Alaska & Hawaii</u>					
Alaska Electric Light and Power Co.	15,113	\$83	\$59	\$162	21.6%
Hawaiian Electric Company, Inc.	281,871	\$70	\$70	\$121	59.8%
Maui Electric Company	59,410	\$76	\$136	\$113	92.9%

* NorthWestern Energy & Montana Power combined operations in 2002. Generation percent is based on data submitted to EIA by both systems.

NA = not available or data excluded because of inconsistent reporting.

Customer accounts, service & sales per customer ratio not calculated for ERCOT utilities because they no longer perform billing services.

Sources: 2002 FERC Form 1, as compiled in SNL Financial's Energy Information System, for expense data, and 2002 Form EIA-861,

Energy Information Administration for total customers (full-service plus delivery); Calculations by APPA.

Appendix: Description of Data Sources and Ratio Calculations

I. Table 2: Revenue per Kilowatt-hour Comparisons

- 1) States Served: Form EIA-861, Schedule 4, Part A;
- 2) Revenue from Sales to Ultimate Customers: Form EIA-861, Schedule 4, Part A: Full Service – Energy and Delivery Service (Bundled); “Revenue (thousand dollars)” line, Column (e), for the sum of all states;
- 3) Average Revenue per Kilowatt-hour: Calculated for each class of customers by dividing total annual revenues by total kilowatt-hours sold.

Data for residential, commercial and industrial revenue per kilowatt-hour calculations are from Form EIA-861, Schedule 4, Part A: Full Service – Energy and Delivery Service (Bundled):

Revenue = “Revenue (thousand dollars)” line multiplied by 1000;

Kilowatt-hours = “Megawatt-hours Sold and Delivered” line multiplied by 1000;

- Residential data: Column (a) for the sum of all states;
- Commercial data: Column (b) for the sum of all states;
- Industrial data: Column (c) for the sum of all states.

Sales for Resale revenue per kilowatt-hour:

- Revenue = FERC Form 1, Page 300, Line 11, Column (b);
- Kilowatt-hours = FERC Form 1, Page 301, Line 11, Column (d) x 1000.

Note: Sales and revenue data for some utilities were adjusted in line with details reported on FERC Form 1, page 310-311, Sales For Resale Schedule.

To express in cents per kilowatt-hour, multiply results, calculated above, by 100. (One cent per kilowatt-hour is the same as 10 mills per kilowatt-hour and \$10 per megawatt-hour.)

II. Table 4: Total Operations & Maintenance and Power Supply Comparisons

- 1) Net Generation: FERC Form 1, Page 401, Line 9, Column (b);
- 2) Purchases: FERC Form 1, Page 401, Line 10, Column (b);
- 3) Total O&M Expense per Kilowatt-hour Sold: Calculated by dividing total operations and maintenance expense by total kilowatt-hours sold.
 - Total O&M Expense = FERC Form 1, Page 323, Line 169, Column (b);
 - Kilowatt-hours Sold = Sales to Ultimate Customers: Form EIA-861, Schedule 4, Part A: Full Service, Energy and Delivery Service (Bundled Sales), “Megawatthours Sold and Delivered” line, Column (e), for the sum of all states; plus Sales for Resale: FERC Form 1, Page 301, Line 11, Column (d); multiplied by 1000.

Note: Kilowatt-hour sales to consumers as reported on Form EIA-861, Schedule 4, Part A include only sales to full-service customers. Total O&M expense per kWh was adjusted for 35 utilities providing delivery services to customers that purchased power from alternative suppliers. For these utilities, the distribution, customer-related and administrative and general expense portion of the ratio was calculated based on kilowatt-hours sold for resale, plus full-service and delivery sales to consumers. Delivery sales are sales reported on Form EIA-861, Schedule 4, Part C, Delivery Only Service, “Megawatthours Delivered” line, Column (e), for the sum of all states; multiplied by 1000.

- 4) Power Supply Expense per Kilowatt-hour Sold: Calculated by dividing total power supply expense, including power generated and power purchased, by total kilowatt-hours sold.
 - Total Power Supply Expense = FERC Form 1, Page 321, Line 80, Column (b);
 - Kilowatt-hours Sold = Sales to Ultimate Customers: Form EIA-861, Schedule 4, Part A: Full Service, Energy and Delivery Service (Bundled Sales), “Megawatthours Sold and Delivered” line, Column (e), for the sum of all states; plus Sales for Resale: FERC Form 1, Page 301, Line 11, Column (d); multiplied by 1000.

- 5) Transmission Expense per Kilowatt-hour Sold: Calculated by dividing cost of transmission operations and maintenance expense by total kilowatt-hours sold.
- Transmission Expense = FERC Form 1, Page 321, Line 100, Column (b);
 - Kilowatt-hours Sold = Sales to Ultimate Customers: Form EIA-861, Schedule 4, Part A: Full Service, Energy and Delivery Service (Bundled Sales), “Megawatthours Sold and Delivered” line, Column (e), for the sum of all states; plus Sales for Resale: FERC Form 1, Page 301, Line 11, Column (d); multiplied by 1000.
- 6) Purchased Power Cost per Kilowatt-hour: Calculated by dividing cost of purchased power by purchases (in kilowatt-hours).
- Purchased Power Cost = FERC Form 1, Page 321, Line 76, Column (b);
 - Kilowatt-hours Purchased = FERC Form 1, Page 401, Line 10, Column (b) multiplied by 1000.

Note: Purchased power cost as reported on page 321 includes the cost of exchanges; for those utilities with a significant amount of exchanges, data on purchased power costs and kilowatt-hours were obtained from FERC Form 1, Pages 326-327, which provide details for all purchases and exchanges. Page 326-327 details were also used to adjust ratios with extreme values.

To express ratios 3, 4, 5 and 6 in cents per kilowatt-hour, multiply result calculated above, by 100. (One cent per kilowatt-hour is the same as 10 mills per kilowatt-hour and \$10 per megawatt-hour.)

III. Table 6: Operations & Maintenance Expenses other than Power Supply

1) Total Ultimate Customers: FERC Form 1, Page 301, Line 10, Column (f).

Note: For most utilities, ultimate customers reported on FERC Form 1 include both full service (bundled) and delivery-only service (unbundled) customers. Thirteen utilities did not include delivery-only customers in the data reported on page 301. For these 13 utilities, total ultimate customers equal the sum of full-service and delivery-only customers reported on Schedule 4, Part A and Part C, Form EIA-861.

2) Distribution Expense per Customer: Calculated by dividing total distribution operations and maintenance expenses by total ultimate customers;

- Distribution Expense = FERC Form 1, Page 322, Line 126, Column (b);
- Total Ultimate Customers: FERC Form 1, Page 301, Line 10, Column (f).

3) Customer Accounts, Customer Service and Sales Expense per Ultimate Customer: Calculated by dividing total operations and maintenance expenses for customer accounts, customer service and information, and sales by total ultimate customers;

- Customer Accounts, Customer Service and Sales Expense = FERC Form 1, Page 322, Line 134, Column (b) plus Line 141, Column (b) plus Line 148, Column (b);
- Total Ultimate Customers: FERC Form 1, Page 301, Line 10, Column (f).

4) Administrative and General Expense per Customer: Calculated by dividing total administrative and general operation and maintenance expense by total ultimate customers;

- Administrative and General Expense = FERC Form 1, Page 323, Line 168, Column (b);
- Total Ultimate Customers: FERC Form 1, Page 301, Line 10, Column (f).

5) Generation as a Percent of Total Sources of Energy: Calculated by dividing net generation by total sources of energy. (Total sources of energy equals net generation, purchases, net exchanges, net transmission for other, and transmission by others losses.)

- Generation = FERC Form 1, Page 401, Line 9, Column (b);
- Total Sources of Power = FERC Form 1, Page 401, Line 20, Column (b).