

RECEIVED S.A.C.
MAR 24 2005
ARPS

05047796

Investment

PROCESSED
MAR 24 2005
THOMSON FINANCIAL

SUMMARY ANNUAL REPORT 2004



Wisconsin Energy Corporation



FOCUS

FINANCIAL AND OPERATIONAL DISCIPLINE

EXECUTION

OPERATIONAL PLAN

INVESTMENT

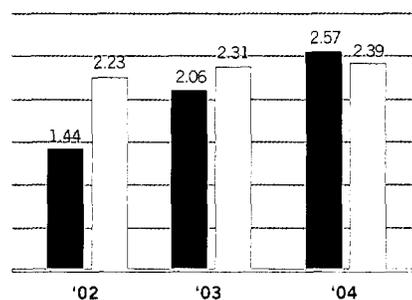
MANAGING PLANTS, PROCESSES AND PEOPLE

UNITED WISCONSIN ENERGY

TO RECORD PERFORMANCE LEVELS IN 2004

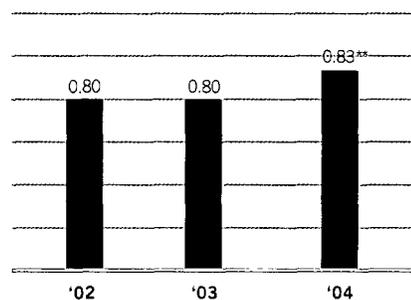
Financial Highlights

Earnings per Share
(in dollars)

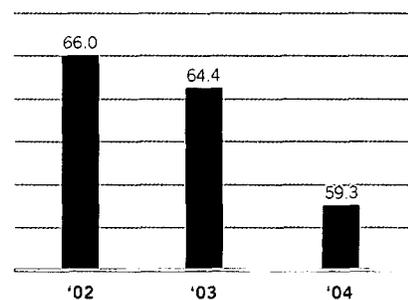


■ EPS
□ Adjusted EPS*

Dividends per Share
(in dollars)



Debt to Total Capital
(in percent)



	2004	2003
Operating Revenues (in billions)	\$ 3.4	\$ 3.3
Earnings Per Share	\$ 2.57	\$ 2.06
Adjusted Earnings Per Share*	\$ 2.39	\$ 2.31
Dividends Per Share	\$ 0.83	\$ 0.80
Average Diluted Shares Outstanding (in millions)	119.1	118.4
Market Price (year-end closing)	\$ 33.71	\$ 33.45

* Excludes the net gain (loss) from asset sales, impairment charges and other one-time items totaling \$0.18 per share in 2004, (\$0.25) per share in 2003 and (\$0.79) per share in 2002. For additional information on our adjusted earnings per share, please refer to page 21 of this summary annual report.

** Quarterly dividend rate was increased from \$0.20 to \$0.21 per share in the second quarter of 2004.

Dear Stockholder

For Wisconsin Energy, 2004 was a year of focus on customer satisfaction, execution of our business plan and investment in our future. I'm pleased to report record results.

IMPORTANT ACCOMPLISHMENTS OF 2004

We posted earnings of \$2.57 a share in 2004, an increase of nearly 25 percent over our earnings in 2003. Our results were bolstered by strong operational performance and by a significant gain from the sale of our pump and water systems business.

Our board of directors raised the dividend on our common stock by 5 percent in the second quarter of 2004 and raised it again by 4.8 percent in the first quarter of 2005 – reflecting the tremendous improvement we've made in the company's balance sheet and the confidence we have in our long-term business plan.

And our stock continued to appreciate in value during the year, trading at an all-time high of \$34.60 a share on December 22. Over the past five years, Wisconsin Energy stock has outperformed both the S&P 500 and our peer group of 30 utilities across the United States.

As I mentioned, we sold our pump and water systems business in July for more than \$850 million. We used the proceeds from this sale to pay off debt and strengthen our balance sheet. Now, as we look ahead, we're well-positioned to finance our Power the Future plan. As a result, we do not expect to issue any new shares to fund the major power plants we're planning to build.

Meeting Wisconsin's Growing Need

During 2004, the Wisconsin economy showed signs of renewed strength. According to preliminary data, Wisconsin was one of the top ten states in the country for new job growth. And Wisconsin outperformed every other state in the Midwest in creating jobs.

Our customer base continued to grow as well. In fact, since we combined with Wisconsin Gas in April of 2000, the number of gas customers we serve has grown by 8 percent and our electric customer total is up by 6.5 percent.

Wisconsin's economic gains underscore the urgent need to upgrade the energy infrastructure of the state. Both public and private forecasts project that Wisconsin will need to add a significant amount of capacity – approximately 7,000 megawatts of new power plants by 2016. To put that statistic in perspective, our existing plants today are capable of producing about 5,600 megawatts. And our system is by far the largest in the state.

- Achieved record earnings per share of \$2.57
- Raised the dividend on our common stock by 5 percent in 2004 and by 4.8 percent in 2005
- Traded at an all-time high of \$34.60 a share on December 22
- Sold our pump and water systems business for more than \$850 million



Gale E. Klappa
Chairman, President and CEO

A major power plant has not been built in the state since the mid-1980s – another reason why the need for new infrastructure is so acute.

Our Power the Future Plan

As many of you know, we proposed a comprehensive plan for new generating capacity – including new coal- and natural gas-fueled units, efficiency programs and more renewable energy. Major elements of the plan have been approved by the Public Service Commission of Wisconsin.

We're also investing approximately \$600 million over a ten-year period for air quality improvements at our existing power plants.

In Port Washington, where we've been part of the community for more than 70 years, construction continued on the first of our new natural gas units. Unit one is on schedule to be in commercial operation this summer. The second unit is expected to be on line in 2008.

Forty miles south of Port Washington, we're working through the complex process of securing permits for two new coal-fueled units in Oak Creek. We achieved several milestones on this project during 2004, but we were disappointed by a decision in late November from the Dane County Circuit Court. This court ruling overturned the Public Service Commission's order authorizing construction of the Oak Creek units.

Appeal to the Supreme Court of Wisconsin

Timely construction of the units at Oak Creek is an essential part of our plan to deliver a reliable, competitive supply of energy to our customers in the latter part of this decade and beyond. And because the public policy implications of the Circuit Court decision are so significant, our company and the Commission took the unusual step of asking the Supreme Court of Wisconsin to take immediate jurisdiction over the case.

I'm pleased to report that in early January, the Court agreed to hear our appeals and scheduled oral arguments for March 30. We hope to receive a ruling before this summer.

Our Focus on Customers

While we remain focused on meeting our customers' growing need for energy, we believe that their satisfaction with our service is the foundation of our enduring success.

Our customer satisfaction scores showed marked improvement in 2004 – the result of many initiatives we have under way. For example, we reduced by more than 25 percent the average time it took to restore electric service when one of our customers experienced an outage. Our response times are now among the best in the industry.

We also were named America's most reliable utility in an independent ranking of 115 utilities nationwide. For three years in a row, we've been named the most reliable utility in the Midwest. This is the first year that we've been selected for the national award.

As you'll note on page 18 of this report, we also received the industry's highest honor – the Edison Award – given annually by the Edison Electric Institute. We were recognized for our innovation and environmental leadership in expanding the market for byproducts that are produced from the burning of coal.

The Challenges Ahead

We have a solid foundation, a strong management team and a realistic plan to meet the energy needs of the Wisconsin economy. We have a tremendous amount of work to accomplish. But I'm optimistic about our ability to deliver real value for our customers and stockholders in the years ahead. When the future gets here, I believe it will be a bright one.

We appreciate your confidence and support.

Sincerely,



Gale E. Klappa
Chairman, President and Chief Executive Officer

March 18, 2005



A Conversation with Gale Klappa **Thoughts on the Company and *Power the Future***

Q. What were the major accomplishments in 2004 for Wisconsin Energy?

We saw improvement in every major indicator that we use to track the underlying performance of the business... from financial results to outage response to the availability of our generating plants. The year 2004 definitely was a year of progress.

And I believe one other accomplishment is worthy of note. Through the successful sale of WICOR, we materially strengthened our balance sheet – and in the process we eliminated over \$650 million of debt. That's clearly a significant step forward, and it puts us in a strong position to finance the new power plants and infrastructure upgrades the state so badly needs. It also streamlines the company and allows us to continue to sharpen our focus on our core energy business.

Q. What are the biggest challenges facing the business?

As I look ahead over the next five to seven years, I think the three major challenges facing Wisconsin Energy are clear. The first is we need to upgrade the energy infrastructure in Wisconsin – with an emphasis on adding power plant capacity – so we can avoid a severe energy shortfall in the latter part of this decade. The second is to continue to increase our productivity – particularly our focus on financial discipline and cost control – so that we can minimize the price increases that will be necessary. And the third is to continue to increase customer satisfaction.

Like any other business, our enduring success is based on how well we serve and satisfy customers.

Q. Your Power the Future plan is in a critical phase. Are you confident it will succeed?

As you know, our Power the Future plan has several major elements. The first is the building of two new natural gas-fueled units in Port Washington. That work is well under way. More than 500 construction workers are reporting to the site every day – and we expect to see the first unit in service in July. We've also begun demolition and site preparation activities to start construction on the second unit. I'm pleased with the progress we're making on that element of the plan.

The second leg of our Power the Future plan has legal challenges. And we face a critical decision in the next few months from the Supreme Court of Wisconsin – which will determine whether we can go forward. I'm hopeful the Court will clear the way for construction to begin at Oak Creek. But I think the important point about our plan is this: The need for new base load capacity – meaning large power plants that operate 24/7 – is not going away. And every day that the economy continues to strengthen in southeastern Wisconsin, the need for new base load capacity grows more acute.

Q. You brought a new emphasis on customer satisfaction to Wisconsin Energy. Tell us more about your customer satisfaction initiatives.

My views about customer satisfaction were formed a long time ago in a small family shoe store in Wisconsin Rapids. My parents owned and operated that shoe store. And as I grew up spending time in the store, I learned a lot about how important it is – for any business – to treat customers well and to satisfy those customers in the process of serving them.

Many people think that because our major operations are utilities – and because at the moment customers in Wisconsin have no choice but to take energy from their local utility – that customer satisfaction isn't important. But the most successful enterprises anywhere and the most successful utilities in the world excel at customer satisfaction. That's why I have placed such a personal emphasis on measuring and improving customer satisfaction.

Q. Why is Wisconsin Energy a solid investment?

First, we have an opportunity through our Power the Future plan to significantly grow our investment in assets that Wisconsin really needs. Second, we understand the importance of the dividend to our stockholders.

With that backdrop, I believe the company is positioned to deliver total risk-adjusted returns that will compete with the best in our industry. And that's our goal.

In 2004, we maintained our focus on customer satisfaction, executed our business plan and invested in the future – while continuing to build a great place to work.

Focusing on Customer Satisfaction

Satisfying our customers' growing need for reliable, reasonably priced energy is vital to our success and is a daily focus of our work. So is quickly and safely restoring power to our customers following an electric outage.



We Energies won the 2004 ReliabilityOne National Achievement Award as America's most reliable utility.

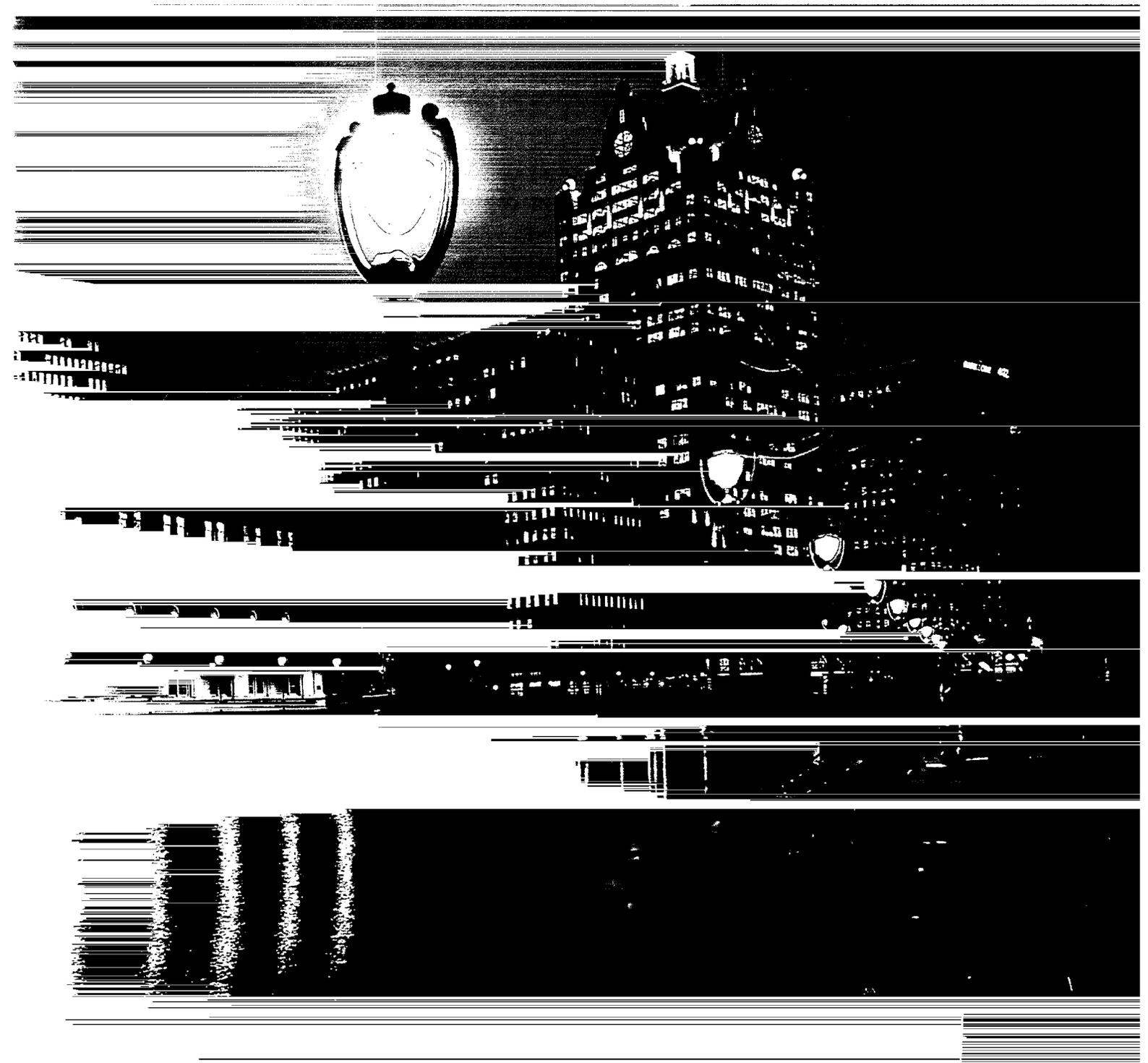
We Energies won the ReliabilityOne™ National Achievement Award in 2004 as America's most reliable utility. We finished first out of 115 utilities for "leading the industry toward a more reliable future... and advancing regional grid security." The company also won its third consecutive ReliabilityOne Regional Achievement Award as the most reliable utility in the Midwest.



Job growth and a stronger economy are contributing to increasing demand for electricity in Wisconsin.



Both our residential and business customer satisfaction ratings improved in 2004.



WISCONSIN ENERGY HELPS FUEL THE STATE'S GROWING ECONOMY.
ACCORDING TO PRELIMINARY DATA, WISCONSIN WAS ONE OF
THE TOP TEN STATES IN THE COUNTRY FOR NEW JOB GROWTH.

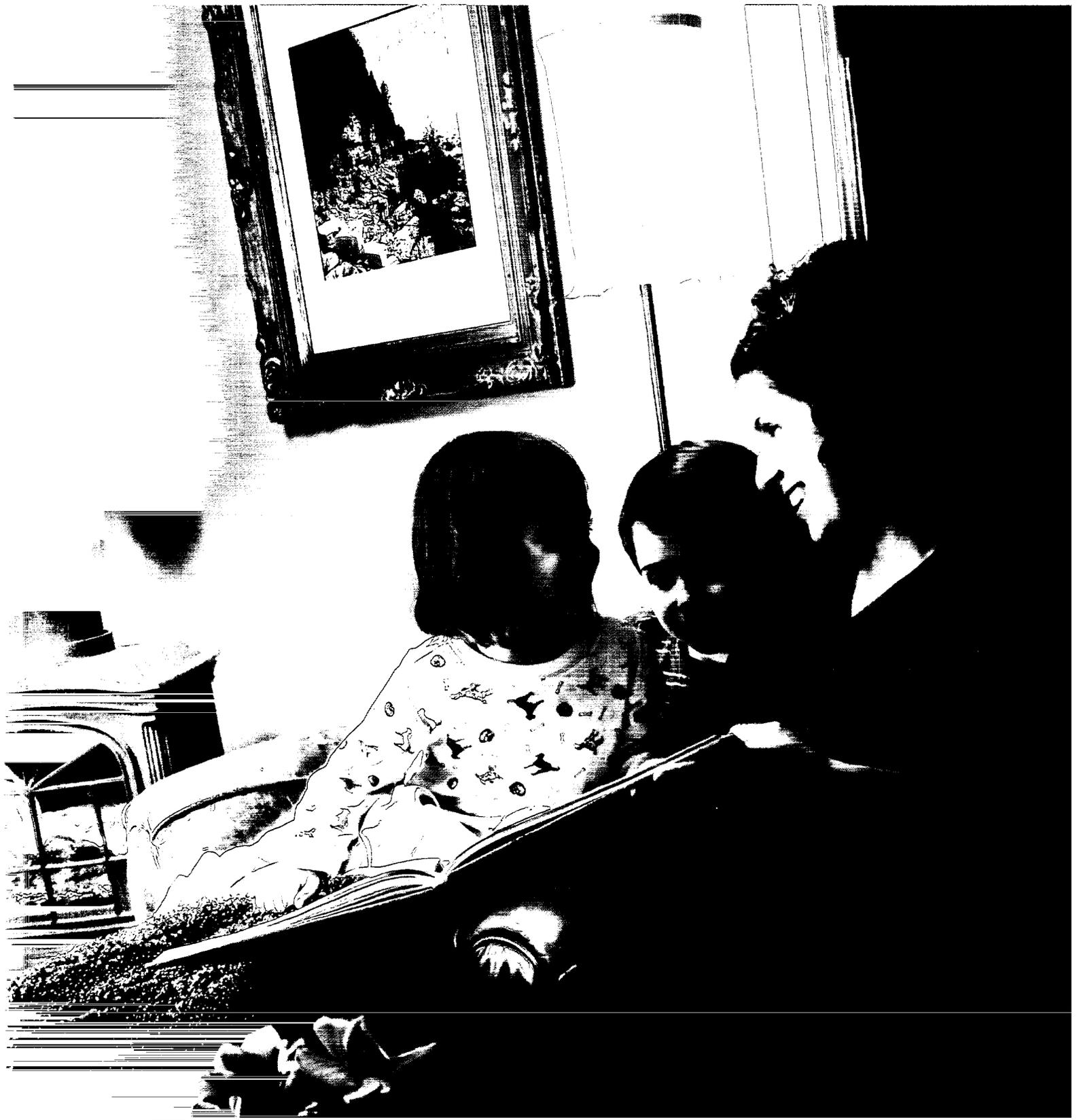
In 2004, we reduced by more than 25 percent the average time it takes to restore electric service to our customers following an outage. We implemented process improvements and installed an automated callout system to dispatch crews more effectively. We invested in automation and technology to more quickly detect and fix problems on our distribution system. And we expanded efforts to rigorously test our underground cables to identify and address problems earlier. These and other reliability initiatives drove improvements in our customer satisfaction ratings during the year.

J.D. Power and Associates recognized our efforts twice in 2004. We Energies achieved the country's largest improvement in customer satisfaction scores in the J. D. Power Residential Gas Customer survey – moving from 17th to 9th in the Midwest Region. And We Energies ranked eighth out of 52 electric utilities nationwide in J.D. Power's annual Business Customer Survey.

Our desire to improve customer satisfaction also was the impetus for our "We Care Calls" – a company-wide effort to contact customers who have interacted with us. More than 600 employees make approximately 3,000 We Care Calls each week – logging more than 150,000 calls in 2004. Transaction surveys show that customers who receive follow-up phone calls give us satisfaction ratings five percentage points higher or more than those who are not contacted.



Customer satisfaction is the foundation of any successful business. We made more than 150,000 "We Care Calls" to customers who interacted with us in 2004.



READY SUPPLIES OF NATURAL GAS AND ELECTRICITY FOR
HEAT, LIGHT AND OTHER USES ARE ESSENTIAL TO THE
SAFETY AND SECURITY OF OUR CUSTOMERS.

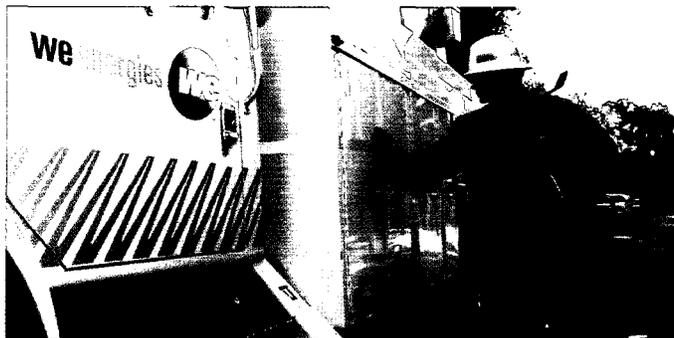
Executing Our Business Plan

Moving our Power the Future plan forward to help strengthen Wisconsin's energy infrastructure also was a priority in 2004.

In Port Washington, we are investing approximately \$640 million to replace older coal-fueled generation with two 545 megawatt natural gas-fueled units. We retired the coal units last fall. The first natural gas unit is scheduled to come on line this summer; the second unit is expected to be on line in 2008. We also completed construction of a 17-mile pipeline that will deliver natural gas to the new Port Washington Generating Station and surrounding communities.

In Oak Creek, we focused on securing environmental permits and negotiating other agreements needed to start construction of two 615 megawatt coal-fueled units. Despite legal challenges, the Oak Creek expansion project achieved several milestones in 2004 and early 2005:

- The Wisconsin Department of Natural Resources (WDNR) issued two permits: one allows us to work in wetlands and place an intake and discharge structure in Lake Michigan – and the other is for air emissions control. Both permits were challenged in administrative proceedings and affirmed.
- The Racine County Economic Development and Land Use Planning committee approved a Conditional Use Permit that will govern issues related to the construction and operation of the two new units.
- The Caledonia Town Board approved an agreement with We Energies that outlines mitigation efforts related to the expansion.
- The WDNR announced its intent to reissue a Wisconsin Pollutant Discharge Elimination System (WPDES) permit, tentatively determining that the proposed cooling water intake structure and water discharge meet regulatory requirements.



In 2004, we reduced by more than 25 percent the average time it takes to restore electric service to our customers following an outage.



WISCONSIN COMPANIES LIKE HARLEY-DAVIDSON DEPEND
ON WE ENERGIES TO PROVIDE THEM WITH A CONSTANT
AND RELIABLE SOURCE OF ENERGY.



The process for building new coal-fueled units is complex. We were disappointed with the Dane County Circuit Court decision in late November that vacated the PSCW's 2003 order authorizing construction of the Oak Creek units. The Circuit Court reaffirmed the PSCW's finding that there is a critical need for additional electric generating capacity in Wisconsin, but found that the PSCW did not follow proper procedures in authorizing the project. In mid-December, Wisconsin Energy and the PSCW separately filed direct appeals with the Supreme Court of Wisconsin.

The PSCW and a number of Wisconsin businesses and organizations affirmed the importance of a prompt resolution because of the cost and reliability impact that a delay would have on our customers and the state's energy infrastructure.

In January 2005, the Supreme Court agreed to hear the appeals and scheduled oral arguments for March 30. This allows the case to bypass the state's Court of Appeals and be resolved more quickly.



We are a leader in finding productive uses for the coal combustion products generated at our power plants. Many of them end up in concrete, asphalt and other construction materials.



Rigorously testing underground electric cables helps us to identify and address problems earlier – preventing potential cable failures.



THE OAK CREEK POWER PLANT GENERATED
735,481 MEGAWATT-HOURS OF ELECTRICITY
IN 2004 — A RECORD FOR THE 52-YEAR-OLD PLANT.

Investing in the Future

In addition to our investments in Port Washington and Oak Creek, we plan to spend approximately \$600 million in capital improvements for environmental upgrades at our existing power plants over the ten years ending 2013.

At our Pleasant Prairie Power Plant in Kenosha County, we are installing environmental controls at an estimated cost of \$280 million to further reduce sulfur dioxide and nitrogen oxide emissions. Work is expected to be complete by the end of 2007.

We expect to complete two projects this year that will further reduce air emissions at our Presque Isle Power Plant in Michigan's Upper Peninsula.

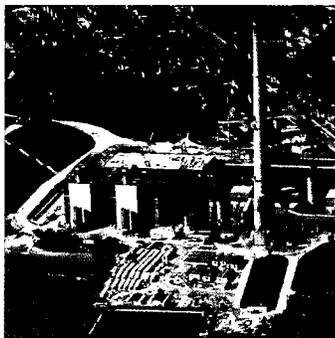
We are:

- Conducting the nation's first full-scale test of a patented process to control mercury and other air emissions in a \$50 million joint project with the U.S. Department of Energy.
- Investing \$26 million to install equipment that will further control the plant's particulate emissions.

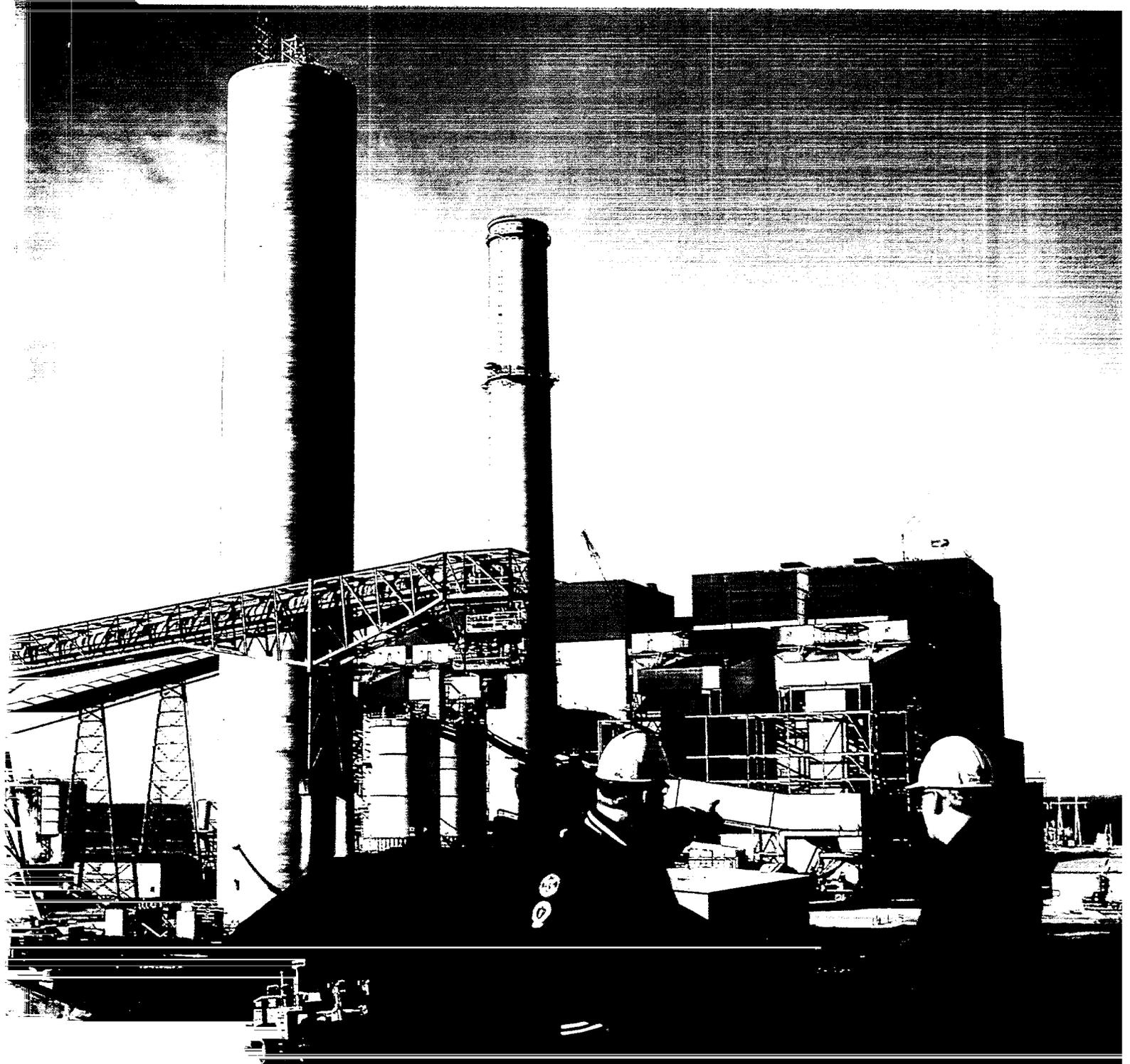
Other Power the Future work during 2004 included completion of several new substations and the upgrade of hundreds of miles of our electric distribution system.



Unit 1 of the new Port Washington Generating Station is scheduled to come on line in summer 2005.



The former Port Washington Power Plant coal-fueled units were retired in fall 2004. They are being replaced by two 545 megawatt natural gas-fueled units.



AT OUR PLEASANT PRAIRIE POWER PLANT IN KENOSHA COUNTY,
WE ARE INSTALLING ENVIRONMENTAL CONTROLS TO FURTHER
REDUCE SULFUR DIOXIDE AND NITROGEN OXIDE EMISSIONS. WORK
IS EXPECTED TO BE COMPLETE BY THE END OF 2007.

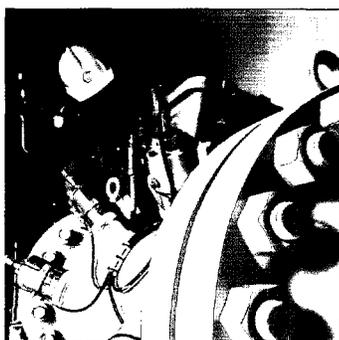


Wisconsin Energy was named the 2004 winner of the electric power industry's highest honor – the Edison Award.

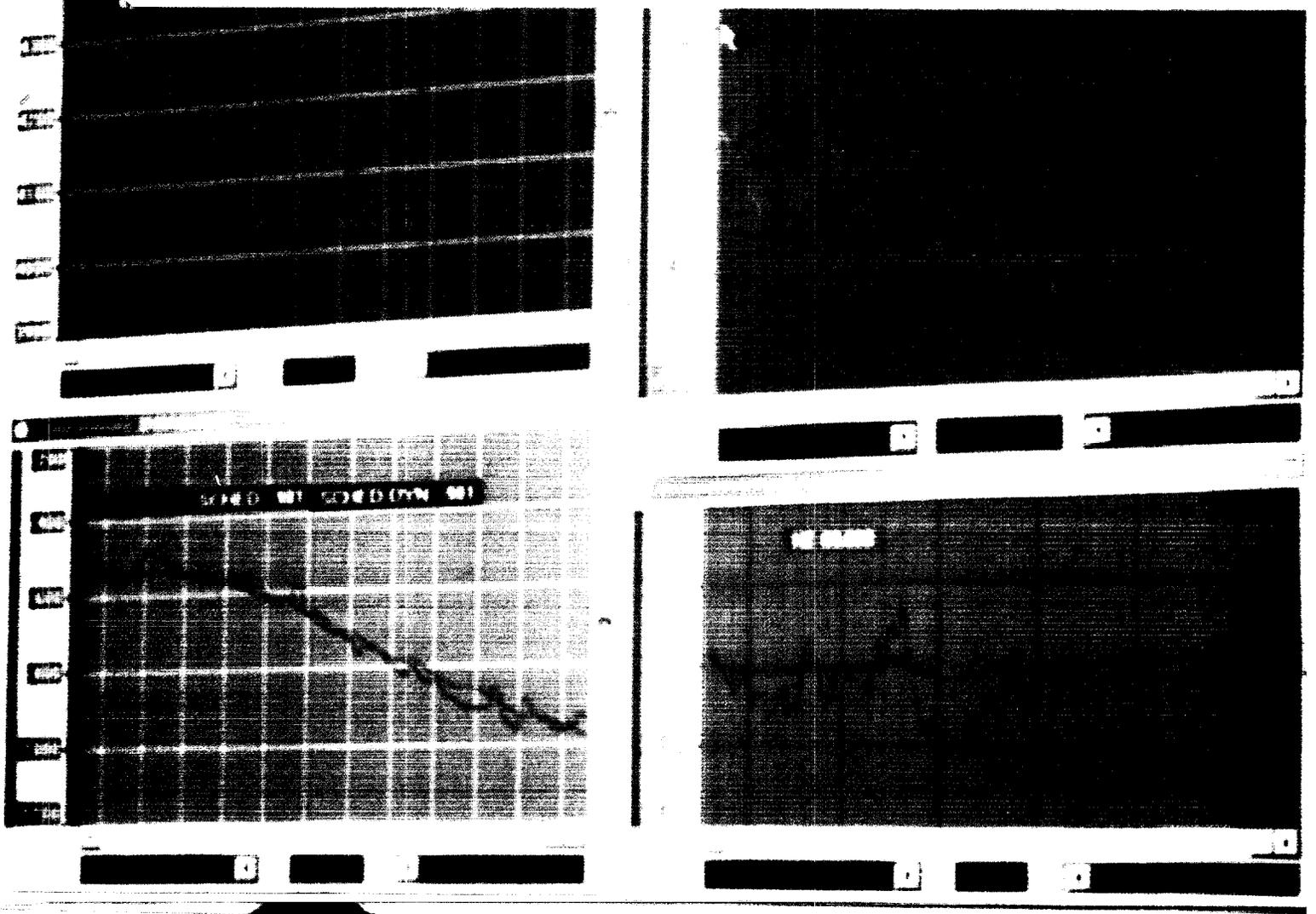
Elsewhere on our system, our commitment to provide safe, reliable energy continues at our Point Beach Nuclear Plant in Two Creeks, Wisconsin. Unit 2 at the plant generated a record 4.38 million megawatt-hours of electricity in 2004. We also continue to make progress on our application to extend the operating licenses of units 1 and 2 at Point Beach for an additional 20 years.

In recognition of our innovation and leadership in expanding the markets for coal combustion products, Wisconsin Energy was named the 2004 winner of the electric power industry's highest honor – the Edison Award. The award recognizes electric utilities that have made significant contributions to the advancement of the industry. As recently as 1980, we were discarding 95 percent of the fly and bottom ash generated at our power plants. Today, we are finding productive uses for 98 percent of these materials – approximately 645,000 tons per year.

For our corporate governance practices in 2004, we were one of only 26 companies to earn a perfect 10 – the highest score – from Governance Metrics International (GMI). GMI evaluated 2,588 companies worldwide. We also were rated one of the top ten companies in the S&P 400 by Institutional Shareholder Services.



To help meet demand for natural gas, this gate station was built north of Milwaukee near Germantown. The station regulates gas flow through the Guardian Pipeline.



AT THE WE ENERGIES SYSTEM CONTROL CENTER, OPERATORS MONITOR AND MANAGE OUR ELECTRIC DISTRIBUTION SYSTEM.

FINANCIAL SUMMARY

Stock Listing and Trading

Wisconsin Energy Corporation

New York Stock Exchange

Ticker symbol: WEC

This summary annual report provides essential financial, operational and stockholder services information.

More detailed information is included in the company's annual report on Form 10-K filed with the Securities and Exchange Commission – available by going to www.wisconsinenergy.com or by contacting the company at:

Stockholder Services

Wisconsin Energy Corporation

231 West Michigan Street, P409

Milwaukee, WI 53203

(414) 221-4257

	2004	2003	2002
Operating Data			
Electric Utility Sales (thousands of megawatt-hours)			
Residential	8,053.9	8,099.3	8,310.9
Small Commercial /Industrial	8,840.4	8,740.6	8,719.5
Large Commercial /Industrial	11,686.4	11,401.8	11,129.6
Other	3,067.7	2,941.7	2,702.6
Total Electric Utility Sales	31,648.4	31,183.4	30,862.6
Electric Peak Demand (megawatts)	5,789	6,379	6,231
Electric Customers — End of Year	1,104,112	1,090,513	1,078,710
Gas Utility Deliveries (millions of therms)			
Residential	809.9	853.7	817.1
Commercial /Industrial	464.0	492.5	463.1
Interruptible	24.7	27.5	29.4
Total Gas Sold	1,298.6	1,373.7	1,309.6
Transported Gas	769.5	797.5	811.7
Total Gas Utility Deliveries	2,068.1	2,171.2	2,121.3
Gas Peak Demand (dekatherms)			
Wisconsin Electric	682,933	718,046	628,272
Wisconsin Gas	922,076	859,532	759,066
Gas Customers — End of Year	1,014,799	998,201	982,066
Total Employees — End of Year (full- and part-time)	5,655	6,039	6,102
Degree Days			
Heating (6,739 normal)	6,663	7,063	6,551
Cooling (714 normal)	442	606	897

Non-GAAP Earnings Measures

Adjusted earnings (non-GAAP earnings), which generally exclude nonoperational items as well as one-time charges or gains that are not associated with the company's ongoing operations, are provided as a complement to earnings presented in accordance with GAAP. These items are not indicative of the company's operating performance. Therefore, we believe that the presentation of earnings from adjusted operations is relevant and useful to investors to understand Wisconsin Energy's operating performance. Management uses such measures internally to evaluate the company's performance and manage its operations.

Earnings Reconciliation (Unaudited)

Year Ended December 31	2004	2003	2002
Adjusted Earnings	\$ 2.39	\$ 2.31	\$ 2.23
Gain on Asset Sales	1.28	0.07	—
Impairment Charges	(0.81)	(0.32)	(0.79)
Debt Redemption Costs	(0.13)	—	—
Severance Costs	(0.16)	—	—
GAAP Earnings	\$ 2.57	\$ 2.06	\$ 1.44

Financial Highlights

(Millions of Dollars, Except Financial Ratios and Other Data)	2004	2003	2002
Financial Data			
Total Operating Revenues	\$ 3,431.1	\$ 3,308.3	\$ 3,051.0
Income from Continuing Operations	\$ 122.2	\$ 200.4	\$ 131.7
Income from Discontinued Operations, Net of Tax	184.2	43.9	35.3
Net Income	\$ 306.4	\$ 244.3	\$ 167.0
Total Assets			
Utility energy	\$ 8,775.3	\$ 8,303.9	\$ 7,820.5
Non-utility energy	506.8	397.6	348.7
Manufacturing	—	938.0	925.5
Other	283.3	375.0	371.2
Total Assets	\$ 9,565.4	\$ 10,014.5	\$ 9,465.9
Total Debt	\$ 3,678.5	\$ 4,327.5	\$ 4,223.9
Cash Provided by Operating Activities	\$ 598.7	\$ 529.9	\$ 660.9
Capital Expenditures	\$ 636.8	\$ 649.0	\$ 541.8
Capitalization Ratios — End of Year			
Common equity	40.2%	35.1%	33.5%
Preferred stock	0.5%	0.5%	0.5%
Long-term debt	53.9%	55.6%	51.1%
Short-term debt	5.4%	8.8%	14.9%
Common Equity Data			
Earnings per Share of Common Stock			
Basic	\$ 2.60	\$ 2.09	\$ 1.45
Diluted	\$ 2.57	\$ 2.06	\$ 1.44
Return on Average Common Equity	12.6%	10.8%	8.1%
Dividends per Share of Common Stock	\$ 0.83	\$ 0.80	\$ 0.80
Payout Ratio (calculated using the annualized current quarterly dividend and EPS for the 12-month period)	32.7%	38.8%	55.6%
Common Stock Price per Share — End of Year Close	\$ 33.71	\$ 33.45	\$ 25.20
Price Earnings Ratio (end of year divided by diluted EPS)	13.1	16.2	17.5
Book Value per Share of Common Stock — End of Year	\$ 21.30	\$ 19.92	\$ 18.44
Average Common Shares Outstanding (millions)			
Basic	117.7	117.1	115.4
Diluted	119.1	118.4	116.3
Senior Unsecured Debt Ratings at December 31, 2004 (a)			
	WEC	WE	WG
Moody's	A3	A1	A1
Standard & Poor's	BBB+	A-	A-
Fitch	A-	A+	A+

(a) The current ratings outlooks for Wisconsin Energy Corporation (WEC), Wisconsin Electric Power Company (WE) and Wisconsin Gas LLC (WG) are stable.

Condensed Consolidated Income Statements

Year Ended December 31 (Millions of Dollars, Except Per Share Amounts)	2004	2003	2002
Operating Revenues	\$ 3,431.1	\$ 3,308.3	\$ 3,051.0
Operating Expenses			
Fuel and purchased power	592.9	570.8	594.1
Cost of gas sold	890.9	863.3	574.9
Other operation and maintenance	1,002.7	934.2	933.8
Depreciation, decommissioning and amortization	327.1	329.8	318.5
Property and revenue taxes	87.3	82.4	87.8
Asset valuation charges, net	150.4	45.6	141.5
Total Operating Expenses	3,051.3	2,826.1	2,650.6
Operating Income	379.8	482.2	400.4
Other Income and Deductions, Net	16.1	42.2	43.7
Interest Expense	193.4	213.8	227.1
Income from Continuing			
Operations Before Income Taxes	202.5	310.6	217.0
Income Taxes	80.3	110.2	85.3
Income from Continuing Operations	122.2	200.4	131.7
Income from Discontinued Operations, Net of Tax	184.2	43.9	35.3
Net Income	\$ 306.4	\$ 244.3	\$ 167.0
Earnings Per Share (Basic)			
Continuing Operations	\$ 1.04	\$ 1.71	\$ 1.14
Discontinued Operations	1.56	0.38	0.31
Total Earnings Per Share (Basic)	\$ 2.60	\$ 2.09	\$ 1.45
Earnings Per Share (Diluted)			
Continuing Operations	\$ 1.03	\$ 1.69	\$ 1.13
Discontinued Operations	1.54	0.37	0.31
Total Earnings Per Share (Diluted)	\$ 2.57	\$ 2.06	\$ 1.44
Weighted Average Common Shares Outstanding (Millions)			
Basic	117.7	117.1	115.4
Diluted	119.1	118.4	116.3

Condensed Consolidated Balance Sheets

December 31 (Millions of Dollars)	2004	2003
Assets		
Property, Plant and Equipment	\$ 8,238.4	\$ 8,342.4
Accumulated depreciation	(3,121.6)	(3,021.3)
	5,116.8	5,321.1
Construction work in progress	602.4	296.2
Leased facilities, net	98.9	104.6
Nuclear fuel, net	85.0	78.4
Total Property, Plant and Equipment	5,903.1	5,800.3
Investments		
Nuclear decommissioning trust fund	737.8	674.4
Other	287.3	276.9
Total Investments	1,025.1	951.3
Current Assets		
Cash and cash equivalents	35.6	28.1
Accounts receivable, net	349.3	333.7
Accrued revenues	245.1	212.2
Materials, supplies and inventories	409.5	385.6
Prepayments and other assets	137.0	168.2
Assets held for sale	—	938.0
Total Current Assets	1,176.5	2,065.8
Deferred Charges and Other Assets		
Regulatory assets	849.4	612.3
Goodwill, net	441.9	441.9
Other	169.4	142.9
Total Deferred Charges and Other Assets	1,460.7	1,197.1
Total Assets	\$ 9,565.4	\$ 10,014.5

December 31 (Millions of Dollars)	2004	2003
Capitalization and Liabilities		
Capitalization		
Common equity	\$ 2,492.4	\$ 2,358.7
Preferred stock of subsidiary	30.4	30.4
Long-term debt	3,239.5	3,570.5
Total Capitalization	5,762.3	5,959.6
Current Liabilities		
Long-term debt due currently	101.0	166.2
Short-term debt	338.0	590.8
Accounts payable	309.7	248.7
Accrued expenses	114.5	126.1
Other	129.2	80.2
Liabilities held for sale	—	251.7
Total Current Liabilities	992.4	1,463.7
Deferred Credits and Other Liabilities		
Regulatory liabilities	922.4	887.7
Asset retirement obligations	762.2	732.0
Deferred income taxes — long-term	530.4	570.8
Other	595.7	400.7
Total Deferred Credits and Other Liabilities	2,810.7	2,591.2
Commitments and Contingencies	—	—
Total Capitalization and Liabilities	\$ 9,565.4	\$ 10,014.5

Condensed Consolidated Statements of Cash Flows

Year Ended December 31 (Millions of Dollars)	2004	2003	2002
Operating Activities			
Net income	\$ 306.4	\$ 244.3	\$ 167.0
Income from discontinued operations, net of tax	(184.2)	(43.9)	(35.3)
Reconciliation to cash			
Depreciation, decommissioning and amortization	360.2	360.3	337.9
Asset valuation charges, net	150.4	45.6	141.5
Deferred income taxes and investment tax credits, net	6.5	64.5	(32.4)
Other accounts receivable	—	—	116.4
Change in working capital and other	(40.6)	(140.9)	(34.2)
Cash Provided by Operating Activities	598.7	529.9	660.9
Investing Activities			
Capital expenditures	(636.8)	(649.0)	(541.8)
Asset sales	899.6	55.3	310.0
Other	(19.7)	(2.5)	(150.7)
Cash Provided by (Used in) Investing Activities	243.1	(596.2)	(382.5)
Financing Activities			
Change in common equity, net	(81.8)	56.1	0.3
Dividends paid on common stock	(97.8)	(93.7)	(92.4)
Change in debt, net	(654.2)	120.7	(190.2)
Other	(0.5)	(23.7)	—
Cash (Used in) Provided by Financing Activities	(834.3)	59.4	(282.3)
Change in Cash and Cash Equivalents from Continuing Operations	7.5	(6.9)	(3.9)
Cash and Cash Equivalents at Beginning of Year	28.1	35.0	38.9
Cash and Cash Equivalents at End of Year	\$ 35.6	\$ 28.1	\$ 35.0
Supplemental Information — Cash Paid For			
Interest (net of amount capitalized)	\$ 232.2	\$ 220.9	\$ 233.6
Income taxes (net of refunds)	\$ 80.5	\$ 92.2	\$ 89.8

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Wisconsin Energy Corporation:

We have audited the consolidated balance sheets and consolidated statements of capitalization of Wisconsin Energy Corporation and subsidiaries (the "Company") as of December 31, 2004 and 2003, and the related consolidated statements of income, common equity and cash flows for each of the three years in the period ended December 31, 2004. Such consolidated financial statements and our report thereon dated February 9, 2005, expressing an unqualified opinion and including an explanatory paragraph concerning the Company's change in its accounting for asset retirement obligations adopted January 1, 2003 (which are not included herein), are included in Appendix A to the proxy statement for the 2005 annual meeting of stockholders. The accompanying condensed consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on such condensed consolidated financial statements in relation to the complete consolidated financial statements.

In our opinion, the information set forth in the accompanying condensed consolidated financial statements of the Company is fairly stated in all material respects in relation to the basic consolidated financial statements from which it has been derived.

Deloitte & Touche LLP

Deloitte & Touche LLP
Milwaukee, Wisconsin
February 9, 2005

Forward-Looking Statements

Some matters discussed in this document, including estimates of future earnings, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are subject to various risks, uncertainties and assumptions. Actual results may vary materially. Factors that could cause actual results to differ materially include, but are not limited to: general economic conditions; business, competitive and regulatory conditions in the deregulating and consolidating energy industry, in general, and in the Company's utility service territories; regulatory decisions; availability of the Company's generating facilities; changes in purchased power costs and supply availability; changes in coal or natural gas prices and supply availability; the ability to recover fuel and purchased power costs; unusual weather; risks associated with non-utility diversification; construction risks; obtaining necessary regulatory approvals and investment capital to implement the Company's Power the Future strategy; timely and successful resolution of legal challenges to the Power the Future strategy; the timing and extent to which anticipated synergy benefits from the WICOR merger are realized; disposition of legal proceedings; foreign governmental, economic, political and currency risks; and the other cautionary factors described in the Management's Discussion and Analysis of Financial Condition and Results of Operations in Wisconsin Energy Corporation's Form 10-K for the year ended December 31, 2004, and other factors described from time to time in the Company's reports to the Securities and Exchange Commission. The Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Stock Listing and Trading

The common stock of Wisconsin Energy Corporation is listed on the New York Stock Exchange. Our ticker symbol is WEC. Daily trading prices and volume can be found in the NYSE Composite section of most major newspapers, usually abbreviated as WI Engy.

www.wisconsinenergy.com

Wisconsin Energy's Internet site contains information about the company, its subsidiaries and business segments. It also provides direct access to news releases, annual reports, regulatory filings and other company-related information. At this site, you can request financial publications, submit questions and sign up for the Release Alert Service to receive timely news about the company.

Stockholder Account Inquiries

Questions about your stockholder account, the Stock Plus Investment Plan, stock ownership changes and other account-specific questions should be addressed to Wisconsin Energy's transfer agent, The Bank of New York. You can reach them by telephone, Internet or mail as follows:

Stockholder Hotline

Call (800) 558-9663 anytime to receive information about your account balance, year-to-date dividend payments, company news and other pre-recorded information. To speak directly with a stockholder services representative about specific issues, you may do so during any business day between the hours of 7 a.m. and 7 p.m. Central Time.

www.stockbny.com

The Bank of New York's Internet site provides online access to your stockholder account, commonly used forms and current information on Wisconsin Energy's Stock Plus Investment Plan. You also can take advantage of electronic proxy voting and other electronic services.

Written Inquiries

Written inquiries or instructions about your account should be mailed to:
Wisconsin Energy Corporation
c/o The Bank of New York
Church Street Station
P.O. Box 11258
New York, NY 10286-1258

Dividend Reinvestment and Stock Purchase Plan

The company's Stock Plus Investment Plan allows current stockholders and new investors to purchase Wisconsin Energy common stock directly at market prices, without brokerage commissions. You can invest cash and/or reinvest all or a portion of your dividends into this plan. As a convenience, Stock Plus allows participants to automatically make regular monthly investments through electronic bank transfers. You can obtain a prospectus and enrollment form for the Stock Plus Investment Plan through The Bank of New York as noted above. This is not an offer to sell, or a solicitation of an offer to buy, any securities. Any stock offering will be made only by prospectus.

Dividend Payment Information

Dividends, as declared by the board of directors, typically are payable on the first day of March, June, September and December. You may choose to receive your dividends in cash, have them electronically deposited to your checking or savings account, or reinvest all or a portion of your dividends to purchase additional shares of company stock through the Stock Plus Investment Plan.

Changing Ownership of Stockholder Accounts

In most circumstances, to change the registration (ownership) of your account, you must provide the name, address and taxpayer identification number of the new owner; endorse the stock certificates; have your signature medallion-guaranteed; and send the certificates to The Bank of New York using registered mail. You also may be required to submit other documentation and identifying information. Since no stock transfer procedure can anticipate all possible situations, please contact The Bank of New York for specific instructions.

Replacing Lost Stock Certificates

Stock certificates are valuable documents and should be kept in a safe deposit box or other secure place. If a certificate is lost, stolen or destroyed, please notify The Bank of New York immediately so that a "stop transfer" can be placed on the certificate and the process for receiving a replacement can be started. You may be required to obtain and pay for an indemnity bond.

Participants in Stock Plus are encouraged to submit their stock certificates to The Bank of New York for "safekeeping" in the plan. Please keep a list of the certificates turned in and any other information that may be required for income taxes.

Taxpayer Identification Number

Federal law requires that every stockholder account have a certified Taxpayer Identification Number (TIN) such as a Social Security Number. If your account does not have a certified TIN, the company is required to withhold 29 percent of your dividends and transfer the amount to the Internal Revenue Service for federal income tax purposes.

Annual Meeting and Voting of Proxies

The 2005 Annual Meeting of Stockholders will be held May 5, 2005, at 10 a.m. Central Time at:

Concordia University Wisconsin
R. John Buuck Field House
12800 North Lake Shore Drive
Mequon, Wisconsin 53097

Detailed information is contained in the Notice of Annual Meeting and Proxy Statement that is provided to each stockholder entitled to vote at the meeting. You can conveniently vote your proxy through the Internet at www.proxyvotenow.com/wec, by telephone or by submitting a paper proxy.

Additional Information

Individual investors may obtain a free copy of Wisconsin Energy Corporation's Annual Report on Form 10-K and Annual Report to Stockholders attached as Appendix A to the proxy statement, which are filed with the Securities and Exchange Commission. Just go to www.wisconsinenergy.com or contact the company at:

Stockholder Services
Wisconsin Energy Corporation
231 West Michigan Street, P409
Milwaukee, WI 53203
(414) 221-4257

Securities analysts and institutional investors should call Wisconsin Energy's Investor Relations Line at (414) 221-2592.

2004 Stock Prices and Dividends

Quarter	High	Low	Dividend
First	\$ 34.30	\$ 31.57	\$.20
Second	\$ 33.00	\$ 29.50	.21
Third	\$ 32.95	\$ 31.12	.21
Fourth	\$ 34.60	\$ 31.50	.21
Year	\$ 34.60	\$ 29.50	\$.83

2005 Key Dates

Quarter	Anticipated Dividend Record Dates	Anticipated Dividend Payment Dates
First	Feb. 11, 2005	March 1, 2005
Second	May 13, 2005	June 1, 2005
Third	Aug. 12, 2005	Sept. 1, 2005
Fourth	Nov. 11, 2005	Dec. 1, 2005

Officers of Wisconsin Energy Corporation

Gale E. Klappa

Chairman of the Board,
President and Chief Executive Officer

Frederick D. Kuester

Executive Vice President

Allen L. Leverett

Executive Vice President and Chief Financial Officer

Larry Salustro

Executive Vice President and General Counsel

James R. Klauser

Senior Vice President

Kristine A. Rappé

Senior Vice President and Chief Administrative Officer

Anne K. Klisurich

Vice President and Corporate Secretary

Kristine M. Krause

Vice President – Environmental

Walter J. Kunicki

Vice President

Richard J. White

Vice President

Arthur A. Zintek

Vice President

Stephen P. Dickson

Controller

Jeffrey P. West

Treasurer

Keith H. Ecke

Assistant Corporate Secretary

Ralph W. Kane

Assistant Vice President – Tax

James A. Schubilske

Assistant Treasurer

Board Committees

EXECUTIVE COMMITTEE

Gale E. Klappa (chair)
John F. Bergstrom
Barbara L. Bowles
Robert A. Cornog
Frederick P. Stratton, Jr.

AUDIT AND OVERSIGHT COMMITTEE

Barbara L. Bowles (chair)
John F. Bergstrom
Robert A. Cornog
Curt S. Culver
Ulice Payne, Jr.
Frederick P. Stratton, Jr.

COMPENSATION COMMITTEE

John F. Bergstrom (chair)
John F. Ahearne
Willie D. Davis

CORPORATE GOVERNANCE COMMITTEE

Willie D. Davis (chair)
Barbara L. Bowles
Robert A. Cornog

FINANCE COMMITTEE

Frederick P. Stratton, Jr. (chair)
John F. Bergstrom
Barbara L. Bowles
Robert A. Cornog
Curt S. Culver
Ulice Payne, Jr.

NUCLEAR OVERSIGHT COMMITTEE

John F. Ahearne (chair)
Frederick P. Stratton, Jr.

The Nuclear Oversight Committee includes one employee member, Frederick D. Kuester, Executive Vice President, and three non-directors who serve as ad hoc members due to their considerable expertise in nuclear matters.



John F. Ahearne
Director since 1994.
Director of the ethics program of the Sigma Xi Center for Sigma Xi, The Scientific Research Society, an organization that publishes American Scientist, provides grants and conducts national meetings on scientific issues.



Willie D. Davis
Director since 2000.
President and Chief Executive Officer of All Pro Broadcasting, Inc. The company owns and operates radio stations in Los Angeles and Milwaukee.



John F. Bergstrom
Director since 1987.
Chairman and Chief Executive Officer of Bergstrom Corporation, which owns and operates numerous automobile sales and leasing companies.



Gale E. Klappa
Director since 2003.
Chairman of the Board, President and Chief Executive Officer of Wisconsin Energy Corporation.



Barbara L. Bowles
Director since 1998.
Founder, Chairman and Chief Executive Officer of The Kenwood Group, Inc., an investment advisory firm that manages pension funds for corporations, public institutions and endowments.



Ulice Payne, Jr.
Director since 2003.
Managing Member of Addison-Clifton, LLC, which provides advisory services on global trade compliance.



Robert A. Cornog
Director since 1993.
Retired Chairman of the Board, President and Chief Executive Officer of Snap-on Incorporated, a developer, manufacturer and distributor of professional hand and power tools, diagnostic and shop equipment, and tool storage products.



Frederick P. Stratton, Jr.
Director since 1987.
Chairman Emeritus of Briggs & Stratton Corporation, a manufacturer of small gasoline engines.



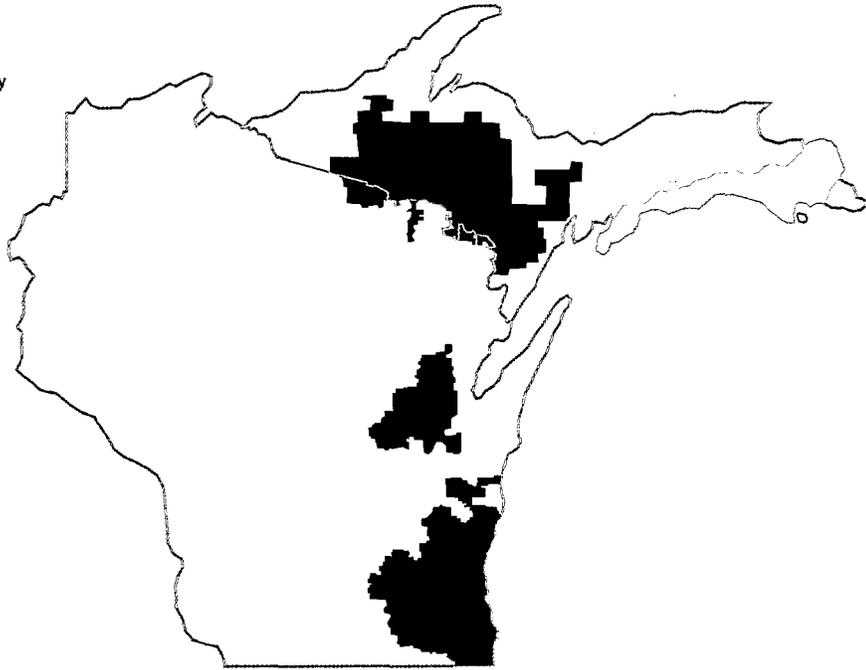
Curt S. Culver
Director since 2004.
President and Chief Executive Officer of MGIC Investment Corporation and Mortgage Guaranty Insurance Corporation, a private mortgage insurance company.



George E. Wardeberg
Director since 2000.
Retired Vice Chairman of the Board of Wisconsin Energy Corporation.

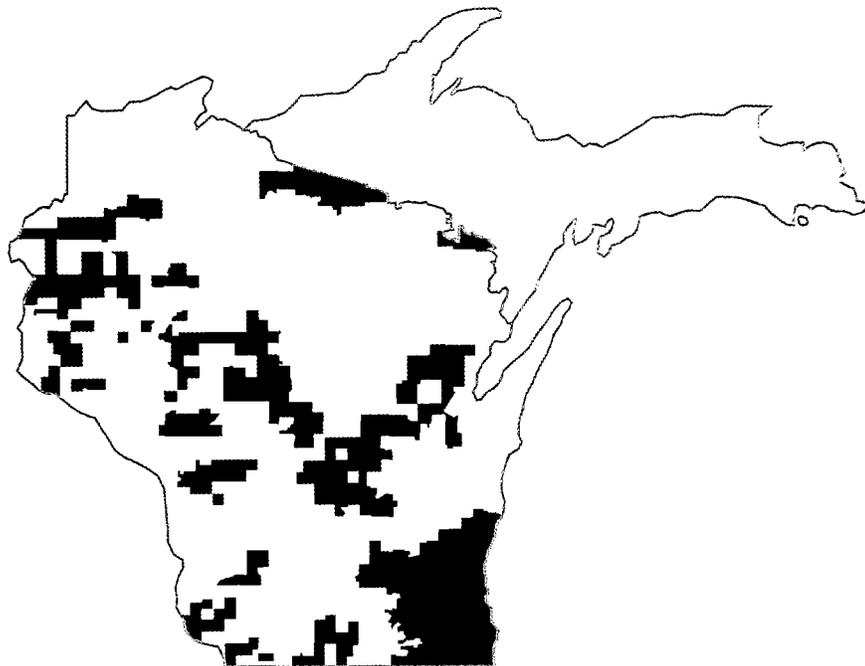
TOTAL ELECTRIC CUSTOMERS SERVED: 1,104,112

-  **We Energies**
Electric Service Areas
-  **Edison Sault Electric Company**
Electric Service Area



TOTAL NATURAL GAS CUSTOMERS SERVED: 1,014,799

-  **We Energies**
Natural Gas Service Areas



Wisconsin Energy Corporation (NYSE:WEC) is a Fortune 500 holding company with more than \$9 billion of assets and a diversified portfolio of businesses engaged in electric generation; electric, natural gas, steam and water distribution; and certain nonutility businesses.

Its principal utilities are We Energies (the trade name for Wisconsin Electric Power Company and Wisconsin Gas LLC) and Edison Sault Electric Company. These companies serve more than one million electric customers in Wisconsin and Michigan's Upper Peninsula, and more than one million natural gas customers in Wisconsin.

Through its nonutility subsidiaries – W.E. Power, LLC, Wispark LLC, Minergy Corp. and Wisvest Corporation – the company is involved in energy development; recycling and renewable energy; and real estate development.

Headquartered in Milwaukee, Wisconsin Energy (www.wisconsinenergy.com) has approximately 5,600 employees and 58,000 registered stockholders.



