

WISCONSIN  
PUBLIC SERVICE  
CORPORATION

1988 ANNUAL REPORT



ACTIONS  
IN '88

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## ACTIONS IN '88

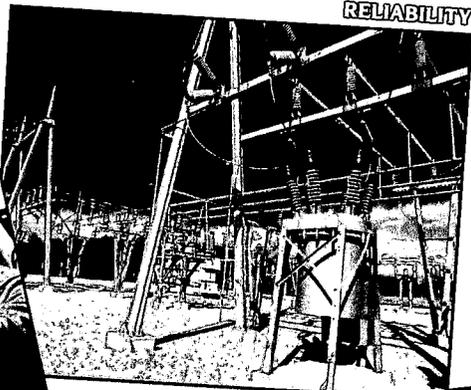
Every day at Wisconsin Public Service Corporation brings us new challenges we must translate into action. When we act, it is within the context of our intention to serve our customers in the best way possible, to control spending so we can offer the best service at the lowest prices and to protect investors' interests.

We are always working to take the kind of actions that will enhance the efficiency of our operations, strengthen electric transmission reliability, ensure continued customer satisfaction, protect the welfare of our employees, preserve the environment and encourage new economic development. In the next pages we will share with you specific actions we have taken in these areas in 1988.

OPERATIONS



RELIABILITY



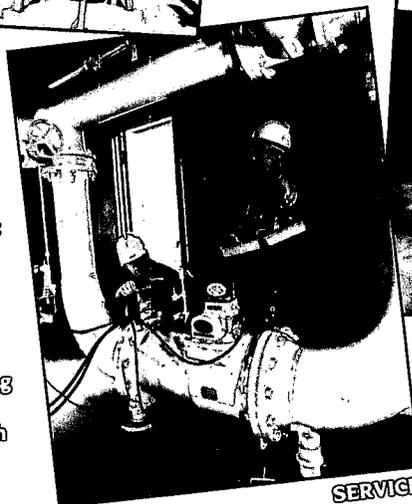
ENVIRONMENT



### ABOUT THE COVER

Poinsettias bloom at Wisconsin's largest greenhouse, Grelling Farms, Inc., near Green Bay. The plants are sold annually to department stores, other greenhouses and Walt Disney World in Florida.

Wisconsin Public Service recently extended natural gas to Grelling's, enabling them to install a new natural gas heating system in greenhouses which span 19 acres.



EMPLOYEE WELFARE

SERVICE

# 1988 ANNUAL REPORT

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## BUSINESS

WISCONSIN PUBLIC SERVICE CORPORATION is an investor-owned electric and gas utility providing service to a 10,000 square mile area of Northeastern Wisconsin and an adjacent part of Upper Michigan.

## OPERATING HIGHLIGHTS

	1988	1987	Change
Revenues (Thousands) .....	\$604,334	\$580,456	4.1%
Net Income (Thousands) .....	56,420	52,771	6.9
Earnings Per Average Share of Common Stock* .....	2.28	2.11	8.1
Dividends Paid Per Share* .....	1.56	1.52	2.6
Book Value Per Share .....	16.00	15.52	3.1
Construction Expenditures (Thousands) .....	68,841	62,601	10.0
Capitalization (Thousands) .....	680,777	669,813	1.6
Electric Customers .....	317,695	312,858	1.5
Electric Sales (Kwh—Thousands) .....	8,840,298	8,351,062	5.9
Gas Customers .....	169,369	166,178	1.9
Gas Transport Customers .....	171	263	-35.0
Gas Volume (Therms—Thousands):			
Gas Sales .....	313,646	272,939	14.9
Transportation .....	187,452	178,754	4.9
Total Gas Volume .....	501,098	451,693	10.9

## COMMON STOCK— TWO YEAR COMPARISON

Share Data	Dividends Per Share*	Price Range**	
		High	Low
1988			
1st Quarter .....	\$ .385	23¼	20
2nd Quarter .....	.385	22¾	20½
3rd Quarter .....	.395	22½	21
4th Quarter .....	.395	23¾	21½
Total .....	\$1.56		
1987			
1st Quarter .....	\$ .375	53¾	49
2nd Quarter .....	.375	49½	42¾
3rd Quarter .....	.385	25¾	21¾
4th Quarter .....	.385	22¾	18¾
Total .....	\$1.52		

\*Adjusted to reflect 2 for 1 common stock split in June 1987.

\*\*Unadjusted.



## LETTER TO SHAREHOLDERS

### TO OUR SHAREHOLDERS:

If there are two goals that drive Wisconsin Public Service today, they are "satisfy the customer" and "control our costs." If I've mentioned them once, I've mentioned them a hundred times, and I can assure you these two ideas have been driven home innumerable times to every one of our 2,500 employees.

These two ideas are behind the actions we are now taking to improve our competitive position in the Wisconsin energy marketplace. This will promote the financial success of our company so we can remain an independent, and I stress the word "independent," energy supplier.

A promising future for this company, and for every person connected with it, will largely be determined by how well each employee does in providing our customers with the best possible service and keeping our prices as low as possible.

It is clear to me that everyone at Public Service is accepting this challenge, and I'm pleased to highlight several of these successes both here and in other parts of this annual report which we have entitled: "Actions in '88."

Customer satisfaction achievements take two forms: "people" type and "process" type. We have several unique "people" programs underway to help customers in need. One of these, our Gatekeeper program, helps employees who visit customers' homes to identify those with special problems. Gatekeeper, which focuses mostly on isolated, vulnerable, elderly persons, allows us to connect these people with the proper social agencies.

On the process side, we reduced the number of estimated meter readings, a customer irritant, by rerouting meter reading routes and making arrangements with customers whose meters are hard to reach.

We also improved our emergency phone service. Now, when storm calls swamp our operating department phone lines, our division accounting personnel will be able to take the overflow calls.

Cost-control progress was most decisively achieved in the fuel purchase area where we took advantage of the lower prices on the spot market for coal, nuclear fuel and natural gas and saved \$17.8 million.

Lowering our personnel levels is another cost-control measure, and we are continuing to slowly but steadily reduce our staff through attrition.

Certainly, our rates are our best foot forward, and our electricity prices are among the lowest in Wisconsin and well below the national average. In fact, electric rates overall have been reduced about 10% since 1983. In the same time period, residential gas rates were down 8%; commercial and industrial rates also declined; and additionally, many of our customers benefited from the availability of cheaper transport gas.

This past year's record of generating plant availability demonstrates our dedication to providing service. The availability of our Kewaunee nuclear plant was 87.4%. Since going commercial in 1974, availability was 84.4%, as compared to an industry average of 75%. The availability of our coal-fired units remains above national industry average, even with some units having extended outages because of the regulatory opacity compliance program.

In January 1989, the Nuclear Regulatory Commission (NRC) issued its most recent Systematic Appraisal of Licensee Performance (SALP) ratings for the Kewaunee plant. In its letter to the company, the NRC stated "Overall, your performance was found to be exemplary; Kewaunee is the first plant in Region III to achieve all Category I ratings. You and your staff have shown over the years that a plant can be run well, have a high capacity factor, and meet regulatory guidelines and directives with a strong commitment to safety. You are to be commended for that, and are an example for the industry." We are extremely proud of this rating and the favorable comments received from the NRC.

Mr. Stoll accompanying Wisconsin Governor Thompson and his staff on a tour of the Kewaunee nuclear plant.



Transmission line access, which is one aspect of Advance Plan 5 now before the Public Service Commission of Wisconsin (PSCW), is a real cause for concern. The Commission staff, upon reviewing this multi-utility 20-year plan, has proposed some major changes in transmission line access, which would more or less socialize these systems now managed by individual utilities. We strongly disagree with this idea which, from our point of view, is a step toward confiscation of our property. We intend to make our opposition clear.

Looking ahead, our strategic planning group is dealing with several important issues including optimum corporate structure, the common stock equity ratio, quality improvement processes, transmission access and management succession.

For example, our management succession plan is in place in the event of the loss of any members of our executive staff.

As we work to implement our two-pronged strategy of customer service and cost control, we keep in the forefront our obligation to our shareholders. Results for 1988 were very positive:

- Electricity sales were 5.9% higher than in 1987. This was primarily due to the hot weather this past summer.
- Gas sales and transportation volumes increased 10.9%. Again, weather played a big part in this.
- Operation and maintenance expenses were 2% below budget.

Earnings were \$2.28 per share, up 8% from the \$2.11 last year.

- Return on average common equity was 14.4% compared to 14% in 1987.

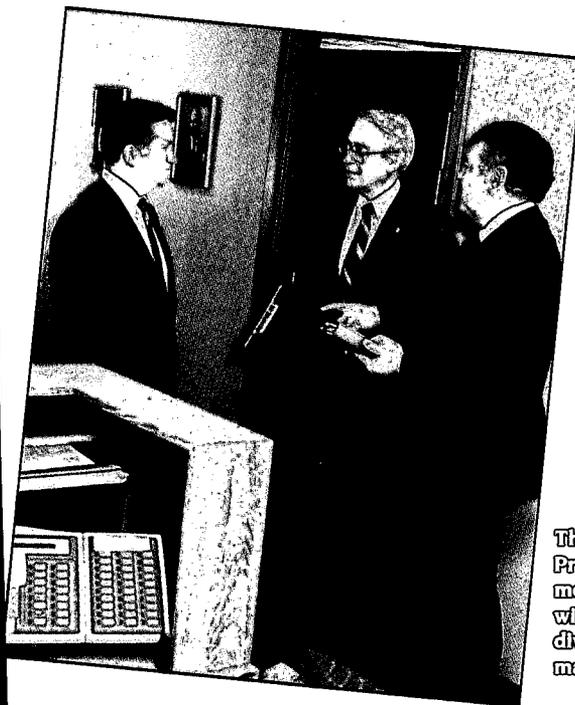
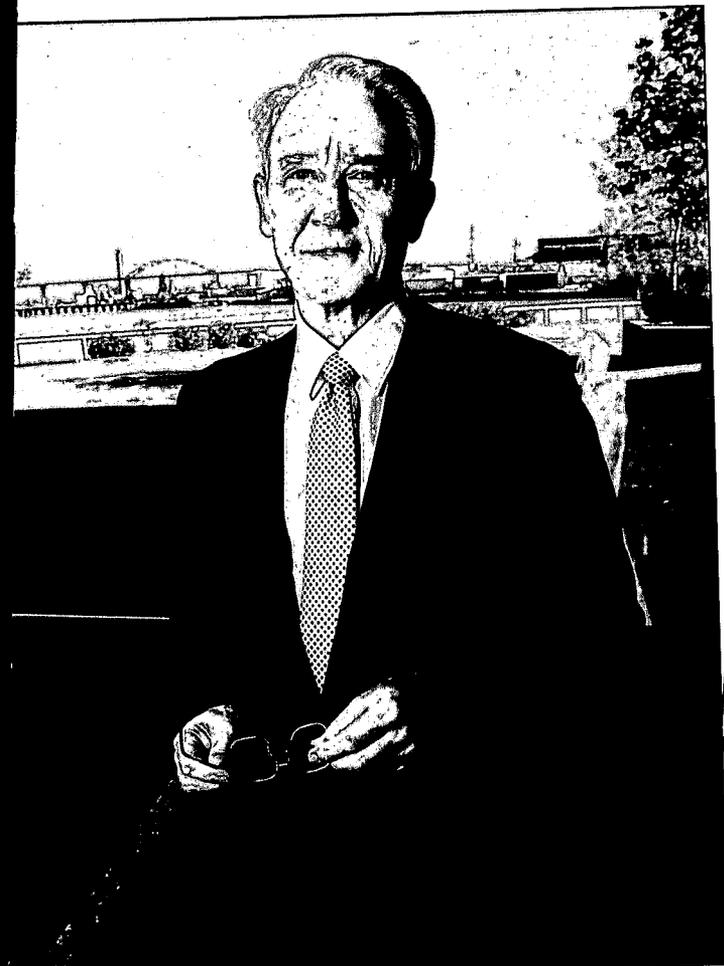
- Quarterly dividends on common stock were increased to 39.5 cents with the September payment. This is up from 38.5 cents in 1987 and marks the 30th consecutive year in which we increased dividends paid per share.

All in all, my first year as chief executive officer has been very rewarding. I am inspired by the enthusiasm of our employees. I could not ask for a more cooperative team effort than afforded me by these quality oriented Public Service people. As we embark upon a new phase in the utility industry, we appreciate the continued support of our shareholders.



**Linus M. Stoll**  
President and  
Chief Executive Officer

February 23, 1989



The  
President  
meeting  
with some  
division  
managers.

Linus M. Stoll

## YEAR IN REVIEW

### FINANCIAL

At the Annual Meeting in May, shareholders approved amendments to the company's Restated Articles of Incorporation and By-Laws adopting a Classified Board of Directors. Richard A. Bemis, James H. Liethen and Eugene R. Mathews were elected to serve until the 1989 Annual Shareholder's Meeting; A. Dean Arganbright, James L. Kemerling and Paul D. Ziemer until the 1990 Annual Shareholder's Meeting, and Michael S. Ariens, Kathryn M. Hasselblad-Pascale and Linus M. Stoll until the 1991 Annual Shareholder's Meeting, or until their successors have been elected. James L. Kemerling was elected to the Board of Directors replacing William V. Arvold who retired.

Construction expenditures for the five-year period 1989 through 1993 are estimated to be \$332 million. This compares with \$301 million for the previous five-year period. Almost half of the estimated future expenditures will be for electric transmission and distribution system expansion and improvements.

### RATE PROCEEDINGS

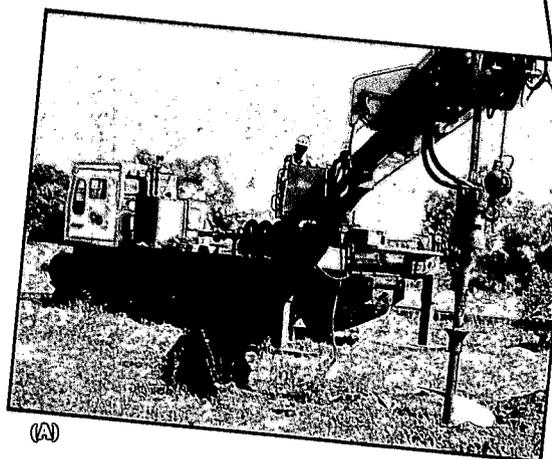
In April 1988, a rate filing was made with the PSCW to increase electric rates \$17.9 million (5%) and to reduce gas rates by \$1.7 million (1%) to be effective in 1989. The request was based on projected 1989 costs which included changes in electric fuel, depreciation, taxes and other operation and maintenance expenses. The electric fuel expense represented \$7.5 million of the \$17.9 million increase. The PSCW issued an order authorizing an increase of

\$2.7 million for the electric utility and a rate decrease of \$1.1 million for gas, effective January 28, 1989. The last electric increase was in March 1983, and since then, electric rates have been reduced about 10%.

The Michigan Public Service Commission reviewed the company's rate levels and reduced electric rates by \$168,000. These rates will be in effect only for 1989.

### MANAGEMENT CHANGES

Eugene R. Mathews, who served as a director and senior vice president-power supply and engineering, was promoted to the new position of executive vice president-power in October. He will retire February 28, 1989 and be succeeded on the Board by Daniel A. Bollom.



(A)



(B)

Donald C. Hintz, vice president-nuclear power, advanced to vice president of power production, and Richard A. Krueger, vice president of fossil operations, was named vice president of power engineering and construction. Each will become a senior vice president when Mr. Mathews retires. Daniel P. Bittner, treasurer, was promoted to vice president-treasurer, effective January 1, 1989.

### ELECTRICAL SYSTEM

Hearings concluded this past fall on Advance Plan 5, and we expect the PSCW to issue an order early in 1989 directing our planning.

The Plan, which is coordinated with the plans of the other Wisconsin utilities, is our 20-year outline of how we

will meet future demands for electricity. The Plan is submitted to the PSCW every two years in order to keep in step with developments in the industry.

This particular Plan marks the first time we have integrated control of load on the customer-side of the meter and generation availability (supply-side) alternatives. Issues addressed include access to transmission lines, alternate energy sources, electromagnetic fields and the abilities of utilities in the eastern and western parts of the state to transfer electricity over existing transmission facilities.

Ten of our fifteen hydroelectric projects are up

### OPERATIONS

In all aspects of our operations, our actions are geared to improving efficiency whenever possible. This has influenced our decisions to invest in specialized equipment, to make our customer contact areas more accommodating for customers and to adopt new operating practices.

It's important to us that we offer our customers the best possible service to make them feel good about doing business with us.

(A) Our new all terrain vehicle equipped with a 100-foot crane assists in rapid repair of power lines.

(B) In Kewaunee, and at other local offices, we have remodeled our service center to make it easier for customers to pay their bills, handle financial matters privately and learn new energy use ideas.

(C) Engineering quality has been boosted by our computer aided design drafting system which produces three-dimensional computer screen models of our electric facilities.

(D) Gas staff personnel engage in a new operating procedure of purchasing system gas on the spot market and acquiring gas transportation service.



## YEAR IN REVIEW

for relicensing by the Federal Energy Regulatory Commission (FERC) in the 1988-1995 period. In 1988, we filed an application to renew our license at Otter Rapids, and also filed notices of intent to relicense eight other projects. A notice for a tenth hydro project will be filed in 1990. Generally, these license renewals are for 30-year periods.

In compliance with the Electric Consumers Protection Act of 1986, we have placed a high priority on consulting with land management, environmental and energy use agencies to ensure that our hydros and their watershed areas are well-operated and are

as convenient as possible for public use.

At Otter Rapids we have proposed a comprehensive wildlife and recreational improvement plan including an improved canoe portage route, shoreline work, new parking, a new pier and self-guided public tour area.

The license for our largest hydro plant, Grandfather Falls on the Wisconsin River, was renewed in April 1988. We are now working with state and federal environmental agencies to develop fish habitat studies, a wildlife management plan and additional recreational facilities.

Low water on the Wisconsin

River caused by last summer's drought forced our hydroelectric generating levels to slide to record lows making them 46th lowest of the 48 years we've been keeping records.

Water flow was so low on the Peshtigo River, we had to begin releasing water from our dams in order to preserve fish habitat and maintain reasonable water levels in our reservoirs. The release worked well and continued into the fall season.

The hot summer may have lowered the rivers but it sent our electric demand to new heights. Our all-time high gross

### RELIABILITY

Reliability plays a key role in our effort to provide the best possible service to our customers. We have designed backup features to provide continuous power required by the sophisticated equipment used by our customers for their operations.

(A) Continued upgrading and reinforcement of transmission lines, such as this new 138,000 volt line north of Green Bay, is necessary to meet growing customer demand and increased exchange of power with other utilities.

(B) Our new Thunder substation at Crivitz is a milestone in our three-year project to upgrade the reliability of electric service in the Marinette-Menominee area.



hourly demand record of 1,567,000 kilowatt-hours was set on August 16, far surpassing our August 3, 1987 peak of 1,433,000 kilowatt-hours. We broke the 1987 record several times before reaching the August high.

We are projecting our annual kilowatt-hour firm sales growth through 1998 to be 1.6%, down slightly from last year's estimate. Our annual growth in peak load is now projected at 1.0%, up slightly from the trend foreseen last year.

At our Pulliam plant in Green Bay, we cut our lighting expenses in half — by \$52,000 — by replacing 2,100

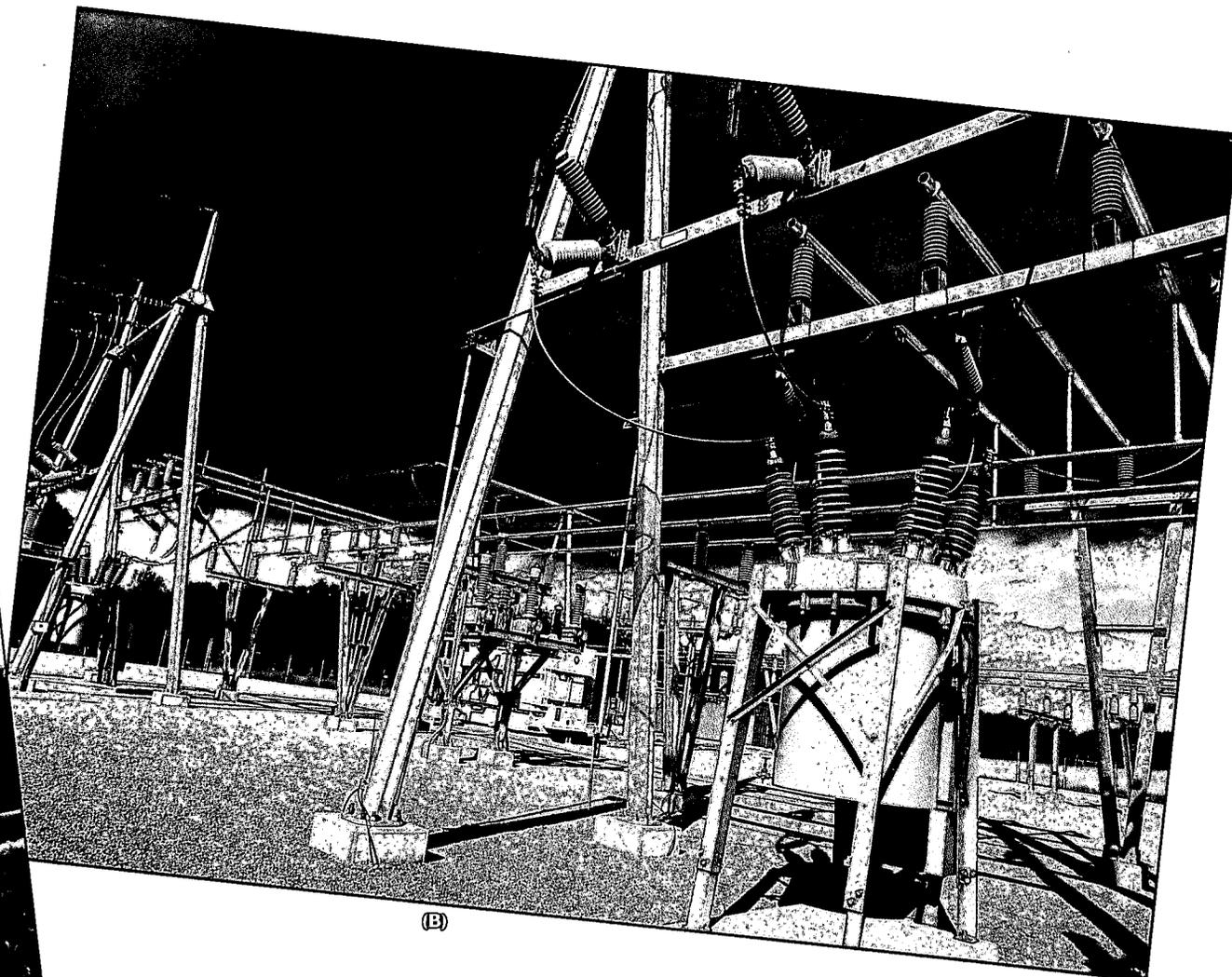
incandescent light fixtures with 1,100 high efficiency high-pressure sodium lights. The plant is much brighter now, and our maintenance expenses dropped by another \$50,000.

We're nearing the end of our \$10 million Marinette-Menominee transmission line reinforcement project. This involves upgrading a 28-mile, 69,000-volt transmission line to 138,000 volts; and installing four new substations and a new switching station. Work is scheduled to be finished in 1989.

An agreement was reached that will allow us to build and lease a 15-mile transmission reinforcement in 1989 to the City of Marshfield, one of our

municipal customers. The new line will provide a second source of electrical power to the city and will significantly improve the reliability of Marshfield's electrical supply.

We continue to work closely with our customers to identify possible causes of stray voltage effects on dairy animals. Similarly, we helped finance research and PSCW hearings on stray voltage, and agreed with state and national experts that solutions are available to help farmers with this problem. We're working with the University of Wisconsin to determine the extent of the stray voltage problem in our area.



(B)

## YEAR IN REVIEW

### SERVICE

We serve our customers in many ways and at many locations. Our goal is to be as accessible as possible when customers have questions, want service or wish to express concerns. It's important to us that we offer all our customers choices and opportunities to contact us.

Sometimes, those customers stop in at our local offices, or we may visit their homes, when the need arises. We also enjoy a positive relationship with schools, libraries and other public institutions which help bring our energy message to new audiences.

(A) Through our Gatekeeper program, our employees who have regular contact with the public keep alert for people who may need special help, especially the elderly.

(B) Our new customer information system will provide a new bill designed to be easier to read. It's due to be introduced in 1989.

(C) This past year we modified our extension rules, undertook a pipeline construction program and extended gas to 640 new customers.

(D) We installed electronic recorders for our largest natural gas customers to read gas meters remotely and better manage gas supplies. An installation at a Procter & Gamble paper mill in Green Bay is pictured.

(E) Our display of early American flag replicas, which we rotate among public institutions and our local offices, has attracted some 60,000 fascinated viewers.

### NATURAL GAS

The transportation of natural gas continues to have a significant impact on our business. In turn, it has helped reduce our customer's energy costs and keep local industrial products competitive in the world market, while we maintain our profit margin by transporting the gas.

Some 38% of the gas that flowed through our pipelines in 1988 was purchased directly from producers by major customers. That's 60% of our industrial/commercial volume, virtually the same as in 1987.

As of the end of last October, we were able to buy 50% of our system gas on the spot market for resale to customers at significant savings.

We continue to convert pipeline purchases to transportation service to take advantage of competitive bidding for gas supplies.

A new marketing alternative was added to our gas extension program making it easier for new homeowners to pay for gas extensions. This strengthened gas sales in our territory by adding 640 new customers.



(A)



(B)



(C)

Through a special agreement with ANR Pipeline, our sole pipeline supplier, we stored cheaper spot market gas in ANR's underground fields in Michigan. We began withdrawing this supply during the past winter months and saved approximately \$200,000 in doing so. We are also looking at expanding our gas storage possibilities.

Keeping up with evolving technology has become such a challenge that we have developed a special one-year training course with instructors at Northeast Wisconsin Technical College in Green Bay. Here, students will learn techniques applicable to all aspects of gas distribution,

construction and service. It is the first course of its type in Wisconsin and one of few in the nation.

With the completion of another new feature of our Integrated Facilities Model computer program, we now provide all our district gas personnel with updated gas system maps each month. These computer-generated maps greatly enhance efficiency and the safety of our employees and customers by providing fast updates of the location of underground facilities.

New electronic recorders have been installed at our

largest gas customers' sites. These benefit the customer by allowing us to provide meter readings at any time. The recorders help us better manage gas demand and monitor gas use by these customers.

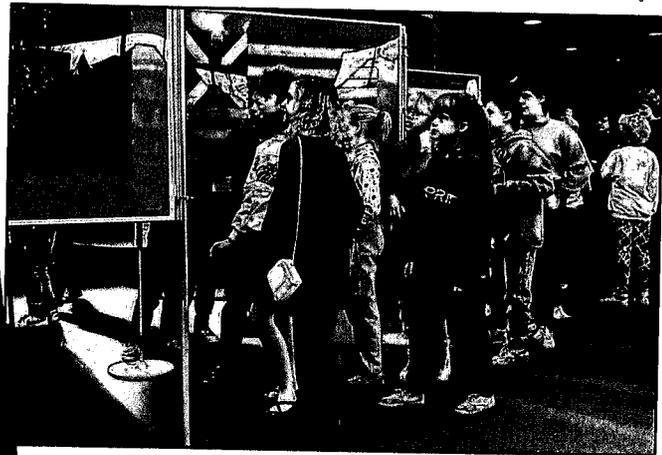
### NUCLEAR POWER

Kewaunee nuclear plant continues to be on the Institute of Nuclear Power Operations (INPO) "Award of Excellence" list, and the nuclear regulatory performance of Kewaunee continues to be excellent.

The Kewaunee plant was a popular tour attraction during the 1988 refueling outage when more than 700 employees and their families visited the plant.



(D)



(E)

## YEAR IN REVIEW

Wisconsin Governor Tommy Thompson, our most notable visitor, offered many positive comments about the plant's operation and the quality of our employees.

Fuel costs at Kewaunee dropped considerably due to our spot market purchases of fuel, decreasing about 8%, or about \$1.6 million. Our nuclear fuel expenses are among the lowest in the nation.

The Nuclear Regulatory Commission approved our request to do more of our own reactor core safety analysis. Previously, this work was done by outside contractors. Now we have a broader opportunity to evaluate the safety of the

plant's fuel and operating systems.

We reached a high point in our training program at Kewaunee in 1988 when the National Academy of Nuclear Training accredited the last four of our ten training programs. This makes us a member of the academy, which is the accrediting body of INPO.

### COAL

Availability of low-priced coal prompted us to buy 30% of our coal supply on the spot market, reducing 1988 fuel costs by \$3.7 million. We have also taken advantage of market conditions through contract buy-outs and price

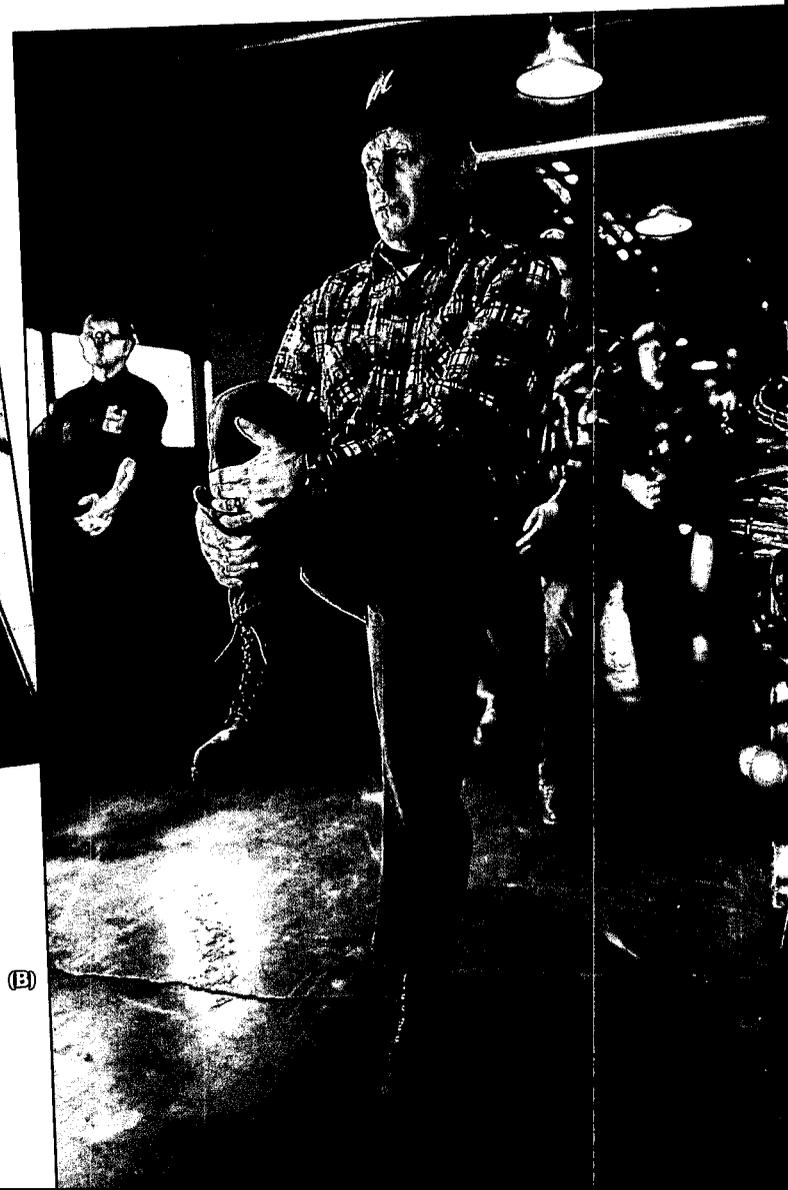
renegotiations. Throughout this process, we continued to strike the delicate balance between the security of long-term coal contracts and the lower, short-term prices of the spot market.

We have also managed to reduce our investment in coal inventories by more than 40%, lowering carrying costs by \$1.5 million.

### FUEL COSTS AND GENERATION MIX

Fuel costs in 1988 compared with 1987, expressed in dollars per million Btu, were:

Nuclear, \$.44, down from \$.47; coal, \$1.84, down from \$1.89; natural gas, \$3.47, up from \$3.32; and No. 2 fuel oil,



\$3.42, down from \$3.75.

The generation mix of fuels needed to operate our power plants in 1988 compared with 1987 was:

Coal, 66.1%, down from 67.8%; nuclear, 17.0%, down from 18.5%; hydro, 2.1%, down from 2.8%; combined natural gas and fuel oil, .6%, up from .4%; and power purchased from other utilities, 14.2%, up from 10.5%.

### ENVIRONMENTAL ISSUES

Our primary environmental project in 1988 was a series of improvements to reduce particulate emissions at our

Pulliam plant. We had developed emissions problems and were cited by the State of Wisconsin after our switch to lower sulfur coal several years ago caused inefficiencies in our fly ash collection equipment.

We spent more than \$9 million in 1988 for those improvements. This represented the bulk of our \$12 million pollution abatement project there. The 1988 work included:

- Installation of flue gas conditioning equipment on Units 5 through 8. These systems inject sulfur trioxide into flue gases which allows for more effective collection of fly ash.

### EMPLOYEE WELFARE

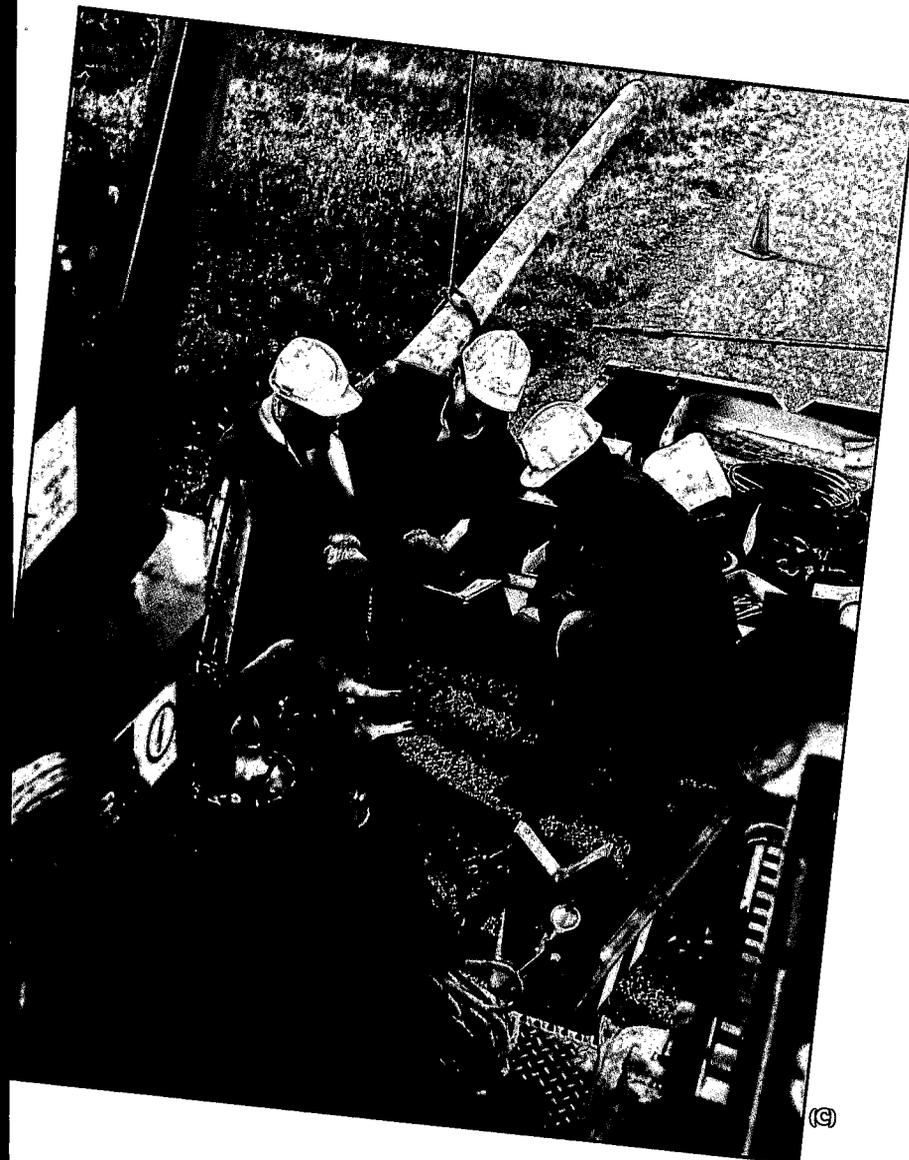
We provide our employees with a safe and healthful work environment. Company injuries are half the industry average, which substantially reduces our personnel and equipment insurance rates.

The success of our safety program lies in the excellent cooperation of our employees and management's belief that employees have a fundamental right to a working environment that neither damages their health nor endangers their safety.

(A) As part of our effort to identify and reduce occupational hazards, our industrial hygienist measures the noise encountered by an employee at a grinding machine.

(B) Line and gas service crew members in Menominee, as well as the other employees in the division, begin their day with 15 minutes of stretching exercises in a pilot fitness program to prevent on-the-job injuries.

(C) Our safety advisor, center, meets with an electric line crew at a job site to discuss precautions and reinforce their knowledge of safety procedures.



## YEAR IN REVIEW

- Enlargement of precipitators on Units 6 and 7. This allows for the collection of more fly ash and reduction of particulate emissions from the stack.

- Installation of a natural gas start-up system.

- Installation of computerized soot-blowers to remove coal ash from boiler tubes of Units 5, 6 and 7. The new systems reduce the potential for soot discharges up the stack.

- Addition of new transformers and controls to precipitators in Units 3 through 8. This helps maintain high fly ash collection efficiency as boiler conditions vary.

Last May we reached agreement with the Town of Knowlton in Marathon County to build a disposal site for fly ash from our three Weston Units near Wausau. The site is expected to hold some 15 years of fly ash, a by-product of the coal-burning process.

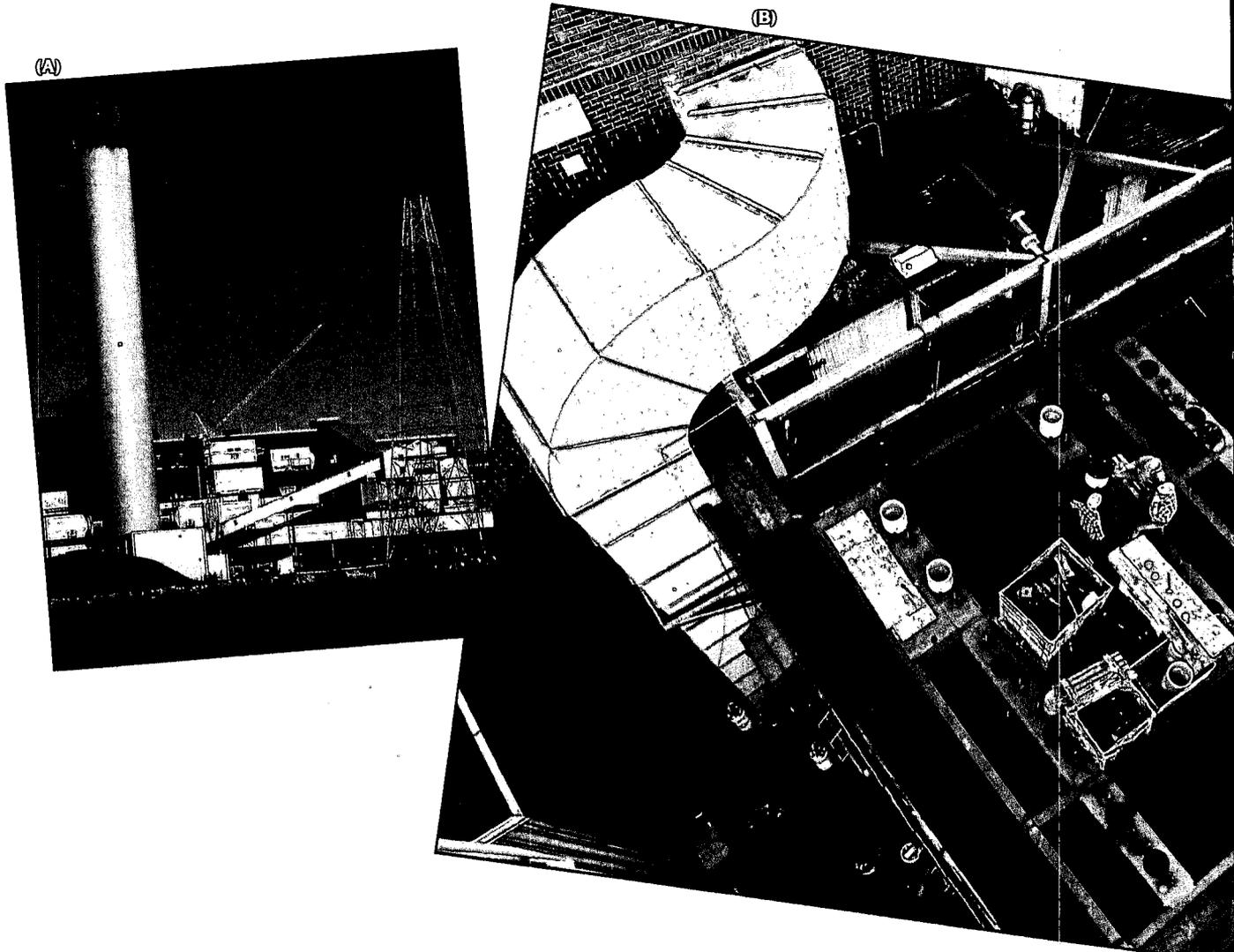
However, we continue to aggressively market fly ash as a concrete additive, and 20,000 tons were put to that purpose in 1988. We also have been working with the Wisconsin Department of Transportation which used 80,000 tons of fly ash for road base fill material in construction projects in 1988. We are also stockpiling

fly ash from all our coal plants for highway construction in the next two years.

### GOVERNMENT AFFAIRS

Our primary legislative concern continues to be national acid rain legislation. Our position all along has been that Wisconsin utilities have been responsive to stringent state guidelines, and therefore, should be exempted to the extent that they have substantially reduced emissions.

Attempts to pass an acid rain bill failed in the 100th Congress. Sponsor of the Senate's bill, Senator George Mitchell (D-Maine) has now been elected Senate majority



leader, and we expect a new bill to be introduced in the 101st Congress this year with Senator Mitchell's strong support. We will continue lobbying to promote our position.

Wisconsin Utility Investors, Inc. was extremely active last year in advocating the cause of the state's utilities and their shareholders. The group entered testimony at numerous legislative and PSCW hearings, as well as holding several informational meetings for its members. This organization has clearly shown itself as a strong voice for Wisconsin utility

shareholders and is worthy of continued shareholder support.

### BUSINESS VENTURES

WPS Communications, Inc., our fiber optics subsidiary, increased its share of ownership of the NorLight fiber optics network to 31.9%. NorLight's revenues of \$6.2 million tripled 1987 figures, and we are optimistic about 1989.

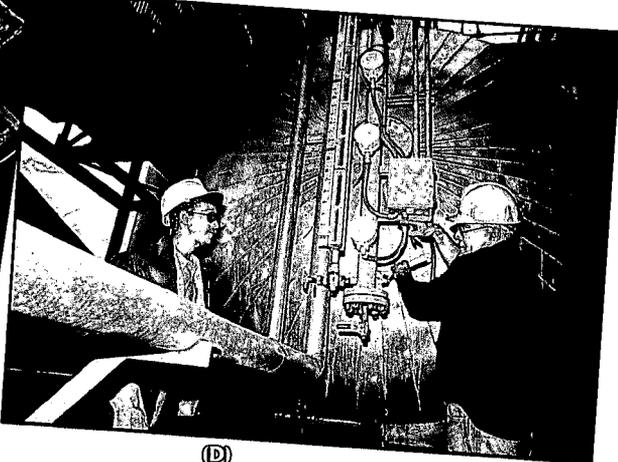
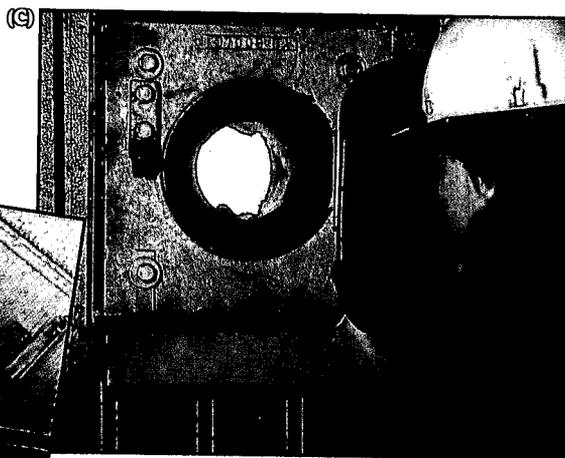
The partners in NorLight added a total of \$3 million more in equity which, along with a \$5 million bank loan, enabled NorLight to build a new link of the fiber optics network between Milwaukee and Green Bay.

WPS Development, Inc.,

which sells the Integrated Facilities Model software package we developed, had higher revenues in 1988 than 1987, but is still in the developmental stage from the profit perspective.

### PLANNING FOR OUR CUSTOMERS

Our desire to be the company of first choice for our customers emerges as a key corporate goal. We are working hard on many fronts with our customers. These fronts include: education and promotion of energy-efficient



### ENVIRONMENT

The wide range of our facilities — from power plants to hydroelectric watershed areas — has caused us to take many actions to protect the air, land, water and wildlife.

Our projects include environmental protection equipment and processes at our coal and nuclear plants and enhanced public recreational opportunities around our hydroelectric projects. We work closely with state and federal agencies to develop wildlife habitat improvements on our properties.

(A) Our 373,000 kilowatt Pulliam plant has been the scene of many environmental

protection improvements prompted largely by our transition to lower sulfur coal.

(B) A work crew at the Pulliam plant in Green Bay stands atop a precipitator we rebuilt and enlarged to collect more fly ash and reduce plant emissions.

(C) The glow of fire can be seen through a window in a boiler where we installed a new natural gas startup system at Pulliam. The gas system quickly increases boiler temperatures and helps avoid startup emissions.

(D) Crews install a tank of sulfur trioxide, a chemical which is injected into flue gases to better collect fly ash from Pulliam's boiler emissions.

## YEAR IN REVIEW

appliances, equipment and processes; conservation programs; economic development and cogeneration.

We are conducting pilot studies in all market areas — residential, commercial, industrial and rural — to uncover the energy-efficient conservation approaches that best fit our customers' needs.

Keeping people employed and businesses flourishing is the role played by our economic development department. We're continuing to help local communities attract service industries and small and medium sized

businesses, which have proven to be excellent sources of new jobs.

Manufacturing jobs are back on the upswing after a reduction caused by the recession of the early 1980s. Unemployment in our territory and in Wisconsin in general is the lowest it has been in many years.

Industrial cogeneration holds promise for our industrial customers, other customers in general, and, certainly, us. Through cogeneration, an industrial complex can produce electricity while using the steam from power production for

processes within the plant. This dual-use of energy helps reduce energy costs, which makes our customers more competitive in their markets.

We are communicating with many of our customers now on cogeneration with an eye toward developing working relationships on cogeneration processes as this technology becomes better understood in our service territory. In the past, industries used the cogenerated electricity themselves. In the future, cogeneration is expected to not



only supply those industries, but the power also may be sold to us.

### EMPLOYEE RELATIONS

To protect all our employees and the company against the dangers of drug and alcohol abuse, we started our "Fitness for Duty" program. We trained our supervisors on testing procedures and explained the policy and testing procedures to all employees.

Participating in the program are our executives, employees

with unescorted access to the Kewaunee nuclear plant and union employees who drive certain classifications of trucks.

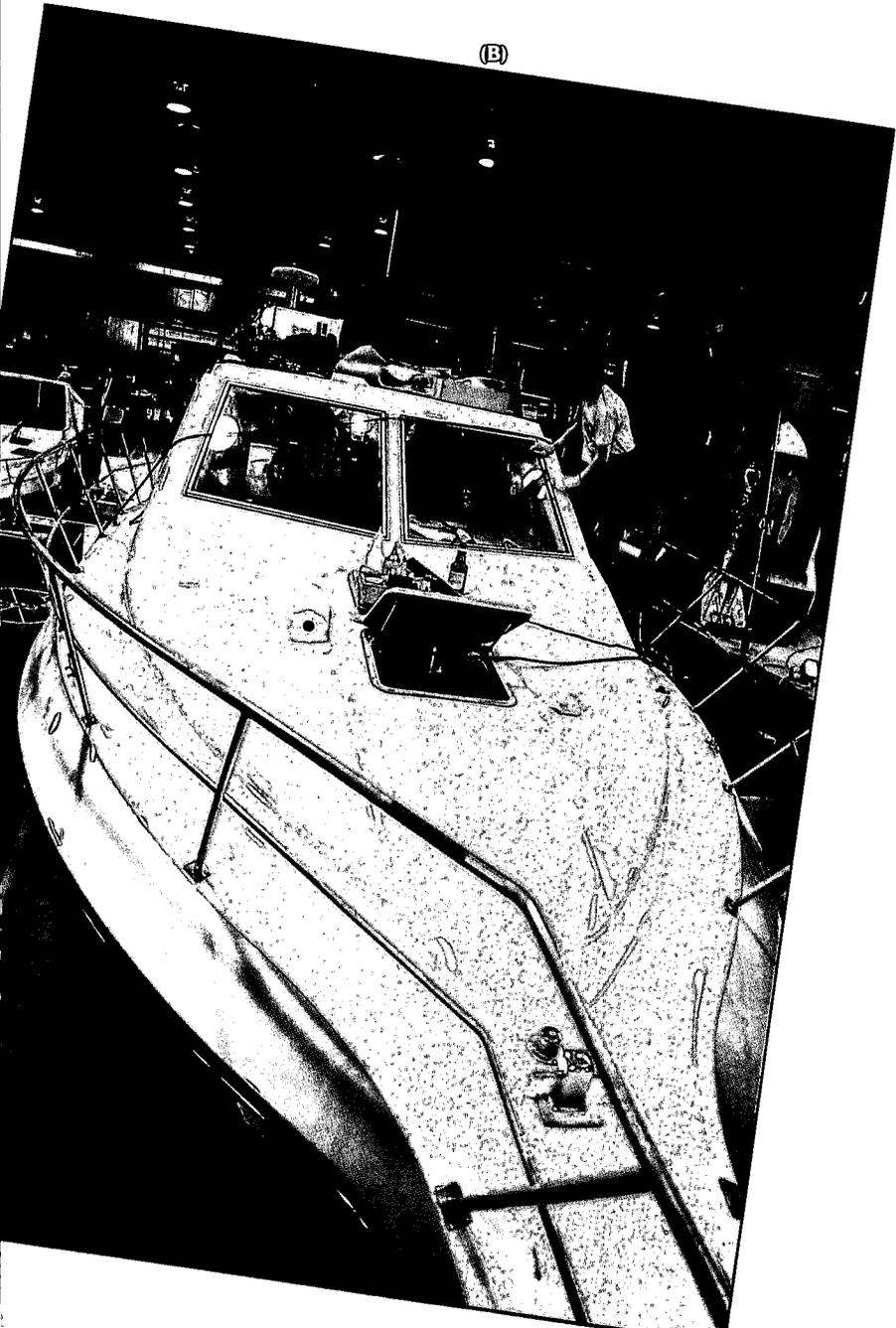
As one of our efforts to moderate escalating health care costs, we initiated an employee/spouse health care program to help them modify their lifestyles with a goal of lowering their health care needs.

We have had a program analyzing employees' and their

spouses' lifestyles so they can use the information to make specific improvements.

Follow-up on our part consists of a series of ongoing focus programs on topics such as nutrition, weight control, exercise, stress control and quitting smoking. Of 2,500 employees, 2,650 employees and spouses are participating. Our program is one of the few to include spouses.

(B)



### ECONOMIC DEVELOPMENT

Enriching the viability of the businesses and industries in our service territory is an action that has a direct impact on the regional economy and on our future.

Our concern about maintaining and enhancing economic growth and jobs is exemplified by the support we offer local governments and businesses in the form of communications, targeted advertising in trade journals, government contract seminars, participation in trade shows, support for business incubator programs and loans for plant expansions.

(A) Engineers from Wisconsin Public Service and Krueger International, Wisconsin's largest manufacturer of

office and institutional chairs, examine a recent energy report. By installing high-efficiency lamps in their Green Bay facilities, Krueger reduced its electricity demand by 38%. About 30% of the project was funded by Public Service's Motor and Lighting Rebate program.

(B) Workers put the finishing touches on a luxury powerboat at Cruisers Incorporated, of Oconto, a good example of local economic progress. Here, jobs have multiplied from 192 to 600, and sales went from \$11 million to \$60 million, all within the last six years. Cruisers manufactures power boats ranging from 28 to 42 feet.

The Board of Directors keeps fully informed about company operations and facilities by periodic field trips. One such tour occurred this

past summer when they visited hydroelectric projects on the Peshtigo River at High Falls, Caldron Falls and Sandstone Rapids.

Below, from left, Directors Michael S. Ariens, President and Chief Executive

Officer, Ariens Company, Brillion, WI; James L. Kemerling, President and

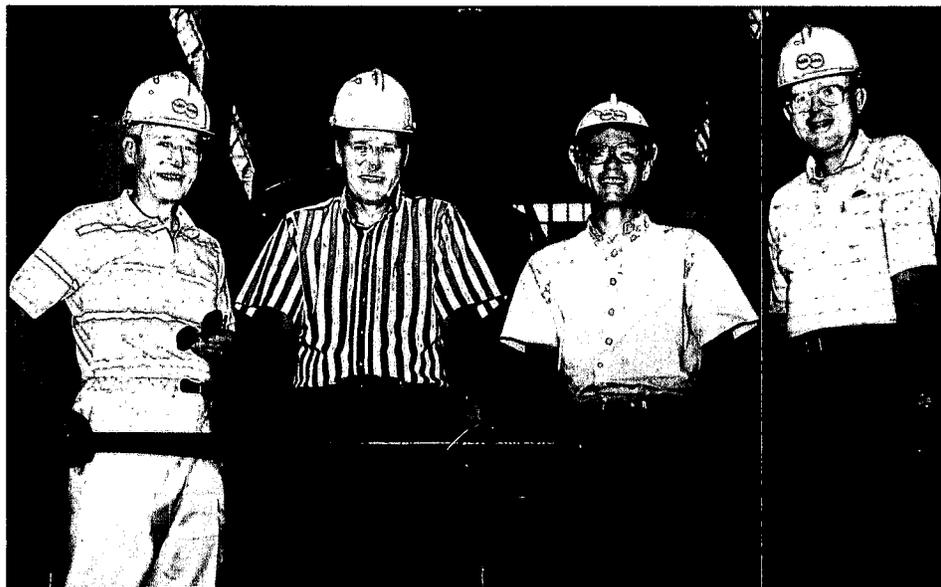
Chief Executive Officer, Shade Information Systems, Inc., Green Bay, WI

and James H. Liethel, Senior Vice President of the company.



Above, from left, Directors Kathryn M. Hasselblad-Pascale, Partner and General Manager, Hasselblad Machine Company, Green Bay, WI and Eugene R. Mathews, Executive Vice President of the company (retired); Staff Member John V. Henderson, Senior Vice President of the company and Paul D. Ziemer, Director and Chairman of the Board.

Right, from left, Directors Linus M. Stoll, President and Chief Executive Officer of the company; A. Dean Arganbright, President, Wisconsin National Life Insurance Company, Oshkosh, WI; Richard A. Bemis, President, Bemis Manufacturing Company, Sheboygan, WI and Daniel A. Bollom, Senior Vice President of the company.



Prior to the tour, a regularly scheduled Board of Director's meeting was held at the Eastern Division Hydroelectric Operating Headquarters in Grivity.

## DIRECTORS

- Paul D. Ziemer**  
Chairman of the Board
- Linus M. Stoll**  
President and Chief Executive  
Officer of the Company
- A. Dean Arganbright**  
President, Wisconsin National  
Life Insurance Company,  
Oshkosh, WI
- Michael S. Ariens**  
President and  
Chief Executive Officer,  
Ariens Company,  
Brillion, WI
- Richard A. Bemis**  
President,  
Bemis Manufacturing  
Company, Sheboygan, WI
- Daniel A. Bollom**  
Senior Vice President  
of the Company
- Kathryn M. Hasselblad-Pascale**  
Partner and General Manager,  
Hasselblad Machine  
Company, Green Bay, WI
- James L. Kemerling**  
President and  
Chief Executive Officer,  
Shade Information Systems,  
Inc., Green Bay, WI
- James H. Liethen**  
Senior Vice President  
of the Company

## OFFICERS

- Linus M. Stoll\***  
President and  
Chief Executive Officer
- Daniel A. Bollom\***  
Senior Vice President,  
Operations
- John V. Henderson\***  
Senior Vice President,  
Corporate Services
- Donald C. Hintz\***  
Senior Vice President,  
Power Production
- Richard A. Krueger\***  
Senior Vice President,  
Power Engineering  
and Construction
- James H. Liethen\***  
Senior Vice President,  
Finance
- Daniel P. Bittner**  
Vice President, Treasurer
- Patrick D. Schrickel**  
Vice President,  
Gas Engineering  
and Supply
- J. Gus Swoboda**  
Vice President,  
Marketing
- Robert D. Valesano**  
Vice President,  
Human Resources
- Robert H. Knuth**  
Secretary and  
Assistant Treasurer
- William O. Nedderson**  
Assistant Vice President,  
System Planning  
and Engineering
- Paul E. Reinhardt**  
Assistant Vice President,  
Marketing
- David W. Schonke**  
Assistant Vice President,  
Electric Distribution  
Engineering

## MANAGEMENT

- James A. Derbique**  
Division Manager, Green Bay
- James L. Dobratz**  
Superintendent, Pulliam Plant
- Kenneth H. Evers**  
Manager, Kewaunee Plant
- Ronald K. Grosse**  
Manager, Customer Accounts
- Charles K. Heidemann**  
Manager, Substation and  
Transmission
- Richard E. James**  
Manager, Rates and Economic  
Evaluation
- Randall G. Johnson**  
Manager, Information Services
- Roger W. Lange**  
Manager, Fossil Operations
- John J. Mattila**  
Division Manager, Sheboygan
- Gerald L. Mroczkowski**  
Superintendent, Weston Plant
- Leonard B. Pehlke**  
Division Manager, Rhinelander
- Jack A. Picard**  
Division Manager, Lakeshore
- Jack C. Rasmussen**  
Manager, Purchasing and Stores
- John E. Ruppenthal**  
Division Manager, Oshkosh
- Clark R. Steinhardt**  
Manager, Nuclear Power
- Kenneth P. Sweet**  
Division Manager, Marinette  
and Menominee
- Peter J. Van Beek**  
Division Manager, Wausau
- Larry L. Weyers**  
Director, Fuel Services

\*Senior Staff

## MANAGEMENT'S DISCUSSION AND ANALYSIS

### RESULTS OF OPERATIONS 1988 Compared to 1987

Electric operating revenues increased 1.5% in 1988 compared to 1987 primarily due to a 6% overall increase in kilowatt-hour sales which more than offset reductions in rates to our Wisconsin retail and our FERC wholesale customers.

Increased kilowatt-hour sales were experienced in the residential, commercial and industrial, and resale markets due to significant increases in both heating and cooling degrees as a result of unusual seasonal variations in temperature. Heating degree days increased approximately 17% and cooling degree days increased approximately 21% over 1987. In addition, customer growth was evident in both the residential and small commercial and industrial sectors.

Residential kilowatt-hour sales increased 6% during 1988 for the reasons noted above. Commercial and industrial sales increased approximately 5% for the same reasons as well as increased demand from paper mill customers. In addition, several large industrial customers experienced below average internal hydro generation as a result of the abnormally hot and dry summer necessitating additional energy purchases from the company. Kilowatt-hour sales to our wholesale customers increased 8.5% over 1987 which can be attributed primarily to their below average hydro generation and higher energy requirements because of the extremely hot summer.

Both gas operating revenues and gas therm sales increased approximately 11% during 1988 compared to 1987 with the most significant increases being experienced in the residential (17%) and commercial and industrial (25%) markets because of colder than normal weather during the heating season and customer growth. A gas rate increase took effect for Wisconsin retail customers in January of this year.

Gas transportation therm sales to commercial and industrial customers increased approximately 5% during 1988 over 1987. We anticipate gas transportation sales will be at about the same level in 1989 as was experienced during 1988.

Operating expenses experienced a net increase of 4% in 1988, primarily in gas purchases because of the colder weather noted above partially offset by a lower average cost per therm resulting from purchases on the spot market. There was a significant increase in purchased power because the company was able to acquire power from other sources at favorable rates. Maintenance expense was also higher due to increased maintenance activity at the company's coal-fired generating units and its nuclear plant. Additional depreciation decreased in 1988 primarily for two reasons: the reversal of deferred taxes provided at rates in excess of current rates and an adjustment recorded in 1987 which reflects the results of an Internal Revenue Service (IRS) depreciation audit with no similar item being recognized this year. Federal income tax decreased due to lower tax rates noted above and lower taxable income. Investment tax

credit restored decreased significantly in 1988 because of an adjustment recorded in 1987 that reflected two IRS investment credit audits with no similar item being recorded in this year. State income tax decreased because of lower taxable income.

Other income increased because of increased earnings from nuclear decommissioning trusts and temporary investments.

Interest expense on long-term debt also increased as a result of the issuance of \$45 million in first mortgage bonds in December of 1987 and other interest experienced a significant decrease because of reduced short-term borrowing requirements for the year.

### 1987 Compared to 1986

Electric operating revenues increased approximately 4.5% in 1987 due to a 7% overall increase in kilowatt-hour sales primarily in the commercial, industrial and wholesale markets. During 1987 the company experienced several rate decreases including FERC wholesale electric rates in January and June, and PSCW and Michigan Public Service Commission retail rate decreases in July. A substantial cause of these decreases was lower taxes as a result of the Tax Reform Act of 1986. Heating degree days decreased approximately 11% in 1987 while calendar month cooling degree days for the same period increased 66%. Residential kilowatt-hour sales increased at an annual rate of less than 2% primarily due to customer growth. Kilowatt-hour sales increased 5% to our small commercial and industrial customers and approximately

7% to our large commercial and industrial customers. Kilowatt-hour sales to our wholesale electric customers rose a significant 21% in 1987 primarily due to the addition of a paper machine by our largest wholesale customer in late 1986.

Gas operating revenues decreased approximately 17% in 1987 due primarily to the unusually mild winter weather experienced during the year and also the continuation of transportation gas to our industrial customers. Because of the mild winter weather noted above, residential gas therm sales decreased approximately 7% in 1987.

Sales to our firm commercial and industrial customers decreased 26% in 1987 as a result of mild winter weather and increased use of transportation gas.

Gas therm sales to our large interruptible customers decreased 89% due almost entirely to transportation gas.

Transportation gas is expected to continue throughout 1988 but at a slightly lower level than 1987 due to an increase in spot market prices and an increase in transportation rates. The company plans to purchase approximately 50% of its system requirements from suppliers other than ANR, our pipeline supplier, for resale within our service territory.

Operating expenses showed a net decrease of 3% in 1987, primarily in gas purchases because of transportation gas mentioned above, a lower average price per therm from our normal pipeline supplier and purchases of cheaper gas made in the spot market. Federal income tax also

decreased in 1987 due to the lower statutory tax rates that took effect this year as enacted in the Tax Reform Act of 1986. Investment tax credit deferral decreased significantly because of its elimination in that same tax legislation and adjustments resulting from two IRS investment tax credit audits for the years 1974-1979 and 1980-1981. The amount shown for 1987 primarily reflects restored investment tax credits. There was a significant increase in purchased power because the company was able to obtain energy from other sources at favorable rates. Adjustments caused by settling an IRS depreciation audit for the years 1980-1981, and filing the company's 1986 tax return as well as higher tax depreciation rates for nuclear fuel, and the normalization of a portion of the payments being made to the nuclear decommissioning trusts which are now deductible as the result of a ruling received from the IRS this year, caused a major increase in additional depreciation. Higher short-term borrowing, the majority of which was used to finance the initial payments to the nuclear decommissioning trusts made in July, caused other interest expense to increase. The company also issued \$45 million in first mortgage bonds in December, with a portion of the proceeds being used to reduce short-term borrowing.

#### **FINANCIAL CONDITION**

The company has maintained good liquidity levels and follows conservative accounting practices. The company's financial position is considered to be strong by utility analysts and rating

services. No funding difficulties are anticipated in the near or long-term future. Commercial paper ratings of A-1+ (Standard & Poor's) and P-1 (Moody's), the highest given, have resulted in a low cost for short-term debt. The company has also maintained bank credit agreements which, although seldom used, are available to back the issuance of commercial paper. For most of 1988, excess funds were invested in short-term securities. However, a moderate level of short-term debt was incurred toward the end of 1988, which is expected to be retired early in 1989.

In recent years, the company has generally used short-term debt and internally generated funds to finance construction, to fund other investments including external nuclear plant decommissioning trusts, as well as to retire common and preferred stocks and long-term debt. Internally generated funds (hereafter defined as net cash provided from operating activities less cash dividends, less the net increase in cash and equivalents) exceeded construction and other capital expenditures during 1986 and 1987. For the year 1988, however, internally generated funds did not exceed total investments, including construction expenditures, and a small amount of net external funding was required. For the period 1989-1993, internally generated funds are expected to exceed construction expenditures. Another base load power plant should not need to be built during the

## MANAGEMENT'S DISCUSSION AND ANALYSIS

next 20 years. Even though internally generated funds should cover construction, some external funding may be required for such purposes as nuclear decommissioning.

The company received approval from the PSCW to refund certain long-term debt issues if the transactions are economical due to lower interest rates. Since 1986, the company has purchased and retired approximately \$34 million of the 11.50% Bond Series Due 2015. In late 1987, \$45 million of bonds (9.50% Series Due 1994) were sold to reduce short-term borrowing. The only additional long-term financings anticipated through 1993 are the sale of bonds late in the period or perhaps tax-exempt financing. Several contingencies could change this, including major federal acid rain legislation, the repurchase of additional company securities, or changes in rate treatment.

Standard & Poor's Corporation has assigned a rating of AA+ to the company's first mortgage bonds. Moody's rating is Aaa. These excellent ratings are due in part to strong pretax interest coverage which was 4.5 times for the year 1988. This favorable ratio resulted from moderate construction requirements, low allowance for funds used during construction (AFUDC), low embedded cost of debt, and strong equity ratios.

Common and preferred shareholders' equity was 62% of long-term capitalization at December 31, 1988. Company management has been taking

action, however, to limit the total equity devoted to utility purposes. In recent years, the company has retired some of its highest dividend preferred stock through open market purchases, sinking funds and early redemption calls. In 1985, the company conducted a program to purchase and retire common stock. Although there are currently no firm plans, the company may purchase and retire additional common stock in later years. The company may also direct additional retained earnings to nonutility projects.

A July 1987 rate order from the PSCW imposed restrictions on additional investment in nonutility diversification based on common equity levels. In November 1987, the company presented rate case testimony requesting more flexibility. A rate order was received in January 1988 which allowed up to \$2.9 million of investment in nonutility projects for the year 1988. A rate order received in January 1989, however, is less specific, authorizing additional nonutility investment only if certain minimum common equity levels are maintained during the coming year. Indications are that the PSCW may allow additional minor investments in existing nonutility operations in the next few years if it believes the utility's financial integrity permits.

Recent decisions in each jurisdiction have resulted in some rate decreases because of lower returns authorized on common equity, changes in the tax law, and changes in accounting practices directed by the various commissions which regulate the company.

These actions have had some adverse impact on revenues and financial strength. (For more information on rate matters, see "Rate Proceedings" in the "Year In Review" section.) Recent tax laws have also had some negative impact on revenues, internal cash generation, and interest coverages due to elimination of investment tax credits, changes in depreciation, and reduction of tax rates.

Refer to the "Notes To Financial Statements" for discussion of the impact of Statement of Financial Standards No. 96 on the company's financial statements.

### IMPACT OF INFLATION

Current financial statements are prepared in accordance with generally accepted accounting principles and report operating results in terms of historic cost. They provide a reasonable, objective, quantifiable statement of financial results but do not evaluate the impact of inflation. Under ratemaking prescribed by the commissions regulating the company, projected operating costs are recoverable in revenues. Because forecasts are prepared assuming inflation, the majority of inflationary effects on normal operating costs are recoverable in rates. However, the company is only allowed to recover the historical cost of plant via depreciation in these forecasts. Any effects of inflation on utility plant are generally offset by the holding gain resulting from the use of debt to finance utility construction.

**STATEMENTS OF INCOME**  
**WISCONSIN PUBLIC SERVICE CORPORATION**

	Years Ended December 31		
	<u>1988</u>	<u>1987</u>	<u>1986</u>
	(Thousands)		
Operating Revenues:			
Electric .....	\$435,958	\$429,443	\$410,514
Gas .....	<u>168,376</u>	<u>151,013</u>	<u>181,756</u>
	<u>604,334</u>	<u>580,456</u>	<u>592,270</u>
Operating Expenses:			
Operation —			
Electric production fuels .....	134,437	132,430	132,028
Gas purchased for resale .....	120,702	109,447	141,656
Purchased power, net .....	24,887	19,109	9,015
Other .....	101,935	100,305	95,258
Maintenance .....	43,422	35,142	32,927
Depreciation —			
Straight-line provision .....	50,486	49,170	47,271
Additional depreciation .....	5,705	8,491	4,681
Taxes —			
Current federal income .....	20,042	28,604	31,825
Investment credit restored, net .....	(2,826)	(4,040)	(2,122)
Current state income .....	5,954	6,603	5,958
Other .....	<u>22,399</u>	<u>21,309</u>	<u>21,293</u>
	<u>527,143</u>	<u>506,570</u>	<u>519,790</u>
Operating Income .....	<u>77,191</u>	<u>73,886</u>	<u>72,480</u>
Other Income and (Deductions):			
AFUDC, other funds .....	659	456	595
Other, net .....	823	(2,815)	(306)
Income taxes .....	<u>697</u>	<u>1,912</u>	<u>(182)</u>
	<u>2,179</u>	<u>(447)</u>	<u>107</u>
Income Before Interest Expense .....	<u>79,370</u>	<u>73,439</u>	<u>72,587</u>
Interest Expense:			
Interest on long-term debt .....	21,583	18,309	19,914
AFUDC, borrowed funds .....	(363)	(275)	(277)
Other interest .....	<u>1,730</u>	<u>2,634</u>	<u>1,409</u>
	<u>22,950</u>	<u>20,668</u>	<u>21,046</u>
Net Income .....	56,420	52,771	51,541
Preferred Stock Dividend Requirements .....	<u>3,594</u>	<u>3,751</u>	<u>4,392</u>
Earnings On Common Stock .....	<u>\$ 52,826</u>	<u>\$ 49,020</u>	<u>\$ 47,149</u>
Earnings Per Share On Common Stock* .....	\$2.28	\$2.11	\$2.03
Dividends Per Share On Common Stock* .....	\$1.56	\$1.52	\$1.465

\*Adjusted to reflect 2 for 1 common stock split in June 1987.

The accompanying notes to financial statements are an integral part of these statements.

**BALANCE SHEETS**  
WISCONSIN PUBLIC SERVICE CORPORATION

	December 31		
	1988	1987	1986
		(Thousands)	
<b>Assets</b>			
Utility Plant (at original cost):			
In service — Electric .....	\$1,146,227	\$1,101,697	\$1,072,214
Gas .....	<u>143,089</u>	<u>135,044</u>	<u>131,363</u>
	1,289,316	1,236,741	1,203,577
Less — Accumulated provision for depreciation .....	<u>682,722</u>	<u>635,454</u>	<u>591,727</u>
	<u>606,594</u>	<u>601,287</u>	<u>611,850</u>
Nuclear decommissioning trusts, at cost .....	<u>31,715</u>	<u>25,502</u>	<u>—</u>
Construction in progress .....	<u>9,946</u>	<u>10,776</u>	<u>4,379</u>
Nuclear fuel .....	117,048	108,028	100,756
Less — Accumulated provision for amortization .....	<u>97,035</u>	<u>89,142</u>	<u>80,976</u>
	<u>20,013</u>	<u>18,886</u>	<u>19,780</u>
Net utility plant .....	<u>668,268</u>	<u>656,451</u>	<u>636,009</u>
Investments .....	<u>17,507</u>	<u>20,367</u>	<u>19,573</u>
<b>Current Assets:</b>			
Cash and equivalents .....	(3,904)	(9,174)	(1,339)
Customer and other receivables (less uncollectible reserves) .....	58,795	54,882	51,754
Accrued utility revenues .....	28,220	27,225	27,425
Fossil fuel, at average cost .....	23,081	27,936	36,634
Materials and supplies, at average cost .....	13,596	12,210	11,692
Prepayments and other .....	<u>18,021</u>	<u>17,591</u>	<u>15,864</u>
Total current assets .....	<u>137,809</u>	<u>130,670</u>	<u>142,030</u>
Deferred Charges .....	<u>19,809</u>	<u>17,141</u>	<u>16,415</u>
	<u>\$ 843,393</u>	<u>\$ 824,629</u>	<u>\$ 814,027</u>
<b>Capitalization and Liabilities</b>			
<b>Capitalization:</b>			
Common stock equity .....	\$ 371,168	\$ 360,101	\$ 346,445
Preferred stock with no mandatory redemption .....	51,200	51,200	51,200
Preferred stock with mandatory redemption .....	2,145	3,645	5,144
Long-term debt .....	<u>256,264</u>	<u>254,867</u>	<u>228,631</u>
Total capitalization .....	<u>680,777</u>	<u>669,813</u>	<u>631,420</u>
<b>Current Liabilities:</b>			
Note payable .....	10,000	10,000	10,000
Commercial paper .....	11,500	3,000	23,400
Maturing first mortgage bonds .....	—	—	5,062
Accounts payable .....	50,367	49,640	44,577
Accrued taxes .....	1,865	(76)	5,826
Accrued interest .....	5,308	5,427	5,212
Accrued contributions to benefit plans .....	137	4,036	4,520
Other .....	<u>4,500</u>	<u>2,480</u>	<u>3,475</u>
Total current liabilities .....	<u>83,677</u>	<u>74,507</u>	<u>102,072</u>
<b>Other Credits:</b>			
Accumulated deferred investment credit .....	44,727	47,551	51,313
Other .....	<u>34,212</u>	<u>32,758</u>	<u>29,222</u>
	<u>78,939</u>	<u>80,309</u>	<u>80,535</u>
	<u>\$ 843,393</u>	<u>\$ 824,629</u>	<u>\$ 814,027</u>

The accompanying notes to financial statements are an integral part of these balance sheets.

**STATEMENTS OF CAPITALIZATION**  
WISCONSIN PUBLIC SERVICE CORPORATION

		December 31		
		<u>1988</u>	<u>1987</u>	<u>1986</u>
		(Thousands)		
<b>COMMON STOCK EQUITY:</b>				
Common stock, \$4 par value, 32,000,000 shares authorized:				
23,200,552 shares outstanding*		\$ 92,802	\$ 92,802	\$ 92,802
Premium on capital stock		50,385	50,385	50,385
Retained earnings		233,521	216,914	203,258
ESOP loan guarantee		(5,540)	—	—
Total common stock equity		<u>371,168</u>	<u>360,101</u>	<u>346,445</u>
<b>PREFERRED STOCK:</b>				
Cumulative, \$100 par value, 1,000,000 shares authorized:				
With no mandatory redemption —				
	<u>Series</u>	<u>Shares outstanding</u>		
	5.00%	132,000	13,200	13,200
	5.04%	30,000	3,000	3,000
	5.08%	50,000	5,000	5,000
	6.76%	150,000	15,000	15,000
	7.72%	150,000	15,000	15,000
			<u>51,200</u>	<u>51,200</u>
With mandatory redemption —				
10.50% Series, 21,445, 36,445 and 51,445 shares				
outstanding, respectively				
			<u>2,145</u>	<u>3,645</u>
			<u>51,200</u>	<u>51,144</u>
<b>LONG-TERM DEBT:</b>				
First mortgage bonds —				
	<u>Series</u>	<u>Year due</u>		
	4¾%	1987	—	5,062
	4¾%	1993	8,726	8,726
	4½%	1994	10,944	10,944
	9.50%	1994	45,000	—
	6¾%	1997	23,482	23,482
	7¼%	1999	24,039	24,039
	8¼%	2001	25,000	25,000
	8½%	2003	25,000	25,000
	7¾%	2005	11,000	11,000
	8.20%	2012	45,000	45,000
	9.70%	2014	22,000	22,000
	10½%	2014	1,000	1,000
	11.50%	2015	11,155	21,450
			<u>252,346</u>	<u>256,641</u>
Maturing first mortgage bonds			—	(5,062)
Unamortized discount and premium on bonds, net			(1,622)	(1,610)
Total first mortgage bonds			<u>250,724</u>	<u>216,031</u>
Other long-term debt			—	12,600
ESOP loan guarantee			5,540	—
Total long-term debt			<u>256,264</u>	<u>228,631</u>
Total capitalization			<u>\$680,777</u>	<u>\$631,420</u>

\*Adjusted to reflect 2 for 1 common stock split in June 1987.

The accompanying notes to financial statements are an integral part of these statements.

**STATEMENTS OF CASH FLOWS**  
**WISCONSIN PUBLIC SERVICE CORPORATION**

	Years Ended December 31		
	<u>1988</u>	<u>1987</u>	<u>1986</u>
	(Thousands)		
Cash Flows From Operating Activities:			
Net income .....	\$ 56,420	\$ 52,771	\$ 51,541
Items Not Affecting Cash Flow —			
Depreciation .....	56,191	57,661	51,952
Amortization of nuclear fuel .....	7,582	8,392	8,436
Investment credit restored, net .....	(2,826)	(4,040)	(2,122)
AFUDC equity .....	(659)	(456)	(595)
Other, net .....	<u>6,745</u>	<u>13,896</u>	<u>6,237</u>
	67,033	75,453	63,908
Changes in Working Capital Other Than Cash —			
Customer and other receivables .....	(3,913)	(3,128)	5,751
Accrued utility revenues .....	(995)	200	5,752
Fossil fuel .....	4,855	8,698	6,429
Accounts payable .....	727	5,063	(8,321)
Accrued taxes .....	1,941	(5,902)	(279)
Other, net .....	<u>(5,695)</u>	<u>(6,756)</u>	<u>(2,912)</u>
	<u>(3,080)</u>	<u>(1,825)</u>	<u>6,420</u>
Net cash provided by operating activities .....	<u>120,373</u>	<u>126,399</u>	<u>121,869</u>
Cash Flows From (Used For) Investing Activities:			
Construction expenditures and nuclear fuel, including AFUDC debt .....	(65,728)	(61,123)	(54,952)
Decommissioning funding, net .....	(6,213)	(22,314)	(3,188)
Other, net .....	<u>(6,054)</u>	<u>(11,193)</u>	<u>(10,475)</u>
Net cash from (used for) investing activities .....	<u>(77,995)</u>	<u>(94,630)</u>	<u>(68,615)</u>
Cash Flows From (Used For) Financing Activities:			
Redemption and maturities of first mortgage bonds .....	(4,295)	(11,062)	(23,550)
Change of other long-term debt .....	—	(12,600)	12,600
Redemption of preferred stock .....	(1,500)	(1,500)	(15,003)
Sale of first mortgage bonds .....	—	45,000	—
Change in commercial paper .....	8,500	(20,400)	4,405
Preferred stock cash dividends .....	(3,620)	(3,777)	(4,660)
Common stock cash dividends .....	<u>(36,193)</u>	<u>(35,265)</u>	<u>(33,989)</u>
Net cash from (used for) financing activities .....	<u>(37,108)</u>	<u>(39,604)</u>	<u>(60,197)</u>
Net Increase (Decrease) in Cash and Equivalents .....	5,270	(7,835)	(6,943)
Cash and Equivalents at Beginning of Year .....	<u>(9,174)</u>	<u>(1,339)</u>	<u>5,604</u>
Cash and Equivalents at End of Year .....	<u>\$ (3,904)</u>	<u>\$ (9,174)</u>	<u>\$ (1,339)</u>
Cash Paid During Year For:			
Interest, less amount capitalized .....	\$ 21,878	\$ 19,724	\$ 21,063
Income taxes .....	\$ 24,690	\$ 39,606	\$ 43,359
Construction expenditures and nuclear fuel including accruals and AFUDC ..	\$ 68,841	\$ 62,601	\$ 55,547

The accompanying notes to financial statements are an integral part of these statements.

**STATEMENTS OF RETAINED EARNINGS**  
**WISCONSIN PUBLIC SERVICE CORPORATION**

	Years Ended December 31		
	1988	1987	1986
		(Thousands)	
Balance at Beginning of Year .....	\$216,914	\$203,258	\$191,091
Add — Net income .....	56,420	52,771	51,541
	<u>273,334</u>	<u>256,029</u>	<u>242,632</u>
Deduct —			
Cash dividends declared on preferred stock			
5.00% Series (\$5.00 per share) .....	660	660	660
5.04% Series (\$5.04 per share) .....	151	151	151
5.08% Series (\$5.08 per share) .....	254	254	254
6.76% Series (\$6.76 per share) .....	1,014	1,014	1,014
7.72% Series (\$7.72 per share) .....	1,158	1,158	1,158
10.50% Series (\$10.50 per share) .....	383	540	698
10.75% Series (\$10.75 per share) .....	—	—	725
Cash dividends declared on common stock .....	36,193	35,265	33,989
Premium paid for repurchase of preferred stock .....	—	—	725
Other .....	—	73	—
	<u>39,813</u>	<u>39,115</u>	<u>39,374</u>
Balance at End of Year .....	<u>\$233,521</u>	<u>\$216,914</u>	<u>\$203,258</u>

The accompanying notes to financial statements are an integral part of these statements.

**MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING**

The management of Wisconsin Public Service Corporation has prepared and is responsible for the financial statements and related financial information encompassed in this annual report. The financial statements have been prepared in conformity with generally accepted accounting principles, and financial information included elsewhere in this report is consistent with the financial statements.

The company maintains a system of internal accounting control designed to provide reasonable assurance that the company's assets are safeguarded and that transactions are executed and recorded in accordance with authorized procedures. Written policies and procedures have been developed to support the internal controls in place and are updated as necessary.

The company also maintains an internal auditing department that independently reviews and assesses the effectiveness of selected internal controls, and reports to management as to their findings and recommendations for improvement.

The Board of Directors has established an Audit Committee, comprised entirely of outside directors, which actively assists the Board in its role of overseeing the company's financial reporting process and the system of internal control.

The accompanying financial statements have been examined by Arthur Andersen & Co., independent public accountants, whose report follows.

**D. P. Bittner**  
 Vice President-Treasurer

**L. M. Stoll**  
 President and Chief Executive Officer

**REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS**

To the Board of Directors and Shareholders, Wisconsin Public Service Corporation:

We have audited the accompanying balance sheets and statements of capitalization of Wisconsin Public Service Corporation (a Wisconsin corporation) as of December 31, 1988, 1987, and 1986, and the related statements of income, retained earnings, and cash flows for the years then ended. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Wisconsin Public Service Corporation as of December 31, 1988, 1987, and 1986, and the results of its operations and its cash flows for the years then ended in conformity with generally accepted accounting principles.

Milwaukee, Wisconsin,  
 January 26, 1989.

ARTHUR ANDERSEN & CO.

**NOTES TO FINANCIAL STATEMENTS**  
**WISCONSIN PUBLIC SERVICE CORPORATION**

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:  
 The financial statements reflect the application of certain

accounting policies which are described in this note.

(a) Jurisdictional Accounting — The company uses jurisdictional accounting which reflects the effects of the different ratemaking principles followed by the various jurisdictions regulating the company. These include the Public Service Commission of Wisconsin (PSCW), the Michigan Public Service Commission (MPSC) and the Federal Energy Regulatory Commission (FERC).

The retail portion of the business is regulated by the PSCW and MPSC which comprise approximately 87% and 2%, respectively, of the company's operating revenues. The FERC regulates the electric wholesale portion which is approximately 11% of such revenues.

(b) Utility Plant — Utility plant is stated at the original cost of construction, which includes an allowance for funds used during construction (AFUDC). All retail jurisdictional construction work in progress (CWIP) is subject to AFUDC using a rate based on the company's overall cost of capital (approximately 11%).

AFUDC is recorded on wholesale jurisdictional electric construction work in progress at debt and equity percentages specified in the FERC Uniform System of Accounts. For 1988, the rate was approximately 8.5%.

Substantially all of the company's utility plant is subject to a first mortgage lien.

(c) Property Additions, Maintenance and Retirements — The cost of renewals and betterments of units of property (as distinguished from minor items of property) is charged to utility plant accounts. The cost of units of property retired, sold or otherwise disposed of, plus removal costs, less salvage, is charged to the accumulated

provision for depreciation. No profit or loss is recognized in connection with ordinary retirements of property units. Maintenance and repair costs and replacement and renewal of items less than units of property are generally charged to operating expenses.

(d) Nuclear Fuel — The cost of nuclear fuel is being amortized to fuel expense based on the quantity of heat produced for the generation of electric energy by the Kewaunee plant. The tax effect of using a liberalized method of depreciating the fuel for income tax purposes is recorded as additional depreciation as discussed in Note 1(j). Amortization and additional depreciation are included in the accumulated provision for amortization of nuclear fuel. The costs amortized to fuel expense (which assume no salvage values for uranium or plutonium) include an amount for ultimate disposal which is being recovered through current rates. As required by the Nuclear Waste Policy Act of 1982, a contract with the Department of Energy (DOE) has been signed and

quarterly payments are being made to the DOE for the fee related to generation. Interim storage space for spent nuclear fuel is provided at the Kewaunee plant, and expenses associated with this storage are recognized as current operating costs.

A wholly-owned subsidiary of the company has engaged in various mining operations relating to procuring a reliable supply of uranium for the Kewaunee plant but recently ceased mining operations and has written off all major properties. The investment in this subsidiary is carried on the equity basis of accounting. The uranium obtained through this subsidiary is carried at cost, including the operation costs of the subsidiary.

	December 31		
	1988	1987	1986
		(Thousands)	
Accumulated amortization . . . . .	\$97,891	\$91,922	\$85,182
Accumulated additional depreciation . . . . .	(856)	(2,780)	(4,206)
Accumulated provision for amortization of nuclear fuel . . . .	<u>\$97,035</u>	<u>\$89,142</u>	<u>\$80,976</u>
Investment in subsidiary . . . . .	\$403	\$2,193	\$2,096

(e) Deferred Charges — Deferred charges primarily represent costs recoverable in future rates, including such items as coal contract buy-outs, major computer systems

development, purchased software, and leasehold improvements.

(f) Revenue — The company accrues revenues related to electric and gas service through the end of the month.

Automatic fuel adjustment clauses are used for the FERC wholesale electric and MPSC retail electric portions of the company's business. The PSCW retail electric portion of the business uses a "cost variance range approach." This range is based on a specific estimated fuel cost for the upcoming year. If the company's actual fuel costs fall outside this range, a hearing may be held and a rate increase or decrease may result.

The company's rates permit, subject to PSCW and MPSC review, passing on to all classes of gas customers

(g) Employee Benefit Plans — The company has non-contributory retirement plans covering substantially all employees under which annual contributions are made to an irrevocable trust established to provide retired employees with a monthly payment if conditions relating to age and length of service have been met. It is the company's policy to fund retirement contributions to meet current costs of the plans as determined using the entry-age normal, frozen initial liability actuarial method to the extent deductible for tax purposes. The unfunded prior service costs have been amortized over approximately ten years. Because the plans are fully funded, the 1988 tax deductible amount is zero.

The weighted average assumed rate of return used in

changes in the cost of gas purchased from its suppliers.

Some of the company's larger gas customers purchase gas directly from the pipeline supplier. This gas continues to be transported over the company's distribution facilities for which the company earns a transportation fee. This transport fee is designed to recover approximately the same profit margin as if the gas had been purchased and resold by the company; therefore, there is a minimal effect on net income. It is estimated that gas revenues are lower by approximately \$53,000,000 in 1988, \$59,000,000 in 1987 and \$33,000,000 in 1986 because of such transportation gas.

determining the actuarial present value of accumulated plan benefits was 7% in 1988 and 5½% for 1987 and 1986.

The company adopted Statement of Financial Accounting Standards (SFAS) No. 87 in 1986. However, the PSCW requires the recognition of the funded amount for ratemaking, and such amount is reflected as retirement plan cost in the financial statements. SFAS No. 87 provides for the use of the projected unit credit actuarial cost method.

The following tables, in compliance with SFAS No. 87, disclose the plan's funded status and amounts using the provisions of that statement.

	As of December 31		
	1988	1987	1986
		(Thousands)	
Vested benefit obligation	\$103,876	\$ 90,435	\$ 82,498
Non-vested benefit obligation	6,171	8,462	8,374
Total actuarial present value of accumulated benefit obligation	<u>\$110,047</u>	<u>\$ 98,897</u>	<u>\$ 90,872</u>
Projected benefit obligation for service rendered to date	\$(146,099)	\$(128,835)	\$(119,322)
Plan assets at fair value	216,551	199,760	190,879
Plan assets in excess of projected benefit obligation	\$ 70,452	\$ 70,925	\$ 71,557
Unrecognized net gain from past experience different from that assumed and the effects of changes in assumptions	(14,707)	(10,668)	(14,615)
Prior service cost not yet recognized	5,766	(161)	—
Unrecognized net asset at January 1, being recognized over 17 years	<u>(47,706)</u>	<u>(51,171)</u>	<u>(54,635)</u>
Prepaid retirement plan cost	<u>\$ 13,805</u>	<u>\$ 8,925</u>	<u>\$ 2,307</u>

The assumed rates for calculations used in the above table were:

	1988	1987	1986
Expected long-term rate of return	7.00%	7.00%	7.00%
Average rate for future salary increases	6.25%	6.25%	6.25%
Discount rate to compute projected benefit obligation	8.50%	8.50%	8.50%

**NOTES TO FINANCIAL STATEMENTS**  
**WISCONSIN PUBLIC SERVICE CORPORATION**

The net retirement plan expense includes the following components:

	<u>1988</u>	<u>1987</u>	<u>1986</u>
		(Thousands)	
Service cost — benefits earned during the year .....	\$ 3,758	\$ 3,440	\$ 3,102
Interest cost on projected benefit obligation .....	11,404	10,020	9,291
Actual return on plan assets .....	(18,859)	(11,026)	(26,167)
Net amortization and deferral .....	2,790	(1,132)	11,467
Regulatory adjustment to funded amount .....	<u>907</u>	<u>2,238</u>	<u>6,341</u>
Net retirement plan expense .....	<u>\$ —</u>	<u>\$ 3,540</u>	<u>\$ 4,034</u>

The company also has self-funded health care plans which provide medical and dental benefits to employees, retirees and their dependents. The health care expenses for active employees are expensed as incurred. However, anticipated post-retirement medical benefits are funded to irrevocable trusts within the limits of the current deduction for tax purposes. These funded amounts are recognized in the financial statements currently. The unfunded past service costs associated with post-retirement medical benefits are currently amortized over the average remaining service life of the participants, which is approximately 17 years.

The company also has survivor benefits plans for its employees and retirees. These plans include a Survivor Income Benefits (SIB) Plan, which provides benefits to survivors of employees and retirees over a period of

time, and a Group Life Insurance Plan for those not covered by SIB. These survivor benefits are paid from a trust funded by the company. The funded amount is recognized as a current expense. Because the trust is currently fully funded, no provisions were made to it in 1987 or 1988.

In 1988, the company revised its Employee Stock Ownership Plan and Trust (ESOP) to obtain additional tax benefits. As a result of the conversion, the ESOP borrowed \$5,526,000 from a bank to purchase 238,900 shares of the company's common stock on the open market for the future benefit of its participants. This loan is guaranteed by the company, and is to be repaid from dividends on undistributed stock in the ESOP, and employee and company contributions.

	<u>1988</u>	<u>1987</u>	<u>1986</u>
		(Dollars in Thousands)	
Health Care Plans:			
Post-retirement medical plan funding .....	\$3,524	\$3,143	\$2,461
Active employee health care costs .....	\$4,057	\$4,002	\$3,429
Survivor Benefits Plans:			
Survivor Benefits plan funding .....	—	—	\$1,234
Number of active participants .....	2,330	2,336	2,305
Number of retired participants .....	593	558	545

(h) Investments — Included in investments are various immaterial subsidiaries and affiliates, whose operations

are accounted for as other income and deductions using the equity method of accounting.

(i) Depreciation — The company reports depreciation expense as a current cost of doing business to reflect an allocation for the use of property. Straight-line depreciation expense is reported over the estimated useful life of the property as approved by the PSCW.

Based on an order of the PSCW, the company also reports the deferred taxes applicable to plant and nuclear fuel as additional depreciation expense. For an explanation of deferred income taxes recorded as additional depreciation, see Note 1(k).

	<u>1988</u>	<u>1987</u>	<u>1986</u>
Composite depreciation rates (for the year)			
Electric .....	4.10%	4.12%	4.09%
Gas .....	4.73%	4.80%	4.85%
Additional depreciation (benefit) expense (for the year)		(Thousands)	
Federal .....	\$6,564	\$9,007	\$5,070
State .....	\$(858)	\$(516)	\$(389)
Accumulated additional depreciation (end of year) .....	\$150,438	\$146,657	\$139,591

(j) Nuclear Decommissioning — External trust funds are maintained to cover the estimated future decommissioning costs of the Kewaunee nuclear plant. These costs are being recovered from customers in rates as depreciation expense. Earnings on these trusts are reflected in other income and deductions in the statements of income.

Through December 31, 1988, all amounts collected from customers for this purpose have been deposited in these trusts. The company's 41.2% ownership share of future decommissioning costs of this plant is estimated to be \$203,942,000.

(k) Income Taxes - Depreciation expense used for federal and state income tax purposes is different from the amounts recorded on the books as straight-line depreciation. There are two major reasons for the differences. First, the period of time over which the taxing authorities allow the cost of assets to be depreciated is generally shorter than the lives used for straight-line depreciation purposes. Second, the IRS allows some of the depreciation the company would be entitled to in later years to be deducted earlier, a practice known as accelerated depreciation. The estimated changes in current federal income taxes paid as a result of these differences are recorded as additional depreciation. The deferral of additional depreciation and the related allocation of such tax benefits over plant life is referred to as normalization. Beginning in 1985, as a result of a PSCW order, the estimated reduction in state income taxes resulting from the utilization of accelerated depreciation for state income tax purposes is no longer being normalized for retail jurisdictional purposes.

These benefits are now being flowed through to the current retail customers. The accumulated additional depreciation related to state income taxes as of December 31, 1984 is being amortized to income over 17 years for the retail jurisdiction.

Certain book-tax depreciation differences have not been normalized; the cumulative tax effect of such differences as of December 31, 1988 is \$15,815,000. The ratemaking policies of the jurisdictions which regulate the company provide for recovery of the related future taxes that have not been normalized.

The effective income tax rates are computed by dividing total income tax expense, including net investment credit restored and additional depreciation, by the sum of such expense and net income. Previously deferred investment tax credits are currently being restored over the life of the related utility plant.

	1988		1987		1986	
	(Thousands except for percentages)					
	Amount	Rate	Amount	Rate	Amount	Rate
Statutory federal income tax	\$28,764	34.0%	\$36,162	40.0%	\$42,350	46.0%
State income taxes and state additional depreciation, net	2,997	3.6	3,463	3.8	2,832	3.1
Investment credit restored	(2,680)	(3.2)	(3,093)	(3.4)	(3,483)	(3.8)
Other differences, net	(902)	(1.1)	1,214	1.3	(1,175)	(1.3)
Effective income tax	<u>\$28,179</u>	<u>33.3%</u>	<u>\$37,746</u>	<u>41.7%</u>	<u>\$40,524</u>	<u>44.0%</u>

The Financial Accounting Standards Board has issued a new standard on accounting for income taxes which must be adopted by the company not later than January 1990. The company has determined that it will reflect the initial application of the standard as a cumulative effect in 1990.

This new standard requires adjustments of previously recorded deferred taxes to reflect income tax rate changes, recognition of previously unrecorded deferred taxes and reclassification of deferred taxes previously

netted against certain assets and liabilities. Although the company has not yet determined the amounts of such adjustments, management believes that any additional assets and liabilities resulting from adoption of the standard will be offset by regulatory assets and liabilities representing the expected future rate treatment of these adjustments. As such, management does not expect the new standard to have a significant impact on future operations.

**NOTES TO FINANCIAL STATEMENTS**  
**WISCONSIN PUBLIC SERVICE CORPORATION**

(l) Leases — Leases are not material in the aggregate.

(m) Earnings Per Share — Earnings per share on common stock are computed on the basis of the weighted average

number of shares outstanding adjusted to reflect 2 for 1 common stock split in June 1987.

(n) Statement of Cash Flows — In 1988, the company adopted SFAS No. 95, "Statement of Cash Flows," which required modifications from the previous Statement of Sources of Construction Funds. The 1987 and 1986

statements have been restated to conform to the 1988 presentation. For purposes of the Statement of Cash Flows, all short-term investments with a maturity of three months or less are assumed to be cash equivalents.

**(2) JOINTLY-OWNED FACILITIES AND CONSTRUCTION COMMITMENTS:**

Information with respect to the company's share of jointly-owned electric generating facilities in service at December 31, 1988 is as follows:

	<u>Columbia Energy Center</u>	<u>Edgewater Unit No. 4</u>	<u>Kewaunee</u>
	(Thousands except for percentages)		
Ownership .....	31.8%	31.8%	41.2%
Utility plant in service .....	\$109,489	\$17,733	\$117,929
Accumulated provision for depreciation .....	\$57,720	\$10,244	\$93,487

The company's share of direct expenses for these plants is included in the corresponding operating expenses in the income statements and the company has supplied its own financing for all jointly-owned projects.

The company is not currently engaged in any major construction projects. Utility plant construction expenditures for 1989 are estimated to be approximately \$70,699,000.

(3) OTHER DEBT AND LINES OF CREDIT: To support outstanding commercial paper, the company maintains unused bank lines of credit.

of the lenders. While certain cash balances represent compensating balances for credit lines and bank services, there are no legal restrictions as to withdrawal of these funds. The majority of the lines of credit require a fee based on the unused balance.

Many of these lines may be withdrawn at the discretion

The following information relates to short-term borrowings and lines of credit for the years indicated:

	<u>1988</u>	<u>1987</u>	<u>1986</u>
	(Thousands except for percentages)		
As of end of year —			
Discount rate on outstanding commercial paper .....	9.1% to 9.2%	7.9%	6.5%
Interest rate on note payable .....	8.6%	7.0%	6.0%
Unused lines of credit .....	\$42,590	\$50,365	\$48,675
Compensating balance requirements .....	\$215	\$321	\$418
For the year —			
Maximum amount of borrowings .....	\$21,500	\$51,500	\$46,100
Average amount of borrowings .....	\$11,590	\$33,449	\$19,195
Weighted average interest rate on borrowings .....	7.8%	6.8%	6.6%

Included in the above lines of credit are agreements with commercial banks that permit the company to borrow up to \$28,600,000 at any time provided compliance with certain financial covenants is maintained. These

agreements extend for 13 months or more. As of December 31, 1988, no amounts were outstanding under these agreements.

(4) FIRST MORTGAGE BONDS: Sinking fund requirements on first mortgage bonds may be satisfied by the deposit of cash or reacquired bonds with the trustee and for certain series by the application of net expenditures for bondable property in an amount equal to 166⅔% of the annual requirements.

All series requiring cash or reacquired bonds for sinking funds purposes have been satisfied to maturity. The company has adequate unpledged property to satisfy the remaining series for at least ten years. In 1993 \$8,726,000 of 4⅞% bonds will mature.

(5) PREFERRED STOCK: The 10.50% Series Preferred Stock has a mandatory 5% annual sinking fund requirement and an additional 5% is redeemable annually at the company's option at a price of \$100 per share plus

accrued dividends. In each of the years 1988, 1987 and 1986, the company redeemed 15,000 shares to meet the sinking fund requirements, as well as 23 shares in 1986, to meet future sinking fund requirements.

(6) COMMON EQUITY: Shareholders authorized a 2 for 1 common stock split in May 1987. This action reduced the par value of common stock from \$8 per share to \$4 per share and increased the number of authorized common stock shares from 16,000,000 to 32,000,000.

In a rate order dated January 26, 1989, the PSCW authorized the company to invest additional funds in its nonutility operations in 1989, only if the company's average common equity during 1989 exceeds 52.76% of the company's total capitalization.

(7) COMMITMENTS AND CONTINGENT LIABILITIES: To ensure a long-term, reliable, low-cost supply of coal for the jointly-owned Edgewater 4 unit, the company is a party to a coal contract that contains demand charges totalling approximately \$35,000,000 for the company's share through 1994, of which approximately \$12,000,000 has been paid to date. The company is required to pay

these demand charges in future years, even if it is unable to fully utilize all contracted quantities of coal under future emission limits and acid rain legislation. In the opinion of management, any such costs incurred to meet mandatory emission limits would be considered a legitimate cost of service expense subject to recovery in rates.

**NOTES TO FINANCIAL STATEMENTS**  
**WISCONSIN PUBLIC SERVICE CORPORATION**

(8) SEGMENTS OF BUSINESS:

The following table presents information for the respective years pertaining to the company's operations segmented by lines of business. The information does not represent ratemaking treatment since the company is regulated by three jurisdictions with differing ratemaking practices.

	1988			1987			1986		
	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total
Operating revenues . . . .	\$435,958	\$168,376	\$604,334	\$429,443	\$151,013	\$580,456	\$410,514	\$181,756	\$592,270
Operating expenses —									
Operation and maintenance . . . . .	282,285	143,098	425,383	263,323	133,110	396,433	244,396	166,488	410,884
Straight-line depreciation . . . . .	44,170	6,316	50,486	43,006	6,164	49,170	41,275	5,996	47,271
Other taxes . . . . .	19,679	2,720	22,399	18,401	2,908	21,309	19,064	2,229	21,293
	<u>346,134</u>	<u>152,134</u>	<u>498,268</u>	<u>324,730</u>	<u>142,182</u>	<u>466,912</u>	<u>304,735</u>	<u>174,713</u>	<u>479,448</u>
Operating income before income taxes . . . . .	89,824	16,242	106,066	104,713	8,831	113,544	105,779	7,043	112,822
Total AFUDC . . . . .	967	55	1,022	704	27	731	848	24	872
Provisions for income tax (a) . . . . .	23,784	5,091	28,875	36,851	2,807	39,658	38,067	2,275	40,342
Operating income including AFUDC . . . .	<u>\$ 67,007</u>	<u>\$ 11,206</u>	78,213	<u>\$ 68,566</u>	<u>\$ 6,051</u>	74,617	<u>\$ 68,560</u>	<u>\$ 4,792</u>	73,352
Other income, net . . . . .			1,520			(903)			(488)
Interest expense . . . . .			23,313			20,943			21,323
Net income . . . . .			<u>\$ 56,420</u>			<u>\$ 52,771</u>			<u>\$ 51,541</u>
Identifiable assets (b) . .	<u>\$705,220</u>	<u>\$110,176</u>	\$815,396	<u>\$702,601</u>	<u>\$101,748</u>	\$804,349	<u>\$691,929</u>	<u>\$102,474</u>	\$794,403
Assets not allocated (c)			27,997			20,280			19,624
Total assets . . . . .			<u>\$843,393</u>			<u>\$824,629</u>			<u>\$814,027</u>
Construction and nuclear fuel expenditures including AFUDC . . . .	<u>\$ 59,466</u>	<u>\$ 9,375</u>	<u>\$ 68,841</u>	<u>\$ 55,536</u>	<u>\$ 7,065</u>	<u>\$ 62,601</u>	<u>\$ 49,811</u>	<u>\$ 5,736</u>	<u>\$ 55,547</u>

(a) Income taxes include amounts recorded as additional depreciation representing the estimated changes in income taxes due to using liberalized depreciation for income tax purposes. See Note 1(k).  
 (b) At December 31 and net of the respective accumulated provisions for depreciation.  
 (c) Primarily includes cash, investments, nonutility property and other receivables.

(9) QUARTERLY FINANCIAL INFORMATION (Unaudited):

	Three Months Ended			
	(Thousands except for per share data)			
	1988			
	<u>Mar.</u>	<u>June</u>	<u>Sept.</u>	<u>Dec.</u>
Operating revenues .....	\$183,795	\$126,977	\$131,035	\$162,527
Operating income .....	\$25,901	\$12,942	\$18,030	\$20,318
Net income .....	\$20,462	\$7,910	\$13,418	\$14,630
Earnings on common stock .....	\$19,557	\$7,005	\$12,513	\$13,751
Average number of shares of common stock outstanding* ...	23,201	23,201	23,201	23,201
Earnings per average share on common stock* .....	\$ .84	\$ .30	\$ .54	\$ .60
	1987			
	<u>Mar.</u>	<u>June</u>	<u>Sept.</u>	<u>Dec.</u>
Operating revenues .....	\$164,351	\$127,655	\$130,883	\$157,567
Operating income .....	\$21,889	\$14,775	\$17,256	\$19,966
Net income .....	\$16,423	\$9,898	\$11,816	\$14,634
Earnings on common stock .....	\$15,479	\$8,953	\$10,872	\$13,716
Average number of shares of common stock outstanding* ...	23,201	23,201	23,201	23,201
Earnings per average share on common stock* .....	\$ .67	\$ .39	\$ .47	\$ .58
	1986			
	<u>Mar.</u>	<u>June</u>	<u>Sept.</u>	<u>Dec.</u>
Operating revenues .....	\$186,251	\$127,720	\$120,659	\$157,640
Operating income .....	\$24,580	\$13,199	\$15,224	\$19,477
Net income .....	\$19,199	\$8,066	\$10,102	\$14,174
Earnings on common stock .....	\$17,853	\$6,961	\$9,118	\$13,217
Average number of shares of common stock outstanding* ...	23,201	23,201	23,201	23,201
Earnings per average share on common stock* .....	\$ .77	\$ .30	\$ .39	\$ .57

Because of various factors which affect the utility business, the quarterly results of operations are not necessarily comparable.

\*Adjusted to reflect 2 for 1 common stock split in June 1987.

**STATISTICS - FINANCIAL**  
**WISCONSIN PUBLIC SERVICE CORPORATION**

**Statements Of Income (Thousands)**

	<u>1988</u>	<u>1987</u>	<u>1986</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1978</u>
Operating Revenues:							
Electric .....	\$435,958	\$429,443	\$410,514	\$403,801	\$405,420	\$389,197	\$217,576
Gas .....	168,376	151,013	181,756	234,703	238,771	240,694	114,357
	<u>604,334</u>	<u>580,456</u>	<u>592,270</u>	<u>638,504</u>	<u>644,191</u>	<u>629,891</u>	<u>331,933</u>
Operating Expenses:							
Operation —							
Electric production fuels .....	134,437	132,430	132,028	125,179	125,457	127,055	63,881
Gas purchased for resale .....	120,702	109,447	141,656	190,195	198,172	202,770	89,360
Purchased power, net .....	24,887	19,109	9,015	10,070	6,276	4,597	1,241
Other .....	101,935	100,305	95,258	89,399	83,404	78,859	37,648
Maintenance .....	43,422	35,142	32,927	36,166	34,634	32,112	17,178
Depreciation —							
Straight-line provision .....	50,486	49,170	47,271	47,486	45,634	41,873	25,607
Additional depreciation .....	5,705	8,491	4,681	8,843	7,933	17,322	8,868
Taxes —							
Current federal income .....	20,042	28,604	31,825	32,198	34,364	24,851	19,169
Net investment credit .....	(2,826)	(4,040)	(2,122)	1,325	2,966	501	5,291
Current state income .....	5,954	6,603	5,958	6,696	7,672	6,862	3,898
Other .....	22,399	21,309	21,293	14,908	20,313	18,569	13,302
	<u>527,143</u>	<u>506,570</u>	<u>519,790</u>	<u>562,465</u>	<u>566,825</u>	<u>555,371</u>	<u>285,443</u>
Operating Income .....	77,191	73,886	72,480	76,039	77,366	74,520	46,490
Other Income and (Deductions):							
AFUDC, other funds .....	659	456	595	717	—	—	—
Other, net .....	823	(2,815)	(306)	(275)	(2,405)	(665)	(29)
Income taxes .....	697	1,912	(182)	125	1,212	535	26
Gains on bonds reacquired .....	—	—	—	195	449	221	333
	<u>2,179</u>	<u>(447)</u>	<u>107</u>	<u>762</u>	<u>(744)</u>	<u>91</u>	<u>330</u>
Income Before Interest Expense ..	79,370	73,439	72,587	76,801	76,622	74,611	46,820
Interest Expense:							
Interest on long-term debt .....	21,583	18,309	19,914	16,834	16,205	19,517	14,290
AFUDC, borrowed funds .....	(363)	(275)	(277)	(350)	(154)	(263)	—
Other interest .....	1,730	2,634	1,409	2,902	4,301	3,763	406
	<u>22,950</u>	<u>20,668</u>	<u>21,046</u>	<u>19,386</u>	<u>20,352</u>	<u>23,017</u>	<u>14,696</u>
Net Income .....	56,420	52,771	51,541	57,415	56,270	51,594	32,124
Preferred Stock							
Dividend Requirements .....	3,594	3,751	4,392	5,519	5,789	5,974	4,812
Earnings On Common Stock .....	<u>\$52,826</u>	<u>\$ 49,020</u>	<u>\$ 47,149</u>	<u>\$ 51,896</u>	<u>\$ 50,481</u>	<u>\$ 45,620</u>	<u>\$ 27,312</u>

**Income Statistics**

Common Stock:							
Shares outstanding, Dec. 31* ...	23,200,552	23,200,552	23,200,552	23,200,552	23,644,412	23,644,412	21,627,992
Shares outstanding, Avg.* .....	23,200,552	23,200,552	23,200,552	23,347,514	23,644,412	23,454,062	21,570,284
Earnings per share†* .....	\$2.28	\$2.11	\$2.03	\$2.22	\$2.14	\$1.95	\$1.27
Dividends paid per share* .....	\$1.56	\$1.52	\$1.465	\$1.355	\$1.22	\$1.11	\$0.79
Times Interest Earned:							
Before income taxes .....	4.49	5.13	5.17	6.12	6.27	5.32	5.72
After income taxes .....	3.33	3.41	3.34	3.77	3.74	3.22	3.19
Times Interest and Preferred							
Dividends Earned .....	2.90	2.91	2.78	2.97	2.92	2.56	2.40

\*Adjusted to reflect 2 for 1 common stock split in June 1987.

†Based on weighted average shares outstanding.

**STATISTICS - FINANCIAL**  
WISCONSIN PUBLIC SERVICE CORPORATION

**Balance Sheets (Thousands)**

	<u>1988</u>	<u>1987</u>	<u>1986</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1978</u>
<b>Assets</b>							
Utility Plant:							
Electric .....	\$1,155,645	\$1,111,987	\$1,076,400	\$1,038,867	\$1,000,596	\$ 963,787	\$617,966
Gas .....	<u>143,617</u>	<u>135,530</u>	<u>131,556</u>	<u>126,716</u>	<u>122,742</u>	<u>117,309</u>	<u>98,813</u>
	1,299,262	1,247,517	1,207,956	1,165,583	1,123,338	1,081,096	716,779
Less - accumulated depreciation ..	<u>682,722</u>	<u>635,454</u>	<u>591,727</u>	<u>544,319</u>	<u>494,931</u>	<u>445,823</u>	<u>257,420</u>
	616,540	612,063	616,229	621,264	628,407	635,273	459,359
Nuclear decommissioning trusts,							
at cost .....	31,715	25,502	—	—	—	—	—
Nuclear fuel, net .....	<u>20,013</u>	<u>18,886</u>	<u>19,780</u>	<u>19,857</u>	<u>12,805</u>	<u>10,694</u>	<u>14,918</u>
Net utility plant .....	668,268	656,451	636,009	641,121	641,212	645,967	474,277
Investments .....	17,507	20,367	19,573	13,464	10,012	10,290	11,884
Current assets .....	137,809	130,670	142,030	167,011	137,905	131,776	74,544
Deferred charges .....	<u>19,809</u>	<u>17,141</u>	<u>16,415</u>	<u>13,875</u>	<u>4,167</u>	<u>4,587</u>	<u>8,431</u>
Total assets .....	<u>\$ 843,393</u>	<u>\$ 824,629</u>	<u>\$ 814,027</u>	<u>\$ 835,471</u>	<u>\$ 793,296</u>	<u>\$ 792,620</u>	<u>\$569,136</u>

**Capitalization and Liabilities**

Common stock and premium .....	\$ 143,187	\$ 143,187	\$ 143,187	\$ 143,187	\$ 145,923	\$ 145,909	\$125,873
Retained earnings .....	227,981	216,914	203,258	191,091	175,686	154,184	81,679
Preferred stock with no mandatory redemption .....	51,200	51,200	51,200	51,200	51,200	51,200	51,200
Preferred stock with mandatory redemption .....	2,145	3,645	5,144	20,147	21,684	24,750	14,250
Long-term debt .....	<u>256,264</u>	<u>254,867</u>	<u>228,631</u>	<u>244,362</u>	<u>210,481</u>	<u>222,092</u>	<u>194,440</u>
Total capitalization .....	680,777	669,813	631,420	649,987	604,974	598,135	467,442
Short-term borrowings .....	21,500	13,000	33,400	28,995	36,470	39,500	8,700
Bond sinking fund requirements and maturing first mortgage bonds .....	—	—	5,062	—	—	9,125	2,366
Other liabilities and credits .....	<u>141,116</u>	<u>141,816</u>	<u>144,145</u>	<u>156,489</u>	<u>151,852</u>	<u>145,860</u>	<u>90,628</u>
Total capitalization and liabilities .....	<u>\$ 843,393</u>	<u>\$ 824,629</u>	<u>\$ 814,027</u>	<u>\$ 835,471</u>	<u>\$ 793,296</u>	<u>\$ 792,620</u>	<u>\$569,136</u>

Book Value Per Share, Dec. 31* ..	\$16.00	\$15.52	\$14.94	\$14.41	\$13.60	\$12.69	\$9.60
Return On Average Equity .....	14.4%	14.0%	13.9%	15.9%	16.2%	15.9%	13.7%
Capitalization Ratios							
Common stock and premium ...	21.0	21.4	22.7	22.0	24.1	24.4	26.9
Retained earnings .....	33.5	32.4	32.2	29.4	29.0	25.8	17.5
Preferred stock .....	7.8	8.1	8.9	11.0	12.1	12.7	14.0
Long-term debt .....	37.6	38.1	36.2	37.6	34.8	37.1	41.6
Percent Long-Term Debt to							
Net Utility Plant .....	38.3	38.8	35.9	39.3	32.8	34.4	41.0
Average Bond Rate .....	8.1	8.2	7.9	8.3	7.6	7.2	6.9
Average Preferred Stock Rate .....	6.5	6.6	6.7	7.5	7.6	7.8	7.3
Shareholders — Common stock ...	26,858	27,243	27,240	29,687	31,440	33,857	38,412
Preferred stock .....	5,164	5,402	5,756	6,219	6,553	6,885	8,790
Number of Employees, Dec. 31 ...	2,466	2,495	2,497	2,485	2,390	2,267	1,837

\*Adjusted to reflect 2 for 1 common stock split in June 1987.

**STATISTICS - OPERATING**  
**WISCONSIN PUBLIC SERVICE CORPORATION**

	<u>1988</u>	<u>1987</u>	<u>1986</u>	<u>1985</u>	<u>1984</u>	<u>1983</u>	<u>1978</u>
<b>Electric Operations</b>							
Operating Revenues (Thousands):							
Residential .....	\$145,087	\$139,940	\$138,365	\$137,502	\$135,833	\$132,810	\$ 76,254
Commercial and industrial .....	222,157	223,133	212,180	207,772	209,468	201,037	112,716
All other .....	<u>68,714</u>	<u>66,370</u>	<u>59,969</u>	<u>58,527</u>	<u>60,119</u>	<u>55,350</u>	<u>28,606</u>
Total electric revenues .....	\$435,958	\$429,443	\$410,514	\$403,801	\$405,420	\$389,197	\$217,576
Kwh Sales (Thousands) .....	8,840,298	8,351,062	7,772,905	7,445,019	7,469,964	7,113,304	6,124,585
Number of Customers, Dec. 31:							
Residential .....	285,387	281,111	276,407	271,407	267,461	263,362	242,904
Commercial and industrial .....	31,820	31,262	30,673	30,185	29,702	29,228	25,387
All other .....	<u>488</u>	<u>485</u>	<u>479</u>	<u>478</u>	<u>475</u>	<u>450</u>	<u>960</u>
Total electric customers .....	317,695	312,858	307,559	302,070	297,638	293,040	269,251
Annual Average Use (Kwh):							
Residential .....	7,616	7,294	7,340	7,288	7,269	7,219	7,069
Commercial and industrial .....	152,225	148,158	141,793	136,764	138,244	133,442	136,044
Average Kwh Price (Cents):							
Residential .....	6.73	6.89	6.89	7.01	7.05	7.04	4.52
Commercial and industrial .....	4.63	4.88	4.93	5.08	5.14	5.19	3.30
Production Data:							
System Capacity (Kw):							
Steam .....	1,269,240	1,269,240	1,269,240	1,269,240	1,269,240	1,269,240	967,640
Nuclear .....	221,000	221,000	221,000	221,000	221,000	221,000	221,000
Hydraulic .....	64,236	64,236	64,236	64,236	64,236	62,156	62,156
Combustion turbine .....	156,200	156,200	156,200	156,200	156,200	156,200	156,200
Other .....	<u>4,040</u>	<u>4,040</u>	<u>4,040</u>	<u>4,040</u>	<u>4,040</u>	<u>4,000</u>	<u>4,000</u>
Total .....	1,714,716	1,714,716	1,714,716	1,714,716	1,714,716	1,712,596	1,410,996
Interest in Wisconsin River Power Company .....							
	<u>11,667</u>	<u>11,667</u>	<u>11,667</u>	<u>11,667</u>	<u>11,667</u>	<u>11,667</u>	<u>11,667</u>
Total system capacity .....	1,726,383	1,726,383	1,726,383	1,726,383	1,726,383	1,724,263	1,422,663
Generation and Purchases (Thousands of Kwh):							
Steam .....	6,313,838	6,091,075	5,916,885	5,448,302	5,443,590	5,246,683	4,348,475
Nuclear .....	1,612,880	1,651,626	1,588,287	1,523,780	1,569,519	1,527,660	1,606,997
Hydraulic .....	198,150	206,397	340,488	352,000	307,911	348,813	317,830
Purchases .....	<u>1,371,811</u>	<u>993,319</u>	<u>459,468</u>	<u>691,002</u>	<u>649,557</u>	<u>534,262</u>	<u>356,097</u>
Total .....	9,496,679	8,942,417	8,305,128	8,015,084	7,970,577	7,657,418	6,629,399
System peak — firm (Kw) .....	1,509,500	1,381,300	1,292,600	1,219,700	1,202,900	1,166,000	1,053,100
Annual load factor .....	70.24%	72.72%	71.93%	74.03%	73.57%	72.67%	69.10%
<b>Gas Operations</b>							
Operating Revenues (Thousands):							
Residential .....	\$ 97,184	\$ 84,529	\$ 91,513	\$100,078	\$ 97,114	\$ 97,053	\$ 45,386
Commercial and industrial .....	58,251	54,160	82,755	130,642	139,662	141,314	68,230
All other .....	<u>12,941</u>	<u>12,324</u>	<u>7,488</u>	<u>3,983</u>	<u>1,995</u>	<u>2,327</u>	<u>741</u>
Total gas revenues .....	\$168,376	\$151,013	\$181,756	\$234,703	\$238,771	\$240,694	\$114,357
Therm Sales (Thousands) .....	313,646	272,939	351,014	451,419	470,912	460,488	522,131
Transportation (Therms-Thousands) .....	<u>187,452</u>	<u>178,754</u>	<u>99,407</u>	<u>28,730</u>	<u>—</u>	<u>—</u>	<u>—</u>
Total gas volume .....	501,098	451,693	450,421	480,149	470,912	460,488	522,131
Number of Customers, Dec. 31:							
Space heating .....	161,615	158,229	154,672	150,833	147,646	144,332	126,750
All other .....	<u>7,754</u>	<u>7,949</u>	<u>8,241</u>	<u>8,788</u>	<u>9,376</u>	<u>10,423</u>	<u>15,352</u>
Total gas customers .....	169,369	166,178	162,913	159,621	157,022	154,755	142,102

## SHAREHOLDER INFORMATION

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### EXECUTIVE OFFICE

700 North Adams Street  
P.O. Box 19001  
Green Bay, Wisconsin 54307  
Telephone: (414) 433-1598 for general information  
or (414) 433-1050 for shareholder information.

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### COMMON STOCK

Listed on New York and Midwest Stock Exchanges.  
Ticker Symbol: WPS  
Transfer Agent and Registrar:  
First Wisconsin Trust Company.  
P.O. Box 2077, Milwaukee, Wisconsin 53201  
As of December 31, 1988, there were 26,858 common  
stock shareholders of record.

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### ANNUAL SHAREHOLDERS' MEETING

Midway Motor Lodge  
780 Packer Drive  
Green Bay, Wisconsin  
Thursday, May 4, 1989 at 10:30 a.m.

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### ANNUAL SEC REPORT FORM 10-K

This report (not including exhibits thereto) will be  
available without charge about April 1, 1989 to shareholders  
who make requests to:

Robert H. Knuth, Secretary  
700 North Adams Street  
P.O. Box 19001  
Green Bay, Wisconsin 54307

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### PREFERRED STOCK

Over-the-counter markets. Transfer Agent and Registrar:  
First Wisconsin Trust Company, Milwaukee.

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### WISCONSIN UTILITY INVESTORS

WUI is an independent, non-profit organization  
representing the collective voice of utility shareholders  
before regulators, legislators and the general public. WUI  
invites the participation of all utility investors.

For information write:  
Wisconsin Utility Investors, Inc.  
161 W. Wisconsin Avenue  
Suite 6058  
Milwaukee, Wisconsin 53203  
or telephone: (414) 221-3849

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*50-305 8903280120 3/22/89*



Wisconsin Public Service Corporation  
700 North Adams Street  
P.O. Box 19001  
Green Bay, Wisconsin 54307