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# PUBLIC SERVICE COMMISSION OF WISCONSIN



**Biennial Report**  
July 1, 1948, to June 30, 1950

**JOHN C. DOERFER**  
Chairman

**W. F. WHITNEY**  
Commissioner

**EDWARD T. KAVENY**  
Secretary

**SAMUEL BRYAN**  
Commissioner

**ALVIN H. OLSON**  
Assistant Secretary

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## FOREWORD

Section 195.03(22), Wisconsin Statutes, provides that the Public Service Commission of Wisconsin "shall, on or before the first Monday in December in each even-numbered year, make a report to the governor of the transactions of its office for the two preceding fiscal years, and containing such information, suggestions, or recommendations in respect to the matters under its charge as it may deem proper."

The attached report is an outline of the Commission's work from July 1, 1948, to June 30, 1950. As in previous years, a statistical report on public utilities, railroads, and motor transportation industries will be issued in a separate bulletin.

### PUBLIC SERVICE COMMISSION OF WISCONSIN

JOHN C. DOERFER  
*Chairman*

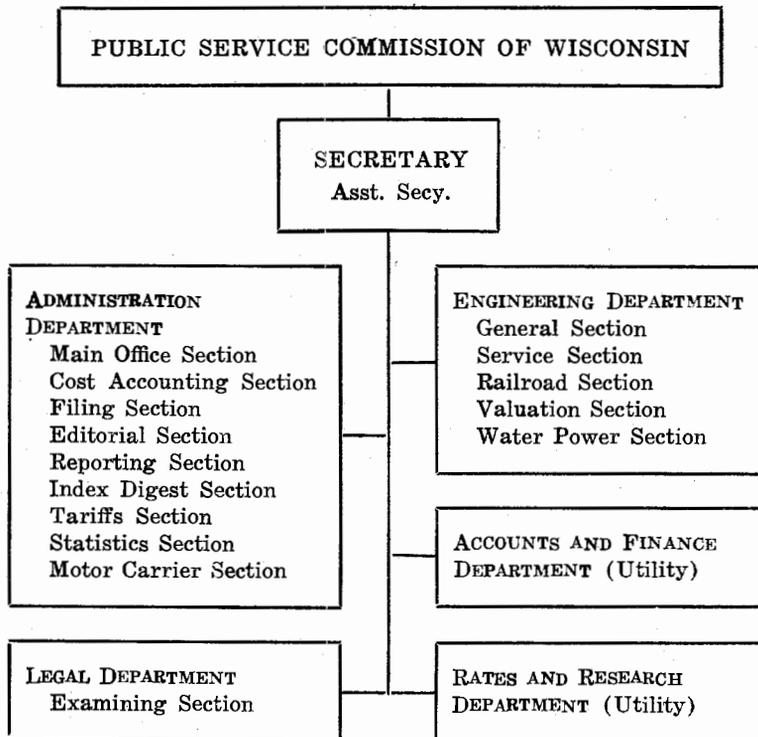
W. F. WHITNEY  
*Commissioner*

SAMUEL BRYAN  
*Commissioner*

EDWARD T. KAVENY  
*Secretary*

Madison, Wisconsin  
December 4, 1950

**ORGANIZATION CHART**  
of  
**PUBLIC SERVICE COMMISSION OF WISCONSIN**



PUBLIC SERVICE COMMISSION OF WISCONSIN

PERSONNEL

John C. Doerfer, chairman<sup>1</sup>  
W. F. Whitney, commissioner  
Samuel Bryan, commissioner  
Edward T. Kaveny, secretary  
Alvin H. Olson, assistant secretary

*Administration Department*

Edward T. Kaveny, chief  
Alvin H. Olson, assistant chief  
Main Office Section—Florence R. Bratlie  
Cost Accounting Section—John F. Goetz  
Filing Section—Faye M. Robbins  
Editorial and Index Digest Section  
Reporting Section—(Supervised by Secretary)  
Tariffs Section—Ivan A. Sherman  
Statistics Section—C. E. Schreiber  
Motor Carrier Section—J. H. Justesen

*Legal Department*

William E. Torkelson<sup>2</sup>

*Engineering Department*

George P. Steinmetz, chief  
Warren Oakey, assistant chief  
General Section—Ralph E. Purucker  
Service Section—W. H. Damon  
Railroad Section—H. F. Muehrcke  
Valuation and Continuing Property Section—Warren  
Oakey  
Water Power Section—W. H. Cartwright

*Accounts and Finance Department*

A. R. Colbert, chief  
Ralph S. Butler, assistant chief

*Rates and Research Department*

Henry J. O'Leary, chief

<sup>1</sup>The Commission, at the end of the biennium, included Messrs. Doerfer, Whitney, and Bryan. Mr. Doerfer began his duties with the Commission on July 11, 1949. He succeeded Timothy Brown who served from April 1, 1949 to July 4, 1949 when he resigned and was appointed to the State Supreme Court. Mr. Brown succeeded Lynn H. Ashley, whose services ended on March 31, 1949.

<sup>2</sup>Mr. Torkelson began his duties on August 1, 1949, succeeding J. Ward Rector, who resigned on May 14, 1949.

## THE COMMISSION

The Public Service Commission of Wisconsin includes three commissioners, a secretary, an assistant secretary, and a staff of about 125 members. The Commissioners are John C. Doerfer, chairman, W. F. Whitney, and Samuel Bryan.

Chairman John C. Doerfer was born in Milwaukee, Wisconsin. He moved to West Allis in 1907, attending grade school and high school there. He was graduated from the University of Wisconsin in 1928 with a B. A. degree from the School of Commerce, and from the Marquette University Law School, J. D. cum laude, in 1934. He worked as an accountant for the Price-Waterhouse and the Cosden Oil Company for 3 years. Entered private practice of law in the city of West Allis. Elected City Attorney in 1940 by popular vote for a 4-year term and re-elected in 1944 and 1948 without opposition. Admitted to practice before the United States Supreme Court in 1944. He was appointed to the Public Service Commission of Wisconsin by Governor Rennebohm on July 11, 1949 and was unanimously confirmed by the Senate. Elected chairman by fellow commissioners.

Commissioner W. F. Whitney was born in Whitewater, Wisconsin. He was graduated from Whitewater State Normal and the University of Wisconsin law school. For 4 years he served as principal of the Waukesha high school. He practiced law in Wenatchee, Washington, was state's attorney for Chelan County, Washington, for several years, and referee in bankruptcy there for 4 years. During the next decade, Mr. Whitney was active in the retail automobile business, and later founded a wholesale and retail automobile distributorship corporation in Wisconsin, which he headed. His term as commissioner began on October 5, 1939. On March 5, 1941 his reappointment by Governor Julius P. Heil for an additional 6-year term was confirmed by the Senate. Reappointment by Governor Goodland for the next 6-year term was confirmed by the Senate April 3, 1947.

Commissioner Samuel Bryan was born in Washington, D. C. After graduation from high school in Washington he attended Leland Stanford, Jr., University at Palo Alto, California, receiving the B. A. degree in 1910 and the M. A. degree in 1911. During the following year he was a graduate scholar at the University of Wisconsin. In the summer of 1912 he became an employee of the Railroad Commission of Wisconsin through civil service examination and continued in its employ as an examiner until 1930 when he became an assistant attorney general of Wisconsin. In 1933 he returned to the Commission, the name of which had been changed to the Public Service Commission, and continued his work as law examiner until appointed to the Commission by Governor Goodland in 1945. His appointment was unanimously confirmed by the Senate.

Edward T. Kaveny has served as secretary since July 1, 1941 and was appointed following a competitive civil service examination in which he ranked first. He was born in Pawtucket, R. I., attended La Salle Academy, Providence, R. I., and Holy Cross College, Worcester, Mass. He was a member of the editorial staff of newspapers in Providence, Pawtucket, and Woonsocket, R. I.; Waterbury, Conn.; Syracuse, N. Y.; Detroit, Mich.; and Milwaukee. He entered state service in 1935 as public relations director for various state departments. In 1937, he was appointed an assistant director of the Beverage Tax Division and public relations director of the State Treasury Department. In 1938, he became editor of the Tax Commission and liaison assistant to the director of the Tax Commission. In 1939, he returned to the Treasury Department as editor and administrative assistant of the Beverage and Cigarette Tax Division. He is chairman of the state and federal Secretarial Offices Committee of the National Association of Railroad and Utility Commissioners.

## GENERAL

## History

The Public Service Commission of Wisconsin affects the daily life of every Wisconsin citizen. From the time the citizen arises in the morning until he retires for the night, his activities are influenced by some organization which is under Commission jurisdiction.

The rates the citizen pays for electric, water, and gas service are approved by the Commission. The service he receives and the fares he pays on railroads and busses are affected by Commission action. The messages he sends by telephone or telegraph are transmitted by companies under the jurisdiction of the Commission. The dams used to create water reservoirs for power are subject to Commission regulation.

When the Commission was first created in 1874 as the Board of Railroad Commissioners, it had jurisdiction chiefly over railroad rates. During the 76 years of its existence the Commission has been given new duties by the Legislature until it now comprises three full-time commissioners with jurisdiction over electric, gas, water, heating, and telephone utilities; steam and electric railroads; express and telegraph companies; water powers and navigation; and certain phases of motor transportation for hire.

## Jurisdictional totals

Although originally the Commission regulated only a few steam railroads, it now is concerned with a total of 1,092 public utilities, 10,217 motor carriers, 20 steam railroads, and other businesses as follows:

|  |       |
|--|-------|
| Common motor carriers of passengers and property | 390   |
| Contract motor carriers of property              | 9,827 |
| Dams in the state                                | 1,078 |
| Electric railways                                | 5     |
| Electric utilities                               | 132   |
| Express companies                                | 1     |
| Heating utilities                                | 6     |
| Gas utilities                                    | 22    |
| Steam railways                                   | 20    |
| Telephone utilities                              | 535   |
| Telegraph companies                              | 1     |
| Common carriers of property by water             | 3     |
| Sleeping car companies                           | 1     |
| Urban trackless trolley systems                  | 2     |
| Water utilities                                  | 392   |

12,415

## Scope of work

During the past biennium the Commission held more than 3,000 public hearings and issued more than 8,500 orders. The hearings required the taking of more than 18,000,000 words of testimony. About 6,600 new cases were opened during the biennium and an equal number closed.

## FORMAL CASES

|  | Opened during biennium |         | Closed during biennium |         |
|--|------------------------|---------|------------------------|---------|
|  | 1948-49                | 1949-50 | 1948-49                | 1949-50 |
| Railroad.....                          | 113                    | 144     | 111                    | 116     |
| Utility.....                           |                        |         |                        |         |
| General.....                           | 311                    | 273     | 337                    | 260     |
| Securities.....                        | 36                     | 49      | 39                     | 44      |
| New plants and additions.....          | 154                    | 98      | 156                    | 88      |
| Water power.....                       | 60                     | 33      | 35                     | 36      |
| Motor.....                             |                        |         |                        |         |
| General.....                           | 34                     | 47      | 33                     | 46      |
| Common motor carrier certificates..... | 56                     | 49      | 53                     | 50      |
| Contract motor carrier licenses.....   | 1608                   | 1425    | 1664                   | 1398    |
| Amendment of operating rights.....     | 1100                   | 1026    | 1086                   | 1045    |
| Total.....                             | 3472                   | 3144    | 3514                   | 3083    |

## ORDERS ISSUED

|                    | 1948-49 | 1949-50 |
|--------------------|---------|---------|
| Railroad.....      | 137     | 161     |
| Utility.....       | 574     | 519     |
| Water power.....   | 55      | 52      |
| Motor carrier..... | 3800    | 3223    |
| Total.....         | 4566    | 3955    |

## HEARINGS

|                                  | 1948-49 | 1949-50 |
|----------------------------------|---------|---------|
| Railroad.....                    | 137     | 160     |
| Utility.....                     |         |         |
| General.....                     | 334     | 311     |
| Securities.....                  | 4       | 0       |
| New plants and additions.....    | 38      | 32      |
| Water power.....                 | 38      | 41      |
| Motor.....                       |         |         |
| General.....                     | 59      | 79      |
| Common carrier certificates..... | 89      | 88      |
| Contract carrier licenses.....   | 971     | 658     |
| Total.....                       | 1670    | 1369    |

## INFORMAL CASES

|   | 1948-49 | 1949-50 |
|---|---------|---------|
| Informal railroad, utility, and water power cases ..... | 1084    | 1137    |

## SUITS AGAINST COMMISSION

|             | 1948-49 | 1949-50 |
|-------------|---------|---------|
| Total ..... | 15      | 10      |

## DEPARTMENTS

For the efficient conduct of its business, the Commission staff is divided into five departments, each with specifically assigned duties: Administration, Legal, Engineering, Accounts and Finance, and Rates and Research.

## ADMINISTRATION DEPARTMENT

**Main Office Section:** The administrative office and general information bureau of the Commission.

**Cost Accounting Section:** Makes monthly and annual assessments of regulatory expense against the utilities or railroads involved, prepares budgets and pay rolls, audits expenditures, collects and deposits receipts, maintains records of Commission finances and personnel, coordinates travel of staff members, and issues and inventories equipment and supplies.

**Filing Section:** Keeps all files and records of the Commission's work except finance and personnel, employs a follow-up system on files and correspondence, handles mailing and distribution of Commission notices and orders.

**Editorial and Index Digest Section:** Prepares material for publication, edits the orders of the Commission, and digests and indexes them for publication in book form.

**Reporting Section:** Records official word-by-word proceedings at hearings and prepares transcripts.

**Statistics Section:** Audits books and reports and analyzes costs of railroads and motor carriers and maintains files of general statistics and data on the transportation industry;

prepares statistical, cost accounting, and general economic data for use in matters before the Commission, the Interstate Commerce Commission, other state and federal commissions and departments, courts, and legislative bodies.

**Tariffs Section:** Investigates transportation rates and fares of express, truck, and bus lines, streetcar and trackless-trolley systems, and electric and steam railroads; maintains a complete file of freight tariffs and passenger fares; represents the state in Interstate Commerce Commission rate proceedings; investigates telegraph rates; and audits bills upon request.

**Motor Carrier Section:** Handles preliminary work in connection with motor carrier authorities and complaints and maintains liaison with other sections of the Commission and State Departments, involving motor carrier regulations. Centralizes and coordinates motor carrier functions.

#### LEGAL DEPARTMENT

Advises the Commission as to procedure in all cases pending before it; conducts formal hearings; prepares notices of hearings; checks all orders issued by the Commission for conformity with legal requirements and as to their validity; handles all litigation in which the Commission may be a party; assists in the participation by the Commission in proceedings before federal agencies and departments involving subject matters under the Commission's jurisdiction; advises and assists the Commission's staff in the preparation and presentation of evidence in proceedings before the Commission or such federal agencies.

Representatives of this department and Commissioners also sit as members of Interstate Commerce Commission joint boards.

#### ENGINEERING DEPARTMENT

This department provides engineering services for the Commission in transportation, water-power, and utility matters, and does similar work for other state departments upon request.

The work includes valuations of utility property for rate, security issue, and acquisition purposes; establishment of continuing property records of utility property for use by the utilities and the Commission in many regulatory matters; investigations of complaints and inquiries concerning, and periodic inspections of telephone, gas, electric, street-car, bus, truck, and railroad service as well as the safety of electric lines and equipment; investigations of utility applications to add facilities, make interconnections, and integrate operations; and investigations of water-power and navigation matters such as lake levels, obstructions in navigable waters, measurement of stream flow, and proposed plans for proposed water-power structures and for their operation.

#### ACCOUNTS AND FINANCE DEPARTMENT

The accounts and finance department audits books and reports of electric, telephone, gas, and water utilities; investigates and studies applications of utilities to issue stocks, bonds, and other securities; and investigates financial practices of utilities.

#### RATES AND RESEARCH DEPARTMENT

This department investigates and designs rates and rules and analyzes costs of telephone, electric, gas, and water utilities; prepares technical reports and recommendations for the examining section and the Commissioners in connection with formal utility cases; handles complaints involving utility rates and rules and extension of service to prospective customers in the existing territory of utilities; investigates applications of electric utilities to extend rural distribution lines; collects, analyzes, and furnishes information and data on the utility industry; makes investigations of economic conditions affecting the utility industry; and maintains a file of electric, telephone, gas, and water rates.

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## FINANCES

The Commission has four principal sources of revenue with which it finances its work:

1. To pay expenses for which no other provision has been made, the state makes a general legislative appropriation to the Commission.
2. To defray the expenses of regulating the rates, service, construction, finances, and security issues of telephone, electric, gas, and water utilities, whether privately or municipally owned, the Commission makes an assessment of costs of particular investigations against the investigated utility up to  $\frac{4}{5}$  of 1 percent of the gross intrastate operating revenues of the utility in the previous calendar year. A similar assessment is made in railroad investigations.
3. To meet costs incurred in utility regulation that cannot be ascribed to a particular investigation, the Commission makes a so-called remainder assessment each year against all Wisconsin utilities which may not exceed  $\frac{1}{5}$  of 1 percent of the gross intrastate operating revenues for the previous year.
4. To provide for regulation of truck and bus-line operating authorities, rates, and service, a specific legislative appropriation is available.

Details of Commission finances are shown in the following table.

## RECEIPTS

|   | 1948-49      | 1949-50      |
|---|--------------|--------------|
| General Legislative Appropriation -----             | \$112,100.00 | \$ 56,291.00 |
| Bonus Appropriation -----                           | 8,161.03     | 3,007.09     |
| Emergency Board Appropriation -----                 | 9,503.00     | 921.11       |
| Deficiency Appropriation -----                      | 7,300.00     | -----        |
| Total Appropriation -----                           | \$137,064.03 | \$ 60,219.20 |
| Motor Transportation Legislative Appropriation----- | \$143,000.00 | \$167,630.00 |
| Bonus Appropriation -----                           | 18,750.58    | 17,565.97    |
| Emergency Board Appropriation -----                 | 6,445.00     | 975.00       |
| Deficiency Appropriation -----                      | 3,000.00     | -----        |
| Total Appropriation -----                           | \$171,195.58 | \$186,170.97 |
| Direct Charges Against                              |              |              |
| Utilities -----                                     | \$ 68,876.84 | \$ 74,487.20 |
| Railroads -----                                     | 3,058.56     | 5,323.72     |
| Remainder Assessments Against                       |              |              |
| Utilities -----                                     | 199,838.54   | 216,671.89   |
| Railroad -----                                      | -----        | 52,515.00    |
| Fees for Removal of Material—Outlying Waters        | -----        | 390.00       |
| Total -----   | \$271,773.94 | \$349,387.81 |
| Total Receipts -----                                | \$580,033.55 | \$595,777.98 |

## DISBURSEMENTS

|                               |              |              |
|-------------------------------|--------------|--------------|
| Utility -----                 | \$304,864.08 | \$316,486.09 |
| Railroad Transportation ----- | 60,742.91    | 73,857.40    |
| Water Power -----             | 39,070.25    | 44,344.02    |
| Motor Transportation -----    | 173,648.22   | 164,610.28   |
| Total -----                   | \$578,325.46 | \$599,297.79 |

## COLLECTIONS FOR GENERAL STATE FUND

|  |              |              |
|--|--------------|--------------|
| Utilities Securities Fees (Public Service Cor-<br>porations) ----- | \$ 48,102.86 | \$ 73,924.31 |
| Water Power and Engineering Fees -----                             | 1,066.15     | 1,261.84     |
| Copy Work and Sale of Printed Matter -----                         | 2,644.01     | 2,187.66     |
| Direct Charges—General State Fund -----                            | 259.89       | -----        |
| Total -----  | \$ 52,072.91 | \$ 77,373.81 |

## COLLECTIONS FOR STATE HIGHWAY FUND

|                                 |              |              |
|---------------------------------|--------------|--------------|
| Motor Carrier Filing Fees ----- | \$ 35,210.00 | \$ 31,775.00 |
|---------------------------------|--------------|--------------|

## UTILITIES

## General

Wisconsin utilities have been especially active during the past biennium. Hundreds of companies have made wage and rate adjustments. The expansion of facilities to overcome shortages caused by World War II has continued until facilities are now available to meet normal growth requirements.

## Utility extensions and changes

During the biennium electric utilities have been authorized to add Diesel installations at eight locations. Twelve steam generating stations or additions to existing steam

facilities have been authorized and four hydroelectric permits have been granted. Large amounts of hydroelectric energy will be produced by four dams constructed by private corporations and cooperative organizations. Additional installations are planned and barring unforeseen contingencies it is anticipated that adequate facilities to handle probable loads will continue to be available. In addition to the increased production, several interconnections have been made between utilities which will permit the most effective use of such production facilities. The transmission systems are being constantly strengthened and the distribution systems are being expanded.

The improved standard of living and public health requirements are creating a demand for the installation of water utility plants in numerous locations where none have formerly existed and 85 authorizations covering such installations as well as important additions to plant and distribution equipment were issued.

Current economic conditions are creating problems for all telephone utilities, but these problems are much more acute for the smaller companies. Authorization for the abandonment of 49 such companies was granted with the provision that service be continued and improved by the larger organizations' taking over the respective areas. Authorization was also issued covering the sale of 27 relatively small companies to other operators. The trend to dial switching equipment has continued unabated during the biennium, and a large part of the state is now served by such facilities.

The biennium witnessed the rapid expansion in the use of natural gas in the southern and eastern industrial portions of the state. Numerous certificates authorizing the substitution of natural gas for manufactured gas and for conversion of customers' equipment, so that the new gas could be efficiently burned, have been issued. In sections of the state beyond the limits of the present natural gas transmission mains, liquefied petroleum gas is rapidly supplanting manufactured gas. To a considerable extent it is expected that the liquefied petroleum gas facilities will serve as a supplemental and emergency gas source when and if natural gas is more widely distributed.

**Rate changes**

Again increased operating expenses have caused higher rates to be paid by customers of Wisconsin utilities. Yet Wisconsin rates remain lower than the average for the United States.

*Rate Reductions*

Substantial reductions in gas rates made during the second half of the biennium, after natural gas was introduced, accounted for 84 percent of total rate reductions during the biennium. In the following table there is some duplication in the reporting of customers benefited because in certain instances more than one reduction was made to the same customer.

| July 1, 1948, to June 30, 1949 | Approximate<br>Reductions | Customers<br>Benefited |
|--------------------------------|---------------------------|------------------------|
| Electric -----                 | \$ 16,460                 | 1,820                  |
| Telephone -----                | 105,000                   | 9,846                  |
| Water -----                    | 7,635                     | 71                     |
| Gas -----                      | 818                       | 39                     |
| <b>Total -----</b>             | <b>\$ 129,913</b>         | <b>11,776</b>          |
| <hr/>                          |                           |                        |
| July 1, 1949, to June 30, 1950 |                           |                        |
| Electric -----                 | \$ 724,125                | 285,131                |
| Telephone -----                | 321                       | 107                    |
| Water -----                    | 3,672                     | 1,946                  |
| Gas -----                      | 4,537,682                 | 697,280                |
| <b>Total -----</b>             | <b>\$5,265,800</b>        | <b>984,464</b>         |

*Rate Increases*

Rate increases authorized totaled almost \$16 million during the biennium, the greater part of which took place during the first half of the period. During the last half of the biennium rate increases authorized were slightly less than the reductions made during the same period.

|                                | Approximate<br>Annual Increases<br>Authorized |
|--------------------------------|---|
| July 1, 1948, to June 30, 1949 |   |
| Electric -----                 | \$ 4,099,118                                  |
| Telephone -----                | 3,571,301                                     |
| Water -----                    | 668,779                                       |
| Gas -----                      | 2,740,304                                     |
| Heating -----                  | 5,790   |
| Total -----                    | <u>\$11,085,292</u>                           |
| July 1, 1949, to June 30, 1950 |   |
| Electric -----                 | \$ 1,359,937                                  |
| Telephone -----                | 3,230,091                                     |
| Water -----                    | 225,111                                       |
| Gas -----                      | 94,727  |
| Total -----                    | <u>\$ 4,909,866</u>                           |

#### Wisconsin and national electric rates for residential use

The average cost of electricity per kilowatt-hour consumed by residential customers in Wisconsin in 1949 was 11 percent below the average for the entire country. Wisconsin residential customers used 17 percent more kilowatt-hours per customer than the national average and paid a slightly higher average bill.

The averages for the past 10 years are tabulated below:

|            | RESIDENTIAL ELECTRIC REVENUE AND CONSUMPTION<br>RATIOS WISCONSIN AND UNITED STATES, 1940-1949 |                  |                                |                  |                         |                  |
|------------|---|------------------|--------------------------------|------------------|-------------------------|------------------|
|            | Revenue per<br>Kilowatt-Hour  |                  | Kilowatt-Hours<br>per Customer |                  | Revenue per<br>Customer |                  |
|            | Wisconsin   | United<br>States | Wisconsin                      | United<br>States | Wisconsin               | United<br>States |
| 1940 ----- | 3.34c   | 3.84c            | 1,064                          | 952              | \$35.51                 | \$36.56          |
| 1941 ----- | 3.25  | 3.73             | 1,123                          | 986              | 36.30                   | 36.78            |
| 1942 ----- | 3.18  | 3.67             | 1,163                          | 1,022            | 37.13                   | 37.51            |
| 1943 ----- | 3.11  | 3.64             | 1,229                          | 1,069            | 38.26                   | 38.91            |
| 1944 ----- | 3.05  | 3.51             | 1,279                          | 1,151            | 39.00                   | 40.40            |
| 1945 ----- | 2.97  | 3.41             | 1,355                          | 1,229            | 40.27                   | 41.91            |
| 1946 ----- | 2.86  | 3.22             | 1,510                          | 1,329            | 43.19                   | 42.79            |
| 1947 ----- | 2.74  | 3.09             | 1,638                          | 1,438            | 45.09                   | 44.43            |
| 1948 ----- | 2.65  | 3.01             | 1,813                          | 1,563            | 47.79                   | 47.05            |
| 1949 ----- | 2.62  | 2.95             | 1,976                          | 1,684            | 51.76                   | 49.68            |

#### Security issues

During the biennium the Commission considered 85 applications of public service corporations for authority to issue securities and granted authority to issue a total of \$113,906,939 of securities, for which applicants paid statutory fees of more than \$120,000, to be deposited into the

state general fund. A comparison of the amount of securities authorized, with those for the two preceding bienniums, is shown in the following tables:

| Type of security                         | 1944-1946     | 1946-1948     | 1948-1950     |
|--|---------------|---------------|---------------|
| Common stock.....                        | \$ 33,081,806 | \$ 85,544,152 | \$ 32,435,639 |
| Preferred stock.....                     | 38,000,000    | 4,056,000     | -----         |
| Bonds.....                               | 60,925,000    | 43,360,000    | 70,460,000    |
| Other forms of debt securities.....      | 9,754,800     | 4,982,000     | 11,011,300    |
| Total.....                               | \$141,761,606 | \$137,942,152 | \$113,906,939 |
|  |               |               |               |
| Purposes of issues                       | 1944-1946     | 1946-1948     | 1948-1950     |
| Refunding of securities.....             | \$135,252,280 | \$ 34,520,200 | \$ 5,325,775  |
| Merger or acquisition of properties..... | 4,403,936     | 250,000       | 46,200        |
| Stock dividends.....                     | 1,613,880     | 297,005       | 441,160       |
| Validation of void securities.....       | 421,350       | -----         | 83,400        |
| New capital.....                         | 70,160        | 102,874,947   | 108,010,404   |
| Total.....                               | \$141,761,606 | \$137,942,152 | \$113,906,939 |

Although there has been a reduction in the total amount of securities issued during each biennium, the amount of securities issued for new capital has increased substantially. During the 1948-1950 biennium, \$108,010,404 or about 95 percent of all the proceeds from securities was used to provide new capital for the public utility industry of the state. This new capital was necessary to finance the unusually large construction programs to increase capacities to serve the demands of customers for utility services.

#### Accounting matters

In the performance of its functions under the public utility laws, many different kinds of financial and accounting investigations are required of the Commission. These duties and activities have been described in many previous reports and need not be repeated, in detail, here. Much of these activities have become routine work continuing from year to year as contemplated by the statutes. They include the design, preparation, and review of the required annual reports of all public utilities to this Commission, the installation of new accounting systems, auditing of books and records, certification of depreciation rates, investigation of any alleged irregularities and financial practices of utilities, and

the attendance at hearings and conferences and presentation of evidence obtained from its investigations.

The following table has been prepared from the annual reports for the years ended December 31, 1949 and December 31, 1947, and shows the combined balance sheets of all class A public service corporations operating in Wisconsin.

## COMBINED BALANCE SHEETS

| Particulars   | As of                | As of                | Increase or<br>(decrease) |
|---|----------------------|----------------------|---------------------------|
|   | Dec. 31, 1949        | Dec. 31, 1947        |                           |
|   | (a)                  | (b)                  | (c)                       |
| <b>Assets:</b>  |                      |                      |                           |
| Utility plant in service.....                                 | \$720,709,499        | \$566,872,386        | \$153,837,113             |
| Less reserve for depreciation.....                            | 190,447,778          | 177,435,445          | 13,012,333                |
| Net utility plant in service.....                             | 530,261,721          | 389,436,941          | 140,824,780               |
| Utility plant leased to others.....                           | 2,680,658            | 2,640,335            | 40,323                    |
| Construction work in progress.....                            | 30,629,200           | 26,553,634           | 4,075,566                 |
| Utility plant held for future use.....                        | 954,892              | 546,698              | 408,194                   |
| Utility plant adjustments and<br>acquisition adjustments..... | 7,639,547            | 12,405,271           | (4,765,724)               |
| Total utility plant.....                                      | 572,166,018          | 431,582,879          | 140,583,139               |
| Other investments.....  | 63,331,687           | 60,071,693           | 3,259,994                 |
| Cash accounts.....  | 17,144,990           | 14,174,492           | 2,970,498                 |
| Other current assets.....                                     | 42,257,732           | 46,674,672           | (4,416,940)               |
| Unamortized debt discount and expense.....                    | 5,418,869            | 7,729,749            | (2,310,880)               |
| Other deferred debits.....                                    | 6,302,485            | 1,459,352            | 4,843,133                 |
| Capital stock expense.....                                    | 1,349,110            | 1,133,310            | 215,800                   |
| <b>Total.....</b>   | <b>\$707,970,891</b> | <b>\$562,826,147</b> | <b>\$145,144,744</b>      |
| <b>Liabilities:</b>   |                      |                      |                           |
| Common stock.....   | \$258,219,001        | \$185,654,839        | \$ 72,564,162             |
| Preferred stock.....  | 73,200,440           | 69,953,100           | 3,247,340                 |
| Premium on capital stock.....                                 | 3,270,906            | -----                | 3,270,906                 |
| Bonds and other long-term debt.....                           | 249,614,591          | 198,500,372          | 51,114,219                |
| Premium on long-term debt.....                                | 431,609              | -----                | 431,609                   |
| Current and accrued liabilities.....                          | 56,310,227           | 46,881,593           | 9,428,634                 |
| Deferred credits.....   | 3,153,172            | 3,400,428            | (247,256)                 |
| Miscellaneous reserves.....                                   | 18,867,659           | 20,042,366           | (1,174,707)               |
| Contributions in aid of construction.....                     | 2,994,106            | 2,748,454            | 245,652                   |
| Capital surplus.....  | 8,911,686            | 8,110,216            | 801,470                   |
| Earned surplus.....   | 32,997,494           | 27,534,779           | 5,462,715                 |
| <b>Total.....</b>   | <b>\$707,970,891</b> | <b>\$562,826,147</b> | <b>\$145,144,744</b>      |

( ) Denotes red figures.

It will be observed that during the biennium a substantial improvement has been made in the financial condition of these companies, especially in the following respects:

1. The construction programs have resulted in an increase of \$153,000,000 of utility plant in service.
2. The reserve for depreciation has increased \$13,000,000 during the same period, resulting in about \$140,000,000 of net additions to utility plant in service.
3. These companies have amortized or otherwise written off their books approximately \$4,765,000 of utility plant adjustments and acquisition adjustment accounts.

4. Unamortized debt discount and expense has been amortized or reduced by about \$2,300,000.
5. Common stock financing has resulted in an increase of \$72,500,000 in that type of security, and surplus and premium accounts have been increased by \$9,500,000, a total increase of about \$82,000,000 in common stock equity.
6. The ratio of the various classes of securities to the total capitalization and the ratio of debt securities to net utility plant in service shows a distinct improvement, as reflected in the following table:

|   | December 31, 1949    |              | December 31, 1947    |              |
|---|----------------------|--------------|----------------------|--------------|
|   | Amount               | %            | Amount               | %            |
| Common stock par or stated value -----  | \$258,219,001        | 41.02        | \$185,654,839        | 38.0         |
| Premium on capital stock -----  | 3,270,906            | .5           | -----                | ---          |
| Capital surplus -----   | 8,911,686            | 1.4          | 8,110,216            | 1.6          |
| Earned surplus -----  | 32,997,494           | 5.3          | 27,534,779           | 5.6          |
| <b>Total common stock equity --</b>   | <b>303,399,087</b>   | <b>48.4</b>  | <b>221,299,834</b>   | <b>45.2</b>  |
| Preferred stock, par value -----  | 73,200,440           | 11.7         | 69,953,100           | 14.3         |
| Bonds and other long-term debt -----  | 249,614,591          | 39.9         | 198,500,372          | 40.5         |
| <b>Total capitalization and surplus -----</b>                                 | <b>\$626,214,118</b> | <b>100.0</b> | <b>\$489,753,306</b> | <b>100.0</b> |
| Ratio of bonds and other long-term debt to net utility plant in service ----- |                      | 47%          |                      | 51%          |

Many of these improvements testify to the effectiveness of the security, financial, and accounting regulation of utilities as required by the statutes.

#### Utility service

The Commission's activities include the supervision of service furnished by utilities. The Commission's general orders prescribe the quality of service for gas, electric, telephone, and water utilities. Extensive work was carried on in revising the requirements for electric service.

#### Standards Laboratory

The Standards Laboratory, maintained jointly at the university by the Commission and the University of Wisconsin-

sin, tests electrical instruments used by the Commission's engineers, checks the rotating meter standards used by utilities for testing consumers' meters, and makes commercial tests of appliances and equipment. This laboratory will soon be moved to the new engineering building.

#### Radio and television interference

There is no legal requirement regulating radio and television interference in the state; however, the Commission has been interested in correcting the causes of such complaints, and the results have usually been satisfactory. Complaints on interference have been handled by referring the conditions to the electric and, occasionally, the telephone company in the locality. The investigations by the utilities and the changes made, often at the request of the Commission, have resulted in a reduction of the trouble.

#### Certificates of authority

Certificates of authority were issued during the biennium as follows:

|                              |    |
|------------------------------|----|
| Electric power .....         | 24 |
| Miscellaneous electric ..... | 29 |
| Telephone utility .....      | 25 |
| Gas utility .....            | 15 |
| Water utility .....          | 85 |

#### Service department activities

|                                  |       |
|----------------------------------|-------|
| Utility inspections .....        | 1,490 |
| Standards laboratory tests ..... | 574   |
| Formal and informal cases .....  | 2,145 |
| Steam railroad inspection .....  | 1,078 |
| Miscellaneous inspections .....  | 34    |

#### Appraisals and continuing property records

During the biennium the following appraisals of utility property were made in connection with acquisitions or rate cases:

|                                    |    |
|------------------------------------|----|
| Electric properties .....          | 4  |
| Water and sewer properties .....   | 5  |
| Telephone properties .....         | 5  |
| Street-lighting estimates .....    | 3  |
| Depreciation estimates .....       | 26 |
| Electric extension estimates ..... | 7  |

Continuing property record work continued throughout the biennium, and with the exception of a few utilities the initial records are now substantially completed. The present

records will be checked at intervals to determine whether they are being properly maintained. The following number of utilities have property records in operation or in process at this time:

|                 |    |
|-----------------|----|
| Electric .....  | 21 |
| Water .....     | 1  |
| Gas .....       | 12 |
| Telephone ..... | 6  |

#### Acquisitions and sales of utility property

The following acquisitions of electric utility property were handled during the biennium:

The property of the Ojibwa Electric Company was acquired by the Winter Electric Company.

The Merchants Power and Light Company was purchased by the Wisconsin Power and Light Company.

A gas transmission line previously owned by the Wisconsin Gas and Electric Company was acquired by the Wisconsin Southern Gas Company.

The electric distribution property in the village of Whiting was purchased by the Wisconsin Public Service Corporation from the Consolidated Water Power Company.

Certain electric property in the southwestern part of the state formerly owned by the Interstate Light and Power Company was acquired by the Wisconsin Power and Light Company.

The Wisconsin Gas and Electric Company sold certain of its electric property to the Wisconsin Electric Power Company.

A total of 27 relatively small telephone utilities were sold during the same period.

#### Interconnection of electric utilities

Authorizations were issued for the construction of transmission lines and associated equipment to permit the interconnection of utility facilities at 15 locations for the purpose of bringing additional power to existing markets.

## RAILROAD AND MOTOR TRANSPORTATION

### The transportation situation

The dominating factor in the transportation situation since the close of World War II has been the rapid increase of costs due chiefly to the constant rising levels of wages and prices of materials and supplies. This has affected all forms of transportation. The increase in costs, together with a rapid decrease in the volume of passenger riding, and a slight recession in the total amount of freight traffic has necessitated transportation rate revisions.

The recession of freight traffic was of that carried by the railroads; since, over the period as a whole, there has been some gain in the smaller part of the total carried by motor carriers. However, both types of carriers suffered from very material decreases in freight traffic in 1949. That decrease extended into the earlier months of 1950, but the direction of trend has since been reversed.

The impact of these factors has been greatest on the railroads. The profitableness of the operations of motor carriers of property generally, except in 1949, was affected by wage and price levels only. Interurban bus and urban bus and electric railway operation of course were not affected, at least directly, by the decrease of freight traffic, and their passenger traffic recession was far less violent than that of the steam railroads.

The average wage rates of the railroads serving Wisconsin were 27 percent higher in 1947 than they were in 1944, and the current wage levels, excluding the effect of the 40-hour week, 49 percent higher. The effect of the imposition of the 40-hour week as the basis for pay of certain important classes of employees is estimated to increase this to 69 percent. Average material prices increased 39 percent between 1944 and 1947, and by 57 percent to the middle of 1948.

The passenger traffic for the United States as a whole decreased from 96 billions of passenger-miles in 1944 to 46 billions in 1947 and to 35 billions in 1949. The net railway operating income from this 1944 traffic, and the express, mail, etc., is estimated to have been 234 millions of dollars.

---

The 1949 amount resulted in a loss of 649 millions. This equaled 9 percent of the revenue from freight, and was only 37 million dollars less than the 686 millions of total net railway operating income from all sources. However, the net operating income for 1949 was in considerable part due to the 18 percent decrease of freight traffic for 1949 as compared with 1948 when the net railway operating income was 1,002 millions of dollars. Except as noted, the figures cited are for the United States as a whole, but the Wisconsin situation follows the national pattern quite closely.

The situation brought about by these three factors has resulted directly in a large number of rate cases brought by all types of carriers for the purpose of increasing revenues. It has also brought about a large number of service cases brought by the rail carriers, in particular, in efforts to cut costs by discontinuing certain passenger trains, by eliminating or curtailing station service at various points, and by abandoning entirely certain branches and spurs. It has also had some, but less direct, influence in bringing about an increasing number of rate cases wherein the main objective has been to redistribute the transportation burden as between classes of traffic handled rather than to augment carrier revenues as a whole.

#### Railroad operation

The Commission's work relating to the operation of railroads is indicated by the following formal cases decided during the biennium:

|   |         |
|---|---------|
| Establishment of new highway crossings -----          | 19      |
| Closing of existing crossings -----                   | 10      |
| Highway crossing protection -----                     | 46      |
| Stations (abandonment of facilities or service) ----- | 31      |
| Track abandonment -----                               | 9       |
| New track construction -----                          | 1       |
| Limited track clearances -----                        | 41      |
| Train service -----                                   | 12      |
| Express service -----                                 | 7       |
| Miscellaneous -----                                   | 7       |
| <br>Total -----                                       | <br>183 |

A total of 81 grade crossings were considered in the 46 cases relating to the installation of crossing protection or changes in existing protection.

**Protecting grade crossings**

During the biennium a new law went into effect providing that state funds be used to pay part of the cost of protecting railroad grade crossings. Upon complaint, the Commission must investigate crossings to determine whether the existing protection is adequate. If added protection is required, up to 50 percent of the cost may be paid by the state from an annual appropriation not to exceed \$250,000.

By the end of the biennium the Commission had ordered automatic signal protection at 14 locations under the new law. The cost of these installations was estimated at \$113,440 of which the state was to pay about \$46,800. None of the state's money was actually paid out during the biennium because none of the constructions had been completed.

**Railroad abandonment**

No lines of railroad were abandoned during the biennium.

**Railroad-highway crossings**

The number of crossings with steam railroads at the end of the biennium is as follows:

|                                       |       |
|---------------------------------------|-------|
| Unprotected crossings -----           | 6,641 |
| Protected by flagmen -----            | 110   |
| Protected by gates -----              | 86    |
| Protected by bell -----               | 96    |
| Protected by bell and light -----     | 69    |
| Protected by wigwags -----            | 654   |
| Protected by flashlight signals ----- | 432   |
| Overhead bridges -----                | 408   |
| Subways -----                         | 388   |
| Total -----                           | 8,884 |

**Railroad signals**

Railroad plans were checked and approved for new installations or revision of old installations as follows:

|  |     |
|--|-----|
| Installation or revision of interlocking plants -----    | 34  |
| Installation or revision of block signals -----          | 49  |
| Installation or revision of highway crossing signals --- | 124 |
| Installation of spring switches -----                    | 6   |
| Total plans approved for biennium -----                  | 213 |

**Railroad accidents**

During the biennium, the following accidents have been reported by the railroad companies:

|   |       |
|---|-------|
| Nontrain accidents .....                | 488   |
| Employees killed .....                  | 5     |
| Employees injured .....                 | 418   |
| Nonemployees killed .....               | 1     |
| Nonemployees injured .....              | 63    |
| Train and train service accidents ..... | 1,552 |
| Employees killed .....                  | 20    |
| Employees injured .....                 | 541   |
| Nonemployees killed .....               | 113   |
| Nonemployees injured .....              | 472   |
| Trespassers killed .....                | 42    |
| Trespassers injured .....               | 35    |

Of the above accidents 838 were at grade crossings and involved the death of 128 persons and injuries to 300 persons. Of these grade-crossing accidents, 812 involved motor vehicles and resulted in 107 deaths and injuries to 293 persons.

**Motor carrier cases**

During the biennium, there were 78 major formal proceedings involving increased rates and fares of carriers for the transportation of property and passengers. Seventeen of these proceedings involved interstate matters before the Interstate Commerce Commission, and 61 involved intra-state rate and tariff matters.

The Commission, through its tariffs section, also processed 506 informal rate and tariff applications wherein the carriers, both rail and motor, sought special authority to publish and make effective various rate and tariff changes. It also made informal investigations of 10 applications filed by the carriers seeking authority to adjust freight charges on specific shipments resulting from rates found to be erroneous, illegal, unusual or exorbitant under the provisions of the governing Wisconsin Statutes.

During this same period, the Commission furnished other state departmental agencies a large number of rates and routings, and in addition, audited 16,881 freight and express bills. Overcharges of \$9,126.08 were discovered and reported for claim adjustment.

In docket MC-326 involving week-end highway restrictions the Commission, in cooperation with the motor carrier

industry, the Highway Commission of Wisconsin, and the Motor Vehicle Department of Wisconsin, reinvoked the restrictions effective July 1, 1950. This order had remained dormant since 1942 due to the war and the post war shortages and inventories, but with the tremendous increase in highway use that developed subsequently it was felt that certain highways should be freed of heavy truck traffic on week-ends and holidays during the tourist season through Labor Day. A network of highways was developed which would impose the minimum hardship on the carrier industry but still release maximum use of highways for automobile traffic.

The Commission actively participated in the Interstate Commerce Commission docket MC-43 involving practices of carriers in the lease and interchange of motor carrier equipment.

The Commission also entered into a proceeding involving the practice of transporting freight between points in the state of Wisconsin through interstate terminals, thus converting the shipments to interstate commerce although reasonable intrastate routes were available. Field checks were made to determine the extent of this practice and introduced in the proceeding. Briefs have been filed, but the matter has not been disposed of.

Closer scrutiny of carrier activities under their authorities was accomplished by field investigations resulting in the elimination of unexercised authorities and compliance with outstanding orders of the Commission.

A new policy was developed regarding the handling of highly perishable field commodities in the state during the canning seasons. In cooperation with the Motor Vehicle Department of Wisconsin and the Wisconsin Cannery Association, a standard lease form was developed which would permit canning companies to lease private trucks by completing the lease form and submitting it to the Motor Vehicle Department of Wisconsin and the Public Service Commission of Wisconsin along with any required fees, and they would receive promptly a sticker to identify the truck and the fact that they had complied with the laws of the state. This eliminated confusion in the transfer of plates and diffi-

culties in registration and substantially expedited the utilization of the vehicles in field service. Approximately 300 vehicles were qualified the first season with properly completed leases on file with the Commission.

## WATER POWERS

### Dams

Construction work was completed on six hydroelectric developments capable of developing more than 750 theoretical horsepower, and those plants are now in operation. They are Petenwell and Castle Rock in the Wisconsin River, Holcombe in the Chippewa, Upper Quinnesec Falls in the Menominee, Port Wing in the Iron, and Stiles in the Oconto Rivers. The Dairyland Cooperative dam in the Flambeau River is nearing completion.

The following table indicates the function of the 1,078 dams which were under the jurisdiction of the Commission at the end of the 1948-1950 biennium:

|  |       |
|--|-------|
| Over 750 theoretical horsepower                    |       |
| Public utility hydroelectric developments -----    | 55    |
| Private power developments -----                   | 29    |
| Combined utility and private power developments -- | 5     |
| Reservoirs -----                                   | 5     |
| Under 750 theoretical horsepower                   |       |
| Public utility hydroelectric developments -----    | 79    |
| Private power developments -----                   | 177   |
| Combined utility and private power developments -- | 3     |
| Reservoirs -----                                   | 8     |
| Miscellaneous                                      |       |
| Lake reservoirs -----                              | 20    |
| Lake control -----                                 | 181   |
| Recreational -----                                 | 241   |
| Occupational -----                                 | 63    |
| Drainage control -----                             | 212   |
|  | 1,078 |

### Water power cases

The Commission's work on water powers for this period is indicated by the following tabulation:

|   |       |
|---|-------|
| Formal cases decided .....  | 102   |
| Special field investigations .....  | 415   |
| Plans checked and approved .....  | 28    |
| Informal water-power cases investigated and disposed<br>of .....  | 197   |
| Stream and lake gaging stations maintained in coopera-<br>tion with the United States Geological Survey ..... | 128   |
| Stream measurements made .....  | 1,378 |
| Inspection of dams having 750 theoretical horsepower<br>or over .....   | 180   |
| Inspection, survey, and resurvey of dams having less<br>than 750 theoretical horsepower .....                 | 281   |

The 102 formal cases decided consist of 26 contracts for removal of material from the beds of lakes, 19 determinations of lake levels, 1 permit to acquire a dam, 24 permits for the construction of dams, 6 permits for the raising and enlarging of dams, 3 decisions in the operation of dams, 8 approval of tolls, 1 transfer of permit of a dam, and 14 miscellaneous cases.

#### Stream gaging

Stream gaging records at about 100 stations are being compiled on a cooperative basis by the Public Service Commission and the Water Resources Branch of the United States Geological Survey.

