

# PUBLIC SERVICE COMMISSION OF WISCONSIN



**Biennial Report**  
**July 1, 1946, to June 30, 1948**

**W. F. WHITNEY**  
Commissioner

**LYNN H. ASHLEY**  
Chairman  
**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, 1946 to June 30, 1948. 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

LYNN H. ASHLEY  
*Chairman*

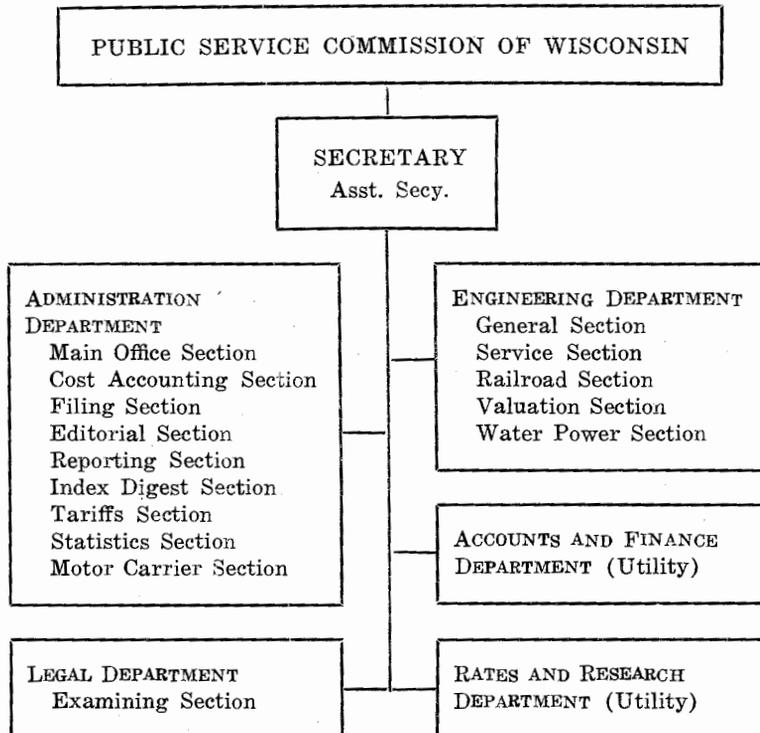
W. F. WHITNEY  
*Commissioner*

SAMUEL BRYAN  
*Commissioner*

EDWARD T. KAVENY  
*Secretary*

Madison, Wisconsin  
December 6, 1948

ORGANIZATION CHART  
of  
PUBLIC SERVICE COMMISSION OF WISCONSIN



PUBLIC SERVICE COMMISSION OF WISCONSIN

PERSONNEL

Lynn H. Ashley, chairman  
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—Henry H. Francisco<sup>1</sup>  
Reporting Section—(Supervised by Secretary)  
Tariffs Section—Ivan A. Sherman  
Statistics Section—C. E. Schreiber  
Motor Carrier Section—J. H. Justesen

*Legal Department*

J. Ward Rector  
H. T. Ferguson<sup>2</sup>

*Engineering Department*

George P. Steinmetz, chief  
Warren Oakey, assistant chief  
Charles B. Hayden<sup>2</sup>  
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> Died September 8, 1947.

<sup>2</sup> Retired January 31, 1948.

## THE COMMISSION

The Public Service Commission of Wisconsin, created as the Railroad Commission nearly 75 years ago, includes three commissioners, a secretary, an assistant secretary, and a staff of about 125 members. The Commissioners are Lynn H. Ashley, chairman, W. F. Whitney, and Samuel Bryan.

Chairman Lynn H. Ashley was born in Wisconsin, and during his early years lived in River Falls, attending elementary schools there. Later he attended Carleton College Academy and Carleton College, Northfield, Minnesota. He was graduated from Minnesota University Law School and moved to Hudson in 1912, where he practiced law until 1943. He was district attorney of St. Croix County 1921-22 and was elected to the Wisconsin assembly from St. Croix County in 1928, serving the 1929-1930 term. He was appointed to the Public Service Commission of Wisconsin by Governor Goodland, and was unanimously confirmed by the senate in January 1943. In March of that year, at the expiration of the term for which he was appointed, he was reappointed by Governor Goodland for a full 6-year term, and again unanimously confirmed by the senate. He was elected chairman of the Commission in March 1945.

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 was created in 1874 as the Board of Railroad Commissioners with jurisdiction chiefly over railroad rates. By various acts of the Legislature, the Commission has been given new duties 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**

A total of 1,130 public utilities, 10,214 motor carriers, 20 steam railroads, and other businesses were under jurisdiction of the Commission on June 30, 1948, as follows:

Common motor carriers of passengers and property--	390
Contract motor carriers of property -----	9,824
Dams in the state -----	1,067
Electric railways -----	4
Electric utilities -----	135
Express companies -----	1
Heating utilities -----	7
Gas utilities -----	23
Steam railways -----	20
Telephone utilities -----	601
Telegraph companies -----	1
Urban trackless-trolley systems -----	2
Water utilities -----	360

**Scope of work**

More than 4,000 public hearings were held by the Commission and its staff during the biennium, an increase of about 900 over the preceding period.

During the biennium the Commission issued 10,616 orders, 4,856 during the first half and 5,760 in the latter half. The total is a 4,000 increase over the number shown in the previous report. There were 8,182 new cases opened during the biennium and 8,084 cases closed.

## FORMAL CASES

	Opened during biennium		Closed during biennium	
	1946-47	1947-48	1946-47	1947-48
Railroad.....	86	102	82	105
Utility.....				
General.....	233	342	231	311
Securities.....	21	41	18	43
New plants and additions.....	204	186	206	195
Water power.....	35	42	36	41
Motor.....				
General.....	25	39	31	39
Common motor carrier certificates.....	62	68	75	72
Contract motor carrier licenses.....	2,392	2,131	2,538	2,173
Amendment of operating rights.....	1,068	1,105	1,137	1,151
Total.....	4,126	4,056	3,954	4,130

## ORDERS ISSUED

	1946-47	1947-48
Railroad.....	80	141
Utility.....	442	529
Water power.....	61	66
Motor carrier.....	4,273	5,024
Total.....	4,856	5,760

## HEARINGS

	1946-47	1947-48
Railroad.....	101	116
Utility.....		
General.....	199	267
Securities.....	2	2
New plants and additions.....	122	65
Water power.....	45	55
Motor.....		
General.....	36	54
Common carrier certificates.....	140	116
Contract carrier licenses.....	1,589	1,117
Total.....	2,234	1,792

## INFORMAL CASES

	1946-47	1947-48
Informal railroad, utility, and water power cases.....	776	1,003

## SUITS AGAINST COMMISSION

	1946-47	1947-48
	12	18

**Division of staff work**

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 makes estimates for other 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 or make interconnections or integrate operations; and investigations of water-power and

navigation matters such as lake levels, navigable-stream obstructions, measurement of stream flow, and proposed plans for water-power structures and 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.

#### 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 securities 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 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		
	1946-47	1947-48
General legislative appropriation -----	\$109,000.00	\$111,000.00
Bonus appropriation -----	1,337.38	7,503.39
Emergency board appropriation -----	-----	9,160.00
Total appropriation -----	\$110,337.38	\$127,663.39
Motor transportation legislative appropriation -----	\$ 95,800.00	\$140,000.00
Bonus appropriation -----	3,874.24	16,006.48
Emergency board appropriation -----	28,045.00	600.00
Deficiency appropriation -----	20,010.00	-----
Total appropriation -----	\$147,729.24	\$156,606.48
Direct charges against		
Utilities -----	\$ 52,469.75	\$ 60,888.62
Railroad -----	3,290.34	2,089.37
Remainder assessment against utilities ----	157,762.15	181,571.71
Fees for removal of material—Outlying waters -----	210.60	1.00
Total -----	\$471,799.46	\$528,820.57
DISBURSEMENTS		
Utility -----	\$248,519.27	\$286,221.24
Railroad transportation -----	49,718.38	54,604.48
Water power -----	41,793.54	43,857.83
Motor transportation -----	150,944.48	161,875.61
Total -----	\$490,975.67	\$546,559.16
COLLECTIONS FOR GENERAL STATE FUND		
Utilities securities fees (public service corporation) -----	\$ 46,442.68	\$ 91,237.13
Water power and engineering fees -----	673.80	756.36
Copy work and sale of printed matter ----	2,279.54	2,093.54
Interest income—Remainder assessment----	-----	.36
Total -----	\$ 49,396.02	\$ 94,087.39
COLLECTIONS FOR STATE HIGHWAY FUND		
Motor carrier filing fees -----	\$ 44,110.00	\$ 42,560.00

## UTILITIES

### General

The foregoing statistics indicate the increased activities of the Commission during the biennium. Postwar expansions and extensions were evident in utility and transportation fields. Rate increases were sought to meet the spiraling cost of labor and materials. Refinancing programs were initiated to meet changing conditions.

### Utility plant extensions and changes

During the biennium numerous additions to and expansion of plant facilities have been authorized by the Commission and made by the utilities. The program of expansion is somewhat behind schedule partly because of inability to make adequate additions to facilities during the war period and partly to the present difficulty in obtaining delivery on large-capacity generating equipment.

The rapid expansion in the use of electrical energy, and recent drought conditions which have decreased the amount of hydroelectric generation far below a normal figure, have been important problems. A power shortage in numerous parts of the state is possible. Such shortage will be overcome as soon as the expansion program is back on schedule.

During the biennium the electric utilities have been authorized to add Diesel installations at 23 locations. Eight steam generating stations or additions to existing steam facilities have been authorized and nine hydroelectric permits have been granted. Additional installations are planned and adequate production plant facilities to handle probable loads may be available by the end of the next biennium. Every large electric utility in Wisconsin is in the process of constructing additional generating capacity. The total of such added capacity under construction exceeds 400,000 kilowatts or about one-third of the existing capacity. In addition to the increased production facilities, several interconnections have been established. The transmission systems are being constantly strengthened, and the distribution systems are being expanded.

For water utilities a large number of authorizations have been issued, covering additions to plant and distribution

facilities and the creation of water utilities in small communities.

For telephone utilities numerous authorizations covering the installation of central-office equipment and the expansion of outside plant facilities have been issued. The strong tide toward the installation of dial equipment as noted in the previous biennial report continues. The abandonment of service on the part of many small telephone companies has been authorized with the provision that service be continued by the larger companies taking over the respective areas.

For gas utilities some authorizations have been issued to substitute liquefied petroleum gas for manufactured gas. Other authorizations have been granted to permit the use of liquefied petroleum gas with manufactured gas to amplify the quantity of gas available for use. Natural gas is now in use in a small area of the state, and it is expected that the eastern part of the state will be supplied by natural gas during the next 2 years by a pipe line under construction between Texas and Michigan. The pipe line company may supply several times as much gas heat to the eastern and south-central part of the state as is now being used.

#### **Rate changes**

For the first time in many years rate increases by Wisconsin utilities were greater than rate reductions. A large number of utilities proposed higher rates to meet increased operating expenses.

#### *Rate Reductions*

Electric utilities accounted for 98.6 percent of the total reductions during the biennium. The Wisconsin Electric Power Company was the major factor in the reductions for the second half of 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.

	Approximate reductions	Customers benefited
July 1, 1946, to June 30, 1947		
Electric -----	\$1,952,697	515,352
Telephone -----	4,598	1,979
Water -----	14,940	2,266
Gas -----	4,994	12,420
Total -----	\$1,977,229	532,017
July 1, 1947, to June 30, 1948		
Electric -----	\$1,403,680	277,013
Telephone -----	1,788	995
Water -----	2,200	589
Gas -----	21,274	6,337
Total -----	\$1,428,942	284,934

### Rate Increases

With the exception of electric utilities the amount of rate increases authorized are much larger than rate reductions made during the biennium. Telephone utilities and gas utilities have been granted 95 percent of the total and the Wisconsin Telephone Company alone accounts for 57 percent of the grand total of 95 percent of the amount granted all telephone companies.

	Approximate annual increases authorized
July 1, 1946 to June 30, 1947	
Electric -----	\$ 31,690
Telephone -----	82,144
Water -----	78,377
Gas -----	675,400
Heating -----	35,300
Total -----	\$ 882,911
July 1, 1947 to June 30, 1948	
Electric -----	\$ 186,239
Telephone -----	6,595,908
Water -----	203,902
Gas -----	3,354,700
Heating -----	3,503
Total -----	\$10,344,252

### Wisconsin and national electric rates for residential use

The average cost of electricity per kilowatt-hour consumed by residential customers in Wisconsin in 1947 was 11 percent below the average for the entire country. Wisconsin residential customers used 14 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 RATIOS  
WISCONSIN AND UNITED STATES, 1938-1947

	Revenue per Kilowatt-hour		Kilowatt-hours per customer		Revenue per customer	
	Wisconsin	United States	Wisconsin	United States	Wisconsin	United States
1938.....	3.60c	4.14c	916	853	\$32.97	\$35.31
1939.....	3.42	4.00	984	897	34.24	35.88
1940.....	3.34	3.84	1,064	952	35.51	36.56
1941.....	3.23	3.73	1,123	986	36.30	36.78
1942.....	3.18	3.67	1,168	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.....	2.75	3.09	1,638	1,438	45.09	44.43

Security issues

During the past 2 years the Commission considered 56 applications of public-service corporations for authority to issue securities. It granted authority to issue a total of \$137,942,152 of securities for which the applicants paid fees of \$136,313.91, as required by section 184.10 (1) of the Wisconsin Statutes. These fees were paid 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 table:

	1942-1944	1944-1946	1946-1948
Common stock.....	\$ 831,520	\$ 33,081,806	\$ 85,544,152
Preferred stock.....	2,000,000	38,000,000	4,056,000
Bonds.....	3,495,000	60,925,000	43,360,000
Notes and other forms of debt.....	1,158,800	9,754,800	4,982,000
Total.....	\$ 7,485,320	\$141,761,606	\$137,942,152

It will be noted that, although the total amount of securities authorized during the past 2 years has not changed materially from the preceding period, there is a noticeable decrease in the amount of senior securities issued and an increase in the amount of common stock. Another significant feature is the relatively large amount of securities authorized to be issued to raise new capital and the noticeable

drop in the amount of securities issued for refunding and other purposes, as shown below:

Purpose of issues	1944-1946	1946-1948
Refunding of securities -----	\$135,252,280	\$ 34,520,200
Merger or acquisition of properties -----	4,408,936	250,000
Stock dividends -----	1,613,880	297,005
Validation of void securities---	421,350	-----
New capital -----	70,160	102,874,947
Total -----	<u>\$141,761,606</u>	<u>\$137,942,152</u>

The above table illustrates the fact that the recent so-called "stiffening" of interest charges on borrowed capital has reduced the incentive, heretofore prevalent for the past several years, to refund outstanding bonds with other securities bearing a still lower rate of interest. It would appear, therefore, that the refunding of outstanding issues of securities is nearing completion except possibly for maturing issues.

In a previous report, it was stated that the small ratio of securities issued for new capital had been due, in part, to wartime conditions which curtailed construction of new additions to property, and that the resulting depreciation reservations had permitted the accumulation of cash on hand which would be available for the financing of new additions to plant, when war restrictions were eased, without the necessity of issuing new securities for that purpose. What appears to be the full force of the aftermath of that wartime curtailment is now being witnessed. The pent-up demand for utility services and the necessity on the part of the public utilities to increase their capacities, as previously pointed out, has resulted in construction programs which have not only utilized the cash accumulated for that purpose but have also necessitated the raising of additional funds by the issuance and sale of more securities.

#### 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. One of these functions is the certification of depreciation rates pursuant to the provisions of section 196.09 of the statutes. In

the 1942 biennial report, the pioneer work of the Commission under this law in certifying depreciation rates for all classes A and B utilities was discussed. It is probable that no other regulatory commission in the United States has undertaken detailed work of this nature, and the results of the Wisconsin Commission's investigations have been in great demand by other state and federal commissions. It was recognized when this work was started that periodic reviews would be necessary to determine whether the prevailing certified depreciation rates should be adjusted.

More than 5 years have now elapsed since most of those certifications were made. The Commission, therefore, issued a general order on August 28, 1946, requiring all class A public utilities to submit to the Commission their revised estimates of the annual rate of depreciation required for each of their classes of property and to be accompanied by estimates of service lives and the percentage of gross salvage and cost of removal for each class of plant together with data relating to the studies and considerations in support of such estimates. All of the 43 class A public utilities have complied with this general order, and the Commission has investigated and certified revised depreciation rates to 31 of such utilities. The remaining 12 cases are now pending before the Commission, and it is expected that these will be disposed of before the end of the year. The essential data in these certifications will then be correlated, compiled and made available to the industry and others.

Many small utilities, mostly municipally owned, have requested that the Commission accounting staff render accounting assistance to them in connection with the installation of new accounting systems, the auditing of books, or the preparation of the annual reports required by statute. Although the Commission does not solicit this work and performs it only at the request of the utility and by agreement of the utility to pay the cost of the Commission in connection therewith, it is believed that such assistance has been of benefit to the utilities concerned and to the public which they serve.

**Annual reports**

The annual reports of public utilities to this Commission range in size from 1 to more than 100 pages dependent upon the size of the utility. During the biennium, the Commission accounting staff has critically reviewed the data in these reports in the light of present-day conditions and needs. As a result, the size of many report forms has been reduced materially without depriving regulation of essential data. These reports set forth detail relative to assets and liabilities, to revenues and expenses, and to the physical characteristics and the operations of the properties. More than 600 reports are reviewed and checked annually.

The following table has been prepared from the annual reports for the years ended December 31, 1947, and December 31, 1945, and shows the combined balance sheets of all class A public service corporations operating in Wisconsin:

## COMBINED BALANCE SHEETS\*

Particulars	As of Dec. 31, 1947	As of Dec. 31, 1945	Increase or (decrease)
<b>Assets:</b>			
Utility plant in service.....	\$566, 872, 386	\$514, 744, 579	\$ 52, 127, 807
Less reserve for depreciation.....	177, 435, 445	156, 058, 173	21, 377, 272
Net utility plant in service.....	\$389, 436, 941	\$358, 686, 406	\$ 30, 750, 535
Utility plant leased to others.....	2, 640, 335	1, 462, 834	1, 177, 501
Construction work in progress.....	26, 553, 634	5, 340, 025	21, 213, 609
Utility plant held for future use.....	546, 698	2, 828, 320	(2, 281, 622)
Utility plant adjustments and acquisition adjustments.....	12, 405, 271	14, 170, 787	(1, 765, 516)
Total utility plant.....	\$431, 582, 879	\$382, 488, 372	\$ 49, 094, 507
Other investments.....	60, 071, 693	58, 579, 957	1, 491, 736
Cash accounts.....	14, 174, 492	50, 059, 794	(35, 885, 302)
Other current assets.....	46, 674, 672	21, 332, 858	25, 341, 814
Unamortized debt discount and expense.....	7, 729, 749	10, 718, 114	(2, 988, 365)
Other deferred debits.....	1, 459, 352	605, 738	853, 614
Capital stock expense.....	1, 133, 310	936, 316	196, 994
Total.....	\$562, 826, 147	\$524, 721, 149	\$ 38, 104, 998
<b>Liabilities:</b>			
Common stock.....	\$185, 654, 839	\$153, 608, 163	\$ 32, 046, 676
Preferred stock.....	69, 953, 100	74, 023, 200	(4, 070, 100)
Bonds and other long-term debt.....	198, 500, 372	195, 981, 000	2, 519, 372
Current and accrued liabilities.....	46, 881, 593	39, 085, 376	7, 796, 217
Deferred credits.....	3, 400, 428	3, 260, 453	139, 975
Miscellaneous reserves.....	20, 042, 366	18, 712, 120	1, 330, 246
Contributions in aid of construction.....	2, 748, 454	2, 628, 363	120, 091
Capital surplus.....	8, 110, 216	8, 297, 162	(186, 946)
Earned surplus.....	27, 534, 779	29, 125, 312	(1, 590, 533)
Total.....	\$562, 826, 147	\$524, 721, 149	\$ 38, 104, 998

( ) Denotes red figure.

\* Consolidated Water Power Co.  
Interstate Light & Power Co.  
Interstate Power Co.  
Lake Superior District Power Co.  
Madison Gas & Electric Co.  
Menominee & Marinette Light & Traction Co.  
Mid West States Telephone Co.  
Milwaukee Gas Light Co.  
Mississippi Valley Public Service Co.  
Monroe County Telephone Co.  
Northern States Power Co.  
St. Croix Falls Wisconsin Improvement Co.  
Superior Water, Light & Power Co.

Wisconsin Electric Power Co.  
Wisconsin Gas & Electric Co.  
Wisconsin Hydro Electric Co.  
Wisconsin Michigan Power Co.  
Wisconsin Power & Light Co.  
Wisconsin Public Service Corp.  
Commonwealth Telephone Co.  
Community Telephone Co.  
La Crosse Telephone Corp.  
North-West Telephone Co.  
United Telephone Co.  
Wisconsin Southern Gas Co.  
Wood County Telephone Co.  
Wisconsin Telephone Co.

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

1. The reserve for depreciation has increased approximately \$21,000,000 and the total reserve is equal to 31 percent of the gross utility plant even after including \$52,000,000 of new additions.

2. The industry has amortized or otherwise written off its books approximately \$1,765,000 of utility plant adjustments and acquisition adjustment accounts.
3. Almost \$3,000,000 of debt discount and expense has been amortized or written off the books.
4. Common stock has been increased by \$32,000,000, preferred stock reduced by \$4,000,000, and long-term debt increased by only \$2,500,000 thereby resulting in a material improvement in the total security structure of these companies.

Many of these improvements testify to the effectiveness of the 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.

#### **Electrical code**

The recently completed Wisconsin State Electrical Code is now available at the Bureau of Purchases.

#### **Standards laboratory**

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

#### **Radio interference**

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

**Certificates of authority**

Certificates of authority were issued during the biennium as follows:

Electric power .....	68
Miscellaneous electric .....	42
Telephone utility .....	26
Gas utility .....	49
Water utility .....	118

**Service department activities**

Utility inspections .....	1,630
Standards laboratory tests .....	577
Formal and informal cases .....	2,397
Steam railroad inspection .....	788
Miscellaneous inspections .....	18

**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 .....	10
Water properties .....	1
Telephone properties .....	11
Street-lighting estimates .....	6
Depreciation estimates .....	33

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 .....	11
Telephone .....	5

**Acquisitions and sales of utility property**

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

The property of the Goodman Light and Power Company was acquired by the Wisconsin Public Service Corporation.

The Colby Electric Utility was purchased by the Northern States Power Company.

The Coleman Pound Electric Utility was purchased by the Wisconsin Public Service Corporation.

The Neshonoc Light and Power Company was acquired by the Northern States Power Company.

The rural lines of the city of Wisconsin Dells Electric Utility were sold to the Wisconsin Power and Light Company.

The city of Stoughton sold a small part of its rural lines to the Wisconsin Power and Light Company.

The city of Monticello sold its distribution system to the Wisconsin Power and Light Company.

A total of 24 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 20 utilities or locations for the purpose of bringing additional power to existing markets.

### RAILROAD AND MOTOR TRANSPORTATION

Increasing costs and other economic factors have cast a serious revenue burden on the transportation system, both statewide and nationwide. The increased transportation operating expense, caused largely by substantial increases in labor costs and greatly increased prices for materials and supplies, have forced both rail and motor carriers to seek relief through higher freight rates and higher passenger fares.

During this biennium, the Commission's tariffs section participated in 16 formal proceedings before the Interstate Commerce Commission, and 60 formal hearings before this Commission, in which the carriers of property and passengers sought higher freight rates and higher passenger fares.

During this same period 503 informal rate and tariff applications filed by both rail and motor carriers were processed. There were 29 applications filed by the carriers seeking authority of this Commission to adjust freight charges in the nature of refunds or waiver of undercharges resulting from unreasonable rates.

Nearly 22,000 freight and express bills were audited for various state departments. Overcharges of \$12,698.27 were discovered and reported for claim adjustment.

#### Railroad

The railroads operating in Wisconsin have been authorized to increase their intrastate freight rates in order to provide sufficient revenues to meet their increasing costs. The general pattern of intrastate increases corresponded to that authorized by the Interstate Commerce Commission on interstate traffic. The first of the general increases, which became effective July 14, 1946, ranged from 3 to 6 percent. The second general increase, which became effective March 3, 1947, was substituted for the previous increase and approximated 20 percent. The third general increase was made in three separate steps. The first authorized an emergency increase of 10 percent, effective December 15, 1947; the second authorized an emergency increase of 20 percent in lieu of the first 10 percent, effective March 5, 1948; and the third, effective July 15, 1948, authorized a 25 percent increase in the rates.

The rail carriers filed reduced rates on refined petroleum products in tank cars to meet motor-truck competition. Upon complaints filed by the motor carriers, the reduced rates were suspended by the Commission. After investigation and hearing, the Commission found that, in general, the reduced rates had not been shown to be unreasonable. The carriers were authorized to make the rates effective after eliminating certain maladjustments and disparities found in the original tariff publications.

The railroads, on December 18, 1947, increased the intrastate basic first-class passenger fares from 3.3 cents to 3.5 cents a mile, and, effective March 1, 1948, increased the coach class fares from 2.2 to 2.5 cents a mile. These increases corresponded to those authorized by the Interstate Commerce Commission. The Pullman fares were also increased in October 1947.

The Railway Express Agency was authorized to establish a temporary increase in its first and second-class rates and commodity rates to correspond with the authority granted

on interstate traffic by the Interstate Commerce Commission.

The general rate changes authorized by this Commission after hearing and investigation on the carriers' petitions correspond generally to those authorized by the Interstate Commerce Commission on interstate traffic, modified to the extent found necessary to meet the necessities of Wisconsin intrastate traffic.

#### Interstate rates

This Commission has participated in a large number of major proceedings before the Interstate Commerce Commission involving increases in the interstate freight rate structure, the passenger fare structure, and the express rate structure. These included Dockets Ex Parte 148 (Increased Railway Rates, Fares, and Charges—1942), Ex Parte 162 (Increased Railway Rates, Fares, and Charges—1946), Ex Parte 166 (Increased Freight Rates, 1947), Ex Parte 163 (Increased Express Rates and Charges—1946), Docket 29555 (Pick-up and Delivery Services by Railroads), Docket 29556 (Charges on Small Shipments by Railroads), Docket 29770 (Increased Less-Than-Carload Rates Within Official Territory), Docket 29779 (complaint of Wisconsin Manufacturers Association regarding the railroads' publication of Ex Parte 162 increases to and from certain portions of Wisconsin), and Docket 29862 (Increased Passenger Fares—Western Railroads).

The interstate interim class-rate adjustment, referred to in the 1944-46 Biennial Report, applicable to interstate traffic moving on classification ratings in the United States east of the Rocky Mountains became effective August 22, 1947. This was the result of the general Class Rate Investigation, 1939, in Docket I.C.C. 28300 and was established as a temporary basis pending the final adjustment which provided a single scale of class rates for application with a uniform classification of freight for the railroads in the United States.

The revenue plight of the interstate common motor carriers is similar to that of the railroads. These carriers have found it necessary to increase their rates and charges

to meet increased operating costs. This Commission has participated in a number of major investigations before the Interstate Commerce Commission in respect to rates sought by the interstate common motor carriers. Some of these investigations are still pending.

#### Railroad traffic

Rail traffic in Wisconsin fell off somewhat immediately after the cessation of hostilities in 1945. Passenger traffic has continued to drop, while freight traffic on the other hand took an upturn in 1947. The number of tons carried by Class I railroads in Wisconsin was slightly greater in 1947, while the ton-miles of service was somewhat less than during the war years. This would tend to indicate that the average haul has been somewhat shorter than during the war years. Freight revenues increased approximately 19 percent in 1947 over 1946, while the number of tons carried increased 12 percent and the ton-miles increased only 4 percent. This reflects the increase in rate levels that had taken place during that time. The rate levels have increased more than is reflected there, as the largest increases took place late in 1947 and in 1948. Total operating expenses were about 9 percent greater for the year 1947 than for the year 1946. The number of tons originated within Wisconsin has remained at about the same level as during the war years.

Annual reports are submitted to the Commission by 20 steam railroads, 2 electric railroads, and 2 street railways.

#### 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 -----	16
Closing of existing crossings -----	7
Highway crossing protection -----	38
Stations (abandonment of facilities or service) -----	31
Track abandonment -----	9
New track construction -----	1
Limited track clearances -----	55
Train service -----	5
Miscellaneous -----	8
Total -----	169

A total of 91 grade crossings were considered in the 38 cases relating to the installation of crossing protection or changes in existing protection.

#### Railroad abandonments

The Chicago and North Western Railway abandoned its line between Parrish Junction and Harrison a distance of 6.2 miles together with a wye track at Harrison all in Langlade, Oneida, and Lincoln Counties.

The Dells and Northeastern abandoned all of its railroad in Ashland County. It was constructed about 10 years ago for the purpose of moving forest products, was about 5 miles long, and was connected with the Soo Line north of Glidden in Ashland County.

The Green Bay and Western Railroad abandoned its line between Scandinavia and Waupaca a distance of 9.7 miles.

#### Railroad highway crossings

There is considerable delay in delivery of material necessary for the installation of automatic and manually controlled highway crossing signals. While there is some improvement over 2 years ago, it still requires about 6 months for delivery of many of the items required for a signal installation.

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

Unprotected crossings -----	6,649
Protected by flagmen -----	111
Protected by gates -----	84
Protected by bell -----	89
Protected by bell and light -----	86
Protected by wig wags -----	654
Protected by flashlight signals -----	402
Overhead bridges -----	406
Subways -----	391
Total -----	8,872

#### Railroad signals

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

Installation or revision of interlocking plants -----	40
Installation or revision of block signals -----	67
Installation or revision of highway crossing signals -----	95
Installation of reflector lenses for switch lights -----	6
Installation of spring switches -----	1
Total plans approved for biennium -----	209

**Railroad accidents**

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

Nontrain accidents -----	693
Employees killed -----	6
Employees injured -----	636
Nonemployees killed -----	2
Nonemployees injured -----	47
Train and train service accidents -----	2,167
Employees killed -----	23
Employees injured -----	758
Nonemployees killed -----	121
Nonemployees injured -----	501
Trespassers killed -----	46
Trespassers injured -----	22

Of the above accidents 834 were at grade crossings and involved the death of 113 persons and injuries to 361 persons. Of these grade-crossing accidents, 811 involved motor vehicles and resulted in 102 deaths and injuries to 356 persons.

**Motor carrier**

The Commission, on petitions of the Wisconsin Household Carriers Bureau, twice reopened Docket MC-1, Sub. 2 for further investigation and hearing with respect to the rates and charges of contract motor carriers for long-distance moving of used household goods and of fixtures and equipment of stores, offices, farms, or other business establishment.

The order of October 18, 1939 in this proceeding prescribed minimum rates for local moving, and the actual (both minimum and maximum) rates for long-distance moving. After hearing and investigation, and upon the showing by the carriers of need for additional revenue because of increased costs of operation, the Commission found the 1939 scale to result in reasonable minimum rates and charges, but prescribed a higher scale as reasonable maximum rates and charges.

The Wisconsin Motor Carriers Association, Contract Carrier Division, by application filed July 21, 1947, urged the Commission to increase the level of the minimum rates prescribed for intrastate contract motor carriers of property in Docket 2-R-255, MC-1, and also to substitute airline distances for highway distances for the purpose of deter-

mining rates between points in Wisconsin. After hearing and investigation the Commission found that the public interest did not require the relief sought and denied the application.

#### Common motor carrier

The common motor carrier class rate structure applicable to single line intrastate traffic has undergone a complete revision during this biennium. Heretofore the single-line class rates were published in individual tariffs by each common motor carrier, and the rates were based on the shortest highway distance computed via its certificated routes. The new system of single-line common-motor-carrier class rates is based on the airline-distance principle previously prescribed in Docket MC-1186 for the determination of joint-line class rates.

The common motor carriers operating intrastate in Wisconsin petitioned this Commission November 12, 1946 for permission to:

- (a) Institute increases in its rate structure, and
- (b) Prior to hearing on said matter that petitioners be authorized to immediately adopt for application on less than truckload single-line traffic the provisions of Wisconsin Motor Carrier Freight Tariff No. 1, then applicable to joint-line traffic only, and the suspension of all individual tariffs of petitioners in conflict with this petition. The purpose was to give the petitioners an opportunity to test the revenue effect of the joint-line level of class rates when applied to single-line traffic.

The Commission, by its interlocutory order on December 9, 1946, authorized common motor carriers to apply the class rates, rules, and regulations in Wisconsin Motor Carriers Association Freight Tariff No. 1 to single-line traffic for a test period pending further order. In view of the revenue indicated by the traffic tests resulting from the temporary tariff changes, the petitioner submitted a revised proposal in lieu of its original petition for a 25-percent increase. In substance the amended proposal sought:

1. The adoption for permanent application of the airline-distance principle as a basis for determining intrastate common-motor-carrier class and volume rates.

2. Authority to use Wisconsin Motor Carrier Association Freight Tariff No. 1 by all carriers, incorporating a new scale of class rates reflecting an increase of approximately 15 percent.
3. Substitute a new scale of single-line volume rates increased by 15 percent, and,
4. A modification of the exception ratings.

The Commission, after full public hearing and investigation, on February 19, 1947 entered an order in the proceeding known as Docket MC-1218 requiring all intrastate common motor carriers to publish and maintain single and joint-line class rates as prescribed therein until further order of the Commission. This order, among other things, prescribed the same scale of class rates for both single- and joint-line traffic with distances determined by use of the airline-distance principle.

This has resulted in considerable tariff simplification due to the fact that a majority of the Wisconsin intrastate common motor carriers of property now participate in a single tariff which provides both the single- and joint-line class rates, and the single-line volume rates of such carriers. Individual carriers still publish separate tariffs for publication of commodity rates for both single- and joint-line traffic.

Because of further increases in wages, in the costs of materials and supplies including gasoline, and in other operating expenses, the Commission, after hearing and investigation, authorized additional increases in the rates of common motor carriers. The order of December 10, 1947, in Docket MC-1218, authorized a temporary increase of 10 percent in transportation charges. On June 21, 1948, a 20-percent increase was authorized in lieu of the prior 10-percent increase, except on traffic moving on quantity rates applicable to 16,000 pounds or greater minimum weights. The 10% increase was continued on the latter traffic. The final hearing in this proceeding has not been held to date.

Two phases of the investigation in Docket MC-1218 resulted in considerable work, especially for the Commission's statistics section. First, a traffic study was undertaken to learn more of the characteristics of the traffic involved in the investigation. The carriers submitted copies of approxi-

mately 100,000 freight bills, which were analyzed and summarized. This extensive traffic study is intended to serve also as a general guide in rate matters in the future. Second, the type of tariff proposed and adopted necessitated finding some means of reflecting within the tariff the exact service which could be performed by each individual carrier.

The continuing increase in operating expenses of urban bus operators has resulted in the filing of a considerable number of applications with this Commission for higher urban fares. Increased fares have been authorized in Ashland, Appleton, Beloit, Eau Claire, Fond du Lac, Green Bay, Janesville, La Crosse, Merrill, and Wausau. Proceedings involving the urban fares in Madison, Milwaukee, Neenah, Menasha, and various other cities are still pending.

#### **Motor carrier revenues**

Since only a small percentage of the contract motor carriers file operating reports with this Commission, it is impossible to reflect the entire effect of motor carriers in the transportation of property. From analysis of the reports of those carriers who collectively perform approximately 90 percent of the intrastate common motor carrier operations within the state, it is noted that the revenues derived from intrastate traffic have increased approximately 25 percent in the current biennium. Perhaps one-half of this increase is the result of the general increase in the rate level, and the other half is the result of additional traffic. The revenues for system traffic handled by these carriers have increased approximately 50 percent. In addition to the Wisconsin intrastate traffic, this total system traffic includes traffic moving to or from Wisconsin as well as traffic in other states.

Bus operations in the state do not reflect much change during the period. Revenues from intercity traffic were approximately 1 percent less in 1947 than in 1945. On the other hand, revenues from urban operations were approximately 6 percent greater in 1947 than in 1945. There were some fare increases during the period, but in general the relationship in revenues would very closely reflect the relationship in traffic.

Annual reports are received from approximately 325 common motor carriers. Monthly reports covering certain operating data are received from all intrastate common motor carriers of passengers; quarterly reports of operating revenues and operating expenses are received from Class A common motor carriers of property. Annual reports from contract motor carriers have not been required, except that for the last 2 years such reports have been required from all contract carriers having gross annual revenues in excess of \$100,000.

It is important, in connection with annual reports and basic carrier records that there be more direct contact with the carriers for the purpose of examining their records and, if necessary, to suggest improved accounting procedures. This has been attempted to a certain extent in the current biennium and the results of contacts seem to establish the importance of this particular function.

#### Complaints and revocations

Heretofore complaints involving claims, services, etc., have been handled by correspondence primarily, except in unusual cases. The need for field investigation became more apparent and was instituted by the employment of a special investigator on April 6, 1948. The bulk of the field work has been confined to common motor carriers of property and passengers. Closer contact with these carriers has been effective as indicated by the decrease of service complaints.

The 1947 legislature amended section 194.46, Statutes, giving the Commission power, after proper notice and an opportunity to be heard, to suspend or revoke contract motor carrier authorities for abandonment. As a result of such legislative action, more than 10 percent of all outstanding contract motor carrier licenses were revoked and removed from the files. These revocations eliminated a great number of unused licenses, which had the effect of distorting the transportation picture, and brought to the attention of the carriers, particularly those holding public authorities, the need to render an adequate, continuing service to the public.

Considerable effort has been devoted to the policy of the Commission regarding transportation of highly seasonal commodities through closer contact with the canning companies and the law-enforcing authorities. Compliance has been secured on practically all hauling performed in this category.

The weekly calendar of public hearings is transmitted to 550 companies and persons, including truck operators, county clerks, editors of newspapers in the locality currently affected, and various truck magazine editors who in turn reprint the subject matter for the benefit of their subscribers.

## WATER POWER

### Dams

Construction work on dams has increased since the previous biennium. Permits were granted for construction of new and for raising and enlarging of existing structures and work has been started on seven dams having over 750 theoretical horsepower as follows: Petenwell and Castle-rock in the Wisconsin River, Holcombe in the Chippewa, Upper Quinnesec Falls in the Menominee, Dairyland Cooperative in the Flambeau, Stiles in the Oconto, and Port Wing in the Iron Rivers.

The following table indicates the function of the 1,067 dams which were under the jurisdiction of the Commission at the end of the 1946-48 biennium:

Over 750 theoretical horsepower	
Public utility hydroelectric developments -----	53
Private power developments -----	27
Combined utility and private power developments --	5
Reservoirs -----	5
Under 750 theoretical horsepower	
Public utility hydroelectric developments -----	78
Private power developments -----	177
Combined utility and private power developments --	3
Reservoirs -----	8
Miscellaneous nonpower	
Lake reservoirs -----	20
Lake control -----	179
Recreational -----	237
Occupational -----	63
Drainage control -----	212
	1,067

**Water power cases**

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

Formal cases decided .....	104
Special field investigations .....	223
Plans checked and approved .....	26
Informal water-power cases investigated and disposed of .....	114
Stream and lake gaging stations maintained in coop- eration with the United States Geological Survey ..	125
Stream measurements made .....	1,376
Inspection of dams having 750 theoretical horsepower or over .....	170
Inspection, survey, and resurvey of dams having less than 750 theoretical horsepower .....	420

The 104 formal cases decided consist of 24 contracts for removal of material from the beds of lakes, 12 determinations of lake levels, 2 permits to acquire dams, 23 permits for the construction of dams, 9 permits for the raising and enlarging of dams, 8 decisions in the operation of dams, 8 approval of tolls, 3 transfer of permits of dams, 18 obstructions or encroachments, and 7 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.