PUBLIC UTILITY RATE MAKING AND THE PRICE LEVEL

PUBLIC UTILITY RATE MAKING

AND THE

PRICE LEVEL

By

E. M. BERNSTEIN

Professor of Economics University of North Carolina



CHAPEL HILL THE UNIVERSITY OF NORTH CAROLINA PRESS 1937 Copyright, 1937, by The University of North Carolina Press

XN:7 G7

41723

PRINTED IN THE UNITED STATES OF AMERICA BY The seeman printery, Inc., Durham, N. C.

PREFACE

THE GREAT DIFFICULTIES that have been experienced by public utilities commissions in regulating utility rates have to a considerable extent been due to the large fluctuations in prices throughout the greater part of the period in which the policy of administrative rate making by commissions has been in effect. In the decade prior to the World War the rise in prices was moderate and it was possible, although not without some difficulty, to make the necessary revision in utility rates. The tremendous rise in prices during and immediately after the war necessitated large and frequent revision of rates which could not be made satisfactorily in view of the general opposition of consumers. The short period of relatively stable prices in the 1920's relieved utilities commissions to some extent of the burden of frequent rate revision. However, with the sharp decline in prices during the recent great depression, difficulties were once more encountered. Consumers pressed for large reductions in rates, and utility companies faced with a decline in revenue from decreased sales resisted rate revision that would have reduced their net incomes even more.

Even the instability of prices would not have prevented effective regulation of utility rates if a satisfactory rate making method had been available. Unfortunately, the rate making rule established by the courts was too complex in its required procedure to permit the prompt and complete adjustment of utility rates in the period of rapidly changing prices. The ultimate purpose of the rule that utility rates must provide a fair rate of return on the fair value of utility property was to duplicate in the field of regulated rates the process of normal price determination in competitive society. Although it would have been desirable to regulate utility rates in a manner that would generally maintain equality of the prices of utility services with their costs of production, this was not in fact achieved under the rate making rule. With the complex, dilatory, and expensive rate making procedure

PREFACE

required under the rate making rule it was impossible to bring about prompt adjustment of rates with changing costs of production. Utility rates thus acquired an undesirable rigidity entirely out of harmony with the purpose of the rate making rule. The experience of the past twenty years shows conclusively the futility of attempting to regulate utility rates on the precise pattern of the price making process of competitive society.

Throughout the war and again in the great depression, commissions found it was impossible to use the rate making method and procedure required by the rate making rule. Instead, it was necessary to develop new methods of rate making that permitted the use of a simpler procedure under which rates could be adjusted more promptly to changing operating costs. The rate making methods developed during the period of unstable prices were designed to introduce greater flexibility in the rate making process, and for this reason they deserve consideration with other proposals for increasing the effectiveness of rate regulation.

It is the purpose of this study to show how the rate making rule and its procedure were developed, to consider the difficulties that were experienced under this rule, to discuss the new methods of rate making that commissions used during the period of rapid fluctuation in prices, and to offer a reasonable solution for the rate making problem.

This study of *Public Utility Rate Making and the Price Level* was undertaken at the suggestion of Professor F. W. Taussig. In his *Principles of Economics* (II, 118), Professor Taussig has commented briefly on the effect of the abrupt price advance during the war on the public utility industries. I have tried to carry the analysis into various aspects of the rate making problem during the war and postwar years and during the recent depression. The aid and advice of Professor Taussig have been invaluable in completing the study.

I should like to record my obligation to the Harvard Club of Chicago for the scholarship I held in 1927, and to the authorities of Harvard University for the Ricardo Prize Scholarship and the University Fellowship in Economics that I held in 1928.

vi

PREFACE

Acknowledgment is made of the kindness of the McGraw-Hill Book Company for permission to use data on construction costs from L. R. Nash's *Economics of Public Utilities*, and of the kindness of the editors of the *Journal of Land and Public Utility Economics* for permission to use data on construction costs from an article by Professor P. J. Raver. The editors of the *Quarterly Journal of Economics* and the *Southern Economic Journal* have permitted me to make use of some previously published material. My colleague, Mr. Earl Hicks, has been very helpful in checking references and compiling the index.

E. M. B.

Chapel Hill October 8, 1937

CONTENTS

Preface	v
I. THE RATE MAKING PROBLEM	3
II. THE RATE MAKING RULE. A statement of the rule—The fair rate making value—The fair rate of return—The Supreme Court on value and return.	8
III. THE PRICE LEVEL, VALUATION, AND RETURN Fluctuations in prices and interest ratesValuation at current re- production costValuation at prudent investmentCapital cost and rate of return.	20
IV. WARTIME REGULATION AND RATE MAKING The objects of wartime rate making—The doctrine of corporate needs—Utility rates and the burdens of war—Wartime methods of valuation.	33
V. VALUATION: REPRODUCTION COST AT AVERAGE UNIT PRICES The prewar use of average prices—Five-year average prices—Ten- year average prices—The attitude of the courts—Some objections considered.	44
VI. VALUATION: THE USE OF CORRECTIVE INDICES Reasonable and normal appreciation—Corrective index valuation in Missouri—Corrective index valuation by federal courts—Disap- proval of indices by the federal courts—An appraisal of corrective index valuation.	59
VII. VALUATION: THE SPLIT INVENTORY	75
VIII. THE FAIR RATE OF RETURN. The problem of rising interest rates—A temporary deficiency of return—A normal rate of return—Interest, dividends, and the rate of return—The Supreme Court on fair rate of return—Summary and conclusions.	91

[ix]

CONTENTS

IX. RATE MAKING IN PROSPERITY AND DEPRESSION	105
X. A PROPOSED SOLUTION Necessary changes in rate making—Prudent investment and cap- ital cost—The New York rate making proposals—A solution to the problem—The prospect for the new plan.	120
Index	135

X

INDEX

- ABILITY to pay, 110
- Accounting, 20, 26, 83, 127, 131
- Additional percentage, 59, 84. See also
- Appreciation, Corrective indices
- Administrative problems, 26
- Administrative rate making, 5
- Alabama Public Service Commission, 67
- Allison, J. E., 17
- American Electric Railway Association, 58
- American Society of Civil Engineers, 10, 44
- American Telephone & Telegraph Co., 132
- Appreciation, 18, 38, 59-61. See also Corrective indices
- Approximate valuations, 42
- Arizona Corporation Commission, 40
- Arkansas Department of Public Utilitics, 49
- Ashland Water Co. (Wisc.), 82
- Association of Railway Executives, 133 Atwill, H. C., 132
- Average unit prices, advantages of, 56; attitude of courts toward, 55; attitude of utilities toward, 46, 57, 113; disadvantages of, 57, 88; fifteen-year, 53; five-year, 44, 46-49, 77; fouryear, 47; prewar use of, 44-46; replaced by corrective indices, 69; tenyear, 44, 49-53; three-year, 47; twenty-year, 53; two-year, 47; used in railroad valuation, 84; used with split inventory, 76; war construction and, 58
- BALTIMORE street railway case, 108 Bauer, J., 24, 127
- Bauer plan, 93, 127-128, 130
- Bay State Street Railway Co. (Mass.), 98
- Bickley, J. H., 91
- Blucheld Water Works & Improvement Co. (W. Va.), 87, 102
- Bonbright, J. C., 87, 127
- Bonds. See Securities.
- Book cost. See Prudent investment
- Brandeis, Justice, 20, 43, 86-87, 93, 101, 102, 109

- Brewer, Justice, 5
- Brooklyn Borough Gas Co. (N. Y.),
- 39, 47, 54, 77, 79 Brown, H. G., 122
- Brundige, H. W., 40
- Buck, S. J., 4
- Built up value, 75, 77, 81, 88. See also Split inventory
- Burdens of depression, 115
- Burdens of war, 94, 95, 99
- Bureau of Labor Statistics index num-
- bers, 60, 67, 70, 71, 113, 118
- Butler, Justice, 55, 87, 102
- CALIFORNIA Railroad Commission on average prices, 47; prudent investment, 105; return, 107, 110; split inventory, 77; wartime return, 40
- Cambridge Electric Light Co. (Mass.), 108
- Capital cost and fair return, 28-30, 38, 91-93, 99, 102, 103, 121, 125, 128,
- 130, 131. See also Corporate needs Capital structure and fair return, 30-31 Capitalization. See Prudent investment
- Cardozo, Justice, 116 Cedar Rapids Gas Co. (Ia.), 18
- Chesapeake & Potomac Telephone Co. (Md.), 66, 69, 71, 114
- Coal Prices, 33, 36
- Coast Gas Co. (N. J.), 60, 70
- Columbus Gas Light Co. (Ind.), 97
- Commissions, bound by constitution, 4; bound by rate making rule, 8-9; emergency powers of, 33; estab-lished, 5; facilities for work of, 6. See also Alabama Public Service Commission, Arizona Corporation Commission. etc.
- Committee on Interstate and Foreign Commerce, 133
- Common law, 3
- Common stock basis for return, 31, 38, 92, 93, 99, 103, 116, 121, 125, 130, 132, 134
- Compensatory return. See Rate of return
- Competitive rate making, 3, 4
- Conference of Governors and Mayors, 34
- [135]

- Confiscation. See Rate of return
- Congress, 4
- Connecticut Public Utilities Commission, 40
- Consolidated Gas Co. (N. Y.), 17, 18, 19, 38, 48, 54, 71
- Constitutional rights, 4, 5, 7, 9, 12, 17, 18, 22, 35, 52, 82, 114, 134
- Construction costs, 38, 50, 72, 73, 123
- Consumers, 31, 39, 110, 129 Consumers' income, 22, 111
- Contract plan, 127, 128
- Cooke, M. L., 36, 49
- Cooley, Professor, 44
- Corporate needs, 35, 37, 97, 98, 103
- Corrective indices, advantages of, 69, 113; additional percentage and, 59; attitude of courts toward, 65, 67-68; during depression, 113-15; future use of, 126; misuse of, 68; objections to, 72; used by federal courts, 63
- Cost of producing utility services, 3, 4, 23-24, 122, 129
- Courts, See Federal courts, State courts, Supreme Court

DAYTON-Goose Creek Railway Co., 102

- Davton Power & Light Co. (Ohio), 116
- Deficiency in return, 131
- Deflation. See Depression, Interest rates, Prices, Profits
- Depreciation, 10, 13, 18, 26, 131
- Depression, 4, 5, 6, 13, 21, 29, 45, 100-11
- Des Moines Gas Co. (Ia.), 17
- Discrimination, 3
- District of Columbia Public Utilities Commission, 44, 77
- Dividends, 30, 97, 98, 118. See also Common stock basis for return
- Donovan, W. J., 127, 128, 130
- Dozier, H. D., 92
- Due process of law. See Constitutional rights
- Duluth Street Railway Co. (Minn.), 66
- ECONOMIC emergency. See Depression, War
- Efficiency of management, 14, 15, 16, 97
- Electric light and power industry, 20, 34, 50, 73

- Elements of fair value. See Prudent investment, Reproduction cost
- Elizabethtown Gas Light Co. (N. J.), 54, 100
- Elizabethtown Water Co. (N. J.), 109 Emergency powers, 33, 36, 37
- Emergency rate making, 37, 41, 111
- Engineering News-Record index number, 63, 71, 72, 73, 113, 114
- Equal protection of the law. See Constitutional rights
- Equalization reserve, 128
- Equipment, 10, 75
- Equivalent service, 24
- Expansion, 13, 16, 27
- FAIR return. See Rate of return
- Fair value, affects return, 13; cases in Supreme Court, 17; cost of determining, 35; factors to be considered in, 9-10; normal value, 38; proposed methods of determining, 126-31; required for rate making, 5; translator for, 114; unit prices and, 12; wartime methods of determining, 32. See also Average prices, Corrective indices, Prudent investment, Reproduction cost, Split inventory, Valuation
- Farrington, Judge, 65
- Federal courts on average prices, 54; burdens of war, 41, 95; corrective indices, 63-64, 67-68, 114; current prices, 62; deficient return, 94; prudent investment, 105; reproduction cost, 106; return, 13, 100, 108, 109, 116, 117; split inventory, 79, 80, 82, 85; temporary rates, 112
- Federal courts, cases in, Ashland Water Co. (Wisc.), 82; Cambridge Electric Light Co. (Mass.), 108; Consolidated Gas Co. (N. Y.), 54; Duluth Street Railway Co. (Minn.), 66: Elizabethtown Water Co. (N. J.), 109; Fort Worth Gas Co. (Tex.), 108; Galveston Electric Co. (Tex.), 64, 86, 101; Georgia Railway & Power Co. (Ga.), 66, 87; Greencastle Water Works Co. (Ind.), 108; Houston Electric Co. (Tex.), 63; Indianapolis Water Co. (Ind.), 55, 102; Joplin Gas Co. (Mo.), 63; Kings County Lighting Co. (N. Y.), 94; Maryland telephone company, 66, 114; Minneapolis Gas Light Co.

(Minn.), 65; Mobile Gas Co. (Ala.), 67: Monroe Gas Light & Fuel Co. (Mich.), 68; New York & Queens Gas Co. (N. Y.), 94; New York Telephone Co. (N. Y.), 80; Pacific Gas & Electric Co. (Calif.), 105; Potomac Electric Power Co. (D. C.), 79; St. Joseph Railway, Light, Heat & Power Co. (Mo.), 79; St. Louis & O'Fallon Railway Co., 85; Southern California Telephone Co. (Calif.), 105; Springfield Gas & Electric Co. (Mo.), 63; Toledo Railways & Light Co. (Ohio), 41; West Palm Beach Water Co. (Fla.), 116; Wisconsin-Minnesota Light & Power Co. (Minn.), 64; Worcester Electric Light Co. (Mass.), 106

- Federal operation, 33, 62
- Financial stability, 110, 112, 133
- Fixed return, 93, 121, 128, 130
- Formula for rate making, 12, 13, 16, 17, 120. See also Uniform methods of rate making
- Fort Worth Gas Co. (Tex.), 108
- Franchise plan, 130, 131, 133
- Franchise value, 10
- GALVESTON Electric Co. (Tex.), 64, 86, 101
- Gas industry, 20, 34, 72, 73
- Georgia Public Service Commission, 42, 87
- Georgia Railway & Power Co. (Ga.), 42, 66, 87, 102
- Gifford, W. S., 132, 133
- Goddard, E. C., 20, 87
- Going concern value, 10
- Gold, N., 24
- Good will value, 10
- Granger movement, 4
- Green Bay Water Co. (Wisc.), 80 Greencastle Water Works Co. (Ind.),
- 108 Creates C. F. and
- Grunsky, C. E., 123
- HADLEY, A. T., 4

Hand, Judge L., 20, 54, 55, 71

- Harlan, Justice, 17
- Hartford street railway case, 40
- Hayes, H. V., 17
- Historical cost. See Prudent investment
- Holmes, Justice, 18, 86, 93, 101
- Home Telephone Co. (Ind.), 49

- Houston Electric Co. (Tex.), 63
- Hughes, Chief Justice, 18, 39, 47, 54, 77, 79
- Hutcheson, Judge, 63, 64
- DAHO Public Utilities Commission, 14
- Illinois Bell Telephone Co. (Ill.), 118 Illinois Commerce Commission on average prices, 47, 49; corporate needs, 99; normal return, 95-96; rate of return, 107; split inventory, 77; valuation conferences, 49
- Improvident investment, 18
- Income of consumers, 22, III
- Index numbers, Bureau of Labor Statistics, 60, 67; construction costs, 72, 73; cost of living, 71; during depression, 113, 118; retail prices, 71, 72; special indices, 70; wholesale prices, 71, 72. See also Corrective indices
- Indiana Bell Telephone Co. (Ind.), 97
- Indiana Public Service Commission on average prices, 48, 52, 53, 58; normal return, 96-97; prudent investment, 48; reproduction cost, 105; return, 103; return during depression, 115; split inventory, 77
- Indianapolis Water Co. (Ind.), 52, 55, 102
- Inflation, 5, 29, 49. See also Interest rates, Prices, Prosperity, War
- Intangibles, 10, 11, 75
- Interest rates, during depression, 29, 110, 115; fluctuations of, 5, 6, 13, 20-21, 29, 94, 107, 115; investors and, 30; and rate of return, 14, 29, 97; during prosperity, 94, 107; table of, 94, 107, 115; during war, 29, 38, 94
- Interstate Commerce Commission, 4, 45, 51, 83-85, 102
- Inventory for valuation, 10, 11, 26, 83 Investment. See Expansion, Prudent investment
- Investors, 28, 29, 129, 133
- Iroquois Natural Gas Co. (N. Y.), 79
- JOPLIN Gas Co. (Mo.), 63
- Judicial review, 5. See also Federal courts, State courts, Supreme Court Just compensation. See Constitutional rights

- KINGS County Lighting Co. (N. Y.), 94
- LAND valuation, 10, 11, 75, 83
- Legal questions, 22, 23, 127, 128, 134
- Legislative rate making, 4, 5
- Legislatures and rate making, 5, 8, 125, 127, 134
- Lincoln Gas & Electric Light Co. (Neb.), 95, 101
- Litigation, 5, 12, 21, 26, 42, 119, 120 Location of industry, 122
- Lockport Light, Heat & Power Co. (N. Y.), 78
- Lynchburg Traction & Light Co. (Va.), 61
- McADOO, W. G., 34, 37, 97 McReynolds, Justice, 101
- Maine Public Utilities Commission, 50, 107, 110
- Maintenance of service, 34, 35 Maryland Public Service Commission on corporate needs, 37, 98; rate of
- return, 108; split inventory, 77 Maryland telephone case, 66, 69, 71, 114
- Massachusetts Commissioners of the Department of Public Utilities on common stock basis for return, 92, 117; corporate needs, 98; rate making policy, 132; rate of return, 99
- Massachusetts plan, 130
- Maximum original cost, 83
- Michigan Board of Tax Commissioners, 44
- Michigan Public Utilities Commission, 68, 70, 110
- Milwaukee Electric Railway & Light Co. (Wisc.), 80
- Minimum valuations, 42
- Minneapolis Gas Light Co. (Minn.), 65
- Minnesota Railroad and Warehouse Commission, 40
- Minnesota rate cases, 11, 18
- Missouri Public Service Commission on average prices, 61; corrective indices, 62, 63; high prices, 39; prudent investment, 61; rate of return, 14, 107; split inventory, 77, 86; temporary rates, 112; wartime valuation, 36

- Mobile Gas Light Co. (Ala.), 67
- Monroe Gas Light & Fuel Co. (Mich.), 68. 70
- Montpelier & Barre Light & Power Co. (Vt.), 51
- Mt. Vernon water case, 78
- Munger, Judge, 65
- Munn v. Illinois. A
- Nash, L. R., 73
- National Electric Railway Commission. 34
- Natural gas industry, 15
- Nebraska State Railway Commission. 39
- Nevada Public Service Commission, 15 New Hampshire Public Service Com-
- mission, 77 New Jersey Board of Public Utility
- Commissioners on appreciation, 60; average prices, 60; corrective indices, 70; split inventory, 77; valuation conferences, 49
- New York Commission on Revision of the Public Service Commissions Law, 6, 93, 126-29
- New York Department of Public Service, Public Service Commission on burdens of war, 99; common stock basis for return, 116; corporate needs, 98; emergency rate making, 111; index numbers, 113; rate of return, 99, 107; split inventory, 77-80
- New York Department of Public Service, Transit Commission, 78
- New York Interurban Water Co. (N. ¥.), 78
- New York Public Service Commission: first district, 78; second district, 78. See also New York Department of Public Service
- New York State Railways (N. Y.), 80
- New York Telephone Co. (N. Y.), 80
- New York Transit Commission, 78
- Normal appreciation, 60, 70
- Normal rate of return, 38, 39, 94, 95-97, 99, 103
- Normal value, 38, 39, 46, 50
- North Carolina rate making law, 8
- North Carolina Utilities Commission, 113
- North Dakota Board of Railroad Commissioners, 45

138

- O'FALLON case, 85
- Ohio Public Utilities Commission, 77, 110
- Operating expenses, 8, 22, 27, 33, 34
- Oregon Public Utilities Commissioner, 77, 115
- Original conditions of construction, 17, 24

Original cost. See Prudent investment Overheads. See Intangibles

- PACIFIC Gas & Electric Co. (Calif.), 105
- Past carnings, 16, 128, 131
- Pennsylvania Public Utility Commission on average prices, 45, 48, 50, 52; rate of return, 107, 115; reproduction cost, 52; valuation conferences, 48
- Potomac Electric Power Co. (D. C.), 79
- Prendergast, W. A., 6, 126
- Prendergast plan, 126
- Present cost. See Reproduction cost
- Present value rule, 18, 82
- Price level. See Index numbers, Prices Prices, abnormal, 39; coal, 33, 36; current, 53; fluctuations in, 5, 6, 13, 20-21, 28, 29, 56; future, 51, 62, 64; postwar, 51, 57; rates and, 110; trend of, 60, 70; reproduction cost and, 112; wartime, 33, 38. See also Wage rates
- Prima facie valuation, 36, 42
- Private operation, 7, 134
- Procedure for rate making, and average prices, 56; complex and expensive, 29; dilatory, 35; corrective indices and, 69; during depression, 178; objections to present, 27; and split inventory, 75, 81, 88; unsatisfactory, 120; in wartime, 43, 59
- Productive resources, 23-24, 122
- Profiteering, 39
- Profits in competitive industry, 101, 105, 107, 115, 116, 119
- Property used and useful, 9, 10, 11
- Prosperity, 29, 45, 105-9
- Prudent investment, advantages of, 26-28, 129; attitude of Supreme Court toward, 134; basis for proposed uniform method of rate making, 121; 127; capital cost and, 28; changing costs of production and, 123; com-

missions prefer, 48, 120; consideration required, 8, 12, 83; and constitutional rights, 22, 23; and corporate needs, 38; current prices and, 124; during depression, 111; disadvantages of, 122; economic aspects of, 26-28; investors and, 27; legal theory of, 23; method of determining, 26; price fluctuations and, 21, 22; security issues and, 38; and stability of return, 28; and split inventory, 75, 89, 90; and wartime valuation, 42

- Public interest, 3
- Public ownership, 7, 131, 132
- Public purchase, 131
- Purchasing power, 25, 55, 71, 110

QUEENS gas case, 94

RACINE Water Co. (Wisc.), 80

- Railroads, 20, 33, 44, 83-85, 133
- Rate base. See Fair value
- Rate making, administrative, 6; competitive, 3, 4; legislative, 4, 5; problems, 5-7; rule, 5, 6, 8, 16, 18; uniform methods of, 16; unit prices and, 12; unsettled questions of, 9; wartime methods of, 6, 7, 33-34, 37, 41. See also Average prices, Corrective indices, Fair value, Procedure for rate making, Prudent investment, Rate of return, Reproduction cost, Split inventory
- Rate of return, base to which applied, 91; capital cost and, 28-29, 31; capital structure and, 30-31; compensatory, 19; in competitive industry, 31; controversies on, 29; in depression, 114-15, 117; dividends and, 07; and emergency rates, 111; excessive, 30-31; factors affecting, 14; interest rates and, 21, 91; past earnings and, 16; profits and, 115; proposed methods of determining, 128; in prosperity, 107-8, 119; variability of, 29; wartime methods of determining, 32. See also Capital cost, Common stock basis for return, Corporate needs, Normal return, Stable return, Standard rate of return
- Rates, comparative, 15; consumers' income and, 22, 111; emergency, 111;

inadequate, 5; prices and, 21-23; schedules of, 13

- Raver, P. J., 73
- Reasonable appreciation, 71
- Reasonable worth, 8, 39, 109-11
- Recapture of excess earnings, 102
- Regulation, 3, 7, 134
- Reproduction cost, attitude of courts, 121; advantages of, 23-25; and average prices, 44, 56; consideration required, 8, 63, 83; constitutional rights and, 17; during depression, 112; disadvantages of, 23-25; dominant consideration given to, 105, 106; economic aspects of, 22-25; and fair value, 64; investors and, 25; legal theory of, 23; method of determining, 25; normal, 40, 50; prices and, 21, 22; and wartime valuation, 41
- Richberg, D. R., 92
- Rigidity of rates, 27
- Risk, 14, 15, 28, 30
- Rockford City Traction Co. (Ill.), 96
- Roosevelt, Franklin D., 125, 127
- Rosenberry, Judge, 82
- Ruggles, C. O., 91
- ST. JOSEPH Railway, Light, Heat & Power Co. (Mo.), 79
- St. Louis & O'Fallon Railway Co., 85
- San Diego Land & Town Co. (Calif.), 17, 18
- San Joaquin & Kings River Canal & Irrigation Co. (Calif.), 17
- Securities, 25, 28, 38, 91
- Single sum value, 84
- Sliding scale, 36
- Smyth v. Ames, and corporate needs, 37; elements of value prescribed in, 12; modification in rule proposed, 127; procedure conforms to rule of, 16; and reasonable worth, 109; rule of, 8; and split inventory, 89; uniform methods of rate making and, 20; on valuation, 17; and wartime rate making, 41, 42
- South Carolina Public Service Commission, 114
- Southern Bell Telephone & Telegraph Co. (N. C.), 113
- Southern California Telephone Co. (Calif.), 105

- Southwestern Bell Telephone Co. (Mo.), 20, 43, 62, 93, 101, 113
- Speculation, 28, 82, 119
- Split inventory, abandoned, 82; attitude of courts toward, 78-80, 85; advantages of, 88; average prices and, 76; built up value, 75; classified inventory, 75; defined, 75; division date, 76; Interstate Commerce Commission uses, 85-87; land valuation and, 75; misuse of, 86, 88; New York uses, 78-80; proposed use of, 126, 129; purpose of, 75, 77, 88; Wisconsin uses, 80-82
- Spring Water Co. (Penna.), 49
- Springfield Gas & Electric Co. (Ill.), 96
- Springfield Gas & Electric Co. (Mo.), 63
- Stable return, 25, 71. See also Fixed return
- Standard rate of return, 19, 91, 95-96, 104, 108, 117, 131
- State courts on average prices, 54, 60; burdens of war, 94; corrective indices, 61; emergency rate making, 100, 111; normal return, 96, 97; rate of return, 100; return during depression, 116, 117; split inventory, 78-79, 82, 85
- State courts, cases in, Bluefield Water Works & Improvement Co. (W. Va.), 87; Brooklyn Borough Gas Co. (N. Y.), 39, 47; Columbus Gas Light Co. (Ind.), 97; Elizabethtown Gas Light Co. (N. J.), 54, 100; Iroquois Natural Gas Co. (N. Y.), New York Interurban Water Co. (N. Y.), 78; New York State Railways (N. Y.), 80; Southwestern Bell Telephone Co. (Mo.), 86; Springfield Gas & Electric Co. (Ill.), 96; United Railways & Electric Co. of Baltimore (Md.), 108; Waukesha Gas & Electric Co. (Wisc.), 82
- Stocks and bonds. See Securities
- Stone, Justice, 88, 102, 114
- Street railways, 20, 34, 72, 73
- Supreme Court on capital cost and return, 134; constitutional guaranties, 4; contract rates, 134; corrective indices, 114; current prices, 53; fair value, 16-17; fixed return, 93; formulas for rate making, 120; juris-

diction, 9; land value, 11; prudent investment, 18, 134; rate making rule, 5; rate of return, 13, 19, 100-101, 108; reproduction cost, 18, 56; return during depression, 116, 118; split inventory, 85-86; uniform methods of rate making, 20; wartime return, 95

Supreme Court, cases in, Bluefield Water Works & Improvement Co., 87, 102; Cedar Rapids Gas Co., 18; Chesapeake & Potomac Telephone Co., 114; Consolidated Gas Co., 17; Dayton Power & Light Co., 116; Galveston Electric Co., 64, 86, 101; Georgia Railway & Power Co., 102; Illinois Bell Telephone Co., 118; Indianapolis Water Co., 56; Lincoln Gas & Electric Co., 95, 101; Minnesota rate cases, 18; Munn v. Illinois, 4; St. Louis & O'Fallon Railway Co., 85; San Diego Land & Town Co., 17; San Joaquin & Kings River Canal & Irrigation Co., 17; Smyth v. Ames, 8; Southwestern Bell Tele-phone Co., 62, 86, 101; Texas railroad rate cases, 5; United Railways & Electric Co. of Baltimore, 108; West Ohio Gas Co., 118

Sutherland, Justice, 108 Swayze, Judge, 100

- TELEPHONE industry, 15, 20, 33, 72, 73, 114
- Temporary deficiency of return, 94-95, 111
- Temporary rate making, 111. See also Emergency rate making
- Temporary valuations, 36, 41, 81
- Tennessee Railroad and Public Utilities Commission, 110
- Tentative valuations, 42, 81
- Texas railroad rate cases, 5
- Thom, A. P., 133
- Toledo Railways & Light Co. (Ohio), 41, 95
- Tompkins, Judge, 79
- Transit Commission of New York, 78
- Transportation Act of 1920, 83-84, 102
- UNIFORM methods of rate making, 16, 20, 21, 22, 121. See also Formula for rate making

- Unit prices, 10, 12, 26, 44, 83, 113. See also Average unit prices
- United Fuel Gas Co. (W. Va.), 112
- United Railways & Electric Co. of Baltimore (Md.), 108
- Utah Public Service Commission, 94, 112
- Utica Gas & Electric Co. (N. Y.), 79 Utilities. See Electric light and power industry, Gas industry, etc.
- VALUATION, conferences on, 48, 49, 131; expense of, 27; informal methods of, 42; objects of wartime, 59; reduction of, 49, 50; wartime methods of, 41-42. See also Average unit prices, Corrective indices, Fair value, Prudent investment, Reproduction cost, Split inventory
- Valuation Act of 1913, 44, 83
- Valuation Brief of 1915, 45, 51
- Value of money. See Purchasing power
- Vermont Public Service Commission, 51
- Virginia Railway & Power Co. (Va.), 60
- Virginia State Corporation Commission, 60, 61

WAGE rates, 33, 83, 112

- War, burdens of, 38; boards, 33; construction costs during, 38; emergency, 95; fair value in time of, 41; interest rates during, 29, 38; objects of rate making in time of, 33-34, 89; rate making rule and, 41; sacrifices of, 40; valuation methods developed in time of, 32. See also Average unit prices, Corrective indices, Normal return, Normal value, Split inventory
- War Finance Corporation, 97, 99
- Washington Department of Public Works, 39, 115
- Water works, 15, 20, 72, 73
- Waukesha Gas & Electric Co. (Wisc.), 82
- West Ohio Gas Co. (Ohio), 118
- West Palm Beach Water Co. (Fla.), 116
- West Virginia Public Service Commission, 58, 87, 112
- Wilson, Woodrow, 34, 37, 97, 99

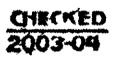
142

INDEX

Wisconsin-Minnesota Light & Power Co. (Minn.), 64

Wisconsin Public Service Commission on average prices, 45; common stock basis for return, 117; corporate needs, 100; emergency rates, 111; rate of return in depression, 110; split inventory, 77, 80-82 Wisconsin railroad valuation, 44 Worcester Electric Light Co. (Mass.), 106

YARDSTICK, 15 Yield on utility bonds, 94, 104, 107, 114, 115 York Water Co. (Penna.), 52



XN:7 41723 67 BERNSTEIN (E.M.) Public utility rate making and the price level Received Lent on Name of borrower oπ SERVANTS OF INDIA SOCIETY'S LIBRARY POONA 4. 1. Books drawn from the library may not be retained for longer than a fortnight. Borrowers will be held strictly responsible 2. for any damage done to books while they are in their possession. - ng