This rule was filed as NMPSC 340.

TITLE 17 PUBLIC UTILITIES AND UTILITY SERVICES
CHAPTER 3 UTILITIES FINANCIAL ACCOUNTING AND REPORTING - GENERAL PROVISIONS
PART 340 AUTHORIZATION OF DEPRECIATION PRACTICES TO BE OBSERVED BY PUBLIC UTILITIES

17.3.340.1 ISSUING AGENCY: New Mexico Public Service Commission [New Mexico Public Regulation Commission]
[Recompiled 12/30/01]

17.3.340.2 SCOPE: NMPSC Rule 340 [17.3.340 NMAC] shall apply to all electric, gas, steam, and water utilities under the jurisdiction of the Commission including municipally-owned utilities as provided by law.
[Recompiled 12/30/01]

17.3.340.3 STATUTORY AUTHORITY:
[Recompiled 12/30/01]

17.3.340.4 DURATION:
[Recompiled 12/30/01]

17.3.340.5 EFFECTIVE DATE:
[Recompiled 12/30/01]

17.3.340.6 OBJECTIVE: The purpose of NMPSC Rule 340 [17.3.340 NMAC] is to formulate for the State of New Mexico adequate requirements for determining depreciation accruals and reserves for public utilities.
[Recompiled 12/30/01]

17.3.340.7 DEFINITIONS: When used in NMPSC Rule 340 [17.3.340 NMAC] unless otherwise specified the following definitions will apply:

A. "Accounts" means the accounts described or recognized by the New Mexico Public Service Commission [New Mexico Public Regulation Commission].

B. "Depreciation Accounting" means a system of accounting which aims to distribute the cost or other basic value of tangible capital assets less salvage (if any) over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation not of valuation.

C. "Amortization" means the gradual extinguishment of an amount in an account by distributing such amount over a fixed period of time, over the life of the asset or liability to which it applies, or over the period during which it is anticipated the benefit will be realized.

D. "Commission" means the New Mexico Public Service Commission [New Mexico Public Regulation Commission].

E. "Cost of Removal" means the cost of demolishing, dismantling, removing, tearing down, or abandoning physical assets including the cost of transportation and handling incidental thereto.

F. "Accumulated Provision for Depreciation" means the summation of the annual provision for depreciation accruals recorded by the utility under a predetermined plan of accounting including charges for retirements and net salvage to recover the cost of the asset between the time it is first devoted to public use and retired from service.

G. "Annual Provision for Depreciation Accrual" means the annual amount charged to expense and/or clearing accounts.

H. "Group Plan" means the plan under which depreciation charges are accrued upon the basis of the original cost of the asset included in each depreciable plant account using the average service life thereof properly weighed, and upon retirement of any depreciable asset its original cost less net salvage is charged to the depreciation reserve whether or not the particular asset has attained or exceeded the average service life.

I. "Net Salvage" means salvage of property retired less the cost of removal.

J. "Original Cost" means the cost of property at the time it was first devoted to public service.

K. "Property Retired" means assets which have been removed, sold, abandoned, destroyed, or which for any cause have been withdrawn from service and the books of account.

L. "Salvage" means the amount received from assets retired less any expenses incurred in connection with the sale or in preparing the assets for sale; or if retained the amount at which the material recoverable is chargeable to materials and supplies or other appropriate accounts.

M. "Service Life" means the period between the date an asset is first devoted to public use and the date of its retirement from service.

N. "Straight-line Method" as applied to depreciation accounting means the plan under which the original cost adjusted for net salvage of the asset is charged to operating expenses and/or to clearing accounts and credited to the depreciation reserve through equal annual charges as nearly as may be during its service life.

O. "Utilities" means Classes A, B, C, and D as defined by the following table of annual operating revenues:

	Class A	Class B	Class C	Class D
Electric and Gas	Exceeding $2,500,000	$1,000,000 to $2,500,000	$150,000 to $1,000,000	$25,000 to $50,000.

Water (annual revenues for 3 consecutive year periods)

Class A	Class B	Class C	Class D
Exceeding $500,000	Exceeding $500,000	$50,000 to $500,000	Less than $50,000.

Sewer (average annual revenues for 3 consecutive year periods)

Class A	Class B	Class C
$750,000 or more	$150,000 but less than $750,000	Less than $150,000

Annual operating revenues are those revenues recorded in the accounts of the utility resulting from all sales of commodities or services or from other uses of utility properties. For combination utilities departmental operating revenues shall be used for classification purposes. "Department" as used in NMPSC Rule 340 [17.3.340 NMAC] shall mean a responsibility center within a combination utility where revenues and costs are accumulated by commodity or service rendered.

P. "Detailed Study" means a determination of depreciation accruals, depreciation rates, and depreciation reserve requirements.

Q. "Annual Review" means a cursory examination to insure that no major changes have taken place which would call for a new detailed study.

R. "Survivor Curve" means a curve that shows the number of units or cost of a given group which is surviving in service at given ages.

S. "Probable Life Curve" means a curve that shows the probable average life of the survivors at any age from zero to maximum life.

T. "Frequency Curve" means a curve that shows in what manner retirements are distributed over the period from zero age to maximum life.

U. "Units of Production Method" means the process whereby an equal portion of an asset's depreciable cost is allocated to operating expense or clearing accounts based on each unit of production from the asset.

[Recompiled 12/30/01]

17.3.340.8 [TABLE OF CONTENTS]

(2) Depreciation Rates
(3) Periodic Studies and Annual Reviews
(4) Report to Commission
(5) Commission Action

C. Acceptable Methods of Estimating Service Lives [17.3.340.11 NMAC]
(1) General
(2) Actuarial Methods
(3) Simulated Methods
(4) Life Span Method
(5) Salvage Estimate
(6) Alternative Methods

D. Reserve Requirement Study [17.3.340.12 NMAC]

E. Hardship Provisions [17.3.340.13 NMAC]

F. [TABLE OF CONTENTS - APPENDICES] [17.3.340.15 NMAC]
(1) APPENDIX A: Elements of a Survivor Curve
(2) APPENDIX B: Summary of Annual Depreciation Accrual and Rate Determination Straight-Line Remaining Life Method
(3) APPENDIX C: Summary of Annual Depreciation Accrual and Rate Determination Straight-Line Average Life Method
(4) APPENDIX D: Life Span Calculation
(5) APPENDIX E: Computation of Estimated Straight-Line Remaining Life Depreciation Accrual from a Survivor Curve-Group Basis
(6) APPENDIX F: Computation of Estimated Depreciation Reserve Requirement and Annual Depreciation Accrual From a Survivor Curve Straight-Line Average
(7) APPENDIX G: Salvage Estimate

[Recompiled 12/30/01]

17.3.340.9 CONCEPT OF DEPRECIATION: Depreciation as conceived by NMPSC Rule 340 [17.3.340 NMAC] is the process by which an equitable method of accounting will permit the recovery of the original cost less net salvage over the service life of a depreciable asset.

[Recompiled 12/30/01]

17.3.340.10 REQUIREMENTS FOR RECORDS, STUDIES, REVIEWS, AND REPORTS:

A. General: All Class A, B, C, and D electric, gas and water utilities and Class A, B and C sewer utilities in New Mexico shall maintain adequate accounts and records related to depreciation practices. Annual depreciation accruals by account shall be reported for each account. A separate reserve for each plant account shall be maintained. The cost of depreciable plant adjusted for net salvage will thus be distributed over the estimated useful life of such plant in a systematic manner. The accounting entries must be made in a manner consistent with applicable Uniform Systems of Accounts.

B. Depreciation Rates: Each public utility company has the primary responsibility for determining the depreciation rates that may be used for each account. Any public utility may make application to the Commission and present justification for a depreciation method to be approved by the Commission for the accounts as contained in the utility's application as evidenced by order of the Commission. If no such application is made, a straight-line method or unit of production method shall be used. Class A and Class B utilities will determine service lives in accordance with NMPSC Rule 340.10 through 340.15 [17.3.340.11 NMAC].

C. Periodic Studies and Annual Reviews:

(1) Class A and Class B utilities shall annually make an internal review of all depreciation rates and other pertinent depreciation factors by accounts to determine whether the current depreciation rates are appropriate for the ensuing accounting year. As a result of each utility's annual review and subject to Commission approval, depreciation rates may be adjusted to reflect known factors which may affect depreciation rates.

(2) Subject to the Commission requiring or a utility requesting a different analysis period, each Class A and Class B utility shall, not less often than every five (5) years, conduct a detailed study of all accounts as to the property of service lives, survivor curves, recorded net salvage, and other pertinent factors affecting depreciation.

(3) Class C and Class D water, gas and electric utilities and Class C sewer utilities shall maintain

depreciation records for each plant account but may determine average service lives either in accordance with NMPSC Rules 340.10 through 340.15 [17.3.340.11 NMAC] or by estimates based upon knowledge of local conditions, company policy with regard to retirement, other factors influencing service life, and the experience of other New Mexico utilities. When in the judgment of the Commission and after hearings, Class C and Class D water, gas and electric utilities and Class C sewer utilities may be required to use actuarial or simulated plant record methods for specified depreciation accounts.

(4) Class C and Class D gas, water and electric utilities and Class C sewer utilities shall annually review all depreciation rates by accounts. When required after hearings, studies shall be made so that within a five-year period or such other period as the Commission shall require all accounts shall have been analyzed. As a result of the annual review depreciation rates may be adjusted to reflect known factors which may tend to lengthen or shorten average service lives.

(5) Nothing in NMPSC Rule 340 [17.3.340 NMAC] shall prohibit the use of subaccounts for plant in separate geographic areas or where an account is large to separate and distinguish between certain classes of property. Where such subaccounts have been established, they shall be carried separately on the books of the utility and may be treated as separate accounts for depreciation purposes.

(6) The Commission may, after hearing, require Class A utilities to maintain certain subdivision of primary accounts for depreciation purposes.

D. Report to Commission: In all rate case filings all utilities shall provide reports to the Commission setting forth the depreciation rates. Class A and B utilities shall also file the results of the detailed depreciation study required by NMPSC Rule 340.7(b) [Paragraph 2 of Subsection C of 17.3.340.10 NMAC] with their next rate case following the completion of this study. In addition the utilities shall indicate on which accounts detailed studies have been undertaken during the previous year, summarized on a form containing all of the data which is contained on the sample enclosed in Appendix B and any other applicable sample appendices. The utility shall show proposed changes to depreciation rates it intends to use in the future and shall provide a justification for each change.

E. Commission Action: In the event the Commission should fail to issue an order approving or disapproving such proposed rates within sixty (60) days after the filing of the report, the utility may use the depreciation rates set forth in its report for the ensuing year.

[Recompiled 12/30/01]

17.3.340.11 ACCEPTABLE METHODS OF ESTIMATING SERVICE LIVES:

A. General:

(1) Utilities may use any reasonable acceptable method for estimating service lives which includes the analysis of plant mortality by group accounts. It is recognized that over the years many such methods have been developed and used successfully. However, it is suggested that utilities restrict themselves to the use of the recognized methods outlined in the following section. The purpose of such voluntary restriction is to minimize the number of methods to be reviewed and to promote economy among the utilities and the regulatory agency in the review of procedures.

(2) Determination of average service lives involves the basic study of historical patterns by use of actuarial and/or simulated plant record methods for group accounts together with engineering estimates of the future effect of physical factors of wear and tear, decay, depletion of supply, action of the elements, and functional factors of inadequacy, obsolescence, and public requirement. In those cases where factors such as anticipated changes to plant, additions of new or improved kinds of plant, previously unanticipated requirements, specific changes in plans of management, or other developments occur, they are to be given consideration in adjusting the average future service life of utility plant in service. The weight to be given past experience shall depend upon the extent to which conditions affecting service life in the future are expected to be similar to or different from those for the historical study period.

B. Actuarial Methods:

(1) Actuarial methods are generally similar to those developed by life insurance companies for the study of human mortality. The end result of the modification and application of these methods to utility plant is to determine estimates of average service life based upon the analysis of past plant retirements. These methods require that plant records be kept in sufficient detail so that the age of plant installed in any one year can be determined at all times.

(2) Utilities are urged to confine their use of actuarial methods to those which are discussed favorably in Public Utility Depreciation Practices, published December 1968 by the National Association of Regulatory Utility

Commissioners, and any subsequent revisions. These methods include the "Gompertz-Makeham" as well as the survivor curves developed by the Engineering Research Institute of Iowa State University. These curves are frequently referred to as "Iowa Curves."

(3) Included in Appendix A to NMPSC Rule 340 [17.3.340 NMAC] is a chart entitled "Elements of a Survivor Curve," which contains the various elements related to service life of utility plant in service. The "Frequency Curve" at the bottom of the chart indicates the frequency of retirements related to annual additions. It is the curve which is used in the "Brennan Method" described in the text that follows.

(4) The second curve is the "Survivor Curve" which indicates the percent of the original plant surviving at any age throughout the life of the group account. It is usually smoothed and extended by mathematical means from a stub-survivor curve developed from actual observed experience.

(5) As early retirements take place the overall service life of the survivors becomes longer than the total of the group at the time of first installation. Therefore the third curve illustrated on the chart is the "Probable Life Curve" which always lies to the right of the "Survivor Curve."

(6) The "Average Service Life" is indicated by the vertical line which starts at the top of the "Probable Life Curve" intersecting the "Survivor Curve" at a point where the "age" of plant in service equals the average service life of the plant.

C. Simulated Methods:

(1) Where utilities lack sufficient records to develop actuarial data, the use of simulated methods such as those developed by Mr. Alex E. Bauhan or by Mr. Joseph F. Brennan are recommended.

(2) The Simulated Plant-Record Method developed by Mr. Bauhan analyzes an account to determine average service life and dispersion by using annual gross additions and yearly plant balances. Through a process of iteration utilizing survivor tables, such as those developed by the Engineering Research Institute of Iowa State University, an attempt is made to duplicate the year-by-year plant balances in the account by a series of simulated balances arrived at by the assumption that each year's actual additions were subsequently retired in accordance with the pattern demonstrated by a particular Iowa Curve being used in the analysis. The use of electronic computing equipment expedites this procedure.

(3) The method developed by Mr. Joseph F. Brennan which was initially described in February 1957 in an article entitled "Plant Mortality" in Electrical Engineering avoids iterations and gives satisfactory results. The calculations required are laborious if performed by hand; however, the method lends itself to electronic computer operation. It involves the parabolic relationships of retirements and relates them to annual additions.

(4) For either of the actuarial or simulated methods it is important that the plant balances, annual additions, and recorded retirements accurately reflect the situation for the year in which the accounting data was prepared. Consequently any accounting adjustments or erroneous entries should all be corrected in the appropriate year before the methods are employed.

D. Life Span Method: In classes of property consisting of large units which are expected to be retired at one time as a single unit, a method employing direct estimates adjusted for interim retirements of portions of the large units is useful. This method is referred to herein as the "Life Span Method". A form entitled "Life Span Calculation" is attached as Appendix D. The method assumes that interim retirements will take place at a relatively constant rate throughout the life of the major unit. The tendency of these interim retirements of small subunits of the major unit is to produce a shortening of the overall life of the major unit for depreciation purposes.

E. Salvage Estimate: A form has been included in Appendix G to aid in the preparation of estimated net salvage. This form takes advantage of historical experience and provides for the analysis by account of the dollars of plant retired in a series of years, the amount of gross salvage received, the cost of removal of the plant, and the resulting net salvage. Because salvage is a condition to be realized in the future, the bottom of the form provides for preparing estimates of future net salvage. It initially uses historical data together with an estimate of gross salvage or scrap value of the surviving plant. By use of these data together with consideration of cost of removal an estimate of future net salvage is determined. With the ever increasing cost of labor and subsequent increase in cost of removal it is recognized that negative salvage may be a factor to consider in estimating the net salvage of any account.

F. Alternative Methods: In each instance where a method other than that covered by the foregoing discussion is to be advanced by a utility, the utility shall first present its proposal together with a justification for its use to the Commission for review. In submitting its request for authorization to use alternative methods the utility shall include specific reasons why it is unable to employ any of the methods previously discussed in NMPSC Rule 340 [17.3.340 NMAC] and the reason why the utility believes the proposed alternative method is superior for the

specific application.
[Recompiled 12/30/01]

17.3.340.12 RESERVE REQUIREMENTS STUDY: Adjustments to Depreciation Reserve: With the procedures outlined in NMPSC Rule 340 [17.3.340 NMAC] which require frequent reviews of depreciation rates and accruals there should not develop any serious over-or under-accruals of depreciation reserves. When a utility believes that at any time an over-or under-accrual in the depreciation reserve exists, the utility shall submit by formal application to the Commission a detailed reserve requirement study and request for adjustment. This reserve requirement study shall be reviewed by the Commission and the Commission will subsequently issue its final order approving, disapproving, or modifying the adjustment.
[Recompiled 12/30/01]

17.3.340.13 HARDSHIP PROVISIONS: Application for Modification of Rule or Exemption: If unreasonable hardship to a Class C and Class D water utility or a Class C sewer utility would result from the application of NMPSC Rule 340 [17.3.340 NMAC] herein prescribed, an application may be made to the Commission for the modification of NMPSC Rule 340 [17.3.340 NMAC] for temporary or permanent exemption from its requirements.
[Recompiled 12/30/01]

17.3.340.14 [**History:** odified by NMPSC Case No. 2086, order dated June 30, 1988; Amended by NMPSC Case No. 2232, order dated December 19, 1988; Amended by NMPSC Case No. 2277, order dated December 29, 1989. Formerly NMPSC General Order No. 27, superseded for purposes of rule reorganization and codification.]
[Recompiled 12/30/01]

17.3.340.15 [APPENDICES] Appendix A, Appendix B, Appendix C, Appendix D, Appendix E, Appendix F, Appendix G.
[Recompiled 12/30/01]

HISTORY OF 17.3.340 NMAC:
Pre-NMAC History: The material in this part was derived from that previously filed with the Commission of Public Records-State Records Center and Archives.
PSC-GO 27, (Case No. 1082) General Order No. 27 Rules Applicable To The Authorization Of Depreciation Practices To Be Observed By Public Utilities In The State Of New Mexico Under The Jurisdiction Of The New Mexico Service Commission, 4-17-74.
NMPSC Rule 340, Authorization Of Depreciation Practices To Be Observed By Public Utilities, 6-30-88.

History of Repealed Material: [RESERVED]