

**State of Minnesota
Department of Revenue**

**In the Matter of the Proposed Rules
of the Department of Revenue
Governing the Valuation and Assess-
ment of Electric, Gas Distribution
and Pipeline Companies (Utility Companies)**

**STATEMENT OF NEED AND
REASONABLENESS**

The above-captioned rules are being proposed in order to update and revise the current Rules and Regulations of the Department of Revenue Relating to Ad Valorem (Property) Taxes. The current rules have been in effect since 1975. They have been revised many times. Once in 1976, 1979, 1982, 1983, 1984, 1985, 1986, and again in 1987; however, it is the announced intention of the Department of Revenue to revise the rules whenever conditions, economic or otherwise, dictate a need for revision. It is now the opinion of the Commissioner of Revenue that the rules should be revised.

This document has been prepared as a verbatim affirmative presentation of the facts necessary to establish the statutory authority, need for, and reasonableness of the proposed new rules. It is submitted pursuant to Minn. Rule 1400.0500 requiring a Statement of Need and Reasonableness.

A Notice of Intent to Solicit Outside Information or Opinions in the preparation of these proposed rules was published in the State Register on March 28, 1988 (12 S.R. 2146). Written comments were received from a number of utilities and were considered by the agency in the preparation of these rules. Additionally, an open forum type discussion meeting was held on March 10, 1988. This meeting was attended by members of the Department of Revenue together with city and county assessors and representatives of various utility companies. A list of those in attendance, the agenda, meeting notes, and correspondence received relative to this meeting is available in the Department of Revenue. Various suggestions and comments made at these meetings were received and duly considered by the agency.

Authority to Adopt Rules

Minn. Stat. § 270.06 (14) states that the ..."Commissioner of Revenue may promulgate rules and regulations for the administration and enforcement of the property tax. Such rules and regulations shall have the force and effect of law..." The above captioned rules are encompassed within this authority.

Further, Minn. Stat. § 270.11, Subd. 1 and 6 gives the Commissioner of Revenue the authority to review, modify, revise, raise or lower the assessed valuation of any real or personal property of any individual, co-partnership, company, association or corporation. The Commissioner of Revenue is also charged with the responsibility under Minn. Stat. §§ 273.33, Subd. 2; 273.37, Subd. 2; and 273.38 of assessing the... "personal property, consisting of the pipeline system of mains, pipes and equipment attached thereto, of pipeline companies and others engaged in the operations or business of transporting natural gas, gasoline or other petroleum products by pipe-lines... transmission lines of less than 69kv, transmission lines of 69kv and above located in an unorganized township and distribution lines, (of electric companies) and equipment attached thereto, having a fixed situs outside the corporate limits of cities... the distribution lines, and the attachments and appurtenances thereto, (of electric companies) used primarily for supplying electricity to farmers at retail...". Such assessments are best discharged through the promulgation of such rules as are being proposed here.

Adoption of Proposed Rules Need and Reasonableness

The agency is currently proposing three revisions to the existing body of the ad valorem rules for utility property. These revisions concern Minn. Rules 8100.0300, Subp. 3, Cost approach and Minn. Rules 8100.300, Subp. 4, Income approach.

The first proposed change in the rules concerns the amount of depreciation which will be allowed as a reduction of the cost of the utility's property. There are several types of cost which are used in the appraisal of utilities:

1. **Original Cost** - Original cost is the actual cost of a property when it was first acquired or constructed.
2. **Book Cost** - Book cost is the original cost of a property less accrued depreciation.
3. **Reproduction Cost** - Reproduction cost is the present dollar cost to reproduce a replica of the existing property, i.e. what the property would cost today. Reproduction cost is obtained by trending known costs up or down, depending on whether current construction costs are greater or less than when the property was first constructed.
4. **Replacement Cost** - Replacement cost is the present dollar cost to replace a property with one having similar or equal usefulness.

The estimation of value by use of the cost approach requires the use of the proper type of cost, and then computing the loss in value due to depreciation.

Depreciation is made up of three factors:

1. **Physical deterioration**, which is the loss in value from original cost caused by normal use and wearing out of the property.
2. **Functional obsolescence**, which is a loss in value because of functional deficiencies or inadequacies within the property itself. Normally, functional obsolescence would result from technological changes which result in better, more efficient techniques.
3. **Economic obsolescence**, which is a loss in value caused by factors outside the property itself.

In the case of electric utilities the various elements of depreciation are considered by the Federal Energy Regulatory Commission which then specifies what rates of depreciation are to be used by the various utilities for different classes of assets.

The four major electric utilities operating within Minnesota are currently at the following depreciation level:

Original Cost of Plant in Service	\$6,391,593,260
Accrued Depreciation	1,847,820,030
Net Cost of Plant in Service	4,543,773,230
Ratio of Depr. to Original Cost	(Approx.) 29%

The rules now in effect allow the electric companies a maximum of 20% depreciation. The proposed rules would give the companies a partial allowance for the depreciation they show on their books in excess of the maximum depreciation allowance of 20%. This partial allowance is proposed at 30% of the excess depreciation. The difference between the companies' actual book depreciation and the maximum depreciation

rate of 20% plus 30% of the excess depreciation is the agency's method of calculating a replacement cost for the utilities' property and also a hedge against inflation.

Minn. Stat. § 273.11, Subd. 1 requires that ..."all property shall be valued at its market value." With most types of property the concept of market value equates to replacement cost. The owner of a 20 year old three bedroom, 1000 square foot rambler does not have his property valued by the local assessor at the original cost of \$20,000; neither does the assessor use book cost. The assessor would use some form of either reproduction or replacement cost. When the house was built in 1967 construction costs must have been approximately \$20 per square foot; hence, the selling price, (market value, original cost) of \$20,000. Today, inflation has pushed these same construction costs to \$70 per square foot, so the market value or replacement cost of the property is \$70,000.

The agency recognizes that a multimillion dollar utility does not sell in the same way a three bedroom rambler might. It also recognizes that in most instances the utility is limited in its earnings by its rate base; (rate base is normally original cost less depreciation). However, it is readily apparent that because of inflation the cost of replacing the facilities at today's prices would be more than the original cost at the time of installation. Our holding of the depreciation at a specified maximum attempts to recognize both the wearing out and obsolescence of the facilities together with the fact that to replace or reproduce the facility would produce more value. The agency believes that the proposed maximum depreciation allowance is a reasonable and viable method of accomplishing both these objectives.

The major pipeline and gas distribution companies have the following depreciation levels.

Original Cost of Plant in Service	\$6,975,973,726
Accrued Depreciation	3,552,979,289
Net Cost of Plant in Service	3,422,994,437
Ratio of Depr. to Original Cost	(Approx.) 51%

The rules now in effect allow pipeline and gas distribution companies a maximum of 50% depreciation. We propose to retain this maximum but once more allow 30% of the excess depreciation to be used as a reduction of the original cost of the plant in service. As with electric utilities, this is the agency's method of calculating a replacement cost for the utilities' property and also a ledge against inflation. The agency is aware of the difference between the depreciation allowed to electric companies and gas distribution and pipelines. We believe that because of the dissimilarity between the industries that the depreciation rates are proper. The electric industry is constantly updating and replacing its property so that overall depreciation rate is fairly low. In the pipeline industry, on the other hand, it is common practice to build a line and leave it in place for years. Since the pipes are normally buried they are not easily accessible as are electric wires. In addition, the state of the art in the pipeline industry changes much more slowly than in the electric industry. There are only so many ways you can design a pipe, while new and different ways for transmitting electricity are regularly being discovered. (Witness the change from transporting electricity in A.C. form to the D.C. mode.) There is very little replacement and updating in the pipeline field. Minnesota has operating pipelines which were built in the 1940's. Because of this longer life span of pipeline property, a larger depreciation allowance is necessary to adequately reflect the loss in value of the property. The same rationale holds true in most instances for gas distribution companies.

There is a further consideration to be looked at as well. It is an acknowledged fact that the need for electricity will go on for the foreseeable future. The demand for electric power can be met in a number of ways; by hydro power, nuclear energy or coal fired generating plants. In short, the electric industry is here to stay. Gas and oil in the other hand are not quite as stable or certain. It may well be that a pipeline may not have nearly as long a life as the builder intended either because the source of supply is exhausted, or is cut off for political or economic reasons. This of course, has a decided effect on the market value of the property. A prospective buyer would be much more willing to pay a higher price for a long term monopoly utility, than for a relatively short term speculative utility. The larger depreciation allowance given to pipelines and gas distribution companies is one of the agency's methods of recognizing this fact. We believe the proposal to be reasonable in its concept, and necessary if we are to find a realistic estimate of market value for these types of utilities.

The second change in Minn. Rules 8100 concerns adjusting electric utility property to take into account the effect of inflation on property values. This change is aimed at a specific type of electric utility asset, the major generating plants. The adjustment is accomplished through the use of a special study called the "Average Cost per Kilowatt of Installed Capacity."

The "Average Cost per Kilowatt of Installed Capacity" is a method of replacement cost which computes the national average cost of building a major generating plant. This average is then applied to all major plants operated by a utility. If the national average is higher than the original cost of the plant the original cost is increased to that of the average; if the national average is lower no adjustment is made.

The reason this average is computed and used can best be explained by again using the homeowner as a comparison. The appraiser can best estimate the value of the three bedroom rambler by using two methods; 1) comparable sales, and 2) cost per square foot of construction. It is apparent that major utility generating plants do not sell frequently on the open market. Therefore the comparable sales avenue of appraisal is not generally available to us. Major generating plants are not built on a square foot basis, but rather on a capacity basis. They are measured and classified as to how many kilowatts they can produce operating at maximum capacity. Therefore, instead of using the square foot construction costs of generating plants to estimate current worth, as we would in the case of a house, we utilize cost per kilowatt.

We feel that this is a fair and workable technique of calculating an accurate measure of replacement cost for a number of reasons.

1. It follows accepted appraisal techniques of comparing construction costs for like properties.
2. It makes no adjustment on smaller standby units which are often kept in working condition by a utility for emergency use only.
3. By using the national average, the utility in Minnesota receives the benefit of warm weather building methods which are usually less costly.
4. The method gives the utility the advantage of the most advanced technology used in building power plants, and refutes the argument "We wouldn't build a plant like that today."
5. It typically produces an additional value only for older plants and does not produce an across the board increase for the newer plants.

Notwithstanding the arguments listed above the agency believes that the amount of additional value added to the cost indicator as a result of this average cost study must be tempered in order to achieve an equitable valuation. For this reason the agency proposes to increase the cost indicator of value by only 25% of the gross additional adjustment calculated through the use of the average cost per kilowatt of installed capacity study.

The results of this study have shown a rapid increase in recent years and the agency has proposed various methods to limit the increases so as to retain a reasonable value for older electric generating plants. These methods have included increasing the number of samples used in the study so as to broaden the study base, granting an allowance for pollution control equipment as a deduction from the gross added value, and computing various measures of functional obsolescence which are also used to reduce the gross value added to each generating plant. These measures have proved effective in past years; however, now the agency believes it is time to place a further restriction on the amount of value added to the generating plants, namely factor the increase by 25%. We believe this proposal is reasonable in both its concept and application and is necessary to continue our history of equitable, defensible utility valuation.

The third change in Minn. Rules 8100 is a change to the wording of the income indicator of value. The income indicator of value estimates the value of property by using the value of the various forms of capital of the utility. The "Income indicator of value" is estimated by weighing the earnings of the utility company for the most recent three years as follows: Most recent year, 40 percent; previous year, 35 percent; and final year, 25 percent. This value is then capitalized using a rate computed considering conditions that may exist in the future that may affect the present annual return. As presently written, the capitalization rates are recomputed each year and the resulting rates specified in the rules for electric companies, gas distribution companies and pipelines.

In the past the agency has used the capital structure of the utility, interest rates, yield of preferred stock and common stock and deferred taxes to compute the capitalization rate.

The agency does not intend to change the method of computing the capitalization rate. However, in order to change the capitalization rate we are now required to change the rules. We believe it will be more efficient to specify the method of calculating the capitalization rate and be able to change the rate without changing the rules. This is since interest rates are constantly changing, investors expectations change and tax laws change. We believe the proposal necessary to find a fair estimate of value for these types of utilities.