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## STATE TAX COMMISSION OF MISSOURI ASSESSOR MANUAL

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CHAPTER:

### RURAL ELECTRIC COOPERATIVES

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## 7.1 RURAL ELECTRIC COOPERATIVES (RECs)

The following guidelines, developed by the State Tax Commission (Commission), are furnished to each county assessor for the valuation of Rural Electric Cooperatives (RECs). The Commission is providing these guidelines to assist county assessors in valuing rural electric cooperatives. These guidelines are intended to be supplemental to the appraiser's knowledge and available resources. It remains the responsibility of each county assessor to defend the final estimates of market value.

### 1. Overview

Electric cooperatives began in the 1930s when President F. D. Roosevelt, by executive order, authorized loans to anyone who would undertake extension of electric service to people in rural areas. Soon after, consumer-owned utilities were organized because existing utility companies were not applying for those low interest loans to serve those areas. The Congress extended this executive order by enacting the Rural Electrification Act (R.E.A.) in 1936. Presently, there are more than 1,000 rural electric cooperatives in the United States. Missouri has approximately 52 of these rural electric cooperative systems providing service to consumers.

There are several major differences between rural electric cooperatives and investor owned electric utilities (IOUs). Seasonal demand and larger investment in distribution facilities required per customer are unique to Distribution cooperatives. This is primarily caused by the low density of customers in rural areas. Most rural electric cooperatives sell the vast majority of their power to rural customers while the IOUs sell a larger percentage of power to commercial and industrial customers. The low customer density and low percentage of revenue generated from commercial and industrial customers are forms of economic obsolescence.

A rural electric cooperative is nonprofit motivated and, thus, it is difficult to arrive at a capitalized income value. Their rates are based on operating expenses, largely made up of the cost of power and the needed funds required to service the debt. Because of the relationship of rates to expenses, the operating margin or net income is nominal and does not provide a market rate of return on capital. The difficulty involved in appraising rural electric cooperatives is in both measuring an income stream and arriving at a capitalization rate, making the capitalized income approach difficult to perform.

The market or comparable sales approach is also difficult to perform due to the scarcity of sales. With such limited sales taking place, this approach would be seldom used for appraising rural electric cooperatives.

Therefore, the cost approach seems to be the most reliable indicator of value. Net distribution plant, less obsolescence, is used for Distribution cooperatives. Net transformer plant, net transmission plant, and net production plant, less obsolescence, is used for Generation & Transmission cooperatives.

The first section of these guidelines may be used by any county wishing to develop a value per mile of the distribution assets for a Distribution cooperative. The second section of the guidelines describes the valuation process for developing a value per kV mile of the transmission assets, a value per MVA of transformer rated capacity, and a value for production assets of a Generation & Transmission cooperative. Construction Work In Progress (CWIP) values are not included in the valuation process outlined by the guidelines for either a Distribution cooperative or Generation & Transmission cooperative. However, the Average of Standard Factor (for a Distribution cooperative) or Aggregate Average of Standard Factor (for a Generation & Transmission cooperative), respectively, may be applied to the CWIP dollars booked as of the January 1 lien date. These factors provide for the inherent obsolescence of the rural electric cooperative. The county assessor will develop market value estimates for buildings and equipment not included in distribution, transmission, and production plant accounts, such as office buildings, fixtures, office equipment and furniture, motor vehicles, materials and supplies, and land, including substation land.

## **2. Market Value Estimate**

This guideline will present several factors that are considered applicable in obtaining the appropriate amount of obsolescence in a rural electric cooperative. In using these factors, which compares rural electric cooperatives to IOUs, the following must be considered:

- A. An IOU operating under regulated conditions in the State of Missouri will be worth at least net book;
- B. Net book is substantially all of the earnings base of an IOU and, therefore, several measures of operating efficiency will provide "standards" against which all companies can be compared; and
- C. "Standards" will be those operating factors that are representative of IOUs operating efficiently and under regulated conditions.

A revenue statistics comparison of a rural electric cooperative to an IOU is hard to achieve because of the cooperative's nonprofit nature, exemption from federal income taxes, receipt of low interest loans, and other revenue and expense differences. While there would be many factors that could be considered when comparing one IOU to another, six factors were chosen for the purpose of comparing cooperatives to the IOUs. These factors are used to determine obsolescence. The factors of comparison are as follows:

- (1) (MWH Sales/Customer) mega-watt hours sold to customers per customer.
- (2) (MWH Sales/Net Distribution Plant) mega-watt hours sold to customers per net dollar invested in distribution plant.
- (3) (MWH Sales/O & M Expenses) mega-watt hours sold to ultimate customers per dollar of operating and maintenance expense.
- (4) (MWH Sales/Distribution O & M Expenses) mega-watt hours sold to customers per dollar of distribution operating and maintenance expense.
- (5) (Customers/Net Distribution Plant) number of customers per net dollar invested in distribution plant.
- (6) (Customer per Mile) number of customers per mile of distribution line.

\*\* Note: MWH Sales should not include any amount for resale or those customers served.

These are ratios that a prospective buyer would examine. Ratios 1, 5 and 6 give some indication of the density or volume of the business. Ratio 2 gives an indication of the cost effectiveness and efficiency of the invested assets. Ratios 3 and 4 give some indication of the efficiency of the operations. All six factors are intended to be directly comparable to the ratios of an IOU.

The operating ratios are calculated using data of the four IOUs operating in Missouri. The calculations, of the six ratios, yield the six **STANDARD COMPANY FACTORS**. They do not represent any one particular electric company but rather a threshold by which to compare the cooperative's ratios.

In January of the odd-numbered year, the Original Assessment Section of the Commission calculates the **STANDARD COMPANY FACTORS**. These factors are based upon reports submitted by the IOUs to the Commission in April of the prior even-numbered year and contain year-end data from the immediately preceding odd-numbered year. For example, the **STANDARD COMPANY FACTORS** for 2015 will be calculated from information as of December 31, 2013 year-end. Therefore, this information is representative of the same year as the 2013 REC data used to calculate the Average of Standard Factor for the rural electric cooperative in 2015. The Average of Standard Factor for a Distribution cooperative for an odd-numbered year is also used in the valuation process for the following even-numbered year.

### **3. Updates**

Real property is to be valued on a two-year assessment cycle. The difference in data utilization for a Distribution cooperative and a Generation & Transmission cooperative is explained below:

#### **A. Distribution Cooperative**

**In the odd-numbered year: all information will be updated.**

**In the even-numbered year: the Distribution cooperative's data will be updated for any added or retired distribution plant, and associated Accumulated Depreciation.** Also, the miles of distribution line and customers used in the "allocation to the county" will be updated.

For example, these values as of December 31, 2015 year-end will be utilized for 2016.

Accordingly, the Average of Standard Factor for the Distribution cooperative will NOT be updated for the even-numbered year.

#### **B. Generation & Transmission Cooperative**

**In the odd-numbered year: all information will be updated.**

**In the even-numbered year: the Generation & Transmission cooperative's data will be updated for any added or retired transmission plant, transformer plant, and production plant, and associated Accumulated Depreciation.** Also, the list of member cooperatives, the Distribution cooperatives' net distribution plant, and the miles and ratings of transmission line and transformer rated capacity used in the "allocation to the county" will be updated.

For example, these values as of December 31, 2015 year-end will be utilized for 2016.

Accordingly, as the Distribution cooperatives' net distribution plant values change, the Aggregate Average of Standard Factor for the Generation & Transmission cooperative will be updated for the even-numbered year.