(Decision No. R79-182)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

* * *

RE: INVESTIGATION AND SUSPENSION OF TARIFF SHEETS ACCOMPANYING ADVICE LETTER NO. 34 FILED BY MOUNTAIN VIEW ELECTRIC ASSOCIATION, INC., FOR REVISION OF TARIFF COLORADO PUC NO. 2 - ELECTRIC.	)	INVESTIGATION AND SUSPENSION DOCKET NO. 1259 RECOMMENDED DECISION OF EXAMINER LOYAL W. TRUMBULL TERMINATING SUSPENSION OF FILED RATES

February 8, 1979

Appearances: Robert T. James, Esq., Colorado Springs, Colorado, for Respondent Mountain View Electric Association, Inc.;

Jacqueline Vermeulen, Assistant Solicitor General, Denver, Colorado, for the Commission.

STATEMENT OF THE CASE

On October 6, 1978, Mountain View Electric Association, Inc., hereinafter referred to as "Respondent," filed with this Commission its Advice Letter No. 34, accompanied by six separate tariff sheets. Respondent requested that the rates contained in such tariff sheets be allowed to become effective on November 8, 1978, subsequent to the normal minimum statutory notice of 30 days.

However, by Decision No. C78-1438, issued October 31, 1978, this Commission suspended the effective date of the aforementioned tariff sheets for the maximum allowable suspension period of 210 days, terminating on June 7, 1979, unless terminated or permanently suspended by an earlier order of the Commission. Such order also set the matter for hearing on December 14, 1978, at 10 a.m. in the District Courtroom, Lincoln County Courthouse, at Hugo, Colorado, and directed any person, firm, or corporation desiring to intervene in this proceeding to file appropriate pleadings on or before November 24, 1978. No such requests for leave to intervene were so filed, with the exception of one on behalf of the Town of Limon, which was withdrawn on November 16, 1978.

The hearing was held as scheduled. Testimony was heard from Respondent's general manager and his administrative assistant, a consulting engineer retained by Respondent to conduct an electric rate study, three public witnesses, a representative of the National Rural Utilities Cooperative Finance Corporation, and a financial analyst and an engineering analyst from the Staff of the Commission. A total of 39 exhibits were offered and admitted into evidence.

Pursuant to the provisions of 40-6-109, CRS 1973, Examiner Loyal W. Trumbull now submits to the Commission the record and exhibits of this proceeding, together with this Recommended Decision.

FINDINGS OF FACT AND
CONCLUSIONS THEREON

Based upon all the evidence of record, the Examiner has found the following facts to exist and has arrived at the following conclusions on the basis of such facts:

1. Respondent Mountain View Electric Association, Inc., is a non-profit corporation organized and doing business under the laws of the State of Colorado. Respondent is engaged in the business of purchasing, acquiring, transmitting, distributing, furnishing and selling electricity to its consumers in the Colorado counties of Elbert, Arapahoe, El Paso, Pueblo, Washington, Lincoln and Douglas.

2. Respondent is a public utility as defined by 40-1-103, CRS 1973, and is therefore subject to the jurisdiction of this Commission for the purposes of this proceeding.

3. Respondent has chosen to use the 12-month period ending April 30, 1978, in this proceeding as its test period for determination of revenue requirements, which test period is reasonable and proper.

4. Respondent does not presently recover franchise taxes paid to municipalities by imposing a surcharge upon customers receiving service within the municipalities imposing such franchise fees, but intends to do so in the future. Such franchise fees amount to $21,862 on a test-year basis and are reasonable charges for the rights conferred by such franchises to use the streets, alleys and other rights-of-way for Respondent's utility purposes. There is, incidentally, no evidence of undue subsidization of customers receiving service outside such municipalities by those receiving service inside such municipalities which might render the proposed surcharge unjust or unreasonable, and it is found and concluded that such franchise fees should be recovered as proposed by surcharge. The findings of fact and conclusions contained in this Recommended Decision as to revenues, expenses and rates are therefore predicated upon the $21,862 in franchise fees being recovered by an appropriate surcharge upon customers receiving service within the municipalities imposing such franchise fees rather than being included in operating expense to be allocated among all customers.

5. The rates filed by Respondent are designed and intended to increase revenues by $501,854, exclusive of revenues which would result from the future surcharging of franchise taxes. These rates would result in a rate of return on year-end rate base of 6.98% on a test-year basis, which is substantially beyond the range of reasonable rates of return presently indicated by the so-called "San Luis Guidelines." These figures were predicated upon the conclusion of Respondent's management and board of directors that it must generate margins sufficient to accomplish the following objectives:

a. Meet effective interest costs of $454,770,

b. provide cash reserves equal to the unrefunded portion of 1963 and 1964 patronage capital, which amount to $211,826, and

c. provide for additional equity improvement of 2%, which would require $306,862.

6. Respondent's total operating revenues per books were $4,131,654 for the test year. However, a wholesale power cost increase pass-on allowed by this Commission requires an adjustment of $277,449 to annualize the effect of such pass-on, resulting in adjusted test year operating revenues of $4,409,103.

7. Respondent's total electric operating expenses per books are $3,633,210 for the test year, after excluding certain items for advertising, good will, service clubs and charitable contributions, which do not constitute proper above-the-line expenses according to current Commission policy. Respondent has proposed an adjustment in the amount of $290,368 to annualize the effect of wholesale power cost increases and one of $32,189 to annualize the effect of an 8% wage and salary increase which became effective January 1, 1978, both of which are reasonable and proper. Respondent's adjusted test-year operating expenses are therefore found to be $3,955,767.

8. Staff has recommended that Respondent should be allowed to use a year-end rate base in the determination of its revenue requirements. There is no doubt that the use of an average rate base for rural electric cooperatives, which are generally experiencing a higher compound annual growth rate than investor-owned utilities, is a major factor in the inability of such cooperatives to realize their authorized rates of return on rate base and, conversely, to experience declines in their equity levels. Respondent should be allowed to use a year-end rate base in this proceeding.

9. Respondent's net original cost rate base as of the end of the test year was $14,004,569, and is composed of the following element:

Gross Rate Base		
Electric Plant In Service	$17,426,267	
Construction In Progress	471,290	
Materials and Supplies	324,242	
Prepayments	101,834	
Working Capital	133,949	
		$18,457,582
Deduction From Gross Rate Base		
Accumulated Depreciation and Amortization	$ 4,098,842	
Contributions In Aid Of Construction	0	
Consumer Advances For Construction	354,171	
		$ 4,453,013
Net Rate Base		$14,004,569

10. Respondent's per books operating income or margins of $498,444 result in a rate of return on rate base of 3.56% when applied to a rate base of $13,988,667, which is merely the test-year rate base before an increase in working capital of $15,902 attributable to the wage and salary increases. Respondent's fully adjusted test year margins of $453,336 result in a rate of return on test-year rate base of only 3.24%, which is not a reasonable rate of return. With the foregoing rates of return on rate base, Respondent's rate of return on equity for the test year is 3.54% per books and only 1.65% for the fully adjusted test year under existing rates.

It is evident that Respondent's present rates do not now, and will not in the foreseeable future, afford Respondent a reasonable opportunity to realize a just and reasonable rate of return on its property dedicated to utility use, and such rates, in the aggregate, are unjust and unreasonable.

11. Respondent's administrative policy concerning equity capital objections and patronage capital payments, dated October 21, 1974, provides that Respondent will, among other things:

a. Allocate capital credits annually,

b. through its operations, strive to attain a 45% equity component in as short a period of time as is consistent with prudent business practice,

c. strive to refund contributed capital from net operating earnings within a period of no more than ten years,

d. not retire capital if the financial condition of Respondent would thereby be impaired, and

e. continue to retire capital credited to the estates of deceased persons.

Although the language of this administrative policy does not appear to conform to Rural Electrification Administration (REA) policy, which suggests allocation of all amounts in excess of losses, costs and expenses (see Exhibit 23), it appears that Respondent does indeed allocate capital credits as so recommended.

12. Respondent has not been able to make any general refunds of patronage capital for years after 1962. In has routinely paid capital credits to estates of deceased customers regardless of when allocated.

13. Commission Staff and representatives of the National Rural Utility Cooperative Finance Corporation (CFC) have taken the opportunity afforded by this filing and this hearing to advise the Commission as to the efficacy of the San Luis Guidelines in maintaining the financial integrity of jurisdictional rural electric cooperatives (RECs), individually and as members of CFC. The situation is not particularly gratifying, as indicated by the following summary and discussion.

14. The so-called "San Luis Guidelines" have generally followed a three-step process of evolution, being:

a. The Union Rural Electric Association Decision No. 71084, issued March 26, 1968, in which the Commission discussed the role of "patronage margins," stating that ". . . a reasonable equity position ranges from a minimum of 20% to a desirable 30% or more (depending on the factual situation) of total capitalization. . ." and that the retainage period should ". . . probably be not less than ten years, nor more than fifteen years." A zone of reasonableness for rates of return on rate base of from 2.93% to 4.4% was accordingly developed as follows, with the percentage rate of return being derived by dividing 100 by the retention period:

20% Equity - 15-Year Rotation

	% of Capital	% Rate	Composite Cost
Debt	80	2.0	1.60
Equity	20	6.67	1.33
			2.93%

30% Equity - 10-Year Rotation

	% of Capital	% Rate	Composite Cost
Debt	70	2.0	1.4
Equity	30	10.0	3.0
			4.4%

The Commission specifically found that a fair rate of return was one that would be adequate to pay interest on long-term debt and to attain and maintain a reasonable equity position and period of retention or rotation of patronage margins.

This decision was a necessary response to a nationwide change in financing available to RECs. From their inception they had been able to borrow capital for plant from the REA under the U.S. Department of Agriculture at an interest rate often as low as 2%. As time went by and RECs were widely observed by Congress as expanding beyond their original purpose, largely from serving in areas unserved by investor-owned utilities to serving suburban developments and industry, there was a widening gap between the demand for loan funds by RECs and the amounts appropriated by Congress for such purposes. REA accordingly instituted a series of policy changes in the mid-1960's designed to reduce loan fund demand. These measures, besides merely tightening controls on loans in terms of purposes and duration, mainly involved the progressive reduction of the allowable level reserve funds that could be held, thus forcing internally generated funds to be invested in the system instead of loan funds, and the restriction of rotation of capital credits to 25% if the cooperative had less than 40% equity.

The Union decision basically allowed a more substantial equity position to be imputed to a capital structure that was in fact highly leveraged so that it would have a reasonable prospect of building equity and rotating patronage capital on reasonable terms.

b. The San Luis Valley decision, being Commission Decision No. 78921, issued October 28, 1971.

As a result of these changes designed to reduce loan fund demand, the nation's REAs set up the CFC in order to reduce reliance on REA for loan funds by being able to go into the private money markets on the basis of their collective credit. CFC is also organized and operated as a non-profit cooperative without any government funding. CFC's equity consists of the proceeds of the purchase by member systems out of general funds of capital term certificates having a 50-year maturity and earning interest at a rate of three percent per annum. There are presently about 900 members, consisting of rural electric distribution and power supply systems and related organizations located in 46 states. Inasmuch as CFC is intended to supplement REAs' loans rather than to serve as an alternative source of funding, loans are made to a member by CFC concurrently with REA in three different ratios. These loans are secured by promissory notes and common mortgages giving liens of equal priority to both lenders. CFC also has a mortgage covenant prohibition against rotation of more than 25% of the prior year margins if system equity is below 40% unless CFC has approved an equity management plan. Three Colorado systems had such plans approved in 1978. The interest rate on 35-year long-term secured bonds is currently around 8 3/4%, but the interest rate may be adjusted upon expiration of the current collateral trust bond issues in seven years.

One of the three ways that CFC raises debt capital in the private money market is through the sale of collateral trust bonds. In the issuance of such bonds, CFC pledges the notes that it holds from its member RECs as collateral to secure the performance of CFC's obligations under such bonds. The pledged note of an REC which is not meeting the minimum requirement of a 1.5 TIER and a 1.25 DSC must be removed from the portfolio of collateralized notes and replaced with either eligible mortgages or cash, thus reducing remaining loanable funds or borrowing power by a corresponding amount. It must be realized, however, that these criteria are only measurements of a borrower's ability to meet minimum standards of repayment of long-term debt; they incorporate little or no concern for the ability of an REC to rotate capital credits in a reasonable manner.

In this decision the Commission noted the changing financing situation and the advent of the CFC, with the increasing importance of a borrower's equity status now that cooperatives would be competing with other borrowers for private funds. REA had by this time indicated that it considered 40% as a desirable level of net worth or equity which should inspire the confidence of CFC investors in a cooperative's financial stability. The Commission thus increased its recommended minimum and upper equity target levels to 30% and 45%, respectively, while adhering to previous policy as to retainage periods, a new range for reasonable rates of return of from 3.4% to 5.6%, developed as follows:

30% Equity - 15-Year Rotation

	% of Capital	% Rate	Composite Cost
Debt	70	2.00	1.4
Equity	30	6.67	2.0
			3.4%

45% Equity - 10-Year Rotation

	% of Capital	% Rate	Composite Cost
Debt	55	2.00	1.10
Equity	45	10.00	4.50
			5.60%

c. Actual Imbedded Cost of Debt - after interest rates on long-term debt from REA, increased to 5% and that from CFC increased into the 7 - 10% range, the Commission departed from the 2% interest figure which had been prevalent at the time of the Union and San Luis decisions and began allowing the incorporation of a utility's actual imbedded cost of debt into the calculation of the range of allowable rates of return.

15. Respondent's actual imbedded cost of debt is currently 3.57%, so the application of the San Luis Guidelines, taking such factor into account, results in a range of reasonable rates of return on Respondent's rate base of from 4.5% to 6.46%.

30% Debt - 15-Year Rotation

	% of Capital	% Rate	Composite Cost
Equity	30	6.67	2.0
Debt	70	3.57	2.5
			4.5%

45% Debt - 10-Year Rotation

	% of Capital	% Rate	Composite Cost
Equity	45	10.00	4.5
Debt	55	3.57	1.96
			6.46%

16. There are presently 21 distribution systems and 2 generation and transmission cooperatives in Colorado, plus the Colorado Rural Electric Association and the Western United Electric Supply Cooperative,

which are members of CFC. At the present time, 11 of these systems have been identified by CFC as being in need of review because of deteriorating or already unacceptable financial conditions.

17. The following figures demonstrate that Respondent, which is growing at a compound annual growth rate of 8.23%, is experiencing a decline in its equity situation at a compound annual rate of 2.44% per year:

	Equity % of Capital	Total Plant
1971	19.52	$ 9,861,817
1972	18.28	11,597,141
1973	16.74	13,395,783
1974	15.80	14,670,323
1975	14.63	16,386,494
1976	15.88	16,728,631
1977	17.29	17,452,222

These statistics, together with the fact that Respondent has not been able to retire any capital credits other than to decedents' estates for any years after 1962, show that the use of the San Luis Guidelines have not enabled Respondent to generate revenues sufficient to allow it to rotate capital credits on a reasonable basis or to build equity to a more satisfactory level, to say nothing of being able to do both. Furthermore, the evidence in this proceeding clearly shows that Respondent's situation is entirely typical of, rather than unique among, Colorado rural electric cooperatives, which have been subject to similar rates of growth since establishment of the San Luis Guidelines.

To summarize on the basis of wholesale power supplies, Colorado-Ute Electric Association's members experienced a compound average drop in equity of 4.48% per year over the subject seven-year period, as opposed to an annual decrease in equity of 1.16% for those jurisdictional cooperatives who belong to Tri-State Generation & Transmission.

More specifically, during such period of time, each 9.21% compound growth in plant for the average Colorado-Ute member caused a 1.12% compound equity decline; for the average Tri-State member, each 7.14% compound growth in plant caused a .76% decline in compound equity growth.

Bearing in mind that Colorado rural electric cooperatives have a responsiblity to have their notes carry their own weight in CFC's portfolio as part of the security or collateral for notes issued to investor, the following table illustrates that they have eroded faster than the national average of rural electric cooperatives in the critical measurements of TIER (times-interest-earned ratio), DSC (debt service coverage) and equity over the period from 1973 to 1977:

	1973	1974	1975	1976	1977
Weighted TIER					
Nation	3.73	2.83	2.56	2.68	2.71
Colorado	3.99	3.07	1.63	1.79	1.86

		1973	1974	1975	1976	1977
DSC						
	Nation	2.02	1.90	1.89	2.01	2.08
	Colorado	2.14	1.92	1.54	1.65	1.70
Equity/%						
	Nation	33.93	33.22	32.54	32.05	31.82
	Colorado	25.12	24.77	21.51	20.93	19.90

It is apparent that some reasonable allowance for growth in plant must be incorporated into these guidelines in order for them to result in a range of reasonable rates of returns which will allow sufficient revenues under the existing conditions.

18. There is no doubt that the main reason for decline in equity levels of jurisdictional rural electric cooperatives is due to substantial increases in plant and insufficient compensation for plant growth in the San Luis Guidelines.

19. In order to build a growth factor into the San Luis Guidelines, it is necessary to adopt a formula for rate of return on equity which will, at the end of a given retention or rotation, have developed sufficient margins to refund patronage capital contributed at the beginning of the cycle and also to provide funds equal to the equity portion of the increase in capitalization occuring during the last year of the cycle. The following formula, proposed by the Staff of the Commission, will provide such a rate of return on equity:

$$RE = \frac{(1+g)^{n+1} - (1+g)^{n}}{(1+g)^{n} - 1} \times 100$$

where RE = rate of return on equity in percent
g = compound rate of growth expressed as a decimal
n = years in revolving cycle

The consulting engineering firm retained by Respondent to perform study of Respondent's revenue requirements, cost of service and rate structure has proposed that basically the same formula be used to compensate for growth, but has proposed that the compound annual growth rate be predicated on growth experienced over the last ten years, which results in a range of rates of return on rate base of 6.14% to 8.69% when incorporated into the usual demonstration of the San Luis Guidelines. The Examiner agrees that system growth experienced during the period of the last three consecutive years is more likely to be predictive of growth to be experienced during the future span of time for which rates are to be established, and it is therefor found that such three-year period should be used in developing a factor for compound rate of growth to be used in the aforementioned formula for determination of rate of return on equity.

20. Respondent's compound annual growth rate of net rate base over the last three calendar years is 5.47%. Application of the formula for return on equity discussed in Finding No. 19 results in the following based upon 15 and 10-year capital rotation periods:

$$RE = \frac{(1 + .0547)^{15 + 1} - (1 + .0547)^{15}}{(1 + .0547)^{15} - 1} \text{ X } 100$$

$$RE = \frac{2.3445696 - 2.2229730}{2.222973012 - 1} \times 100$$

$$RE = \frac{.1215966}{1.2229730} \times 100$$

$$RE = .0994 \times 100$$

$$RE = 9.94\%$$

Assuming a 10-year capital rotation period:

$$RE = \frac{(1 + .0547)^{10 + 1} - (1 + .0547)^{10}}{(1 + .0547)^{10} - 1} \times 100$$

$$RE = \frac{1.7964635 - 1.7032934}{1.7032934 - 1} \times 100$$

$$RE = \frac{.0931701}{.7032934} \times 100$$

$$RE = .1325 \times 100$$

$$RE = 13.25\%$$

21. Use of the growth-adjusted rates of return on equity result in the following rates of return on rate base when inserted into the usual demonstration of ranges of rates of return resulting from the use of the San Luis Guidelines with Respondent's actual imbedded cost of debt:

30% Equity - 15-Year Rotation

	% of Capital	% Rate	Composite Cost %
Equity	30	9.94	2.98
Debt	70	3.57	2.50
	100.00		5.48

45% Equity - 10-Year Rotation

	% of Capital	% Rate	Composite Cost %
Equity	45	13.25	5.96
Debt	55	3.57	1.96
	100.00		7.92

The application of this range of rates of return on equity, when applied to Respondent's adjusted test-year figures shows that the use of a growth-adjusted rate of return on equity would theoretically afford Respondent of realizing a TIER of between 2.19 and 4.04 and a DSC of between 1.98 and 2.40, depending upon what is eventually chosen as a just and reasonable overall rate of return on rate base.

22. Staff has recommended, in the development of a range of reasonable rates of return for Respondent, that such should in some way be conditioned upon Respondent restricting annual rotation of capital credits to a maximum of 25% of the prior year's margins until such time as Respondent has reached an equity level of 45% of total capitalization. While such assumption is a reasonable one, and departure from such practice might well need substantial justification in any future proceeding, the record in this matter does not support inclusion of any such condition on the approval of the new rates now under consideration.

23. The Examiner has duly considered and expressly rejects those contentions of Respondent directed at remedying alleged "shortfalls" in long-term debt coverage, with resulting reduction in return on equity, which result from imputing a higher level of equity than actually is in a REC's capital structure, and those resulting from using a traditional net rate base without express considerations for the fact that RECs typically have additional capital investments in associated organizations upon which a return thus cannot be earned.

24. The consulting engineering firm retained by Respondent has made reasonable allocations of the various components of cost of service among the various classes of service and has, as a result, recommended that the present rates be increased by the following percentages in order to generate the additional revenues of $501,854 needed to be able to realize a 6.98% rate of return on rate base on a test-year basis:

Residential	15.05%
Irrigation	15.22%
Municipal Water Pumping	15.22%
Public Buildings	2.23%
Waterway Lighting System	3.67%

The rates contained in the tariff sheets accompanying Advice Letter No. 34 are just, reasonable and nondiscriminatory, and should be allowed to go into effect as Respondent's legal rates.

25. Pursuant to the provisions of 40-6-109, CRS 1973, it is recommended that the Commission enter the following Order.

O R D E R

THE COMMISSION ORDERS THAT:

1. The suspension of the effective dates of the six tariff sheets filed by Respondent Mountain View Electric Association, Inc., with its Advice Letter No. 34, filed October 6, 1978, is hereby terminated as of the effective date of this Order, and the rates and charges contained shall become effective on such date.

2. Within five (5) days after the effective date of this Order, Respondent shall file substitute tariff sheets for those filed with Advice Letter No. 34, which shall cancel the tariff sheets originally filed with Advice Letter No. 34 and shall contain a rule or regulation generally providing that any franchise tax, or other similar fee, however denominated, shall be recovered by a surcharge only upon those customers receiving service within the boundaries of the municipality imposing such tax or fee. Such filings shall be accompanied by a new advice letter and

shall refer to the authority of this Decision. Such filings are for administrative and record-keeping purposes only and shall be made without any necessity for further notice to the public or this Commission, this Decision being self-executing in all respects.

3. Investigation and Suspension Docket No. 1259 is hereby closed.

4. This Recommended Decision shall be effective on the day it becomes the Decision of the Commission, if such be the case, and is entered as of the date hereinabove set out.

5. As provided by 40-6-109, CRS 1973, copies of this Recommended Decision shall be served upon the parties, who may file exceptions thereto; but if no exceptions are filed within twenty (20) days after service upon the parties or within such extended period of time as the Commission may authorize in writing (copies of any such extension to be served upon the parties), or unless such Decision is stayed within such time by the Commission upon its own motion, such Recommended Decision shall become the Decision of the Commission and subject to the provisions of 40-6-114, CRS 1973.

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

Examiner
vc