Decision No. C94-199)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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INVESTIGATION OF THE TARIFF SHEETS ACCOMPANYING ADVICE LETTER NO. 69 FOR SAN MIGUEL POWER ASSOCIATION, INC.	))))	DOCKET NO. 93I-311E

COMMISSION ORDER

Mailed Date: February 28, 1994
Adopted Date: February 18, 1994

BY THE COMMISSION:

On May 28, 1993, San Miguel Power Association, Inc. ("SMPA" or "San Miguel"), filed with the Commission Advice Letter No. 69 accompanied by 61 tariff sheets. The filed tariff sheets set forth SMPA's rates, tariffs, rules, and regulations. The present proceeding concerns the justness and reasonableness of the rates, charges, and conditions of service set forth in the tariff sheets.

SMPA is a non-profit cooperative corporation engaged in the sale and distribution of electricity on a retail basis. Prior to February 26, 1993, SMPA was largely exempt from regulation by the Commission, pursuant to the provisions of section 40-9.5-101, *et seq.*, C.R.S. (1993).[1] In that statute, the Legislature declared

[1] Article 9.5 provides that Articles 1 to 7 of Title 40 shall not apply to cooperative electric associations whose membership has voted for exemption from Public Utilities Commission regulation. In general, the Commission retains only complaint jurisdiction over cooperatives which have voted for self-regulation.

that Commission regulation of cooperative electric associations which are owned by member-consumers would likely be duplicative of self-regulation by the cooperative itself. Section 40-9.5-101, C.R.S. (1993). The Legislature then directed that members and consumers of each cooperative electric association, upon the affirmative vote of a majority of those voting, could exempt their association from regulation by the Commission. In 1986 SMPA members voted for such an exemption.

However, in order to provide electric cooperative consumers access to regulatory oversight, the statute provides for re-regulation by the Commission, also upon the affirmative vote of a majority of those voting upon the question.[2] A group of SMPA members petitioned for re-regulation. In February of 1993, that petition drive proved successful, and re-regulation of SMPA was approved by a vote of approximately 1600 to 1000. Thereafter, SMPA was directed to file its tariffs with the Commission, and Advice Letter 69 was filed in compliance with the Commission's previous directive. According to SMPA, the rates and charges set forth in Advice Letter 69 and associated tariff sheets are a continuation of those in effect immediately prior to re-regulation.

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[2] Section 40-9.5-113, C.R.S. (1993).

The Commission set this matter for hearing in Decision No. C93-718.[3] The Commission Staff ("Staff"), the Colorado Office of Consumer Counsel ("OCC"), and the Western Colorado Congress ("WCC") intervened. Consistent with the Commission's orders in this proceeding, hearings were held January 10 through 14, 1994 in Ouray, Colorado, and January 28 and 31, 1994 in Denver, Colorado. The formal testimony of a number of witnesses, along with exhibits, was offered and received. In addition, public witness testimony was heard in Ouray on January 10, 1994. Staff, SMPA, and the OCC have filed closing Statements of Position.[4] Now being duly advised in the matter, the Commission will enter its decision and order.

INTRODUCTION

SMPA is one of many cooperative electric associations in the State and, as such, is engaged in the retail distribution of electricity. SMPA provides service to all of San Miguel, Ouray, and San Juan Counties, as well as to portions of Montrose, Mesa, Dolores, and Hinsdale Counties. San Miguel serves approximately 5700 consumers; approximately 5400 are members of the Association. The testimony presented at hearing indicated that SMPA's service territory is one of the most difficult to serve in the country.

[3] The rates, charges, and rules, and regulations associated with Advice Letter 69 were not suspended pending the hearing. Section 40-6-111(4)(a), C.R.S. (1993) states that new or proposed tariffs of cooperative electric associations shall not be suspended pending Commission review.

[4] Staff has requested a one-day extension of time within which to file its Statement of Position. We find that the motion states good cause, and will grant the request for extension.

This is due in part to extremely mountainous terrain, low customer density, and severe weather conditions.

In 1975, the SMPA elected Board of Directors ("Board") approved the purchase of a portion of the system then owned by Western Colorado Power Company, a subsidiary of Utah Power and Light ("Western Colorado Power").[5] According to San Miguel's witnesses, the facilities acquired from Western Colorado Power were marginally, or in some instances completely, unserviceable. The witnesses testified that SMPA has spent substantial monies reconstructing entire portions of the acquired system. San Miguel purchased the system because, at the time of acquisition, it enjoyed a significant commercial load from mining operations. However, shortly after the acquisition, the mines in the area began to close.[6] At the present time, virtually all of San Miguel's load is composed of residential and small commercial customers. For example, in 1992 single phase without demand customers comprised over 90 percent of SMPA's consumers.[7]

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[5] Western Colorado Power sold its system pursuant to a divestiture order entered by the federal court.

[6] The closure of the Sunnyside Mine in Silverton, Colorado is illustrative of SMPA's loss of large commercial load. Sunnyside closed in 1991. At that time, the mine accounted for 10 percent of San Miguel's revenues.

[7] SMPA's standard nominal voltages for its secondary voltage distribution systems are 120 volts, single phase and 240 or 480 volts, three phase.

These circumstances, as well as others,[8] have resulted in a high cost of service for San Miguel. SMPA witness Barnes from the United States Department of Agriculture's Rural Electrification Administration ("REA") introduced government statistics demonstrating that San Miguel's costs of total plant per megawatt hour sold, system losses, revenue per megawatt hour sold (*i.e.*, costs of power to consumers), and power cost per megawatt hour sold are among the highest in Colorado.

We noted above that SMPA's members and consumers elected to re-establish Commission regulation in 1993. That choice was primarily the result of consumer dissatisfaction with the customer service charges imposed by the Board. In 1989, the Board increased the customer service charge from $2.38 to $8.00 per month, and in 1991 to $18.50 per month. The Board based these actions upon cost of service studies and a policy decision to make its rates reflective of costs. At $18.50 per month, the SMPA customer service charge was the highest in the State.

These rate increases led to the filing of formal complaints at the Commission by disgruntled consumers.[9] The Commission

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[8] In the acquisition from Western Colorado Power, SMPA purchased antiquated transmission lines which impose a tremendous maintenance burden on the Association. The evidence indicates that San Miguel is investigating the sale of these transmission lines to its wholesale supplier, Tri-State Generation and Transmission Association, Inc. SMPA is encouraged to continue its efforts in this regard.

[9] *Boland v. San Miguel Power Association, Inc.*, Docket No. 91F-056E; and *Shain v. San Miguel Power Association, Inc.*, Docket No. 91F-231E.

dismissed these complaints in Decision No. C92-762. The Commission decision was based, in part, upon San Miguel's status as an electric cooperative exempt from regulation under section 40-9.5-101, C.R.S.[10] But the voice of the unhappy ratepayers was heard by the elected Board, and in January 1993 the Board decreased the customer charge to $12.00 per month. While the Board's action was responsive to the obvious consumer displeasure with the $18.50 charge, the rate reduction proved insufficient to dissuade SMPA members from pursuing the re-regulation effort.

In its Advice Letter filing, SMPA proposes to continue presently effective rates. Specifically, San Miguel proposes to maintain its present revenue requirement and its existing rate structure, including the $12.00 customer service charge. Staff's position regarding San Miguel's revenue requirement is consistent with that of SMPA. The OCC proposes a reduction in revenues and rates. The OCC and Staff both propose various changes to the rate structure.

REVENUE REQUIREMENT

Methodology

Based upon a test year ending December 31, 1992, SMPA requests a revenue requirement of $9,436,000--the same revenue level in

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[10] The Commission held that, in complaint cases regarding the rates of exempt cooperative, it is statutorily limited to a finding of whether or not the cooperative rates are unjust and unreasonable. After hearing the administrative law judge ruled, and the Commission affirmed, that complainants failed to prove that the rates were unjust and unreasonable.

effect since 1991. San Miguel did not propose to increase rates in this proceeding. Staff, based upon a test year ending July 31, 1993, suggested a nominal revenue increase of $2013. The OCC utilized the same calendar test year as SMPA, but originally contended that revenues should be reduced by approximately $217,000.[11] OCC witness Dianne Wells, in direct testimony, originally suggested that Construction Work in Progress ("CWIP") in the amount of $1,222,708 be removed from rate base, and that the revenue requirement be reduced accordingly. However, in its closing Statement of Position the OCC withdrew this recommendation based upon the evidence adduced at trial that all SMPA construction projects were completed within two to three months from commencement.

The parties disagree regarding the appropriate method for deriving SMPA's revenue requirement. The OCC contends that traditional rate-base/rate-of-return principles which are applicable to investor-owned utilities ("IOU") should be used for this proceeding. San Miguel and Staff contend that traditional regulatory principles and methods cannot be applied to non-profit cooperatives. Instead, SMPA and Staff, in their revenue requirement determination, have employed the methodology recommended by the Cooperative Finance Corporation ("CFC"). This methodology has been referred to as the "CFC method." The

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[11] Application of the regulatory principles advanced by OCC to Staff's updated test year would result in a revenue reduction of approximately $383,000.

Commission, for the most part, agrees with Staff and San Miguel on this issue. *See* discussion, *infra*.

Staff and SMPA pointed out several fundamental differences between electric cooperatives and IOUs for the Commission's consideration. Following is a brief discussion of these differences. As the term indicates, IOUs are owned by investors. Therefore, in rate cases involving IOUs, the Commission must balance the interest of ratepayers in receiving service at reasonable prices against the interests of shareholders in receiving a profitable return on their investment. It is a well-established principle that shareholders of a regulated utility are entitled to the opportunity to earn a return on investment commensurate with returns on investment in other enterprises having corresponding risks. *Federal Power Commission v. Hope Natural Gas*, 320 U.S. 591 (1944). Rate cases involving IOUs would require the Commission to reasonably balance the often conflicting interests of ratepayers and shareholders. In contrast, electric cooperatives such as San Miguel are owned by the ratepayers who are its members. SMPA cannot raise equity financing through privately or publicly traded stock. Instead, equity is generated through ratepayer/member rates, and operating margins, or profits. These margins are credited to customers as patronage capital, and are returned to customers over time according to a capital rotation

cycle determined feasible by the cooperative's Board of Directors.[12] Unlike circumstances which exist for an IOU, there is no distinction between ratepayers and owners in a cooperative such as SMPA.

It is also significant that, unlike ratepayers of an IOU, members of an electric cooperative are able to influence management at the cooperative through election of the board of directors. While this democratic process may not be as expeditious a way to impact management's decisions as some might desire, it nevertheless exists. Members of a cooperative who are dissatisfied with management or board decisions have recourse to the ballot box. Ratepayers of an IOU have no such remedy.

This is not to say that consumers of electric cooperatives are entitled to less regulatory protection than consumers of IOUs. As discussed above, the Legislature gave the Commission full ratemaking authority over cooperative associations in which members have chosen full regulation. We are required, consistent with those legislative directives, to establish just and reasonable rates for the members and consumers of SMPA. The establishment of those rates requires us to examine SMPA's investments, revenues, and expenses and to exercise independent judgment regarding the reasonableness of those items. However, the unique characteristics

[12] In a year when a cooperative's equity level is less than 40 percent, REA prohibits a return of capital credits greater than 25 percent of the prior year's margins.

of cooperatives--in particular the merger of owners and ratepayers in one group--means that ratemaking considerations are different from those which prevail for IOUs.

For example, the OCC has contended that the Commission should disallow the inclusion of certain expenses when establishing rates for San Miguel. Expenses which the OCC would have the Commission disallow include certain advertising expenses, specified dues and donations, and directors' fees which the OCC regards as excessive. The rationale for these proposed disallowances is the same as that given for such disallowances in an IOU rate case--that the expenses did not directly benefit ratepayers as ratepayers. In a rate case involving an IOU, a disallowance of expenses results in shareholders, instead of customers, paying for the disallowed expenses. Disallowance of a particular expense incurred by a cooperative's management produces a different result. That is, the cooperative may not collect rates to recover the expense; therefore, the expense must be recovered from the margins of the ratepayers. With cooperatives, the ratepayer always pays.

The Commission recognizes that past, present, and future consumer/owners of SMPA may have divergent interests. The parties to this case have suggested that inter-generational equity is an important ratemaking principle for a cooperative, and we agree. Generally, this principle signifies that each generation of SMPA consumers should carry the burden of its own cost of service. Our

determinations in the present case are guided, in part, by this principle.

The Commission rejects the argument that ratemaking principles for investor-owned utilities are perfectly transferrable to the present case. Expenses and investment should be examined by the Commission, and adjustments should be made in appropriate circumstances. We accept Staff's suggestion that the appropriate standard for review of a cooperative's expenses and investments should be whether the cooperative management has abused its discretion. Relevant to this consideration are questions regarding whether the disputed expenses have benefitted the association as a whole, and whether the expenses incurred resulted from prudent decisions. This standard recognizes the differences between IOUs and electric cooperatives. However, this standard does require the disallowance of improper expenses. Such a disallowance would be a clear indication to management and the Board that certain expenditures are improper, and that management and the Board should adjust their future actions accordingly. Neither present nor future customers of the Association will be required to pay for improper expenses, where management complies with these Commission directives.

Given the differences between IOUs and electric cooperatives, the Commission has determined that it is not appropriate to use a traditional rate-base/rate-of-return methodology for calculating

SMPA's revenue requirement.[13] One of the primary reasons for use of this methodology for IOUs is to derive a rate of return on investor-supplied capital which will enable the utility to access capital markets. But, the capital markets which SMPA and other cooperatives seek to access are comprised of loans from the Rural Electrification Administration ("REA") and CFC. As argued by San Miguel and Staff, financing considerations for rural electric cooperatives are dependent on lender requirements, while IOU financing is dependent on investor requirements. Therefore, it is most appropriate to use the CFC methodology for deriving SMPA's revenue requirement. In the past the Commission has used a similar methodology for other electric cooperatives. *See* Decision No. R82-1065, Case No. 6036 (Holy Cross Electric Association); Decision No. C81-812, I&S Docket No. 1470 (Moon Lake Electric Association); and Decision No. R79-182, I&S Docket No. 1259 (Mountain View Electric Association).

[13] The OCC pointed out that the Commission has used an IOU methodology for determining the revenue requirement for telephone cooperatives. However, we agree with Staff's response that there are substantial differences in the circumstances of telephone and electric cooperatives (page 16-18 of Statement of Position). These differences include: a significant portion of costs related to telephone cooperatives' assets are assigned to the federal jurisdiction, and are allowed to earn a generous return by the Federal Communications Commission; telephone cooperatives receive considerable support from the federal Universal Service Fund and the Colorado High Cost Fund; and, unlike electric plant and facilities, telephone plant is depreciated at a much higher rate than the amortization period for Rural Electrification Administration ("REA") loans used to finance this plant, thus allowing telephone cooperatives to earn interest income on these loans. Simply put, the circumstances of telephone cooperatives are such that no need exists to depart from IOU ratemaking principles. The state of electric cooperatives is generally quite different.

CFC Methodology

The CFC method analyzes plant investment for the sole purpose of calculating the annual compound growth rate as one step in quantifying the appropriate margin to be generated by rates. This methodology relies upon establishment of an appropriate times interest earned ratio ("TIER")[14] to generate the proper level of revenues. In particular, the CFC method of calculating revenue requirement incorporates certain elements including a selected compound growth rate, a specific capital credit rotation cycle, a target equity level, and a desired TIER. Attachment 1 to this decision sets forth the elements chosen by the Commission as most appropriate for setting SMPA's revenue requirement.

San Miguel and the OCC used calendar year 1992 as their test period. The Commission has adopted Staff's updated test year ending July 31, 1993, as a more preferable representation of the current relationships between revenues, expenses, and investments for purposes of deriving SMPA's revenue requirement.

The Commission also will approve Staff's suggested annual capital investment growth rate of 4.8408 percent. Staff calculated this growth rate based upon the three-year historic growth in capital investment from July 31, 1990 through July 31, 1993. Based upon the evidence presented, we conclude that this growth rate is

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[14] TIER is the ratio of interest on long-term debt plus margins divided by interest on long-term debt.

more reliable for ratemaking purposes than the pure projections employed by San Miguel.

With respect to the capital rotation cycle, the Commission will accept the 20-year period used in San Miguel's and the OCC's analyses. This cycle is consistent with SMPA's stated capital rotation policy. Currently, San Miguel has managed only a 26-year cycle. The 15-year cycle advocated by Staff would allow San Miguel to achieve a 20-year goal more quickly, but the 20-year period is sufficient for the present and does not place an excessive burden on current customers.

While no party disputed a target equity level of 40 percent as recommended by both REA and CFC, the parties disagree regarding the methods for achieving that goal. Specifically, the OCC contends that San Miguel can make progress toward a 40 percent equity level by cutting costs and becoming more efficient.[15] The Commission agrees that movement to this 40 percent equity standard is important and desirable. The evidence in this proceeding indicates that future funding for REA and its ability to continue to provide low-cost loans to SMPA may be in transition. Widespread concerns regarding the federal deficit may lead to future reductions in

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[15] This argument is not convincing. For example, we note that the OCC did not identify particular efficiencies or cost-cutting measures which could be implemented. Moreover, the OCC's revenue requirement methodology would take away these efficiencies at the subsequent rate case, making it even more difficult for San Miguel to attain a 40 percent equity level. Also, Barnes from the REA stated that, in his estimation, short of selling its antiquated transmission line (a goal it is working to achieve), SMPA is implementing every possible efficiency measure.

REA's budget. Therefore, San Miguel's long-term access to funding from REA is not guaranteed, and therefore its debt to equity ratio must be improved since it may be forced to go to private financing markets in the future.

SMPA witness Hedburg, a CFC employee, observed that CFC competes in the same bond markets as private utilities to secure debt financing. Since CFC bonds are secured by the assets of debtor cooperatives such as SMPA, it is important for those cooperatives to have acceptable levels of equity. It is in the consumers'/members' interests that SMPA reach a point where it can access commercial capital markets at reasonable rates, given changes occurring at REA and CFC.[16] A 40 percent level of equity will assist SMPA in continuing to provide reliable electric service at the lowest possible cost.

Our approved revenue requirement methodology also incorporates a modified TIER of 2.0.[17] This specific TIER is consistent with the recommendations of REA and CFC, and with the positions of Staff and SMPA. For example, San Miguel utilized a modified TIER of 2.04 in its model. The Commission's TIER balances the interests of present customers in receiving service at reasonable rates with

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[16] CFC is considering pricing loans based upon financial risk of the applicant.

[17] A modified TIER is based upon operating margins (*i.e.*, margins which are achieved through operations). This calculation excludes non-cash, non-operating margins such as G&T and CFC capital credits. These capital credits are excluded from the TIER calculation, inasmuch as they are not used by lending agencies in assessing a cooperative's true, current financial condition.

SMPA's interests in meeting current expenses, making progress to a 40 percent equity level, and rotating capital credits on a reasonable interval.

In its TIER approach, Staff excluded non-operating margins of $115,852 in interest income for SMPA. This income was associated with government securities held by San Miguel. The OCC objects to Staff's exclusion of this income, observing that the government securities were included in Staff's computation of total capitalization. The OCC's argument is persuasive. Ratemaking based on a certain capital structure should, as a matter of consistency, account for all income produced by that capital structure. Under Staff's TIER analysis, present customers of SMPA will pay rates to support a level of capitalization which includes the government securities. Fairness to present consumers requires that the income produced by those securities be included in the ratemaking calculation. Accordingly, we incorporate non-operating income of $115,852 and non-operating expenses of $21,659 in deriving SMPA's revenue requirement.

The cost of long-term debt ("LTD") on Attachment 1 is derived in accordance with the following considerations: Staff's updated test year results in a 4.9217 percent average cost of debt. SMPA witness Hedburg advocated an annual interest adder of .10 percent. However, REA witness Barnes testified that San Miguel meets the "hardship" criteria recently adopted by REA. SMPA's hardship

status, when awarded, will mean that REA will fund 100 percent of future debt requirements at a 5 percent interest rate. If the current cost of LTD is 4.9217 percent, and the future cost of additional debt is 5 percent, the average interest rate will not exceed 5 percent in 1994. Therefore, the Commission will adopt an interest adder which produces a 5 percent rate in 1994.

As shown on Attachment 1, the approved methodology, in conjunction with the specific elements discussed herein, indicates that a revenue reduction of $129,591 properly balances all relevant interests. The model confirms that SMPA should make significant progress towards a 40 percent equity capitalization, although that goal will not be achieved within the next 10 years. In fact, the calculations reveal that San Miguel should reach the 40 percent equity level by year end 2006, a 13-year time period. According to the REA and CFC witnesses, those agencies are particularly interested in seeing cooperatives making clear progress to the equity goal. The "progress" requirement is even more acceptable for cooperatives, like SMPA, that are faced with significant operational problems which are not a result of imprudent management decisions. This result should be acceptable to REA and CFC. Also, SMPA would not meet the 10-year, 40 percent criterion even under its own, and Staff's recommendations. The substantial and steady improvement in SMPA's equity under our adopted model should satisfy lenders, without placing an inordinate burden on present customers.

Operating Expense Adjustments

The OCC recommended disallowance of several operating expense items for San Miguel including adjustments for advertising and sales promotion expenses, directors' fees and expenses, and dues and donations.[18] The most significant adjustment concerns the proposed disallowance in the amount $48,823 for directors' fees and expenses. The major portion of SMPA directors' expenses in the past was for fees and health insurance. In 1991, directors' fees ($19,200) and insurance expenses ($45,984) totalled $65,984. The 1992 compensation was $50,285 in fees and $18,025 for insurance, a total of $68,310. The SMPA decided in 1992 to eliminate health insurance, but at the same time changed its fee structure to maintain a comparable compensation package. The OCC contends that fees should be maintained at the 1991 level, and that all expenses relating to health insurance for directors should be disallowed. We reject this proposal.

In the above discussion, the Commission held that, in light of the fundamental differences between IOUs and electric cooperatives, SMPA test year expenses would be disallowed only for abuses of management discretion. We find no such abuse with respect to SMPA's directors' fees and expenses. The evidence demonstrates that San Miguel has taken steps to control directors' expenses by reducing the number of directors. The record also shows that the

[18] Attachment 1 (pages 2-3) presents the OCC's *pro forma* adjustments as recalculated by Staff for the updated test year. We understand that the OCC does not dispute Staff's updated calculations.

amounts and methods of compensating the SMPA directors are consistent with prevailing arrangements for other electric cooperatives in the State. The testimony of Board member Huffman indicated that Board members spend significant amounts of time on Association business as part of their duties. In short, the evidence convinces us that there has been no abuse of discretion with respect to the amounts of directors' fees and expenses paid by SMPA.

We strongly encourage the SMPA Board to adopt formal standards and procedures for payment of the $200 monthly fee for director performance of "substantial services other than attendance at meetings . . ." Exhibit JH-1 to Huffman Rebuttal. Presently, the term "substantial service" is not defined, nor is there any apparent formal method for holding directors accountable for claims of having performed "substantial service" (*e.g.*, specifying records which must be submitted in support of claims for reimbursement). Formal standards and procedures will likely provide assurance and comfort to consumers and members of SMPA that directors are not awarding themselves excessive compensation. Further, the Board should adopt a policy on any insurance provided that treats all directors alike, *i.e.*, only individual coverage will be provided at no expense to the director.

The OCC also argues that a disallowance of approximately $23,000 should be made with respect to dues and donations paid to

the Colorado Rural Electrification Association ("CREA") and the National Rural Electric Cooperative Association ("NRECA"). The grounds for this disallowance are that these expenses are not directly beneficial to ratepayers of San Miguel. In fact, the record demonstrates that membership in CREA and NRECA is beneficial to SMPA since, as a result of membership, the Board has access to training, employment search services, management consulting, and other valuable services. No abuse of management discretion is shown with respect to these expenditures.

The OCC's other recommended disallowances, such as advertising, were minor. The evidence persuades the Commission that there has been no abuse of management discretion associated with any of these items. The testimony that these expenses benefitted SMPA is credible; therefore, no disallowance is justified. Staff recommended a *pro forma* adjustment of $14,786 as an estimate of the PUC fee San Miguel will be required to pay as a result of its return to full regulation. This adjustment is uncontested, and the Commission accepts it as reasonable.

Rate Base Adjustments

The OCC suggests that certain adjustments be made to rate base consistent with the principles which apply to IOUs. In particular, the OCC recommends removal from rate base of customer advances for construction, customer deposits, and prepayments. Additionally, the OCC argues that an adjustment should be made to

SMPA's cash working capital ("CWC") requirement. This specific adjustment would compute San Miguel's CWC requirement according to the methodology used in the most recent Public Service Company of Colorado case, and result in a $200,923 reduction in CWC for San Miguel.

Under a TIER analysis, adjustments to rate base are largely irrelevant inasmuch as rates are not established based upon a rate of return times the rate base. Since the Commission has adopted a TIER approach to determining SMPA's revenue requirement, it is unnecessary to rule upon the OCC's proposed adjustments. Attachment 1 calculates the rate of return on rate base in light of the revenue requirement determinations made here merely to allow for comparison of returns on investment.

The OCC is correct that, in a proceeding where IOU ratemaking principles are applied, its proposed adjustments, with adequate supporting evidence, would be appropriate. For example, the removal of customer deposits from rate base would be proper, since this is non-investor supplied capital. It appears to the Commission that the CWC requirement is more accurately calculated in a lead-lag study than according to the 1/8 (45 day) method.[19]

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[19] Cash working capital is that cash requirement to pay expenses that come due before the revenue is collected for the service rendered. A lead-lag study measures the timing differences between the receipt of revenues and the associated payment of expenses. The 1/8 method assumes revenue is collected 45 days after service is rendered and that expenses are paid when service is rendered, *i.e.*, no lag in expenses.

Where a lead-lag study is too costly to perform, the lead-lag factors applicable to Public Service Company are better suited to determining CWC requirements than the simple 1/8 method. Attachment 1 shows the rate of return on rate base assuming the OCC is correct in its rate base adjustments. We again emphasize that these adjustments do not affect the derived revenue requirement under our chosen methodology which is TIER analysis.

RATE DESIGN

SMPA Rates

In Advice Letter No. 69, San Miguel essentially proposes to retain the same rates which have been in effect since 1991. The only change made to the rate structure since that time was the reduction of the monthly customer service charge from $18.50 to $12.00, and a concomitant increase in the kwh charge for 1Ph without demand customers. San Miguel's current rate structure is:

Customer Charge	Kwh Charge	Demand Charge	
$12.00	$.08770	NA	1Ph w/o Dem
50.00	.06310	NA	3Ph w/o Dem
12.00	.08770	$9.44	1Ph w/ Dem
50.00	.06310	9.44	3Ph w/ Dem
40.00	.05310	3.00	Incentive

Presently, San Miguel provides 35 kw free demand to 1Ph demand customers and 20 kw free demand to 3Ph demand customers (*i.e.*,

demand charges for these consumers are not imposed for the first 20 or 35 kw).

SMPA's cost allocation in justification of its rate structure includes a minimum distribution methodology for portions of its distribution costs, and an Average and Excess Demand ("AED") methodology for the remainder.[20] In fact, the primary dispute between the parties regarding cost allocation involves San Miguel's use of the minimum distribution method. Staff, OCC, and SMPA agree that transmission costs are demand related and should be allocated to the demand component of rates. Similarly, the parties generally agree that metering and billing costs should be allocated to the customer charge).

However, with respect to allocation of distribution costs, SMPA uses the minimum distribution method and assigns approximately 30 percent of costs to the customer component and 70 percent to the demand component. SMPA utilizes the AED methodology to allocate

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[20] The minimum distribution system methodology assumes that a minimum distribution system must be in place to serve the customer, regardless of usage. For example, the methodology assumes that a minimum size pole, conductor, cable, and transformer must be installed to deliver even one kwh. According to this methodology, since at least this minimum distribution system must be in place for the benefit of the customer, this minimum system cost should be allocated to the customer component of rates. The balance of the distribution system cost (*i.e.*, that system which is required to serve load in excess of the minimum) is allocated to the demand component of the rate.

The AED method emphasizes or recognizes the extent of the use of capacity resulting in allocation of an increasing proportion of capacity costs to a customer group as its load factor increases. This theory implies that a utility's capacity serves a dual function--while system peak demand establishes the level of capacity, providing continuous service creates additional incentive for such capacity costs.

the 70 percent of demand related costs. Staff and the OCC, in contrast, employ the AED method to allocate 100 percent of distribution costs. These parties argue that the minimum distribution method is inappropriate for assigning distribution plant. For example, the OCC contends that the minimum distribution approach causes low-use customers to pay twice for some portion of distribution costs--once in the customer service charge and again in usage charges. The OCC, through witness Robert Hix, opposes the minimum distribution system approach, contending that this methodology results in an "unduly burdensome customer charge." In fact, the above discussion notes that consumer displeasure with the $18.50 customer service charge was one of the principal reasons for re-regulation of San Miguel. The evidence reveals that the SMPA management and Board adopted the $18.50 charge based upon a cost of service study which demonstrated that this rate was cost-justified.

OCC Rates

The rates advocated by the OCC are:[21]

Customer Charge	Kwh Charge	Demand Charge	
$ 8.17	$.08286	NA	1Ph w/o Dem
10.38	.09182	NA	3Ph w/o Dem
18.05	.03782	$11.44	1Ph w/ Dem
17.58	.04041	15.13	3Ph w/ Dem

[21] Since these rates are based upon the OCC's revenue requirement, which was $217,000 less than that of Staff and SMPA, the rate structure is not entirely comparable to that of the other two parties.

Customer Charge	Kwh Charge	Demand Charge
60.50	.04367	13.32 Incentive

As noted above, the OCC's rates are based upon an AED method of cost allocation.[22] However, in his rate design, Mr. Hix adjusted Pure Demand Revenues by reducing the values by 25 percent. This means that Mr. Hix reassigned 25 percent of the demand revenue requirement to the energy component of rate categories which bill demand separately. This adjustment results in higher energy rates, and favors low energy and low load factor customers. Conversely, SMPA argues, the OCC's rate design penalizes full-time and high load factor users.

San Miguel also points out that the OCC's proposals would result in "rate shock" to many 3Ph with demand customers. Exhibit 22(a) illustrates that the OCC's rate design would cause some 3Ph with demand bills to increase 20, 30, 40 percent, or more. *See* also exhibit 47. According to San Miguel, these rate impacts contravene the principle of rate gradualism.

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[22] Mr. Hix quantified each customer class's average and excess demand according to the following method: Average demand was calculated by dividing the annual kwh usage for each class by the number of hours in the year. The amount of demand above the average demand determined for each class was the class excess demand. Class excess demand was calculated by subtracting the average demand for each class from its maximum peak demand during the test year. System excess demand was determined beginning with SMPA's system peak demand during the test year. SMPA's system excess demand was then allocated to rate classes based upon the ratio of each class' demand to the total of all classes' excess demand.

Staff Rates

Staff advocated the following rate schedule:

Customer Charge	Kwh Charge	Demand Charge	
$10.16	$.08172	NA	1Ph w/o Dem
10.21	.08382	NA	3Ph w/o Dem
10.25	.05413	$8.08	1Ph w/ Dem
10.30	.05420	11.90	3Ph w/ Dem
10.33	.05435	6.26	Incentive

To its credit, Staff observed that SMPA has a significant number of low-usage or part-time customers on its system, and that these customers will not pay their fair share of system costs without a specific rate structure designed to account for this problem. Staff witness Ralph Teague correctly pointed out that many utility expenses are fixed. That is, expenses such as interest on debt, personnel costs, depreciation, taxes, and some operation and maintenance expense continue even if the utility makes no sales. Staff estimated that over 50 percent of SMPA's costs are fixed.

Mr. Teague also explained that under the current rate structure electric customers with low kwh usage are not paying their fair share of the costs of operating the utility. In order to address this problem, Staff recommends a minimum monthly bill for each consumer. Under Staff's proposal, for example, 1Ph without demand customers would pay a minimum monthly charge of $18.29. This rate would include the customer service charge and

would provide the consumer with approximately 100 kwh of usage for no added charge.

The OCC asserts that this proposal is the equivalent of the $18.50 customer charge instituted by San Miguel in 1991 which SMPA members resisted. This assertion over-simplifies and mischaracterizes Staff's suggestion. The $18.50 customer charge was the rate strictly for connection to the system. Any kwh usage during the month would have caused the customer's total bill to increase beyond the $18.50 charge. In contrast, Staff's $18.29 monthly minimum bill would cover the customer charge and provide approximately 100 kwh.

Staff also recommends a specific charge for customers who disconnect and subsequently reconnect at the same location within 12 months. Under this proposal, the reconnecting customer would be required to pay the customer charge for each month the customer was disconnected from the system. Staff observed that other electric cooperatives in the State impose such a charge. Notably, this suggestion is directed at seasonal customers (*i.e.*, those who disconnect their meter from the system, then reconnect at the same location during a 12-month period) and, as is the case for part-time users, is intended to require these seasonal customers to pay an appropriate share of system costs. We agree with the policy promoted by this recommended change and adopt it.

Like the OCC, Staff's rate design was based upon an AED method. OCC and SMPA noted that Staff's AED does not allocate any excess demand to the "Street Light" and "Yard Light" classes, even though these classes contribute to the system's annual peak demand. Staff's study also has a "Primary" rate class, even though SMPA no longer has customers or usage in this class. As a result of these flaws in Staff's AED approach, the parties contend, revenue requirement may be shifted between rate classes on a disproportional basis.

Ruling On Rates

We are unable to adopt completely any of the rate structures proposed by the parties since each proposal has shortcomings. The most significant deficiency, one common to each approach, is the failure to address adequately the problem posed to the SMPA system by part-time consumers.[23] The evidence indicates that a substantial number of San Miguel's customers are part-time users. For example, approximately 15 percent of all customer bills are for 0 or near 0 usage, indicating that the residence or business is not occupied for much of the billing period. SMPA witness Lankutis specifically stated that the number of part-time users on the SMPA system represents a serious problem.

[23] We consider "part-time" customers to be those who leave their meters connected to the system but use energy at a location, such as a residence or a business establishment, for only part of the month. The fundamental characteristic of such customers is low kwh usage. In contrast, seasonal customers are those who disconnect their meters, then reconnect at the same location during a 12-month period.

As implied by the above discussion, the electric utility business is capital intensive. That is, a substantial portion of costs are fixed. These costs continue whether the customer uses energy during the month or not. To illustrate, electric plant and facilities such as lines, poles, and meters, remain even if the customer uses 0 kwh during the month. Consumers must recognize that there are significant costs associated with providing the capacity or availability to serve, even when no usage occurs. Furthermore, SMPA rates, like the rates of electric utilities in general, are designed to recover substantial portions of fixed costs in usage or kwh charges. Those fixed costs are not fully recovered when the customer uses energy only part of the time. It is also important to recognize that costs which are not recovered from part-time consumers are passed to other customers. The result is that full-time permanent residents and businesses in SMPA's service territory are subsidizing part-time (or seasonal) low-usage customers.

The parties' proposals do not sufficiently address this problem. Indeed, we conclude that the OCC's suggested rates would exacerbate the situation. SMPA and Staff point out that the OCC's rate design favors low-usage customers even more than existing rates. SMPA's $18.50 customer service charge, which was abandoned after customer protests, was intended to address this difficulty. Additionally, Staff's minimum bill concept is intended to recover a more equitable measure of costs from part-time users. These

proposals, however, apply to all consumers, even full-time residents. SMPA's customers--including full-time, permanent residents who are not being subsidized but who, nevertheless, would be subject to these charges--have indicated their dissatisfaction with the $18.50 customer charge. We believe Staff's minimum bill approach would be poorly received by SMPA's ratepayers. Moreover, Staff's rate structure does not fully consider nor address the problems caused by part-time users.

We emphasize that, in order for the Commission to fashion a rate structure which does address this situation, we will require San Miguel to perform load research regarding part-time usage on the system. This should include consumer surveys which will enable the Commission and SMPA to design cost-based rates for San Miguel customers, including part-time customers. We will order SMPA to perform the necessary research and re-file tariffs, supported by a revised cost-of-service study, within six months of the effective date of this order. That re-filing should comply with the parameters which are set forth here:

1. SMPA, in its cost of service study, shall use a fully distributed AED methodology as presented by Staff and the OCC.[24]

[24] Although we conclude that the AED is a more appropriate approach than the minimum distribution system methodology, we do not approve the OCC's arbitrary reallocation of 25 percent of demand costs to the energy component. Neither do we accept Staff's failure to allocate demand to the Street Light and Yard Light classes. We also find that Staff erred in allocating costs to the Primary rate class when there are no customers in that class.

2. SMPA's re-filed rates shall be revenue neutral, *i.e.*, shall be designed to recover the revenue requirement we authorize in this decision.

3. SMPA's re-filed rate structure shall not cause any customer class's rates to increase by more than 15 percent.[25]

4. SMPA shall perform necessary load research studies to adequately identify the nature and extent of part-time usage on the system. The re-filed rates for part-time customers shall be based upon the identified costs for such users, and shall have a separate rate classification for such customers.

5. SMPA's re-filed rates shall propose to reduce or eliminate the free kw presently provided to demand customers, to the extent consistent with the other directives in this order (*i.e.*, avoidance of rate shock).

6. SMPA shall consider seasonal rates, and shall propose them if its load research shows they would be justified.

If the re-filing complies with the standards set forth in this order and the proposed rates appear to be just and reasonable, a

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[25] We are persuaded by San Miguel's argument that Staff's and OCC's rate designs are not acceptable because they would result in rate shock to some customers. In consideration of the principles of rate continuity and gradualism, we find that a 15 percent rate cap is appropriate.

hearing on the proposals may not be necessary. When performing the necessary load research and the new cost of service study, SMPA should consider consultation with Commission Staff and the OCC. This will increase the likelihood that the parties will determine that a hearing on the new rates is unnecessary. In the interest of saving time and resources, we encourage the parties to engage in such collaboration.

Although more information is necessary before finalizing rates to address part-time usage on the system, we suggest that SMPA consider at least two alternatives. First, after defining part-time usage, San Miguel should establish a separate rate class with separate rates for part-time customers. Such rates would be cost-based and applicable to part-time users only. Additionally, SMPA could establish seasonal rates which recognize its peak and off-peak seasons. To illustrate, the evidence in this case indicates that the system peak occurs in the months of January, February, March, November, and December. Given this information, cost-based rates could be designed based upon the two seasonal peaks.[26] All users, including part-time customers, would pay the same seasonal rates.[27]

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[26] If, for example, winter peak were 12MW and summer peak 8MW, 66 percent of relevant costs would be allocated to winter seasonal rates and the remainder to summer seasonal rates.

[27] Under this concept, even full-time consumers would pay higher rates in winter and lower rates in summer. Customers could levelize their bills by using budget billing.

Interim Rates

Because we have inadequate evidence upon which to base a decision adopting permanent rates in this proceeding, we must address the method to be used to account for the revenue reduction we have ordered. SMPA is hereby ordered to reduce rates by a negative rider to be applicable to all existing rates. That negative rider shall be in the amount of -1.2943 percent, and shall be filed within 30 days after the effective date of this decision in the absence of further order of the Commission. In addition, we approve Staff's recommendation regarding a re-connection charge for seasonal customers. SMPA will be ordered to file, within 30 days after the effective date of this decision, a tariff providing that any customer who disconnects and subsequently re-connects at the same location within 12 months shall be billed a reconnect charge. Such charge shall be the sum of the customer service charges for those months during which service was disconnected.

CONCLUSION

In this decision, we find that San Miguel's revenues should be reduced by $129,591. SMPA's rates were not suspended pending hearing, in light of the provisions of section 40-6-111(4)(a), C.R.S. (1993). In previous pleadings, Staff and the OCC reserved the right to request customer refunds in the event present rates were found to be excessive. We now conclude that no refund should be ordered. The evidence does not support a finding of abuse of management discretion in any respect, nor that present rates are

excessively high. Most importantly, we find that a refund would hinder SMPA's efforts to build equity and achieve the financial goals set forth on Attachment 1. Since any refund would, of necessity, be financed by customers/owners, our revenue requirement determinations herein would have to be modified to account for reduced margins to San Miguel. We conclude that such an exercise would be pointless and counterproductive.

To implement the ordered rate reduction, SMPA will be directed to file interim rates consistent with the above discussion. SMPA will also be directed to perform an investigation regarding part-time users, and to submit the results of its investigation and revised rates within 6 months following the effective date of this order.

Pages 17 through 61 of the tariffs accompanying Advice Letter No. 69 consist of proposed Rules and Regulations for SMPA. These Rules and Regulations are not contested by any party, and we now find them to be in compliance with Commission rules and to be just and reasonable.

THEREFORE, THE COMMISSION ORDERS THAT:

1. Pages 17 through 61 of the tariff sheets accompanying Advice Letter No. 69, dated May 28, 1993, are hereby approved.

2. Except as provided in ordering paragraph 1 above, the tariff sheets filed by San Miguel Power Association, Inc., pursuant to Advice Letter No. 69, dated May 28, 1993, are hereby permanently suspended.

3. San Miguel Power Association, Inc., is hereby directed to file, within 30 days following the effective date of this order, appropriate tariff sheets to reflect a rate reduction of 1.2943 percent applicable to all rates of SMPA. This rate reduction shall be filed to become effective upon one day's notice.

4. San Miguel Power Association, Inc., is hereby directed to file, within 30 days following the effective date of this order, appropriate tariff sheets to establish a re-connection charge for seasonal customers, consistent with the above discussion.

5. San Miguel Power Association, Inc. is hereby directed to conduct the studies and investigations consistent with the above discussion, and to file proposed new rates within 6 months following the effective date of this order. The proposed rates shall be consistent with the directives discussed above. In addition to the new proposed rates, SMPA shall, at the same time, file a report informing the Commission which alternative rate structures for part-time users were considered, but rejected, by SMPA.

6. The motion by Staff of the Commission for a one-day extension of time within which to file its Statement of Position is hereby granted.

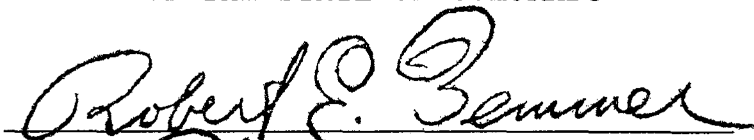
7. This order shall be considered a final decision subject to the provisions of sections 40-6-114 and 40-6-115, C.R.S. (1993).

8. The 20-day time period provided for in section 40-6-114(1), C.R.S. (1993) within which to file applications for rehearing, reargument, or reconsideration begins on the first day following the mailing or serving of this decision.

This order is effective upon its Mailed Date.

ADOPTED IN OPEN MEETING February 18, 1994.

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO



Commissioners

CONSTANT TIER MODEL FOR
SMPA RURAL ELECTRIC

BASE YEAR	1993	
TOTAL EQUITY	$7,774,652	
ALLOCATED PAT. CAP.	$420,219	
	=============	
ADJ. TOTAL EQUITY	$7,354,433	
TOTAL DEBT	$14,317,569	
	=============	
ADJ. TOTAL CAPITALIZATION	$21,672,002	
PRESENT EQUITY LEVEL	33.94	%
MODIFIED TIER GOAL	2.0000	($129,591) REV. INCREASE
COMPOUND CAPITAL GROWTH	4.8408	%
CAPITAL CREDIT CYCLE	20	YEAR THEORETICAL
BLENDED INTEREST	4.9217	%
ANNUAL INTEREST ADDER	0.0783	%

YEAR	BOY EQUITY	BOY DEBT	R/R ON DEBT	R/R ON EQUITY	R/R ON TOTAL CAPITAL	EOY EQUITY
1994	33.94 %	66.06 %	5.00 %	9.73 %	6.61 %	34.52 %
1995	34.52 %	65.48 %	5.08 %	9.63 %	6.65 %	35.09 %
1996	35.09 %	64.91 %	5.16 %	9.54 %	6.69 %	35.63 %
1997	35.63 %	64.37 %	5.23 %	9.46 %	6.74 %	36.16 %
1998	36.16 %	63.84 %	5.31 %	9.38 %	6.78 %	36.66 %
1999	36.66 %	63.34 %	5.39 %	9.31 %	6.83 %	37.15 %
2000	37.15 %	62.85 %	5.47 %	9.25 %	6.88 %	37.62 %
2001	37.62 %	62.38 %	5.55 %	9.20 %	6.92 %	38.08 %
2002	38.08 %	61.92 %	5.63 %	9.15 %	6.97 %	38.53 %
2003	38.53 %	61.47 %	5.70 %	9.10 %	7.01 %	38.97 %
2004	38.97 %	61.03 %	5.78 %	9.06 %	7.06 %	39.39 %
2005	39.39 %	60.61 %	5.86 %	9.02 %	7.10 %	39.80 %
2006	39.80 %	60.20 %	5.94 %	8.98 %	7.15 %	40.21 %
2007	40.21 %	59.79 %	6.02 %	8.95 %	7.20 %	40.61 %
2008	40.61 %	59.39 %	6.10 %	8.92 %	7.24 %	40.99 %
2009	40.99 %	59.01 %	6.17 %	8.89 %	7.29 %	41.37 %
2010	41.37 %	58.63 %	6.25 %	8.86 %	7.33 %	41.75 %
2011	41.75 %	58.25 %	6.33 %	8.83 %	7.38 %	42.11 %
2012	42.11 %	57.89 %	6.41 %	8.81 %	7.42 %	42.47 %
2013	42.47 %	57.53 %	6.49 %	8.79 %	7.46 %	42.82 %

INCOME STATEMENT

	STAFF Test Year 8/92 to 7/93	STAFF ADJUSTMENTS	OCC ADJUSTMENTS	COMMISSION ADJUSTMENTS	COMMISSION Test Year 8/92 to 7/93 ADJUSTED
Operating Revenue	$10,012,391				$10,012,391
Cost of Puch Power	$5,102,625				$5,102,625
Transmission	$30,460				$30,460
Distrib - Operation	$554,490				$554,490
Distrib - Maintenance	$324,766				$324,766
Customer Accts Exp	$394,106				$394,106
Customer Service Exp	$61,524				$61,524
Sales Expense	$9,800		($9,764)		$9,800
Admin and Gen Exp	$870,772	$14,786	($75,823)	$14,786	$885,558
TOTAL O&M EXP	$7,348,543	$14,786	($85,587)	$14,786	$7,363,329
Deprec & Amort	$825,485				$825,485
Property Taxes	$193,988				$193,988
Other Taxes	$103,719				$103,719
Interest - LTD	$696,191				$696,191
Interest - Other	$41,886				$41,886
Other Deductions	$16,829		($2,605)		$16,829
TOTAL EXPENSES	$9,226,641	$14,786	($88,192)	$14,786	$9,241,427
OPERATING MARGIN	$785,750	($14,786)	$88,192	($14,786)	$770,964
Non-Op Margins - Int	$115,852				$115,852
Non-Op Margins - Other	($21,659)				($21,659)
G&T Captial Credits	$324,019				$324,019
Other Capital Credits	$33,965				$33,965
Extraordinary Items	$10,051				$10,051
TOTAL PATRONAGE	$1,247,978	($14,786)	$88,192	($14,786)	$1,233,192

REVENUE REQUIREMENT	COMMISSION Test Year 8/92 to 7/93 ADJUSTED
TEST YEAR CAPITAL COST	
RETURN ON EQUITY	$715,878
RETURN ON LTD	$715,878

TOTAL	$1,431,757
TOTAL EXPENSES LESS LTD INTEREST	$8,545,236
REV REQ TO MEET TEST YEAR GOAL	$9,976,993
LESS	
NON-OP MARGINS - INT	$115,852
NON-OP MARGINS - OTHER	($21,659)
OPERATING REVENUE REQUIREMENT	$9,882,800
TEST YEAR OPERATING REVENUE	$10,012,391
NET REVENUE INCREASE	($129,591)

RATE BASE & EQUITY EQUIVALENT RETURNS

	STAFF Test Year 8/92 to 7/93	STAFF ADJUSTMENTS	OCC ADJUSTMENTS	COMMISSION ADJUSTMENTS	COMMISSION Test Year 8/92 to 7/93 ADJUSTED
UTILITY PLANT IN SERVICE	$27,932,464				$27,932,464
CONST. WORK IN PROGESS	$972,734				$972,734
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GROSS UTILITY PLANT	$28,905,198				$28,905,198
ACCUM DEPRECIATION+ AMORTIZA	($7,986,234)				($7,986,234)
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NET UTILITY PLANT	$20,918,964				$20,918,964
CUSTOMER DEPOSITS			($309,693)	($309,693)	($309,693)
NET MATERIALS AND SUPPLIES	$572,387				$572,387
PREPAYMENTS	$42,531		($42,531)	($42,531)	$0
CASH WORKING CAPITAL	$282,282		($201,725)	($201,725)	$80,557
CUSTOMER ADVANCES FOR CONSTR	($2,337,647)				($2,337,647)
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NET RATE BASE	$19,478,517		($553,949)	($553,949)	$18,924,568
RETURN ON RATE BASE					7.57%
RETURN ON RATE BASE EQUITY					11.15%