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BEFORE THE ARIZONA CORPORATION COMMISSION  
DOCKETED

Arizona Corporation Commission

NOV 3 2008

MIKE GLEASON, CHAIRMAN  
WILLIAM A. MUNDELL  
JEFF HATCH-MILLER  
KRISTIN K. MAYES  
GARY PIERCE

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IN THE MATTER OF THE COMPLAINT  
OF THE BUREAU OF INDIAN AFFAIRS,  
UNITED STATES OF AMERICA,  
AGAINST MOHAVE ELECTRIC  
COOPERATIVE, INC. AS TO SERVICES  
TO THE HAVASUPAI AND  
HUALAPAI INDIAN RESERVATIONS

DOCKET NO. E-01750A-05-0579  
BUREAU OF INDIAN AFFAIRS  
SUR-REBUTTAL TESTIMONY OF  
LEONARD GOLD

The Bureau of Indian Affairs ("BIA") submits the following sur-rebuttal testimony  
of Leonard Gold:

**I. Introduction**

Q: What is the purpose of your testimony?

A: Mohave Electric Cooperative, Inc. ("Mohave") filed direct testimony of Tom  
Longtin (the "Longtin Statement"). The purpose of my testimony is to respond to issues  
raised in the Longtin Statement. Specifically, I will respond to the following issues:

- Whether the 70-mile electric line (the "Line") from Mohave's Nelson Substation to Long Mesa is used and useful;
- Whether the Line is a distribution or a transmission line;
- Whether the Mohave-BIA contract was a retail contract;
- Whether the 12 customers on the Line were retail customers of Mohave; and
- Whether the Line would be a financial burden upon Mohave.

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1 **II. Ever Since the Line Became Operational, It Has Been Used and Useful**

2 Q: On page 6 of Mr. Longtin's testimony he states that Mohave does not  
3 consider the Line to be used and useful. What did Mr. Longtin rely upon to support this  
4 statement?

5 A: On January 7, 1982, Mohave applied for a permanent rate increase. The  
6 ACC granted Mohave's rate application. Mr. Longtin relied upon the August 11, 1982  
7 ACC Decision No. 53174 (the "1982 Rate Decision"). See Longtin Statement, Exhibit 6.  
8

9 Q: Do you agree with Mr. Longtin's reliance upon the 1982 Rate Decision to  
10 determine whether the Line is used and useful?

11 A: No. Mohave filed its application for a permanent increase on January 7,  
12 1982. However, Mohave first started supplying electricity through the Line on or after  
13 February 1, 1982. Attached as Exhibit 1 is Mohave's first invoice to the BIA and it is  
14 dated April 8, 1982. Mohave's application for a permanent rate increase was filed  
15 before the Line supplied electricity to the BIA. Thus, Mr. Longtin should not have relied  
16 upon the 1982 Rate Decision.

17 Q: Instead of the 1982 Rate Decision, what should Mr. Longtin have relied  
18 upon to decide whether or not the Line is used and useful?

19 A: It would have been more reasonable for Mr. Longtin to have relied upon  
20 Mohave's records, Mohave's ACC filings, and ACC decisions after the Line began  
21 supplying electricity. For example, on September 26, 1989, Mohave filed another  
22 application for a permanent rate increase in Docket No. U-1750-89-231 (the "1989 Rate  
23 Application"). Mohave filed this application after the Line had been operational for over  
24 seven years, so it contains Mohave's historical data about actual usage of the Line and  
25 it identifies how Mohave classified the Line.

26 Mr. Longtin should have relied upon Mohave's 1989 Rate Application. Also, he  
27 should have relied upon the ACC's November 29, 1990 decision on the rate application  
28 (the "1990 Rate Decision") in his assessment of whether the Line is used and useful.

1 Attached, as Exhibit 2, is Mohave's 1989 Rate Application. Mohave's cost of service  
2 study, which Mohave attached to the Application and is Exhibit 10 to my direct  
3 testimony, is not attached to this sur-rebuttal. Attached as Exhibit 3 is the 1990 Rate  
4 Decision.

5 Additionally, Mr. Longtin should have reviewed Mohave's annual REA reports  
6 from 1980 – 2007, Exhibit 9 to my direct testimony.

7 Q: In its 1989 Rate Application, did Mohave consider the Line to be used and  
8 useful?

9 A: Yes. As part of its Application, Mohave stated "(6) This application is for  
10 an increase in operating revenues .....which would return to the applicant a rate of  
11 return of 12.53% on an original cost rate base of \$25,988,341,..." (Application, page 2  
12 lines 7 – 11) and "(7) Attached hereto are the following exhibits necessary to comply  
13 with R14-2-103B.3 ... (f) A cost of service study for the twelve (12) months ended July  
14 31, 1989..." (Application, Page 3, lines 6 – 8). 1989 Rate Application, attached as  
15 exhibit 2.

16 Q: What is rate base and why is it an indication the Line is used and useful?

17 A: Rate base typically means the value of property used by a utility in  
18 providing service and upon which a utility is allowed to earn a specified rate of return.  
19 Rate base is intended to reflect the investment made by the utility in all property and  
20 plant that both the utility and Commission consider to be used and useful in providing  
21 electric service. Mohave's rate base included the Line, so Mohave considered the Line  
22 to be used and useful.

23 Q: Did Mohave's 1989 Rate Application and cost of service study show the  
24 total rate base and the rate base of each of Mohave's customer classes?  
25

26 A: Yes it did. On page 1 of Mohave's cost of service summary (Exhibit 10 of  
27 my direct testimony) the total rate base is shown along with the rate base associated  
28

1 with each customer class. For the BIA, Mohave calculated rate base of \$1,074,241 and  
2 a return on that rate base of 5.98%.

3  
4 Q: Mohave included what components in BIA's rate base?

5 A: Mohave included the following components and values in BIA's rate base:

6  
7

| <b>MEC Rate Base For BIA From<br/>Cost of Service Summary</b> |                     |             |
|---|---------------------|-------------|
| <b>Category</b>   | <b>Amount</b>       | <b>Page</b> |
| Intangible Plant  | \$ 21               | 21          |
| Transmission Plant  | \$ 60,545           | 24          |
| Distribution Plant  | \$ 1,170,449        | 27          |
| General Plant   | \$ 121,372          | 30          |
| Customer Accounts   | \$ 5,064            | 5           |
| <b>Gross Plant In Service</b>                                 | <b>\$ 1,357,451</b> |             |
| Accumulated Depreciation                                      |                     | 30          |
| Production Plant  | \$ -                | 30          |
| Transmission Plant  | \$ 24,420           | 30          |
| Distribution Plant  | \$ 261,247          | 30          |
| General Plant   | \$ 54,650           | 30          |
| Customer Accounts   | \$ 2,280            |             |
| <b>Total Accumulated<br/>Depreciation</b>                     | <b>\$ 342,597</b>   | <b>30</b>   |
| <b>Total Working Capital</b>                                  | <b>\$ 59,387</b>    | <b>33</b>   |
| <b>Total BIA Rate Base</b>                                    | <b>\$ 1,074,241</b> |             |

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22 Q: Based upon the above table, how did Mohave categorize the Line?

23 A: This table clearly shows that Mohave thought the Line was used and  
24 useful. Mohave included both the distribution Line and the associated accumulated  
25 reserve for depreciation as components of the rate base. Based upon the amount of  
26 accumulated depreciation in the 1989 test year, Mohave had been depreciating the Line  
27 since 1982.

1 Q: Did the ACC address in its 1990 Rate Decision Mohave's rates and rate  
2 base?

3 A: Yes, on pages 13 and 14 under the topic of "Findings of Fact", the ACC  
4 stated:

5 "7. Applicant's fair value rate base is determined to be \$26,742,431<sup>1</sup>, which is  
6 the same as its original cost rate base." and

7 "12. The rates and charges approved herein will produce a net operating income  
8 of \$2,297,218, for a return of 8.59% which is a fair and reasonable return on fair  
9 value rate base, and a net TIER of 2.00 which is reasonable for [Mohave] at this  
10 time."

11 The 1990 Rate Decision is attached as Exhibit 3.

12 Q: What else is indicated by Mohave including the Line as distribution plant?

13 A: Prior to the capital cost of new facilities being placed on the books, a  
14 determination is made as to the appropriate function of those facilities. The  
15 determination of function is done so as to be able to assign the capital cost of the new  
16 facilities to the proper function. In this case, Mohave determined that the appropriate  
17 function for the Line was distribution and assigned the capital cost of the Line to  
18 distribution plant.

19 Q: Based upon Mohave's 1989 Rate Application and the ACC's 1990 Rate  
20 Decision, is the Line used and useful?

21 A: Yes. The ACC approved the rate base that includes all Mohave's plant,  
22 including the Line, that is considered used and useful for providing service. Thus, both  
23 Mohave in its 1989 Rate Application and the ACC in its 1990 Rate Decision considered  
24 the Line used and useful.

25 Q: Are you aware of Mohave filing another rate application with the ACC  
26 since the 1989 Rate Application?  
27

28 <sup>1</sup> This amount differs from that found on the cost of service study summary due  
to adjustments during the rate case.

1 A: No I am not.

2 Q: Are you aware of Mohave filing a request with the ACC to adjust and/or  
3 remove any rate base?

4 A: No.

5 **III. The Line is a Distribution Line**

6 Q: Do you agree with Mr. Longtin's opinion the Line is a transmission line?

7 A: No. As discussed in more detail in my direct testimony, not only does the  
8 Line have the characteristics of a distribution line, but Mohave always classified the Line  
9 as a distribution line. While Mr. Longtin and I can disagree on the textbook  
10 considerations, Mohave itself determined that the function of the Line was distribution  
11 and reflected this in its 1989 Rate Application, filed September 26, 1989, or almost 2  
12 years prior to Mr. Longtin joining Mohave. Mohave also always classified the Line as a  
13 distribution line in its yearly reports it filed with the Rural Electric Administration.

14 Q: On page 8 of his testimony, Mr. Longtin testifies about ACC Decision  
15 51491. What was the purpose of Mohave's application that resulted in this decision?

16 A: Mohave sought to finance construction of the Line with a \$1,600,000 loan  
17 from the Rural Electric Administration. On October 1, 1980, Mohave filed an application  
18 in Docket No. U-1750-80-170 for approval of the construction loan. See Exhibit 5 to my  
19 direct testimony. In Mohave's attachments to its application, Mohave estimated the cost  
20 to construct a transmission line (\$3,376,000) and the cost to construct a distribution line  
21 (\$1,600,000). Mohave clearly indicated that the borrowed funds were to be used for a  
22 distribution line with an estimated cost of \$1,600,000. So, once again, Mohave itself  
23 determined and acknowledged the Line was a distribution line.

24 Q: Did the ACC approve Mohave's request for a loan to construct a  
25 distribution line?

26 A: Yes. In Decision No. 51491 dated October 22, 1980 the ACC approved  
27 the \$1,600,000 funding request for the construction of a distribution line.  
28

1 Q: Are you aware of any other information to indicate that Mohave itself  
2 determined the Line was a distribution line?

3 A: Yes. Mohave requested bids to construct the Line. Attached as Exhibit 4  
4 is a copy of Mohave's bid package and the contract to build the Line.<sup>2</sup>  
5

6 Mohave called the project to build the Line the "Supai Distribution Line." The  
7 bids were due in Mohave's Bullhead City on or before 2:00 pm on March 2, 1981 (page  
8 1 of Notice And Instructions To Bidders). The "Notice and Instructions To Bidders"  
9 specified that the project would consist of the construction of a distribution line and that  
10 there would be no "Transmission Line Construction" or "Substations and Other Major  
11 Facilities." Page 2 of Notice And Instructions To Bidders.

12 Q: Did Mohave select a bidder to construct the Line?

13 A: Mohave accepted the proposal from Four States Electric Co., Inc. to  
14 construct a distribution line only. Page 75, Acceptance.  
15

16 Q: Is there anything in Four States' bid that indicated that Mohave and Four  
17 States considered the Line to be a distribution line?

18 A: Yes. In Four States' bid, Four States broke down the number, type, and  
19 cost of the facilities that it would construct. All facilities to be constructed were  
20 distribution. None of it was transmission. See pages 27-74 of Four States' proposal.  
21 As summarized on page 74 of the proposal, \$986,223.47 was to be used to construct a  
22 distribution line and no money was allocated to construct a transmission line.

23 Mohave accepted this proposal to build a distribution line. Page 75, Acceptance.

24 Q: So Mohave contracted with Four States to build distribution line. Did  
25 Mohave's upper management also understand that the Line was for distribution  
26 purposes?  
27

28 <sup>2</sup> Because of the size of the specifications and the other documents in  
Mohave's bid/contract, Exhibit 4 contains excerpts of the bid and contract.

1 Q: Yes. Mohave's board of directors approved the construction of a  
2 distribution line and the contract with Four States. At a special meeting of Mohave's  
3 board of directors, held on March 10, 1981, the board adopted Resolution 81-3.

4 Included in this resolution were the following statements:

5 " WHERE AS, Mohave Electric Cooperative, Inc., has entered in an  
6 agreement to provide central station power to the Hualapai and Supai  
7 Indian Reservations.

8 WHERE AS, bids were solicited for the construction of a 14.4/24.9  
9 KV distribution line to serve these reservations.....

10  
11 BE IT THEREFORE RESOLVED, that the bid of \$986,223.47 by  
12 Four States Electric Company be accepted by Mohave Electric  
13 Cooperative, Inc., this acceptance being subject to approval of  
14 administrator of the Rural Electrification Administration."

15 Attached as Exhibit 5 is a copy of the resolution.

16 Q: So, given the board of directors' resolution, did Mohave itself determine  
17 the Line was a distribution line.

18 A: Yes.

19 **IV. The Mohave-BIA Contract Provided for Retail Power at Long Mesa**

20 Q: Before Mohave contracted with Four States to build the Line, the United  
21 States sought its own bids. On page 7 of Mr. Longtin's testimony he states that a  
22 request for quotations ("RFQ"; Exhibit 2 of Longtin Statement) that was issued in 1976  
23 contemplated a wholesale contract. Do you agree with that statement?  
24

25 A: No. The RFQ does not specify a wholesale relationship. Further, it  
26 should be noted that the RFQ did not result in any acceptable responses and did not  
27 result in a contract being executed. Finally, in October 1981, five years after the RFQ,  
28

1 Mohave and the BIA entered into a contract that set forth the parties' actual relationship  
2 to one another.

3 Q: On page 4 of Mr. Longtin's testimony he references that contract, the  
4 Negotiated Electric Utility Contract (the "Contract"), between Mohave and the BIA. Did  
5 the Contract specify the rate Mohave would charge the BIA for electric power?  
6

7 A: Yes. The Contract (Mr. Longtin's Exhibit 3, p. 00015) states that "[the BIA]  
8 shall pay Mohave power rates according to Mohave's Rate Schedule "L" (Large  
9 Power)...". This was Mohave's retail rate for large power users at that time.  
10

11 Q: Does the Contract make any reference to providing power to the BIA at  
12 wholesale rates?

13 A: No it does not. The Contract indicates a retail relationship.

14 Q: Did Mohave propose a retail rate for the BIA in its 1989 Rate Application?  
15

16 A: Yes. Mohave requested a retail rate schedule for the BIA that was  
17 approved by the ACC.

18 Q: Then under Mohave's current approved ACC rates, it is providing electric  
19 power service to the BIA under an ACC approved retail rate schedule?  
20

21 A: Yes. The BIA always has paid retail rates.

22 **V. The 12 Customers Along the Line Were Mohave's Retail Customers**

23 Q: Mr. Longtin states that it was his understanding that Mohave provided  
24 service to the 12 customers along the Line as a courtesy to the BIA and that Mohave  
25 never had any intent to serve customers off of the Line. Is that understanding  
26 consistent with the Contract?  
27  
28

1           A:     No. I don't see any provision in the Contract that authorizes Mohave to be  
2 the BIA's agent. Also, the Contract (Exhibit 3 of Longtin Statement) states on page  
3 00016 that "The Government agrees that Mohave may elect to serve the Hualapai  
4 Indian Reservation upon its own arrangements from the utility plant proposed to be  
5 constructed provided that contemplated system capacities are not unreasonably  
6 exceeded." The Contract contemplated that Mohave could, on its own initiative, use the  
7 Line to serve new retail customers. Mohave serving its own retail customers on the  
8 Hualapai Reservation along the Line would be consistent with this Contract provision.

9  
10  
11 **VI. The Line is Not, and Would Not, be a Financial Burden on Mohave's**  
12 **Customers**

13           Q:     On pages 27 and 28 of Mr. Longtin's testimony he discussed the effect of  
14 the Line on Mohave's finances. Do you agree with his concerns?

15           A:     No. Mohave's cost of service summary, attached to its 1989 Rate  
16 Application, shows the BIA providing a 5.98% return on the rate base and an Operating  
17 TIER of 1.24, which indicates Mohave was providing service without a loss. Also, the  
18 BIA has paid off construction of the Line and every month was paying for operation and  
19 management costs and for depreciation of the Line. In addition, as part of the ACC  
20 approved retail rate for the BIA, the BIA has paid a monthly service charge, demand  
21 charge and energy charge to Mohave. As a result, Mohave should be recovering its  
22 costs associated with the Line.  
23

24  
25           Q:     Mr. Longtin also states that if the BIA and others along the Line were  
26 Mohave's customers, it would be a financial burden upon its other 37,000 customers or  
27 members. Do you agree with that?  
28





# Exhibit 1

MOHAVE ELECTRIC COOPERATIVE, INC.



April 8, 1982

DEPT. OF INTERIOR  
BUREAU OF INDIAN AFFAIRS  
P O BOX 7007  
PHOENIX, AZ 85011

SUBJECT: REVISED FEB. BILLING FOR USAGE FROM FEB. 1, 1982 TO MAR. 1, 1982

RE: ACCOUNT #29740-00, D-8, LONG MESA POWER TRANSFORMER

|     | Present Reading | Previous Reading | Diff. | Multi. | Usage  |
|-----|-----------------|------------------|-------|--------|--------|
| KWH | 65              | -                | 65    | 1200   | 78,000 |
| KW  | .42             | -                | .42   | 1200   | 504    |

PREVIOUS BALANCE \$32,249.32

Energy Charges:

Base Rate:

|        |               |   |                    |
|--------|---------------|---|--------------------|
| 78,000 | KWH @ \$ .029 | = | \$ 2,262.00        |
| 504    | KW @ \$6.90   | = | \$ 3,477.60        |
|        |               |   | <u>\$ 5,739.60</u> |

Wholesale Power Cost Adjustment:

|        |                  |   |             |
|--------|------------------|---|-------------|
| 78,000 | KWH @ \$ .013092 | = | \$ 1,021.18 |
|--------|------------------|---|-------------|

Arizona Sales Tax @ 4%

|  |  |   |                  |
|--|--|---|------------------|
|  |  | = | \$ 6,760.78      |
|  |  |   | <u>\$ 270.43</u> |

Total Energy Charge

\$ 7,031.21

Facility Charge:

|                      |  |   |             |
|----------------------|--|---|-------------|
| Cost of Construction | $\frac{1,145,651.55}{12} \times .0444$ | = | \$ 4,238.91 |
|----------------------|--|---|-------------|

|              |                                      |   |             |
|--------------|--------------------------------------|---|-------------|
| Property Tax | $\frac{1,145,651.55}{12} \times .05$ | = | \$ 4,773.55 |
|--------------|--------------------------------------|---|-------------|

|                         |                                      |   |             |
|-------------------------|--------------------------------------|---|-------------|
| Operation & Maintenance | $\frac{1,145,651.55}{12} \times .02$ | = | \$ 1,909.42 |
|-------------------------|--------------------------------------|---|-------------|

|              |                                       |   |             |
|--------------|---------------------------------------|---|-------------|
| Depreciation | $\frac{1,145,651.55}{12} \times .048$ | = | \$ 4,582.60 |
|--------------|---------------------------------------|---|-------------|

\$15,504.48

Arizona Sales Tax

\$ 620.18

Total Facility Charge

\$16,124.66

BALANCE DUE

\$55,405.19

MOHAVE ELECTRIC COOPERATIVE, INC.

*A. H. Carpenter*  
Mr. A. H. Carpenter  
Manager

AHC/kh

cc: TRUXTON CANYON AGENCY  
VINCE LA POINTE  
VALENTINE, AZ 86437.

# Exhibit 2

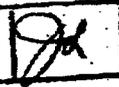
BEFORE THE ARIZONA CORPORATION COMMISSION

Arizona Corporation Commission

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of CORP. COMMISSION

1  
2 RENZ D. JENNINGS  
Chairman  
3 MARCIA WEEKS  
Commissioner  
4 DALE H. MORGAN  
Commissioner

5 IN THE MATTER OF THE APPLICATION ) DOCKET NO. 6-1750-87-231  
6 OF MOHAVE ELECTRIC COOPERATIVE, INC., ) APPLICATION FOR A  
7 AN ARIZONA NON-PROFIT CORPORATION, ) PERMANENT RATE INCREASE  
FOR A PERMANENT RATE INCREASE. )

8 MOHAVE ELECTRIC COOPERATIVE, INC., (MEC) a non-profit Ari-  
9 zona corporation, hereby makes a rate application to the Arizona  
10 Corporation Commission pursuant to the Rules and Regulations of  
11 the Arizona Corporation Commission R14-2-103B.3 "Information re-  
12 quired from distribution electric cooperatives," and in support  
13 thereof alleges as follows:

14 (1) MEC is an Arizona non-profit cooperative corporation  
15 engaged in providing electric service to some 21,148 customers in  
16 Mohave County, Arizona, pursuant to Certificates of Public Con-  
17 venience and Necessity ("Certificates") granted by this Commis-  
18 sion.

19 (2) MEC's service territory encompasses two separate por-  
20 tions of Mohave County. The larger of the service areas lies  
21 east of Kingman, Arizona, and is sparsely populated. The second  
22 area consists of a strip of land along the Colorado River, in-  
23 cluding the communities of Riviera and Bullhead City, Arizona.

24 (3) Applicant purchases all of its electric power from  
25 Arizona Electric Power Cooperative, Inc.

26 (4) Applicant is financed by long-term financing from REA,  
27 which is an agency of the U. S. Department of Agriculture. Ap-  
28

1 plicant is a member of the National Rural Utility Cooperative  
2 Finance Corporation ("CFC"), a nationwide financing institution  
3 organized to furnish supplemental financing in addition to the  
4 financing provided by REA.

5 (5) MEC has experienced very rapid growth in the past few  
6 years in its certified area along the Colorado River.

7 (6) This application is for an increase in operating reve-  
8 nues of \$1,803,775.00 using a test year ended July 31, 1989,  
9 which would return to the applicant a rate of return of 12.35% on  
10 an original cost rate base of \$25,988,341.00, or an overall in-  
11 crease in rates of 7%.

12 (7) Attached hereto are the following exhibits necessary to  
13 comply with RI4-2-103B.3:

14 (a) REA Form 7 for the periods ending July 31, 1989  
15 and December 31, 1988, filed under "Historical Financial Re-  
16 sults." These Form 7's encompass the test year of the applicant.

17 (b) The applicant has elected not to submit a recon-  
18 struction cost new value of its utility plant considered in the  
19 determination of its fair value.

20 (c) A bill count for the residential rate schedule is  
21 set forth in Schedule H-5, page 1 of 1, under "Rate Comparisons  
22 Present and Proposed Rates," and total bills by class on page 3  
23 of "Cost of Service Study."

24 (d) A summary of revenues by consumer classification  
25 for present and proposed rates for each class of service and  
26 rates and charges for other services, are set forth in Schedule  
27 H-1 and Schedule H-3, pages 1 through 15, for the test year ended  
28

1 July 31, 1989 under "Rate Comparisons Present and Proposed  
2 Rates."

3 (e) A schedule listing long term debt obligations,  
4 on page 18, marked Schedule 5, attached to financial statements  
5 under "Historical Financial Results."

6 (f) A cost of service study for the twelve (12) months  
7 ending July 31, 1989, pages 1 through 52. See "Cost of Service  
8 Study."

9 (g) A "Financial Summary of Present and Proposed  
10 Rates" includes:

11 (i) a rate adjustment summary (Schedule A-1),

12 (ii) a comparative statement of operations  
13 (Schedule A-2),

14 (iii) pro forma test year adjustments (Schedule  
15 A-3), and

16 (iv) original cost rate base for the test year  
17 ending July 31, 1989 (Schedule A-4).

18 (h) An "Equity Management Plan", Schedules EM-1  
19 through 5.

20 (i) Additional information in the form of financial  
21 statements, accounting reports, audit reports, and other vital  
22 reports contained in "Historical Financial Results."

23 WHEREFORE, Applicant requests that the Commission forthwith:

24 Find and determine the fair value of Applicant's electric  
25 property devoted to public service in Arizona, that a just and  
26 reasonable rate of return upon the fair value of such property be  
27 granted to Applicant, with a permanent rate schedule to be there-  
28 after approved by this Commission which will produce equitable  
rates among the classes of customers to be effective with

1 October, 1990 billings.

2 Respectfully submitted  
3 On behalf of  
4 MOHAVE ELECTRIC COOPERATIVE, INC.

5 CHARLES D. WAHL, P.C.

6 By *Charles D. Wahl*  
7 Charles D. Wahl  
8 Attorney at Law  
9 2910 North Seventh Avenue  
10 Phoenix, Arizona 85013  
11 (602) 264-3794

12 DATED this 26th day of September, 1989.

13 Original and 9 copies filed  
14 this 26th day of September, 1989  
15 with

16 Arizona Corporation Commission  
17 Utilities Division  
18 1200 West Washington  
19 Phoenix, Arizona 85005  
20  
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MOHAVE ELECTRIC COOPERATIVE, INC.

RATE ADJUSTMENT SUMMARY

Test Year Ended July 31, 1989

| <u>Line No.</u> | <u>Description</u>             | <u>Present Rates</u> | <u>Proposed Rates</u> |
|-----------------|--------------------------------|----------------------|-----------------------|
| 1.              | Revenues                       | \$25,802,347         | \$27,606,122          |
| 2.              | Operating Expense and Interest | 25,727,526           | 25,727,526            |
| 3.              | Operating Margins              | 74,821               | 1,878,596             |
| 4.              | Non-Operating Margins          | 367,019              | 367,019               |
| 5.              | Operating TIER                 | 1.06                 | 2.41                  |
| 6.              | Net TIER                       | 1.33                 | 2.69                  |
| 7.              | Rate Base                      | 25,988,341           | 25,988,341            |
| 8.              | % Return on Rate Base          | 5.41%                | 12.35%                |
| 9.              | Requested Increase in Revenues | --                   | 1,803,775             |
| 10.             | % Increase                     | --                   | 7.00%                 |

Date: 9-21-89

MOHAVE ELECTRIC COOPERATIVE, INC.

ORIGINAL COST RATE BASE

Test Year Ended July 31, 1989

| <u>Line No.</u> | <u>Description</u>                   | <u>Amount</u>       |
|-----------------|--------------------------------------|---------------------|
| 1.              | Gross Utility Plant In Service:      |                     |
| 2.              | Intangible Plant                     | \$ 579              |
| 3.              | Transmission Plant                   | 2,642,587           |
| 4.              | Distribution Plant                   | 25,878,944          |
| 5.              | General Plant                        | 3,355,553           |
| 6.              | Total Gross Utility Plant In Service | 31,877,663          |
| 7.              | Less: Accumulated Depreciation       | 8,098,436           |
| 8.              | Net Utility Plant in Service         | 23,779,227          |
| 9.              | Plus:                                |                     |
| 10.             | Construction Work In Progress        | 3,553,430           |
| 11.             | Working Capital                      | 706,782             |
| 12.             |                                      | 4,260,212           |
| 13.             | Less:                                |                     |
| 14.             | Consumer Advances For Construction   | 2,051,098           |
| 15.             | Original Cost Rate Base              | <u>\$25,988,344</u> |

MOVAVE ELECTRIC COOPERATIVE, INC. --- EQUITY MANAGEMENT PLANNING HORIZON

FORECAST SCENARIO

Consumer Growth Rate 7.50%  
 Inflation Rate 5.80%  
 Retail Rate Increase 7.00%  
 Year of Rate Increase 1980

COMMENT

Most Likely Scenario

FINANCIAL OBJECTIVES

Capital Credits Cycles: 15  
 Equity Ratio: 45%

| DESCRIPTION               | FORECAST YEAR |              |              |              |              |              |              |              |              |              |
|---------------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                           | 7-31-80       | 7-31-81      | 7-31-82      | 7-31-83      | 7-31-84      | 7-31-85      | 7-31-86      | 7-31-87      | 7-31-88      | 7-31-89      |
| Base Revenues             | \$25,740,022  | \$29,595,680 | \$31,804,591 | \$34,188,938 | \$38,784,181 | \$39,510,744 | \$42,474,050 | \$45,659,604 | \$49,034,074 | \$52,705,380 |
| Cost of Service           | 25,038,588    | 27,481,319   | 29,351,181   | 31,481,010   | 33,782,187   | 36,359,945   | 39,215,528   | 42,339,125   | 45,754,631   | 49,551,581   |
| Operating Margins         | 101,455       | 2,124,347    | 2,443,400    | 2,726,326    | 2,982,014    | 3,150,800    | 3,258,422    | 3,320,479    | 3,279,443    | 3,213,799    |
| Net Margins               | 378,405       | 2,388,621    | 2,576,138    | 2,782,384    | 2,982,014    | 3,150,800    | 3,258,422    | 3,320,479    | 3,279,443    | 3,213,799    |
| Operating TIER            | 1.07          | 2.60         | 2.87         | 3.06         | 3.10         | 3.03         | 2.82         | 2.59         | 2.30         | 2.10         |
| Net TIER                  | 1.28          | 2.78         | 2.88         | 3.09         | 3.10         | 3.03         | 2.82         | 2.59         | 2.30         | 2.10         |
| Construction Expenditures | 3,348,671     | 3,785,543    | 4,304,620    | 4,881,970    | 5,538,773    | 6,279,393    | 7,121,618    | 8,078,803    | 9,180,104    | 10,388,703   |
| Borrowing Requirement     | 3,870,000     | 0            | 0            | 1,130,557    | 1,630,336    | 2,300,747    | 3,255,544    | 3,380,051    | 4,382,881    | 5,654,788    |
| Embedded Cost of Debt     | 6.80%         | 5.78%        | 5.78%        | 5.97%        | 6.17%        | 6.52%        | 6.80%        | 7.34%        | 7.82%        | 8.38%        |
| Debt/Equity Ratios        |               |              |              |              |              |              |              |              |              |              |
| Debt Percentage           | 71.10%        | 65.77%       | 61.78%       | 59.78%       | 58.60%       | 56.49%       | 54.03%       | 54.10%       | 54.50%       | 55.77%       |
| Equity Percentage         | 28.90%        | 34.23%       | 38.22%       | 41.22%       | 43.40%       | 45.51%       | 45.97%       | 45.90%       | 45.42%       | 44.23%       |

MOVAVE ELECTRIC COOPERATIVE, INC. --- EQUITY MANAGEMENT PLANNING HORIZON

|                         | BASE YEAR  |            |            |            |            |            |            |            |            |            |            |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|                         | 7-31-89    | 7-31-90    | 7-31-01    | 7-31-82    | 7-31-83    | 7-31-84    | 7-31-85    | 7-31-86    | 7-31-87    | 7-31-88    | 7-31-89    |
| STATEMENT OF OPERATIONS |            |            |            |            |            |            |            |            |            |            |            |
| Base Operating Revenues | 24,584,383 | 25,740,022 | 28,585,866 | 31,804,501 | 34,188,938 | 36,764,101 | 39,510,744 | 42,476,050 | 45,858,804 | 48,084,074 | 52,765,300 |
| Base Purchased Power    | 18,370,477 | 19,354,729 | 20,006,334 | 22,368,808 | 24,044,310 | 25,947,843 | 27,788,217 | 29,870,183 | 32,110,446 | 34,518,730 | 37,107,835 |
| Operating Expenses:     |            |            |            |            |            |            |            |            |            |            |            |
| O & M Expenses          | 3,001,324  | 3,229,897  | 3,407,330  | 3,594,733  | 3,772,444  | 4,001,028  | 4,221,085  | 4,453,244  | 4,680,173  | 4,950,572  | 5,229,184  |
| Depreciation            | 935,882    | 1,009,631  | 1,138,233  | 1,248,733  | 1,374,053  | 1,518,182  | 1,677,375  | 1,860,187  | 2,067,518  | 2,302,658  | 2,569,337  |
| Property Taxes          | 520,723    | 620,010    | 778,482    | 847,208    | 928,202    | 1,017,088  | 1,121,235  | 1,240,477  | 1,378,850  | 1,532,653  | 1,710,482  |
| Interest                | 1,174,384  | 1,354,500  | 1,330,831  | 1,303,707  | 1,324,512  | 1,410,214  | 1,554,034  | 1,791,530  | 2,086,137  | 2,444,017  | 2,834,844  |
| Total Cost of Service   | 24,062,800 | 25,638,560 | 27,461,319 | 29,301,101 | 31,481,010 | 33,792,167 | 36,358,945 | 39,215,828 | 42,380,125 | 45,764,631 | 49,551,581 |
| Operating Margins       | 521,783    | 101,455    | 2,124,347  | 2,443,400  | 2,728,326  | 2,982,014  | 3,159,800  | 3,258,422  | 3,378,478  | 3,329,443  | 3,213,780  |
| Non Operating Margins   | 582,588    | 278,951    | 204,273    | 132,738    | 34,030     | 0          | 0          | 0          | 0          | 0          | 0          |
| Net Margins             | 1,104,352  | 378,405    | 2,388,621  | 2,576,138  | 2,762,354  | 2,982,014  | 3,159,800  | 3,258,422  | 3,378,478  | 3,329,443  | 3,213,780  |
| Operating TIER          | 1.44       | 1.07       | 2.60       | 2.87       | 3.06       | 3.10       | 3.03       | 2.82       | 2.59       | 2.36       | 2.10       |
| Net TIER                | 1.84       | 1.28       | 2.79       | 2.88       | 3.09       | 3.10       | 3.03       | 2.82       | 2.58       | 2.38       | 2.10       |

MOVAVE ELECTRIC COOPERATIVE, INC. --- EQUITY MANAGEMENT PLANNING HORIZON

| ASSUMPTIONS DETAIL        | 7-31-80   | 7-31-80   | 7-31-81   | 7-31-82   | 7-31-83   | 7-31-84   | 7-31-85   | 7-31-86   | 7-31-87   | 7-31-88   | 7-31-89    |
|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Number of Consumers - YE  | 21,148    | 22,734    | 24,439    | 26,272    | 28,243    | 30,361    | 32,638    | 35,065    | 37,717    | 40,546    | 43,587     |
| Consumer Growth Rate      | 8.00%     | 7.50%     | 7.50%     | 7.50%     | 7.50%     | 7.50%     | 7.50%     | 7.50%     | 7.50%     | 7.50%     | 7.50%      |
| KWH Sales Per Avg. Cons.  | 14,897    | 14,300    | 14,300    | 14,300    | 14,300    | 14,300    | 14,300    | 14,300    | 14,100    | 14,300    | 14,300     |
| Const. Expend. Per Cons.  | 2,000     | 2,110     | 2,226     | 2,348     | 2,476     | 2,614     | 2,768     | 2,908     | 3,089     | 3,239     | 3,418      |
| Other Revenues Per Cons.  | 13.20     | 13.20     | 13.20     | 13.20     | 13.20     | 13.20     | 13.20     | 13.20     | 13.20     | 13.20     | 13.20      |
| Weighted Base Retail Rate | 0.081115  | 0.081115  | 0.086793  | 0.086793  | 0.086793  | 0.086793  | 0.086793  | 0.086793  | 0.086793  | 0.086793  | 0.086793   |
| Weighted Base P.P. Rate   | 0.061687  | 0.061687  | 0.061687  | 0.061687  | 0.061687  | 0.061687  | 0.061687  | 0.061687  | 0.061687  | 0.061687  | 0.061687   |
| Inflation Rate            | 5.00%     | 5.50%     | 5.50%     | 5.50%     | 5.50%     | 5.50%     | 5.50%     | 5.50%     | 5.50%     | 5.50%     | 5.50%      |
| Depreciation Rate         | 3.00%     | 3.00%     | 3.00%     | 3.00%     | 3.00%     | 3.00%     | 3.00%     | 3.00%     | 3.00%     | 3.00%     | 3.00%      |
| Interest Rate - REA       | 5.00%     | 5.00%     | 5.00%     | 7.00%     | 7.00%     | 8.00%     | 8.00%     | 9.00%     | 9.00%     | 10.00%    | 10.00%     |
| Interest Rate - CFC       | 10.50%    | 10.50%    | 17.50%    | 10.50%    | 10.50%    | 10.50%    | 10.50%    | 10.50%    | 10.50%    | 10.50%    | 10.50%     |
| Financing Ratios          |           |           |           |           |           |           |           |           |           |           |            |
| REA Percentage            | 70.00%    | 70.00%    | 70.00%    | 60.00%    | 60.00%    | 60.00%    | 50.00%    | 50.00%    | 50.00%    | 40.00%    | 40.00%     |
| CFC Percentage            | 30.00%    | 30.00%    | 30.00%    | 40.00%    | 40.00%    | 40.00%    | 50.00%    | 50.00%    | 50.00%    | 60.00%    | 60.00%     |
| Interest Rate On Temp. In | 9.00%     | 9.00%     | 9.00%     | 9.00%     | 9.00%     | 8.00%     | 9.00%     | 9.00%     | 9.00%     | 9.00%     | 9.00%      |
| Temp. Invest. Bal.-YE     | 2,475,000 | 3,679,485 | 2,183,279 | 768,404   | 0         | 0         | 0         | 0         | 0         | 0         | 0          |
| Construction Expenditures | 3,724,440 | 3,346,671 | 3,795,543 | 4,304,620 | 4,681,978 | 5,536,773 | 6,279,393 | 7,121,616 | 8,076,903 | 9,160,104 | 10,388,703 |
| Principal Payments - Debt | 376,000   | 400,000   | 482,021   | 482,780   | 443,726   | 457,461   | 478,919   | 513,395   | 568,438   | 625,030   | 700,188    |
| M&M Sales                 | 300,253   | 313,757   | 337,280   | 362,505   | 399,779   | 419,013   | 450,439   | 484,222   | 520,530   | 559,579   | 611,547    |
| Average No. of Consumers  | 20,430    | 21,941    | 23,587    | 25,356    | 27,257    | 29,302    | 31,489    | 33,852    | 36,401    | 39,131    | 42,055     |

| UTILITY PLANT DETAIL          | 7-31-89    | 7-31-80    | 7-31-81    | 7-31-82    | 7-31-83    | 7-31-84    | 7-31-85    | 7-31-86    | 7-31-87    | 7-31-88    | 7-31-89    |
|-------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Gross Utility Plt. - In Serv. | 31,077,683 | 37,104,428 | 40,675,538 | 44,725,617 | 49,318,017 | 54,528,202 | 60,430,375 | 67,136,879 | 74,739,080 | 83,359,842 | 93,128,048 |
| CHTP                          | 3,853,430  | 1,673,335  | 1,097,772  | 2,152,310  | 2,440,588  | 2,788,396  | 3,130,898  | 3,560,800  | 4,039,401  | 4,580,052  | 5,194,352  |
| Total Utility Plant           | 36,431,093 | 38,777,764 | 42,573,307 | 46,877,928 | 51,759,605 | 57,256,678 | 63,576,071 | 70,697,687 | 78,774,490 | 87,934,894 | 98,323,297 |
| Less Accumulated Depr.        | 9,080,438  | 9,108,067  | 10,249,300 | 11,495,033 | 12,859,086 | 14,385,288 | 16,062,843 | 17,922,830 | 19,980,348 | 22,283,007 | 24,892,344 |
| Net Utility Plant             | 27,350,655 | 29,669,697 | 32,324,007 | 35,382,895 | 38,890,519 | 42,871,410 | 47,513,228 | 52,774,857 | 58,794,142 | 65,651,887 | 73,430,954 |
| Property Taxes                | 520,723    | 660,010    | 778,482    | 887,209    | 926,292    | 1,017,059  | 1,121,236  | 1,240,877  | 1,378,650  | 1,532,853  | 1,710,482  |





MOHAVE ELECTRIC COOPERATIVE, INC.

SUMMARY OF REVENUES BY CONSUMER  
CLASSIFICATION - PRESENT AND PROPOSED RATES

Test Year Ended July 31, 1989

| Line<br>No. | Consumer<br>Classification | Revenues In The Test Year |                     | Proposed<br>Increase (Decrease) |              |
|-------------|----------------------------|---------------------------|---------------------|---------------------------------|--------------|
|             |                            | Present                   | Proposed            | Amount                          | %            |
| 1.          | Residential                | \$14,753,243              | \$15,889,243        | \$1,136,000                     | 7.70%        |
| 2.          | Small Commercial           | 5,724,824                 | 6,268,684           | 543,860                         | 9.50         |
| 3.          | Large C & I                | 2,196,205                 | 2,327,977           | 131,772                         | 6.00         |
| 4.          | Irrigation                 | 447,185                   | 424,826             | (22,359)                        | (5.00)       |
| 5.          | BIA                        | 119,710                   | 119,710             | -0-                             | -0-          |
| 6.          | Chemstar                   | 1,340,694                 | 1,340,694           | -0-                             | -0-          |
| 7.          | Cyprus Bagdad              | 850,536                   | 825,020             | (25,516)                        | (3.00)       |
| 8.          | Lighting                   | 100,044                   | 140,062             | 40,018                          | 40.00        |
| 9.          | Other Electric Revenue     | 269,906                   | 269,906             | -0-                             | -0-          |
| 10.         | Total                      | <u>\$25,802,347</u>       | <u>\$27,606,122</u> | <u>\$1,803,775</u>              | <u>7.00%</u> |

MOHAVE ELECTRIC COOPERATIVE, INC.

PROPOSED CHANGES IN RATE SCHEDULES

Test Year Ended July 31, 1989

Large Contract - BIA

| <u>Line No.</u> | <u>Description</u>          | <u>Rate</u> |
|-----------------|-----------------------------|-------------|
| 1.              | <u>Present Rates:</u>       |             |
| 2.              | Monthly Service Charge      | \$ 62.00    |
| 3.              | Demand Charge - Per kw      | 9.00        |
| 4.              | Energy Charge - Per kwh (1) | 0.04850     |
| 5.              | <u>Proposed Rates:</u>      |             |
| 6.              | Monthly Service Charge      | \$400.00    |
| 7.              | Demand Charge - Per kw      | 9.00        |
| 8.              | Energy Charge - Per kwh     | 0.04418     |

Notes:

(1) Including current purchased power adjustment of \$0.006 per kwh.

# Exhibit 3

1 **BEFORE THE ARIZONA CORPORATION COMMISSION**

Arizona Corporation Commission

2 **DOCKETED**

3 **NOV 29 1990**

4 **MARCIA WEEKS**  
5 **CHAIRMAN**  
6 **RENZ D. JENNINGS**  
7 **COMMISSIONER**  
8 **DALE H. MORGAN**  
9 **COMMISSIONER**

DOCKETED BY



10 **IN THE MATTER OF THE APPLICATION OF ) DOCKET NO. U-1750-89-231**  
11 **MOHAVE ELECTRIC COOPERATIVE, INC., AN )**  
12 **ARIZONA NON-PROFIT CORPORATION, FOR A ) DECISION NO. 57172**  
13 **PERMANENT RATE INCREASE. )**

14 **OPINION AND ORDER**

15 **DATES OF HEARING:** July 11, 1990 (Public Comments)  
16 July 25, 1990 (Hearing)

17 **PLACES OF HEARING:** Bullhead City, Arizona (Public Comments)  
18 Phoenix, Arizona (Hearing)

19 **PRESIDING OFFICER:** Beth Ann Burns

20 **IN ATTENDANCE:** Marcia Weeks, Chairman  
21 Renz D. Jennings, Commissioner

22 **APPEARANCES:** Mr. Charles D. Wahl, Attorney at Law, on behalf  
23 of Mohave Electric Cooperative, Inc.;

24 Mr. K. Justine Reidhead, Staff Attorney, on  
25 behalf of the Residential Utility Consumer  
26 Office;

27 **JENNINGS, STROUSS & SALMON**, by Mr. Glenn J.  
28 Carter, on behalf of Chemstar, Inc.; and

Ms. Elizabeth A. Kushibab, Staff Attorney,  
Legal Division, on behalf of the Arizona  
Corporation Commission Staff.

29 **BY THE COMMISSION:**

30 Mohave Electric Cooperative, Inc. ("MEC", "Applicant", or  
31 "Company") is an Arizona non-profit cooperative corporation engaged  
32 in the business of providing electric service to the public in

1 various portions of Mohave County, Arizona, pursuant to authority  
2 granted by the Arizona Corporation Commission ("Commission").

3 On September 9, 1989, MEC filed with the Commission an  
4 application for a permanent increase in its rates and charges. The  
5 application was revised by filings dated November 8, 1989, April 9,  
6 1990, and May 9, 1990.

7  
8 By Procedural Order dated November 9, 1989, intervention in  
9 this matter was granted to the Residential Utility Consumer Office  
10 ("RUCO") and Chemstar, Inc.

11  
12 By Procedural Order dated May 29, 1990, the hearing in this  
13 matter was scheduled to commence on July 25, 1990. The hearing was  
14 held as scheduled.

15 Following the conclusion of the hearing, MEC and RUCO submitted  
16 late-filed exhibits on July 27, 1990 to reflect a consensus reached  
17 on certain issues. Staff submitted revised exhibits on August 1,  
18 1990, August 7, 1990 and September 14, 1990. The late-filed  
19 exhibits should be marked and admitted into evidence as follows:  
20 Ex. MEC-10 (proposed rates revised) and Ex. MEC-11 (TIER forecasts);  
21 Ex. S-3 (revised Staff Report); and Ex. R-5 (revised schedules).  
22

23 **DISCUSSION**

24 Applicant provides electric utility service to approximately  
25 22,000 customers located in two separate portions of Mohave County,  
26 Arizona: a large, sparsely populated area east of Kingman, Arizona  
27 and a rapidly growing area encompassing Bullhead City and Riviera,  
28

1 Arizona. As an electric cooperative, MEC purchases all of its power  
2 requirements from Arizona Electric Power Cooperative, Inc. MEC's  
3 current rates and charges for electric service were approved by the  
4 Commission in Decision No. 53174 (August 11, 1982).  
5

6 This case comes before the Commission upon application of MEC  
7 for authority to permanently increase its rates and charges. Based  
8 upon its analysis of operating data for the test year ended July 31,  
9 1989, MEC initially requested approval of rate schedules which would  
10 yield \$1,801,775 in additional gross annual revenues, a 7% increase.  
11 As revised to reflect the settled issues, discussed below, MEC is  
12 now requesting a revenue increase of \$1,497,840, or 5.62%.  
13

14 Staff conducted an investigation of the application and, in the  
15 Staff Report filed July 3, 1990, recommended a revenue increase of  
16 \$460,699, or 1.73%. Taking into account the settled matters, Staff  
17 currently supports a \$585,762 increase, or 2.2%.  
18

19 RUCO has presented a range within which it believes the revenue  
20 increase should be determined. Initially, the range provided for an  
21 increase from \$1,118,858 to \$1,199,330, or 4.2% to 4.8%. Upon  
22 revision to incorporate the settled issues, the range became  
23 \$686,690 to \$767,162, or 2.6% to 2.88%.  
24

25 The settled issues referenced above result from a consensus  
26 reached by the parties just prior to the hearing in this matter.  
27 The consensus essentially represents acceptance of the Staff Report  
28 and covers a substantial portion of the case.

1 With regard to determining the revenue requirement, no issues  
2 remain in dispute as to the quantification of rate base. Applicant  
3 has accepted Staff's proposed original cost rate base valuation of  
4 \$26,742,431. Since MEC has elected not to submit a reconstruction  
5 cost new rate base, the original cost rate base of \$26,742,431 will  
6 be used as the fair value rate base for rate-making purposes.  
7

8 Applicant and RUCO have accepted Staff's adjustments to the  
9 test year income statement, including the adjustments to reflect the  
10 effects of customer growth. The adjustments subject to the  
11 consensus are reasonable and should be adopted.  
12

13 The parties have further reached agreement that: MEC's base  
14 rate for purchased power should be \$0.065798 per KWH; MEC's share of  
15 the Arizona Electric Power Cooperative, Inc. ("AEPCCO") refund  
16 approved by the Commission in Decision No. 56803 (January 31, 1990)  
17 should be passed on to the Company's customers through a 3 mill  
18 credit per KWH; and MEC should include an addendum to its monthly  
19 purchased power adjustor filing to report for each month the amount  
20 refunded, the balance of the refund, and the amount of interest  
21 earned on the unrefunded balance. The Commission finds that the  
22 agreement is reasonable and should be adopted.  
23

24 The only unresolved issue affecting the calculation of the  
25 revenue requirement is the level of revenues necessary for MEC to  
26 maintain an appropriate times interest earned ratio ("TIER") and  
27 equity ratio.  
28

1 With regard to rates and tariffs matters, one issue remains in  
2 dispute. Staff has accepted Applicant's proposed distribution of  
3 the revenue increase among the customer classes, whereas RUCO favors  
4 an alternative allocation. The parties have agreed upon Applicant's  
5 proposed rate design, which includes the following changes:  
6

- 7 • reduction of the residential monthly service charge from  
8 \$12.00 to \$9.50 per month;
- 9 • revision of the optional demand rate for residential and  
10 small commercial customers;
- 11 • expansion of the small commercial tariff to include  
12 customers with demands up to 100 KW;
- 13 • establishing a new rate for irrigation customers; and  
14 • establishing separate rates for MEC's three large contract  
15 customers.

16 The rate structure supported by the parties is reasonable and should  
17 be adopted.

#### 18 THE TIER AND EQUITY RATIOS

19 At July 31, 1989, Applicant's actual capitalization consisted  
20 of 68.26% debt and 31.74% equity. The ten-year equity management  
21 plan Applicant submitted for the Commission's consideration in this  
22 proceeding contemplates raising the Company's equity ratio to 45%  
23 within four to five years. The objective of raising the equity  
24 ratio would be to improve the capital structure and thereby enable  
25 the Company to attract financing for its construction program from  
26 sources other than the Rural Electrification Administration ("REA")  
27 and the National Rural Utilities Cooperative Financial Corporation  
28

1 ("CFC"). Applicant is concerned that the REA and CFC may reduce  
2 available funding or increase the interest rates.

3 According to Applicant, an integral step in the equity  
4 management plan is achieving a net TIER of at least 2.69.<sup>1</sup> The  
5 Company believes that a 2.69 TIER would provide sufficient earnings  
6 to maintain its sound financial condition, provide reliable service,  
7 respond to rapid system growth, stabilize rates at the lowest  
8 overall long-term costs to its member-customers, improve its equity  
9 ratio, and rotate capital credits to its member-customers in a  
10 meaningful cycle.<sup>2</sup> As revised, Applicant's \$1,497,840 rate request  
11 would produce the earnings required to achieve the targeted interest  
12 coverage ratio in the late-1990's.  
13  
14

15 RUCO disagrees with Applicant's plan to reach a 45% equity  
16 ratio within a four to five-year period. It is RUCO's position that  
17 the equity component should instead be raised to between 35% and 40%  
18 of total capitalization, with some consideration given to adopting  
19 a flexible capital credit rotation policy so that the correct equity  
20  
21

22 <sup>1</sup> An interest coverage ratio, or TIER, is a common financial  
23 measure of a company's earnings capability. The net TIER is  
24 calculated by adding the total margin and the interest expense on  
25 long-term debt, and then dividing by the amount of the interest  
26 expense. The operating TIER is calculated by dividing operating  
27 income by interest expense.

28 <sup>2</sup> Under the capital credit system, a cooperative's margin is  
allocated or credited back to its members in proportion to each  
member's patronage or revenues. The credits are maintained on the  
cooperative's books until its financial condition allows the refunds  
to be made.

1 ratio can be maintained when the Company's margin fluctuates. RUCO  
2 contends that moving toward a ratio of 35% to 40% would comport with  
3 the principles of continuity and gradualism. The upper end of the  
4 range RUCO sponsored for the rate increase is intended to produce a  
5 2.14 net TIER and a 37.5% equity ratio in about five years.  
6

7 The revenue increase recommended by Staff is calculated to  
8 allow MEC to maintain a net TIER of 2.00, with a net debt service  
9 coverage ratio ("DSC") of 2.09. Staff contends that a 2.00 net TIER  
10 is appropriate for the Company. In support of its position, Staff  
11 has observed that the long-term debt financing provided by the REA  
12 and CFC only requires a cooperative to maintain a 1.5 net TIER and  
13 a 1.25 DSC, as an average of the best two of the last three calendar  
14 years of operations. In Staff's opinion, little incentive exists to  
15 pursue coverage ratios significantly higher than the minimums since  
16 neither the CFC nor the REA reward financially strong cooperatives  
17 with lower interest rates than those charged other companies.  
18  
19

20 The issue before the Commission is the extent to which the rate  
21 relief granted in this proceeding should include revenues intended  
22 to augment MEC's earnings and thereby increase its TIER ratio and  
23 equity capitalization. The Commission finds that the weight of the  
24 evidence fails to substantiate the reasonableness of or need for a  
25 revenue allowance in the magnitude suggested by either MEC or RUCO.  
26

27 The primary objective underlying Applicant's proposed move  
28 toward a higher coverage ratio and equity component is enhancement

1 of its financial posture and ability to attract capital from sources  
2 other than REA and CFC. However, the record evidence does not  
3 establish a need for MEC to actually seek alternative financing. At  
4 the time of hearing, Applicant's witnesses anticipated that MEC  
5 would in the next month submit a request to REA and CFC for  
6 financing its 2-year construction program. The Company's testimony  
7 has suggested no obstructions to procuring that financing and  
8 expresses hope that the funds will be obtained without having to  
9 approach another source. There is no indication in the record that  
10 the Company will be unable to secure REA and CFC financing unless  
11 its proposed 2.69 TIER is attained. There is also no certainty that  
12 REA and CFC will drive cooperatives into the capital market by  
13 increasing interest rates or restricting the availability of debt.  
14 Absent evidence establishing more than a remote possibility that it  
15 will be necessary for MEC to obtain alternative financing in the  
16 near future, the record fails to convince the Commission that a  
17 revenue allowance in excess of Staff's recommendation is warranted.

18  
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20  
21 The \$585,762 increase recommended by Staff is the level of rate  
22 relief necessary for Applicant to meet its operating costs, provide  
23 reliable electric utility service, and accrue sufficient earnings to  
24 maintain its financial integrity while cycling capital credits to  
25 its member-customers. It produces a 2.00 net TIER for the adjusted  
26  
27  
28

1 test year,<sup>3</sup> which is slightly higher than the coverage ratios NEC  
2 has recently experienced.<sup>4</sup> It will provide a reasonable return on  
3 fair value rate base and should be approved.  
4

5 **REVENUE DISTRIBUTION**

6 The remaining issue for the Commission's determination is the  
7 appropriate distribution of the authorized revenue requirement among  
8 the customer classes. Traditionally, the most widely accepted  
9 measure of reasonable utility rates and rate relationships is cost  
10 of service. Through a cost of service study, allocation ratios are  
11 developed to identify the proportionate responsibility of the  
12 various customer classifications for the utility's investment,  
13 revenues, and expenses. The realized rate of return under present  
14 rates is then calculated for each class and its relative rate of  
15 return performance is considered, along with other intangible  
16 factors, in distributing the revenue requirement.  
17

18 Applicant performed a class cost of service study using a  
19 functionalization, classification, and allocation approach. The  
20 study is a product of load data for other utilities and the judgment  
21 of its expert witness because Company-specific information is  
22  
23

24 <sup>3</sup> On rebuttal, the Company presented a forecast which  
25 estimates that for the 12 months ended June 30, 1991, the revenue  
26 increase recommended by Staff would produce a net TIER of 1.85. The  
27 2.00 net TIER calculated based upon adjusted test year results,  
28 however, is the relevant number.

29 <sup>4</sup> At the end of the test year, the Company's net TIER was  
30 approximately 1.80 (Ex. A-2, Sch. 3). At year-end 1989, it was 1.77  
31 (Ex. A-8, p. 3).

1 unavailable. Under the revenue distribution resulting from the  
2 study, a higher than average percentage increase would be allocated  
3 to the residential, small commercial, and lighting classes. Staff  
4 has accepted this revenue distribution, but recommends that MEC be  
5 directed to implement a load research program for its system.  
6

7 RUCO has criticized that portion of Applicant's cost of service  
8 study which allocates demand-related costs to the customer classes.<sup>5</sup>  
9 In RUCO's opinion, the demand allocation factors used in the study  
10 were improperly derived from load characteristics which had been  
11 estimated by Company witness Neidlinger based in part upon judgment  
12 and in part upon actual information he had in the past reviewed for  
13 the Arizona Public Service Company ("APS"), Tucson Electric Power  
14 Company, and Texas Electric Utilities Company. RUCO contends that  
15 the use of actual data for APS alone would be more appropriate, but  
16 that load data specific to MEC would most closely reflect the actual  
17 cost responsibility of the Company's customer classes. It is,  
18 therefore, RUCO's proposal that Applicant's cost of service study be  
19 modified to reflect the APS demand-related data and that Applicant  
20 be directed to implement a load research program to develop MEC-  
21 specific data for future rate cases. Under RUCO's revision to the  
22 Company's cost of service study, the small commercial, large  
23  
24  
25  
26  
27

28 <sup>5</sup> The demand-related portion of the purchased power costs is  
the single largest expense item incurred by MEC.

1 commercial and industrial, irrigation, and lighting classes would  
2 sustain an above-average percentage increase.

3       The Commission agrees with Staff and RUCO that actual load data  
4 for MEC's own system would be the preferable basis for determining  
5 the revenue responsibility of each customer class. The rapid growth  
6 in the Bullhead City vicinity of the Company's service territory has  
7 produced a customer base of sufficient size to warrant the  
8 performance of load research. We will direct MEC to implement a  
9 load research program and base its class cost of service study in  
10 the next case on the resultant data.  
11

12       For purposes of this proceeding, the Commission will reject the  
13 Company's cost of service study as being suspect and not susceptible  
14 to an evaluation for reasonableness. While surrogate data and the  
15 exercise of judgment can be appropriate elements in a study,  
16 Applicant has completely failed to document, support, or explain the  
17 combination of judgment and data for other utilities which it relied  
18 upon for cost of service purposes.  
19

20       We will also reject the revenue distribution proposed by RUCO.  
21 While its treatment of demand-related costs is better founded,  
22 RUCO's proposal in other areas adopts the Company's rather nebulous  
23 study and contemplates greater overall shifts in the revenue  
24 responsibility of the customer classes. We are not persuaded that  
25 any such shifts should be effectuated until actual, MEC-specific  
26  
27  
28

1 load data becomes available in the next case to provide guidance on  
2 the direction and magnitude of any needed realignment.

3 The Commission, therefore, finds it appropriate in this case to  
4 maintain the proportionate revenue responsibility which currently  
5 exists between the classes. We will approve a revenue distribution  
6 which allocates an average percentage increase of 2.34% to the  
7 customer classes.<sup>6</sup>

9 From a billing perspective, the 2.34% revenue increase  
10 allocated to the residential class will be offset by the reduction  
11 in the monthly service charge from \$12.00 to \$9.50 per month. As a  
12 result, approximately 82% of the residential class (those customers  
13 using up to approximately 1,000 KWH per month) will experience an  
14 overall decrease in their monthly bills.

16 \* \* \* \* \*

17 Having considered the entire record herein and being fully  
18 advised in the premises, the Commission finds, concludes, and orders  
19 that:  
20

21 **FINDINGS OF FACT**

22 1. Applicant is an Arizona non-profit cooperative corporation  
23 engaged in the business of providing electric service to the public  
24

25  
26  
27 <sup>6</sup> The 2.20% authorized increase in gross annual revenues,  
28 when distributed to the customer classes exclusive of the "other  
revenue" category, equates to an average rate increase of 2.34%.

1 in various portions of Mohave County, Arizona, pursuant to authority  
2 granted by the Commission.

3 2. On September 9, 1989, as revised by filings dated November  
4 8, 1989, April 9, 1990, and May 9, 1990, MEC submitted to the  
5 Commission an application for a permanent increase in its rates and  
6 charges.  
7

8 3. Notice of the hearing in this matter was duly provided to  
9 Applicant's customers.

10 4. The hearing in this matter was held on the dates indicated  
11 above.  
12

13 5. The following late-filed exhibits should be admitted into  
14 evidence: Ex. MEC-10 (proposed rates revised) and Ex. MEC-11 (TIER  
15 forecasts); Ex. S-3 (revised Staff Report); and Ex. R-5 (revised  
16 schedules).  
17

18 6. The consensus reached by the parties, as reflected in Ex.  
19 S-3, is reasonable and should be adopted.

20 7. Applicant's fair value rate base is determined to be  
21 \$26,742,431, which is the same as its original cost rate base.

22 8. The weight of the evidence fails to substantiate the  
23 reasonableness of or need for granting a revenue allowance in the  
24 magnitude suggested by either MEC or RUCO to augment the Company's  
25 earnings and thereby increase its TIER ratio and equity  
26 capitalization.  
27  
28

1           9. The record evidence does not establish a need for MEC to  
2 actually seek financing from sources other than the REA and CFC.

3           10. Absent evidence establishing more than a remote  
4 possibility that it will be necessary for MEC to obtain alternative  
5 financing in the near future, the record fails to convince the  
6 Commission that a revenue allowance in excess of Staff's  
7 recommendation is warranted.  
8

9           11. The \$585,762 increase recommended by Staff is the level of  
10 rate relief necessary for Applicant to meet its operating costs,  
11 provide reliable electric utility service, and accrue sufficient  
12 earnings to maintain its financial integrity while cycling capital  
13 credits to its member-customers.  
14

15           12. The rates and charges approved herein will produce a net  
16 operating income of \$2,297,218, for a return of 8.59% which is a  
17 fair and reasonable return on fair value rate base, and a net TIER  
18 of 2.00 which is reasonable for MEC at this time.  
19

20           13. The authorized increase in gross annual revenues is  
21 \$585,762, or 2.20%.

22           14. Actual load data for the Company's system is the  
23 preferable basis for determining the revenue responsibility of each  
24 customer class.

25           15. Applicant's cost of service study is suspect and not  
26 susceptible to an evaluation for reasonableness because the Company  
27 has completely failed to document, support or explain the  
28

1 combination of judgment and data for other utilities which it relied  
2 upon for cost of service purposes.

3  
4 16. The revenue distribution proposed by RUCO adopts, in part,  
5 the Company's rather nebulous study and contemplates greater overall  
6 shifts in the revenue responsibility of the customer classes.

7 17. No significant shifts in the proportionate revenue  
8 responsibility of the classes should be effectuated until actual,  
9 MEC-specific load data becomes available to provide guidance on the  
10 direction and magnitude of any needed realignment.

11 18. It is appropriate in this case to maintain the  
12 proportionate revenue responsibility which currently exists between  
13 the classes.  
14

15 19. A revenue distribution which allocates an average  
16 percentage increase of 2.34% to the customer classes is reasonable.  
17

#### 18 CONCLUSIONS OF LAW

19 1. Applicant is a public service corporation within the  
20 meaning of Article XV of the Arizona Constitution and A.R.S.  
21 Sections 40-250 and 40-251.

22 2. The Commission has jurisdiction over Applicant and of the  
23 subject matter of the application.

24 3. Notice of the application was provided in the manner  
25 prescribed by law.  
26

27 4. The rates and charges proposed by Applicant are not just  
28 and reasonable.



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IT IS FURTHER ORDERED that MEC shall notify its customers of the rates and charges authorized herein and the effective date of same by means of an insert in its next regular monthly billing.

IT IS FURTHER ORDERED that MEC's base rate for purchased power is hereby established at \$0.065798 per KWH.

IT IS FURTHER ORDERED that a credit of \$0.003 per KWH shall be applied to customer bills until MEC has refunded its share of the AEPCO refund and the interest earned on the unrefunded balance.

IT IS FURTHER ORDERED that MEC is hereby directed to include an addendum to its monthly purchased power adjustor filing to report for each month the amount of the AEPCO refund passed on to customers, the remaining balance of the refund, and the amount of interest earned on the unrefunded balance.

IT IS FURTHER ORDERED that MEC is hereby directed to implement a load research program for its system, develop and submit for Staff approval its plan for the program within six months from the effective date of this Decision, and base its class cost of service study in the next rate case on the resultant data.

IT IS FURTHER ORDERED that the following late-filed exhibits are hereby admitted into the record for this proceeding: Ex. MEC-10 (proposed rates revised) and Ex. MEC-11 (TIER forecasts); Ex. S-3 (revised Staff Report); and Ex. R-5 (revised schedules).

1 IT IS FURTHER ORDERED that this Decision shall become effective  
2 immediately.

3 BY ORDER OF THE ARIZONA CORPORATION COMMISSION.  
4

5  
6 [Signature] [Signature] [Signature]  
7 CHAIRMAN COMMISSIONER COMMISSIONER

8  
9 IN WITNESS WHEREOF, I, JAMES MATTHEWS, Executive  
10 Secretary of the Arizona Corporation Commission, have  
11 hereunto set my hand and caused the official seal of  
12 the Commission to be affixed at the Capitol, in the  
13 City of Phoenix, this 29 day of November, 1990.

14 James Matthews  
15 JAMES MATTHEWS  
16 EXECUTIVE SECRETARY

17 DISSENT \_\_\_\_\_  
18 babs

|                             | TEST YEAR<br>REVENUES   | MOHAVE<br>PERCENTAGE INCREASE<br>AMOUNT INCREASED |                       |                       | % of<br>TOTAL |
|-----------------------------|-------------------------|---|-----------------------|-----------------------|---------------|
|                             |                         | MOHAVE  | RUCO                  | APPROVED              |               |
| RESIDENTIAL<br>(% of TOTAL) | \$15,421,961<br>57.89%  | 2.39%<br>\$15,790,546                             | 1.79%<br>\$15,698,014 | 2.34%<br>\$15,782,835 | 57.97%        |
| SMALL COMM'L.               | 5,997,009<br>22.51%     | 2.94%<br>6,173,321                                | 3.56%<br>6,210,503    | 2.34%<br>\$6,137,339  | 22.54%        |
| LRG COMM. & IND.            | 2,123,873<br>7.97%      | 2.01%<br>2,166,563                                | 3.47%<br>2,197,571    | 2.34%<br>2,173,572    | 7.98%         |
| IRRIGATION                  | 437,797<br>1.64%        | -1.62%<br>430,705                                 | 3.40%<br>452,682      | 2.34%<br>448,041      | 1.65%         |
| BIA                         | 115,718<br>0.43%        | 0.00%<br>115,718                                  | 0.42%<br>116,204      | 2.34%<br>118,436      | 0.43%         |
| CHEMSTAR                    | 1,340,694<br>5.03%      | 0.00%<br>1,340,694                                | 0.00%<br>1,340,694    | 0.00%<br>1,340,694    | 4.92%         |
| CYPRUS BAGDAD               | 832,471<br>3.12%        | -0.97%<br>824,396                                 | -0.71%<br>826,560     | 2.34%<br>851,951      | 3.13%         |
| LIGHTING                    | 100,044<br>0.38%        | 12.99%<br>113,040                                 | 12.99%<br>113,040     | 2.34%<br>102,385      | 0.38%         |
| OTHER REVENUE               | 269,904<br>1.01%        | 0.00%<br>269,904                                  | 0.00%<br>269,904      | 0.00%<br>269,904      | 0.99%         |
| AVG INCREASE                | \$26,639,471<br>100.00% | 2.20%<br>\$27,224,896                             | 2.20%<br>\$27,225,172 | 2.20%<br>\$27,225,147 | 100.00%       |

MOHAVE  
SUMMARY  
CURRENT AND APPROVED  
RATE COMPARISONS

| <u>RESIDENTIAL</u>           | <u>CURRENT<br/>RATES</u> | <u>APPROVED<br/>RATES</u> |
|------------------------------|--------------------------|---------------------------|
| <u>Small General Service</u> |                          |                           |
| <u>Residential-SGS</u>       |                          |                           |
| Monthly Service Charge       | \$12.00                  | \$9.50                    |
| Energy-kWH                   | \$0.08100                | \$0.08319                 |
| <br>                         |                          |                           |
| <u>Optional-TOD Rates</u>    |                          |                           |
| <u>Residential-RTOD</u>      |                          |                           |
| Monthly Service Charge       | \$15.00                  | \$15.00                   |
| On-Peak Energy Charge        | 0.11600                  | 0.14950                   |
| Off-Peak Energy Charge       | 0.05200                  | 0.05200                   |
| <br>                         |                          |                           |
| <u>Optional Demand Rate</u>  |                          |                           |
| <u>Residential-RD</u>        |                          |                           |
| <u>Oct.-April</u>            |                          |                           |
| Monthly Service Charge       | \$13.50                  |                           |
| Energy-kWH                   | 0.08100                  |                           |
| <u>May-Sept.</u>             |                          |                           |
| Monthly Service Charge       | \$13.50                  |                           |
| Demand Charge-kW             | \$6.50                   |                           |
| Energy-kWH                   | 0.05100                  |                           |
| <u>All Months</u>            |                          |                           |
| Monthly Service Charge       |                          | \$13.50                   |
| Demand Charge-kW             |                          | \$7.50                    |
| Energy-kWH                   |                          | 0.04800                   |

**SMALL COMMERCIAL**

**Small Commercial Service**

**SCS - Less than 100kW**

**Non-Demand Metered**

**Monthly Service Charge**

**Energy Charge-kWH**

|         |         |
|---------|---------|
| \$17.50 | \$12.00 |
| 0.07330 | 0.08160 |

**Demand Metered**

**Monthly Service Charge**

**Demand Charge-kW (>3kW)**

**Energy-kWH**

|         |         |
|---------|---------|
| \$19.00 | \$25.00 |
| \$7.20  | \$8.25  |
| 0.05750 | 0.05374 |

**Optional TOD Rate**

**Small Comm. & Ind.**

**(Less than 100kW-2CTOD)**

**Monthly Service Charge**

**On Peak Demand Charge-kW**

**Energy-kWH**

|         |         |
|---------|---------|
| \$25.00 | \$30.00 |
| \$13.50 | \$12.50 |
| 0.05950 | 0.05040 |

**LARGE COMM. & INDUSTRIAL**

**Large Comm. & Ind.**

**(Greater than 100 kW)**

**Monthly Service Charge**

**Demand Charge-kW**

**Energy-kWH**

|         |         |
|---------|---------|
| \$62.00 | \$70.00 |
| \$9.00  | \$9.75  |
| 0.04850 | 0.04558 |

**Optional TOD Rate**

**Large Comm. & Ind.**

**Monthly Service Charge**

**On Peak Demand Charge-kW**

**Energy-kWH**

|         |         |
|---------|---------|
| \$62.00 | \$70.00 |
| \$13.50 | \$13.50 |
| 0.04100 | 0.04100 |

**IRRIGATION**

|                             |         |         |
|-----------------------------|---------|---------|
| <b>Large Irrig. Pumping</b> |         |         |
| Monthly Service Charge      | \$62.00 | \$60.00 |
| Demand Charge-kW            | \$9.00  | \$7.00  |
| Energy-kWH                  | 0.04850 | 0.05000 |

|                             |         |         |
|-----------------------------|---------|---------|
| <b>Optional TOD Rate</b>    |         |         |
| <b>Large Irrig. Pumping</b> |         |         |
| Monthly Service Charge      | \$62.00 | \$60.00 |
| On Peak Demand Charge-kW    | \$13.50 | \$13.50 |
| Energy-kWH                  | 0.06333 | 0.05000 |

**LIGHTING**

|                            |        |         |
|----------------------------|--------|---------|
| <b>Lighting Service-LS</b> |        |         |
| <b>Utility Owned:</b>      |        |         |
| Mercury Vapor-175 Watt     | \$6.70 | \$6.85  |
| HP Sodium-100 Watt         | 7.70   | \$7.88  |
| LP Sodium-100 Watt         | 10.20  | \$10.43 |
| <b>Consumer Owned</b>      |        |         |
| Mercury Vapor-175 Watt     | \$5.00 | \$5.11  |
| HP Sodium-100 Watt         | 5.00   | \$5.11  |
| LP Sodium-100 Watt         | 5.00   | \$5.11  |

**LARGE CONTRACT**

**Large Contract- BIA**

|                        |         |         |
|------------------------|---------|---------|
| Monthly Service Charge | \$62.00 | \$70.00 |
| Demand Charge-kW       | \$9.00  | \$9.00  |
| Energy Charge-kWH      | 0.04850 | 0.04579 |

**Large Contract-Cyprus Backfed**

|                        |         |     |
|------------------------|---------|-----|
| Monthly Service Charge | \$62.00 | (1) |
| Demand Charge-kW       | \$13.50 |     |
| Energy Charge-kWH      | 0.04100 |     |

**Large Contract-Chanalar**

|                        |         |     |
|------------------------|---------|-----|
| Monthly Service Charge | \$62.00 | (1) |
| Demand Charge-kW       | \$9.00  |     |
| Energy Charge-kWH      | 0.04850 |     |

(1) Current contract rates apply.  
Any back-up service provided outside of the contract  
will be subject to the Large Commercial and Industrial general rate  
or the Optional Time-of-Day rate.

MOHAVE ELECTRIC COOPERATIVE, INC.

**ORIGINAL**

CONTRACT RATE - REVISED EXHIBIT "2"

for the

U.S. Bureau of Indian Affairs

Availability:

1. Available only to the U.S. Bureau of Indian Affairs pursuant to agreement for electric service dated April 1, 1982.

Character of Service:

1. All service provisions are specified in the contract.

Net Rate Per Month:

|                         |         |
|-------------------------|---------|
| Monthly Service Charge  | \$70.00 |
| Demand Charge - Per KW  | 9.00    |
| Energy Charge - Per KWH | 0.04579 |

Billing Demand:

1. The billing demand shall be the maximum kilowatt demand established for any fifteen (15) minute period during the billing month.

Tax Adjustments:

1. Total monthly sales for electric service are subject to adjustment for all federal, state and local governmental taxes or levies on such sales and any assessments that are or may be imposed by federal or state regulatory agencies on electric utility gross revenues.

Purchased Power Cost Adjustment:

1. The utility may, if the cost of purchased power is increased or decreased above or below the base purchased power cost of \$0.065798 per KWH sold, flow through to the consumer such increases or decreases.

Conditions of Service:

1. The terms and conditions for the provision of service to the consumer under this rate schedule are subject to the Rules and Regulations of the utility, as approved and modified from time to time by the Arizona Corporation Commission.

Effective Date:

1. This rate schedule is effective January 1, 1991.

APPROVED FOR FILING  
IN COMPLIANCE WITH

# Exhibit 4

MOHAVE ELECTRIC COOPERATIVE, INC.  
ARIZONA 22

PLANS AND SPECIFICATIONS  
SUPAI DISTRIBUTION LINE

#5

**ELECTRIC SYSTEM  
CONSTRUCTION CONTRACT**

**(Labor and Material)**

**U. S. DEPARTMENT OF AGRICULTURE  
RURAL ELECTRIFICATION ADMINISTRATION**

REA FORM 830  
REV 8-72

NOTICE AND INSTRUCTIONS TO BIDDERS

1. Sealed proposals for the construction, including the supply of necessary labor, materials and equipment, of a rural electric project of MOHAVE ELECTRIC COOP., INC. (hereinafter called the "Owner") to be known as Project ARIZ 22 - SUPAI DIST. will be received by the Owner on or before 2:00 o'clock P M., MARCH 2, 19 81.

at its office at BULLHEAD CITY ARIZONA at which time and place the proposals will be publicly opened and read. Any proposal received subsequent to the time specified will be promptly returned to the Bidder unopened.

2. Description of Project: The Project will consist of approximately:

Overhead Distribution Line Construction

- miles of - kV Single Phase Lines

- miles of - kV V-Phase Lines

60.73 miles of 14.4 / 24.9 kV Three-Phase Lines

- miles of secondary on secondary poles

- miles of services for - consumers

2.65 miles of double circuit 14.4 / 24.9 kV  
Three-phase line

Underground Distribution Facilities

- miles of - kV Single-Phase Construction

- miles of - kV V-Phase Construction

0.038 miles of 14.4 / 24.9 kV Three-Phase Construction

- miles of - Volt Secondary and Service

Construction for - Consumers.

Distribution Line Changes, Conversion, and Removal

0.434 miles of 14.4/24.9 kV Single-Phase Removal  
2.65 miles of 14.4/24.9 kV Three-Phase Removal  
\_\_\_\_\_ miles of \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Transmission Line Construction

\_\_\_\_\_ miles \_\_\_\_\_ kV; \_\_\_\_\_ miles \_\_\_\_\_ kV  
\_\_\_\_\_ miles \_\_\_\_\_ kV; \_\_\_\_\_ miles \_\_\_\_\_ kV  
\_\_\_\_\_ miles \_\_\_\_\_ kV underbuild  
*NONE*  
\_\_\_\_\_  
\_\_\_\_\_

Substations and Other Major Facilities

\_\_\_\_\_ kVA \_\_\_\_\_ Voltage \_\_\_\_\_ Name  
\_\_\_\_\_ kVA \_\_\_\_\_ Voltage \_\_\_\_\_ Name  
\_\_\_\_\_ kVA \_\_\_\_\_ Voltage \_\_\_\_\_ Name  
*NONE*  
\_\_\_\_\_  
\_\_\_\_\_

The Project is located in MOHAVE

County, in the State of ARIZONA all as more fully described in the Plans; Specifications, Construction Drawings and Contractor's Proposal therefor hereinafter referred to.

3. Work on Energized Lines. Unless stated below all construction work including attachments to existing poles and line changes, is to be done with the lines deenergized. The hours during which existing lines will be deenergized are shown in the Contractor's Proposal. Approximately 0 miles of the line changes are to be made with the lines energized and such lines are in the following locations or areas:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

19. Discrepancy in Unit Prices. Where the unit prices in the Contractor's Proposal are separated into three columns designated as "Labor," "Materials" and "Labor and Materials," and where a discrepancy appears between the sum shown in the "Labor and Materials" column and the correct addition of the sums appearing in the "Labor" column and the "Materials" column, the correct addition of the sums appearing in the "Labor" column and the "Materials" column shall control.

20. Definition of Terms. The terms "Administrator," "Engineer," "Supervisor," "Project," "Completion of Construction" and "Completion of the Project" as used throughout this Contract shall be as defined in Article VI, Section 1, of the Contractor's Proposal.

21. The Owner represents:

- a. If by provisions of the Contractor's Proposal the Owner shall have undertaken to furnish any materials for the construction of the Project, such materials are on hand at locations specified or if such materials are not on hand they will be made available by the Owner to the successful Bidder at the locations specified before the time such materials are required for construction.
- b. All easements and rights-of-way, except as shown on maps included in the Plans and Specifications, have been obtained from the owners of the properties across which the Project is to be constructed (including tenants who may reasonably be expected to object to such construction). The remaining easements and rights-of-way, if any, will be obtained as required to avoid delaying construction.
- c. All staking, except as shown on the maps included in the Plans and Specifications, has been completed and sufficient staking crews will be available to maintain stakes at all times in advance of construction.
- d. Where underground distribution construction is required, permission has been obtained from state and local highway and road authorities to install underground distribution power facilities and set pedestals, if any, on the highway and road right-of-way in the Project area. Notwithstanding such permission granted to the Owner, each Bidder is responsible for ascertaining that the equipment, methods of construction and repair proposed to be used on the Project will meet all requirements of public authorities having jurisdiction over highway and road right-of-way. The successful Bidder will be required to furnish proof satisfactory to the Owner of compliance with this requirement. If required by highway or road authorities, the successful Bidder will furnish to such authorities a bond or meet other guaranty requirements to assure the prompt repair of all damages to highways and roads and their associated rights-of-way caused by the Bidder during construction of the Project. This requirement is in addition to and independent of the Contractor's Bond required under this Contract. The acceptance of a bid from any Bidder is not to be construed as approval of the Bidder's equipment or proposed construction methods by or on behalf of the highway and road authorities. Bidders may obtain information concerning the requirements of highway and road authorities by communicating

with the following: ARIZONA STATE HIGHWAY DEPT., KING MAN, ARIZONA  
BUREAU OF INDIAN AFFAIRS PEACH SPRINGS, ARIZONA

e. All funds necessary for prompt payment for the construction of the Project will be available.

If the Owner shall fail to comply with any of the undertakings contained in the foregoing representations or if any of such representations shall be incorrect, the Bidder will be entitled to an extension of time of completion for a period equal to the delay, if any, caused by the failure of the Owner to comply with such undertakings or by any such incorrect representation, provided the Bidder shall have promptly notified the Owner in writing of its desire to extend the time of completion in accordance with the foregoing; provided, however, that such extension, if any, of the time of completion shall be the sole remedy of the Bidder for the Owner's failure, because of conditions beyond the control and without the fault of the Owner, to furnish materials in accordance with subparagraph a. hereof.

MOHAVE ELECTRIC COOP, INC.  
Owner

By Gene N. Smith  
HICKS & RAGLAND ENGINEERING CO.;

February 2, 19 31

CONTRACTOR'S PROPOSAL

(Proposal shall be submitted in ink or typewritten)

To:

MOHAVE ELECTRIC COOPERATIVE, INC.

(Hereinafter called the "Owner")

ARTICLE I--GENERAL

Section 1. Offer to Construct. The undersigned (hereinafter called the "Bidder") hereby proposes to receive and install such materials and equipment as may hereinafter be specified to be furnished by the Owner, and to furnish all other materials and equipment, all machinery, tools, labor transportation and other means required to construct the rural electric project ARIZ 22

SUPPLY DISTRIBUTION

in strict accordance with the Plans, Specifications and Construction Drawings for the prices hereinafter stated.

The total length of the project lines shall be determined by taking the sum of all straight horizontal span distances between pole stakes or from center to center of poles, or centerline of structures, carrying conductors, plus the length of service drops, if any, measured horizontally from center of last pole to the point of attachment to the consumer's building.

Section 2. Materials and Equipment. The Bidder agrees to furnish and use in the construction of the Project under this Proposal, in the event the Proposal is accepted, only such materials and equipment as are included in the current "List of Materials Acceptable for Use on Systems of REA Electrification Borrowers," including revisions adopted prior to the Bid Opening.

For distribution lines, the Bidder further agrees to furnish and use guy wire with ASTM Class A (Engineer to insert A or B) zinc coating.

All leads on equipment such as transformers, reclosers, etc., shall be of #6 minimum copper conductivity using STANDARD SOFT DRAWN COPPER (Engineer to insert stranded soft drawn copper or aluminum alloy) conductor. All conductor ties on insulators shall be ~~of the materials and methods shown in the following Tying Guide Drawings:~~ PREFORMED LINE PRODUCTS' WT "WRAP-LOCK TIE" AND ST "GROOVE FORMED" TIE (Engineer to insert appropriate drawing number).

Ground rods and butt-type grounding plates shall be COPPER (Engineer to insert galvanized steel or copper).

Underground primary cable shall have ROUND coated copper neutral (Engineer to insert round or flat).

For transmission lines, the Bidder further agrees to furnish and use guy wire, overhead ground wire, and pole ground wire with ASTM Class NA (Engineer to insert A, B, or C) zinc coating. Guy wire shall be the same size and grade as the overhead ground wire. Where overhead ground wire is not specified, the guy wire shall be NA size, \_\_\_\_\_ grade.

The Bidder further agrees to furnish and use poles, crossarms, and other timber products, of which the physical characteristics, method of treatment, type of preservative, instructions on inspection and general procedure shall be in accordance with REA standards and requirements.

because of habit, local custom, or otherwise. The Bidder agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that it will retain such certifications in its files.

Section 7. Franchises and Rights-of-Way. The Bidder shall be under no obligation to obtain or assist in obtaining: Any franchises, authorizations, permits or approvals required to be obtained by the Owner from Federal, state, county, municipal or other authorities; any rights-of-way over private lands; or any agreements between the Owner and third parties with respect to the joint use of poles, crossings, or other matter incident to the construction and operation of the Project.

Section 8. Nonassignment of Contract. The Bidder shall perform directly and without subcontracting not less than twenty-five per centum (25%) of the construction of the Project, to be calculated on the basis of the total Contract price. The Bidder shall not assign the Contract effected by an acceptance of this Proposal or any interest in any funds that may be due or become due hereunder or enter into any contract with any person, firm or corporation for the performance of the Bidder's obligations hereunder or any part thereof, without the approval in writing of the Owner and of the Surety and Sureties on any bond furnished by the Bidder for the faithful performance of the Bidder's obligations hereunder. If the Bidder, with consent of the Owner, and any Surety or Sureties on the Contractor's Bond or Bonds, shall enter into a subcontract with any subcontractor for the performance of any part of this Contract, the Bidder shall be as fully responsible to the Owner and the Government for the acts and omissions of such subcontractor and of persons employed by such subcontractor as the Bidder would be for its own acts and omissions and those of persons directly employed by it.

Section 9. Extension to Successors and Assigns. Each and all of the covenants and agreements herein contained shall extend to and be binding upon the successors and assigns of the parties hereto.

Section 10. Contractor. Upon acceptance of this Proposal, the successful Bidder shall be the Contractor and all references in the Proposal to the Bidder shall apply to the Contractor.

Four States Electric Inc.  
(Bidder)

By Deborah J. Harris  
(President)

P.O. Box 2013

Farmington N.H. 07461  
(Address)

ATTEST:

Deborah J. Harris  
(Secretary)

Date 2/28/81

The Proposal must be signed with the full name of the Bidder. If the Bidder is a partnership, the Proposal must be signed in the partnership name by a partner. If the Bidder is a corporation, the Proposal must be signed in the corporate name by a duly authorized officer and the corporate seal affixed and attested by the Secretary of the Corporation.

**DISTRIBUTION CONSTRUCTION UNITS--NEW CONSTRUCTION**

**Section 1--POLE UNITS**

A pole unit consists of one pole in place. It does not include pole-top assembly unit or other parts attached to the pole. The first two digits indicate the length of the pole; the third digit shows the classification per A.S.A. (Example: 25-6 means a pole 25 feet long, class 6.)

Species of Timber: SOUTHERN YELLOW PINE OR DOUGLAS FIR

Kind of Preservative: (Check one)

1. Creosote \_\_\_\_\_ 2. Pentachlorophenol  3. Creosote plus 2% Pentachlorophenol \_\_\_\_\_  
 4. Salt type preservative - GCA \_\_\_\_\_, ACA \_\_\_\_\_

Method of Treatment: (Check one)

1. Pressure  2. Thermal Process \_\_\_\_\_

Pole Plan Under Which the Poles are to be Furnished: (Check one)

1. Insured Warranted \_\_\_\_\_ 2. Independently Inspected   
 3. Either Insured Warranted or Independently Inspected \_\_\_\_\_

(Engineer to complete above)

| Unit No. | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|---------------------|---|
|          |              | Labor      | Materials | Labor and Materials |   |
| 35-6     | 5            | 172.00     | 106.13    | 278.13              | 1,390.65                                |
| 40-6     | 1            | 172.00     | 152.42    | 324.42              | 324.42                                  |
| 35-4     | 54           | 172.00     | 142.90    | 314.90              | 17,104.60                               |
| 40-4     | 601          | 172.00     | 175.16    | 347.16              | 208,643.16                              |
| 45-4     | 84           | 180.00     | 207.65    | 387.65              | 32,562.60                               |
| 50-4     | 25           | 190.00     | 234.71    | 424.71              | 10,617.75                               |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |

Total, Section 1-- \$ 270,543.18









**DISTRIBUTION CONSTRUCTION UNITS--NEW CONSTRUCTION (Continued)**

**Section E--GUY ASSEMBLY UNITS**

A guy assembly unit consists of the hardware and wire, and guy insulator where necessary. An overhead guy assembly consists of an overhead guy, a pole, and a down guy, each of which is listed separately. Guy guards are designated separately.

| Unit No. | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|---------------------|---|
|          |              | Labor      | Materials | Labor and Materials |   |
| E 2-2    | 6            | 44.50      | 29.95     | 74.45               | 446.70                                  |
| VE1-2    | 125          | 32.50      | 20.85     | 53.35               | 6,668.75                                |
| VE1-3    | 11           | 32.50      | 25.28     | 57.78               | 635.58                                  |
| VE6-2    | 11           | 65.00      | 39.20     | 104.20              | 1,146.20                                |
| VE8-2L   | 9            | 130.00     | 156.75    | 286.75              | 2,580.75                                |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |

Total, Section E-- \$ 11,477.98

**Section F--ANCHOR ASSEMBLY UNITS**

An anchor assembly unit consists of the anchor with rod complete, ready for attaching the guy wire.

| Unit No. | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|---------------------|---|
|          |              | Labor      | Materials | Labor and Materials |   |
| F1-4     | 176          | 155.00     | 55.07     | 210.07              | 36,972.32                               |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |

Total, Section F-- \$ 36,972.32



**DISTRIBUTION CONSTRUCTION UNITS--NEW CONSTRUCTION (Continued)**

**Section J--SECONDARY ASSEMBLY UNITS**

A secondary assembly unit consists of the hardware, insulators, etc., to support the secondary conductors or cable. It does not include the secondary conductor or cable, or any hardware, insulators, etc., required to support service conductors or cable.

| Unit No. | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|---------------------|---|
|          |              | Labor      | Materials | Labor and Materials |   |
| J        |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |

Total, Section J-- \_\_\_\_\_

**Section K--SERVICE ASSEMBLY UNITS**

A service assembly unit consists of the hardware, insulators, etc., required to support the service conductors or cable. It does not include the service conductor or cable, or any hardware, insulators, etc., required to support secondary conductors or cable.

| Unit No. | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|---------------------|---|
|          |              | Labor      | Materials | Labor and Materials |   |
| K        |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |

Total, Section K-- \_\_\_\_\_



DISTRIBUTION CONSTRUCTION UNITS--NEW CONSTRUCTION (Continued)

Section R--RIGHT-OF-WAY CLEARING UNITS

R1-10. The unit is 1,000 feet in length and 10 feet in width (to be measured on one side of the pole line) of actual clearing of right-of-way. This includes clearing of underbrush, tree removal, and such tree trimming as is required so that the right-of-way, except for tree stumps which shall not exceed THREE INCHES in height, shall be clear from the ground up on one side of the line of poles carrying primary conductors of the width specified. This unit does not include clearing or trimming associated with secondaries or services which is included with conductor units. The length of actual clearing shall be measured in a straight line parallel to the horizontal line between stakes and across the maximum dimension of foliage cleared projected to the ground line. All trees and underbrush across the width of the right-of-way, as designated by the Engineer, shall be considered to be grouped together as a single length in measuring the total length of clearing. Spaces along the right-of-way in which no trees are to be removed or trimmed or underbrush cleared shall be omitted from the total measurement. All length thus arrived at, added together and divided by 1,000, shall give the number of 1,000-foot R1-10 units of clearing. This unit includes the removal or topping, at the option of the Bidder, of danger trees outside of the right-of-way when so designated by the Engineer. (Danger trees are defined as dead or leaning trees which, in falling, will affect the operation of the line.) The Bidder shall not remove or trim shade, fruit, or ornamental trees unless so directed by the Engineer.

R1-20. This unit is identical with R1-10 except that width is 20 feet (to be measured 10 feet on each side of the pole line).

R1-30. This unit is identical with R1-10 except that width is 30 feet (to be measured 15 feet on each side of the pole line).

R1-40. This unit is identical with R1-10 except that width is 40 feet (to be measured 20 feet on each side of the pole line).

RC1-10, RC1-20, RC1-30, RC1-40. These units are identical to the respective R1 units except that chemical treatment of stumps is required in addition to the clearing of underbrush, tree removal and tree trimming.

Additional Requirements (When specifying R1 units denote type of disposal (A or B).)

A. Trees, brush, branches and refuse shall, without delay, be disposed of by such of the following methods as the Engineer will direct (Engineer to strike out methods not to be used):

~~1. Burned~~

~~2. Piled on one side of right-of-way~~

3. Roller chopped and left on right-of-way in such a manner as not to obstruct roads, ditches, drains, etc.

~~4. Other (describe)~~

B. Trees that are felled shall be cut to commercial wood lengths, stacked neatly, and left on the right-of-way for the landowner. Commercial wood length means the length designated by the Engineer but in no case shall it be required to be less than eight (8) feet. Brush, branches, and refuse shall, without delay, be disposed of by such of the following methods as the Engineer will direct (Engineer to strike out methods not to be used):

~~1. Burned~~

~~2. Piled on one side of right-of-way~~

3. Roller chopped and left on right-of-way in such a manner as not to obstruct roads, ditches, drains, etc.

~~4. Other (describe)~~

**DISTRIBUTION CONSTRUCTION UNITS--NEW CONSTRUCTION (Continued)**

**Section R--RIGHT-OF-WAY CLEARING UNITS (Continued)**

| Unit No. | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|---------------------|---|
|          |              | Labor      | Materials | Labor and Materials |   |
| R-10     | 4.449        | 1,500.00   | -         | 1,500.00            | 6,673.50                                |
| R-20     | 5.775        | 3,000.00   | -         | 3,000.00            | 17,325.00                               |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |

Total, Section R-- \$ 23,998.50

**Section UD--UNDERGROUND CABLE ASSEMBLY UNITS**

An underground cable assembly unit consists of 1000 feet of cable for underground primaries, secondaries or services. It does not include the conduit, plowing, trenching and backfilling, or the termination of the primary cable which are provided for in other assembly units. It includes the termination, connection and sealing of secondary and service cables and conductors as shown in the specifications and construction drawings, and all primary, secondary and service cable splices (buried cable may be spliced only when and where permitted by the Owner).\* In computing the compensation to the Bidder for underground cable assembly units, only the distance between stakes, paralleling the cable shall be used. The number of units so computed will include all cable installed in place in all specified trenches, risers, conduits, crossings, manholes, transformers, terminal housings and meter boxes.\*\* The conductor or cables listed are the manufacturer's designation of types, size, voltage rating and material. The Bidder and the Owner shall jointly perform cable acceptance tests on installed cable in accordance with the specifications using test equipment furnished by the Bidder. (Engineer to insert Owner or Bidder).

- \*Engineer check here if primary splices are permitted.
- \*Engineer check here if secondary and service splices are permitted.
- \*\*Engineer check here if 12 feet of service conductor is to be left as a coil three feet from the building with ends capped instead of connection to meter box.

| Unit No.           | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|--------------------|--------------|------------|-----------|---------------------|---|
|                    |              | Labor      | Materials | Labor and Materials |   |
| UD - 3Ø<br>1Ø-PRI. | 5.70         | 1,000.00/Ø | 2,500.00  | 3,500.00            | 1,995.00                                |
|                    |              |            |           |                     |   |
|                    |              |            |           |                     |   |
|                    |              |            |           |                     |   |

Total, Section UD \$ 1,995.00

**DISTRIBUTION CONSTRUCTION UNITS--NEW CONSTRUCTION (Continued)**

**Section UG--UNDERGROUND TRANSFORMER ASSEMBLY UNITS**

An underground transformer assembly unit consists of the transformer, its housing, warning sign, switches, over-current protective devices, grounding loop, and hardware and leads with their connectors and supporting insulators installed in place. This unit includes the cable terminations but does not include lightning arresters, fault indicators, ground rods or trenching. For submersible transformers, it includes the cable terminations, the enclosure and cover, drainable material (when specified)\*, and the excavation when required. For pad-mount transformers, it does not include the pad, site preparation, drainable material, backfilling or compaction which are included in the pad assembly units.

\*Engineer check here if drainable material is specified.

| Unit No. | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|---------------------|---|
|          |              | Labor      | Materials | Labor and Materials |   |
| UG       |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |

Total Section UG \_\_\_\_\_

**Section UK--UNDERGROUND SECONDARY AND SERVICE ASSEMBLY UNITS**

An underground secondary and service assembly unit consists of secondary or service cable terminal housing mounted in place. It includes the power pedestal, stake (when required), mounting hardware, warning sign, directional marker, housing identification marking and the cable identification tags. It does not include the cable terminations, ground rod, or pad, when required.

| Unit No. | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|---------------------|---|
|          |              | Labor      | Materials | Labor and Materials |   |
| UK       |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |

Total, Section UK \_\_\_\_\_



DISTRIBUTION CONSTRUCTION UNITS--NEW CONSTRUCTION (Continued)

Section UR--UNDERGROUND EXCAVATION ASSEMBLY UNITS

- UR 1-S (D) Plowing Assembly Unit, Soil--Consists of one (1) lineal foot of plowing in soil, measured parallel to the surface of the ground, to a specified depth (D), in inches, including the compacting, except as specifically provided for in other units. This unit includes all material and labor required in the repair and/or replacement of streets, roads, drives, fences, lawns, shrubbery, watermains, pipes, pipelines and contents, underground power and telephone facilities, buried sewerage and drainage facilities, and any other property damaged during the plowing of the cable, except as specifically provided for in other units. This unit does not include underground cable facilities installed in the slot. NOTE: Where in the judgement of the Owner greater than normal difficulty will be involved in plowing because of the presence of underground facilities of other utilities, this unit will be suffixed by the letter "T". This will be applicable only in those areas predesignated by the Owner on the detail maps herein. All plowing outside of the predesignated area on the map, regardless of the difficulty in placement actually experienced, will be inventoried as the regular UR 1-S (D) units. If field conditions show the existence of rock to prevent the placing of the cable in soil to the depth required in the specifications, the Owner may specify UR2-R units. Where more than one cable is to be installed in the slot, the UR1-S unit designation should be modified by a suffix corresponding to the number of cables installed. Example: UR1-S(D) 3c for 3 cables plowed at one time.
- UR 2-S (D&W) Trenching Assembly Unit, Soil--Consists of one (1) lineal foot of trenching in soil, measured parallel to the surface of the ground, to a specified depth (D) and width (W), in inches, including the excavation, and backfilling and compacting. This unit includes all material and labor required in the repair and/or replacement of streets, roads, drives, fences, lawns, shrubbery, watermains, pipes, pipelines and contents, underground power and telephone facilities, buried sewerage and drainage facilities, and any other property damaged by the trenching, except as specifically provided for in other units. This unit does not include underground cable facilities installed in the trench or cable bedding assembly units, when required. NOTE: Where in the judgment of the Owner greater than normal difficulty will be involved in trenching because of the presence of underground facilities of other utilities, this unit will be suffixed by letter "T". This will be applicable only in those areas predesignated by the Owner on the detail maps herein. Where more than one cable is to be installed in the trench, the regular UR2-S unit designation should be modified by a suffix corresponding to the construction drawing for the type of cable placement desired.
- UR 2-R (D&W) Trenching Assembly Unit, Rock--Consists of one (1) lineal foot of trenching in rock, measured parallel to the surface of the ground, to specified depth (D) and width (W), in inches, including the excavation, and backfilling and compacting to place cable to the depth specified in the Specifications. This unit will be specified by the Owner only when field conditions at the site show the existence of rock at a depth preventing the placing of the cable in soil to the depths required in the Specifications. This unit includes all material and labor required in the repair and/or replacement of streets, roads, drives, fences, lawns, shrubbery, watermains, pipes, pipelines and contents, underground power and telephone facilities, buried sewerage and drainage facilities, and any other property damaged by the trenching, except as specifically provided for in other units. This unit does not include underground cable facilities installed in the trench or cable bedding assembly units, when required.
- UR-3 Cable Bedding Assembly Unit--Consists of one (1) lineal foot of a two-inch bed of clean sand or soil placed in the trench under the cable and a four-inch layer of clean sand or soil backfill over the cable to the width of the trench. NOTE: The exact location and number of units shall be determined by the Owner after the trenches are open in those areas where rock or other conditions make special bedding necessary.
- UR-4a Pavement Assembly Unit, Asphalt--Consists of the labor and material necessary to remove and restore one (1) lineal foot of asphalt pavement, measured along the route of the cable. All work shall be performed in accordance with the requirements of state or local authorities. Any trenching which may be necessary is included in this unit.

DISTRIBUTION CONSTRUCTION UNITS--LINE CHANGES--(Continued)

TABLE D. Value's of Material Items Creditable to Bidder

| REA Item Letter Designation* | Description of Material Item         | Item Value |
|------------------------------|--------------------------------------|------------|
| a                            | INSULATOR, PIN TYPE, 25 KV           | 9.45       |
| b                            | PIN, POLE TOP, 20"                   | 3.20       |
| c                            | BOLT, MACHINE, 5/8" X 10"            | 0.68       |
| c                            | BOLT, MACHINE, 5/8" X 12"            | 0.72       |
| d                            | WASHER, SQUARE, 2 1/4" X 2 1/4"      | 0.28       |
| bs                           | BOLT, SINGLE UPSET, INSULATED        | 1.66       |
| K                            | SUSPENSION INSULATOR, 10"            | 8.22       |
| o                            | BOLT, EYE, 5/8" X 10" and 5/8" X 12" | 1.67       |
| ca                           | DEAD END ASSEMBLY, PRIMARY           | 3.18       |
| cc                           | DEAD END ASSEMBLY, NEUTRAL           | 2.75       |
| qa                           | EYE NUT, 5/8"                        | 1.14       |
| ao                           | SHACKLE, ANCHOR                      | 0.74       |
| g                            | CROSS ARM, 3 1/2" X 4 1/2" X 8'-0"   | 23.92      |
| cu                           | BRACE, WOOD, 28"                     | 4.11       |
| i                            | BOLT, CARRIAGE, 3/8" X 4 1/2"        | 0.20       |
| dy                           | BOLT, EYE, DOUBLE ARMING, 5/8"       | 1.40       |
| n                            | BOLT, DA, 5/8" X req'd length        | 1.40       |
| c                            | BOLT, MACHINE, 1/2" X req'd length   | 0.43       |
| d                            | WASHER, ROUND, 1 3/8" DIAMETER       | 0.04       |
| cu                           | BRACE, WOOD, 60" SPAN                | 10.30      |
| f                            | PIN, STEEL, CROSS ARM, 5/8" X 14"    | 5.12       |
| g                            | CROSS ARM, 3 3/4" X 4 3/4" X 10'-0"  | 26.50      |
| u                            | 3 BOLT CLAMP, 6" LONG                | 2.28       |

\*See "List of Materials Acceptable for Use on Systems of REA Electrification Borrowers".

DISTRIBUTION CONSTRUCTION UNITS--LINE CHANGES--(Continued)

TABLE D. Values of Material Items Creditable to Bidder--(Continued)

| REA Item Letter Designation* | Description of Material Item                 | Item Value |
|------------------------------|--|------------|
| V                            | GUY ATTACHMENT                               | 2.70       |
| CK                           | CLAMP, ANCHOR ROD BONDING                    | 0.72       |
| d                            | WASHER, CURVED, 3" X 3" X 5/16" X 1/16" hole | 0.35       |
| at                           | GUY GUARD, 8'                                | 3.53       |
| pp                           | CLAMP, HOT LINE                              | 1.67       |
| dd                           | Adapter, INSULATOR                           | 0.92       |
|                              | FUSE TUBE                                    | 3.20       |
| da                           | BRACKET, INSULATED                           | 1.79       |
|                              | INSULATED, GUY STRAIN, FIBERGLASS            | 2.90       |
|                              | ANCHOR ROD                                   | 2.76       |
| a                            | INSULATOR, PIN TYPE, 12.5 KV                 | 7.45       |
|                              | # 4 - 7/8 ACSR (SWANATE)                     | .0642/FT.  |
|                              | # 2 - 5/8 ACSR (SPARROW)                     | .0877/FT.  |
|                              | TRIPLEX                                      | .0910/FT.  |
|                              | TRANSFORMER, SKVA                            | 190.47     |
| ab                           | NUT, THIMBLEYE, 5/8"                         | 0.79       |
| ao                           | BOLT, THIMBLEYE, 5/8"                        | 1.39       |
|                              |  |            |
|                              |  |            |
|                              |  |            |

\*See "List of Materials Acceptable for Use on Systems of REA Electrification Borrowers".

**DISTRIBUTION LINE CONSTRUCTION**

**Proposal Summary**

**Recapitulation of Sections**

**New Construction  
Overhead**

|             |                                  |                      |
|-------------|----------------------------------|----------------------|
| Section - I | <u>POLE UNITS</u>                | \$ <u>270,543.18</u> |
| Section - A | <u>NONE</u>                      | <u>- 0 -</u>         |
| Section - B | <u>NONE</u>                      | <u>- 0 -</u>         |
| Section - C | <u>3 Ø POLE TOP ASS'Y UNITS</u>  | <u>121,858.15</u>    |
| Section - D | <u>CONDUCTOR ASS'Y UNITS</u>     | <u>362,855.91</u>    |
| Section - E | <u>GUY ASS'Y UNITS</u>           | <u>11,477.98</u>     |
| Section - F | <u>ANCHOR ASS'Y UNITS</u>        | <u>36,972.32</u>     |
| Section - G | <u>NONE</u>                      | <u>- 0 -</u>         |
| Section - J | <u>NONE</u>                      | <u>- 0 -</u>         |
| Section - K | <u>NONE</u>                      | <u>- 0 -</u>         |
| Section - M | <u>MISCELLANEOUS ASS'Y UNITS</u> | <u>61,852.69</u>     |
| Section - R | <u>ROW CLEARING UNITS</u>        | <u>23,998.50</u>     |

Total Overhead \$889,558.73

**Underground**

|              |                               |                 |
|--------------|-------------------------------|-----------------|
| Section - UD | <u>CABLE ASS'Y UNITS</u>      | <u>1,995.00</u> |
| Section - UG | <u>NONE</u>                   | <u>- 0 -</u>    |
| Section - UK | <u>NONE</u>                   | <u>- 0 -</u>    |
| Section - UM | <u></u>                       | <u>8315.62</u>  |
| Section - UR | <u>EXCAVATION ASS'Y UNITS</u> | <u>4,560.00</u> |

Total Underground 14,870.62

Total New Construction \$904,429.35

**Line Changes**

|             |                            |                  |
|-------------|----------------------------|------------------|
| Section - H | <u>NONE</u>                | <u>- 0 -</u>     |
| Section - I | <u>REMOVAL ASS'Y UNITS</u> | <u>7,800.78</u>  |
| Section - N | <u>NEW ASS'Y UNITS</u>     | <u>73,993.34</u> |

Total Line Changes \$81,794.12

Total Distribution Line Construction \$986,223.47



TRANSMISSION CONSTRUCTION UNITS--(Continued)

Section 2--POLE TOP ASSEMBLY UNITS

A pole top assembly unit consists of the hardware, crossarms and their appurtenances, insulators, etc., except tie wire, required to support the power conductors and overhead ground wire. It does not include the pole, the downlead, and butt coil, which are separate units.

| Unit No. | No. of Units | Unit Price |           |                        | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|------------------------|---|
|          |              | Labor      | Materials | Labor and<br>Materials |   |
| TH       |              |            |           |                        |   |
|          |              |            |           |                        |   |
|          |              |            |           |                        |   |
|          |              |            |           |                        |   |
| TP       |              |            |           |                        |   |
|          |              |            |           |                        |   |
|          |              |            |           |                        |   |
| TS       |              |            |           |                        |   |
|          |              |            |           |                        |   |
|          |              |            |           |                        |   |
| TSS      |              |            |           |                        |   |
|          |              |            |           |                        |   |
|          |              |            |           |                        |   |
| TSZ      |              |            |           |                        |   |
|          |              |            |           |                        |   |
|          |              |            |           |                        |   |

NONE

Total, Section 2-- \_\_\_\_\_



**TRANSMISSION CONSTRUCTION UNITS--(Continued)**

**Section 4--GUY ASSEMBLY UNITS**

A guy assembly unit consists of the hardware and wire. Guy guards are designated separately.

| Unit No. | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|---------------------|---|
|          |              | Labor      | Materials | Labor and Materials |   |
| TG-1     |              |            |           |                     |   |
| TG-2     |              |            |           |                     |   |
| TG-3     |              |            |           |                     |   |
| TG-4     |              |            |           |                     |   |
| TG-5     |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |

Total, Section 4-- \_\_\_\_\_

**Section 5--ANCHOR ASSEMBLY UNITS**

An anchor assembly unit consists of the anchor with rod or rods, complete, ready for attaching the guy wire.

| Unit No. | No. of Units | Unit Price |           |                     | Extended Price--<br>Labor and Materials |
|----------|--------------|------------|-----------|---------------------|---|
|          |              | Labor      | Materials | Labor and Materials |   |
| TA-1-5   |              |            |           |                     |   |
| TA-1-8   |              |            |           |                     |   |
| TA-3     |              |            |           |                     |   |
|          |              |            |           |                     |   |
|          |              |            |           |                     |   |

Total, Section 5-- \_\_\_\_\_



TRANSMISSION CONSTRUCTION UNITS--(Continued)

Section 7--RIGHT-OF-WAY CLEARING UNITS

TM - 12. The unit is 1,000 feet in length and \_\_\_\_\_ ( \_\_\_\_\_ ) feet in width (to be measured \_\_\_\_\_ ( \_\_\_\_\_ ) feet on one side of pole line or centerline of structures) of actual clearing of right-of-way. This includes clearing of underbrush, tree removal, and such tree trimming as is required so that the right-of-way, except for tree stumps which shall not exceed \_\_\_\_\_ in height, shall be clear from the ground up on one side of the line of poles carrying conductors. (See Detail A, Drawing TM-12-2A.) The length of actual clearing shall be measured in a straight line parallel to the horizontal line between poles or centerline of structures and across the maximum dimension of foliage cleared projected to the ground line. (See Detail B, Drawing TM-12-2A.) All trees and underbrush across the width of the right-of-way shall be considered to be grouped together as a single length in measuring the total length of clearing. (See Detail C, Drawing TM-12-2A.) Spaces along the right-of-way in which no trees are to be removed or trimmed or underbrush cleared shall be omitted from the total measurement. All length thus arrived at, added together and divided by 1,000 shall give the number of 1,000-foot TM-12 units of clearing. The Bidder shall not remove or trim shade, fruit, or ornamental trees unless so directed by the Engineer in writing.

TM - 12 (1). This unit is identical with TM-12, except the full width of the right-of-way to be cleared shall be \_\_\_\_\_ ( \_\_\_\_\_ ) feet wide (to be measured \_\_\_\_\_ ( \_\_\_\_\_ ) feet on each side of the pole line or centerline of structures). (See Detail D, Drawing TM-12-2A.)

TMC-12, TMC-12 (1). These units are identical to the respective TM units except that chemical treatment of stumps is required in addition to the clearing of underbrush, tree removal and tree trimming.

TM - 13. The unit, for purpose of quoting, is 1,000 feet in length of clearing off the right-of-way. The Engineer will select those trees off the right-of-way that he deems to be a hazard to the line and will designate them to the Bidder in writing as danger trees. When so designated, the Bidder shall remove or top such trees at his option except that the Bidder shall trim and not remove shade, fruit, or ornamental trees unless otherwise directed by the Engineer in writing. (See Drawings TM-12-2A and TM-13 for examples of danger trees.)

The measurement of the length of clearing off the right-of-way shall be considered as a straight line parallel to the horizontal line between poles or centerline of structures, such measurement of length to be based on maximum dimension of foliage (not trunk) projected to the ground line. (See Details E, F, G, and H, Drawing TM-12-2A.) Dead trees having no foliage shall be measured across the maximum dimension and multiplied by two. (See Detail F, Drawing TM-12-2A.) Each tree so removed shall be added together to determine the total length of clearing. All length thus arrived at, added together and divided by 1,000, shall give the number of TM-13 units. (Example: Details E, F, G, and H, Drawing TM-12-2A, total .1 of a TM-13 unit.)

TM - 14. The unit is 1,000 feet in length and \_\_\_\_\_ ( \_\_\_\_\_ ) feet in width (to be measured \_\_\_\_\_ ( \_\_\_\_\_ ) feet on one side of right-of-way centerline) of actual clearing of right-of-way. Trees and underbrush should be cleared from the ground up within 10 feet of any structure location. The Engineer will mark the trees and brush to be cleared to provide "undulating" boundaries. Low growing trees and brush are to be left in the right-of-way to the extent it will not be hazardous to the line or will not interfere with the access road.

The length of actual clearing shall be measured in a straight line parallel to the horizontal line between poles or centerline of structures and across the maximum dimension of foliage cleared projected to the ground line (See Detail B, Drawing TM-12-2A). All trees and underbrush cleared across the right-of-way shall be considered to be grouped together as a single length in measuring the total length of clearing (See Detail C, Drawing TM-12-2A). Spaces along the right-of-way in which no trees are to be removed or trimmed or underbrush cleared shall be omitted from the total measurement.

TRANSMISSION CONSTRUCTION UNITS--(Continued)

Section 7--RIGHT-OF-WAY CLEARING UNITS (Continued)

TM - 14 (1). This unit is identical with TM-14 except the full width of the right-of-way to be cleared shall be \_\_\_\_\_ ( \_\_\_\_\_ ) feet wide (See Detail D, Drawing TM-12-2A).

TM - 15. The unit is 1,000 feet in length and \_\_\_\_\_ ( \_\_\_\_\_ ) feet in width (to be measured \_\_\_\_\_ ( \_\_\_\_\_ ) feet on one side of the right-of-way centerline) of actual clearing of the right-of-way. Trees and underbrush should be cleared from ground up within 10 feet of any structure location. The Engineer will mark the trees and brush to be cleared to provide a "feathered" appearance in the right-of-way. Low growing trees and brush are to be left in the right-of-way to the extent it will not be hazardous to the line or will not interfere with the access road.

The length of actual clearing shall be measured in a straight line parallel to the horizontal line between poles or centerline of structures and across the maximum dimension of foliage cleared projected to ground line (See Detail B, Drawing TM-12-2A). All trees and underbrush cleared across the right-of-way shall be considered to be grouped together as a single length in measuring the total length of clearing (See Detail C, Drawing TM-12-2A). Spaces along the right-of-way which no trees are to be removed or trimmed or underbrush cleared shall be omitted from the total measurement.

TM - 15 (1). This unit is identical to TM-15 except the full width of the right-of-way to be cleared shall be \_\_\_\_\_ ( \_\_\_\_\_ ) feet wide (See Detail D, Drawing TM-12-2A).

Additional Requirements (When specifying TM units denote type of disposal (A or B).)

A. Trees, brush, branches and refuse shall, without delay, be disposed of by such of the following methods as the Engineer will direct (Engineer to strike out methods not to be used):

1. Burned
2. Piled on one side of right-of-way
3. Roller chopped and left on right-of-way in such a manner as not to obstruct roads, ditches, drains, etc.
4. Other (describe) \_\_\_\_\_



TRANSMISSION LINE CONSTRUCTION

Proposal Summary

Recapitulation of Sections:

|                                      |       |          |
|--------------------------------------|-------|----------|
| Section - 1                          | _____ | \$ _____ |
| Section - 2                          | _____ | _____    |
| Section - 3                          | _____ | _____    |
| Section - 4                          | _____ | _____    |
| Section - 5                          | _____ | _____    |
| Section - 6                          | _____ | _____    |
| Section - 7                          | _____ | _____    |
| Total Transmission Line Construction |       | \$ _____ |

NONE

## SUBSTATION AND SWITCHING STATION CONSTRUCTION UNITS

Description of Construction Units. Each Construction Unit consists of a complete installation of the designated portion of a substation or switching station as specified on the drawings, together with connections to associated equipment. Each Construction Unit represents all labor and material including necessary accessories completely installed and tested in satisfactory operation. Full identification of each Construction Unit and all necessary specifications of the installation is shown on the drawings.

Items of material in each Construction Unit shall be of the designated size, rating, type, voltage, or other specification in accordance with the drawings. The bill of material drawing for each station shows the identification of the Construction Units under which the material is to be installed and shows which items of material may be partly or entirely found in the lists of owner-furnished materials.

All items of equipment, unless otherwise specified, are mounted on a structure which shall be a Construction Unit of Group A.

Each Construction Unit is designated by the letter of the Group to which it belongs and an identifying number. The same item of equipment carries the same Construction Unit designation in all the stations. Items of equipment designated by the same Construction Unit in one station are of only one kind as to voltage, type and other specifications. The tabulation of construction units is separate for each station and contains all units necessary for construction of that station.

Group A. Structures. A Construction Unit consists of a structure, or structures, with bus supports including insulators and fittings, buses, conductors and overhead ground wires to adjacent structures within the station, grounding material to connect equipment with the ground bus, and associated material including mounting brackets, supports for equipment, clamps and connectors, all as specified in the drawings.

Group B. Three-Pole Group Operated Air Break Switches. A Construction Unit consists of one 3-pole group operated air break switch with all accessories and operating mechanisms as specified in the drawings.

Group C. Lightning Arresters. A Construction Unit consists of one single-phase lightning arrester.

Group D. Single Pole Disconnecting Switches. A Construction Unit consists of one single pole disconnecting or by-pass switch as specified in the drawings. If a fuse disconnect switch is specified, the fuse is included with the switch.

Group E. Oil Circuit Breakers. A Construction Unit consists of one complete three-phase power circuit breaker complete with supporting frame and control cabinet, unless shown otherwise in the drawings, mounted as specified in the drawings.

Group F. Oil Circuit Reclosers. A Construction Unit consists of a complete single-phase or three-phase oil circuit recloser as specified in the drawings.

Group G. Meters, Relays and Instrument Transformers. A Construction Unit consists of one meter, relay, potential transformer or current transformer.

Group H. Transformers. A Construction Unit consists of one power transformer or one station service transformer either single-phase or three-phase as specified in the drawings.

Group I. Voltage Regulators. A Construction Unit consists of one single-phase or three-phase voltage regulator as specified in the drawings.

Group J. Communications and Supervisory Control Equipment. A Construction Unit consists of carrier current equipment, microwave, or other types of communications and supervisory control equipment as specified in the drawings.

Group K. Conduit and Cable. A Construction Unit consists of the wire, cable, conduit and accessories necessary to complete the installation of equipment in accordance with the specifications and drawings, where such installation has not been included in other Groups.

PROPOSAL RECAPITULATION

|   |                      |
|---|----------------------|
| Distribution line construction                | \$ <u>986,223.47</u> |
| Transmission line construction                | <u>- 0 -</u>         |
| Substation and Switching Station Construction | <u>- 0 -</u>         |
| Total   | \$ <u>986,223.47</u> |

ACCEPTANCE

The Owner hereby accepts the foregoing Proposal of the Bidder, \_\_\_\_\_  
Four States Electric Co., Inc. \_\_\_\_\_ for the construction of the following:

Distribution Construction Units:

Sections 1, C, D, E, F, M, R, UD, UM, UR, I and N

Transmission Construction Units: None

Sections \_\_\_\_\_

Substation and Switching Station Construction:

Stations (name): None

The total Contract price is \$ 986,223.47

MOHAVE ELECTRIC COOPERATIVE, INC.

OWNER

*[Signature]*  
By \_\_\_\_\_  
PRESIDENT

*[Signature]*  
SECRETARY

2-10-81  
DATE OF CONTRACT

# Exhibit 5

RESOLUTION

AT THE SPECIAL MEETING OF THE BOARD OF DIRECTORS OF THE MOHAVE ELECTRIC COOPERATIVE, INC., HELD MARCH 10, 1981, AT BULLHEAD CITY, ARIZONA, COUNTY OF MOHAVE, STATE OF ARIZONA, THE FOLLOWING RESOLUTION WAS ADOPTED:

WHERE AS, Mohave Electric Cooperative, Inc., has entered in an agreement to provide central station power to the Hualapai and Supai Indian Reservations.

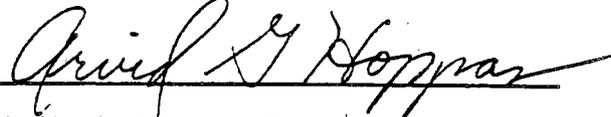
WHERE AS, bids were solicited for the construction of a 14.4/24.9 KV distribution line to serve these reservations.

WHERE AS, (4) Four bids were received, with Four State Electric Company, of Farmington, New Mexico being low bidder with a bid of \$986,223.47.

BE IT THEREFORE RESOLVED, that the bid of \$986,223.47, by Four States Electric Company be accepted by Mohave Electric Cooperative, Inc., this acceptance being subject to approval of administrator of the Rural Electrification Administration.

CERTIFICATION

I, Arvid G. Hoppas, Secretary of the Mohave Electric Cooperative, Inc., do hereby certify that the foregoing is a true and correct copy of the resolution passed at the March 10, 1981, meeting of the Board of Directors of the Mohave Electric Cooperative, Inc., of Mohave County, State of Arizona, held on this 10th day of March, 1981, as it appears in the minute book of the Cooperative and that it has not been rescinded or modified.

  
Arvid A. Hoppas, Secretary

(CORPORATE SEAL)